S. Ladstätter – P. Magdalino (Eds.)
Ephesos from Late Antiquity until the Late Middle Ages

Band 58

ISSN 1998-8931
ISBN 978-3-903207-42-4

Made in Europe

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Proceedings of the International Conference at the Research Center for Anatolian Civilizations, Koç University, Istanbul

30th November – 2nd December 2012

ÖSTERREICHISCHES ARCHÄOLOGISCHES INSTITUT

Sonderschriften Band 58
Wien 2019

HOLZHAUSEN Der Verlag

ÖAW ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN

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ÖAI

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This volume is dedicated to the memory of Adrian Saunders (1958–2017),
speaker at the 2012 RCAC Symposium,
native of Devon,
graduate of Oxford,
teacher in Cairo and Istanbul,
resident of Selçuk,
subscriber to *Private Eye*,
indefatigable drinking companion,
who introduced the students of Koç University to Latin, Greek and Arabic,
sometimes using the ruins of Ephesos as his classroom,
and rests by the way from Ephesos to the Theologian,
near İsa Bey's mosque that he knew inside out
αἰωνία ἡ μνήμη

Herausgeber
Österreichisches Archäologisches Institut
Franz Klein-Gasse 1
A-1190 Wien
‹www.oeaw.ac.at/oeai›

Das Österreichische Archäologische Institut ist eine Forschungseinrichtung der
Österreichischen Akademie der Wissenschaften

ÖAW ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN

Eigentümer & Verleger
Verlag Holzhausen GmbH
Leberstraße 122
A-1110 Wien
‹www.verlagholzhausen.at›

HOLZHAUSEN
Der Verlag

Lektorat: Andrea M. Pülz, Barbara Beck-Brandt
Englisches Lektorat: Paul Magdalino
Layout: Andrea Sulzgruber
Umschlaggestaltung: Büro Pani; Andrea Sulzgruber
Abbildungsnachweis: Namengebendes Relief vom sog. Medusa-Tor (© ÖAW-ÖAI, N. Gail)

1. Auflage 2019
Verlagsort: Wien – Herstellungsort: Wien – Printed in the EU

ISSN 1998-8931
ISBN 978-3-903207-42-4

Die verwendete Papiersorte ist aus chlorfrei gebleichtem Zellstoff hergestellt, frei von säurebildenden Bestandteilen und alterungsbeständig.

Bibliografische Information der Österreichischen Nationalbibliothek und der Deutschen Nationalbibliothek: Die ÖNB und die DNB verzeichnen diese Publikation in den Nationalbibliografien; detaillierte bibliografische Daten sind im Internet abrufbar. Für die Österreichische Bibliothek: ‹http://onb.ac.at›, für die Deutsche Bibliothek: ‹http://dnb.ddb.de›.

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PREFACE

In most investigations of Late Antique and Byzantine cities, archaeology is the *deus ex machina* that descends to correct and supplement the evidence of the written record, or, more often, to establish a historical record that did not previously exist. In the case of Ephesos, the archaeology of the 21st century has been devoted to revisiting and revising the archaeology of the previous hundred years, which historians had used to build a coherent narrative of the city's development from the 3rd to the 15th century. In order to fulfill this aim, an interdisciplinary research programme was developed, dedicated to the Byzantine settlement phases of Ephesos and Ayasoluk using the most up-to-date methods. The research encompassed extensive surveys and detailed excavations as well as the analysis of numerous categories of finds. The results offer a multifaceted picture of a changing ›settlement area‹, starting from a Late Antique metropolis confined in an ancient urban structure, up to the final abandonment of the Caystros plain in the 17th century.

The new wave of Ephesian archaeology found its way into two events organised in 2010 by Professor Falko Daim, then director of the Römisch-Germanisches Zentralmuseum, Mainz: the exhibition »Byzanz: Pracht und Alltag«, which ran at Bonn from February to June, and the conference at Mainz on Byzantine life in town and country, which coincided with the closing days of the exhibition. It was here that Sabine Ladstätter and Paul Magdalino began the collaboration that led them to propose Ephesos as the subject for the 2012 annual symposium of the Research Center for Anatolian Civilizations of Koç University, Istanbul, where Paul Magdalino was teaching at the time. We are grateful to the then director of the Center, Professor Scott Redford, for accepting our proposal. The present volume is the outcome of the symposium and has the same title. Unforeseen circumstances prevented us from publishing the papers in the same series as the previous symposium volumes, but the happy result is that the volume is published by the institution, the Austrian Archaeological Institute, whose name is synonymous with the excavation of Ephesos. This has meant that the contributions to the volume that rely on excavation material could be updated ›in house‹, so the delay in publication has allowed us to take account of important discoveries made during the excavation seasons since 2012. Furthermore, it has been possible to provide the publication with the most recent photographs and plans, thereby reflecting the state of research in 2019. The OeAI was responsible for the editing and the production of the volume, and we wish to sincerely thank Barbara Beck-Brandt, Andrea Pülz, Andrea Sulzgruber and Nicolas Gail for their professional supervision of the manuscript.

We are profoundly grateful to our co-authors for their patience, and we hope that they will find the finished product worth the wait. We also hope that the readers of this volume will learn from the example of Ephesos how much there is still to discover about Late Antique and Byzantine urbanism, and how much remains to unlearn from the certainties of 20th-century scholarship.

Sabine Ladstätter – Paul Magdalino
July 2019

Sabine Ladstätter

EPHESOS FROM LATE ANTIQUITY UNTIL THE MIDDLE AGES

AN ARCHAEOLOGICAL INTRODUCTION

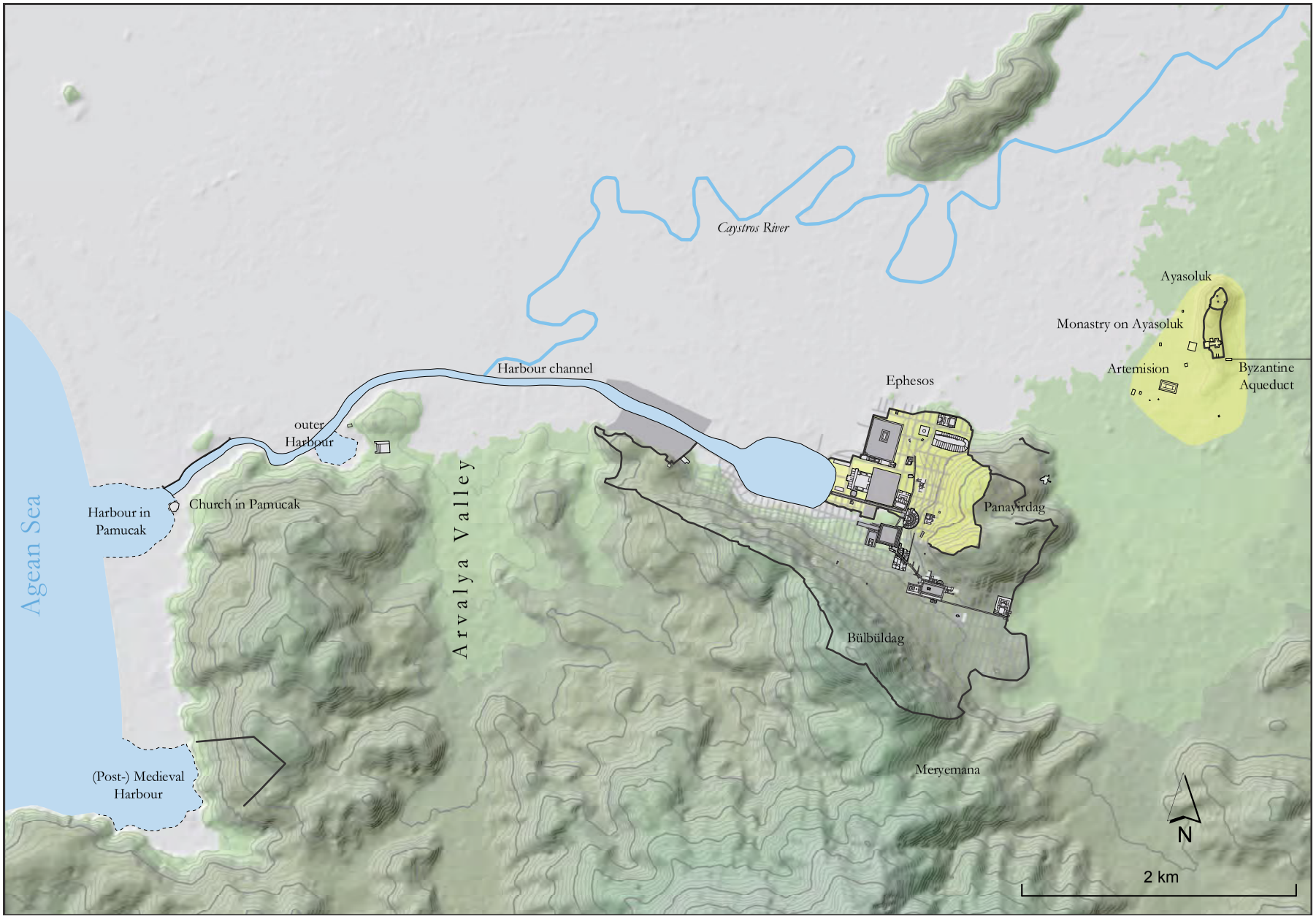
THE STATE OF RESEARCH

The remains from the Byzantine era are ubiquitous in Ephesos and characterise the current appearance of the ancient city much more strongly than one might be aware (fig. 1). Many buildings of the Roman imperial period are preserved neither in their original function nor in their primary urban planning context, but instead reflect Late Antique-Byzantine phases of usage and modification. As an example may be cited the colonnades and the statues embellishing the streets of the inner city, the workshops and stores adjoining them, and the numerous rebuilt and newly designed fountains. The most prominent example is, without doubt, the façade of the Library of Celsus, which owes its spectacular state of preservation to its reuse as a Late Antique fountain (fig. 2).

To these may be added the monumental new constructions of the Christian period, in particular the basilicas of St Mary and of St John, and the Cemetery of the Seven Sleepers, yet also prestigious secular buildings such as the so-called Byzantine Palace. During the Byzantine period, many structures which had formerly dominated the cityscape of Ephesos also disappeared. For example, the two imperial cult sites as well as the Temple of Ephesian Artemis were demolished down to their foundations, and their architectural elements were either used elsewhere or re-processed. Most of the Byzantine ruins, however, consist of unremarkable buildings of rubble and brick which are distributed extensively over the area of the ancient city, but which have received very little attention since excavation began. For, in contrast to the preoccupation with Byzantine prestige architecture and in particular with Christian sacred architecture, which have enjoyed a long research tradition, the investigation of the Byzantine culture of daily life began only a few years ago. A very similar situation exists with regard to the Turkish remains in Ayasoluk, today's Selçuk, where some remarkably preserved buildings provide evidence of the town's heyday in the 14th and the first half of the 15th century, and yet the daily life of the inhabitants of the Late Medieval and Early Modern period remains largely unknown.

In order to be able to evaluate better the inventory of monuments visible today, and also to assess the state of research into the Byzantine settlement phases of Ephesos, it is necessary to review briefly the excavation history of the site. The Austrian excavations of the late 19th century built on the British field research at the Artemision[1], but rapidly shifted to the Hellenistic and Roman city, where extensive clearances in the harbour region began[2] (fig. 3). Since it corresponds to archaeological logic to remove the uppermost layers first, in the early years of excavation large areas of the Late Antique-Byzantine city centre were excavated using the methods then prevalent. Characteristic for the significance attached at the time to

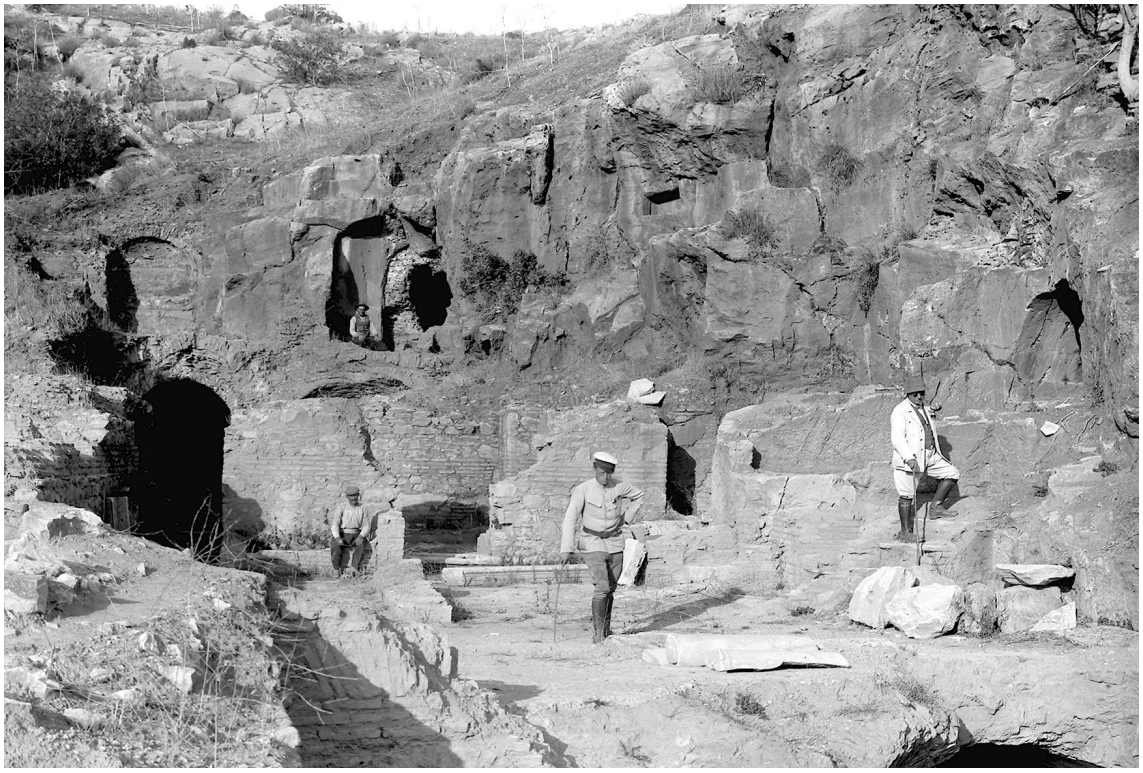
[1] Wood 1877; Benndorf 1906; Wohlers-Scharf 1995; Knibbe 1998.
[2] Benndorf 1898, 59 f.



1 Ephesos and environment in the Byzantine period (© OeAW-OeAI, C. Kurtze/N. Math)

2 Late Antique Fountain in front of the Celsus Library (© OeAW-OeAI, Archive)

3 View to the Byzantine City Centre, the harbour region of Ephesos (© OeAW-OeAI, Archive)



4 Keil's excavation of the Seven-Sleepers-Cemetery (© OeAW-OeAI, Archive)

Byzantine culture is the manner in which the residential quarter, discovered in the course of research into the Harbour Baths, was approached[3]. In spite of spectacular finds made here, the area was quickly forgotten, without precise documentation and publication taking place.

In the excavation period between the two world wars (1926–1935)[4] the focus of activities lay in the study of the Christian sacred buildings, a focus which was reflected in the resulting publications of the Church of St Mary, the Cemetery of the Seven Sleepers and the Basilica of St John (fig. 4)[5]. The concentration on Early Christianity was associated ultimately with the promotion of Ephesos as a modern site of Christian pilgrimage. Although the visiting of specific cult sites followed ancient traditions, as preserved in the processions of the Greek Orthodox population of Ayasoluk/Selçuk and Şirince, equally, with the localisation of the place of Mary's death, today Meryemana, in the hills south of Ephesos[6], pilgrimages began which rapidly acquired supra-regional prominence[7]. In this connection, archaeology made a conscious contribution to the increase in the Christian attraction of Ephesos, as is clearly evident in an observation made by the excavation director Josef Keil in 1926[8]:

[3] Benndorf 1898, 63: »Jetzt sind die zwischenliegenden mittelalterlichen Bauschichten sämmtlich im Zusammenhange aufgedeckt und liegt somit ein Theil der nachantiken Stadt im Grundrisse zutage. Er besteht aus einer in elendem Flickwerk zusammengestümperten 130m langen Hallenstraße, an die auf beiden Seiten gleichartige Bauten sich anschlossen.«

[4] Wohlers-Scharf 1995; Knibbe 1998.

[5] Reisch et al. 1932 (Church of St Mary); Miltner 1937 (Cemetery of Seven Sleepers); Hörmann et al. 1951 (Church of St John). For the resumption of the Austrian mission after the 1st World War see in general: Gerber 2008.

[6] Pülz – Ladstätter 2006.

[7] Ladstätter 2018c, 261 n. 10 (with further references).

[8] Keil 1926, 289: »If in this campaign a conclusion could not be reached, nevertheless that which has been accomplished has far exceeded all expectations, in that an extensive Christian burial- and cult-site has been brought to light at the holy places recorded by tradition; this is of great importance not only for local research at Ephesos, but furthermore it can count on attracting the interest of the entire Christian world.« (translation: S. Ladstätter).

5 Miltner's excavation of the Curetes Street (© OeAW-OeAI, Archive)

»Wenn auch ein Abschluß in dieser Kampagne nicht erreicht werden konnte, so hat doch das bereits Erreichte alle Erwartungen weit übertroffen, indem an der von der Tradition festgehaltenen heiligen Stätte eine ausgedehnte christliche Coemeterien- und Kultanlage ans Licht gebracht wurde, die nicht nur für die ephesische Lokalforschung von größter Bedeutung ist, sondern über diese hinaus auf das Interesse der gesamten christlichen Welt rechnen kann.«

Franz Miltner, who had participated decisively in the study of the Christian sacred buildings during the period between the wars, followed other goals after 1954 as director of excavations[9]. He concentrated mainly on excavating the city centre, in particular the large plazas, as well as the urban streets (fig. 5)[10]. At the time, special attention was given to the Late Antique period only when the focus was on monumental buildings, such as for example the Byzantine Palace, identified by Miltner as Sarhoş Hamam[11]. Aspects of Byzantine daily life, in contrast, received little consideration. Revealing the city »in its original glory« also implied the restoration of the buildings of the Roman imperial period and the removal of the Late Antique and Medieval settlement phases, which were readily perceived as an encumbrance. In selected cases, a ›re-authentication‹ into an imperial state even occurred, for which the destruction of a Late Antique ensemble was willingly accepted.

The Byzantine period became the focus of research interest in the 1960s, when, with the discovery of the two Terrace Houses, residential structures supposedly of Late Antique date were excavated (fig. 6)[12]. Based on the analysis of the building history, the latest phase of refitting and furnishing in Terrace House 2 was dated to the early 5th century, and its final destruction, connected to a severe earthquake, was assigned to the reign of Emperor Heraclius

[9] Wohlers-Scharf 1995; Knibbe 1998.
[10] See extensively Ladstätter 2018c, 266–272; Quatember 2005.
[11] Miltner 1956–58, 4–17; Miltner 1959, 243–250.
[12] Summarising see Vetters 1966.

6 Vetter's excavation of the Terraces Houses (© OeAW-OeAI, Archive)

in ca. 614 A.D.[13]. The archaeological evidence in the residential complex itself left no doubt that a seismic catastrophe was the cause of the extensive destruction. Yet the interpretation of the evidence has had most unfortunate consequences. Although in the meantime it has been proved that the earthquake damage is to be dated to the late 3rd century[14], the notion of a seismic event in the reign of Heraclius had already established itself as a fixed point in Ephesos research[15], and was viewed virtually as a ›Pompeii premise‹[16] for Late Antique destruction horizons. This led immediately to a second critical point, namely, the assumption that the evidence from Terrace House 2 can be transferred to the entire urban area of Ephesos, and that an area-wide destruction horizon and a caesura in the settlement history can be deduced from this. In the current state of research it can be confirmed that there is no secure archaeological evidence at all in Ephesos for a serious earthquake in the early 7th century. Furthermore, the many levels of fire debris, dated to Late Antiquity, are to be regarded in a more nuanced manner, both from a chronological as well as a taphonomic perspective. The combination of destruction horizons and earthquakes with coins struck by the emperor Heraclius is a typical example for a vicious circle in archaeology.

Apart from the research at the Terrace Houses, numerous other projects concerning Byzantine Ephesos were initiated under Hermann Vetters[17], including, for instance, studies of Christian sacred structures such as the Church of St Mary or the church in the East Gymnasium, the Late Antique domestic architecture, and also the inscriptions. These investigations – mostly sporadic and lacking coherent framing of questions – were also continued in the 1990s. With

[13] Ladstätter 2002, 9 n. 2 with further references.

[14] In general on the chronology of Terrace House 2: Ladstätter 2002. See additionally the detailed studies: Thür 2005; Krinzinger 2010; Thür – Rathmayr 2014; Rathmayr 2016.

[15] Vetters 1977 and after him Foss 1979, 105 referring to the excavators.

[16] The term ›Pompeii premise‹ goes back to a debate between the archaeologists Michael Schiffer and Lewis Binford in the 1980s; see summarising the state of research Lucas 2012, 102–104.

[17] Wohlers-Scharf 1995; Knibbe 1998.

a few exceptions, the results of these studies were either only cursorily published, or remain unpublished even today.

A milestone in the investigation of Byzantine Ephesos was achieved with the first comprehensive study, appearing in 1979, by Clive Foss, a study which from a historical perspective is still broadly valid[18]. This doesn't count for the archaeological evidence used by the author, because of the critical re-evaluation of earlier excavations and the high amount of newly generated data in the last years. Another study by Luis Hopfgartner of Ephesos in the post antique period had nonetheless already appeared in 1962/63; this is based on an inspection of the surroundings of the city and contains unique visual material[19]. Most of it disappeared in the meantime, be it through deterioration or deliberate destruction in the course of modern construction activity.

In the late 1990s, under the direction of Friedrich Krinzinger, the Turkish settlement periods finally became the subject of research. Numerous individual monuments were studied, and in addition questions regarding the settlement history were also developed, covering the transformation from antiquity to the modern period[20].

Currently, a broadly conceived priority programme is dedicated to the Byzantine epoch at Ephesos, whereby particular attention is being paid to processes of transformation[21]. An additional, explicit goal is a classification of phases that is as detailed as possible, as well as a cultural-historical interpretation of the material legacy. In order to better comprehend the phenomenon of city and land in the Byzantine period, an intensive exploration of the hinterland as well as the complex harbour landscape of Ephesos has been initiated, and the investigation of the Turkish replacement settlement of Ayasoluk has been incorporated into the programme. Questions regarding the culture of daily life and habitat conditions require a thorough engagement with the relationship of humans to their environment and the mutual dependencies extrapolated from this, which makes an integration of geo-archaeological and bio-archaeological aspects absolutely necessary.

OVERCOMING A CRISIS – THE FOURTH CENTURY

In Late Antiquity, Ephesos had to redefine itself as a regional centre. According to the traditional scholarly opinion, the city suffered greatly from the consequences of the crisis of the 3rd century and was, in addition, badly affected by severe earthquakes[22]. This archaeologically clearly recognised scenario, based on a »3rd century crisis model«[23] – a model which is not undisputed by scholars –, stands somehow in contradiction to the literary tradition, which presents Ephesos as an important ecclesiastical administrative seat and as a centre of learning with considerable economic capacity during the era of Constantine[24]. The huge decrease in size of the province of Asia, which after the Diocletianic reforms now had only 19,100 km² or about a sixth part of its original size, will certainly have had an impact on its capital. Furthermore, the decision to expand Nicomedia and subsequently Constantinople as residential cities of the Eastern Roman emperor had, without doubt, far-reaching consequences. The imperial assistance, public building programmes and private patronage were from now on concentrated on the capital city, where the rapidly increasing numbers of the population also needed to be provided for. In addition, we must reckon with an emigration of elements of the local aristocracy and bureaucracy, which in turn had an impact on economic power[25]. This

[18] Foss 1979.
[19] Hopfgartner 1962/1963.
[20] Krickl – Pfeiffer-Taş 2002; Krinzinger 2005; Pfeiffer-Taş 2010; Ladstätter 2015.
[21] Summarising see Ladstätter 2016; Ladstätter 2017b and the various contributions in Daim – Drauschke 2010.
[22] Ladstätter 2002, 38 f.; Ladstätter 2011, 3; Ladstätter – Pülz 2007, 396.
[23] Jacobs – Richard 2012.
[24] Külzer 2010b, 522.
[25] Koder 2018, 28–30.

›Constantinople effect‹ affected rural settlements and provincial cities in the entire Empire[26]. But Ephesos had something which was missing in Constantinople: prominent local saints[27]. Once described as *lumen* or *metropolis Asiae*, the city now had to supply Constantinople, and indeed not only with agricultural products, but also with valuable relics such as those of St Timothy which were solemnly placed in the Church of the Apostles in 336 or 357 A.D.[28].

From an archaeological perspective, the period between 280 and 350 A.D. represents a particular challenge in Ephesos, since the usual find types which can be subjected to fine chronological evaluation are either completely lacking, or can only be consulted in a very limited fashion for a division into phases, and for an interpretation of the settlement history based on these phases[29]. After the strong series of coin issues of Emperors Gallienus and Aurelian, which display a high rate of loss in Ephesos, the coin circulation practically breaks down completely[30]. Coinage of the first Tetrarchy (284–306) as well as of the Constantinian dynasty (324–363) is found extremely rarely; only after the middle of the 4th century is Ephesos again supplied in greater quantities with freshly minted coins[31]. From this circumstance it can be deduced that older coins remained in use over a longer time period before they finally forfeited their denominational value and were melted down or lost. Since comprehensive studies of Late Antique coin circulation in the province of Asia are lacking, it must remain open whether this is a phenomenon specific to Ephesos, or one which affected the region. The recently published coin finds from Smyrna, which display a high proportion of Constantinian coinages, nonetheless make it likely that there was a temporary supply problem with regard to Ephesos[32].

In addition to coins, sigillata as a reliable means of dating is also scarce. A drastic decrease in the quantitiy of sigillata can already be observed in the find complexes of the second half of the 3rd century; this is associated with a decrease in the Terra Sigillata-spectrum[33]. This development also continues in the Tetrarchic-Constantinian period and is particularly characterised by the lack of typical forms of African Red Slip Ware[34]. The gap was apparently filled by locally produced table wares, the typo-chronological development of which, however, is not yet clarified in detail[35]. A certain security in dating first arises with the appearance of Late Roman C Ware after the second half of the 4th century[36]; parallel to this, imports from Africa again increase greatly[37]. As already observed in the case of the coin circulation, a regional comparison for the sigillata is also lacking that would enable general conclusions to be drawn from the Ephesian evidence. The serious dating uncertainties of the Tetrarchic-Constantinian period briefly sketched here complicate the chronological classification of additional find types, such as for example lamps or glass vessels. Finally, in the current state of research it is only possible with great difficulty to differentiate chronologically the find complexes of the late 3rd and the first half of the 4th century; this greatly impedes an absolute chronological classification of phases.

Furthermore, a clear decrease in inscriptions and sculptural production is noteworthy[38]. Only a few objects – such as for example the portraits of Socrates and Menander (fig. 7), or a

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[26] Haldon 2016, 12.
[27] Magdalino 2016, 119.
[28] Keil 1935; Foss 1979, 33; Magdalino 2016, 120 f.
[29] Ladstätter 2011, 7–9. For Anatolia in general see Niewöhner 2016, 297; Niewöhner 2018, 41.
[30] Schachinger 2016, 313.
[31] Schindel 2009, 172 tab. 1; 180; Schachinger 2016, 313 f.
[32] Ersoy et al. 2014, 102 fig. 1 and 106 fig. 4.
[33] This development is obvious in the destruction horizons of Terrace House 2: Ladstätter 2005, 242–261; Ladstätter 2010b, 193. 535–540.
[34] Ladstätter 2010a, 499.
[35] Ladstätter – Waldner 2014, 49.
[36] Ladstätter – Sauer 2005, 149.
[37] Ladstätter – Waldner 2014, 50.
[38] Auinger – Sokolicek 2016, 160.

7 Portrait of the poet Menander (© OeAW-OeAI, N. Gail)

female head from Terrace House 1 – can be securely assigned to the Tetrarchic-Constantinian period[39]. The drying up of private patronage in the public sphere is manifested in Ephesos already after the early 3rd century with a decline in building activity[40]. Among the last large-scale buildings can be counted the roofing over and renovation of the connecting road between the Artemision and the city, funded by Flavius Damianus[41], as well as the erection of an arch, the so-called southern gate, and the renovation of the northern gate, both at the harbour[42].

It is undisputed that no immediate reconstruction in the late 3rd century (270–280) occurred at the sites of massive destruction in many areas of the city, but instead building activities first resumed in the early 5th century[43]. From this it can be assumed that entire civic quarters were characterised by ruins and piles of debris for just about a century. Evidence from Terrace House 2 indicates that the removal of the massive amounts of debris in fact represented a substantial problem. Particularly comprehensible is the approach that was taken in Residential Units 1 and 2, where in the course of the cleaning up activities, small rooms were walled up and completely filled with rubble, in order to create living space in other areas of the house (fig. 8)[44].

On the other hand, large-scale structures such as the Serapeion, the Vedius Gymnasium, the so-called Temple of Hadrian on the Curetes Street or the Prytaneion show no evidence of broad

[39] Auinger – Aurenhammer 2010; Aurenhammer – Sokolicek 2011, 43.
[40] This is not a particular phenomenon in Ephesos but widely recognised: Borg – Witschel 2001.
[41] Engelmann 1995. See recently: Quatember – Scheibelreiter-Gail 2017.
[42] For the southern Harbour Gate/Arch see Knibbe 1985; for the northern Harbour Gate see more recently: Erkelenz 2004.
[43] Ladstätter 2010a, 499.
[44] Ladstätter – Pülz 2007, 420 fig. 16; Ladstätter 2010a, 496.

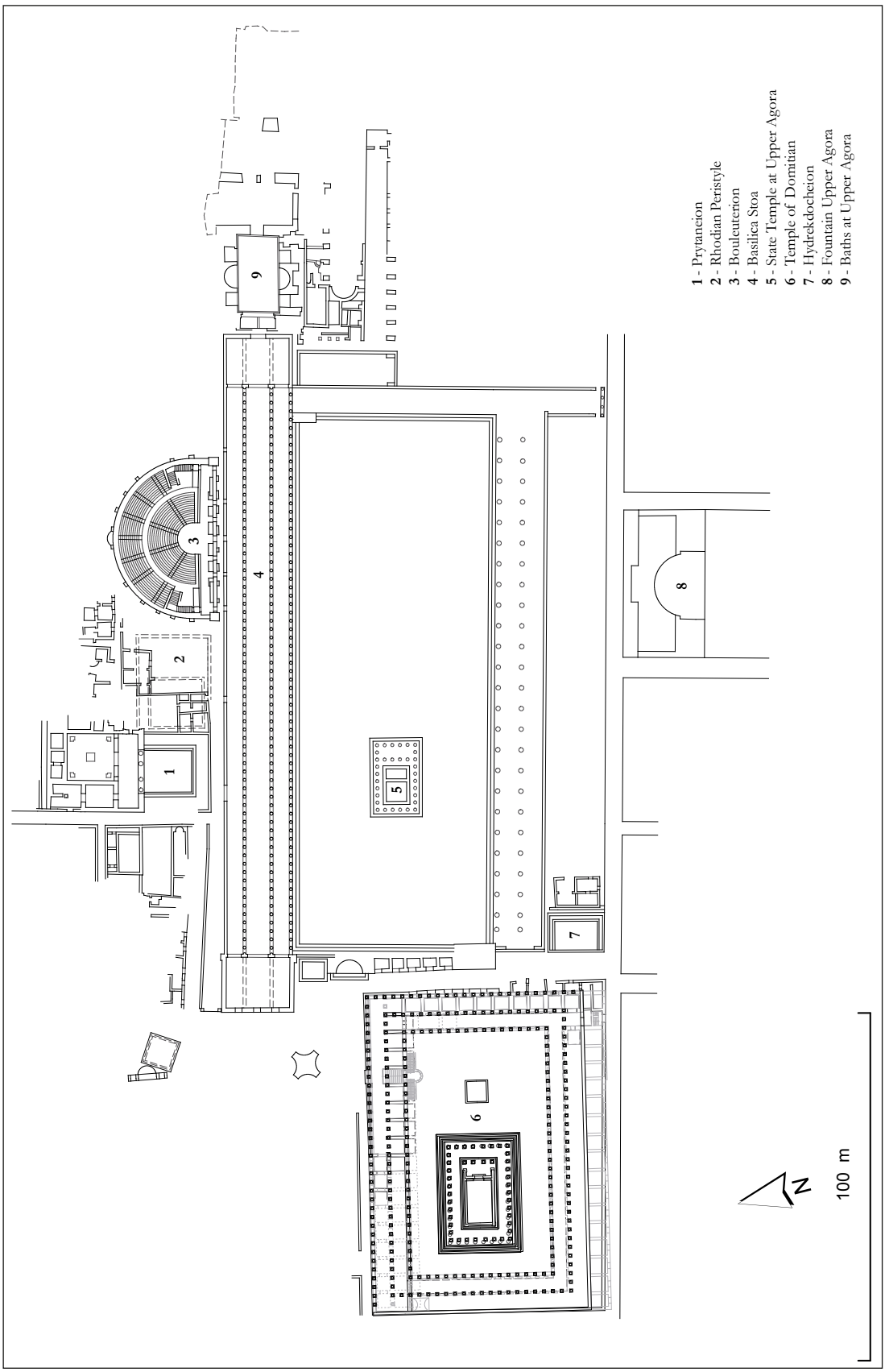
8 Late Antique Phases in Terrace House 2 (© from Krinzinger 2010, pl. 389)

9 The Hydreion (© OeAW-OeAI, N. Gail)

destruction[45]. The discernible repairs could naturally have been occasioned by an earthquake, but it is not possible to date them precisely[46]. Devastation to the Artemis Temple and the Library of Celsus in the late 3rd century is only presumed; here, too, concrete archaeological evidence is lacking[47]. Therefore, in order to understand this complex scenario of destruction, a nuanced and critical analysis of the archaeological evidence is necessary before a destruction horizon encompassing the entire urban area is postulated. In the period immediately after the great earthquakes it is far more plausible to assume an urban landscape in which ruins stood next to completely intact and unaffected buildings – and this for many decades.

The building measures of the 4th century in the public sphere very clearly allow the recognition that the imperial civic structure was only marginally altered[48]; rather, the open plazas and the urban boulevards remained the determining elements, and the orthogonal street grid continued to be respected. Along the Curetes Street, the first Tetrarchs demonstrated their imperial power with the erection of imperial statues in front of the so-called Temple of Hadrian[49] and the Hydreion[50] (fig. 9), that constituted the prestigious eastern termination of the city before the erection of the Herakles Gate[51]. At the same time, the Nymphaeum Traiani was newly fitted out with a balustrade of Herms representing the seven planets[52]. There is much to support the argument that this 4th-century construction phase included the colonnade

[45] Steskal – La Torre 2008, 93 (Vedius Gymnasium); Quatember 2018, 145 (Temple of Hadrian); Steskal 2010a, 81 (Prytaneion); Serapeion unpublished.
[46] See especially Quatember 2018, 145 f.; Ladstätter 2010a, 496.
[47] Ladstätter – Pülz 2007, 398; Pülz 2010c, 544; Ladstätter 2015, 515.
[48] This also counts for the display of statuary: Auinger – Sokolicek 2016, 163.
[49] Roueché 2009, 160 f.; Quatember 2018, 146; Auinger – Sokolicek 2016, 173.
[50] Roueché 2009, 157; Auinger – Sokolicek 2016, 172.
[51] Roueché 2009, 158–160.
[52] See in general Hanslmayr 2016, 128–136 and specifically Hanslmayr 2003.



10 Plan of the Upper Agora (© OeAW-OeAI, C. Kurtze)

in the eastern section of the Curetes Street, perhaps overbuilding preceding stoai of imperial date[53]. At least the statuary ensemble set up here in the 380s presupposes such a construction. Flanked by Nike figures, Aelia Flaccilla, the wife of Emperor Theodosius I (379–394), was honoured with a bronze statue[54]. The Herakles Gate, adjacent to the east and erected by the Proconsul Flavius Const(antinus) constituted the frame for this display of imperial authority[55].

The Upper Agora seems not to have lost its function as political centre of the city (fig. 10). A Late Antique phase of usage of the Bouleuterion is assured by the affixing of crosses over the entrance[56]; furthermore, a later installation of a semi-circular apse in the *summa cavea* could indicate that the building served as the assembly place for the Boule for a long time[57]. Late Antique building- and refurbishment phases can be equally ascertained in the hall in front of the Basilica Stoa, as well as in the baths adjacent to the east[58]. Likewise, the fountain installations were renovated and the site of the square was respected[59]. What happened to the cult buildings on the Upper Agora – above all the Prytaneion, the so-called Holy Area, and the State Temple – in the Tetrarchic-Constantinian period can no longer be determined on account of massive later interventions. In general, one may assume that the buildings lost their original function and were closed at the latest with the prohibition of pagan cult practices under Theodosius I (391/392)[60]. At least it can be proven in the case of the Prytaneion that the demolition of the building nevertheless occurred significantly later, in the advanced 6th century[61]; therefore closure and demolition did not necessarily go together.

The Lower Agora not only retained its function as a commercial market during Late Antiquity, but it was also fundamentally reconfigured and newly remodelled[62]. The large public bath complexes also remained, at least partially, in use, as proven by the refurbishment of the palaestra in the Vedius Gymnasium (fig. 11) still in the early 5th century[63], as well as the redesigning of the entrance to the Harbour Baths, dated to around the middle of the 4th century[64], and the contemporaneous statuary displayed[65]. It appears that the large bath complexes remained in use at least until the end of the 5th century, and then were replaced by smaller baths[66]. In contrast, the great sports halls, the xystoi, were demonstrably abandoned, and the extensive area was left dormant after a catastrophic fire in the late 3rd century (fig. 12)[67]. Late ancient statuary displays and an acclamation inscription for the Late Antique proconsul Ambrosius in the Great Theatre of Ephesos as well as several graffiti depicting performers are unequivocal indications that this structure too remained in use as before[68]. The information displayed on the walls of the Theatre regarding the removal from office of the bishops Cyrill and Memnon also only make sense if this structure served as a place of assembly for great numbers of people[69].

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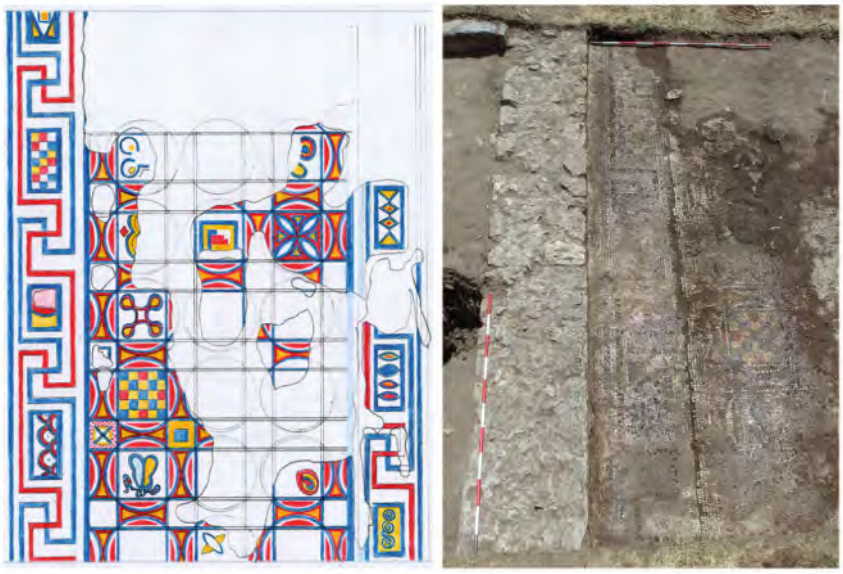
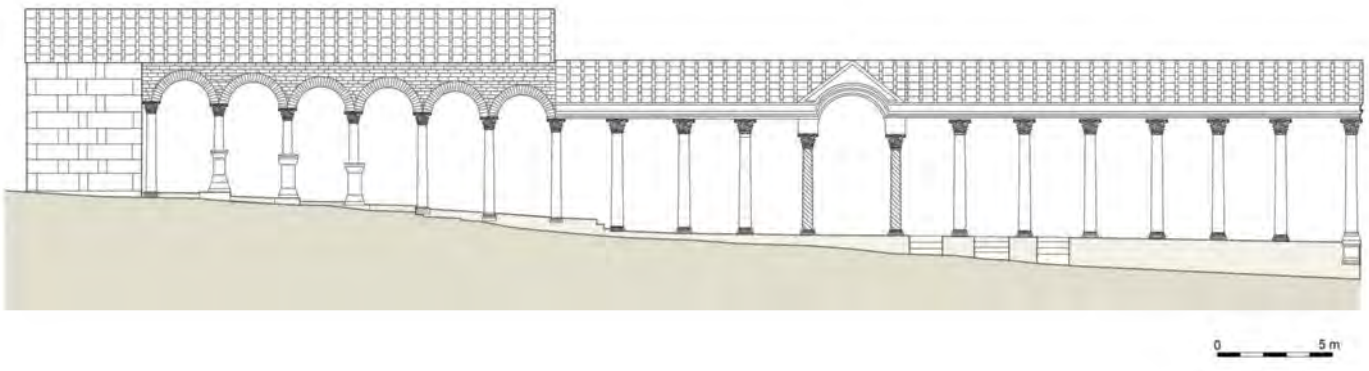
53 Quatember 2014, 109.
54 Roueché 2002a, 536; Auinger – Sokolicek 2016, 169 f.
55 Bammer 1976/1977; Roueché 2002a, 537 f.; Pülz 2010c, 550 f.
56 Bier 2011, 53.
57 Bier 2011, 53 sceptical about a Christian use of the building.
58 Aurenhammer – Sokolicek 2011, 46–50.
59 For renovated and newly constructed fountains in Late Antique Ephesos see in general: Auinger – Rathmayr 2007. For the Upper Agora specifically Rouché 2009, 155 f.
60 Steskal 2010a, 82; Külzer 2010b, 523.
61 Steskal 2010a, 82 f.
62 Scherrer – Trinkl 2006.
63 Steskal 2008; Steskal – La Torre 2008, 310–312; Steskal 2010b, 582.
64 Steskal 2010b, 577–579.
65 Auinger 2011; Aurenhammer – Sokolicek 2011, 44.
66 Steskal 2010b, 586.
67 Recent excavation results, unpublished.
68 Auinger – Sokolicek 2016, 166; Roueché 2002b, 256–276.
69 Foss 1979, 15.



11 Late Antique mosaics in the palaestra of the Vedius Gymnasium (© OeAW-OeAI, V. Scheibelreiter-Gail/N. Gail)

12 Collapsed and burnt roof of the Halls of Verulanus (© OeAW-OeAI, N. Gail)



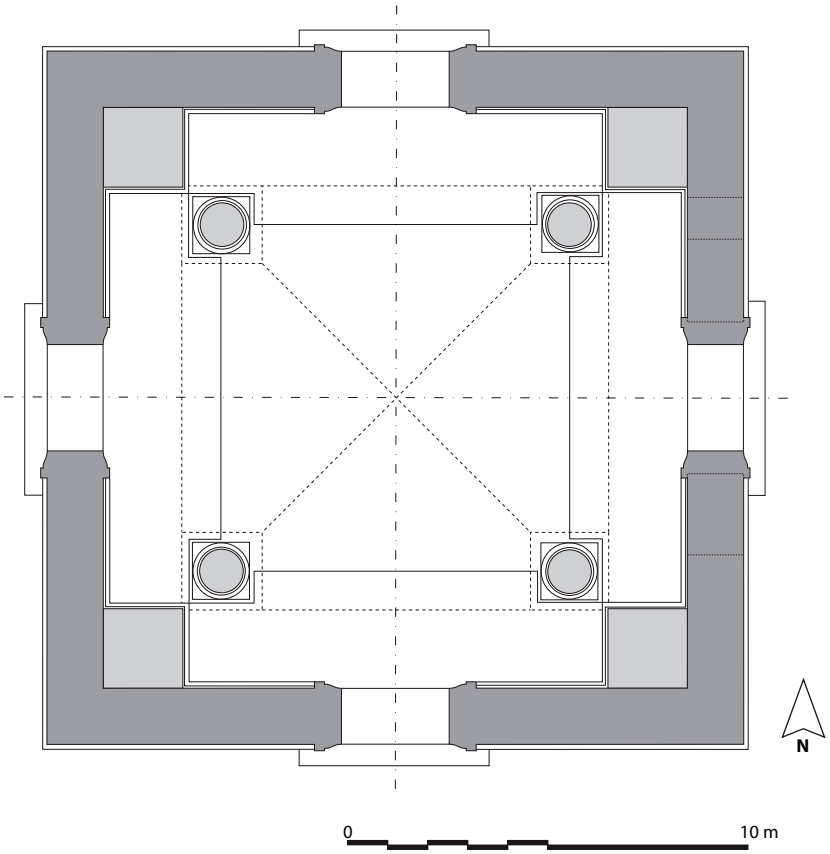
13 Reconstruction of the so-called Stoa of the Alytarchs (© OeAW-OeAI, U. Quatember)

14 Late Antique installation in the Stadium, so-called Arena (© OeAW-OeAI, Archive)

15 Church in the Northern entrance of the Stadium (© OeAW-OeAI, Archive)

The existence of the civic institutions of Demos and Boule is attested throughout the 4th century until Theodosius I[70], likewise the performance of games, which lay in the hands of alytarchs[71]. A building which was built on the lower Curetes Street in about 410 A.D., and which has a projecting hall decorated with one of the best-preserved Late Antique mosaics, was probably dedicated to the office of the alytarchs (fig. 13)[72]. A Late Roman, almost circular installation in the Stadium of Ephesos has been described as an arena for animal chases and gladiatorial fights (fig. 14)[73], while the later building-in and walling-up of the northern entrance to the Stadium indicates a church structure (fig. 15)[74].

[70] Foss 1979, 13; Külzer 2010b, 523.
[71] Foss 1979, 19.
[72] Quatember et al. 2009, 125; Scheibelreiter-Gail 2011, 210–212 figs. 66–91.
[73] Roueché 2007, 60.
[74] Karwiese 1994, 24.



16 Memoria of St John at the Ayasoluk (© OeAW-OeAI, H. Hörmann/N. Math)

17 Glass vessels from the Harbour Necropolis (© OeAW-OeAI, N. Gail)

An enigma which as before is still not solved is the question as to when the first church was erected at Ephesos. As with other sites in Asia Minor, clear indications for church construction of the Constantinian era are lacking[75]; instead, Christian building activities were introduced first towards the end of the 4th century or in the early 5th century[76]. Apparently,

[75] This is a widely attested phenomenon in Asia Minor: Külzer 2010b, 532; Niewöhner 2016, 298.
[76] Pülz 2010c, 563.

already existing structures were utilised for Christian assembly rooms, which also explains the later, seemingly idiosyncratic solutions for the ground plans of Early Christian churches in Ephesos. The transfer to Constantinople of the relics of St Timothy in 336/357 A.D. might be an indication that the memorial feasts for martyrs were still held directly at the grave, without a particular building being constructed specifically for this. An exception to this is provided by the already existing memoria[77] of the most prominent Ephesian saint, St John the Theologian on the Ayasoluk (fig. 16)[78]. A structure assigned as the tomb, which was according to the tradition found empty after his death by disciples, turned into the centre of veneration[79].

To what extent the Hellenistic city wall was still functioning is difficult to judge. In any event the entrances of the Magnesian Gate which were open in the imperial period were closable again in the 3rd century, probably having to do with building activity on the wall that is attested by an inscription[80]. Work on the city fortifications is mentioned a second time for the year 370/371, whereby the Hellenistic wall circuit must be intended[81]. As previously, this wall constituted the respected boundary between the living and the dead. All of the necropoleis lay *extra muros*, including also a Christian cemetery that was already founded during the period of persecutions in the 3rd century and that later would become renowned as the pilgrimage sanctuary of the Seven Sleepers[82]. A street of tombs developed throughout the 3rd century along the canal that linked the harbour of Ephesos with the sea. During the long period of occupancy and the tombs characterised by numerous burials, the transition from pagan to Christian belief was effected, as can clearly be deduced from the burial goods (fig. 17)[83].

In Late Antiquity Ephesos was integrated into a close-knit trading network. In the Price Edict of Diocletian, three maritime routes relate to the harbour of Ephesos, and also in the *Expositio totius mundi et gentium* the harbour is described as functioning[84]. The archaeological evidence also does not contradict this picture, as a high level of activity precisely for the harbour area during Late Antiquity is proven[85]. If one believes the literary tradition, it appears that agricultural production in the hinterland of Ephesos flourished in the 4th century. On the other hand, from a decree of the emperors Valentinian, Valens and Gratian of the year 370/371 that was chiselled into the socle slabs of the Octagon, it follows that the starkly affected city suffered economic difficulties, and that tax reductions and financial support in the framework of an aid programme were designed to bring relief[86]. Unfortunately the environs of Ephesos are not sufficiently studied, so that only a few statements are possible regarding the rural settlement structures and their transformations in Late Antiquity. Two villas, located at a distance of 4 and 2 km from the city, as well as large building complexes in the immediate vicinity of the city allow the conclusion that estates for the production of agricultural goods and for the exploitation of raw materials existed (fig. 18). Furthermore those villae might indicate a ruralisation of the urban elite by building huge estates in the hinterland of the city. Those properties were not only in the possession of locals, but also of senators in Constantinople or of the imperial house itself[87]. In addition, the fact that the estates of the Artemision were transferred to the state and subsequently probably to the church should not be ignored[88].

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[77] For the date of the memoria see recently: Feissel 2014. For the cult of St John already in the 4th c.: Pülz 2012, 226 f.; Külzer 2013, 6.
[78] Külzer 2010a, 191; Külzer 2018a, 164.
[79] Foss 1979, 36.
[80] Sokolicek 2009, 343.
[81] Sokolicek 2009, 343.
[82] Pülz 2010a, 85; Zimmermann 2011, 402; Steskal 2013, 251.
[83] Steskal 2014, 337; Steskal 2017.
[84] Foss 1979, 7; Külzer 2010b, 522.
[85] Steskal 2014, 337.
[86] Schulten 1906; Pülz 201c, 546.
[87] Foss 1979, 19.
[88] Külzer 2010b, 532.

18 Late Antique mosaics in the villa southeast of Ephesos (© OeAW-OeAI, Archive)

In summary, it can be stated with confidence that, despite the massive political and social transformations, the 4th century in Ephesos is characterised by a remarkable continuity. This applies in particular to the urban image, the normative elements of which only changed negligibly. The frequently observed destructions of the late 3rd century generated indeed a chronological, but not a spatial caesura; far rather, following a hiatus, a period of reconstruction took place and a continued usage without fundamental alterations. This information gained from archaeology naturally allows inferences to be drawn regarding society and its social practices, which obviously had deep roots in ancient traditions.

CHRISTIAN BLOOM – FROM THEODOSIUS II TO CONSTANS II

As at many sites in the eastern Mediterranean, a boom under the Theodosian dynasty (379–450) can be observed at Ephesos[89]. Ultimately, with substantial infrastructural projects, a break was made with the ancient city structure and the Late Antique urban image took shape. In essence, these measures had two effects on the cityscape, namely, the new organisation of the public space and the development of a Christian sacred landscape. The seat of administration shifted from the Upper Agora to the lower city (fig. 19), where the sacred centre was also located, with the episcopal church dedicated to the Mother of God and the residence of the archbishop located not far from it[90]. Both structures were erected in the early 5th century, whereby for the Church of St Mary a basilica of the imperial period was converted, while for the Bishop's Palace a monumental new building was set up[91]. The governor, in contrast, continued to reside in the Domus above the Theatre, an extensive building complex which already served as the seat of office of the *Proconsul Provinciae Asiae* during the Roman imperial period (fig. 20)[92].

[89] Jacobs 2014; Niewöhner 2017b, 43.
[90] Pülz 2010c, 554–558; Ladstätter 2018b, 88.
[91] Karwiese 1989 proposes a date for the church construction after the council in 431. See already critical: Engelmann 1994a.
[92] Baier 2013, 44 f.

A dense development extended around the Church of St Mary and the Bishop's Palace, whereby older open plazas were built over in compartmentalized fashion[93]. Recent excavations over an area of 2,000 m² have brought a section of this Late Antique city quarter to light, and allow a detailed insight into the daily life of its residents (fig. 21)[94]. The pattern of development is characterised by a juxtaposition and an intertwining of residential areas – in part of prestigious character – with areas for the production as well as the distribution and sale of goods. The processing of, for example, agricultural products such as grain, grapes and olives, yet also meat, fish and seafood is proven here (fig. 22). We can assume the existence of shops in the rooms oriented towards the street side, an assumption supported by the thousands of coins found here. From a precise study of the building sequences it is noteworthy that the area was not developed in one piece, but was successively expanded in strips of houses. This usage of land allows the inference that there was no specific plan of development, but instead a process of longer duration must have occurred. The strip-form expansion nevertheless resulted in the fact that no unified ground plan can be observed; instead, the development was oriented according to topographical circumstances and functional requirements. The house located farthest to the west displays a large central courtyard, to which are connected a 60 m² large apsidal room with *opus sectile* floor to the south (fig. 23), and a group of three rooms decorated with floor mosaics to the west. In contrast, the courtyards of the two eastern strip houses appear substantially more modest and, based on the objects found here, served primarily for commercial activities.

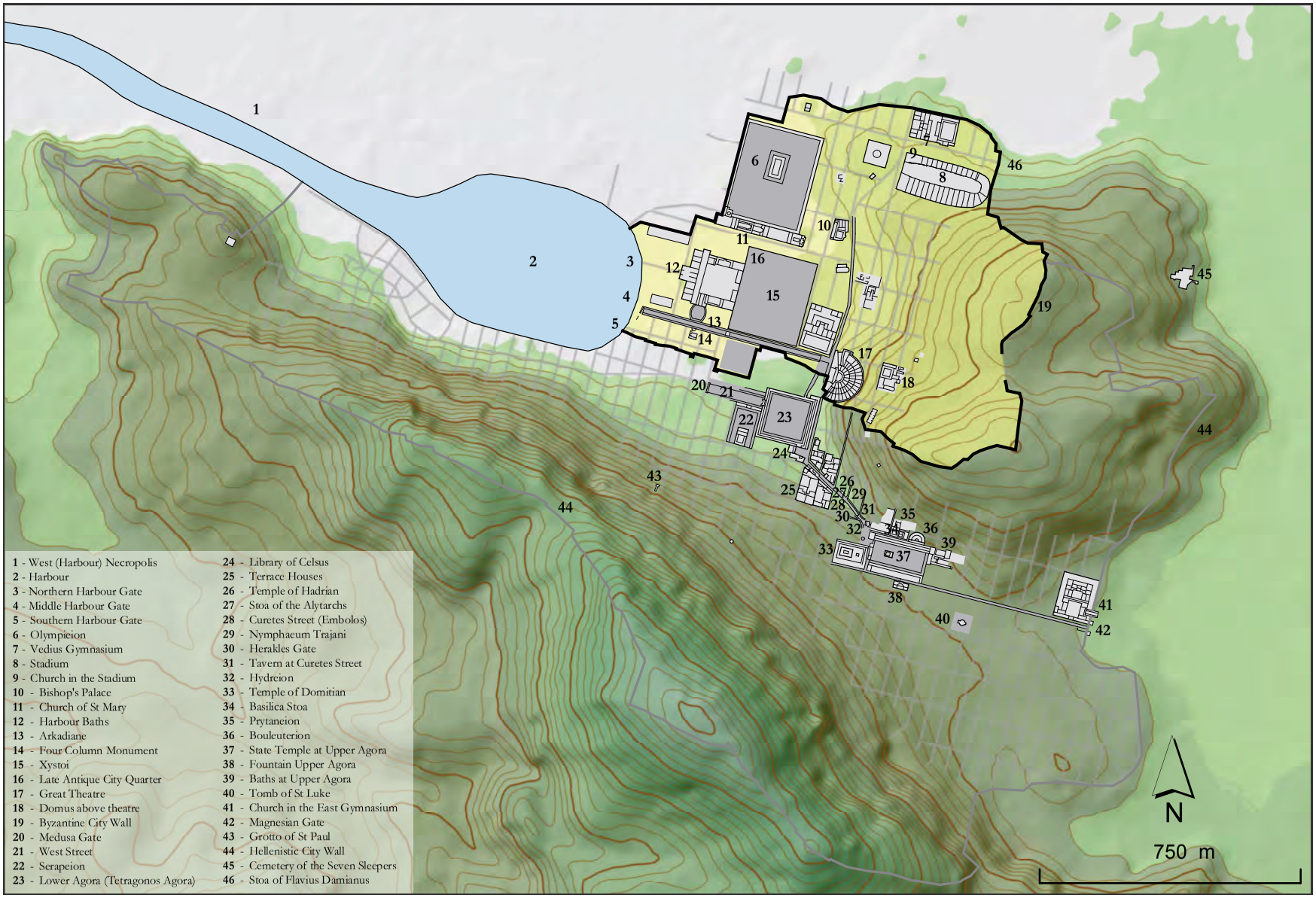
The urbanistic embedding of the excavated city quarter is also interesting (fig. 24). Whereas the development continued in both directions, to the west as well as to the east, the colonnaded street in the north constituted a termination. To the south, geophysical surveying reveals a largely undeveloped space that could have served as a garden area or for the keeping of animals. For the Late Antique city quarter, the use of space, as well as the activities attested, display clearly rural components in the urban settlement context.

In the excavated area, the earliest buildings can be dated to the early 5th century. Frequently rebuilt and exposed to clearly visible earthquake damage (fig. 25), the entire area was ultimately destroyed by a catastrophic fire in the later 7th century. Coinage of Emperor Constans II (641–668), yet also tableware of very late variety (ARS Hayes 109 and LRC 10) leave no doubt about this ›late dating‹, even though the predominant proportion of the coins from the destruction levels date from the reign of Emperor Heraclius (610–641) or earlier. We should far rather presume that this coinage was in circulation for a longer period of time after the partial collapse of the coin supply in the second quarter of the 7th century[95]. The consequences of this observation are nonetheless of far-reaching significance for the chronological classification of the destruction evidence of the 7th century in Ephesos, which until now has been based frequently on coin finds and here, in particular, on single coins[96]. As can be clearly shown here, these were in circulation decades longer, and therefore may be used for dating purposes only with reservations[97]. A re-evaluation of all destructions documented so far, including reference to small finds and pottery, is urgently needed in order to place the chronology of the 7th century on a secure footing.

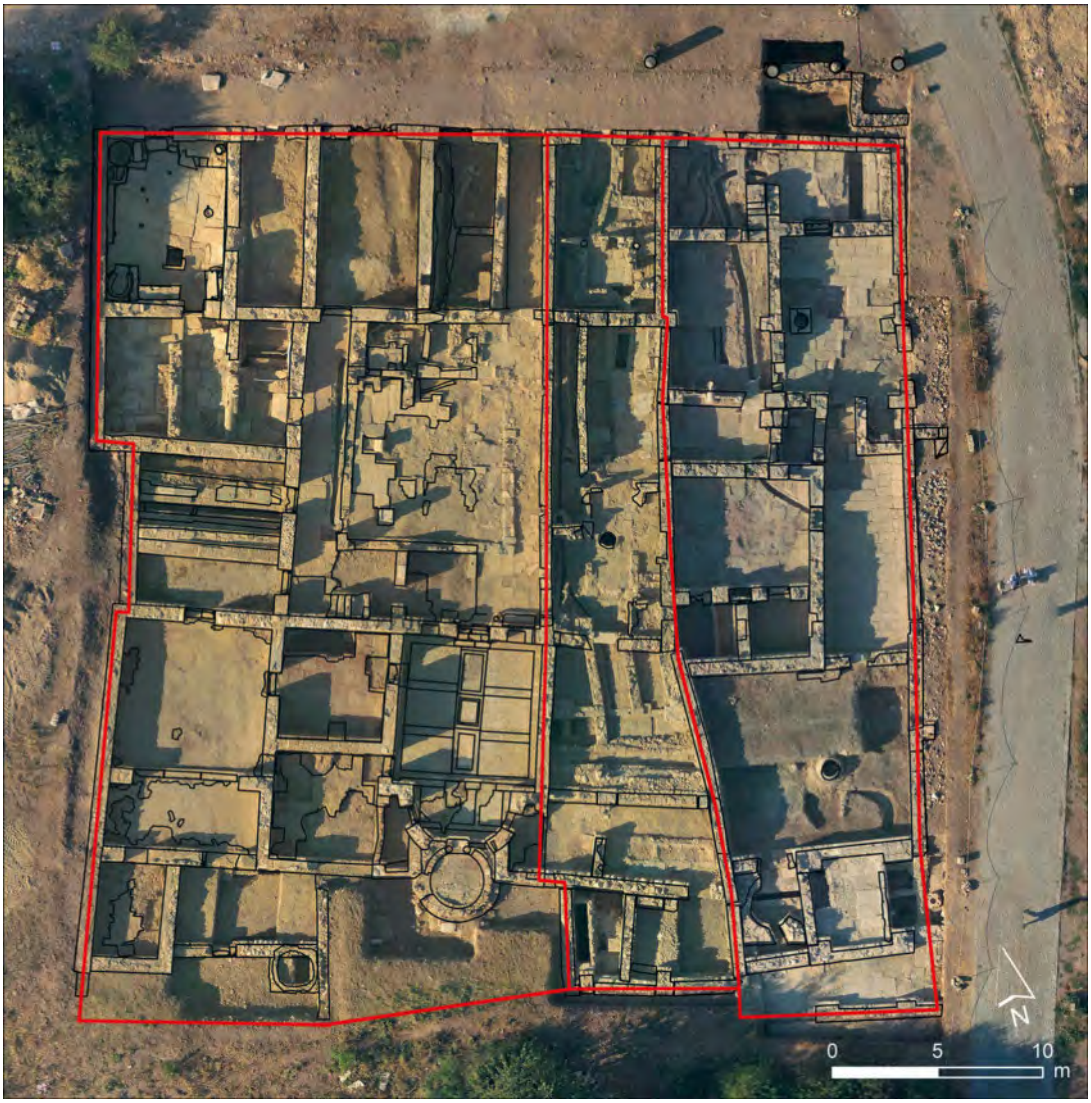
Even when the Upper Agora lost its function as an administrative centre, the area in no way became desolate. Instead, construction projects can be observed along the southern street, where a row of peristyle houses was erected. A water-powered mill, built in to the rear side of

[93] Jacobs 2009, 208.
[94] Excavations are still ongoing, for preliminary interpretations see Schwaiger 2012; Schwaiger 2016, 87–89; Ladstätter 2018b, 86 f.
[95] Haldon 2012, 109. 112.
[96] Schindel 2009, 186. 192 f.; Haldon 2012, 109.
[97] Ladstätter 2018b, 98.

19 View from the west to the harbour region (© OeAW-OeAI, O. Durgut)



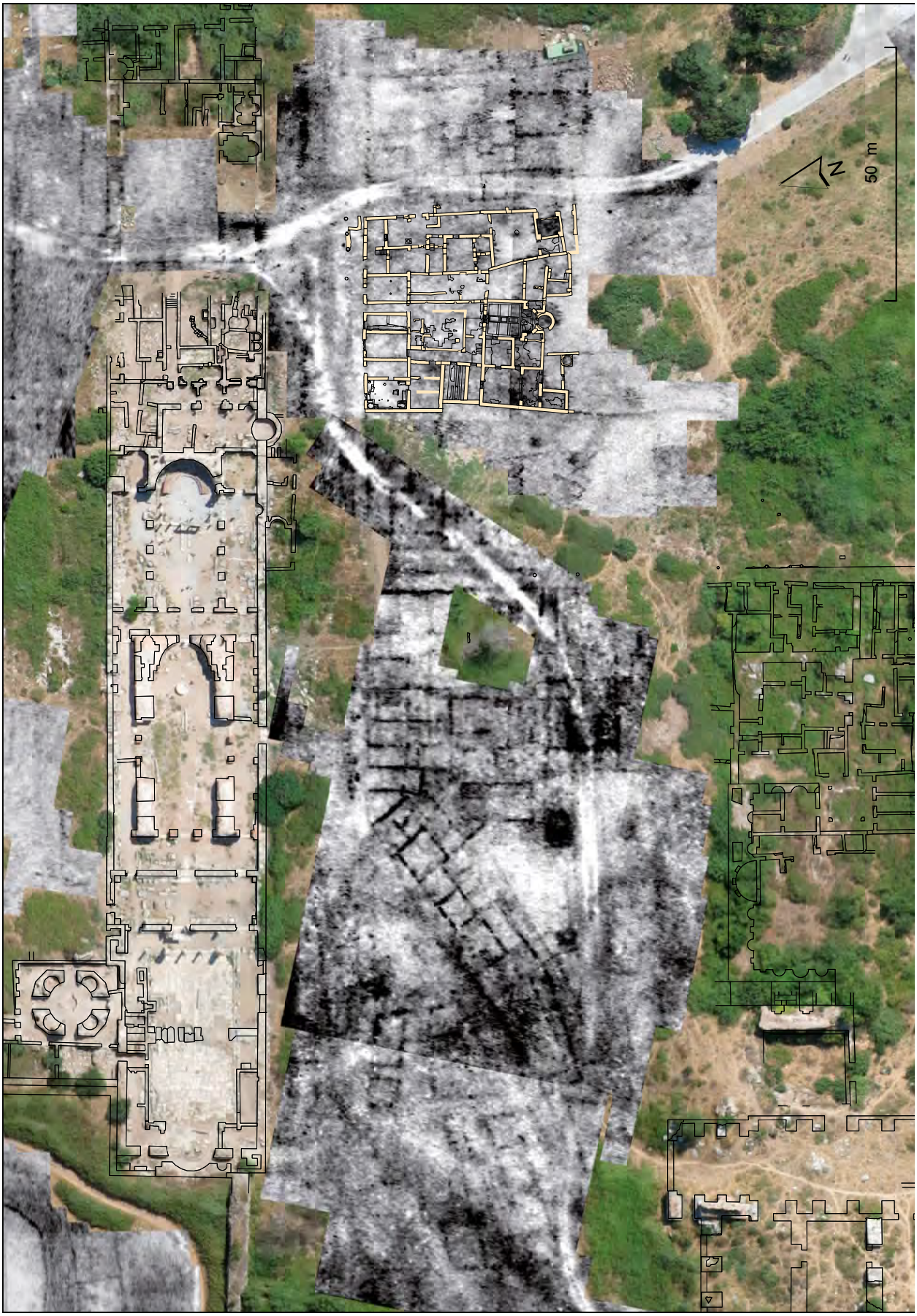
20 Map of Late Antique/Byzantine Ephesos (© OeAW-OeAI, C. Kurtze/N. Math)



21 Late Antique-Medieval City Quarter south of the Church of St. Mary, excavated area (© OeAW-OeAI, N. Gail/C. Kurtze)

22 Late Antique winepress in the Late Antique-Medieval City Quarter (© OeAW-OeAI, N. Gail)

23 Late Antique apsidal hall with *opus sectile* floor in the Late Antique-Medieval City Quarter (© OeAW-OeAI, N. Gail)



24 Late Antique-Medieval City Quarter south of the Church of St Mary. Geophysics and excavated areas (© OeAW-OeAI, C. Kurtze)

25 Earth quake disruptions in the Late Antique-Medieval City Quarter (© OeAW-OeAI, N. Gail)

26 Mosaic floor in the Late Antique dwelling in the temenos of the Temple of Domitian (© OeAW-OeAI, N. Gail)

the fountain, is evidence for the processing of grain. At the latest around 520[98], the southern colonnade of the plaza was already razed, a date which also appears probable for the demolition of the Prytaneion and the reuse of its building elements in the lower Curetes Street[99]. Already a century earlier, the imperial cult temple for Domitian and the Flavian house had been demolished down to its foundations, and the material reused or reprocessed[100]. The area of the temenos was exploited for the construction of a complex building with high-quality furnishings, for example a mosaic decorated with sea creatures and a marble niche fountain (fig. 26)[101].

98 Schindel – Ladstätter 2016, 390.
99 Steskal 2010a, 82 f.; Waldner (in press).
100 Talloen – Vercauteren 2011, 356; Ladstätter 2019, 35.
101 Scheibelreiter-Gail 2016, 346 f.

27 View from the Arcadiane to the Four-Column Monument (© OeAW-OeAI, N. Gail)

Particular effort was dedicated to a prestigious elaboration of the streets[102]. Thus, the 500 m long, central Harbour Street was fundamentally renovated under Emperor Arcadius and newly embellished with colonnades on both sides[103]. The significance of this splendid boulevard was emphasised by a four column monument endowed by a certain Frontinos and erected probably in the course of the first half of the 6th century on the Arcadiane (fig. 27)[104]. The four columns carried honorific statues of high officials or even members of the imperial house. The two additional harbour streets as well as the marble street connecting the Theatre with the Embolos also exhibit Late Antique phases of design and decoration, manifested in colonnades, fountain installations, official inscriptions, acclamations and the erection of honorific statues[105]. Two differing groups of sculptures, one in the 4th–5th century and the other in the late 5th/early 6th century, attest lively statuary workshops up to the reign of Justinian I, when the latest portrait in Ephesos was carved (fig. 28)[106].

28 Portrait of Stephanos, 6th century (© OeAW-OeAI, N. Gail)

[102] Bauer 1996, 299; Jacobs 2009, 206 f.; Auinger – Sokolicek 2016, 163. 165; Ladstätter 2018b, 81.
[103] Schneider 1995; Feissel 1999; Ladstätter – Pülz 2007, 402; Pülz 2010c, 548 f.
[104] Wilberg 1906; Jastrzebowska 2006.
[105] Roueché 2009, 162; Jacobs 2009, 210; Auinger – Sokolicek 2016, 165 f.
[106] Auinger – Sokolicek 2016, 165.

29 Late Antique phase of the Curetes Street (© OeAW-OeAI, Archive)

The Curetes Street is likely the most impressive example for the reuse of older building material in Ephesos. Architectural elements such as bases, columns, capitals and the like were removed from a variety of buildings and inserted here along the street for the configuration and decoration of the colonnades (fig. 29)[107]. The statues placed between the columns were treated in similar fashion: here, frequently, the statues and the bases did not originally belong to each other, and the inscriptions therefore do not refer to the statues[108]. The colonnades formed the backdrop for the erection of honorific statues, which were fashioned in marble as well as in bronze. Behind the colonnades lay tabernae which were used as bars, shops and workshops. Differing materials, heights, and working techniques did not hinder their joint construction.

Already in the course of the 6th century a partial walling-up and encroachment of the colonnade can be observed[109]. This development has to be understood as an extension of the original function of porticoes, which had in important role in the economic life of ancient cities[110]. Particularly striking is the evidence along the upper Curetes Street, where recently a row of shops built into a portico could be excavated (fig. 30). The room at the east can be identified without doubt as a tavern due to its specific inventory. Shelves for storing crockery, benches, storage areas and apparatus for washing, as well as more than 100 complete vessels allow a detailed reconstruction (fig. 31). The destruction must have occurred surprisingly quickly, since vessels for eating and drinking were found in place still on the tables. The high incidence of finds makes it possible to date the fire to the second decade of the 7th century.

A chronological difference of about 50 years lies between the destruction scenarios along the Curetes Street, and those of the Late Antique city quarter to the south of the Church of St Mary. Based on the archaeological evidence the hypothesis of a great catastrophe dating to the reign of Heraclius in Ephesos can be doubted[111]; instead, a model of numerous

[107] Thür 1999.
[108] Auinger 2009.
[109] See in general Jacobs 2009; Niewöhner 2017b, 44; Ladstätter 2018b, 61.
[110] Jacobs 2009, 215.
[111] Ladstätter 2017a, 222 with n. 28.

30 Tavern built into a Late Antique porticoe in the 6th century (© 7reasons, Medien GmbH, Vienna)

31 Crockery found in the destruction layer of the tavern (© OeAW-OeAI, N. Gail)

destructions occurring over a longer period of time should be proposed. Due to the lack of characteristic finds originating from the impact of military action, an explanation in terms of invasion or conquest is not possible from an archaeological perspective[112]. Natural events or destructive fires are conceivable.

Closely related to the question of the destructions is naturally that of the date of the so-called Byzantine city wall of Ephesos, for which regrettably there is still no secure archaeological evidence available[113]. The inscriptions which are repeatedly invoked, dating to the early 7th century and coming from the city gate near the Theatre, on closer consideration do not provide reliable arguments[114]. One inscription is located on a column of the colonnade and is not architecturally related to the city gate[115]; the second one was found collapsed in front of it[116]. The block on which it was affixed could have belonged to the gate, yet nevertheless no proof of its erection can be read from this; it should far rather be treated as providing a *terminus ante quem*[117]. If one considers the Ephesian fortification wall, then it is immediately apparent that it is no hastily erected wall of spolia, but instead is a solid circuit erected in one piece and in a monumental style, which enclosed the core settlement from the Theatre[118] in the south up to the Vedius Gymnasium in the north and even included part of the harbour bay. There is no need to assume that it was constructed in response to an immediate invasion threat. Instead, it represents a well-thought through building programme for the display of power and for the ongoing protection of the city. The assumption is confirmed by several gateways as optional components of the construction phase of the wall, leading from the extra-mural Tetragonos Agora to the fortified city area. The wall must be therefore understood as a primary prestigious building project and not as a protective answer to a threat scenario. The main argument for a late dating lies in the fact that not the entire city, but only its core, was surrounded, as well as the existence of an older wall[119]. At least the final point can be

[112] Foss 1975; Foss 1979, 103–105; Brandes – Haldon 2000, 147; Schindel 2009, 196–213; Külzer 2010b, 524; Külzer 2013, 7; Haldon 2016, 12.
[113] Foss 1979, 106; Crow 2017 and Niewöhner 2010, 258 with a date to the invasion period.
[114] Already critical: Niewöhner 2007, 126 but with an interpretation as a *terminus post quem*.
[115] IvE 1195. I am grateful to Alexander Sokolicek for this information.
[116] IvE 1196; Külzer 2013, 6.
[117] Pülz 2010c, 559 f.
[118] For the Byzantine faith of the Theatre see Heberdey et al. 1912; Krinzinger – Ruggendorfer 2017, 520.
[119] Niewöhner 2010, 254.

rebutted, with the reference to the basilica in the East Gymnasium, which demonstrably was built over the Hellenistic wall and for which its demolition was a precondition[120].

Possible clues for a closer chronological limit are offered by a general analysis of the use of spolia at Ephesos. According to this analysis, the organised demolition of buildings and the removal of architectural elements appear to have been initiated only in the 6th century as shown above. This is particularly applicable to the structures on the Upper Agora, which are found again rebuilt into the lower Curetes Street, on the Lower or Tetragonos Agora, and in the harbour district, as well as in the Artemision[121]. Particularly noteworthy is the comparison with the fortification wall on the Ayasoluk, which contains spolia from the sanctuary and the city[122]. The to a great extend absence of spolia in the Ephesian city wall might therefore indicate a construction date still in the 5th century, in which case the Theodosian era would naturally suggest itself[123]. In this connection it is also interesting that, in the recollection of the Seven Sleepers and their resurrection, the building of a wall was connected with Theodosius II[124].

If one follows this hypothesis, then the transferral of the seat of administration to within the area protected by the wall makes sense. In any case, it is remarkable that the entire upper city as well as the area between Panayır Dağ and Bülbül Dağ, and even the Lower Agora with the west street leading to the harbour, lay outside the fortified area. This also applies to the area of Terrace House 2, where after the 4th century a workshop quarter spread out, reaching its greatest extent and prime in the late 6th century[125]. The mills which were in operation here could supply 8,000–12,000 people with flour, during a 12-hour workday and working at full capacity. Additionally a stone cutting machine located here, and adjacent sculpture workshops were in use in the second half of the 6th century producing stone slabs and architectural elements like capitals and bases[126]. On the other hand, the low significance of the defensive character of is precisely a feature of Theodosian walls[127]. If the wall had been erected in response to an immediate threat, one would proceed from quite the opposite assumption, namely, that the facilities for supplies that were necessary to survive would have been included within the wall circuit. This observation is – as already mentioned above – validaled by the interconnectivity of (fortified) city centre and (unprotected) inner urban quarters.

The fortification circuit did enclose the harbour, which was additionally protected by towers towards the north. Late Antique docking facilities can also be attested along the 6 kilometre-long canal leading to the sea (fig. 32). Viewed from the sea the imposing character of the Late Antique city wall is evident. One could go even one step further and explain the course of the wall along the Arcadiane as a reminiscence of the Theodosian Land Walls in Constantinople.

Emperor Theodosius II (408–450) undertook specific measures in order to underscore the significance of Ephesos as a Christian metropolis. The staging of the Third Ecumenical Council in 431 A.D., and the far-reaching theological decisions that were taken there, brought great attention to the city throughout the Christian world[128]. With the institution of the cult of the Seven Sleepers, not only was a provisional conclusion made regarding the debate concerning resurrection, but also the foundation was laid for Ephesos as a destination for Christian pilgrimage[129].

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120 Vetters 1983, 117.
121 Ladstätter 2015.
122 Foss 1979, 197.
123 Niewöhner 2007, 122 f.; Niewöhner 2010, 251 f.
124 Bauer 2009, 180.
125 Wefers – Mangartz 2010; Wefers 2015; Ladstätter 2018b, 88 f.
126 Mangartz 2010; Mangartz 2015.
127 Niewöhner 2010, 253.
128 Külzer 2010b, 533.
129 Bauer 2009, 179–181; Pülz 2010a, 87; Zimmermann 2011; Külzer 2010b, 533; Külzer 2018a, 165. For the legend see Grysa 2010.

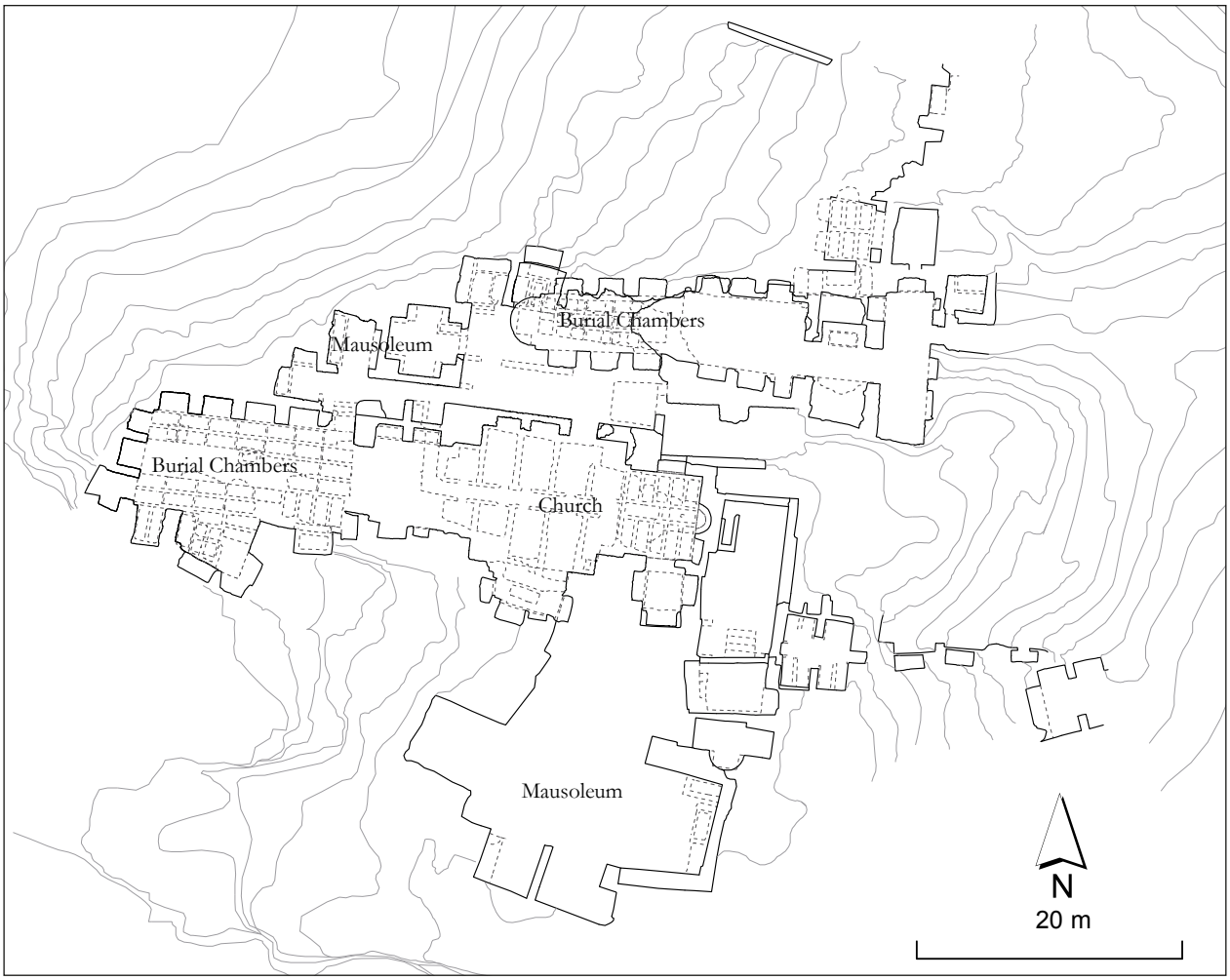
32 The Harbour Canal with Late Antique dock installations (© OeAW-OeAI, N. Gail)

The Cave of the Seven Sleepers consisted of a burial complex dating to the 3rd century A.D. (fig. 33)[130]. Based on the evidence of the closure slabs from the graves it was already frequented by Christians at this early date. These inscriptions attest to the existence of a Christian community in the period of persecution and the burial of its members in the coemeterium on the Panayır Dağ. Under Theodosius II, the cult of the Seven Sleepers was established here, and the burial complex overbuilt by a church. There are strong indications that the cult was set up as a direct, religious-political measure in response to heretical currents which cast doubt on the resurrection. The legend of the Seven Sleepers as an attestation for resurrection after death, and the establishment of the legend is an impressive example for the exploitation of narratives of saints in religious-political controversies.

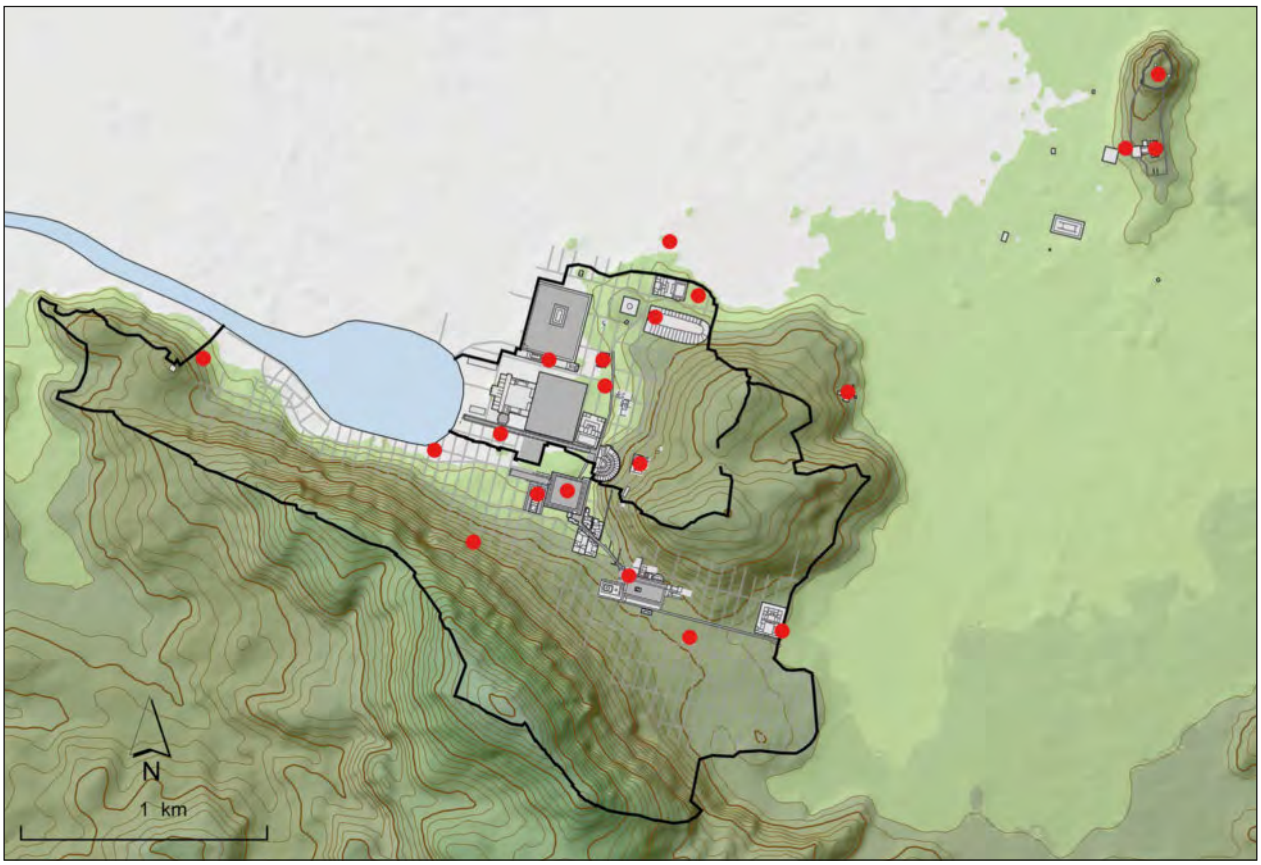
If in the early 4th century Ephesos was still seeking a role, a century later it had found: with its numerous iconic figures of the Early Church, who were active here, as well as its local martyrs, Ephesos offered fertile ground for the formation of a Christian identity. The Church of St Mary as the venue of the Church Council, as well as the Basilica of St John, the Cemetery of the Seven Sleepers, and the ›Tomb of St Luke‹ developed into pilgrimage sites which attracted large numbers of the faithful and allowed Ephesos to become a centre of Early Christian pilgrimage[131]. The preconditions for a flourishing pilgrimage site were outstanding: the city was easy to reach, offered sufficient accommodation, and had the economic foundations to be able to feed and provide for pilgrims. The presence of police and military guaranteed security, and could quickly react to the often violent rivalries between various groups[132].

Yet a real church-building boom after the early 5th century can also be attested away from the large sanctuaries (fig. 34)[133]. A mapping of sacred buildings clearly reveals how widely and densely this network extended across the city. In many cases older, imperial-period structures were adapted[134], such as for example a Roman basilica for the Church of St Mary[135],

[130] Zimmermann 2011.
[131] Hellenkemper 1995; Foss 2002; Pillinger 2005; Külzer 2010a, 191; Pülz 2010a; Külzer 2010b, 524; Pülz 2012; Külzer 2015; Külzer 2018a; Külzer (in press).
[132] Külzer 2010a, 187.
[133] Pülz 2010a, 76; Ladstätter 2018b, 90; Ladstätter – Pülz 2007, 408.
[134] Pülz 2010c, 562.
[135] Karwiese 2004; Bauer 2009, 182; Talloen – Vercauteren 2011, 364.



33 Groundplan of the Seven-Sleepers-Cemetery (© OeAW-IKAnt, N. Zimmermann)



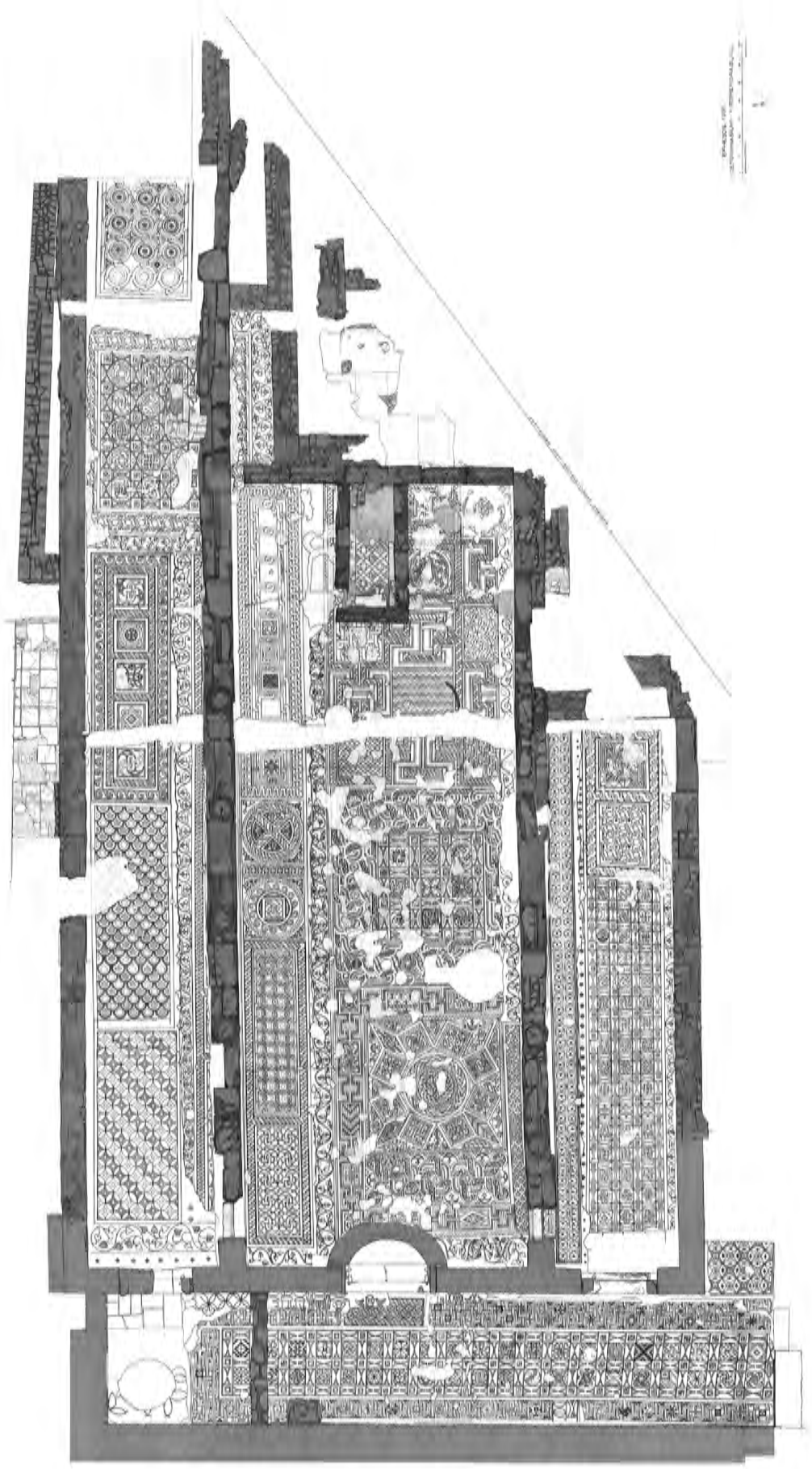
34 Map of churches and chapels in Ephesos (© OeAW-OeAI, N. Math)

35 Reconstruction of the church ›Tomb of St Luke‹ (© OeAW-IKAnt, A. Pülz)

a fountain for the circular church designated as the Tomb of St Luke (fig. 35)[136], a part of the palaestra for the church in the East Gymnasium (fig. 36)[137], and a barrel-vaulted entrance for the church in the Stadium[138]. A very unconventional solution was found in the Serapeion, where a large presbyterium was built into the north-south oriented, elongated cella in the east, thereby starkly reducing the space for the laity (fig. 37)[139]. The location of the churches was primarily oriented according to property situations as well as buildings which had lost their function[140].

The ›Christianisation‹ of these originally profane or pagan buildings was carried out by the addition of inscriptions or crosses[141]. In this regard, probably the most impressive example is provided by the Serapeion, where a large number of John monograms were found on the outside steps, as well as the popular Early Christian iconographic representation of a stork eating a snake, symbol of the conflict between God and the devil (fig. 38). Furthermore, the Serapeion is the only temple in Ephesos that was transformed into a church; all other temples were demolished and built over. This is also true for the Artemision, where the postulated transformation into a church does not stand up to critical scrutiny[142]. It must far rather be assumed that the structure, already probably derelict since the destructions of the 3rd century, was demolished and the architectural elements were reused in the construction of the later Basilica of St John and the Byzantine aqueduct[143].

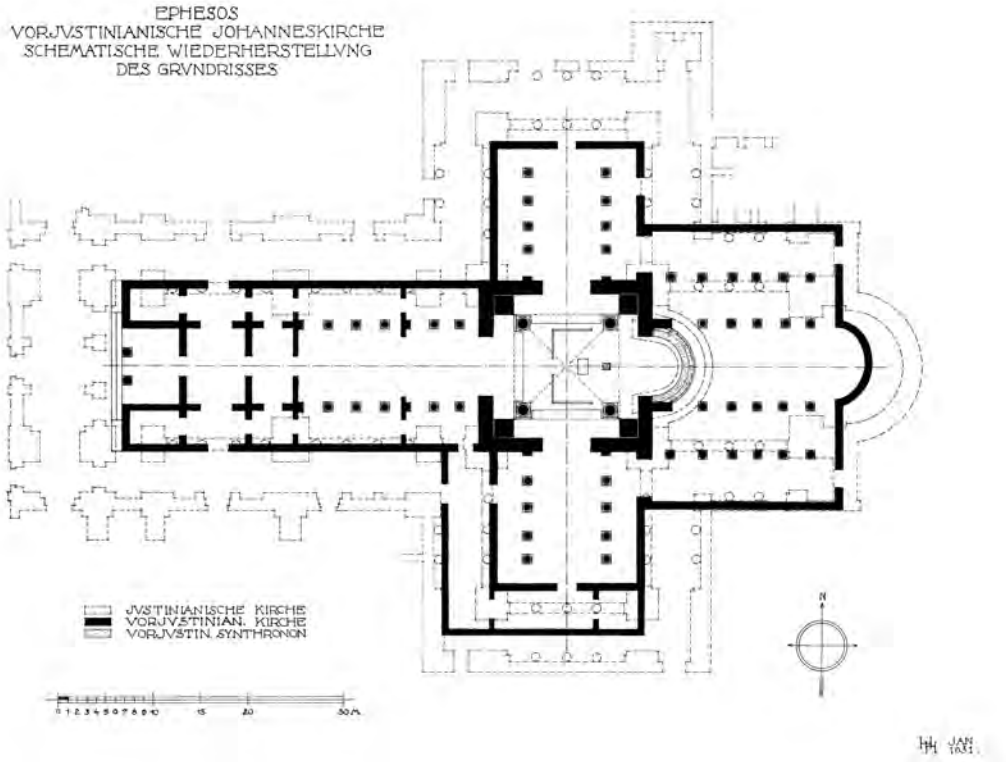
136 Pülz 2010a, 90 f.; Pülz 2010b; Pülz 2012, 249.
137 Steskal 2010b, 581.
138 Karwiese 1994, 24.
139 Bauer 2015.
140 Bauer 2009, 183.
141 Külzer 2010b, 523.
142 A church was postulated by Bammer 1999 based on weak arguments. Already critical: Büyükkolancı 2011. His deduction is confirmed by an examination of the archaeological remains, see Ladstätter 2015, 515; Ladstätter 2018b, 91–94.
143 Ladstätter 2015, 516.



36 Groundplan of the church in the East Gymnasium (© OeAW-OeAI, Archive)

37 View to the church in the Serapeion, graves marked in red (© OeAW-OeAI, N. Gail)

38 Christian engravings on the staircase of the Serapeion (© OeAW-OeAI, N. Gail)



39 Groundplan of the Basilica of St John, 1st phase (© OeAW-OeAI, H. Hörmann)

In contrast, there is also a considerable number of new buildings, first and foremost the first Basilica of St John (fig. 39)[144]. Quite a number have been discovered in the course of geophysical investigations and surface surveys in recent years. To this can be added small chapels which were either publicly accessible on the streets, or are encountered in domestic contexts (fig. 40). Except for a quite late monastery at the foot of the Ayasoluk hill[145] it has not been possible as yet to discover archaeologically a single one of the Ephesian monastery sites which are frequently mentioned in the literary sources.

The acts of the council of 431 A.D. prove that the synod took place in the episcopal church of the city, dedicated to St Mary (fig. 41)[146]. In addition to the space of the church, the extensive complex included an atrium in front, a baptistery with side rooms, at least one funerary chapel, and a bath[147]. In the immediate vicinity of the Hellenistic-Roman east necropolis, the church in the East Gymnasium was erected; its cemetery function is also confirmed by the extensive Christian graveyard surrounding it. Analogous to this, a double church on the Bülbül Dağ near the west or harbour necropolis may probably also be identified with a similar function (fig. 42). An intra-urban church could be detected by ground penetrating radar east of the Vedius Gymnasium (fig. 43). This cruciform structure, as far as is evident from the survey imaging, displays all the elements of an Early Christian memorial church, but without excavation neither the date nor the dedication is deducible. Naturally, it cannot be excluded that such churches developed out of memoriae erected in memory of local martyrs[148]. In any case, this can be concluded for the Basilica of St John which was

144 Pülz 2010a, 77.
145 Büyükkolancı 1999.
146 Foss 1979, 52.
147 For the building history of the Church of St Mary see summarising Ladstätter – Pülz 2007, 410–413; Pülz 2010c, 561; Degaspari 2013.
148 Bauer 2009, 184.

40 Chapel at the Clivus Sacer (© OeAW-OeAI, N. Gail)

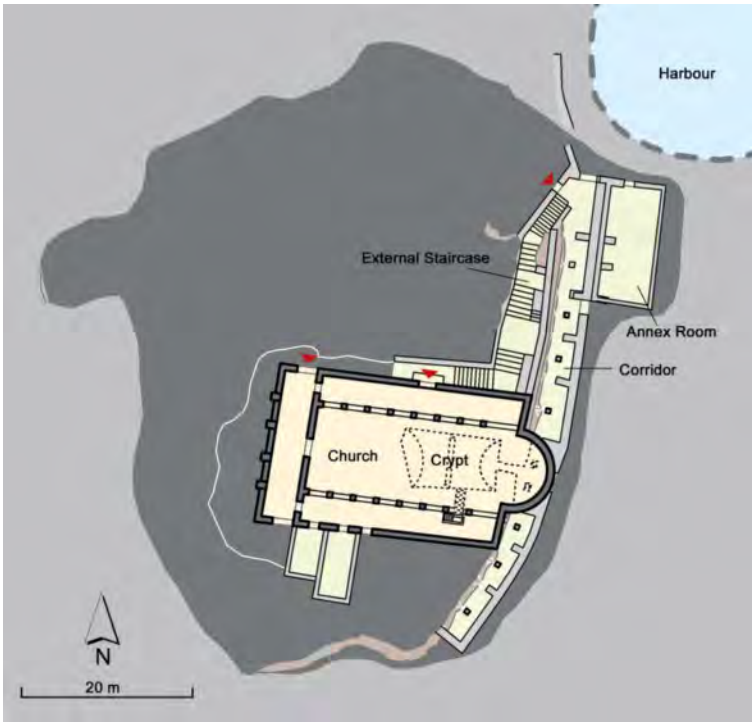
built on top of a memoria for the most important Ephesian saint[149]. In around 380 A.D., the pilgrim Egeria made mention of a *martyrium sancti et beati apostoli Iohannis*[150]. This might, in fact, refer to the cruciform church, which certainly existed by the date of 431 A.D., since it is mentioned in the acts of the ecumenical council. St John was worshipped on the fortified hill of Selçuk, the medieval Ayasoluk, which is a corruption of the name Hagios Theologos. It is believed that the church which was built there was erected over his grave; the tomb, however, was found empty. The saint, in contrast to St Mary, did not experience an assumption to heaven, but according to a persistant tradition was still alive waiting for the end of time[151]. From an archaeological perspective the location of a tomb of the imperial period on Ayasoluk is highly unlikely, as dating back to the Mycenaean period the hill was never a site for a necropolis. This contradiction must have been already understood in Late Antiquity; a Syrian source informs us that the saint, after his missionary activities in the city, settled on a

[149] Thiel 2005.
[150] Pülz 2010a, 73; Külzer 2013, 6.
[151] Magdalino 2016, 132.

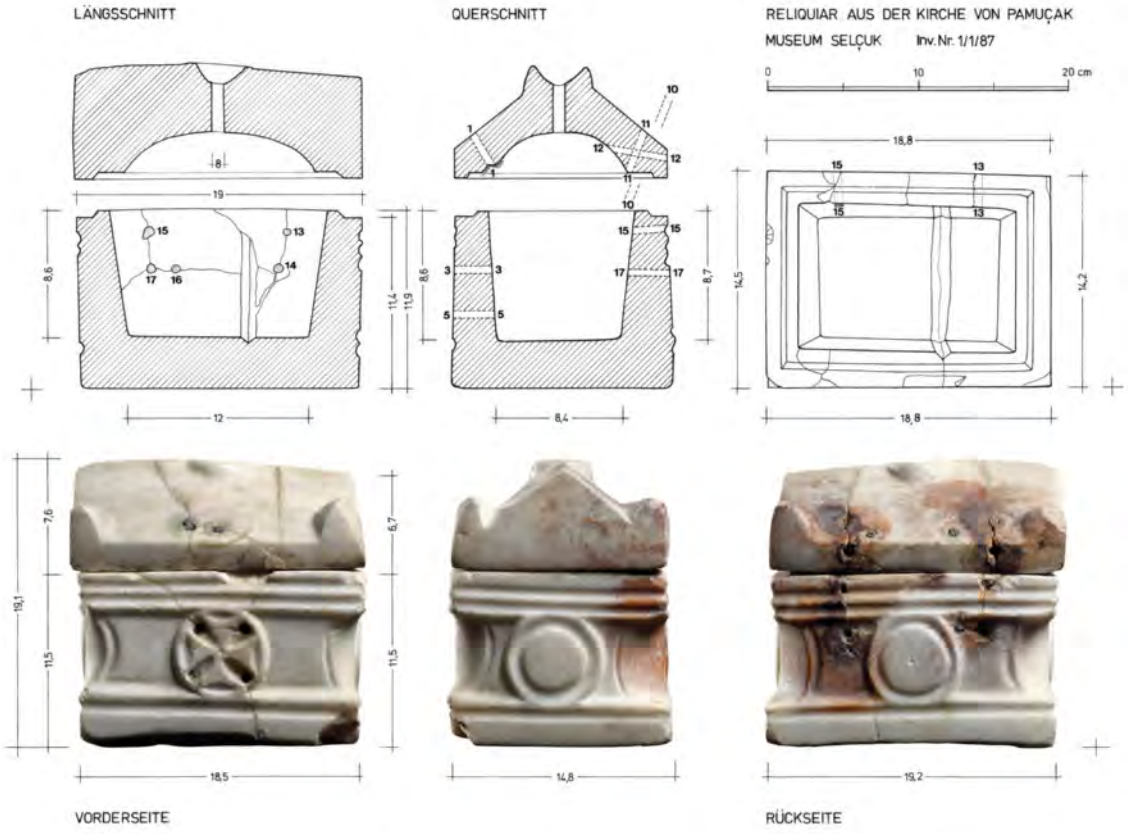
41 Aerial image of the Church of St Mary and the Late Antique-Medieval City Quarter (© OeAW-OeAI, N. Gail)

42 Aerial image of the double church on the Bülbül Dağ (© OeAW-OeAI, L. Fliesser)

43 Cross-shaped church east of the Vedius Gymnasium (© ZAMG/OeAW-OeAI, N. Math)



44 Late Antique pilgrimage site in Pamucak (© OeAW-OeAI, C. Kurtze)



45 Early Christian reliquary from Pamucak (© OeAW-OeAI, F. Fichtinger/N. Gail)

hill near the Temple of Artemis, and from this vantage point observed the destruction of the temple[152]. This topographical description fits perfectly with the Ayasoluk, which is located in the immediate vicinity of the Artemision.

The originally pagan necropoleis were transformed into Christian graveyards through the erection of cemetery churches, or they were abandoned. Large Christian cemeteries arose around the Church of St Luke and the East Gymnasium church overlapping the Hellenistic city wall and the Magnesian Gate[153]. At a time which cannot be more precisely identified at the moment, the siting of intramural graveyards, for example around the Church of St Mary or south of the Bishop's Palace, was also begun. The abandonment of the street of tombs along the harbour canal might give a dating hint, as the area was used as a waste disposal site already in the early 6th century[154]. With the utmost caution we may conclude that the transition from extra-urban necropoleis to inner-urban church cemeteries took place in the first half of the 6th century[155].

An additional church complex which was important for Ephesian pilgrimage stood on a low bluff at the entrance to the harbour towards Ephesos, at a distance of 6 km from the city (fig. 44)[156]. The sanctuary, accessed by the harbour and consisting of a church on the summit, a crypt lying at a lower level, an architectonically designed route connecting the individual elements, and annex buildings, skilfully took advantage of the natural conditions and extended over two levels.

The ingenious adaption of the architecture to the natural conditions, its elaborate construction and high quality features as well as the uniform construction process imply that the planning and execution were carefully conceived, and that a financially generous sponsor can be assumed behind the building programme. With the exception of the mosaic pavement, which based on its motifs can be roughly dated to the 5th century, there are only a few indications for the date of the complex. The various phases of the church floor allow us to assume at least a longer period of use, whereby it can generally be observed in Ephesos that the application of the opus sectile technique for the creation of decorative floors in private, public and sacred spaces distinctly increased during the 6th century. The archaeological finds do not reveal how long the complex was actually used. Clearly the fact that the harbour entrance was passable up until the Late Byzantine period and the ›old city harbour‹ of Ephesos was still functioning speaks for a period of use far beyond Late Antiquity[157].

Possibly the most significant find is a two-part reliquary, made most probably out of Proconnesian marble, in the form of a sarcophagus (fig. 45)[158]. The technical observations on the Ephesian reliquary itself, as well as the study of comparable examples, imply that the division of the compartments was secondarily executed, and the centrally located libation hole in the original planning related to the entire chest. The small chest was therefore adapted for a specific ritual, which must be understood in a causal connection with the site of its installation. In favour of this conclusion are additional details of its construction, such as the hinge mechanism, the lock of the chest, and the lack of a possibility of drainage, which although also found on other reliquaries, are until now unique in their combination in one object.

A hinge contraption only makes sense if the chest was always being opened and closed. The libation hole and the subdivision of the compartments which exactly take this into account indicate that the liquid – probably oil – as it penetrated poured over the primary relic con-

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[152] Foss 1979, 35; Engelmann 1994b.

[153] Pülz 2010a, 91 f.; Pülz, 2010b, 119–125; Steskal 2013, 253; Sokolicek 2009, 344 dates the burials at the Magnesian Gate to the 4th/5th c.

[154] This assumption seems to be confirmed by the latest tombs on the Bülbül Dağ dating to the late 5th/early 6th c.: Steskal et al. 2011, 304.

[155] Steskal 2013, 253; Ladstätter 2018b, 98.

[156] Mercangöz 1997; Ladstätter 2018a; Külzer 2018b, 79.

[157] Stock et al. 2016, 992.

[158] Ladstätter 2018a, 756.

46 Early Christian ampulla from Ephesos (© OeAW-OeAI, N. Gail)

tained in the larger compartment, then flowed over the dividing wall into the smaller unit where it was caught, and from there it could again be removed as a contact relic. The ritual practised in the church in Pamucak therefore provided for the public presentation of primary relics, most probably within the context of processions which took place at regular intervals and for specific occasions; the reliquary chest discussed here is assigned to the category of mobile church reliquaries. This hypothesis finds support in the literary sources of the 6th century, which in the eastern Mediterranean region attest to the display of holy bones »when opened«[159]. The relics were however not only viewed, but also sacred oil was obtained by contact with them, oil which could be given to pilgrims in the form of impregnated cloths.

Relics, however, should also be visible apart from the processions, and publicly accessible in the space of the church. Where, however, was the chest exhibited in the church complex in Pamucak, and how were the processions carried out? The architectural evidence appears to give a clear answer here. The pilgrims could reach the site exclusively by means of the harbour located in the north-east; from here, they were guided directly through the vaulted passageway to the crypt. This elongated space was divided into two, whereby a narrow staircase led from the front part into the southern aisle of the church. The area at the rear offered enough room so that we can presume that this was the space where the reliquary was exhibited, perhaps in combination with an altar. After veneration the relic, the pilgrims ascended to the church where mass was held; afterwards, completing the tour, they descended the exterior staircase down to the harbour.

The economic factor associated with pilgrimage was enormous, since the visitors required accommodation and provisions at the site; furthermore, endowments and donations were also made to the church[160]. The establishment of Ephesos as a pilgrimage centre resulted in an economic revival of the region and provided the motivation for increased efforts in creating a functioning network of roads and connection to the sea, in order to guarantee access to Ephesos. In the city and in the extra-urban sanctuaries, establishments were set up which were specifically aimed at pilgrims, and which assured their provision and accommodation. The production of small 4–8 cm tall clay ampullae, manufactured in moulds and decorated with reliefs on both sides were part of this phenomenon (fig. 46)[161]. They are the material witnesses to an extensive trade in devotional objects from Christian pilgrimage centres[162]. Ephesos was certainly a main site of production of these pilgrim's souvenirs, and this is also confirmed by petrographic analyses. Nevertheless, a number of workshops in western Asia Minor must be assumed. There is no certain evidence indicating what the little bottles once contained. Conceivably they contained the dust of St John – the *manna* –, which was annually collected from his tomb; or perhaps also oil and wine, which was blessed and bottled during special ceremonies.

After overcoming the crisis, Ephesos enjoyed a heyday in the early 5th century, characterised not only by large-scale building programmes but also by a radical social change. The cae-

159 Ladstätter 2018a, 761.
160 Külzer 2010a, 187.
161 Külzer 2010a, 194.
162 Pülz 2012, 233–238.

sura compared to the Tetrarchic-Constantinian period is serious, as the character and layout of the city had fundamentally altered. A clear revitalization of civic life and increasing prosperity occurred, even though over a smaller space and with a distinctly smaller population count. This development might be explained by loss of political and administrative importance of Ephesos in comparison to the Early and mid-Roman period. On the other hand huge estates in the environs indicate a flourish of rural life style to the detriment of urbanism. If one believes the acts of the council, the city also largely regained its economic importance. When Ephesos was designated as the venue for the Third Ecumenical Council in 431 A.D., two reasons were decisive: the city could be reached easily by land and by sea, and the city had the means necessary to provide satisfactory accommodation and provisions for the participants[163]. This is an important piece of evidence for the agricultural production of the Ephesian chora, which was decisive for the prosperity of the region. The most important agricultural products were grain, oil, and wine[164]. While the characteristic Ephesian wine amphoras during the Imperial period (so-called one-handle jars or Peacock-Williams 45)[165] almost exclusively circulated in the eastern Mediterranean region, in Late Antiquity their distribution radius altered fundamentally. Now, the entire Empire up to the furthest peripheral regions was provided with wine from Asia Minor; moreover, standardisation in form and size can be observed. Wine from Ephesos now was also supplied to the military, a fact which is impressively emphasised by the intensified occurrence of the amphora form ›Late Roman Amphora 3‹ in the Roman forts along the limes (fig. 47). It seems that it cannot be excluded that the standardisation of production, and the appearance of the amphora type throughout the entire Mediterranean, can be associated with the new socio-political conditions of Late Antiquity and the administrative reforms, in particular the *annona*, that came with them[166].

47 Late Roman 3 Amphora (© OeAW-OeAI, N. Gail)

The prosperous life of the city lasted at least until the second quarter of the 6th century[167]. Thanks not least to its functioning harbour, Ephesos was integrated into a widely branched trade network. This is also reflected in the culture of daily life, where tableware from North Africa and wine and oil from Egypt, the Black Sea region and Tunisia belonged to the sophisticated household. Exchange of goods was particularly intensive at the regional level, incorporating western Asia Minor and the Aegean islands. This fact is easily recognisable in the supply of copper coins, which came predominantly from the mints of Constantinople, Nicomedia and Cyzicus[168]. Emperor Justinian and his wife Theodora gave prominent recognition to St John with the foundation of a new church on the Ayasoluk, thereby making a religious and political statement (fig. 48)[169]. This monumental new construction, initiated in

[163] Foss 1979, 7; Külzer 2018a, 164.
[164] Ladstätter 2010a, 511 f.
[165] Bezeczky 2013; Ladstätter 2010a, 513 f.; Ladstätter 2018b, 94.
[166] Ladstätter – Pülz 2007, 422 f.
[167] This corresponds to the historical record: Foss 1979, 8; Külzer 2010b, 523; Haldon 2016, 10.
[168] Schindel 2009.
[169] Hörmann et al. 1951; Büyükkolancı 1995; Thiel 2005; Russo 2010; Pülz 2010a, 78; Karydis 2015.

48 Aerial image of the Basilica of St John, 2nd phase (© OeAW-OeAI, N. Gail)

49 Medieval phase of the City Quarter south of the Church of St Mary (© OeAW-OeAI, N. Gail)

535/536, replaced the older church, and in scale and opulence was not surpassed. For this reason, Procopius referred to it as the most sacred of the Ephesian churches. The tomb of St John lay in an underground crypt, at the intersection of the arms of the cross; this could be accessed by means of a narrow flight of stairs in the rear area of the presbyterium. Here, on holy days, the dust of St John, the *manna*, was gathered from his tomb. According to Gregory of Tours, the healing of sicknesses was attributed to this *manna*[170]. The Ayasoluk hill was transformed into a pilgrimage site with a baptistery, a treasury and a chapel adjacent to the basilica and infrastructural buildings to accommodate and supply the stream of pilgrims[171]. Furthermore, an aqueduct secured the water supply for the now fortified site. Spolia, originally from Ephesos but also from the Artemision, were used as building materials. One gets the impression that at least the temple, and probably also other structures in the temenos, were released for demolition and for rebuilding. The Church of St Mary also experienced a fundamental renewal in the Justinianic period, while other houses of worship were decorated with mosaics or *opus sectile* floors.

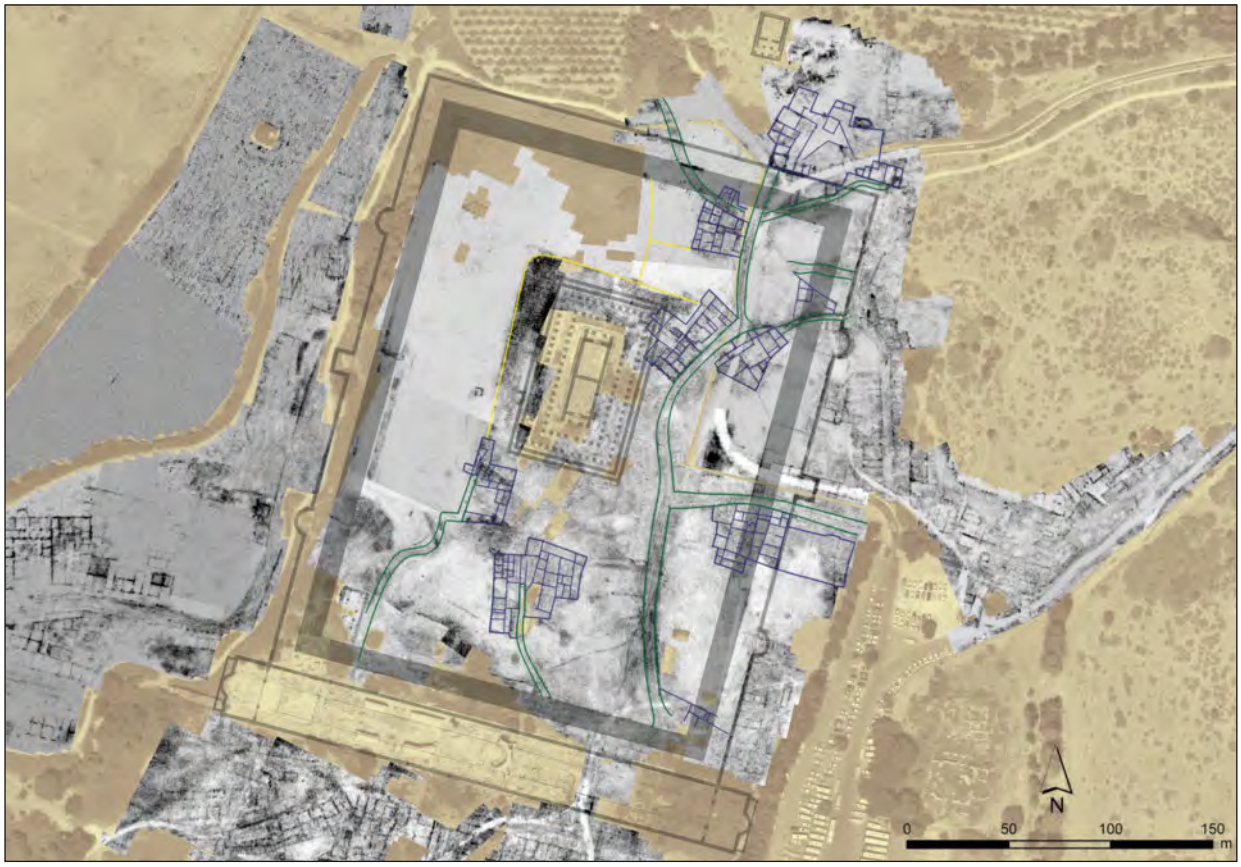
It is of course impossible that the Justinianic plague did not affect Ephesos[172], nevertheless, until now there are no archaeological indications and the historical sources only refer to a plague wave in A.D. 744–747[173]. Neither the mass graves typical for epidemics, nor marks of the plague on skeletons are attested, and the second half of the 6th century shows no apparent decrease in population or decline in living conditions. The devastations of the 7th century appear to have affected a still lively city. Here, two destruction horizons need to be clearly differentiated, of which the earlier, with final coins of ca. 614/616 A.D., is dated to the first quarter of the 7th century, whereas the later one is to be dated at least to the 660s, if not even a little later. After this destruction there followed no reconstruction in a traditional sense; instead, the situation was used as an occasion to create something completely new[174].

SURVIVING AND TRANSFORMING – THE INVASION PERIOD

The building development subsequent to the destructions of the 7th century had only very little to do with the former ancient city. The consequences are nowhere more impressively displayed than in the recently excavated Late Antique-Medieval City Quarter (fig. 49). On top of a massive fire debris layer, a reconstruction took place in which although standing walls were retained for use, the ground plan was nevertheless completely altered. In contrast to the Late Antique strip houses, the now compartmentalized development was not oriented to the alignment of the street grid. Characteristic forms of ancient residential architecture, such as for example the (peristyle) courtyard, were also given up. The irregular ground plans follow no pattern and can be most readily explained as a response to functional necessities.

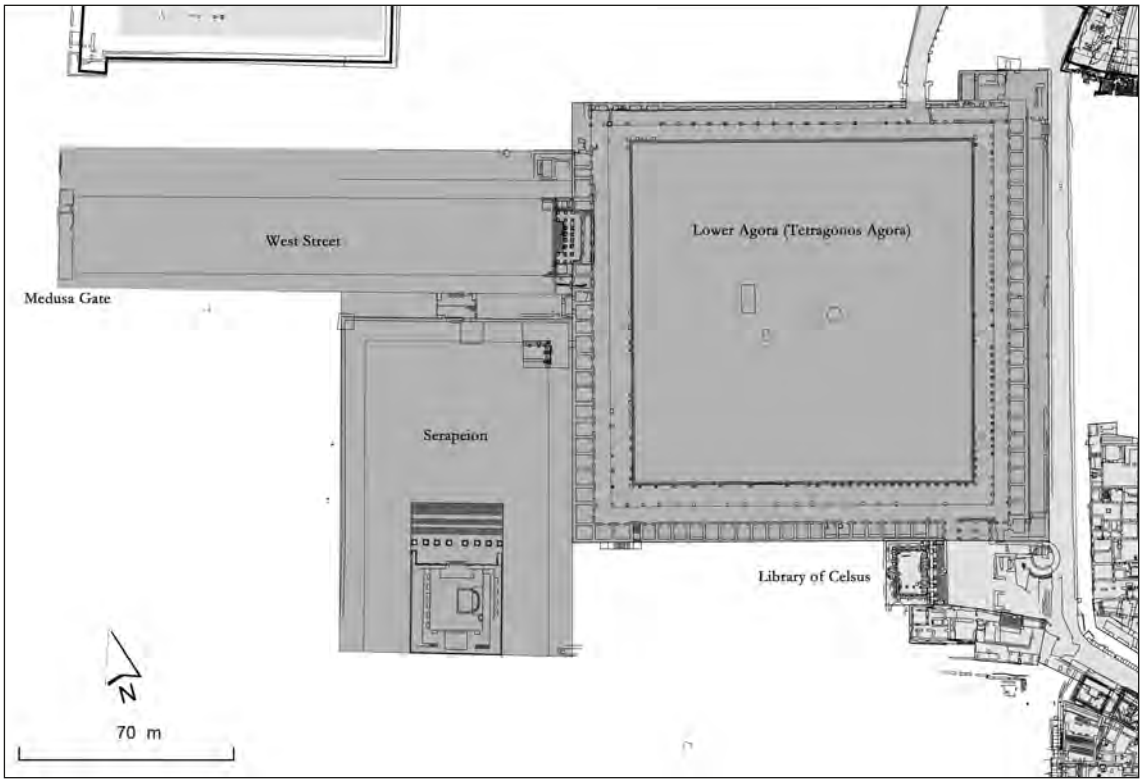
Workshops were located near storage rooms and residential areas, which nonetheless lack sophisticated features. This settlement phase is characterised by floors of brick and rammed earth, whitewashed walls and simple items of furniture. Whereas to the south of the Church of St Mary a relatively small surface area has been excavated, to the north of this, geophysical survey has revealed a large-scale area on top of the former land of the Olympieion (fig. 50). Here groups of buildings constituted small settlement units which were connected to each other by means of paved paths. Gardens or pasture for cultivation and livestock could be extrapolated from the fallow areas lying between them and can also be recognised in the walled precincts. The character and structure of Ephesos had fundamentally changed; the

[170] Pülz 2010a, 81; Pülz 2012, 230–232.
[171] Büyükkolancı 1982.
[172] Stathakopoulos 2000; Little 2007; Meier 2016.
[173] Foss 1979, 106; Külzer 2010b, 525.
[174] In general: Brandes 1990; Külzer 2013, 4.



50 Medieval (?) structures in the Olympieion (© ZAMG, S. Seren/N. Math)

51 Late Antique/Medieval encroachment on the Arcadiane (© OeAW-OeAI, J. Struber-İlhan)



52 West street, Serapeion and Lower Agora (© OeAW-OeAI, N. Math)

Late Antique city had given way to an urban village. When, precisely, this transformation of the Olympieion took place cannot be clarified without excavation. However that may be, the relative-stratigraphy observations suggest that a mid-Byzantine settlement horizon can be proposed here.

This phenomenon of ruralisation can also be attested in other districts of the city. For example, at the Upper Agora installations relating to water management as well as basins indicate handwork activities on the plaza. Concentrations of finds indicate that decentralized settlement structures grew up on the extensive former urban area of Ephesos, often in the immediate vicinity of Christian sacred buildings. The church, generally with adjacent graveyard, formed the centre of these small villages, and their inhabitants devoted themselves to agriculture and manual trades.

Whereas the minor roads were frequently completely built over, the large intramural arteries were retained, although they were constricted by numerous installations. An important reason for maintaining the main roads was certainly the connection to the harbour and pilgrimage sanctuaries. Encroachments can be well observed along all of the main colonnaded streets, and in particular along the Arcadiane (fig. 51)[175]. Along the Curetes Street the tabernae were closed and abandoned while the side colonnades were provided with dry walls of spolia, probably to stop the fall of debris from the slopes above. The West Street was divided into two parts by the so-called Medusa Gate, and the eastern region was reconfigured into a plaza (fig. 52). From now on this constituted a unity with the church in the Serapeion and the Lower Agora. The arrangement that was created here is not easy to interpret, yet at any rate it is clear that the agora lost its columns, yet retained its form as a plaza[176]. A small chapel dedicated to St John was built into the eastern taberna front[177]. John is also present in the form of the monograms on the steps

[175] Jacobs 2009, 212.
[176] See already Foss 1979, 112; Pülz 2010c, 558–560.
[177] Zimmermann 2010, 656 f.

53 Eponymous relief from the so-called Medusa Gate (© OeAW-OeAI, N. Gail)

of the Serapeion church; this can be demonstrated to have existed at least until the 10th/11th century[178]. In addition, the proximity to and easy access from the harbour basin, as well as the monumental context of the ›Medusa Gate‹ are noteworthy (fig. 53). Are we perhaps dealing with the site where the market of St John was held during the Middle Byzantine period[179]? This market is assured for the 8th–10th centuries A.D., and in addition two independent sources report a panegyris for the period after the Turkish conquest in 1317 and 1322[180]. While a localisation for this market at Ephesos makes complete sense for the Middle Byzantine period, for the later reports one would prefer Ayasoluk as a location, also because at this time period the harbour of the old city was already silted up[181].

On the other hand, the decision was taken to transfer the seat of the bishop to the Basilica of St John on the Ayasoluk (fig. 54). The seals that were found in the Bishop's Palace and which underscore its central administrative function come to an end in the first third of the 8th century. This might be an indication that the administrative as well as the episcopal centre was transferred at this date from Ephesos to Ayasoluk[182]. This transferral also signified a change of function for the Church of St Mary which, although it lost its episcopal position, nevertheless continued to serve the local population as a church for the celebration of the eucharist and as a cemetery church. The evaluation of the archaeological sources suggests that not only the ecclesiastical and secular administration was transferred to the Ayasoluk hill during the course of the late 7th/early 8th century, but also the military leadership. Geostrategic considerations may well have been in the forefront here: the Ayasoluk hill looked towards the hinterland and threats could be rapidly responded to. This might be associated with the establishment of the Thema Thrakesion and the stationing of a garrison in the capital city of Ephesos[183]. The defence against Arabic attacks required a geostrategic reorientation away from the Aegean and back towards Anatolia.

In contrast to previous centuries, controlling the harbour of Ephesos was no longer a priority due to its state of deterioration, although it was still at least partially functioning[184]. Whereas the Byzantine city wall still incorporated the harbour basin and fortified it with massive towers, the military administration, with the stationing of troops and the development of the fortifications on the Ayasoluk, was oriented towards the interior of Anatolia. The building of

178 Steskal et al. 2015, 286 tab. 3.
179 Foss 1979, 110.
180 The Travels of Sir John Mandeville (1322), Chapter IV. 13. Nicephorus Callistus Xanthopoulos, Ecclestiasticae Historiae, Libri XVII, chapter 31, in: J.-P. Migne, Patrologiae cursus completus. Patrologia Graeca 147 (Paris 1865) col. 301A. B.
181 Stock et al. 2016, 992.
182 Ladstätter 2018b, 100.
183 Külzer 2010b, 524 dates the installation of the Thema to the late 7th c.
184 Ladstätter 2018b, 100.

54 Aerial image of the Ayasoluk (© OeAW-OeAI, O. Durgut)

the fortification on the Ayasoluk hill may also have been associated with this transfer[185]; the materials and the type of construction differ considerably from those in Ephesos. By massive exploitation of the architectural elements from the city – for example the marble benches of the Theatre – the seat of the bishop was built up into a fort, a protection that the Church of St Mary could not offer due to its topographical situation. Nevertheless, as the main church of the city it still remained functional[186]; the baptistery, however, was abandoned and its entrance was obstructed by the construction of a bathing installation (fig. 55)[187]. Around the Church of St Mary a graveyard extended, used up until the Late Byzantine era. Burial areas are also attested for the church at the Stadium, the churches south of the Bishop's Palace, in the Serapeion church and in the East Gymnasium, as well as the pilgrimage sites of the ›Tomb of St Luke‹ and naturally, in particular, the Cemetery of the Seven Sleepers[188].

This phase of settlement can only very roughly be assigned a date sometime between the late 7th century and the late 9th century. Although numerous sub-phases can be ascertained through relative stratigraphy, nevertheless diagnostic finds are lacking which could confirm this periodisation in terms of absolute chronology. This lack of precision in the dating is due to the collapse of the regular coin circulation after the reign of Constans II, as well as to the absence, after the end of the 7th century, of ceramic types which can be evaluated in a fine-chronological manner. Even if the density of finds is so sparse, evidence does accumulate for an extensive settlement horizon in the 8th century[189]. In this connection, coins and lead seals from the Upper Agora, the Arcadiane and the Bishop's Palace can be mentioned[190]. A renovation and refurbishment of the Church of St Mary also occurred during this time period[191], and naturally the graves as well are an indirect confirmation of settlement activity.

185 Foss 1979, 113; Niewöhner 2007, 124.
186 Ladstätter 2018b, 100.
187 Ladstätter 2018b, 83–85.
188 Steskal 2013, 253; Steskal 2017, 184 f.; Ladstätter 2017a, 230 f.
189 For 8th–10th c. small finds see A. M. Pülz 2012.
190 For seals as indicators for trade and commerce: Haldon 2012, 133 f.
191 Degaspari 2013.

55 The Byzantine Bath south in the atrium of the Church of St Mary (© OeAW-OeAI, Archive)

56 Mid-Byzantine amphora from Ephesos (© OeAW-OeAI, N. Gail)

Ephesos continued to be, as previously, an important producer of agricultural products, above all of wine (fig. 56). These products were, however, transported in a container that was completely new for the region, namely, the so-called amphoras of the Byzantine globular type. These have been found in the Middle Byzantine settlement horizon and therefore date to the 8th/9th century. For Ephesos, the adoption of a type that was common to the entire Byzantine Empire signified a clear and distinctive break with a centuries-old tradition. Whereas the contents, that is, wine, did not change, the producers took up the standardised Byzantine vessel

type in order to be able to compete on the market and to conform to the generally accepted tendencies towards normalization[192]. This development can be perceived around the Mediterranean and also affects areas outside the Byzantine Empire such as, for example, Visigoth Spain before 711. Even regions with a strongly export-oriented agricultural production, such as for example the provinces of Africa Proconsularis or even Asia, broke with their traditions and embraced the Byzantine repertoire of forms.

Although Ephesos as before displayed the normative elements of a city as a political, cultic and economic centre, the urban image of the Middle Byzantine period signified a distinct break with antiquity. This is evident not only in a fundamental de-urbanisation[193], resulting in a shrinking of the city and an increase in rural space[194], but also in a ruralisation of the urban structures per se. The formerly dense development yielded to an agglomeration of villages, connected by Roman traffic routes which continued to be maintained. Sporadic destructions could be neither the inducement nor the cause for such far-reaching alterations; instead, the grounds – be they of a climatic, demographic, or social nature – must have already existed before[195]. Ultimately it seems rather as if the inhabitants used the destructions as opportunities to get rid of structures which had fallen out of use, or which were perhaps a hindrance to the new challenges, and to adapt the city to the new realities of life.

BYZANTINE REVIVAL – THE TENTH-ELEVENTH CENTURIES

If one can believe the depiction of Ephesos in the Life of St Lazarus, then the city as an active living site had lost a great deal of importance in western Anatolia of the 11th century[196]. The settlement pattern of the lower Caystros Valley and the plain of Ephesos consisted now of numerous villages, individual farmsteads and monasteries. The designation of »kastron« and »polis« was now only applied to the administrative centre on the Ayasoluk hill, existing in immediate relationship to the Basilica of St John[197]. The archaeological evidence, however, leaves no doubt that the ›old‹ Ephesos was still occupied during the 11th century and, furthermore, confirms the existence of a vital, dynamic Christian pilgrimage site[198]. This applies not only to the large sanctuaries, the Basilica of St John and the Seven Sleepers, but also to numerous smaller sacred buildings. In the Church of St Mary the presbyterium was fundamentally redesigned in the form of a templon (fig. 57)[199]. The marble decoration of the 11th century includes a columnar installation with architrave running around it, and closed barrier plaques finished with profiled cornice. Particular attention was undeniably given to the Basilica of St John, where a building horizon of the 11th century can be recognised both in terms of building history and also due to the fittings[200]. Such building measures were, however, only realisable with financially secure contracting authorities, functioning administrative structures at the urban and clerical level, and an intact infrastructure. These measures occurred during a phase of re-urbanisation of Anatolia, in which the city again acquired its key function as economic centre and the coastal region gained in attractiveness due to the resurgence in supra-regional trade[201].

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192 Ladstätter 2010a, 515.
193 Brandes – Halden 2000, 143; Haldon 2016, 13.
194 Haldon 2016, 12.
195 Haldon et al. 2014, 149 f.
196 Greenfield 2000.
197 Külzer 2010b, 526.
198 Foss 1979, 121; Külzer 2013, 9; Ladstätter 2017a; Ladstätter 2018b, 102.
199 Degaspari 2013.
200 Thiel 2005, 105 f.
201 Haldon 2016, 13.

57 The 11th century templon in the Church of St Mary (© OeAW-OeAI, N. Gail)

A reconstruction of the settlement history requires an analysis of meaningful find types which can be chronologically evaluated. In the 10th/11th centuries these include, in addition to coins and seals, specific ceramic groups, in particular the glazed ware (so-called Glazed White Ware) as well as amphoras[202]. Whereas coins from the 8th and 9th century are only sporadically encountered in Ephesos, a recovery in the monetary economy and coin circulation can be observed during the 10th century, reaching a high point with the mint series of the anonymous *folles* of the 11th century. The situation at Ephesos is in itself not unusual, but can be compared extremely well with other find sites in Anatolia which also demonstrate high loss rates of anonymous *folles*[203]. In contrast, seals are very rare, unlike in the invasion period, and are less informative for questions regarding settlement history. In combination with the coins, the glazed ware and the amphoras, it is nevertheless very clear that we have to assume the presence of two small towns existing in parallel during the 10th and 11th centuries. In addition, the finds of the 11th century extend over the entire ancient urban area. From this we can probably conclude that there was a continuum of those decentralized villages observed during the invasion period, with a dense settlement nucleus around the Church of St Mary. The fortifications erected in the Late Antique period protected, as before, a 56 ha large area suitable for building, while the temenos wall of the Olympieion must have formed an additional inner circuit. Although the old harbour had certainly diminished in size, it was still navigable for small boats via a narrow canal gully and was recognised as one of the greatest ports of the Empire[204]. The main harbour was now already located in the bay of Pamucak, and from here either the old city could be reached by means of the channel, or Ayasoluk could be accessed via the Caystros. Due to the swamp formation of the plain and the flooding along the foothills of the Bülbül Dağ, the land passage had to be conducted from the coast via Ephesos to Ayasoluk, and therefore in any case ran past the old city.

Concurrently, a second Middle Byzantine settlement grew up around the Ayasoluk; subsequently the Turkish provincial capital developed out of this. The hilltop itself did not provide enough space for a settlement, since after deducting the space of the Basilica of St John and

[202] See in detail: Ladstätter 2017a, 225–230.
[203] Morrisson 2017, 71–81.
[204] Foss 1979, 119; Ladstätter 2017a, 232.

the citadel, only 2.3 ha were available for building[205]. This area was used mostly for infrastructural buildings necessary for the establishment of a pilgrimage sanctuary of this size, as well as administrative buildings[206]. The *kastron* on the Ayasoluk hill, frequently mentioned in the sources, is therefore not to be understood as a town but far rather as an acropolis or fort, in both a topographical and also a functional sense[207]. The Byzantine settlement must have extended down the slopes of the hill and into the temenos of the Artemision[208].

This supposedly obvious insight nevertheless casts great doubt on the validity of a translocation model; the evaluation of the archaeological evidence points far rather to a coexistence of two small towns in the Middle Byzantine period, or at least only a very gradual transferral of Ephesos to Ayasoluk[209].

THE LATE MEDIEVAL SEQUEL – BYZANTINE DOWNTURN AND TURKISH HEYDAY

For the Late Byzantine period we must state that the ›old city‹ no longer existed; finds after the 11th century are extremely rare. The latest settlement phases in the Late Antique-Medieval City Quarter reveal round structures with piled up dry stone walls; these are interpreted as animal pens or borders of gardens (fig. 58). The area apparently was exploited agriculturally, yet proof of permanent settlement activity is nonetheless absent and the harbour was silted up[210]. Graves scattered throughout the entire urban area also indicate extensive desolation. The presence of a small Byzantine community may, however, be conjectured due to the continued use of the cemetery around the Church of St Mary. In contrast, traces of Turkish settlement are completely absent in the ancient urban area; instead, they are concentrated exclusively on the Ayasoluk and its surroundings.

Equally, the holy sites of Christendom continued to be visited, maintained, and even newly refurbished. This is attested by Late Byzantine frescoes in the so-called Grotto of St Paul and in the Cemetery of the Seven Sleepers (fig. 59)[211]. On the other hand, Ephesos had to

58 Late Byzantine structures in the Late Antique-Medieval City Quarter (© OeAW-OeAI, N. Gail)

[205] Pülz 2010c, 567; Külzer 2013, 9; Ladstätter 2017a, 233.
[206] Pülz 2012, 242 f.
[207] Ladstätter 2018b, 102.
[208] Ladstätter 2015, 520.
[209] Ladstätter 2017a, 234.
[210] Foss 1979, 123.
[211] Zimmermann 2010, 650–656 (Seven Sleepers). 646 (Grotto of St Paul).

60 Late Byzantine fresco depicting saints in the Basilica of St John (© OeAW-OeAI, N. Gail)

59 Late Byzantine fresco of St George in the ›Grotto of St Paul‹ (© OeAW-OeAI, N. Gail)

61 Venetian cup, 14th century (© OeAW-OeAI, N. Gail)

accept the loss of additional relics. Whereas those of Mary Magdalene had already been brought to Constantinople under Leo VI (886–912), in 1169 the stone slab upon which the body of Jesus was laid out was also transported to the capital city[212].

The Ayasoluk hill had been developed into a well-secured Byzantine fortification that was visible for miles around. Still in the 12th/13th centuries, a chapel near the treasury in the Basilica of St John (fig. 60), and the entrance portal of the fortification were newly embellished with frescoes[213]. In addition to prophets and saints who cannot be more closely identified, the life-size figures depict St John, the patron of the church who gave the medieval settlement its name of Theologos. At the latest in the 12th century a Byzantine settlement had grown up in the temenos of the Artemision[214]. According to the identification of the ceramic findings, this was integrated into a supra-regional trade network which extended to the Islamic world[215]. Coins of the Crusader period and Venetian imported ceramics reveal the close connections with the west (fig. 61). It has not yet been possible, however, to discover buildings from this period; equally, not a single rural monastery – of which many are recorded for the region of Ephesos – has received close archaeological investigation. The harbour belonging to this settlement was located 8 km away, in the bay of Pamucak, where harbour buildings of the Middle and Late Byzantine period were discovered and destroyed during the construction of a modern aqua park[216].

The conquest of the region by the Turks in 1304 did not signify a decisive caesura in the settlement history of Ephesos[217]. It was instead far rather the case that the Turkish town of Ayasoluk developed out of the Byzantine settlement in the temenos of the Artemision with a fortified castle on the top of the hill[218]. In the 14th century under the rulers of Aydın, this town experienced a heyday as the residence of a regional emirate. Strong Byzantine traditions in the language of forms, the usage of specific materials, and the techniques of craftsmanship are characteristic for the architecture[219]. The fact that people in the West were still aware of the former metropolis of Asia, the place of activity of St John, is proven not only by numerous nautical maps that indicate the harbour of Ayasoluk, but also by a fresco in the Peruzzi Chapel that illustrates the resurrection of St Drusiana from the Ephesian suburb at the Ayasoluk hill[220]. The holy sites acted as important magnets for pilgrims from the West, who visited the ruins of Ephesos during the Middle Ages and the Early Modern period. Their descriptions in turn constituted the foundations for a humanistic involvement with the ancient city and its spiritual and cultural-historical significance, ultimately leading to the first excavation activities in the 19th century.

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212 Külzer 2010b, 534.
213 Zimmermann 2010, 647–649.
214 Ladstätter 2017a, 233.
215 Ladstätter 2015, 520 f.
216 Pfeiffer-Taş 2014; Külzer 2018b, 79.
217 Foss 1979, 144 f.; Külzer 2010b, 528–531.
218 Niemann 1906; Büyükkolancı 2010; Ladstätter 2015.
219 Telci 2010.
220 Ladstätter 2015, 522.

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Julian Baker

A REASSESSMENT OF WOOD'S 1871 ARTEMISION HOARD OF FOURTEENTH-CENTURY COINS*

In 1869 the British architect and engineer J. T. Wood, encouraged and financed by the Trustees of the British Museum, to whom he pledged all possible finds, began formal excavations at the Artemision in Ephesos. He narrated the course of events which occurred fourteen months later, in April 1871:

»April 7 was a notable day at Ephesus. The workmen […] came upon an earthenware vessel […] containing more than 2,000 coins and some lumps of metal. […] It was most fortunate that these coins were not found before I bought the land, as in that case the land-owners would never have consented to part with it for any reasonable sum. The coins were all forwarded eventually to the Trustees of the British Museum […].«[1]

There is some corresponding paperwork still extant at the British Museum[2]. On 29 April 1871 the Board of Trustees saw four coins from the hoard[3]. In the subsequent documentation there is a constant preoccupation with the identification of rare pieces and so-called duplicates in the hoard, substantial parts of which had in the meantime reached London[4]. The latter was dealt with very swiftly by the numismatist H. A. Grueber of the British Museum, who believed that he saw all the coins of the hoard, and who quickly published a detailed and exemplary study[5]. Grueber listed 2,231 coins, but 197 more coins from the same hoard reached London between February and April 1872, when on the 23rd the Keeper of Coins, R. Poole, produced a final list of total numbers of coins per issuer, and of coins finally selected for the British Museum, which is reproduced here in a slightly abbreviated and amended form[6]:

Table 1: The content of the Artemision 1871 hoard according to Reginald Poole (23 April 1872)

Authority	Issuer	In the hoard	Selected for the BM
»Sicily«	Charles II d'Anjou (1285–1309)	10	3
	Robert d'Anjou (1309–1343)	1,569	30
	Johanna and Louis (1349–1362)	24	4
Rhodes	Helion de Villeneuve (1319–1346)	162	38
	Dieudonné de Gozon (1346–1353)	101	15
	Pierre de Corneillan (1353–1355)	113	8
	Roger de Pins (1355–1365)	410	53
»Seljuk«	Theologos (Ephesos)	17	12
	Manisa (Magnesia ad Sipylum)	3	3

* I would like to thank S. Ladstätter and P. Magdalino for the invitation to talk at the December 2012 Congress in Istanbul; and the Research Center for Anatolian Civilisations, Koç University, for awarding me a Visiting Senior Fellowship for that period.

1 Wood 1877, 181 f.; see also Wood 1890, 46 f.

2 I wish to thank B. Cook at the Department of Coins and Medals for retrieving and forwarding me this information.

3 Minutes of the Department of Coins and Medals (1870–1876) s. v. 29 April 1871. Vol. 2. London: British Museum.

4 Reports (1870–1871) Coins and Medals, 22 February 1872, 299–301. London: British Museum.

5 Grueber 1872.

6 Reports (1870–1871) Coins and Medals, 23 April 1872, 337–340. London: British Museum.

»Genoa«	Chios	1	1
Venice	Francesco Dandolo (1329–1339)	1	1
»Rome«	John XXII (1316–1334)	3	1
Unascertained		14	14
Total		**2,428**	**183**

In addition to the coins, the hoard contained fifteen pieces of silver weighing 17 lb. 4 oz. 368 gr. troy, none of which were selected for the permanent museum collection. There is also no further trace of the reported vessel. The discarding of these items and of more than 90 per cent of the coins of the Artemision hoard looks incredible to us, but would have been common practice at the time, since the main public and private coin collections strove to hold the best examples of each known type, and tried to avoid supposed type duplications. There was also much less regard for preserving excavated archaeological materials in their entireties, for future consultation. This approach cannot be reconciled with modern scientific interests, for instance in detailed type and die analyses, and in metrology and taxonomy. Grueber's study hardly compensates for the loss of this information, since it is itself of its time, and although it is thorough in reproducing some legends, there is no systematic listing of weights, no consideration of the coins' types and styles, and only very few specimens are illustrated in line drawings. It is uncertain what happened to the coins which were not acquired by the British Museum in 1872. Usually the museum would have been quick to offload such pieces to dealers of choice, in this period usually a French firm with offices in London called Rollin et Feuardant[7]. There are no paper trails at the British Museum recording this, nor, to my knowledge, any sales catalogues of this particular firm which list such coins, and we must assume that the coins were sold over the counter, unless they were disposed of wholesale to particular buyers or even melted down[8]. This kind of detective work still remains to be done and I believe that it would be useful to amass as many additional pieces for study as possible should one be able to find them in collections or recorded sales. One mention of the hoard in a later sales catalogue demonstrates the potential of a more thorough search[9]. The coins which remained in the British Museum lay, with one exception known to me[10], dormant until I consulted and discussed a part of them in a study dealing with the monetisation of the general area in later medieval times, which illustrated all the Neapolitan, Provençal, Chiot, Beylik, imitative specimens[11]. The purposes of the current article, in addition to clarifying the figures first set out by Grueber, are to make the extant specimens available to a wider audience, to discuss them in the light of a partial die study and of recent typological advances, especially with regard to similar hoards from Miletos and Kasos[12], and to make some suggestions on the circulation and production of the precise coin types found in the Artemision hoard. This will occur in the first section, whereas in the second section the wider monetary, archaeological and topographical, as much as politico-economic, context will be discussed, and I will come to conclusions which may be of interest to a wider readership of archaeologists and historians.

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[7] Rollin & Feuardent, Dealers of Coins, Medals, Gems, Antiquities &c, Gt Russell Street, Bloomsbury.

[8] Gold coins were quite readily melted down until fairly recently, for instance to prevent the deflation of the prices that dealers can achieve, but we should also remember that ca. 55,000 medieval silver coins of the famous Brussels 1908 hoard of the 13th c. faced a similar fate, see Churchill – Thomas 2012, 12.

[9] Catalogue of Greek, Roman, English and Foreign Coins and Medals…, Sotheby and Co., Monday 6 April 1925, p. 15, lot 156: »A Find of Gros of Sicily, of King Robert, 1309, of two types (54), and of Louis and Joan (1), with eight others of the Knights … (63). These were found during the excavations at the Temple of Diana of Ephesus.« I thank J. Reed and L. Elizabeth of Sotheby's and S. Lloyd of Morton and Eden for answering my enquiries in this respect. M. Allen kindly informed me that, according to the annotated copy of the auction catalogue held by the Fitzwilliam Museum, Cambridge, this lot went to W. S. Lincoln, a dealer operating at 144 Kensington High St. until the 1920s, for £6 15s 0d.

[10] G. Schlumberger makes sporadic mention of coins from the hoard which he saw in London: see for example Schlumberger 1882, 481. 485. 487.

[11] Baker 2006.

[12] The hoards are referred to as Miletos 1903 and Kasos 1912 in the further course of this paper, and all the pertinent information in their regards can be found in two recent studies: Baker 2012 and Baker – Kluge 2017.

NUMISMATIC ANALYSIS

The selected coins of the Artemision hoard were accessioned into the collection of the Department of Coins and Medals in March 1872, hence the general inventory number of 1872/3, which is followed by an individual number for each coin. The coins are of the following general description:

Table 2: The specimens of Artemision 1871 now extant at the British Museum

Denomination	Authority	Issuer	Selected for the BM	Inventory numbers 1872/3/…
Gigliati	Kingdom of Sicily (Naples)	Charles II d'Anjou (1285–1309)	3	1, 2, 3
		Robert d'Anjou (1309–1343)	9	4, 5, 6, 10, 11, 12, 13, 14, 16
	County of Provence	Robert d'Anjou (1309–1343)	9	18, 19, 20, 21, 23, 24, 25, 26, 27
		Johanna and Louis (1349–1362)	4	34, 35, 36, 37
	Papacy in Avignon	John XXII (1316–1334)	1	164
	Maona Company on Chios		1	163
	Knights of St John at Rhodes	Helion de Villeneuve (1319–1346)	32	39, 41, 40, 42, 43, 44, 45, 46, 47 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63 64, 65, 66, 67, 68, 69, 71
		Dieudonné de Gozon (1346–1353)	17	75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 150, 151
		Pierre de Corneillan (1353–1355)	8	90, 91, 92, 93, 94, 95, 96, 97
		Roger de Pins (1355–1365)	53	72, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149
	Saruhanoğulları	Saruhan Bey (†1344/1345)	2	175, 176
	Aydınoğulları		12	152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 177, 178
	Menteşeoğulları	Orhan Bey (†1333/1337)	3	168, 169, 179
	Imitative gigliati	In the name of Robert d'Anjou (1309–1343)	22	7, 8, 9, 15, 17, 22, 29, 30, 31, 32, 33, 166, 167, 170, 171, 172, 174, 180, 181, 182, 183, 184
		Of Helion de Villeneuve (1319–1346), variety 1	1	70
Aspra	Knights of St John at Rhodes	Helion de Villeneuve (1319–1346)	2	73, 74
Grosso	Republic of Venice	Francesco Dandolo (1329–1339)	1	165
	Total		**181**[13]	

[13] The inventory numbers go from 1 to 184, suggesting that one more coin was chosen from the hoard than is indicated in tab. 1. In the present list only 181 coins are given since coins 28, 38, 162 are unaccounted for. This is inconsequential with regard to our analysis.

The Artemision 1871 hoard is a fine silver hoard. The main currency it contains is the so-called gigliato, which was first conceived at the Naples mint in two steps in 1278 and 1302/3 and was usually referred to as the carlino by contemporaries[14]. The type spread to the Provence and to the eastern Aegean[15]. Since the specimens that are now available were apparently chosen for their uniqueness of type – even if I still found plenty of die identities amongst this material – the selection might not have absolute statistical validity, but it is at least guaranteed some kind of completeness in terms of issues and their varieties. Combined with the original list (tab. 1), these can therefore still give us important insights into the profile of the gigliato currency in western Anatolia. There is only one silver grosso of Venice in the hoard, a coinage which is otherwise represented in the medieval Aegean in vast quantities. It is important that a substantial proportion of the wealth contained in the hoard was nevertheless tied up in uncoined metals.

Kingdom of Sicily (Naples)

As we can see from Poole's list (tab. 1), the majority of gigliato issues in the hoard (1569) were emitted in the name of Robert d'Anjou (1309–1343). Whereas these were all originally given as Sicilian/Neapolitan, we are now able to distinguish, on epigraphic and stylistic basis, with some ease issues for Provence as much as imitative gigliati. Table 2 shows us that the hoard did indeed contain issues in the name of Robert from mints other than Naples, and seemingly in good quantities. By far the greatest damage caused by the dispersal of the hoard in 1872 regards these issues, more precisely we are unable to ascertain from the surviving 40 specimens the original distribution amongst these three categories. Nevertheless, the remaining coins might just be enough to give us some reliable insights into the typological make-up within each of the categories. Robert's coins from the Naples mint are distributed across Group 1 (four specimens, dated from 1309 to a point perhaps between 1321 and 1323), Group 2b (one specimen, dated perhaps from 1321/1323 to 1343), and Group 4 (four specimens, dated posthumously precisely to the year 1348) (see tab. 3)[16]. Considering that the hoard also contains issues of Charles II we may conclude that the Neapolitan coins of Ephesos 1871 represent about 50 years of gigliato imports into western Anatolia from that mint. Miletos 1903 does not contain issues of Charles, and it includes also one later specimen of Group 3bis dating perhaps as late as the 1370s[17], but otherwise its internal profile is very similar to that of the Artemision hoard. In both hoards Group 4, which is quite rare in southern Italy and which has been attributed to a short Hungarian phase of Neapolitan minting[18], is represented in significant quantities. Maybe this issue was purposefully culled from Italian circulation and used for international payments?

[14] For Neapolitan minting see Grierson – Travaini 1998, 205 f. 219 f.
[15] On the history of the type and its distribution see Grierson 1965.
[16] I established this typology on the basis of a hoard from the Campania region: Baker 2002. For further clarifications on the types and their datings see Baker 2011a.
[17] In the case of Kasos 1912, the gigliati in the name of Robert are very insufficiently known, and only one Neapolitan specimen can now be positively identified as pertaining to this hoard. It, too, is of Group 3bis.
[18] The evidence and arguments can be found in Baker 2002.

Table 3: The Neapolitan gigliati of Artemision 1871 now extant at the British Museum

Type	No.	No. in Baker 2006	Weight in g
Charles II d'Anjou (1285–1309)	1*[19]	20	3.52
Charles II d'Anjou (1285–1309)	2	21	3.82
Charles II d'Anjou (1285–1309)	3	19	3.40
Robert d'Anjou (1309–1343), Group 1a	13*	22	3.59
Robert d'Anjou (1309–1343), Group 1a	14	23	3.66
Robert d'Anjou (1309–1343), Group 1b acorn	11	24	3.73
Robert d'Anjou (1309–1343), Group 1b fleur de lis	10	25	3.55
Robert d'Anjou (1309–1343), Group 2b	4*	26	3.68
Robert d'Anjou (1309–1343), Group 4	5	27	3.53
Robert d'Anjou (1309–1343), Group 4	6*	28	3.63
Robert d'Anjou (1309–1343), Group 4	12	29	3.58
Robert d'Anjou (1309–1343), Group 4	16	30	3.66

County of Provence

A typology and chronology for the Provençal gigliati in Robert's name, which, like their Neapolitan counterparts, continued to be issued also after 1343, has been attempted only recently[20]. Accordingly, amongst the nine extant coins of the Artemision hoard, there is only one which can be attributed to the early type A with the characteristic thin and upright figure of the king, and the small and neat lettering with the lombardic M in the reverse legend (tab. 4). The remainder of the coins are of types C and D, which can be dated to mid-century. There are additionally four coins of Johanna and Louis, which in the 19th century, and in the influential work of Rolland[21], were wrongly considered Neapolitan. In their Provençal elements, Ephesos 1871, Miletos 1903, and Kasos 1912 are very similar indeed.

Table 4: The Provençal gigliati of Artemision 1871 now extant at the British Museum

Type	No.	No. in Baker 2006	Weight in g
Robert d'Anjou (1309–1343), Type A	21*	31	3.45
Robert d'Anjou (1309–1343), Type C	25	33	3.46
Robert d'Anjou (1309–1343), Type C	26*	34	3.22
Robert d'Anjou (1309–1343), Type D	18	38	3.45
Robert d'Anjou (1309–1343), Type D	19*	39	3.29
Robert d'Anjou (1309–1343), Type D	20	35	3.36
Robert d'Anjou (1309–1343), Type D	23	32	3.75
Robert d'Anjou (1309–1343), Type D	24	37	3.34
Robert d'Anjou (1309–1343), Type D	27	36	3.52
Johanna and Louis (1349–1362)	34	41	3.73
Johanna and Louis (1349–1362)	35	42	3.42
Johanna and Louis (1349–1362)	36*	43	3.48
Johanna and Louis (1349–1362)	37	40	3.32

[19] Illustrated coins have been marked with an asterisk. I have focussed on those specimens – or at least (obverse) dies – not previously illustrated in Baker 2006.
[20] Testa 2011.
[21] Rolland 1956.

Papacy in Avignon

By contrast, the Artemision hoard is the only one of the three to contain Papal gigliati produced over a confined period in 1317–1321 at Pont-de-Sorgues[22]. This is due almost certainly to its much larger size, as we can deduce from a slightly earlier and larger Chiot hoard which also had such coins[23].

Table 5: The Papal gigliato of Artemision 1871 now extant at the British Museum

Type	No.	Weight in g
John XXII (1316–1334)	164*	3.82

Maona Company on Chios

The large size of the Artemision hoard also makes a fundamental contribution to our knowledge of the next coinage, gigliati in the name of the ›Doge of Genoa‹ minted by the Maona Company, which had conquered and administered Chios on behalf of Genoa from 1346[24]. Our hoard contains merely one specimen, whereas the slightly later but considerably smaller hoards from Kasos and Miletos have three and 23 respectively. This dates the beginnings of the series around 1360, and demonstrates that the distinctive issue represented at Ephesos with the squatting figure of the obverse doge and the neat gothic lettering was the first of three types[25]. It is also present at Miletos, with five specimens. Our die study of all the Chiot specimens of Miletos 1903 has revealed that for about a decade after its inception this coinage was minted at yearly rates which were in the same order of magnitude as those of the Rhodian coinage.

Table 6: The Chiot gigliato of Artemision 1871 now extant at the British Museum

Type	No.	No. in Baker 2006	Weight in g
First type	163*	1	3.62

Knights of St John at Rhodes

At a total of 786 specimens, Rhodian gigliati and their fractions constituted a substantial part of the hoard. Nevertheless, these were still outnumbered at about 1:2 by the combination of Neapolitan, Provençal and imitative gigliati, even though we are unable to ascertain which of the latter three categories and their sub-groupings might have prevailed (see above). At Kasos this relationship was even more dramatically weighted towards the issues in the name of Robert of Anjou, at about 1:10. At Miletos 1903, by contrast, the only hoard for which we possess precise identifications, the distribution was as follows: Rhodes (66); Naples (13); Provence (5); imitative gigliati (20). With regard to the internal distribution of the Rhodian coins, these are in two respects less mature at Ephesos than in the other two hoards, that is to say they lack the issues of Grandmaster Berenger (1365–1374), and the issues of Roger de Pins (1355–1365) are less than 400 per cent of those of the preceding grandmaster, Pierre de Corneillan (1353–1355), whereas at Miletos the figure was exactly 600 per cent. These are

[22] For the type and its dating see Poey d'Avant 1860, 348; see also Bompaire 1983.
[23] Gnecchi – Gnecchi 1888, 1–14. 399–409; see also Mazarakis 1993.
[24] There is a lot of literature regarding this phase of Chiot minting, and the early gigliati issues of the Maona in particular. See in the latest instance Mazarakis 1997, 851–854. 891–893; see also Mazarakis 2003, 131–133. 158 f. 169–171.
[25] For a description of these types see Baker 2011b, 1310 f.

important elements in the dating of the hoard's concealment. Ephesos has a significant concentration of issues of the first grandmaster to mint gigliati, Helion de Villeneuve (1319–1346). According to my experience with the Miletos hoard, the obverse or anvil dies were always those depicting the kneeling grandmaster. Fewer of these were manufactured, as compared to reverse dies, and, correspondingly, fewer obverse dies and more die identities can be found amongst a given sample. These data lend themselves therefore more readily to statistical evaluations. This consideration, combined with the fact that more typologically diagnostic details are contained on this side of the coins, have induced me to concentrate my die study of the Rhodian coins in our sample from Ephesos on the obverses. I have also checked these dies against those of the Miletos hoard and have chosen to illustrate all the established ones in anticipation of a possible obverse die corpus which somebody may one day wish to create. Certainly, a combination of these two hoards is giving us some good figures of coverage for some of the grandmasters[26].

Helion de Villeneuve (1319–1346) minted two substantial gigliato varieties, that in which the figure is stylized and looks towards the viewer, and a more recent one, closer to the style of his successors, in which a more naturalistic figure is turned half way towards the cross[27]. The second of these is usually rarer, and this seems to be the case also in the Artemision hoard, although Grueber does not reveal the proportions and we are not sure in how far the relationship of 24:8 within the extant specimens is a reflection of the original numbers. It has traditionally been assumed that Helion began minting gigliati only in 1332[28], although a few considerations would suggest that he began a good decade earlier: the Provençal issues have been re-dated to an earlier period; the general arrival of gigliati in the Aegean is also now known to have occurred much earlier (see above, on both of these accounts); and a late dating would deprive Helion of any substantial coinage for the first half of his grandmastership. The die counts undertaken on the basis of the Ephesos and Miletos hoards are also suggestive of this. The Miletos hoard had four coins of Helion: three separate obverse dies for variety 1, one of which was present at Ephesos (A = die I of Ephesos), and one obverse die for variety 2, also present at Ephesos (D = die Y of Ephesos). I have analysed a total of 4 + 32 coins, found 27 dies, of which 20 singletons, which gives us a more or less decent coverage of 0.45 and a 95 per cent confidence range of original obverse die numbers between 39 and 92. In view of the production rates of the later grandmasters, it is more probable that Rhodes emitted gigliati for ca. 25 years rather than a mere ca. 15 years, with the shift from variety 1 to 2 occurring perhaps in the late 1330s or early 1340s. Both varieties of Helion are well produced and quite uniform. The arrangement of the specimens below follows the inventory numbers and is not necessarily chronological, though I have grouped specimens minted from the same obverse die towards the end of the respective varieties 1 and 2.

Table 7: The Rhodian gigliati of Helion de Villeneuve (1319–1346) of Artemision 1871 now extant at the British Museum

Type	No.	Obv. die	Obv. die in Miletos 1903	Weight in g
First variety	39*	A	/	2.68
First variety	41*	B	/	3.55
First variety	42*	C	/	3.47
First variety	44*	D	/	3.50
First variety	45*	E	/	3.46

[26] See Esty 2006, 359–364, for statistical coverage and estimates of the original dies used in a given issue, based on a sample of coins and the rates of die duplication.
[27] See for instance Metcalf 1995, 298.
[28] See for instance Metcalf 1995, 297.

First variety	51*	F	/	3.59
First variety	52*	G	/	3.60
First variety	53*	H	/	3.66
First variety	55*	I	A	3.55
First variety	57*	J	/	3.51
First variety	58*	K	/	3.43
First variety	59*	L	/	3.73
First variety	61*	M	/	3.66
First variety	62*	N	/	3.34
First variety	63*	O	/	2.69
First variety	40	P	/	/
First variety	66*	P	/	3.52
First variety	43*	Q	/	3.38
First variety	65	Q	/	3.18
First variety	56	R	/	3.49
First variety	60*	R	/	3.41
First variety	54	S	/	3.49
First variety	64*	S	/	3.86
First variety	71	S	/	3.62
Second variety	46*	T	/	3.32
Second variety	47*	U	/	3.20
Second variety	49*	V	/	3.80
Second variety	50*	X	/	3.43
Second variety	48*	Y	D	3.68
Second variety	68	Y	D	3.44
Second variety	67	Z	/	3.40
Second variety	69*	Z	/	3.81

The Artemision hoard also contains two aspra of Helion, which according to Pegolotti were worth half a gigliato each[29]. Such coins were not present at Kasos or Miletos, no doubt because of the smaller sizes of these hoards, but are otherwise not uncommon[30]. The two coins from Ephesos are of the first variety and were minted from different obverse and reverse dies:

Table 8: The Rhodian aspra of Helion de Villeneuve (1319–1346) of Artemision 1871 now extant at the British Museum

Type	No.	Weight in g
First variety	73*	2.03
First variety	74*	1.93

17 gigliati of the next grandmaster, Dieudonné de Gozon (1346–1353), were selected in 1872. The coins are stylistically uniform and a great number of obverse die identities can be established. At Miletos, where there were merely five specimens of this grandmaster, merely two obverse dies were represented, one of which (B) is also to be found at Ephesos. By combining the results from these two die studies we arrive at a total of 22 specimens, 12 obverse dies, and six singletons, resulting, according to Esty's formulas, in coverage of 0.73 and a range of original dies between 11 and 36. Table 9 lists singletons first and groups

[29] Metcalf 1995, 297.
[30] For instance there are nine aspra of Helion at Clerkenwell, see Kasdagli 2002, 24–27.

together the die linked specimens towards the end, though making no claim to typological and chronological progression:

Table 9: The Rhodian gigliati of Dieudonné de Gozon (1346–1353) of Artemision 1871 now extant at the British Museum

No.	Obv. die	Obv. die in Miletos 1903	Weight in g
76*	A	/	3.45
77*	B	/	3.54
78*	C	/	3.47
81*	D	B	3.27
83*	E	/	3.37
89*	F	/	3.41
151*	G	/	3.56
79*	H	/	3.45
80	H	/	3.45
88	I	/	3.47
150*	I	/	3.41
75*	J	/	3.69
85	J	/	3.27
87	J	/	3.38
82*	K	/	3.72
84	K	/	3.55
86	K	/	3.42

Pierre de Corneillan (1353–1355) was grandmaster for an even shorter period than his predecessor. At Miletos there were four specimens of different obverse and reverse dies. At Ephesos, there were eight specimens from seven dies, two of latter having already been present at Miletos. The combined hoards resulted therefore in nine dies and six singletons, at 12 coins, which is too little to produce adequate coverage. The style of the coins is also uniform, and variations regard mostly, as with the issues of the previous grandmaster, the lettering towards the end of the legend.

Table 10: The Rhodian gigliati of Pierre de Corneillan (1353–1355) of Artemision 1871 now extant at the British Museum

No.	Obv. die	Obv. die in Miletos 1903	Weight in g
90*	A	/	3.27
91*	B	C	3.77
92*	C	B	3.25
93*	D	/	3.40
95*	E	/	3.11
96*	F	/	3.44
94	G	/	3.55
97*	G	/	3.25

The coins of Roger de Pins (1355–1365) are more complex. The 53 coins selected in 1872 divide into those with and without pinecone behind the back of the kneeling grandmaster (referred to according Schlumberger's plates)[31]. Within both of these groupings there are

[31] Schlumberger 1882.

differences in the way in which the grandmaster's head is rendered. Amongst the obverses without pinecone[32], nos. 98–113, dies A–I, have a traditional small and thin head and chin/beard. One die, K, nos. 102–114, has a much rounder head with triangular, protruding chin and beard area which looks more like the coins of later grandmasters, for instance Raymond Berenger, who is not represented in the Artemision hoard. Coins 72–118, die J, is a rather distinctive sub-variety of the earlier style, where the head of the grandmaster is turned partially towards the viewer. This die is not represented at Miletos, but all three dies found in Miletos 1903[33] have matches in the Artemision hoard. Of Schlumberger 1882, pl. 9, 21 at Ephesos, the small and thin head is displayed by 15 of 31 specimens, and 7 of 16 dies (coins 140–148, dies L–R); the remainder of the coins and dies of Roger (dies S–X) have the rounder head. The combined evidence of the Miletos and Ephesos hoards suggests that Schlumberger 1882, pl. 9, 20 and 9, 21, which are defined in the first instance by the pinecone in the right obverse field, were, *grosso modo*, chronologically progressive, even if the earlier small head and chin of the depicted grandmaster is also to be found for some time on plate 9, 21, while the later type featuring the larger head and protruding chin also exists for pl. 9, 20. This said, we should not forget that the latter phenomenon is so far documented by merely one obverse die (K at Ephesos, C at Miletos). The transition period from pl. 9, 20 to 9, 21, and from one head and chin form to the other, might in the future be further investigated with a more precise study of punches used in the creation of the obverse figure, and of reverse die combinations. The fact that the Artemision hoard cuts into the production period of pl. 9, 21 with the later head can be seen from the large number of coins of pl. 9, 21 with small head (coin nos. 140–148, dies L–R), the die identities amongst coin nos. 138–146, and from the absence of a substantial number of dies established for the Miletos hoard (D, E, I–P). Dies H–P at Miletos are characterized by varied markings within the obverse legends, for instance the pine at the end of the legend on die H (which corresponds to coins 129 and 142, die W, at Ephesos), or a dot over the A, diverse constellations of dots, annulets, annulets with dots, and suns. It would appear that the Artemision hoard had already been concealed by the time that Miletos dies I–P were being used, that is to say presumably at a point within perhaps a couple of years before the end of Roger's rule (†1365). The combined die study of the Ephesos and Miletos hoards was based on 77 specimens and produced 37 obverse dies, of which 19 singletons. Coverage is now 0.75, that is to say any scholar with an obverse of Roger has a 75 per cent chance of finding a die match in the two hoards, and the established range of original obverse dies for the ten years of Roger's grandmastership is 46–83, with 95 per cent confidence, that is to say on average between four and eight obverse dies a year. Just for the sake of putting a figure on this, without any claims to accuracy, it might be imagined that about half a ton of silver was minted at the Rhodes mint *per annum*. There would certainly have been an increase in production since the gigliato currency started in the 1320s, perhaps by as much as 100 per cent.

Table 11: The Rhodian gigliati of Roger de Pins (1355–1365) of Artemision 1871 now extant at the British Museum

Type	No.	Obv. die	Obv. die in Miletos 1903	Weight in g
Schlumberger 1882, pl. 9, 20	98*	A	/	3.55
Schlumberger 1882, pl. 9, 20	101*	B	/	3.21
Schlumberger 1882, pl. 9, 20	105*	C	A	3.74
Schlumberger 1882, pl. 9, 20	108*	D	/	3.51
Schlumberger 1882, pl. 9, 20	110*	E	/	3.39

[32] Schlumberger 1882, pl. 9, 20.
[33] Schlumberger 1882, pl. 9, 20.

Schlumberger 1882, pl. 9, 20	103*	F	/	3.39
Schlumberger 1882, pl. 9, 20	106	F	/	3.72
Schlumberger 1882, pl. 9, 20	115*	G	/	3.57
Schlumberger 1882, pl. 9, 20	116	G	/	3.47
Schlumberger 1882, pl. 9, 20	99	H	/	3.41
Schlumberger 1882, pl. 9, 20	100*	H	/	3.57
Schlumberger 1882, pl. 9, 20	109	I	B	3.80
Schlumberger 1882, pl. 9, 20	112*	I	B	3.55
Schlumberger 1882, pl. 9, 20	113	I	B	3.72
Schlumberger 1882, pl. 9, 20	72	J	/	2.34
Schlumberger 1882, pl. 9, 20	117	J	/	2.99
Schlumberger 1882, pl. 9, 20	118*	J	/	2.83
Schlumberger 1882, pl. 9, 20	102	K	C	3.58
Schlumberger 1882, pl. 9, 20	104	K	C	3.60
Schlumberger 1882, pl. 9, 20	107*	K	C	3.58
Schlumberger 1882, pl. 9, 20	111	K	C	3.42
Schlumberger 1882, pl. 9, 20	114	K	C	3.87
Schlumberger 1882, pl. 9, 21	140*	L	/	2.98
Schlumberger 1882, pl. 9, 21	147*	M	/	3.62
Schlumberger 1882, pl. 9, 21	121*	N	F	3.49
Schlumberger 1882, pl. 9, 21	122*	O	/	3.35
Schlumberger 1882, pl. 9, 21	133	P	/	3.11
Schlumberger 1882, pl. 9, 21	145*	P	/	3.35
Schlumberger 1882, pl. 9, 21	123	Q	/	3.49
Schlumberger 1882, pl. 9, 21	124	Q	/	3.53
Schlumberger 1882, pl. 9, 21	125*	Q	/	3.55
Schlumberger 1882, pl. 9, 21	119*	R	G	3.46
Schlumberger 1882, pl. 9, 21	120	R	G	3.45
Schlumberger 1882, pl. 9, 21	127	R	G	3.47
Schlumberger 1882, pl. 9, 21	131	R	G	3.66
Schlumberger 1882, pl. 9, 21	132	R	G	3.68
Schlumberger 1882, pl. 9, 21	148	R	G	3.43
Schlumberger 1882, pl. 9, 21	138*	S	/	3.31
Schlumberger 1882, pl. 9, 21	143*	T	/	3.60
Schlumberger 1882, pl. 9, 21	149*	U	/	3.61
Schlumberger 1882, pl. 9, 21	128*	V	/	3.38
Schlumberger 1882, pl. 9, 21	129	W	H	3.74
Schlumberger 1882, pl. 9, 21	142*	W	H	3.77
Schlumberger 1882, pl. 9, 21	130*	X	/	3.88
Schlumberger 1882, pl. 9, 21	144	X	/	3.40
Schlumberger 1882, pl. 9, 21	134	Y	/	3.52
Schlumberger 1882, pl. 9, 21	135*	Y	/	3.39
Schlumberger 1882, pl. 9, 21	126	Z	/	3.47
Schlumberger 1882, pl. 9, 21	139	Z	/	3.41
Schlumberger 1882, pl. 9, 21	141*	Z	/	3.79
Schlumberger 1882, pl. 9, 21	136*	Zbis	/	3.39
Schlumberger 1882, pl. 9, 21	137	Zbis	/	3.45
Schlumberger 1882, pl. 9, 21	146	Zbis	/	3.46

Anatolian Beyliks

Gigliati which identify clearly in their legends their origins in the Anatolian Beyliks were already known and described well in the 19th century, thanks to the work of Friedländer, Lambros, and Karabacek, and not least to Grueber's publication of the hoard under discussion. In the course of the last 130 years little has been added to the summary provided by Schlumberger[34]: virtually no new specimens and legend variations have emerged, and a rather inconclusive discussion has focussed on the status of the issues. I would concur with Reis that there is no reason to deny that they were issued by the beys at mints in Manisa (Magnesia ad Sipylum), Theologos (Ephesos), and Balat (Miletos), as indicated explicitly on the coins themselves.

Beginning with the coins from the hoard, the two specimens from the Manisa mint of the Saruhanoğulları are of different types and dies, the legends reading respectively M[ONETA MANGLA]SIE SARCANI/DE VOL[VNTAT]E DNI EISD LOCI (no. 175) and MONETA QVE FIT IN MAGLASIE/DE VOLVNTATE DNI EIVSDEM (no. 176). Both coins are of very similar style, and therefore probably chronologically close, being dated to before the death of Saruhan Bey, who is identified as the issuer of the first of the coins, at some point between the end of 1344 and the beginning of 1345[35].

Table 12: The gigliati of the Saruhanoğulları of Artemision 1871 now extant at the British Museum

Type	No.	No. in Baker 2006	Weight in g
Schlumberger 1882, 481	175*	2	3.08
Schlumberger 1882, pl. 18, 14 var.	176*	3	3.23

There are 12 coins of the Aydınoğulları from the Theologos mint in the hoard, all of which of similarly good style with variations on the basic legend MONETA QVE FIT IN ThEOLOGOS/DE MANDATO DNI EIVSDE LOCI. The obverses were checked for die identities, but only one pairing could be identified. The coins' legends identify the mint as Theologos and the issuer as its anonymous ruler.

Table 13: The gigliati of the Aydınoğulları of Artemision 1871 now extant at the British Museum

Type	No.	Obv. die	No. in Baker 2006	Weight in g
Schlumberger 1882, pl. 18, 15 var	152	A	15	3.15
Schlumberger 1882, pl. 18, 15 var	153*	B	14	3.48
Schlumberger 1882, pl. 18, 15 var	154*	C	12	2.88
Schlumberger 1882, pl. 18, 15 var	155*	D	10	3.28
Schlumberger 1882, pl. 18, 15 var	156	E	8	3.38
Schlumberger 1882, pl. 18, 15 var	157*	F	9	3.13
Schlumberger 1882, pl. 18, 15 var	159*	G	6	3.41
Schlumberger 1882, pl. 18, 15 var	160	H	13	3.44
Schlumberger 1882, pl. 18, 15 var	161	I	5	3.27
Schlumberger 1882, pl. 18, 15 var	178*	J	11	3.27
Schlumberger 1882, pl. 18, 15 var	158*	K	7	2.87
Schlumberger 1882, pl. 18, 15 var	177	K	4	3.07

Grueber had not been aware of the existence of gigliati of the Menteşeoğulları, but in 1877–1878 Karabacek and especially Schlumberger, who saw the three coins from the Arte-

[34] Schlumberger 1882, 478–490; see merely Ender 2000, 213–218; Reis 2002.
[35] Lemerle 1957, 194 no. 2, 212.

mision hoard[36], provided the main outline for our current knowledge of this series. Wittek agreed with Schlumberger that the signature URCN could only refer to Orhan Bey, rather than being for instance a toponym, although the IE or I E, at the end of the respective reverse (168) and obverse (169, 179) legends remains unexplained[37]. Since Wittek, the death of this issuer is also much better dated, thanks to the Cretan-Venetian sources, to between November 1333 and April 1337[38]. In table 14 I give the readings for the three specimens, which correspond faithfully to those of Schlumberger, who was very adept in this respect although he confused some of the obverses and reverses. There were no die identities amongst the group of three coins.

Table 14: The gigliati of the Menteşeoğulları of Artemision 1871 now extant at the British Museum

Type	No.	No. in Baker 2006	Weight in g
[MAND]AUIT DOMINUS PALATIE hANC MONETEM FIRIT VR[ ]N IE	168*	17	3.35
hANC MONE[ ]M FIERIT V[ ]E MANDAUIT DOMINUS [ ]LATIE	169*	18	3.77
hANC MONETAM F:I:ERIT URCN:I:E: MANDAV IT DOM:INVS PALATIE	179*	16	3.26

The British Museum preserves, on all accounts, all the signed specimens of the Beyliks which the Artemision hoard had originally contained, picked from it meticulously by the curators. It is all the more significant that so few die identities were discovered. The high percentage of singletons precludes any further statistical evaluation, but we may assume that many more than for instance the 11 obverse dies of the Theologos mint represented in the hoard were originally manufactured. This might indicate that we are dealing with more than a mere »Repräsentationsprägung«, in the words of Reis. We must not forget that in the context of the Ephesos hoard we are measuring these coinages against the products of one of the most prolific mints of the Latin west (Naples). Even for the Rhodes mint we have not been able to establish a phenomenally high number of yearly dies, yet nearly 50 per cent more Rhodian issues were present in the hoard. A partial explanation for this must be the relative longevity of Rhodian minting. By contrast, since the style of all the issues across three mints is very similar – and here I would concur with Reis –, the signed pieces of the Beyliks should according to our present knowledge all be dated to a short period just before 1333/1337.

Some work remains to be done in order to answer the following questions: a) Were the same die cutters at work on these different issues, was there a sharing of technologies? b) Why did these rulers sign their issues at this moment in time, when later and perhaps to some degree concurrently they were arguably emitting large quantities of imitative gigliati in the name of Robert?

Imitative gigliati

Anatolian gigliati imitating directly the Neapolitan and Provençal issues of Robert by reproducing approximately their types and legends are already discussed by Schlumberger[39]. In 2006 I listed the specimens which were to be considered imitative gigliati in the name of Robert, to which we can now add a single piece imitating a Rhodian coin. I have in the meantime benefitted from seeing similar pieces in the Kasos and Miletos hoards. To judge by all of these hoards, a very large percentage of the gigliati in western Anatolian circulation in the second

[36] Schlumberger 1882, 487.
[37] Wittek 1934, 70. 158.
[38] Zachariadou 1983, 109.
[39] Schlumberger 1882, 489 f.; see also Grierson 1965, nos. 9. 10.

half of the 14th century were imitative. At Miletos my co-author and I identified a relatively numerous but closed and heavily die-linked typological grouping which we called ›Milesian‹ (16 of 20 coins). This plentiful group is only represented at Ephesos with two specimens (type 3). The 23 imitative gigliati in the Artemision hoard listed in table 15 belong themselves to a number of distinctive groupings. I have divided this material into types, only one of which (type 2) being additionally represented also at Miletos, with seven and two coins respectively, while merely one coin from either hoard shares an obverse die (dies J and C). The following are my observations regarding the types in the Artemision hoard: Type 1 is characterised by a small, bird-like head, curly hair, a fleur-de-lis sceptre, a tilted orb, and a more or less confused legend. The reverse legends resemble somewhat the Neapolitan prototype, but are otherwise mostly combinations of I and O punches. The flowers that adorn the cross are open and squat, and the flans are large. Type 1–2 shares characteristics of the first two types, but is otherwise a large grouping in its own right with five specimens. Coin no. 170 is a possible outlier, being in some respects closer to type 1, but coins 167, 181, 182, and 183 are very harmonious. The face of the king is round, the chin strong, and the reverse legend nonsensical. Type 2 is yet another large and easily recognisable group, with an elongated head with angular, geometric eye, hair, and chin areas. The lettering is well constructed and the legends unmistakably Neapolitan. The flowers on the reverse are relatively long. The type resembles in many of these details Neapolitan Group 4, which has been discussed above. Type 2bis is the first variation on type 2, represented by only one coin, with some of the same typological hallmarks but with a reverse which might look Provençal. Type 2tris is less distinctively geometric in the construction of the obverse king, but the prototype is again Neapolitan. Note the horizontal I-punch in the obverse legend of coin no. 31. Type 3 is quite different to the previous types, with a larger and more schematic depiction of the king, a hollow orb, and a Provençal reverse. Type 3 corresponds to the »Milesian« imitations mentioned above. There is, finally, one specimen which imitates a Rhodian piece (coin no. 70).

Table 15: The imitative gigliati of Artemision 1871 now extant at the British Museum

Type	No.	Obv. die	Obv. die in Miletos 1903	Rev. die	No. in Baker 2006	Weight in g
Type 1	32*	A	/	a	65	3.60
Type 1	172*	B	/	b	59	3.63
Type 1	174*	C	/	c	58	3.31
Type 1	180*	D	/	d	44	2.79
Type 1–2	170*	E	/	e	56	3.23
Type 1–2	181*	F	/	f	60	3.23
Type 1–2	182	G	/	g	61	3.29
Type 1–2	167*	H	/	h	63	2.85
Type 1–2	183*	H	/	h	64	3.28
Type 2	7*	I	/	i	48	3.78
Type 2	8	J	C	j	46	3.19
Type 2	15	K	/	k	52	3.60
Type 2	17*	L	/	l	50	3.23
Type 2	29*	M	/	m	47	3.56
Type 2	9	N	/	n	51	3.71
Type 2	30*	N	/	n	45	3.55
Type 2bis	184*	O	/	o	62	2.51
Type 2tris	31*	P	/	p	49	3.78
Type 2tris	33	Q	/	q	53	3.64

Type 3	22*	R	/	r	54	3.33
Type 3	166*	S	/	s	55	3.04
Uncertain type	171				57	2.67
Of Helion de Villeneuve (1319–1346), variety 1, Rhodes	70*	T	/	t	70	3.34

The types in the Ephesos hoard are quite easily identifiable, they are well manufactured and, on account of the low instance of die identities, were produced in good quantities. Two types from the Artemision are represented at Miletos (types 2 and 3), and type 3 is also present at Kasos. On the other hand, the proportions of the types are quite different at Miletos, and at Miletos and Kasos there are some distinctive types which are not present at the Artemision, and vice versa there are types at the Artemision lacking at Miletos and Kasos. Looking further afield, an imitative gigliato found at Sardis[40], with broad flan and nonsensical legends, might well be of type 1, although some of the important features on the obverse are not clearly visible. The Archaeological Museum in Istanbul has an unpublished specimen of type 1, with distinctive beak-like head, which might have been from another find from Miletos[41]. At the same museum, the second hoard from the Belgrade Gate contained two specimens of the ›Milesian‹ variety (type 3 of the Ephesos find)[42]. It is clear that the typology of Anatolian imitative gigliati is work in progress and will rely on more specimens from more locations in order to clarify the precise groupings, their origins, datings, and circulation. From the information which is presently available we can ascertain that there was more than one centre of production, and that at least some of the types were made by well established mints, very probably under the auspices of a proper issuing authority. It is difficult to imagine that privates would have been able to embark on such an endeavour, from technical, organisational, and legal points of view. Looking further at the types, we notice that type 1–2, which is in many ways the least stark and the most harmonious of the types contained in the Artemision hoard, bears certain resemblances with the signed gigliati of the Aydınoğulları which were discussed in the last heading and listed in table 13. By deduction, as a working hypothesis, I would propose to set aside type 3, the ›Milesian‹ variety, and to regard type 1, type 1–2, type 2bis, and type 2tris, as local and official Ephesian products. With regard to their datings, we might place the signed pieces and imitative type 1–2 at the beginning, in the 1330s or a bit later, since we should remember that the issue of Aydın was the only signed gigliato issue of the Beyliks which has no internal chronological information. We may assume that the other types followed on from these, in the following two decades and down to the concealment of the hoard. This would tie in with the typological developments, the noted parallels between type 2 and Neapolitan Group 4 of 1348, as much as with the general augmentation in coin production in the wider area, as witnessed by the Chiot and Rhodian issues (see above). Given that the Miletos, Kasos and Belgrade Gate hoards date later than the Artemision hoard, it is possible that the ›Milesian‹ variety dates relatively late, to most of 1360s and perhaps even beyond. The evidence from the last elements in the Artemision hoard, the grosso and the uncoined silver, can in some way corroborate the proposed interpretation of the imitative gigliati.

[40] MacKenzie – Bates 1981, no. 48.
[41] Inv. no. 2614.
[42] Gökyıldırım 1992. The same hoard is now discussed in greater detail by Baker et al. 2017.

Republic of Venice

Merely one Venetian silver grosso is contained in the hoard. This currency is very prominent in the Aegean during the 13th and 14th centuries, mostly in Macedonia and in south-central Greece[43]. The situation in Anatolia is far less clear-cut. There is some sporadic information regarding pure Venetian hoards which might have been found there[44], the Zaccaria of Chios issued Venetian-type grossi in the early decades of the 14th century[45], at Sardis we have a Balkan imitation of a Venetian grosso[46], whereas at Pergamon there is a Bulgarian grosso of Ivan Aleksandăr with Michail IV Asen (1331–1355), minted in all probability also posthumously, perhaps to 1371[47]. This currency often circulated together with earlier Venetian grossi, as it did for instance at the aforementioned Belgrade Gate hoard. Venetian grossi are not present in some of the coin publications for western Anatolian archaeological sites, but I have personally seen large quantities of them in Turkish museums, even if they were invariably without precise provenance. The evidence of the single grosso in the Artemision hoard can be interpreted in three different ways: either this currency was not particularly prominent in this part of Asia Minor in the 1360s; or it was simply dwarfed in relative terms by the much more prolific gigliato currency; or it fell victim to the latter in a more direct fashion, by being melted down and re-minted. I would suggest that the reality was a combination of all three factors, in particular that such a low presence of grossi at Ephesos can only plausibly be explained if we assume local minting and re-minting.

Table 16: The Venetian grosso of Artemision 1871 now extant at the British Museum

Type	No.	Weight in g
Francesco Dandolo (1329–1339)	165*	2.13

Uncoined silver

The reported silver lumps weighed 17 lb. 4 oz. 368 gr. troy, which corresponds to ca. 563 grammes. The gigliati contained in the Artemision hoard were relatively worn and light, at an average of about 3.3 g to judge by the surviving specimens. The total mass of the metal in the hoard would therefore have been in excess of 8.5 kg. There is some evidence that silver ingots, usually of the sommo standard, were produced at Constantinople, amongst other places, and used there and in the Black Sea trade[48]. Our evidence is mostly textual rather than material. We are ignorant about the full range of ingots, in terms of their weights and shapes, which may have been used in a coin-like fashion, just as we are ignorant about the lumps contained in the Artemision hoard, suffice it to say that 563 g divided by fifteenth would not have produced a particularly large average per piece, and that the overall evidence suggests that ingots were not used in this part of the Aegean in the period under discussion. We may therefore move to the alternative interpretation, that these were the lumps »of the metal of which the coins were made«[49]. In other words, the presence of such lumps in a hoard, for which there is to my knowledge no parallel example from the later medieval Aegean, indicates the proximity of minting, geographically and chronologically speaking. It is of course true

[43] A lot of the relevant information is assembled in Touratsoglou – Baker 2002, 203–233. The Thracian and Constantinopolitan evidence has been contrast only recently been developed: see Baker 2018.
[44] Touratsoglou – Baker 2002, 213.
[45] Schlumberger 1882, pl. 13, 31.
[46] Buttrey 1981, no. 12.
[47] Voegtli et al. 1993, no. 1093.
[48] See for instance Hendy 1985, 547–551; see also Spufford 2008, 6–11. 14 f.
[49] Wood 1877, 181.

that the Ayasoluk mint under İsa Bey (ca. 1360–1390) produced Islamic-style silver[50], but the particular context of the Artemision hoard would nevertheless make it more likely that these lumps of silver were destined to be minted into gigliati.

CONTEXT

The Artemision hoard represents a substantial accumulation of money which was concealed and not retrieved in the lower town of Ayasoluk sometime before 1365. In terms of value, 8.5 kg of silver were almost exactly equivalent to 1,000 of the new silver stavrata of Byzantine Emperor John V Palaiologos, first minted in ca. 1372, and therefore probably 500 gold hyperpyra of account[51]. It is possible that this would have corresponded to somewhat more of the contemporary Cretan hyperpyra of account current in great parts of the Aegean[52], a large sum with respect to the wages and prices known for later 14th-century Byzantium and Latin Romania[53]. We should emphasize that neither the find-spot nor the denominations can allow us to make a reasonable guess about its original owner. It is well known that there was a general shift in emphasis inland and away from the site of the ancient city, and also that in various parts of the area Greeks, Latins, and Turks would have dwelled. The operations of the local Beylik mint, as described above, underlines emphatically that even gigliati were emitted and used by the latter. It is also possible that the hoard was not primarily formed in the location in which it was eventually abandoned. One would do well to avoid any speculation about the occupation or ethnicity of its owner, and to limit oneself to stating that she or he may have been relatively well-to-do. The relationship – semantic or otherwise – of the Artemision hoard and the so-called İsa Bey 1999 hoard is also not entirely clear[54]. The latter takes its name from the find-spot, the İsa Bey Hammamı, and from the fact that it contained 936 silver coins which were mostly issued by this ruler of the Beylik of Aydın. None of the coins of the hoard bear explicit datings, and even though its publisher proposes a date of 1389/1390, I believe that the hoard may have been concealed considerably earlier, at some point after the two *termini post quem* provided by the respective reigns of İsa Bey (ca. 1360) and Ahmed gazi of the Menteşeoğulları (1357). I would propose that it is even possible that these two valuable hoards (the latter at ca. 60 gold hyperpyra of account: see above) were abandoned in close geographical proximity to one another as a result of the same natural or man-made events. *A priori*, we must assume that the hoards' separation into western and Islamic denominations is done out of technical and accounting concerns, not for reasons of chronology, let alone of ethnicity.

Nevertheless, it is clear that the area of Ephesos, just like other parts of western Anatolia, went through different phases of coin usage during the long 14th century[55]. The demise of Byzantine power also brought on the end of Byzantine coinage, which may locally not have continued much beyond the reign of Michael VIII Palaiologos (†1282). This gap was initially filled by various denier issues, for instance from Cyprus, amongst which those of Latin southern Greece (deniers tournois) were dominant. Beylik coinages only became important towards the mid-14th century, but eventually dominated almost entirely as far as silver was

[50] Ender 2000, 99–107.

[51] On this new currency, its dating, metrology, and value, see in the latest instance Baker et al. 2017.

[52] Cretan hyperpyra, based on Venetian grossi and piccoli, are rather elusive since the Cretan notaries almost never refer to them explicitly and one needs to look at sources which do not originate on the island, for instance Morrisson 2001, 221.

[53] Morrisson – Cheynet 2002.

[54] Pfeiffer-Taş 2001.

[55] For numismatic data for this period from Ephesos and the immediate surroundings see Milne 1925, 391; see also Vetters 1976, 504; Foss 1979, 197 f.; Karwiese 1986, 132–134; Ünal 2011; Pfeiffer-Taş 2001, 124 f. also refers to some stray finds. Compare further the later hoard from the church of St John, which still contains gigliati: Ölçer 1986.

concerned. In terms of higher-value coinages, whereas in the 13th century there may have been a discreet presence of Byzantine and Latin gold hyperpyra, the new silver coinages of the 14th century, and particularly the gigliato currency discussed in this paper, contributed to a much more elevated level of monetisation of the area. As we have seen, gigliati appeared steadily in western Anatolia from the early years of the century. There cannot be much doubt that the bullion tied up in these various coinages, deniers and gigliati of whatever mintage, and later the akçes, was to a large extent of European origin, although it is equally evident that some silver pre-existed in the Anatolian economy, while yet more silver may have originated in the east, as far away as China[56].

It would be incorrect to suppose that there was throughout the described period a preferential relationship of Anatolia with the areas directly associated with the gigliato currency, Naples and Provence. It is possible that this was the case for short moments, fostered by political or personal contacts, for instance during the inception of the gigliati of the Knights of St John, but the translation of the gigliato currency to Anatolia was otherwise a more general phenomenon, with its own momentum. We must assume that, once established, westerners of diverse backgrounds sought out this currency before any dealings with western Anatolia. Gigliati would also have reached Anatolia through the less tangible currents of the money markets – for instance such coins may have been offloaded from Latin southern Greece, and especially the Angevin colony of Achaia, and even from Angevin Italy itself in the case of Group 4, as argued above. Finally, many of the indigenous Anatolian gigliato issues would have relied on bullion which reached the area in the shape of other denominations, for instance grossi, as we have seen. Once the chronology, the nature, and the origins and directions of this transfer of silver are understood, it becomes clear that western Anatolia partook in the general commercial revolution[57], and also that it had a positive balance of exchange. Obviously this area had a vast array of products to offer to traders, ranging from staples such as wheat or oil, to alum, hides and wax, and slaves[58]. The diplomatic and notarial sources reveal Anatolian trade as particularly important to Venice and Venetian Crete. There is also a clear geo-political dimension to the development of commerce with the area. The final establishments of the Beyliks, and of the Zaccaria on Chios and the Knights of St John on Rhodes, after the turn of the century quickly brought on the stable conditions in which to trade. There were treaties between Venice and Menteşe in 1331 and 1337, but the middle years of the century also saw considerable conflict between Latins and Turks in the Aegean. In the wake of the crusade of Smyrna (1344) further treaties were concluded with Aydın (1353) and Menteşe (1358/1359). According to the numismatic evidence presented in this article, large quantities of western silver may well have reached the territories of these two Beyliks (in addition to the adjoining islands of Chios and Rhodes) precisely from the later 1340s to the 1360s, perhaps after an ebb in the previous one to two decades. In all of this we must however not neglect the fact that certain Latin polities, Negroponte and the Archipelago in particular, were in a tributary relation with the Beyliks and that some silver may have crossed the Aegean in this context.

This movement of bullion also gave a major impetus to the local coin production. I suggest here that a string of imitative types was produced officially at a mint in Ephesos in these years. To judge by the proportions of the issues in the Artemision hoard, as compared to the Miletos hoard, Rhodian gigliati as much as coins and bullion of directly western origin were re-minted there. The signed pieces of the Aydınoğulları (see tab. 13) extend this minting activity perhaps to the early 1340s, or even earlier. While westerners were being attracted to Anatolia, other areas in which they had traditionally traded were becoming more

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[56] Determining the precise balance of European and Asian silver is of course difficult if not impossible and will have varied enormously between areas and periods. Pamuk 2000, 23 warns of eurocentricism on this matter. On 13th c. Anatolia see now Broome 2011; see further Kuroda 2009, 245–269, on the Eurasian dimension.

[57] Spufford 1988, 109–263. Pfeiffer-Taş 2001 came to much the same conclusion.

[58] On what follows see Foss 1979, 141–167; see also Zachariadou 1983; Gallina 2008; Lindner 2009; Fleet 2009.

difficult in the middle period of the 14th century, for instance the Levant, or southern Latin Greece and Byzantium, which were inflicted by political and military instability. If Anatolia was under the influence of the commercial revolution and the rise of silver, as argued here, then this occurred belatedly: the first silver crisis in the west was already well underway by the second and third decades of the century, and for instance all silver minting had ceased in Latin Greece by ca. 1350. To judge by the sparse numismatic evidence which is currently available, in the 14th century the parts of the wider Ephesos area which were the quickest to embrace the new silver currencies were also those which are the most prominent in the documentary and material sources, and which were presumably also the most developed and populous, namely Anaia[59] and Ayasoluk. In the latter context, the Artemision hoard and the other 14th-century coin finds originate in a dense and mixed area of housing, industry, religious and other communal facilities[60]. In closing, it is of some interest that the pottery finds from the same part of town do not seem to underline the same opening towards the west, since the types were mostly of local or even eastern origins[61]. It is difficult to make any clear postulations regarding the relationship of coins and pottery. Both are good indicators of trade and other contacts, and both supposedly travelled in the same direction, given that pottery was only a secondary item of trade and would have been displaced by the primary products for which the money had changed hands, ready for the return journey. Once their journey together had come to an end, it is quite likely that different fates awaited pottery and coins. Unlike the latter, pottery was subject to tastes and fashions, and had much more limited usages and circulation. It is quite likely that the pottery corresponding to the western silver – that is to say imported wares predominantly from Italy – may have been used in other parts of the Ephesos region.

[59] Which also had some western silver, as I will explore in a forthcoming study. On the history of this locality, see Maltezou 2003, 253–274.

[60] See, in addition to the contribution of Pfeiffer-Taş 2001; Weissl 2005, 9–16.

[61] See the material presented in Vroom 2005 and Vroom, in the present volume.

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Naples

1 13 4 6

Provence

21 26 19 36

Papacy **Chios** **Rhodes-Helion**

164 163 39 41 42

44 45 51 52 53

55 57 58 59 61

62 63 66 43 60

64 46 47 49 50

48 69 73 74

Rhodes-Dieudonné

76 77 78 81 83

89 151 79 150 75

Rhodes-Pierre

82 90 91 92 93

95 96 97

Rhodes-Roger

98 101 105 108 110

103 115 100 112 118

107 140 147 121 122

145 125 119 138 143

149 128 142 130 135

Saruhanoğulları

141 136 175 176

Aydınoğulları

153 154 155 157 159

Menteşeoğulları

178 158 168 169 179

Imitative gigliati

32 172 174 180 170

181 167 183 7 17

29 30 184 31 22

166 70

Venice

165

Erdem Soner Bellibaş

MONUMENTAL ARCHITECTURE IN AYASOLUK IN THE BEYLIK PERIOD

AYASOLUK AND ITS ARCHITECTURAL EVIDENCE

Following the outbreak of the ›Justinianic Plague‹ in the 6th century and the Persian and Arab invasions of the 7th, the urban settlement of Ephesos shifted towards the location of the Basilica of St John and the Ayasoluk Hill, where a new centre was established. However, contrary to long-held opinion, the old city was not completely abandoned in the 7th century[1]. Recent research in Ephesos has shown that settlement continued in some parts of it until the 14th century. Therefore, it would be more proper to consider the settlement around St John as an independent settlement which flourished due to pilgrimage and defence[2].

The Turks conquered Ephesos for the first time between 1090 and 1096, but after this short occupation the city reverted to Byzantine rule. The hill of Ayasoluk subsequently lay at the centre of the settlement, as is clear from the accounts of 12th century visitors[3].

In the following centuries, continuing local conflict between Byzantines and Turks inhibited urban expansion. Revitalization and architectural activity took off again in the 14th century under the regime of the Aydınoğulları Beyliği, and lasted into the early decades of the Ottoman Empire.

A large majority of the Turkish monuments visible in the town today belong to this period, before the city started to lose power again and the rival harbour towns of Kuşadası and İzmir started replacing its importance. It is learned particularly from the Vakıf registers of Suleyman the Magnificent's reign, that a large part of the Ayasoluk was in ruins[4]. It is difficult to speak of much architectural development between then and the foundation of the Turkish Republic in 1923.

Written sources for the structures in the town in this period, especially those of the 14th and early 15th century, are very limited. From those sources it is clear that visitors to the town were very impressed by the Basilica of St John which was converted to a mosque[5]. Descriptions of the locality agree that the town was prosperous and well maintained. The town experienced its period of greatest prosperity after around 1360 when İsa Bey came to power[6]. Many new structures were built besides the İsa Bey Mosque which was one of the most significant monuments of the Beylik period in the region. It is also known that not only İsa Bey himself, but his wife Azize Hatun and his son Musa Bey also contributed greatly to building activity in the town[7].

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[1] Ladstätter 2011, 24.
[2] Pülz 2011, 71; see also Ladstätter 2011, 24.
[3] Foss 1979, 121.
[4] Telci 2010, 179.
[5] Foss 1979, 146.
[6] Foss 1979, 154.
[7] Telci 2010, 42; see also Akın 1968, 65 f.

According to the Ottoman Vakıf registers which mostly date from the 15th and 16th centuries, there were numerous *masjids*, *masjids* with *zawiyas*, *zawiyas* (small *tekke*), a *madrassa*, a *darülhuffaz*[8], and several hammams[9], some of which have not survived to the present day. The registers do not include information on the locations of the monuments which presents the problem of identifying those monuments we can locate, due to the lack of surviving inscriptions apart from that of the İsa Bey Mosque. G. Niemann, in his research published in 1906, stated that the town had 14 mosques, five or six hammams and numerous tombs[10]. At present, it is possible to identify eight *masjids*, six hammams and five tombs. Besides these, there exist two structures recorded as hammams, three recorded as tombs, and two more recorded as an *imaret* (soup kitchen) and a *han* (roadhouse) respectively (figs. 1–2; tab. 1)[11]. In addition, there is one fountain visible today next to the so-called Karakolyanı Masjid. However, based on old archives, C. Telci mentions a group of fountains in the area of the Artemision which survived until the 1930s or 1940s[12].

These monuments are mostly clustered around the Ayasoluk fortress, and the west and south sides of Ayasoluk hill, making it possible to argue that the town centre was indeed in this area which also includes St John's Basilica and the Artemision. It is also possible to infer that these structures stayed relatively intact until present day, due to the fact that the modern town of Selçuk was not built over this historical centre, which was by then mostly swamp or agricultural land, with some of the structures being reused by the field owners as barns or other storage facilities. Despite all the regulations and sanctions for the preservation of heritage sites, it is possible to observe that some structures are still in such use.

Ottoman Vakıf registers state that there are three tombs in the town, despite the fact that five can be found. According to Telci this might be due to two of the tombs being components of *zawiya* complexes in the town[13].

The Ayasoluk Restoration Project run by the Vakıf Genel Müdürlüğü (VGM) together with the Austrian Archaeological Institute, aims to conserve and restore 14 Turkish Period monuments of the town. So far, the excavation, documentation and proposals for conservation regarding the Ahmed Paşa Tomb[14] and the tomb in the Artemision[15] have been completed within the scope of the project, and research is ongoing regarding the bathing establishments known as İsa-Bey Hammam and Hammam 4. During the brief land survey performed at the initial stage of the project, some remains of a structure, which can be dated to the Middle Ages by the construction type, were discovered immediately to the west of the temple of Artemis. Further studies on this structure may possibly end up with the discovery of the fountains mentioned above. It is very likely that more buildings will be discovered in the course of future research (fig. 3).

Most of the structures within the scope of the project are generally located in agricultural fields and untended, while some of them are out of plain sight, and decayed to the point of partial or complete collapse. This explains the fact that some of them are not mentioned in previous research on the monuments in the area. For the same reason, their functions remain

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[8] *Darülhuffaz* is a kind of school for training Hafız; see Hasol 1998.

[9] Telci 2010, 129–176.

[10] Niemann 1906, 122.

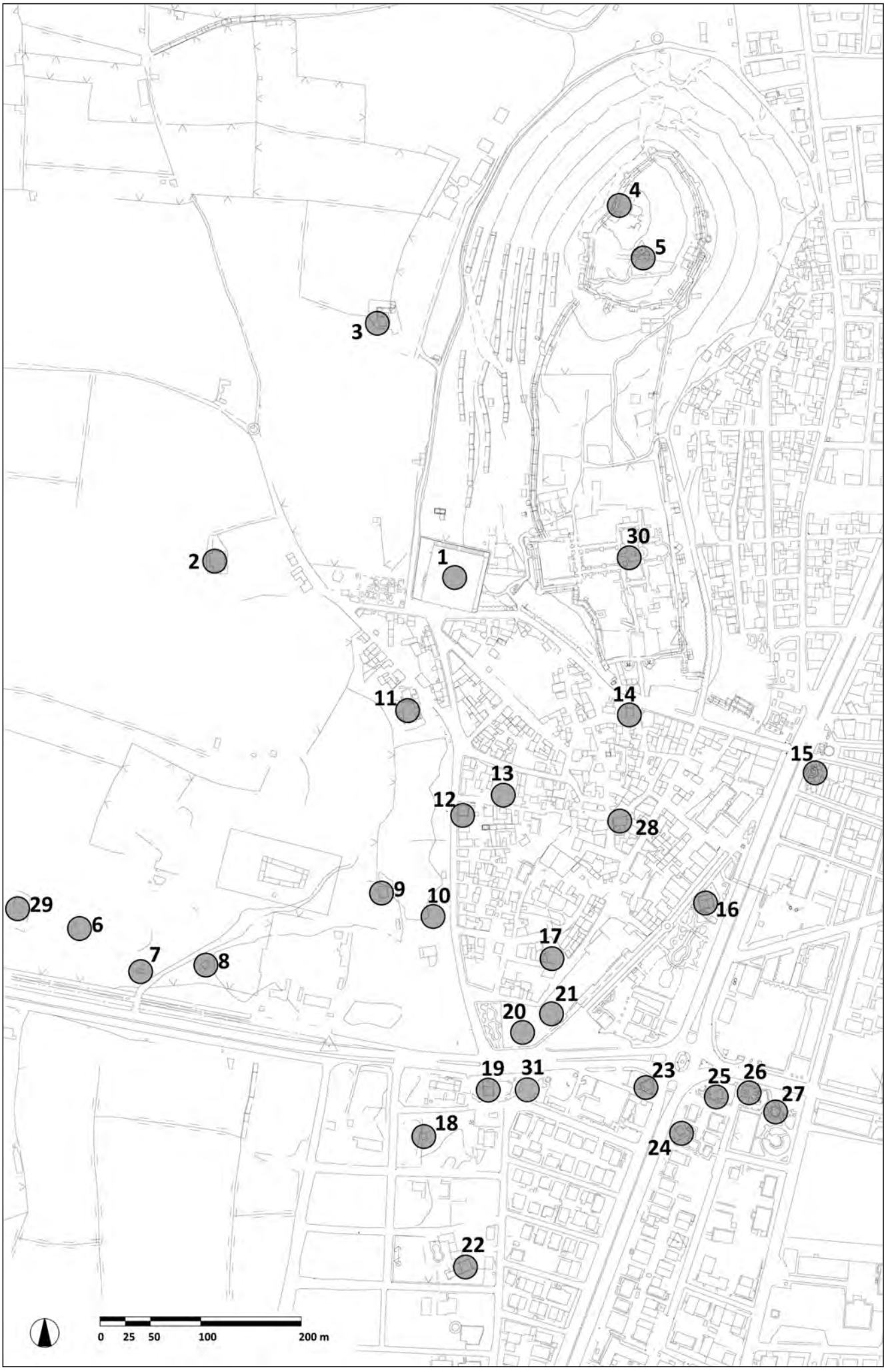
[11] Table 1 (see p. 114) contains a comparison of the names by which the Vakıf Genel Müdürlüğü (VGM) and Cultural Heritage Protection Board of İzmir (Kurul) and essential publications refer to the monuments, as well as C. Telci's (2010) evaluation of these names based on the Ottoman Vakıf registers. The Austrian Archaeological Institute (OeAI) prefers to use the monument names and numbers as defined in the agreement signed with the VGM, unless new evidence for an identification arise.

[12] Telci 2010, 45.

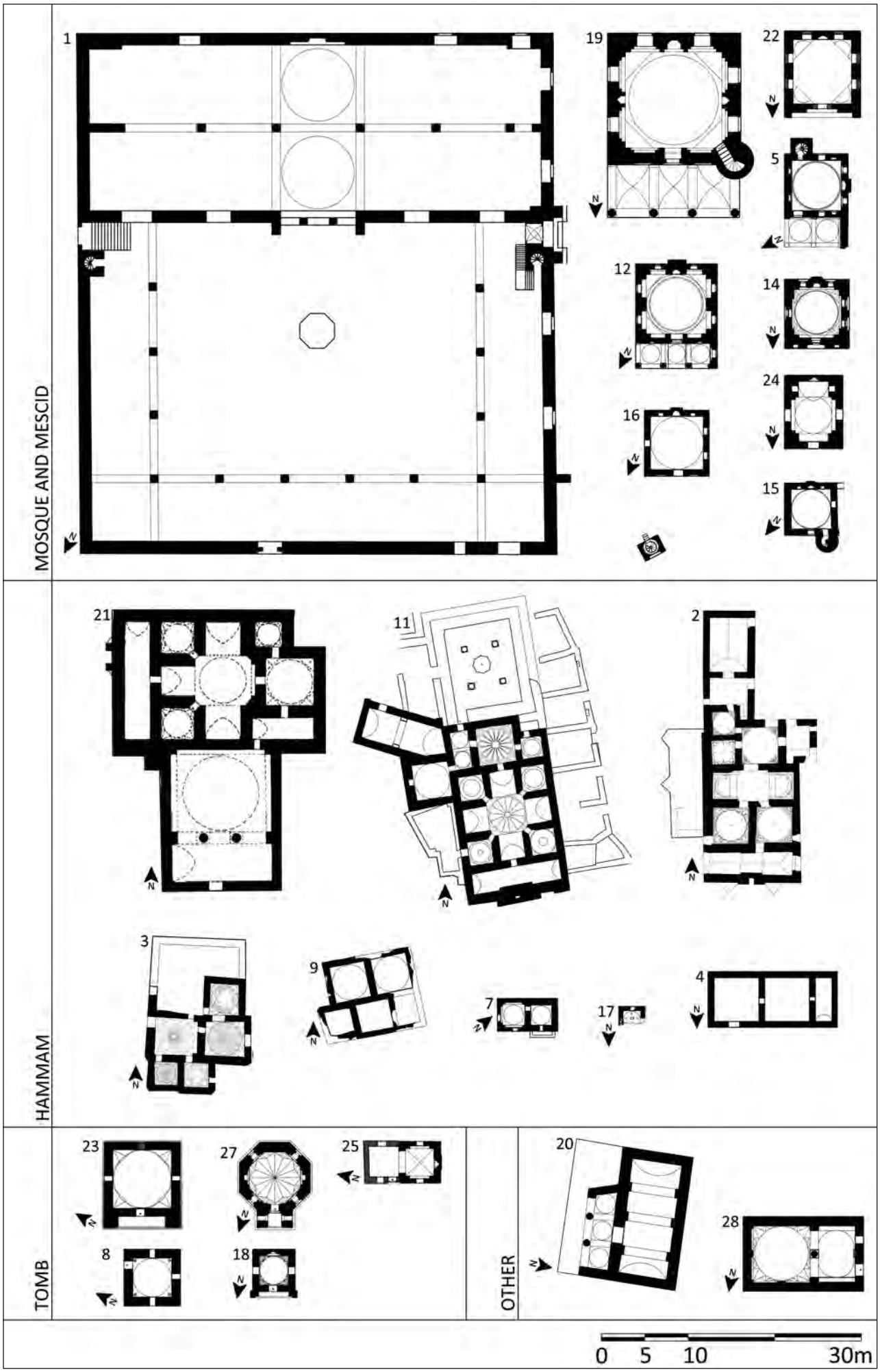
[13] Telci 2010, 172.

[14] The excavation of this tomb revealed a gravestone on which the date of Ahmed Paşa's death is inscribed. See Bellibaş et al. 2013.

[15] Ladstätter 2015.



1 Ayasoluk. Monuments of the Beylik and Early Ottoman Periods (© OeAW-OeAI, E. S. Bellibaş)



2 Map of the Monuments

3 Wall structures recently discovered during a survey in the Artemision (© OeAW-OeAI, C. Kurtze)

unclear. The Hammam 5, near the Artemision, is one of them (fig. 4). The nearby Tomb 7 is almost completely collapsed, and its attributes remain unidentifiable. Similarly, the structure recorded by the name Tomb 8 is completely collapsed (fig. 5), and the Hammam 8, also referred to as the House Hammam, is mostly disintegrated (figs. 6–7). Photographs taken at the start of the 20th century allow the identification of two of these monuments, Tombs 7 and 8[16], and Tomb 8 is also observable in one of the engravings included in Niemann's publication (fig. 8)[17]. It may be possible, in the light of the new data, to document these structures extensively, and to identify their names and functions by comparative research in the registers of the Vakıf.

GENERAL FEATURES OF WESTERN ANATOLIAN BEYLIK ARCHITECTURE

It is possible to broadly accept that the Beylik period was one of transition between the Anatolian Seljuks and the Ottoman Empire. This transitional quality is visible in the experimental nature of art and architecture at the time.

The architecture of the central Anatolian Beyliks, despite displaying some innovative tendencies, was mostly influenced by the Anatolian Seljuks. It is especially possible to state that under the rule of the Karamanoğulları, Seljuk art continued almost unchanged, while the art of eastern Anatolia reflected the traditions of Azerbaijan, and that of southeastern Anatolia the influence of Syria and Mespotamia[18].

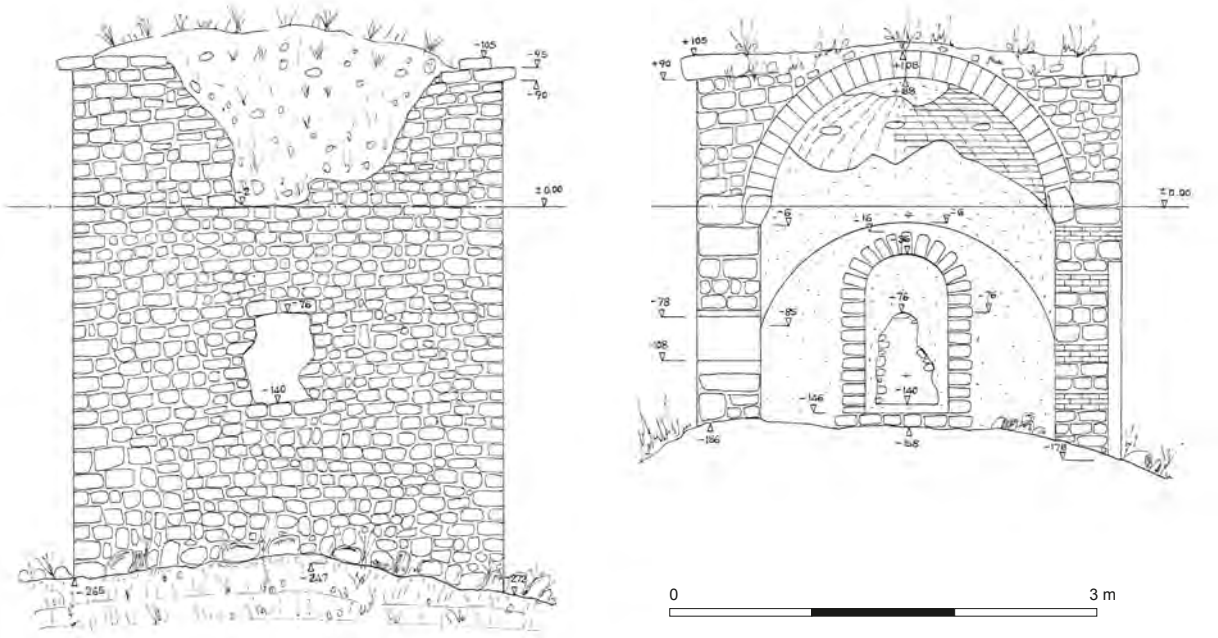
2 Map of the Monuments (Monument nos. 4, 7 and 21 derive from Daş 1998, 388–396; no. 18 derive from Çakmak 1998, 382; no. 28 derive from Pakben 1987, 120; nos. 1 and 22 derive from Uğur 2006, 11 and 66; nos. 2, 9 and 11 derive from OeAI Archive; nos. 3, 5, 12, 14, 15, 16, 17, 19, 24, 25 and 27 derive from Vakıflar Genel Müdürlüğü archive and no. 20 derive from the museum plan taken from <http://www.efesmuzesi.loriennetwork.com/tr/muze/genel-bilgi/muze-plani_64.html> [03/03/2014])

16 Photographs can bee seen in Ladstätter 2015.
17 Niemann 1906, fig. 30.
18 Kuban 2007, 63; see also Kuban 2009, 114; Cantay 2002, 18.

4 So-called Hammam 5
(© OeAW-OeAI, N. Gail)

5 So-called Türbe 8
(© OeAW-OeAI, N. Gail)

6 So-called Hammam 8
(© OeAW-OeAI, N. Gail)



7 Survey drawings of so-called Hammam 8, 1992 (© Vakıflar Genel Müdürlüğü, archive file no.: 352501020-OC001)

8 Niemann's drawing of a general view of Ayasoluk, bottom left: so-called Türbe 8 (© OeAW-OeAI, G. Niemann)

However, in the western Beyliks, a different architectural approach can be observed. These Beyliks inherited the ancient construction techniques and added architectural influence from the East onto these existing heritage layers. The architectural programmes of structures such as mosques, madrassas and tombs which were imported from outside of western Anatolia were implemented either with a local work force or with masons brought from the east, and were blended with local construction techniques and materials so as to create a different architectural identity unique to the region and period, an identity which then led to classical Ottoman architecture. The continuous inflow of migrants from the east surely helped the development of this local style by keeping alive the artistic dialogue between western Anatolia and the East[19].

The reason for this peculiarity of the western Anatolian Beyliks must be the rich architectural repertoire of the area. While the Turks tried to implement the architectural programme

[19] Sözen 1987, 33.

they had imported along with the workforce they brought, they surely have benefitted from the knowledge and practice of the existing masons of the area, as well as from local materials. C. E. Arseven states that the Turks created their works of art in their own fashion while utilizing the techniques of Byzantine and pre-Byzantine civilizations, which makes the art of Asia Minor very different from other areas[20]. According to Arseven, the rich architecture stemming from the combination of native and imported art displays itself in the unparalleled monuments in western Anatolia.

The Beyliks were small states compared to the previous Anatolian Seljuk sultanate and to the subsequent Ottoman Empire. It can be said that their urban fabric was loosely textured and even semi-rural[21]. This resulted in smaller structures and more modest decorative features due to smaller economic capacity. The lack of a central authority is also to be considered one of the reasons for architectural diversity and experimentation[22]. M. Sözen holds the opinion that the Beyliks created very plain monuments within their economic limits, and resorted to other methods to express their architectural ambitions[23]. This in turn must have been one of the main reasons leading to architectural experiments and diversification, rendering the west Anatolian Beylik architecture unique.

It must be noted that the divergence of western Anatolian Beylik architecture from other Anatolian Beyliks also stems from more practical reasons such as local masons and techniques, economical proficiency, and difference in local materials. The influence of the East and Anatolian Seljuk architecture is seen in the west, even if this influence is not as strong as in other parts of Anatolia. The East-West interaction was present in Anatolia long before the Turkish period, and the roots of some components are not easy, or at all possible to identify. The source for arches with carved stone profiles which are widely observed in western Anatolian architecture is mostly sought in Syrian or Anatolian Seljuk architecture, but they were a feature of Roman architecture, and were inherited by Islamic architects working in lands previously ruled by the Eastern Roman Empire[24].

Among the monuments in Ayasoluk, an example of continuity of Eastern architectural tradition is the İsa Bey Mosque, the architect of which is also known to be from Syria. This Mosque's ground plan, with its parallel naves to the Mihrab wall intersected by a cross nave, is similar to those of the Ulucami (Grand Mosque) of Diyarbakır and the Umayyad Mosque of Damascus[25]. The influence of Mamluk-Syrian architecture can be observed in its entrance portal adorned with bicoloured and knotted decorations[26] and each of its windows displays a different ornamental style which can be regarded as evidence that masons and craftsmen coming from different traditions have worked together in one programme during its building[27].

The portal (*taçkapı*), one of the most elaborate and significant feature of the mosque, also has its roots in Beylik architecture. However, it is notable that as the influence of Seljuk architecture diminishes from east to west, the portals also become more modest, as can be seen in Aydınoğulları, Menteşeoğulları and Osmanoğulları monuments. In western Anatolian Beyliks, the portals are adorned with plain arches or moldings constructed through the harmonious use of building blocks or the rhythmic use of different colored building materials, rather than the complex adornments throughout the entrance façades such as one observes in Seljuk architecture. The İsa Bey Mosque and Balat İlyas Bey Mosque portals are suitable examples of this

[20] Arseven 1970, 58.
[21] Tanyeli 1987, 109.
[22] Kuban 2007, 62; see also Crane 2002, 30.
[23] Sözen 1970, 3.
[24] Kolay 1999, 129.
[25] Kuban 2007, 62; see also Altun 1988, 69; Aslanapa 1990, 348.
[26] Tanman 2011, 90; see also Kolay 1999, 126.
[27] Kolay 1999, 126.

approach[28]. Seljukian monuments are generally massive structures enclosed by blind walls and elaborately decorated entrance façades which include the portals. The reason for the elaborate adornment of portals is most likely the need to add movement to an otherwise rigid and plain structure enclosed by blind walls[29]. However, in the Beylik period, all the façades were conceived with the same level of technical and aesthetical concerns[30], and openings and windows were integrated into all the façades resulting in a sense of completeness in all the proportions. A. Kızıltan[31] characterises the monuments of Beylik period as some of the most definitive examples of »the art of proportion« due to their avoidance of dense decoration and the sense of freedom in their design. Openings have been integrated in the drums of the domes as well as the façades. In one of the structures located on the Selçuk-Çamlık motorway, which is thought to belong to the Beylik period, alongside the two rows of windows on the façades, there are four openings on the dome as well, shaped by lancet arches (fig. 9)[32].

9 Window on the dome of a Masjid (?) in Ayasoluk (T. Uğur)

Two of the most dominant features of Ottoman mosques, the porticoed courtyard and the late-comers' porch (*son cemaat yeri*) are also rooted in the Beylik period. Mostly shaped by columns instead of pillars, these elements may be linked to Syrian Architecture, however the porticoed courtyards appeared in Anatolia in Late Antiquity[33], and it is possible to think that they have connections to Roman and Byzantine stoas. In Ayasoluk, while three *masjids* have porticoed late-comers' porches[34], İsa Bey Mosque does not have one, but instead the courtyard has porticoes along three walls.

MATERIAL AND CONSTRUCTION TECHNIQUES

In western Anatolian architecture, as it is in the whole of Anatolian Turkish architecture, the predominant exterior building material is stone. Especially in the Beyliks of the Aydınoğulları and Menteşeoğulları, along with the dense use of local stone, it is observed that broken or whole bricks obtained from Byzantine architectural elements are used inconstruction joints as complementary materials. However, bricks are preferred as transitional elements to the domes or in the construction of domes. Bricks are also widely used in constructing arches, and also as decorative elements on walls, as can be seen in many monuments (fig. 10). The use of bricks as building material becomes more common towards the northern regions[35].

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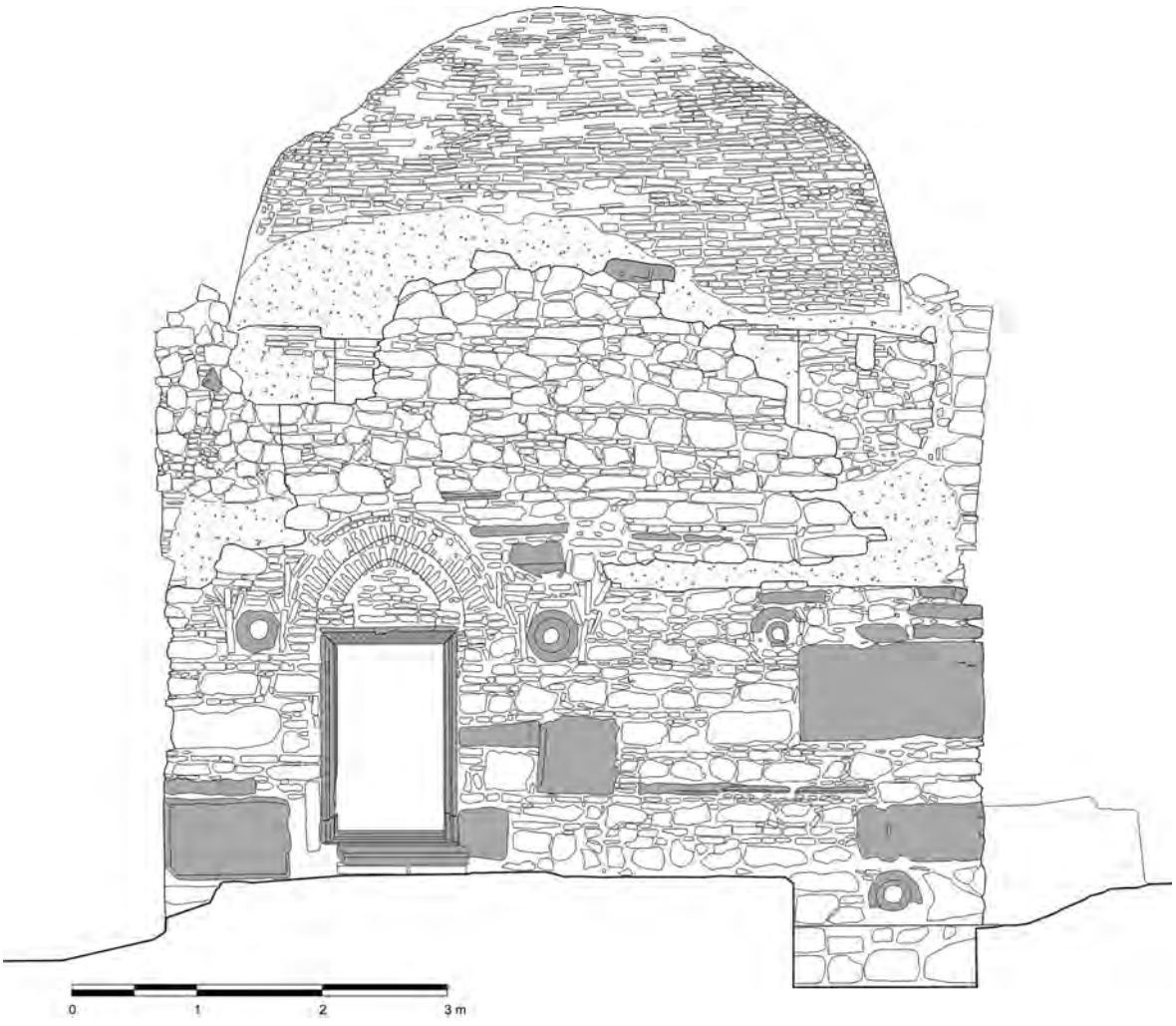
[28] Yetkin 1970, 158.
[29] Yetkin 1970, 158.
[30] Tanman 2011, 91.
[31] Kızıltan 1958, 11.
[32] Ertuğrul 1995, 286.
[33] Kuban 1982, 71.
[34] Despite the late-comers' porch being completely destroyed, it is clear from the design of its façade that in the structure known as Fort Masjid located on the Ayasoluk Hill, one existed.
[35] Kolay 1999, 22.

10 Decorative use of bricks on the wall of the Türbe in the Artemision (© OeAW-OeAI, E. S. Bellibaş)



11 Türbe in the Artemision: use of spolia (© OeAW-OeAI, E. S. Bellibaş)

One of the most typical features of western Anatolian Beyliks architecture is the use of spolia. Fragments of ancient buildings are not only used as construction materials but also abundantly as decorative elements. Almost all the structures display spolia on all their façades, and these materials mostly form the whole decorative programme of the structure, as is the case in the tomb in the Artemision. Spolia are also widely used for columns, capitals, and in door and window frames as well as doorsteps (fig. 11).

The western Anatolian Beyliks utilize most of the wall construction techniques of the Byzantine and Roman periods. A Roman wall construction technique which uses ashlar blocks to build wall surfaces and fills the wall core with rubble and mortar was later inherited by Byzantine architecture and also used extensively in monumental architecture of the western Anatolian Beyliks[36].

In smaller structures, the main construction materials used are rough stone or rubble stone, stones cut in a variety of ways, combinations of stone and brick, and, in a few cases, all-brick. Mixed brick and stone masonry is also Roman based and was continually used during the Byzantine and Turkish periods[37]. According to D. Kuban, the continuity of this type of masonry is due to local stone masons[38].

Another widely practiced technique, was the use of bricks as horizontal and vertical elements framing stone blocks. In many structures in Ayasoluk, especially those which were built with rubble and rough cut mixed stone masonry, the use of pieces of brick as joint fillings, or the mixed use of bricks and stone discussed above are visible.

The use of wooden beams embedded horizontally in masonry walls, observed both in Byzantine[39] and Anatolian Seljuk[40] structures also continued in western Anatolian Beyliks. Today, it is possible to observe the cavities left behind by disintegrated wooden beams. Similarly, it is also possible to observe the traces of the wooden scaffoldings on wall surfaces from the construction periods. The use of one vertical column of ashlar or fine-cut stones to build corners is also a practice which can be observed in Byzantine buildings, and was adopted and implemented often by the Beyliks[41]. Another Byzantine detail which can be observed in Ayasoluk and later became one of the characteristics of Ottoman architecture is the dog tooth cornice[42].

In the western Anatolian Beyliks, the use of local traditional round arch, mixed brick and stone masonry arch, and concentric double arches have continued but the most commonly used arch has been equilateral pointed arch[43]. The increased use of pointed arches indicates a level of loyalty to Persian and Anatolian Seljuk techniques. The entrance to the Tomb in the Artemision is discovered to be originally built of bricks in the form of concentric double arches, which were later carved for aesthetical reasons and transformed into pointed arches (fig. 12). It is most likely that the intention was to transform the local arches into an eastern form. Similarly, the pointed vaults in the area have been inspired from Anatolian Turkish architecture[44].

One of the main transitional elements observed in Beyliks structures of the area, the pendentive, must also be a result of the local architectural tradition; often found in Byzantine structures, they very rarely exist in Persian or middle Asian architecture. However, the Turkish triangles or squinches originated from the East[45]. Transitional elements consisting of

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[36] Kuban 1982, 68; see also Kolay 1999, 126.
[37] Kuban 1982, 68.
[38] Kuban 2007, 64.
[39] Kolay 1999, 15.
[40] Yavuz 2005, 95.
[41] Ertuğrul 1995, 316 f.
[42] Kuban 1982, 68; see also Kolay 1999, 126.
[43] Kolay 1999, 129–131.
[44] Kolay 1999, 131.
[45] Kuban 1982, 69.

12 The arches above the entrance door of the Türbe (© OeAW-OeAI, E. S. Bellibaş)

muqarnas, or the triangles covered with glazed tiles as can be seen in the İsa Bey Mosque, come from the Persian and Anatolian Seljuk tradition[46].

The main element of roofing in Beyliks period monuments was the dome. Almost all the monuments in Ayasoluk have domes covering the interior spaces. Some of the monuments also have vaults covering their secondary spaces. In the case of İsa Bey Mosque, a wooden gabled roof covers the naves.

In western Anatolia, it is known that the production and use of roof tiles go as far back as Phrygian period[47] and were also popular in the Byzantine period. The Roman tiles with very little concavity were transformed into the concave Spanish or mission tiles also used by the Turks later[48]. In areas where a Byzantine sub-layer exists, due to its ease of use on coverings like domes, roof tiles which were broader and concave at the bottom and narrower and more flat at the top have been used and it is known that these tiles were later preferred in Ottoman architecture as well[49].

In some of the Anatolian Seljuk structures, single jutting bricks can be observed protruding from the domes at a distance from each other. These must have been features to which the scaffolding was attached during the construction of the dome, and their being left intact and in place might mean that they were kept for maintenance purposes. Similar details have also been found on Beylik period structures. A. T. Yavuz states that domes which have these features were not covered with roofing tiles but left bare. Similarly, it would be incorrect to look for roof tiles on the domes of hammams perforated with light openings, but would be proper to say that they were plastered with hydraulic lime mortar[50]. Due to lack of roof tile findings in the excavations in and around Beyliks period monuments it can be inferred that

[46] Kolay 1999, 123.
[47] Naumann 2007, 160.
[48] Kolay 1999, 89.
[49] Yavuz 2005, 107.
[50] Yavuz 2005, 107.

13 Dome of Ahmed Paşa Türbesi, Selçuk (© OeAW-OeAI, E. S. Bellibaş)

dome coverings were mostly plastered with lime mortar. It must also be noted that domes with the above mentioned jutting brick details would have been very easy and low cost to replaster (fig. 13).

However, in Balat İlyas Bey Complex, it has been documented that the domes were covered with Turkish type mission tiles, and has been accepted as the authentic dome covering[51].

The bishop of Ephesos in 1339, records that rocks thrown at his house broke the roof tiles[52]. It would not be wrong to deduce from this information that in a town where civil architecture utilizes roof tiles, monumental architecture would also do so.

From the Turkish period monuments in the area, many of the monuments located inside the town of Selçuk have been subjected to speculative restorations aiming to reuse these monuments. Despite being renovated completely, most of these monuments have not been researched archaeologically and architecturally before the interventions, and therefore have not been documented, and the restoration efforts have not been the subject of publication. The less conspicuous monuments have been lucky to be saved from these irreversible restoration attempts; they, however, have suffered neglect resulting in deterioration, and in some cases complete disintegration. As has been mentioned in this article, in the past century alone, four monuments have been completely lost, and their memories erased. The remaining monuments are losing their architectural details and features every day due to ongoing decay, and the authenticity of their restoration is based on speculations, due to lack of documentation and research – that is to say, if they are ever subjected to restoration. Ephesos excavations, aims at researching, excavating, documenting and preparing conservation proposals for such monuments, as it did for the Tomb located in the Artemision. Such work would be the only method to transfer the knowledge of Ayasoluk and these monuments ›correctly‹ to future generations.

[51] Eskici et al. 2011, 189; see also Eskici – Kabaoğlu 2011, 238.
[52] Foss 1979, 160.

Table 1

No.	OeAI[53]	Kurul[54]	Ertuğrul 1995	Çakmak 1998	Daş 1998	Telci 2010
1	İsa Bey Camii	İsabey Camii	İsa Bey Camii	–	–	İsa Bey Camii
2	Hamam 3	›B‹ Hamamı	Hamam ›B‹	–	Anonim Hamam	Burak Bey Hamamı (?)
3	Hamam 4	›A‹ Hamamı/Yahşi Bey Hamamı	Hamam ›A‹	–	Kale Dibi Hamamı	(?)
4	Kale Hamamı	–	–	–	Kale Hamamı	Bey Hamamı (?)
5	Kale Mescidi	Kale Camii	Kale Camii	–	–	–
6	Hamam 7 (?)	Türk Dönemi Yapısı	–	–	–	–
7	Hamam 6	Eski Hamam	Küçük Hamam	–	Küçük Hamam	Burak Bey Hamamı (?)
8	Artemision'ndaki Türbe /Türbe 6	Mescit	Türbe ›C‹	3 no'lu türbe	–	Burak Bey Türbesi/Hacı Sinan Türbesi (?)
9	Hamam 5 (?)	–	–	–	–	–
10	Türbe 7 (?)	–	–	–	–	–
11	İsa Bey Hamamı/ Hamam 2	›C‹ Hamamı/ İsa Bey Hamamı	İsa Bey Hamamı	–	İsa Bey Hamamı	(?)
12	Kılıç Arslan Mescidi	Kılıç Arslan Camii	–	–	–	–
13	Türbe 8 (?)	Eski Yapı Kalıntısı	–	–	–	–
14	Alpaslan Mescidi	Alpaslan Mescidi	–	–	–	Abdullah Bey Mescidi (?)
15	Akıncılar Mescidi	Akıncılar Mescidi	Akıncılar Camii	–	–	Tatar Ahmed Mescidi (?)
16	İshak Bey Mescidi	İshak Bey Cami ve Çeşme	İshak Bey Camii	–	–	Hacı İshak Mescidi
17	Hamam 8 (?)	Hamam Kalıntısı	–	–	–	–
18	Türbe 5	Hacı Fadıl Türbesi	Türbe ›B‹	2 no'lu türbe	–	–
19	Karakolyanı Mescidi	Karakol Yanı (Ayasuluk Mescidi)	–	–	–	Kubbe Mescid (Ahmed Paşa Mescidi) (?)
20	Tonozlu Yapı	Tonozlu Yapı (Han)	Han	–	–	–
21	Müzedeki Hamam	Saadet Hatun Hamamı	–	–	Saadet Hatun Hamamı	Hatun Hamamı
22	Mescid 3 (?)	Mescit	Mescit	–	–	–
23	Ahmed Paşa Türbesi	Sığla Bey Türbesi	Türbe ›A‹	1 no'lu türbe	–	Zaviye (?)
24	Anonim Mescid (?)	İsa Bey Türbesi	Yapı	–	–	Zaviye (?)
25	Şehabeddin Dede Türbesi	Şehabettin Dede Türbesi	Şehabeddin Sivasi Türbesi	Şehabeddin Sivasi Türbesi	–	Şeyh Şehabeddin Türbesi
26	Anonim Yapı	Yapı Kalıntısı*	–	–	–	Yahşi Bey Medresesi (?)
27	Anonim Kümbet	Selçuk Kümbeti*	Anonim Kümbet	Anonim Kümbet	–	Yahşi Bey Türbesi (?)
28	Anonim İmaret (?)	İmaret (İsa Bey İmareti)/Ayasuluğ Kütüphanesi	İmaret	–	–	–
29	Odeion**	Alt Yapı	–	–	–	–
30	St Jean Bazilikası (Camiye çevrilmiş)	–	–	–	–	–
31	Çeşme	Çeşme	–	–	–	Ala Çeşme

* Yapı Kalıntısı and Selçuk Kümbeti are registered together

** At the time of this research the function and period of the structure was not certain. For recent discoveries see L. Zabrana, Das Odeion im Artemision von Ephesos, FiE 12, 6 (Vienna 2018).

[53] Austrian Archaeological Institute.

[54] Cultural Heritage Protection Board of İzmir.

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Yaman Dalanay

WHAT HAPPENED TO THE HARBOUR OF EPHESOS AFTER THE ROMAN PERIOD?

For Ephesos, the importance of its harbour throughout the ages can hardly be overestimated[1]. The city owed its prosperity and vitality to its harbour. Ephesos's location on the Aegean coast provided it with maritime links to the Aegean islands, Greece, the Levant, Egypt, Italy and the western Mediterranean, as well as to Constantinople and the Black Sea (fig. 1). During the Roman period, Ephesos was a hub for international trade. In the light of these good communication links, it was selected as the venue for the Third Ecumenical Council in 431 because »it was easily accessible by land and by sea«[2]. This paper will investigate the Late Antique and Medieval harbours of Ephesos using archaeological and textual evidence to determine their locations and to establish provisional chronologies whenever possible.

THE ROMAN HARBOUR

During the Roman period, the harbour of Ephesos was at the western end of the Arcadiane (fig. 2). It consisted of a polygonal basin surrounded by a marble quay. This small basin was connected to the Cayster River via a canal. The quay of the Roman Harbour was most probably built during the reigns of the emperors Trajan and Hadrian at the latest[3].

Even when it was first constructed, the basin was unlikely to have been designed to accommodate large vessels. Excavations revealed that, when moored at the quay and fully loaded, a thirty metre-long cargo vessel would have had barely enough water under its keel. Moreover, the depth of the basin was under constant threat by the ever-continuing silting. Epigraphic and geo-archaeological evidence shows that measures were taken to alleviate this problem and the basin was regularly dredged between the 1st and the late-3rd centuries[4]. It is known that at the end of the 2nd century Titus Flavius Damianus, constructed anchorages off the coast for large vessels. Their cargo and passengers were then transferred to smaller barques, which carried them via the canal to the basin of the Roman Harbour[5].

Apparently, this was still the case in 431 when Cyril of Alexandria travelled to Ephesos by ship to join the Third Ecumenical Council. Because Cyril's ship could not sail into the basin of the Roman Harbour, he had to disembark in one of the offshore anchorages and get into a barque which then took him via the canal to the Roman Harbour inside the city[6]. This proves that the Roman Harbour was still in operation in the 5th century, though accessible only by light vessels. The Roman Harbour was obviously still functioning when the so-called

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[1] Steskal 2014; Ladstätter 2016.
[2] Limberis 1999 suggests that in addition to logistics, political factors might have also played a role in the selection of Ephesos as the venue for the Third Ecumenical Council.
[3] Steskal 2014, 336.
[4] Steskal 2014, 336 f.; Stock et al. 2016.
[5] Wright 1922, 2, 23.
[6] Engelmann 1996, 134.

1 Eastern Mediterranean and the cities of Western Asia Minor in the Roman period (Public domain)

2 The Arcadiane stretching from the Theatre to the Roman Harbour (© OeAW-OeAI, O. Durgut)

3 The circuit of the Byzantine Wall (after Pülz 2010, fig. 15)

Byzantine Wall was built since the wall extended all the way down to the eastern edge of the harbour basin (fig. 3)[7].

Around 1106 while on a pilgrimage journey to Jerusalem, the Russian Abbot Daniel sailed from Chios to Ephesos. While describing the pilgrimage sites within the ancient city, Daniel mentions a harbour which was apparently different from the one in which he had arrived. Daniel states that this harbour was the place where St John the Evangelist was miraculously cast up by the sea and the name of the harbour was *Muromorjanoe*. Obviously this was a corrupt Russian rendering of the name *Marmareon*, where the miracle is reported to have taken place[8]. Since Daniel mentions this place among the ›pilgrim attractions‹ of the ancient city, and because the basin of the Roman Harbour was indeed surrounded by a marble quay from where it might have acquired the name *Marmareon*, it is possible that Daniel was referring to the Roman Harbour[9].

[7] Ladstätter 2018a, 81.
[8] For the details of the activities of St John in Ephesos, see Foss 1979, 34–36.
[9] Hopfgartner 1962/1963, 54; Brockhoff 1905, 51; Foss 1979, 121; Ladstätter 2018b, 216 f. I am indebted to Olga Grinchenko for her help in translating the Russian text.

It seems to be the case that the Roman Harbour was completely silted and went out of use not earlier than the 11th/12th century[10]. Excavations conducted between 1987 and 1989 on the southern side of the basin revealed many small finds, especially amphorae fragments (fig. 4). These could indicate that the area witnessed intensive activity until around the early-7th century[11]. Moreover the same excavations also revealed a retaining wall on the south edge of the basin which was built at a ›later period‹. This wall differs from the Roman walls in this area in its construction technique, but it is not possible to determine the precise date of its construction. Excavators have expressed the possibility that it might have been built as late as the Late Byzantine or even Beylik periods[12]. In conclusion it seems very likely that the Roman Harbour remained in operation well beyond the 7th century.

4 Excavation area at the south side of the basin of the Roman Harbour (© OeAW-OeAI, Archive)

ÇANAKGÖL TEPE HARBOUR

Louis Hopfgartner surveyed the area around Ephesos in 1959 and identified two locations outside the ancient city which may have been harbours during Byzantine and Turkish times[13]. The first of these locations is the area between the hills of İğdeli Tepe and Çanakgöl Tepe, where there is a pond south of the Cayster River. Hopfgartner reports the remains of extensive buildings around the circular basin. During two visits to the area in December 2009 and September 2010, it was not possible to examine the harbour basin closely due to the high water level and extensive vegetation (fig. 5). Moreover some of the building remains seen by Hopfgartner might have been destroyed in the course of the intervening half a century due to human activity. Nevertheless, large chunks of masonry which could be the tips of vaults submerged in the soil were still visible (fig. 6). Moreover the surrounding fields are strewn with bricks, roof tiles, and pottery sherds. Towards the north-east edge of this harbour area, at the western side of Çanakgöl Tepe, there is a rocky outcrop which is surrounded by a wall from the south side (fig. 7). The wall is constructed with hewn stones and some spolia fragments, including an entablature piece which probably came from the Vedius or the East Gymnasium and dates from the mid to late-2nd century[14]. This could have been some sort of

[10] Stock et al. 2013.
[11] Zabehlicky 1995, 211; Zabehlicky 1999, 482–484.
[12] Zabehlicky 1991, 200.
[13] Hopfgartner 1962/1963, 52–66.
[14] Hopfgartner 1962/1963, 53 claims this piece to be a capital from the Serapeion. However, closer examination of the piece reveals that it is actually part of the entablature of a building. My thanks to Georg Plattner for his help in identifying and dating this piece.

5 Basin of Çanakgöl Tepe Harbour in the front, Ayasoluk Hill in the back (author's photo)

6 Ruins near Çanakgöl Tepe Harbour (author's photo)

7 The fortified building on Çanakgöl Tepe (author's photo)

8 Embankment along the north bank of Cayster (author's photo)

9 Reused columns in the embankment (author's photo)

a fortified building incorporating natural rock. Due to its elevated position, it has a commanding view over the harbour area[15].

The remains of an embankment along the northern bank of the Cayster, only a little further to the west of this spot, could also be considered in conjunction with this harbour. The embankment, which can be traced for 550 m, is made of rubble stones set in mortar. Ancient columns from Ephesos have been employed as bollards. Spolia marble slabs have also been used to build embarkation places (figs. 8. 9. 10). This embankment and the columns were marked on the drawings made by early modern travellers which suggest that there could be more ruins there in the past (fig. 11)[16].

It is hard to date any of these structures since there is no particular building technique or inscription. But some dating evidence could be obtained from analysis of pottery found around the site. The majority of the pottery fragments collected from the surface of the surrounding fields are parts of Late Roman 3 type amphorae (fig. 12). They can be dated between the 4th and the 6th centuries[17]. This indicates that the Çanakgöl Tepe Harbour was probably in operation during the Late Antique period, if not earlier. It could be one of

[15] Hopfgartner 1962/1963, 53.
[16] de Tournefort 1727, 386–387.
[17] I am indebted to Joanita Vroom for identifying and dating these pieces. After being photographed all the fragments were thrown back into the field from where they were collected.

10 Re-used slabs in the embankment (author's photo)

11 Map of Ephesos from the 18th century showing the columns and the ruins at the mouth of the Cayster (after de Tournefort 1727)

12 Late Roman 3 type amphorae fragments from the fields around Çanakgöl Tepe Harbour (author's photo)

the off-shore anchorages as in the case of Cyril of Alexandria in 431. Çanakgöl Tepe Harbour could have remained in use during the Middle Byzantine period as evidenced by the coins found by Hopfgartner near the fortified building[18]. Based on his description one of these coins can be dated to the 10th century and it may suggest activity during that period in this area[19].

According to the Russian Abbot Daniel who visited Ephesos around 1106, Ephesos was »situated among the mountains«. Clearly he was referring to the ancient city, as it was indeed situated between Panayırdağı and Bülbüldağı. He also states that Ephesos was »at a distance of 4 *versts* from the sea«. The distance between the ancient city and the Çanakgöl Tepe Harbour is 4.5 km over land. This figure tallies perfectly with the distance of 4 *versts* stated by Daniel[20].

The travel account of Ludolf von Suchem, who visited Ephesos sometime between 1336 and 1341, contains important information regarding the location of the harbour during the Beylik period. His account is as follows:

»The proper city of Ephesos [i.e. the ancient city] is barely four miles away from the sea. … About four miles away from this ancient city of Ephesos, on the sea shore in the place where there is a harbour a new city has now been built and it is inhabited by Christians who

[18] Hopfgartner 1962/1963, 53 f.: »Dass dieser Platz auch in byzantinischer Zeit besiedelt war, und daß der Großbau am Westende des Çanakgöltepe wahrscheinlich der Byzantinischen Zeit zuzuordnen ist, beweisen Münzfunde in unmittelbarer Nähe des Kapitells aus dem Serapion. Die Münzen sind stark zerstört und eine Bestimmung ist schwer möglich. Eine Münze zeigt am Revers einen byzantinischen Kaiser mit Reichsapfel und Dreizack und am Avers sind die Buchstaben: ›...Trom...E...E...Eoi...Sileus...Roma...‹ erkennbar. Demnach wäre diese Münze zwischen Romanos I (920–944) und Romanos IV (1068–1071) anzusetzen, in welche Zeit auch die Errichtung eines byzantinischen Gebäudes aus dieser Zeit angenommen werden kann.«

[19] Unfortunately Hopfgartner does not give any information about the context in which the coins were found nor about the total number of the coins. One might assume that they were found either on or very close to the ground and hence the possibility of a stray find cannot be ruled out. The single coin that was described by Hopfgartner is a follis of Romanus I (931–944): See Grierson 1973, 562 no. 25 and pls. 38 and 39. I would like to express my gratitude to Julian Baker for identifying this coin.

[20] 1 *verst* is equal to 1.0668 km. Therefore 4 *versts* correspond to roughly 4.26 km. See Cardarelli 2003, 121.

have been driven out of Lombardy because of a conflict. These people have churches and Franciscan monks, and they live like Christians. … Close to the new city of Ephesos there is a river as big as the Rhine … along this river many diverse merchandise is transported. … In this river Turks and false Christians gather their ships, arms, and supplies when they intend to fight against the Christians …«[21].

It is very likely that Ludolf was referring to Çanakgöl Tepe Harbour which was, as already said, 4.5 km from the ancient city[22]. His account also states that merchant vessels sailed along the Cayster and vessels gathered in the river when the Turks and their Christian allies decided to organize a naval expedition[23]. The only location suitable for gathering vessels along the Cayster is Çanakgöl Tepe Harbour.

Ludolf also states that near this harbour a ›new city‹ had been founded and it was inhabited by Christians. Another traveller report from the end of the 14th century describes the same settlement and adds that a substantial number of rich Christian merchants lived there and it was frequented by merchants from various other locations[24].

It is known that due to close trade relations in the course of the 14th century, at least seven treaties were concluded between Venice and Aydınoğulları though the texts of only three have survived[25]. According to the terms of the earliest surviving treaty concluded in 1337, a Venetian consul was established and Venetian merchants were given an area to reside in Altoluogo – the name given to Ephesos by Italians[26]. Another treaty concluded in 1353, enlarged the ›Venetian quarter‹ which included houses, a church, a *loggia*, and a bakery[27]. In addition to the Venetians, Genoese and Ragusan merchants are also known to have resided in Altoluogo[28]. The location of this ›Venetian quarter‹ has not been determined until now. Although western merchants might have resided in Ayasoluk Hill, it seems more likely that they would have preferred to reside close to the harbour where they were conducting business. The date of the treaty (1337) and the date of Ludolf's visit (1336–1341) are concurrent and this is probably why Ludof says *now* a new city has been constructed, implying that the ›Venetian quarter‹ had been built shortly before his visit.

Therefore it is seems very likely that this ›new city‹ located near the harbour and inhabited by Christian merchants, as described by Ludolf, could be identical with the residential quarters given by the Turks to the Venetians and other Christian merchants. It is possible to provisionally identify it with the ruins around the Çanakgöl Tepe Harbour.

Despite the clear description of Ludolf, scholars identified this ›new city of Ephesos‹ as Scala Nova i.e. Kuşadası[29]. This identification can be securely rejected. Not only is Scala Nova 15 km away from the ancient city of Ephesos, but there is also no large river near Kuşadası.

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[21] Deycks 1851, 24 f.: *Vera civitas Ephesi distat a mari ad quatuor parva miliaria … Ab hac civitate antiqua Ephesi supra litus maris ad quatuor miliaria in loco, quo est portus, nunc nova civitas est constructa, et a Christianis de Lumbardia per discordiam expulsis est inhabitata, qui habent ecclesias et fratres minores, ut Christiani viventes … Prope novam civitatem Ephesi est fluvius in modum Reni magnus … per istum fluvium … varia et diversa deveniunt mercimonia. In eodem fluvio Turchi et falsi Christiani, dum contra Christianos intendunt pugnare, navigia et arma ac cibaria solent congregare …* I am grateful to Ida Toth for her help in translating this text.

[22] Ludolf was probably referring to the Roman/Italian mile which is around 1.481 m. If that was the case then the distance mentioned by Ludolf (4 miles) would be around 6 km. However it is unlikely that Ludolf actually measured the distance. The use of 4 *versts* by Daniel and 4 miles by Ludolf make it likely that they were both referring to the same distance but in their own terms.

[23] Deycks 1851, 25. Maritime traffic along the Cayster is also confirmed from a 16th c. Greek portolan which states that one could reach as far as the Ayasoluk Hill by the Cayster River. See Delatte 1947, 246.

[24] Ennen 1862, 460–462.

[25] Zachariadou 1983.

[26] Zachariadou 1983, Doc. 1337A, clauses 6–8, pp. 191 f.

[27] Zachariadou 1983, Doc. 1353A, clause 17, p. 214.

[28] Zachariadou 1983, 58. 128; Krekiç 1961, 212 no. 299.

[29] See for example, Lemerle 1957, 28 no. 4.

13 Dutch map (ca. 1570) showing Altoluogo and Ayasuluk as two seperate settlements (after Theatrum orbis terrarium 1964)

How long this ›new city‹ near the harbour survived is unknown. An Ottoman document dated to 1530 states that the townsfolk of Ayasoluk were resident in the ›remote place‹ (*ücra yerde*) and ›by the sea shore‹ (*deniz kenarında*)[30]. It seems likely that the ›remote place‹ is a reference to the settlement around the Ayasoluk Hill, while ›by the sea shore‹ might be referring to the settlement on the coast. A Dutch map published in 1570 shows ›Altoluogo‹ on the coast and ›Aiasoluch‹ inland; the two sites are quite separate from each other (fig. 13)[31].

PAMUCAK HARBOUR

The other location identified by Hopfgartner, which could have been a harbour, is the embayment at the southern end of Pamucak Beach, at the corner of Cape Rhion (Otuzbir Burnu) to the south and Pamucak Hill to the east (fig. 14). Because of the ruins which are located here, this area was erroneously identified as Phygela by the 19th century excavators and marked as such on various maps.

[30] BOA.TD.166, p. 411: »Kasaba-i mezkurenin şehirlüsü ücra yerde ve deniz kenarında ihtiyatlı mahalde mütemekkin olmağın…«

[31] Theatrum orbis terrarium 1964.

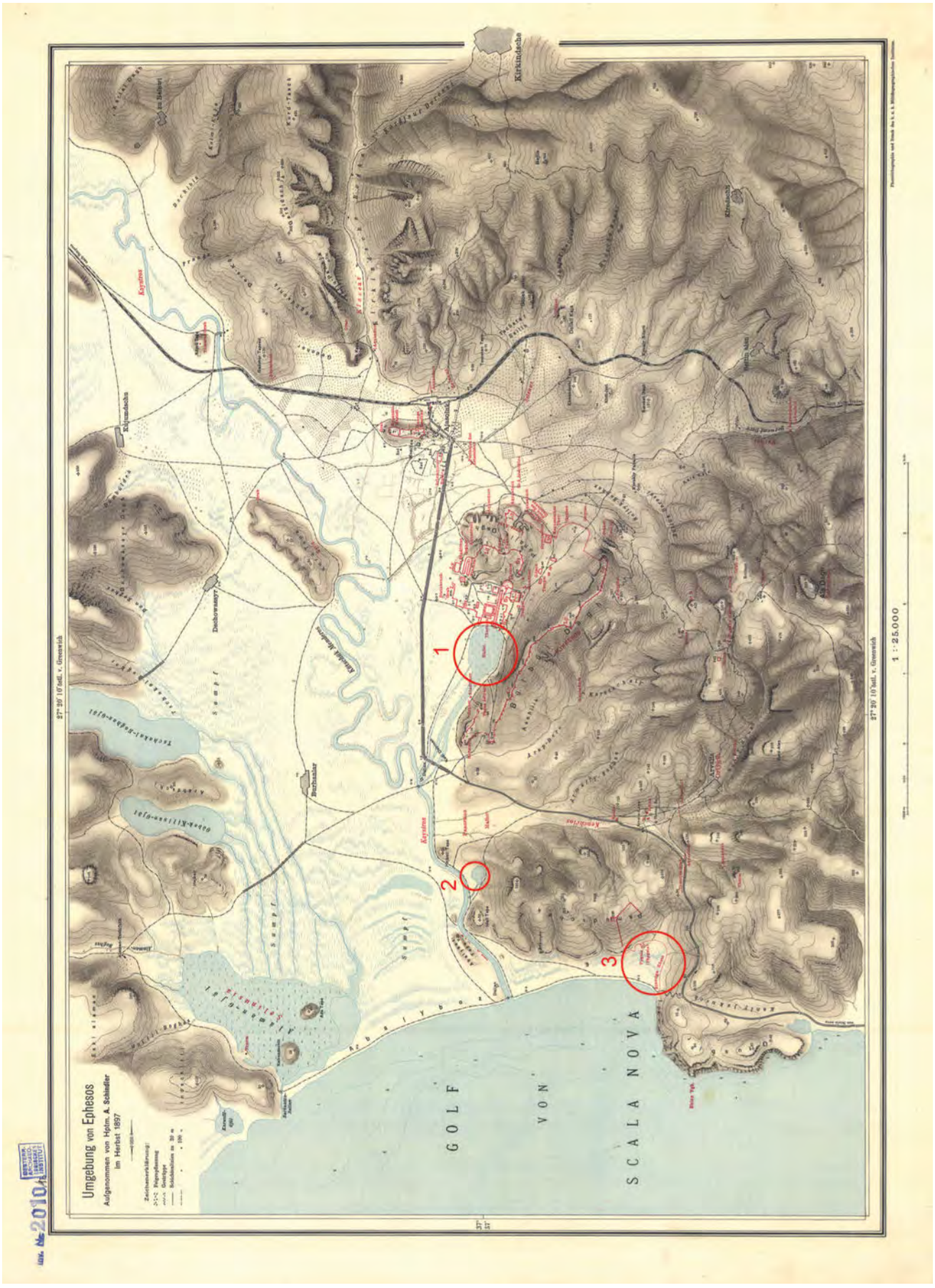
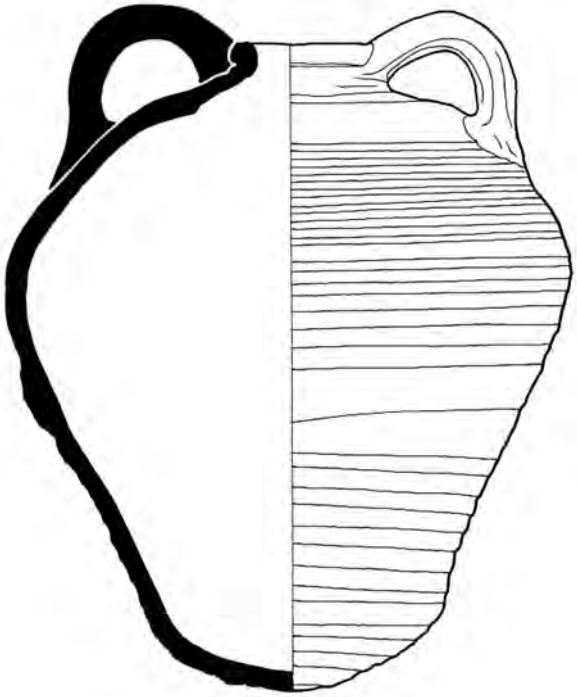


Fig. 14 Map of area around Ephesos (after FiE 1) with the Roman Harbour (1), the Çanakgöl Tepe Harbour (2) and the Pamucak Harbour (3)

15 General area of Pamucak Harbour with Cape Rhion in the background (author's photo)

16 Galleries in Pamucak Harbour (author's photo)



17 Günsenin 1 type amphora excavated in Pamucak Harbour (unpublished drawing by Tamás Bezeczky)

The northern slope of Cape Rhion forms the southern side of the embayment and several ruins are located here (fig. 15). At the easternmost end, three barrel vaulted galleries are still visible (fig. 16). In 1998, because of the planned construction of a beach hotel in this location, Selçuk Museum undertook a salvage excavation[32]. Adjacent to the already-known three galleries, on the east side another chamber, whose vault had completely collapsed, was revealed. Excavations on the upper side of the galleries revealed marble pavements and traces of a staircase, indicating the existence of a superstructure. Under the rubble of the collapsed vault of the eastern most gallery, around 50 amphorae were found in fragments. In the same place, five more amphorae were excavated intact (fig. 17). All of these amphorae were of Günsenin 1 type, which can be dated to the 10th or more probably to the 11th century though a slightly later date is also possible[33]. Just a few metres to the west of this point were the remains of a mole, protruding from the northern slope of Cape Rhion towards the sea, and extending for 80 m. It is 230 cm wide and is constructed using rubble stones and reused marble slabs[34].

Because of the existence of the mole, amphorae and the vaulted galleries, it is evident that this was a harbour site. The presence of Günsenin 1 type amphorae indicates that, at least in the Middle Byzantine period, these galleries were used for storage of merchandise.

[32] The results of this salvage excavation have never been published. What follows is based on personal observations, the report presented to the Selçuk Museum by Mehmet Sevim who conducted the excavation, and also personal communication with Mr. Sevim. I am grateful to the Selçuk Museum for providing me with a copy of the excavation report and also to Mr. Sevim for sharing his personal opinions with me.

[33] Günsenin 2009, 147–150. I would like to express my gratitude to Tamás Bezeczky for sharing with me his unpublished drawings of these amphorae.

[34] Hopfgartner 1962/1963, 58. Except for the barrel vaulted chambers, all the other structures mentioned by Hopfgartner have been obliterated when a hotel was built in this spot.

18 Arched openings connecting the galleries in Pamucak Harbour (author's photo)

These rectangular galleries (ca. 5 × 10 m), aligned in a north-south direction, are connected to each other with arched openings (fig. 18). Similar structures dating to the Roman period were excavated in the harbour of Caesarea Maritima and they have been identified as *horrea*[35]. The almost identical architectural plan would suggest that the galleries in Pamucak Harbour were also storage facilities and used as such at least until the Middle Byzantine period.

According to the trade manual of the Florentine merchant Pegolotti written around 1330 it was possible to transport grain over land from the city of Altoluogo to the harbour using beast-drawn carts. The distance covered in this journey was 9 miles[36]. The seemingly incompatible accounts of Ludolf (who says 4 miles) and Pegolotti (who says 9 miles) concerning the distance between the harbour and the city have confused generations of scholars. The solution to this apparent conflict might actually be quite simple. Whereas Ludolf was describing Çanakgöl Tepe Harbour and measuring its distance from the ancient city of Ephesos, Pegolotti was referring to the Pamucak Harbour and was indicating its distance from Ayasoluk Hill. The total distance between Ayasoluk Hill and Pamucak Harbour is around 12 km and hence roughly compatible with Pegolotti's account.

There is further textual evidence about Pamucak Harbour, which proves its location beyond any doubt. Ephesos/Altoluogo was consistently depicted on Italian portolan charts produced between the 13th and 15th centuries[37]. One of these portolans, which was published in 1490 in Venice, has very detailed sailing instructions for the harbour of Altoluogo. This very important textual source which was re-published in 1909 has been ignored by previous scholars.

[35] Patrich 1996, 149–153. I would like to thank to Marlia Mango for bringing the storage facilities in Caesarea Maritima to my attention.
[36] Evans 1936, 56.
[37] Kretschmer 1909, passim.

On the other hand, Clive Foss, who for the first time drew attention to its importance, has misinterpreted it[38]. Therefore it is necessary to examine the relevant passage in detail here.

The text can be translated as follows:

»Ephesos is a big, ruined town that is close to Alto Luogo at a distance of 1 mile. From the (edge) of the plain of Ephesos to the harbour it is one and a half miles in a south-southwest direction. Based in this harbour are ships that go to Alto Luogo. This harbour is protected (on three sides, starting) from southwest and going eastwards all the way up to north. It is between 6 to 8 passa deep and has docks on its south side. The harbour is recognized by a tower on a high hill. Let the tower remain slightly towards north and go between the tower and the steep cape that dips directly into the water and is situated at the head of the beach.«[39]

Using these directions, Foss concluded that »the port described is that marked ›Hafen Panormos‹ on the map of Schindler«. However, this location does not fit with the description.

In reality, the location described by the portolan text is the very same location as the Pamucak Harbour. This is confirmed by the following points:

1) The distance between the edge of the plain and Pamucak Harbour is roughly 1.5 miles in south-southwest direction.

2) The embayment is surrounded by land from its south/south-west, east, and north sides.

3) The docks on the south side of the harbour are most probably the mole and the galleries described above.

4) The »tower on a high hill« is clearly the one at the summit of Pamucak Hill at an altitude of 180 m (and not the Prison of St Paul as claimed by Foss). This tower has a commanding view and hence can be seen from a distance.

5) The »steep cape dips directly into the water and is situated at the head of the beach« is Cape Rhion (Otuzbir Burnu).

6) The exact location of the harbour specified by the portolan as between the tower and this cape fits perfectly well with the location where the mole, galleries and the medieval amphorae were excavated. Therefore, it is beyond doubt that this text is describing the Pamucak Harbour.

The chronology of the Pamucak Harbour can be reconstructed using the textual and archaeological evidence presented here. The vaulted structures might have been built as early as the Roman period. Like the Çanakgöl Tepe Harbour it probably functioned as an offshore anchorage during the Roman and Late Antique periods. The amphorae excavated here indicate that the vaulted chambers were still used for storage around the 11th century. It was a busy commercial harbour and was connected to Ayasoluk by an overland route in the 1330s when Pegolotti composed his manual. The above-mentioned portolan text proves that it was still in use in the late-15th century. Furthermore the small finds excavated in and around the vaulted galleries include fragments of tobacco pipes, which indicate that these structures were probably in use as late as the 17th century when tobacco pipes were introduced to the realm of the Ottoman Empire[40].

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[38] Foss 1979, 150 n. 31.

[39] Kretschmer 1909, 521: »Efexo si e una gran citade desfacta che e apresso alto luogo a mio uno e dala foxa di efexo fin al statio dele naue entro ostro e garbin mio uno e mezo. In quel statio sta le naue che va in alto luogo ed e chouerto da garbin fin ala tramontana fazando la volta da leuante ed e fondi da passa 6 a 8 e meti li prodexi dal ostro. La cognoscenza de statio si e una tore che e sovra un monte alto, lassala un poco dal tramontana e va entro la tore e un cauo alto che tu vederai che beue in aqua che e a cauo dela spiaza.« I would like to express my gratitude to Chiara Cappellaro for her help in the translation of this difficult text.

[40] Vroom 2005, 173–175.

PANORMOS HARBOUR

Based on a description by Strabo, the early-20th century excavators of Ephesos concluded that the ancient Panormos Harbour was located at the lower reaches of the Arvalya Valley[41]. As a result, this area was marked as ›Panormos Hafen‹ on Schindler's map and this localisation was accepted by all later scholars, even though there was no archaeological evidence to support it. Moreover, many scholars, including Foss, also assumed that the medieval harbour of Ephesos was situated »at the ancient port of Panormos«[42].

If one takes a closer look at the topography of the area, it becomes apparent that this location could not have been a harbour at any time due to its position at the mouth of the Arvalya Valley where there is no embayment. Moreover, there are no remains of any kind on the ground that would support this localisation. More importantly, in recent years, two core drillings carried out in the alleged location of the Panormos Harbour failed to find any firm evidence which would indicate the presence of a harbour here[43]. Therefore, the theory that identifies this location as Panormos Harbour cannot be sustained, until more secure evidence can be brought forward.

NORTHERN HARBOUR

An alternative location for the ancient Panormos Harbour was proposed by Recep Meriç[44]. Upon closer examination of the text of Strabo and the topographical features of the area, Meriç postulated that the ancient Panormos Harbour could have been located at the north-western part of the alluvial plain, where there is a shallow marshy lake called Alaman Gölü[45]. Even today this area is locally known as Pananoz which could be the survival of the name Panormos. However, the only archaeological evidence presented by Meriç in support of his claim are the remains of a causeway, constructed of field stones and architectural spolia, extending into the low-lying marsh[46]. Meriç claims that this causeway was constructed during the 14th century and provided access to the Panormos Harbour which, he assumes, was the harbour of Ayasoluk in this period[47].

It is well known from early modern travellers' accounts that one of the alternative routes between Izmir and Ephesos passed through Alaman Boğazı[48]. The 17th century traveller Thomas Smith, while narrating his journey from Ephesos to Izmir, not only indicates that he passed through Alaman Boğazı, but also identifies this very same structure precisely as a ›causeway‹[49]. Therefore the causeway mentioned by Meriç is a section of Izmir-Ephesos road where it crossed the marshy area and may not have been a specifically built road to connect Ayasoluk with a presumed harbour in this location. The dating of this causeway to the 14th century solely on the basis of the fact that it employs spolia is also highly questionable. Causeways were common in marshy areas of western Asia Minor[50]. There is epigraphic evidence for the construction of similar structures in the lower Maeander plain near Miletus in the second half of the 5th century[51]. In conclusion, although it is possible that the north-western part of the

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41 Strab. 14, 1, 20.
42 See Foss 1979, 149.
43 Kraft et al. 2000, 192.
44 Meriç 1985, 30–32.
45 Strab. 14, 1, 20.
46 Philippson 1936, 29 identifies this causeway as a »Steindamm« and dates it to the Late Roman and Early Byzantine periods.
47 Meriç 1985, 31.
48 Cevdet 1935, 134–137; Bent 1893, 141 f.; Chandler 1817, 151.
49 Smith 1672, 161 f.
50 Philippson 1936, 6 f.; Pococke 1745, 57.
51 Thonemann 2006, 183. I would like to thank Peter Thonemann for bringing this example to my attention.

lower Cayster plain might have been the site of ancient Panormos Harbour, secure archaeological evidence and geological core drilling would be necessary to prove this.

The textual evidence about the harbour of Ephesos is almost continuous from the Late Byzantine period until the 17th century. However these sources only confirm that a harbour was operational. Unfortunately they do not include any clues about the location of this harbour. During the 13th century, the harbour of Ephesos was frequented by the boats of the Monastery of St John on Patmos. In 1244 emperor John III Vatatzes confirmed the rights of the monastery to conduct trade without paying custom duties and other charges in the harbours of the western coast of Asia Minor including Ephesos[52].

Under the Ottomans, the harbour of Ayasoluk was designated as a tax farm (*tımar*). Throughout the 15th and 16th centuries Ottoman tax registers (*tahrir defterleri*) continuously record the revenues of the harbour of Ayasoluk[53]. The harbour of Ayasoluk continued to exist but gradually ceased to play as significant a role in international trade as it did during the 14th century. Nevertheless trade on a regional basis continued. A *ferman* of Bayezid II, dated July 1507 and preserved in the archives of the monastery of St John on Patmos, instructed the *kadıs* of Ayasoluk and Balad to make sure that the monks of the monastery who were coming to these harbours for trade should not be excessively taxed[54]. The last mention of the harbour of Ayasoluk in Ottoman documents (albeit indirectly) is in 1622–1623[55]. After this date neither the Ottoman sources, nor the western travellers who visited Ephesos mention the harbour or any maritime links in Ayasoluk.

In conclusion, there were at least three (Roman, Çanakgöl Tepe, and Pamucak) and possibly more sites around Ephesos which at some point after the Roman period served as a harbour. Contrary to the common assumption that the harbour of Ephesos silted up after the 7th century, it has now been shown that a harbour remained in use until the 17th century. However, only after proper surveys and excavations would it be possible to draw more conclusive results especially about their chronologies.

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[52] Vranousi 1980, I no. 24. The term used in the document to denote the harbour of Ephesos is *skala*.

[53] Telci 2010, 57; BOA.MAD.18003, p. 15; BOA.MAD.232, p. 262; BOA.TD.8, p. 454; BOA.TD.148, p. 98; BOA.TD.166, p. 404; BOA.TD.537, p. 93; TKGM.KK.TD.167, p.16a, TKGM.KK.TD.302, p. 42b, BOA. İbnül Emin Maliye 85.

[54] Zachariadou 1966, 222 f. The term used in the *ferman* to denote the harbour of Ayasoluk is *iskele* derived from the Greek word *skala*.

[55] BOA.MAD.6004, p. 29. 49. I would like to thank to Cahit Telci for his comments on this document.

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Richard P. H. Greenfield

»AS THOUGH STRUCK IN THE HEART BY A MISSILE«: THE IMPACT OF LAZAROS GALESIOTES IN EPHESOS IN THE FIRST HALF OF THE ELEVENTH CENTURY

Gregory the Cellarer, who wrote the primary Life of his monastic superior Lazaros of Galesion in the third quarter of the 11th century[1], attempted to sum up the holy man's achievements in the following way:

»As for the miracles, what needs to be said? For it is surely enough by itself for someone to bear in mind how, although he came up alone onto this mountain, without shelter, without shoes, and with only one little leather tunic and the irons which he wore to crush his body, Lazaros was yet able to found the three monasteries on Galesion and in addition to construct the monastery at Bessai, to gather some 300 monks in them, to provide everything they needed, and moreover to maintain so many guests, then as now, in the monastery every day.«[2]

As this passage suggests, Lazaros's presence in the neighbourhood of Ephesos undoubtedly had a significant impact on the town in the mid-11th century, while Gregory's long Life and the various other written sources on Lazaros and the monasteries he founded provide important information for this rather obscure period in the region's history[3].

Lazaros's role in 11th-century Ephesos, and the continued, if intermittent, importance of his foundation on Galesion into the 13th century has by now become reasonably well known and quite thoroughly discussed, thanks, initially to the work of C. Foss[4]; to contributions by a number of others, including J. P. Thomas[5], E. Malamut[6], A. Rigo[7], and M. Whittow[8]; and to my own publications[9]. All are deeply indebted to the original edition of the Life, which was published (along with that of the later version by Gregory of Cyprus and a brief epitome) a century ago by H. Delehaye in the *Acta Sanctorum*[10]. The present paper does not pretend to contribute anything extraordinarily new to the evidence or its discussion; my purpose, in keeping with the original aims of the symposium from which this publication stems, is simply to summarise two key aspects of Lazaros's impact in the region and to consider how this may inform our understanding of Ephesos in the 11th century. My suggestion, then, is that Lazaros made a significant impact, firstly in the way he became a major attraction in an area already renowned for its numerous and important spiritual attractions; and secondly, in the way that, in doing so, he disturbed the local status quo and incurred the hostility and active opposition of those who saw him as a rival, especially the ecclesiastical authorities in the town of Ephesos

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[1] Gregory the Cellarer 1910; see also Greenfield 2000. See Greenfield 2000, 52 for the dating.
[2] Gregory the Cellarer 1910, chap. 79; cf. chaps. 62. 85. 213. Greenfield 2000, 168. 149 f. 176. 308.
[3] The other sources are published by Delehaye 1910 and Lampsides 1982. On these see Greenfield 2000, 58–61.
[4] Foss 1979; Foss 2002.
[5] Thomas 1994; Thomas – Constantinides Hero 2000, 148–155.
[6] Malamut 1985.
[7] Rigo 1995.
[8] Whittow 2007.
[9] Greenfield 2000; Greenfield 2002; Greenfield 2009.
[10] Delehaye 1910.

itself. In this context, however, I do also want to stress that the opportunity for substantially expanding our understanding of the impact of Lazaros and his legacy on Ephesos in the 11th to the 13th centuries clearly exists, now that the location of one and perhaps two of his core monastic settlements has been tentatively established.

Stretching far back into Antiquity, Ephesos was, of course, one of the great religious centres of the eastern Mediterranean. In some ways it owed its very existence to its reputation as an outstandingly holy place, a status that it deftly managed to retain, and apparently even enhance, despite the shift to Christianity. In the Byzantine period it thus remained a well known pilgrimage destination and both the medieval town of Ayasoluk and the old city were littered with shrines and holy places. As Foss puts it, »in terms of sacred capital – churches, tombs, relics, and sites of miracles – Ephesos was by far the richest place in Asia Minor and one of the greatest goals of pilgrimage in the empire«[11]. Written evidence shows that, in the early 12th century around 50 years after Lazaros's death, there was thus not only the obvious centre of the Basilica and tomb of St John (whose appeal evidently extended year round, beyond its much celebrated annual May miracle of the beneficent and healing dust) but also the Cave of the Seven Sleepers, the tombs of Mary Magdalene and the Apostle Timothy, a celebrated and venerable icon of the Virgin, and the baths that had become a shrine to St John. In the vicinity, but outside the immediate area of the twin towns, there were evidently other holy places: not the now much visited house of the Virgin, but sites like the shrine of St George at Mathaia, mentioned in the Life of Lazaros[12], or places perhaps looking to gain a reputation for sanctity, such as Mt. Kouzenas, not only the site of a monastery reported to have harboured opinion hostile to Lazaros[13], but also recorded in John Skylitzes's Synopsis historion as the location of a spring at which ghostly and apparently prognosticatory moaning and weeping could be heard day and night for several months in 1028 or 1029[14]. What is important to note, then, is that it was into this already crowded and likely highly competitive context of religious and spiritual venues that Lazaros managed to insert himself and actually become a major player.

Lazaros, who had been born in 966 or 967 near Magnesia on the Meander, around 15 km south-east of Ephesos, grew up in the 970s in various nearby monastic establishments[15]. In the mid-980s, however, he left for the East and Jerusalem and did not return to his home region until about 1010. There, over the next forty or so years until his death in 1053, Lazaros gained widespread recognition as a star of contemporary Byzantine asceticism. Renowned primarily as a pillar saint, he attracted flocks of visitors who sought his blessing, his spiritual advice and his material support. But around him a variety of more permanent monastic establishments also grew up. Some were in the Kaystros valley, just to the north-east of Ayasoluk, where he began his career: the monastery of St Marina, the convent of Eupraxia, the Pausolype, and the large monastery of Bessai. Others were in, or close to, a gorge on the slope of the nearby barren mountain of Galesion where he spent the last 35 years of his life. Between ca. 1019 and 1042, Lazaros moved up the gorge roughly every ten years, creating as he did so the monasteries of the Savior, the Theotokos, and, finally, his major foundation, the Resurrection, which was right on top of the mountain[16].

Gregory's Life provides good indication that, in terms of sheer numbers involved, Lazaros soon started to have a definite impact in the region. As was made clear in the quotation at

[11] Foss 2002, 130.
[12] Gregory the Cellarer 1910, chap. 144; Greenfield 2000, 231 f.; see also Whittow 2007, 263.
[13] Gregory the Cellarer 1910, chaps. 84. 99; Greenfield 2000, 174. 189.
[14] Skylitzes 1973, 377; see also Wortley 2010, 357.
[15] For a summary of Lazaros's life and discussion of the chronology, see Greenfield 2000, 5–14; cf. Rigo 1995, 13–30; Thomas – Constantinides Hero 2000, 148 f.; Whittow 2007, 251 f.
[16] For discussion of these foundations and their issues, see Greenfield 2000, 28–48; cf. Rigo 1995, 28–30; Thomas – Constantinides Hero 2000, 149.

the start of this paper, there were evidently some 300 monks in his various communities around the time of his death[17], but his effect on the distribution pattern, and possibly the actual numbers, of pilgrims and sightseers in the Ephesos area was likely even more noticeable. Although the great majority of his visitors were already coming to the town for some other reason, passing on government or private business along the land and sea routes that included Ephesos at this time and stopping at the local pilgrimage sites[18], by the end of his life Lazaros had become an attraction in his own right, evidently drawing people from across the Byzantine world and even from beyond its frontiers[19].

Lazaros's first location, a chapel and then small monastery dedicated to St Marina, lay at the foot of a mountain known to Gregory as Koumaron. This was evidently on the south-east side of the Kaystros on the main road into the town, thus a short distance north-east of Ayasoluk. »Within a short time«, says Gregory, »Lazaros's reputation spread almost everywhere and many people, rich and poor, began coming to him from the villages and towns nearby.«[20] »Everyone that passed by there used to go up to him« so that he was »mobbed by everybody every day.«[21] Indeed the first evidence of a negative local impact arises here, for the two monks, who had lived quite peacefully at St Marina up to this time, discovered that taking Lazaros in had been an unfortunate mistake. Finding themselves confronted by a flood of visitors and the overwhelming demands these people were making on their meager resources, they issued an ultimatum to Lazaros: »Either stop welcoming everyone and giving away to them in this reckless fashion the things which God sends for our use, or else go away from here. If you won't, then we will have to leave ourselves!«[22] Lazaros's response was not accommodating and the two were forced to leave[23].

Lazaros himself quite soon grew tired of the noisy and busy location and moved up onto Galesion, which was »right there«, though across the river to the north[24]. He set himself up somewhere in the lower part of the gorge, but a steady flow of visitors continued, apparently undaunted by the difficult and potentially dangerous pathway, for the gorge has precipitous crags on either side at its base and is blocked by a thirty foot cliff[25]. Over the decades he spent on the mountain, the journey evidently improved, despite becoming longer and still necessitating guides as Lazaros moved higher up towards and then onto the summit[26]. It was evidently quite possible to accomplish the trek from the town of the Theologian (Ayasoluk) in a day, though some did spend the night (or longer) in the guest house, or, towards the end of Lazaros's life at the monastery of the Resurrection in the superior lodgings of the archontarion (which boasted an actual bed)[27]. Those of higher social standing could ride up, though most still went on foot[28].

The reasons why all these people visited Lazaros are numerous, ranging, as I have discussed elsewhere[29], from the spiritual to the mundane and covering pretty much everything

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[17] Gregory the Cellarer 1910, chap. 79; Greenfield 2000, 168.
[18] Foss 1979, 116–130. For these routes, see also Avramea 2002, 76. 85.
[19] For individual longer distance visitors see Gregory the Cellarer 1910, chaps. 70–72. 75–76. 84–85. 87. 93–95. 97. 101. 103. 105. 112–115. 119–120. 177. 187. 252; Greenfield 2000, 156–160. 162–165. 173–178. 183–187. 191–192. 194–198. 203–205. 208–210. 268–269. 279. 361. See also Greenfield 2002, 215–231.
[20] Gregory the Cellarer 1910, chap. 32; Greenfield 2000, 118 f.
[21] Gregory the Cellarer 1910, chap. 36; Greenfield 2000, 123.
[22] Gregory the Cellarer 1910, chap. 32.
[23] Gregory the Cellarer 1910, chap. 32; Greenfield 2000, 118 f.
[24] Gregory the Cellarer 1910, chap. 36; Greenfield 2000, 123.
[25] The »Chalkos Halonios« area mentioned in the *Life*: Gregory the Cellarer 1910, chaps. 41. 56. 77. 154–155; Greenfield 2000, 128. 144. 166. 243–245.
[26] Gregory the Cellarer 1910, chaps. 46. 51; Greenfield 2000, 132. 138.
[27] Gregory the Cellarer 1910, chaps. 150. 162; Greenfield 2000, 237–239. 253 f; see also Greenfield 2002, 219 f.
[28] Gregory the Cellarer 1910, chaps. 237 f.; cf. chaps. 119. 207; Greenfield 2000, 336 f. 208. 301.
[29] Greenfield 2002.

in between, including an annual festival at which holy oil was distributed[30]. Although some clearly went away unimpressed and unhappy, the great majority, if Gregory's necessarily biased account is to be believed, were both impressed and helped by their visits. For instance, the quotation I have used in my title to emphasize Lazaros's impact comes from the story of a layman who went up to the holy man for a blessing:

»As soon as he simply caught sight of Lazaros«, says Gregory, »he immediately fell to the ground head first, as though he had been struck in the heart by some missile. He beat his face with his hands and lamented mournfully and bitterly and let loose such a flood of scalding tears from his eyes that he even soaked the ground where he had fallen. When he arose from there, he went up to the father, made confession of his sins and received forgiveness; then, justified in this way, he too went down from the mountain.«[31]

What is perhaps most important in the context of this paper, however, is that such behaviour necessarily had a significant economic impact in the region. Gregory, as Cellarer in Lazaros's communities during the later period of the holy man's life, was well aware of the costs and resources involved in looking after all these people. As I have made clear, he regarded the ability of Lazaros's communities to do so as almost, if not actually, miraculous. Even before he became a monastic leader, Lazaros had always been very concerned that any food or possessions should be shared with the needy[32]. In his monasteries this charitable work seems to have been regarded as their *raison d'être*, and he became renowned for his generosity[33]. Visitors were thus always offered a meal, and they surely needed it on Galesion after their arduous trek, but, even at St Marina, Lazaros would distribute bread; at the Resurrection two or three sittings in the refectory were apparently necessary to accommodate all the visitors. It is impossible to know how much such visitors were given to eat but crowds of people showed up in search of food during periods of famine and the monastery always seems to have been a haven for beggars and the needy even when the monks themselves were running short. They were evidently given not only food, but also all manner of other provisions and material goods, clothing and money; even thieves and the greedy were treated generously and Lazaros was said to be insistent that not too many questions be asked of the recipients of his charity[34]. On one occasion for example Gregory recalls:

Some of the poor who discovered the father's generous disposition would visit him and ask him to become the sponsor of their children, either telling him the truth or else fabricating their story. Lazaros would respond enthusiastically to them, give them what they needed and dismiss them. But he knew the real reason why they were doing this. Once, then, someone who seemed to be very hard pressed by poverty came and begged for something from the father, as he said he had no provisions at all. The father took out a nomisma and gave it to him and, by means of a personal letter, gave instructions that he should also be given one of the monastery's goats and four measures of wine; he also told the cellarer to give him oil and pulses and cheese, as well as bread and vegetables. In fact, he ordered so many provisions to be lavished upon him that the fellow who received them was unable to carry them or wrap them up, and had nowhere to put them at all; and still he said »Yes« when the father asked him if he needed anything else. When the brothers saw the man doing this they criticized him openly for being greedy and insatiable; but the father defended the poor man by saying to them, »Why are we criticizing him? If he wasn't so hard pressed by hunger and poverty he wouldn't do this, especially when being ridiculed by you. You should commiserate with

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[30] Gregory the Cellarer 1910, chap. 76; see also Greenfield 2000, 165.

[31] Gregory the Cellarer 1910, chap. 116; see also Greenfield 2000, 205 f.

[32] Gregory the Cellarer 1910, chaps. 3. 4. 8. 23. 24; see also Greenfield 2000, 80 f. 85. 107 f.

[33] See especially Gregory the Cellarer 1910, chaps. 151. 211. 213; see also Greenfield 2000, 240. 306. 308. On Lazaros's charity in general and feeding of visitors in particular, see Greenfield 2000, 22; Greenfield 2002, 218 f.

[34] See especially Gregory the Cellarer 1910, chap. 210; see also Greenfield 2000, 305; and, in general, Greenfield 2002, 228 f.

him and have sympathy for him rather than being disapproving and critical«. When the father said this, the brothers were put to shame by his words and immediately gave the poor man a hand[35].

Another time, a thief made off with a sack full of flour and two pairs of hides but, when Gregory reported the theft to Lazaros, the holy man (evidently to his Cellarer's chagrin) simply said: »Let him go, and don't chase after him to catch him. For he's just a poor man.«[36]

It thus seems clear that Lazaros's presence came to have a noticeable economic impact in the region. At one level this involved the redistribution of basic resources and thus perhaps relatively little disturbance of the economic status quo – instead of begging around the pilgrimage and other ecclesiastical sites in Ephesos itself, there was now an alternative location in the hinterland where the needy could seek and find assistance, and the alms, in kind or cash, required to support them would be given to Galesion instead of to the organized church in Ephesos itself. But, on another level, Lazaros's foundations can be seen to have attracted major donations that were likely made at the expense of the long established traditional shrines in Ephesos.

A Calabrian woman called Iouditta, for example, thus made possible the construction of the church at St Marina[37], and, even more obviously a large donation of seven hundred and twenty nomismata from Maria Skleriana, Constantine IX's mistress, paid for construction of the Pausolype community[38], whether or not this is to be identified with Bessai or the convent of Eupraxia[39]. The emperor Constantine himself gave Lazaros the evidently rich land on which Bessai was to be constructed as well as at least one other substantial sum of money shortly before the holy man died[40]. And these are only the contributions we know of specifically; by the end of Lazaros's life the monastery had come to have a reputation for wealth and malicious rumours were being circulated that his pillar was stuffed with gold from its numerous benefactors[41].

At first the metropolitan was evidently supportive of Lazaros's work, – he is thus said to have provided land for the monks' use at St Marina[42], but when Lazaros wanted to move onto Galesion and then, when he stayed there in contradiction of an epsicopal directive to leave and continued over decades to expand his operation, open hostility developed[43]. The feud became increasingly bitter, as I have described elsewhere, involving the spreading of malicious rumours which depicted Lazaros as a fraud, the harassment of his monks, and the violent interception of a delegation from the monastery that was headed for Constantinople[44]; the pressure also provoked very serious and long standing rifts within the community itself which ultimately led to the attempted murder of Lazaros's brother[45]. What exactly lay behind all this strife is never made clear, beyond veiled references to the metropolitan's legal claims on Galesion and a distinctly murky interpretation of imperial patronage. But surely the negative

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[35] Gregory the Cellarer 1910, chap. 146; see also Greenfield 2000, 233.
[36] Gregory the Cellarer 1910, chap. 241; see also Greenfield 2000, 341.
[37] Gregory the Cellarer 1910, chap. 33; see also Greenfield 2000, 119.
[38] Gregory the Cellarer 1910, chap. 245; see also Greenfield 2000, 347.
[39] On this issue see Greenfield 2000, 34–41.
[40] Gregory the Cellarer 1910, chaps. 245. 248; cf. chaps. 221. 246; Greenfield 2000, 346 f. 355 f. 315 f. 349. For discussion of the complex issue of Constantine's intentions and the actual use to which his endowments were put, see Greenfield 2000, 41–48; Greenfield 2009, 38 f.
[41] Gregory the Cellarer 1910, chap. 248; see also Greenfield 2000, 356.
[42] Gregory the Cellarer 1910, chap. 34; see also Greenfield 2000, 120.
[43] Whittow's (Whittow 2007, 265–268) reading of the situation differs somewhat from mine and suggests »relations were generally good« until very late in his [Lazaros'] career, at least until after 1042; cf. Thomas – Constantinides Hero 2000, 153.
[44] Greenfield 2009, 29–31.
[45] Gregory the Cellarer 1910, chap. 202; see also Greenfield 2000, 296. See further on the internal opposition, Greenfield 2009, 31–34; cf. Whittow 2007, 270 f.; Thomas 1994, 249–251.

impact that Galesion came to have on the prestige and revenues of the traditional establishments down in Ayasoluk and Ephesos must have played its part.

As Foss has suggested, pilgrimage, or what we would probably call tourism, was still an important industry in the town at this time[46]. As such it would necessarily have played a significant role in the local economy, both directly in the form of donations to the shrines (if not actual entry fees, as charged by the Turks in the 14th c.), and indirectly in accommodation and food. Now, however, there was a new and unauthorized franchise, as it were, in town, draining away traffic and revenue as well those all important Byzantine commodities, authority, prestige and influence[47]. In the late 8th century we know that Constantine VI had been so impressed by what he found at the shrine of St John that he had remitted the duties, worth one hundred pounds of gold, generated by the annual fair[48]. Two hundred and fifty years later, in May 1040, John Skylitzes reports that the princess Maria, sister of Michael IV and John the Orphanotrophos, »went to Ephesos to worship at the tomb of the beloved disciple, John«[49], and took back to Constantinople reports of the economic and other hardships that were rife in the area[50]. A couple of years later, however, Romanos Skleros, who was the regional strategos and the influential brother of the new emperor's mistress, Maria Skleraina, visited Lazaros on Galesion[51]. Impressed by his experience, he too seems to have reported back to Constantinople, but this time the result was the hefty donation by his sister, mentioned above, and ongoing imperial interest in the new foundations. One can see clearly why the metropolitan, whatever bad blood there was in the past, might have had his nose put out of joint by this new development which typifies the enhanced authority, prestige and influence Galesion was enjoying at the expense of the traditional shrines[52]. The vita thus mentions visits by a good number of other quite high ranking officials, secular and ecclesiastical[53]. Such people, who held office in the town or region, were evidently now finding it prudent to secure the favour of the local holy man, who, on the wider stage, was also sought as a supporter by at least two imperial hopefuls[54]. When they did so, however, they were necessarily draining both prestige and revenue away from old Ephesos. To make matters worse, it now seems clear that while Lazaros's earlier monasteries were modest and tucked away out of sight in the gorge, the substantial monastery of the Resurrection was situated on the top of the mountain and at least one of its subsidiary chapels, though probably not the monastery itself, was likely in view of Ayasoluk. Although distant, it would have stood out as an attraction to pilgrims, but undoubtedly like a sore thumb to its rivals and opponents in the town.

Lazaros's monasteries on Galesion survived his death in 1053, but it appears they did so very precariously. The weight of the establishment in Ephesos and the rifts that had been produced within the Galesiote community itself seem to have finally worked against those who stayed on the mountain, and the striking impact of the founder, described by Gregory as a beacon[55], faded. It is thus perhaps noteworthy that the Abbot Daniel, whose account of his

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[46] Foss 1979, 128; Foss 2002, 145.

[47] Cf. however, Whittow's interpretation (Whittow 2007, 266 f.) which suggests that Galesion became Ephesos's holy mountain and Lazaros's column another of the city's holy sites with the metropolitan's approval.

[48] Foss 2002, 145; on the fair see also Laiou 2002, 709.

[49] Skylitzes 1973, 408.

[50] Skylitzes 1973, 408; see also Wortley 2010, 384. Skylitzes attributes the problems in 1040 to the oppressive regime of John the Orphanotrophos, who, when approached by Maria, dismissively rejected her pleas as »woman's thinking«, but the situation evidently persisted into, or recurred in, the early 1050s, Gregory the Cellarer 1910, chaps. 210. 247; see also Greenfield 2000, 304 f. 355.

[51] Gregory the Cellarer 1910, chap. 87; cf. chap. 245; Greenfield 2000, 177 f. 346 f.

[52] Whittow 2007, 268 sees this as the juncture at which relations with the metropolitan soured.

[53] For a summary, see Greenfield 2002, 223 f.; cf. commentary by Morris 1981, 48 f.; Morris 1995, 104–106; Whittow 2007, 267.

[54] Gregory the Cellarer 1910, chaps. 101. 105; see also Greenfield 2000, 191 f. 196–198.

[55] Gregory the Cellarer 1910, chaps. 36. 111. 128; see also Greenfield 2000, 122. 202. 216.

visit to the numerous important shrines in Ephesos in 1106 provides important evidence of what was still going on there then, makes no mention at all of Galesion. As the 12th century passed, the old status quo appears to have been resumed and the new, challenging franchise seems to have ceased to be a significant player in the Ephesos pilgrimage market. But it did not disappear. With renewed imperial support from Nicaea, the prestige enjoyed by Ephesos under the Laskarid regime[56], and direct influence at the head of the Constantinopolitan ecclesiastical hierarchy (where two former Galesiote monks – Joseph I and Athanasios I – occupied the patriarchal throne for a good portion of the four decades between 1266 and 1309)[57], it would seem likely that it reclaimed a significant market share in the later 13th century[58]. But that is the subject of a different paper.

So my present contribution has, I hope, made clear the sort of impact the holy man Lazaros had on the situation in Ephesos in the first half of the 11th century. In today's terms we might say that, sitting up on his pillar for forty years while interacting with numerous visitors from near and far, Lazaros became a striking religious celebrity, and, as such, managed to elbow his way towards the top of the local list of pilgrimage or tourist attractions. I have suggested that this caused a noticeable rearrangement in visitor distribution. More importantly, however, it seems to have upset traditional patterns of revenue generation as well as those of prestige and influence and thus provoked all manner of bitterness and outright nastiness which manifested itself in conflicts with the ecclesiastical authorities that managed the other long-established local venues.

The main aim of this paper has been to set out the material and discussion above in such a way as to broaden the symposium audience's awareness of these aspects of the pattern of life and settlement at Ephesos in the Middle Ages. My own picture of Ephesos in this period, obtained primarily from the Life, in fact does not differ significantly from that elaborated twenty years ago by Foss. The impression I have is thus that of a regionally important town, one that is a secular and ecclesiastical administrative centre as well as an important destination on long-distance as well as local pilgrimage routes. As such Ephesos is a place that is regularly visited, one that seems quite closely connected to Constantinople with two-way contact and communication taking place as a matter of course on a variety of levels. I would, however, emphasize a little more than Foss what is not present in the Life – that is any obvious interest or discussion of what is happening in general in the immediate physical surroundings of Galesion. I thus take a definite sense from the Life of introversion; a feeling of distance, remoteness and relative isolation which likely derived from attitude and perhaps physical, rather than human, geography. Ephesos (Ayasoluk), somehow seems much more remote in Gregory's account than a place which is actually only around 9 km away from Galesion as the crow flies; it is only mentioned in its own right in a dozen or so chapters (out of 255) in the Life[59]. Other places in the immediate region which were obviously of some importance at the time fare even worse: for example Phygela (22 km distant) is only mentioned twice[60]. There is a feeling of Galesion standing spiritually and physically above and apart, though not distant, from the many scattered centres of habitation in the region to which the Life refers, places which are geographically quite close to each other, obviously in regular touch, and to some extent dependent on each other for supplies and other social necessities, but

[56] Foss 1979, 131.

[57] A third from this period, Gregory of Cyprus, was sufficiently interested in the place to re-write the *Life of Lazaros*; Greenfield 2000, 58 f.

[58] On the history of Galesion after Lazaros's death see Greenfield 2000, 61–67; cf. Foss 1979, 129 f.; Rigo 1995, 32–42; Thomas – Constantinides Hero 2000, 150.

[59] Gregory the Cellarer 1910, chaps. 29. 30. 33. 56. 60. 75. 107. 118. 154. 193. 227. 239. 249; Greenfield 2000, 114. 117. 119. 143. 148. 162. 200. 207. 243. 285. 321. 338 f. 357. It is referred to as Ephesos once, the Theologian five times, the Beloved three times, and the *kastron* four times.

[60] Gregory the Cellarer 1910, chaps. 75. 228; see also Greenfield 2000, 164. 323.

which are of little interest to those living in the monastery up on the mountain. Primarily in the Life these places are other monasteries, but Gregory also mentions an array of villages and the occasional larger town, including Ephesos itself. It is impossible to tell, however, to what extent this sense of separation, even occasionally of suspicion or hostility, is also a product of Gregory's personal outlook, of the very difficult situation evidently prevailing in the monastery at the time he was writing, or of a broader pattern of social interaction in the region in the later 11th century. Perhaps the important archaeological work being undertaken in the group of settlements that seem to have comprised the area of ›greater‹ Ephesos at this time, some of which is presented in the present volume, will continue to clarify the situation.

This leads on to the final point that I would like to stress here concerning Lazaros's impact in Ephesos and what knowledge of him may contribute to wider understanding of this period in the region. To the best of my knowledge, the great majority of textual evidence about Lazaros and his place in 11th century Ephesos, or that of his monasteries during the next two hundred years, has already been published and quite thoroughly examined. A few more pieces may emerge (for instance, I understand there is an Old Slavonic text that mentions a visit to him) but, barring the welcome advent of some unsuspected source, there seems relatively little more to be achieved from this angle. That, however, certainly need not, nor should not, be the end of the investigation. When Foss wrote his important chapter on the »Medieval Recovery« of Ephesos he could only state that »none of Lazarus's foundations has yet been located …«[61] and this remained true when I published my translation of the Life[62]. Over the past decade however, the location of one and perhaps two of Lazaros's monasteries on Galesion itself has been established with some reasonable certainty. As I have discussed elsewhere[63], there appear to be striking and important parallels between the foundation of the now forgotten monastery of the Resurrection on Galesion and that of the now famous and much studied Nea Moni on Chios. A survey and excavation of the as yet unstudied site of the Resurrection would permit comparison of the remains at Galesion with those at the Nea Moni and might be helpful in shedding light on the early history of the latter. But, of course, even more importantly in the present context, such investigation would help us understand the many intriguing and important questions raised, but left unanswered, by the surviving written sources. Among the more interesting things to examine might be, for example, the construction of the original church of the Resurrection: was this building actually made of mud brick, as a passage in the 12th century lives of the founders of the Soumela monastery, Barnabas and Sophronios, suggests[64]? This would be a striking contrast to the *katholikon* at the Nea Moni and would have important bearing on the question of whether or not the original foundation really was imperial. Are there any identifiable remnants left of Lazaros's column or at least traces of its location in the layout of buildings? These would help to answer questions about its construction, and its somewhat puzzling relationship to the church. Is there anything to explain the strange reference to paired apsidal cells in the 12th century source? How did the monastery develop over time or did the 13th century institution essentially represent a re-founding and reconstruction? Is there any evidence that the site did continue to attract a significant number of pilgrims and maintain a cult of Lazaros into the 12th century and beyond? And what did eventually happen to it in the early 14th century? Sadly hopes of investigation have become mired in the tangles of archaeological politics and funding and those involved are forced to practice Lazaros's own much favoured virtue of »patient endurance«. One day, when the site can be properly explored, the book on Lazaros will be reopened and a whole new set of chapters written which will certainly help to clarify his impact on 11th-century Ephesos and beyond.

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[61] Foss 1979, 130.
[62] Greenfield 2000, 31.
[63] Greenfield – Foley 2011.
[64] Lampsides 1982, 170.

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Andreas Külzer

ROADS AND ROUTES

COMMUNICATION NETWORKS IN THE HINTERLAND OF EPHESOS

The Romans obtained their first land possession in Asia Minor through the will of King Attalus III of Pergamon (r. 138–133 B.C.) who died in May, 133 B.C. A revolt led by his half-brother Aristonicus, who wanted to prevent the disposition, was suppressed after bitter fighting in 129 B.C. Subsequently, a province, given the name *Asia*, was set up in the territory of the kingdom of Pergamon[1]. Ephesos (Selçuk) was named as the capital city, which could already boast considerable advantages due to its coastal location compared to the former royal seat at Pergamon (Bergama), situated more than 20 km inland. The territorial extent of the province altered on various occasions: in ca. 120 B.C. a large part of Phrygia was assigned to the province of *Asia*, in 102 B.C. regions in the south-east were separated and consolidated into their own province of *Cilicia*, and in around A.D. 250 *Asia* was further reduced by the establishment of an independent province of *Phrygia et Caria*[2].

Under Emperor Diocletian (284–305), probably in the year 293 or 297, the territory of the Roman province was broken up into seven subunits, which however were consolidated into a diocese of *Asiana*. One of these new creations, now only 19,100 km^2 in size as opposed to the previous size of almost 180,000 km^2,[3] retained the name *Asia*, and was administered from Ephesos. In addition, the city was allowed to remain a centre of a diocese[4]. The new form of organisation remained in place until the late 7th century, when Byzantium, in the course of defensive campaigns against external enemies – primarily the Arabs – again set up larger scale administrative units, units which would be referred to after the 9th century as ›Themes‹, that is, military administrative districts[5]. In the beginning there were four of these units: in addition to *Anatolikon*, *Armeniakon* and *Opsikion,* the theme of *Thrakēsion* located in western Anatolia[6]. In the Middle Byzantine period these areas were further reduced in size, in order to limit the influence of the strategoi who ruled them. Ephesos was the capital of the Theme of *Thrakēsion,* and therefore held the position of an important administrative centre[7]. In addition, Ephesos belonged to the most important ecclesiastical seats of the Byzantine Empire. As the metropolis of the influential ecclesiastical province of *Asia* as well as the most prominent site of Christian pilgrimage in Asia Minor, the city held a central position both in religious and ecclesiastical-political affairs. For these reasons, it was absolutely necessary for Ephesos to be part of a broad and extensive road network (see fig. 1)[8].

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[1] Daubner 2006; see also Kosmetatou 2003, 165 f.; Magie 1950, I, 30–33. 34–52. 147–158; II, 1033–1049; Marek 2010, 320–329; Schwertheim 2005, 85 f.

[2] Belke – Mersich 1990, 74–77; Haensch 1997, 298–321; Mitchell 1993, II, 151–163.

[3] Koder 1986, 183.

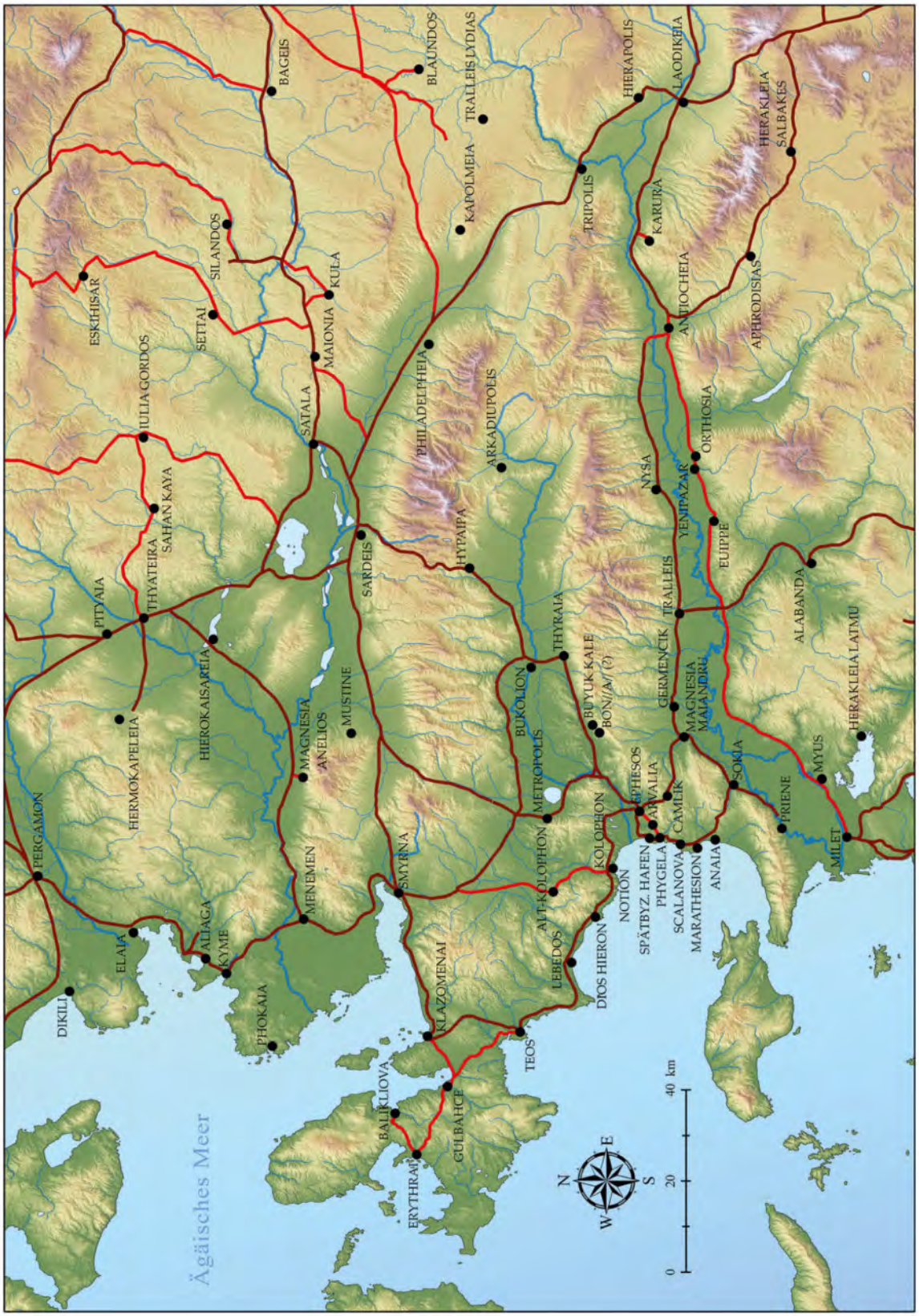
[4] Barnes 1982, 202. 206. 224 f.; Belke – Mersich 1990, 77 f.; Demandt 2007, 67; Külzer 2010b, 522; Mommsen 1862, 491. 506 f.; Schwertheim 2005, 118 f.; Zuckerman 2002, 622–628. 636 f.

[5] Brubaker – Haldon 2011, 744–755.

[6] Lilie 1977, 7–47; Riplinger 1989; Blysidu et al. 1998, 163–234. 391–424.

[7] Foss 1979, 195 f.; Külzer 2010b, 524; Lilie 1977, 24–28.

[8] Darrouzès 1981, 451. 457. 485. 490; Foss 1979, 5–12; Foss 2002, 130; Kötting 1980, 32–57. 171–183; Külzer 2010a, 186 f. 191; Pülz 2010, 71–102; Pülz 2012, 225–260.



1 The Late Antique road network in the hinterland of Ephesos. Roads in purple: Communication routes usually mentioned in academic literature; roads in red: Communication routes, recently discovered (© OeAW-OeAI, design C. Kurtze/content A. Külzer).

The significance of such a network was understood by the Romans from the early beginning; already in the days of Manius Aquillius, who served as the first governor/proconsul of the province between 129 and 126 B.C., the condition of the existing roads was examined, and expansions and extensions were undertaken[9]. In this context one often speaks of an ›upgrade‹ of the road system, yet one ought not to understand this usage to mean that the existing roads were comprehensively paved immediately after the establishment of the province, or that all of those measures which appear to the historian to be typical for Roman roads were carried out at once: the laying down of a solid substructure by covering the ground with a mixture of limestone and mortar followed by a layer of gravel and finally paving with stone slabs or large stones; the raising of the middle or the flattening of the sides of the roads, in order to expedite the drainage of rainwater; and the installation of gutters over long distances, to prevent potential washing-out of the road's structure[10]. These elaborate and expensive measures were only occasionally carried out in the province of *Asia*, and they belonged predominantly to the Roman imperial period. A similar situation existed for the construction of bridges over rivers, valleys and gorges, in order to facilitate and accelerate communication between the capital and the hinterland: the remaining structures are not always easy to date, as corresponding building inscriptions or references in literary sources are lacking. A few bridges which, for example, were mentioned in the work of the geographer Strabo of Amaseia (ca. 63 B.C. – after 23), writing at the beginning of the Common Era – as *pars pro toto* the construction which connects the two parts of the site of Nysa (near Sultanhisar) on the south slope of the Aydın Dağları (14, 1, 43)[11] – may indeed be dated to the Republican period according to their archaeological context. But also in this case a more precise chronological classification is not possible.

The establishment of supply stations for people and animals, stations that bordered the roads at regular intervals, first flourished in Late Antiquity, and after attaining their summit in the 6th century then immediately experienced a decline[12]. This decline was expressed equally in a drastic depletion of the existing network of stations as well as in the variously attested frivolities which might have relocated the still-existing rest stations to the vicinity of whorehouses – the Vita of St Theodōros of Sykeōn of the 6th–7th century provides an often-cited example for this[13]. The responsibility for the maintenance and care of the roads, the necessary work of cleaning and improvement following severe weather and similar circumstances, was assigned to the locals during the period of Emperor Justinian I (527–565). Although, indeed, the building of roads continued at a regional level, the relatively high costs subsequently hindered any appreciable extension of the road network. Alterations in the route network occurred mainly in response to earthquakes or to changed geographical or geomorphological conditions[14]. The superintendence of the road system was held by the *logothetēs tou dromou*, whose office is attested for the first time after the second half of the 8th century[15]. In the Late Byzantine period the communication routes were generally in a far worse condition than in Late Antiquity, and their dimensions were considerably diminished: whereas, in the Roman period, the roads of western Asia Minor may often have attained a width of several metres, in the Late Middle Ages they usually had shrunk to the width of a pathway[16].

In the period immediately following the establishment of the province of *Asia* the existing network of roads was secured and maintained, and naturally improvements were carried out

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[9] French 2012, 7 f.; Mitchell 1993, I, 129. 246; Rathmann 2003, 169.
[10] Belke 2008; Höcker 2001, 1030–1036; Miller 1916, VIII–XI; Rathmann 2003, 164–171; Schneider 1982, 29–37.
[11] von Diest et al. 1913, 30–32.
[12] Avramea 2002, 59 f.; Belke 2008, 302 f.; Holmberg 1933; Kleberg 1957, 61–73.
[13] Vita Theod. Syk I cap. 3. 142. 148; Belke 1998, 273 f.; Kislinger 1989, 1135 f.
[14] Belke 2008, 303; Kislinger 2011, 342–344; Koder 2012, 152–155.
[15] Avramea 2002, 59; Belke 2008, 302.
[16] Belke 1998; Dimitroukas 1997, 324–331; Greenfield 2000, 89; Koder 2001, 62; Külzer 2010a, 186. 189 f.

with repairs to damage caused, for example, by the effect of weather or by simple neglect. Extensions to the existing communication infrastructure are indisputable, yet these must have been initially carried out in a still rather simple method of construction[17]. Very important was the setting up of milestones, which on the one hand possessed a practical purpose in recording distances, yet on the other hand must be understood as politically symbolic: their presence visibly demonstrated the subjection of the respective landscape to the Roman Empire[18].

The precise number of roads which were upgraded or newly laid out in western Asia Minor during the Republican period is unknown[19]. After many years of research, David H. French was able to provide evidence of work done on four supra-regional roadways, namely, 1. on the road from Ephesos through the Meander Valley (Büyük Menderes Nehri) to the interior of Phrygia; 2. on the road which led from Ephesos through the valley of the Caystros River (Küçük Menderes) towards Hypaipa (Datbeyı, also Günlüce), and from there arrived at Sardis (Sart) after crossing the Tmōlos mountain range (Boz Dağ); 3. on a road which led from Ephesos to the north, mostly in proximity to the Aegean coastline, arriving at the Dardanelles after crossing the Troad near Lampsakos (Lapseki), from which place a crossing to the Thracian Chersonesos and a link to the transportation network through the Balkans was possible; and 4. a road which, from Elaia (Kazıkbağları), the former harbour of Pergamon, led inland, providing a connection to the previous residence of the Attalids, and then continued on into the interior of Lydia; this road passed Thyateira (Akhisar) and the landscapes around the Gygaean Lake (Marmara Gölü). Near Sardis it linked up with the road that led through the Caystros valley, and then continued through the Kogamos (Alaşehir Çay) valley towards Phrygia, joining up, at the altitude of Laodikeia (Denizli), with the first-mentioned road through the Meander Valley[20]. – These four communication routes linked the central regions of western Asia Minor, making deliberate use of the physical geography. Therefore, it is hardly surprising that these roads, from Roman antiquity, through the Byzantine Middle Ages and the Ottoman era until the present era, are among the main arteries of contemporary western Turkey[21].

The road along the Meander counted amongst those transportation routes which already existed in pre-Roman times; the geographical conditions and the location in an elongated valley which provided an entry to the Anatolian interior suggest that this is one of the oldest paths of communication in the region. The upgrading of this road was one of the first undertakings of the Romans; a milestone found in the small village of Çamlik, approximately 7 km south of Selçuk, dates already from the period of Manius Aquillius and was therefore erected between 129 and 126 B.C.[22]. From Çamlik, lying in the lowlands to the west of Ovacık Dağ that offer convenient access to the south, the road turned to the east and travelled along the slopes of the Messōgis (Aydın Dağları), which reaches a height of 1,651 m, on the northern bank of the Meander River. In the territory of Germencik, about 20 km away, a milestone was discovered which dates to the year 200/201[23]. A further 20 km to the east, in the region of Tralleis (Asias), today Aydın, a total of three milestones were brought to light, which are to be dated to the years 70 B.C., A.D. 51, and to the mid-3rd century or, in reuse, to the late 3rd or early 4th century[24].

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[17] French 1997, 181 f.; French 2012, 7.
[18] French 1991, 53 f.; French 1997, 181; French 2012, 8.
[19] French 1997, 179.
[20] French 1997, 180; French 2012, 31–42. 45; Talbert et al. 2000, maps 51. 56. 61 f. 65.
[21] Luther 1989, XIX–XXVII maps 1–9; Yaman 2004, 42. 70 f. 99–101. 126–129.
[22] French 2012, 9. 10 f. 36 no. 5; p. 45 map; Hild 2014, 11; Magie 1950, I, 40; II, 789–793; Talbert et al. 2000, maps 61. 65; Thonemann 2011, 13 f.
[23] French 2014, 81 f. no. 035; Talbert et al. 2000, map 61.
[24] French 2012, 37 f. no. 6; French 2014, 83 f. no. 36; Poljakov 1989, 157–160 nos. 170–172; Thonemann 2011, 198–201. 202 f. 238 f.

The continuation of the road is equally well documented: in Umurlu, 10 km east of Aydın, a milestone from the year A.D. 75 was found[25]. A milestone of uncertain date, found in Sultanhisar 20 km further to the east, a little to the south of the settlement of Nysa, records »14 miles to Tralleis«[26]. The road continued to the east, and shortly before Antiocheia, an important ancient settlement north of modern Başaran, crossed the Meander by means of a bridge mentioned by Strabo (13, 4, 15). On the southern bank of the Meander the road met a second route which began in Miletos (Balat), like Ephesos an important central market town in western Asia Minor; this second road ran to the east parallel to the first one[27]. Evidence of this second road is provided by a late milestone from the period of the Byzantine Emperor Anastasios (491–518), a stone which was discovered near Yenipazar[28]. Crossing from one of these roads to the other was hardly possible owing to the lack of bridges to the west of Antiocheia[29].

The now-united roads passed Karura, modern Tekkeköy, which Strabo (14, 2, 29) considered the border between Caria and Phrygia, and led via Laodikeia further into the interior of Phrygia[30]. The road is represented in the *Tabula Peutingeriana*, issued in its final Late Antique version in about 435[31], yet on this map its precise sequence of stations is not correctly indicated. Since the beginning of Roman rule in Anatolia the course of the road must not have been altered significantly; the numerous milestones with their widely differing dates indicate a continuous usage and partial improvements[32]. They may not, however, be interpreted as evidence for the dating of extensions to the route.

The road in the direction of Sardis, as the second supra-regional, expanded, Roman transportation link, led from Ephesos at first in a north-eastern direction through the lower valley of the Caystros; after about 15 km, near the modern village of Kozpınar in the south-east foothills of the 771 m tall mountain of Galēsion (Alaman Dağ), the road forked[33]. One branch, discussed further below, led to the north, while the other retained its north-eastern direction. This latter passed the much-used quarry near Belevi, which provided building material for many structures in Ephesos[34], then it ran to the north of the settlement *Bōneitōn katoikia*, still attested in inscriptions in the early 3rd century, in the region of Büyük Kale and Küçük Kale. At this last mentioned village a milestone was found which gives the distance to Ephesos as 90 stadia and to Sardis as 410 stadia[35].

From this point the road led along the northern foothills of the Messōgis into the territory of Thyraia near modern Tire, where an additional milestone from the period of Manius Aquillius has been found which was oriented to the *caput viae* Ephesos; this stone was reused in about 70 B.C., the only example known of reuse of a milestone in the Republican period[36]. Continuing on from Thyraia, the road turned to the north and passed the extensive settlement of Bukolion near today's Ali Paşa Çiftlik[37]. A little further to the north the road forked: one branch led from here along the foothills of the Tmōlos range in a western direction towards

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[25] French 2014, 84 no. 037.
[26] French 2014, 85 no. 038.
[27] Hild 2014, 33–37.
[28] Debord – Varinlioğlu 2010, 240 no. 5.
[29] Hild 2014, 33.
[30] Belke – Mersich 1990, 149 f. 323–326; Hild 2014, 32 f. 35. 37; Magie 1950, II, 790; Şimçek 2013.
[31] Miller 1916; Rathmann 2013, 92–120; Talbert 2010; Weber 1976, Segment VIII 5; Weber 2012, 209–216.
[32] See n. 21 above.
[33] Keil – Premerstein 1915, map; Meriç et al. 1981, 148; Meriç 2009, 23; Talbert et al. 2000, map 61. See also Greenfield 2000, 28–33. 61–67.
[34] Kerschner – Prohaska 2011, 124–129.
[35] Meriç et. al. 1981, 148. 305 no. 3601; Meriç 2009, 71–79. 75.
[36] French 2012, 34 f. no. 4; Keil – Premerstein 1915, 82–92; Meriç et al. 1981, 148. 305 no. 3602; Talbert et al. 2000, map 61.
[37] Keil – Premerstein 1915, 83. 92 no. 127; Meriç 2009, 97.

Mētropolis, thereby touching on the road station at Anagome, depicted in a false position on the *Tabula Peutingeriana*[38]; the other branch proceeded in a north-eastern direction to Hypaipa, an extensive settlement which was also important in the Byzantine period and which is located near the village of Datbeyı, about 5 km to the north of Ödemiş[39].

From Hypaipa there were two possibilities to traverse the heights of the Boz Dağ which attains an elevation of up to 2,157 m: one led over Lübbey yaylası at the source of the Gencer Çay and the former mines of Metallon, while the other ran further to the east past the village of Üçtepeler. The goal of both routes was the Lydian metropolis of Sardis[40]. In addition to this routing, which is depicted on the *Tabula Peutingeriana* and consequently must have had a supra-regional significance up to the early 5th century[41], there existed a second possibility from time immemorial to travel from Ephesos to Sardis: this route, which was already described by Herodotos as an extension of the Persian Royal Road and which was measured with a distance of 540 stadia (5, 54), ran in the Roman and Byzantine periods from the region around Kozpınar to the north in the direction of Mētropolis (Yeniköy)[42]. Near Sağlik, 8 km to the south of Torbalı, a milestone has been discovered which provides evidence of the extension of the road by Manius Aquillius[43]. Additional milestones from the Roman imperial period were found in Yeniköy itself, in Şehitler, as well as in Torbalı[44]. In this area there once again was an intersection: on the one hand the route led in a north-west direction towards Smyrna (Izmir), on the other hand in a north-eastern direction to Tmōlos. The road led over the Karabel Pass, subsequently to veer off to the east and, travelling along the northern foothills of the mountains, to arrive at Sardis[45].

A Roman bridge in the south-east of the Sipylos mountain range, approximately 5 km to the south of Sancaklıbozköy, the site of the later Lydian bishopric Mustinē, indicates the place at which the road going east from Smyrna joined up with this route[46].

Not only the intersection of each of the two routes which led through the Tmōlos mountains towards Sardis, was situated in the region of Kozpınar; here, too, was the decisive junction of the old road that led towards the Trōad and the Dardanelles. Up until the territory of Torbalı it corresponded to the route just described; after this, milestones found in Kuşcuburun and in Gaziemir, formerly Seydi, provide evidence of the further course of the road up until Smyrna[47]. In the area of the city three milestones were discovered which date to the imperial period, two belong to the 1st century, and one reused to the 3rd and early 4th century[48].

Proceeding from Smyrna, which like Ephesos held the rank of a central market town, communication routes led in a variety of directions. Noteworthy in this context is, on the one hand, the aforementioned route to the east in the direction of Sardis, and on the other hand the continuation of the road from Ephesos towards the north. Its course is documented by, amongst other evidence, numerous milestones, which were found in Menemen, in Aliağa and in the territory around Kazikbağlari, the former Elaia[49]; amongst the six milestones originating from the area around the last-mentioned site, there is one which dates to the Republican period[50].

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[38] Weber 1976, Segment VIII 5.
[39] Keil – Premerstein 1915, 64–76; Meriç 2009, 103–105; Talbert et al. 2000, map 56.
[40] Foss 1979, 27–35.
[41] Weber 1976, Segment VIII 4–5.
[42] Meriç 2009, 23; Mitchell 1993, I, 129; Talbert et al. 2000, map 56.
[43] French 2012, 31 f. no. 1.
[44] French 2014, 50–55 nos. 009–011.
[45] Talbert et al. 2000, map 56.
[46] Magie 1950, II, 786; Talbert et al. 2000, map 56 F5.
[47] French 2014, 55–57 nos. 012–013.
[48] French 2014, 57–61 no. 014 (A) – (C).
[49] French 2014, 61–67 nos. 015–017 (F); Miller 1916, 699–701.
[50] French 2012, 9 f. 32 no. 2.

The road did not always hug the coastline, but by various short cuts took the direct route through the interior, without completely travelling around the individual bays. The road is marked on the *Tabula Peutingeriana*; here one can recognise the further course in the direction of the Dardanelles, which in all probability could be crossed in the region of Lampsakos, in order to join up from there to the road network on the Balkan Peninsula[51]. Numerous milestones, and even bridges and stretches of road surface are preserved archaeologically in this section of the route; one stone, which was found near Dikili, also originates from the period of Manius Aquillius and indicates the interest of the Romans, from an early point on, in establishing this communication route[52]. – The fourth main route which was upgraded at the beginning of Roman rule in western Anatolia is also indicated on the *Tabula Peutingeriana*; this is the previously mentioned road which led from Elaia to the former seat of the Attalid kings at Pergamon. It then proceeded into the interior of Lydia and further to Phrygia, finally to meet up with the road along the Meander in the Lykos (Çürük su) valley not far from Laodikeia[53]. This road is documented in the *Itinerarium Antonini* (335, 3–337, 2); a number of milestones are found along its course[54].

These supra-regional routes of communication indicate that Ephesos was marvellously connected to the Anatolian hinterland since the beginning of Roman rule. They also indicate that the flow of traffic, goods and communications over land routes, from the late 2nd century B.C. throughout the entire Late Antique and Byzantine periods, experienced just as few impediments as the exchange of goods and information via sea: the metropolis on the Caystros was a significant point of intersection between the land and the sea, easily reachable from both elements and from all cardinal points. The advantageous geographical position of the city and its excellent infrastructure were famously crucial in the decision of Emperor Theodosius II (408–450) to assemble at Ephesos the theologians of his time to the Third Ecumenical Council in 431[55].

In addition to the main highways already named, other roads by which the environs of Ephesos were accessed are worthy of mention. A small but nonetheless important road led from the north of the Bülbül Dağ a few kilometres to the west to the coast, there turning to the south and connecting the settlement to the north of the Mykalē range (Samsun Dağ) with the metropolis[56]. After a few kilometres this road passed by Phygela, whose harbour was most likely in the bay of Bayraklıdere, near the extensive settlement remains at the south end of the bay, to the south of the Kara Tepe, at which the Late Byzantine harbour of Ephesos can be conjectured[57]. From Phygela – which still existed in the 8th century, as is related in the report of St Willibald (chap. 11)[58] – the road continued on to Kuşadası, in whose territory the remains of ancient settlements are to be found, and which was then taken over by Latin traders in the 14th century and was later called *Scalanova*[59]. The considerable Byzantine settlement near the village of Arvalia, which has today disappeared, about 6 km south-west of Selçuk on the steep slopes of the Maden Dağ, was connected to this route by local roads[60]. The main road took in the settlement sites of Marathesion, further to the south (probably in the region of the Ambar Tepe) and Anaia (Kadıkalesi), then veering off to the south it ran past the southern foothills of the Gümüş Dağ, the ancient Thōrax, into the region of today's

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[51] Miller 1916, 696–703; Weber 1976, Segment VIII 1–5.
[52] French 2012, 9. 32 f. no. 3.
[53] Külzer 2016; Miller 1916, 715 f.; Weber 1976, Segment VIII 3–5.
[54] French 2014, 239–268 nos. 130–145; Magie 1950, II, 798 f.; Petzl 2007, 111–113 nos. 1536–1538.
[55] *Acta Conciliorum Oecumenicorum* I 1, 3, 31 f.; Pülz 2010, 73; Pülz – Ladstätter 2006, 74 f.
[56] Keil 1908, 135 f.; Talbert et al. 2000, map 61.
[57] Hopfgartner 1962/1963, 51–69.
[58] Wilkinson 1977, 126.
[59] Keil 1908, 146 f.
[60] Hopfgartner 1962/1963, 39–51.

small town of Söke (in Greek Sōkia) on the banks of the Meander. Söke has sometimes been associated with the small ancient city of Maiandros[61], but it is devoid of ancient or medieval settlement remains. From there a road led in a north-eastern direction past the Byzantine fort of Büyük Kale near Kemer to Magnēsia Maiandrou, where the connection was made to the old highway, mentioned previously, in the direction of Tralleis, Antiocheia and further to Phrygia[62].

To the north of Ephesos, barely 5 km distant from Panayır Dağ, the mountain chain of Galēsion (Alaman Dağ) stretches for approximately 18 km; the access through the lower plain of the Caystros was complicated by the swampy marshes of Gebekirse Gölü, Çatal Gölü and Alaman Gölü, which are located at the foot of the mountain chain and which represent the final remnants of the former bay[63]. The communication routes in the plain have slightly shifted since antiquity, as a consequence of the advancing sedimentation and the continuous enlargement of the estuary plain[64]. If one wished to travel from Ephesos towards the north, one could do this by using the main road, mentioned at the beginning, which skirted around the Galēsion mountain range. This road notwithstanding, there were also a variety of possibilities to cross the mountain range directly: one connection led over the pass near Döşeme Deresi in the direction of the site of Mētropolis, important during the imperial period and having episcopal rank during the Byzantine era; a Hellenistic castle, established to secure the road, near the village of Barutçu barely 8 km north-northwest of Selçuk indicates that this route already existed in antiquity. A similar situation held for the narrow roads which led to Mētropolis along the Gavurderesi, near Çeşme Boğazi, or over the Andon pass[65]. In the region of the modern village of Ahmetli, approximately 5 km south of Mētropolis, remains of these roads were discovered[66]. Fortifications and a number of cisterns found along these stretches are witness to the fact that these roads were regularly used for centuries, despite the potential arduousness of the journey.

Traces of roads which came to light during excavations on the south-west slopes of the Galēsion mountain have been associated – probably incorrectly – with the harbour Panormos which is only mentioned by Strabo (14, 1, 20)[67]. This landing place must be located instead to the south of the Caystros. In fact, these remains of roads belong to a communication route, depicted on the *Tabula Peutingeriana*, which led from Ephesos to the west[68]. The first significant station on this route was Notion, at the mouth of the Avcı Çay in the region of Ahmetbeyli, about 15 km away. This site, located on a distinctive settlement hill, was 1.5 km distant from the important Oracle of Apollo at Klaros; in the 2nd century the name of Kolophōn, located 13 km to the north near modern Değirmendere and whose decline could no longer be stopped, was transferred to the settlement on the coast which, in the Byzantine period, belonged to the bishoprics of the ecclesiastical province *Asia*. Traces of roads attest to the connections between these towns, while a smaller road led in addition from Değirmendere to the north and linked up, south of Smyrna, with the road which travelled past Mētropolis.

The coastal road coming from Ephesos ran past Ahmetbeyli further to the north-west, passing the settlements of Dios Hieron (Özdere) and Lebedos (Kısık Burnu), and continuing on to Teōs (Siğacık) at the Siğacık körfezi; all of these sites were ancient foundations, most of them also bishoprics in the Byzantine period, which were naturally connected to each other and to the central market centre of Ephesos. If one follows the indications of the *Tabula Peutingeriana*, the orientation of the road changes here: it led from Teōs to the north

[61] ATL 1939, 1, 514 f.; Lohmann 2002, 213 f. with critical remarks. See also Keil 1908, 145–151.
[62] Keil 1908, 135 f.; Philippson 1936, 25.
[63] Philippson 1936, 29.
[64] Philippson 1936, 30; Stock et al. 2013, 58.
[65] Meriç 2009, 23. 38. 40. 43.
[66] Meriç 2009, 64.
[67] Meriç 1985, 30–32.
[68] Magie 1950, II, 796; Weber 1976, Segment VIII 5.

and, after traversing the only 18 km long isthmus, arrived at Klazomenai (Klazümen) at the İzmir Körfezi. Here the road once again altered its direction, running along the sea coast to the east, and arriving after approximately 32 km at Smyrna, where the junction with the previously mentioned roads, running to the north in the direction of the Troad or to the east towards Sardis, was established[69].

The system of roads depicted on the *Tabula Peutingeriana* was taken over by modern atlases and internet portals, and corresponding representations are found, for example, in the »Barrington-Atlas« or on the »Digital Map of the Roman Empire« of the Pelagios-Project[70]. The disregard of the Peninsula of Erythraia (Karaburun), as if this landscape had no connection to the supra-regional road network, is clearly implausible. One may a priori assume that Erythrai, modern Ildır, a settlement founded already in the 9th century B.C. with a richly documented ancient and medieval history, as a bishopric of the province of *Asia* maintained communication with its superior metropolis Ephesos not only by sea, but also by land, by means of transportation routes which in addition enabled contacts with the neighbouring bishoprics of Klazomenai, Teōs or Lebedos. In fact, historical and geographical research since the early 20th century on the Karaburun Peninsula has been able to identify a great number of sites and occupied areas; furthermore, the settlement density seems even to have increased during the medieval period in comparison with ancient times[71]. For example, a substantial Byzantine settlement, in which architectural remains, fragments of pottery and tiles, mosaics, and the foundations of a three-aisled basilica have been found, lay near Balıklıova on the east slope of the 1,212 m high Mimas Mountain (Boz Dağ)[72]. In the immediate vicinity of this settlement site, in the direction of Erythrai (Ildır) located about 10 km to the east, remains of a Roman road have additionally been found; the road was carefully composed, provided with border stones and paved with large stone slabs[73]. This find, to which numerous others may be added, allows us to conclude that the networks of communications in the hinterland of Ephesos were extensive and widely ramified, and that they reached numerous settlement sites and linked them with each other, sites which in modern maps are represented as isolated places in the landscape.

[69] Miller 1916, 700–703; Weber 1976, Segment VIII 5.
[70] <http://dare.ht.lu.se/> (05. 09. 2019); Talbert et al. 2000, map 56.
[71] Keil 1910, 18 f.; Keil 1912, 64; Külzer 2018, 139–146.
[72] Keil 1910, 8. 11; Külzer 2018, 140 f.
[73] Keil 1910, 11; Külzer 2018, 141.

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HEALTH AND DISEASE IN EPHESOS IN THE ROMAN AND EARLY OTTOMAN PERIOD

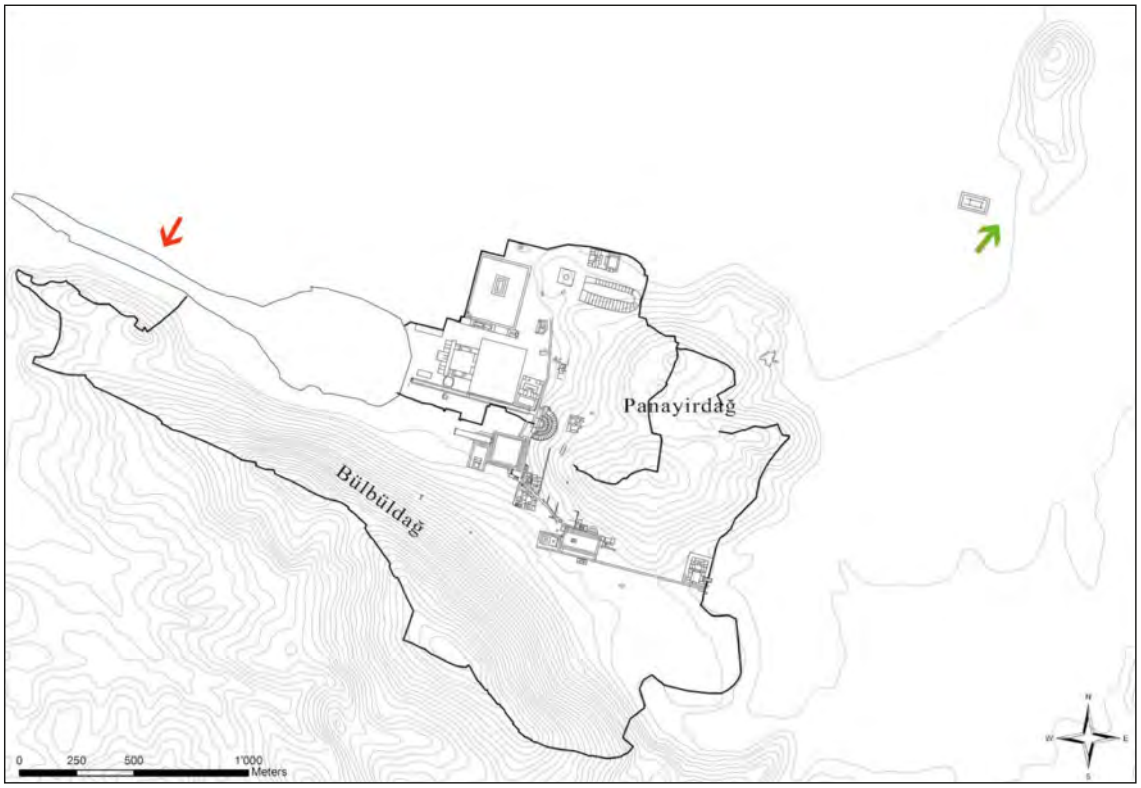
1 INTRODUCTION

The ancient harbour city of Ephesos is located on the western coast of Turkey, about 3 km southwest of the modern town of Selçuk (Province İzmir). Founded by Greek colonists during the 10th century B.C., the city flourished after it came under Roman control in 129 B.C. Ephesos became one of the most important cities in the eastern Mediterranean and capital of the Roman province Asia Minor. During Late Byzantine and Early Ottoman times, after the decline of the Roman city due to earthquakes, invasions, and silting up of the harbour basin, the main settlement moved to the hill of Ayasoluk, today one of the oldest parts of the modern town of Selçuk. Ancient Roman Ephesos was surrounded by numerous necropoleis. Probably the largest is the West or so-called Harbour Necropolis, which is primarily oriented along the harbour channel towards the sea[1]. Various smaller cemeteries from Byzantine and Early Ottoman time from inside, as well as the surroundings of the ancient city area, have been excavated. A comparatively large Early Ottoman cemetery was discovered during the reconstruction of the anonymous Türbe in the Artemision (fig. 1)[2]. This paper presents some aspects of the anthropological and palaeopathological investigation conducted on skeletal human remains from Grave House 1/08 of the Harbour Necropolis, as well as the cemetery around the anonymous Türbe in the Artemision. For palaeopathological diagnostics, especially the frequencies of metabolic diseases such as scurvy, anaemia, and rickets, which often can be associated with malnutrition[3], deliver crucial information on the living conditions and lifestyle of a population[4]. The investigated human skeletal remains from Grave House 1/08 and the cemetery around the anonymous Türbe provide the possibility for a diachronic comparison between the Roman population of the large city of Ephesos and the Early Ottoman population from its successive settlement Ayasoluk. Against the archaeological background, this comparison provides information on not only on the quality of life in Roman and Early Ottoman time, but also on possible changes.

2 MATERIALS AND METHODS

Grave House 1/08 from the Ephesian Harbour Necropolis (fig. 2) is located directly next to the harbour channel to the west of the city (cf. fig. 1). According to radiocarbon dating from the skeletons which were performed at the A. E. Lalonde AMS Laboratory in Ottawa (Canada), the grave house was in use from the first half of the 2nd until the early 5th cen-

[1] Steskal 2017.
[2] Parrer 2015; Scheelen et al. 2015.
[3] Brickley – Ives 2008.
[4] Schultz – Schmidt-Schultz 2017.



1 Map of Ephesos with locations of the Grave House 1 (red arrow) and the Türbe (green arrow) (© OeAW-OeAI)

2 Harbour Necropolis: Grave House 1/08 (© OeAW-OeAI, N. Gail)

3 Harbour Necropolis: Grave House 1/08: Grave 1 (© OeAW-OeAI, M. Steskal)

tury A.D. It contained five collective graves. In these five graves, the skeletal remains from 169 individuals were found partially in anatomical context, but mostly disturbed[5]. While the smaller Graves 4 and 5 were only used during the 2nd century A.D., the large Graves 1 and 3, obviously, remained in use from at least the middle of the 2nd until the early 5th century A.D. The skeletal remains from Grave 2 could be dated to the late 3rd and 4th century A.D.[6]. Usually, the uppermost skeletons were found in their anatomical context, but the lower ones were disturbed (fig. 3), probably due to the making of space for new burials by moving the (partially) skeletized bodies aside, and alternately flooding by water from the harbour channel followed by dry intervals. In most cases, the skeletons were complete or at least representatively preserved, except for Grave 2, which seems to have been used as a kind of deposit for scattered bones from one or several other graves. Apparently, the bones usually were not removed from the graves. A special case is the preservation of infant skeletons, which were generally not recovered in their anatomical context. The tiny children's bones commonly fell to the bottom of the graves. For the anthropological investigation, they had to be collected and fitted together according to age-at-death estimation and morphological characteristics. This kind of complex and time-consuming investigation, which was performed in many adults and most of the infants, allowed a reliable identification of individuals and an assignment of different pathological changes to single individuals. Disregarding the fact that the skeletal remains were commingled, they were not very fragmented and well preserved. Furthermore, Grave House 1/08 represents a single, self-contained unit. Therefore, a classical MNI estimation (minimal number of individuals) by counting single bone elements did not have to be performed.

[5] For complete results see Nováček et al. (forthcoming).
[6] For complete results see Nováček et al. (forthcoming).

4 Türbe in the Artemision (© OeAW-OeAI, N. Gail)

5 Grave 6 and a convolute of dislodged bones from the cemetery around the anonymous Türbe (© OeAW-OeAI, N. Gail)

The cemetery around the anonymous Türbe in the Artemision (fig. 4) is located between the modern street from Selçuk to Kuşadası and the temple ruins. The surroundings of the Türbe show severe disturbances, probably due to excavation work in and around the temple in the late 19th and the beginning of the 20th century, or the construction of new graves already during Early Ottoman time. Also greater earth movements due to ground sluicing or even earthquakes have occurred. For this reason, most skeletons from the 127 individuals identified from this cemetery were disturbed. In some cases, only single bones were recovered. Only 17 graves were found *in situ*[7]. The human bones were often found scattered all over the excavated area, without any distinguishable limits. They were, therefore, investigated taking the archaeological results into account, per excavation area located around the Türbe. Because of this situation, the individuals from the anonymous Türbe cemetery are mostly MNI estimations[8]. Exceptions are the skeletons from the 17 undisturbed graves (fig. 5). The results of radiocarbon dating from these skeletons conducted in the Poznań Radiocarbon Laboratory (Poland) provided a range from the middle of the 15th until the late 17th century A.D.[9].

The methods for the macroscopic estimation of age-at-death, sex, and other personal attributes correlate with the standard methods of physical anthropological investigation[10]. The estimation of age-at-death made use of the following classification: »Infans Ia« 0–2 years, »Infans Ib« 2–7 years, »Infans II« 7–14 years, »Juvenile« 14–20 years, »Adult I« 20–30 years, »Adult II« 30–40 years, »Mature I« 40–50 years, »Mature II« 50–60 years and »Senile« 60+ years. Also a palaeodemographic analysis was applied[11]. For the skeletons from the harbour necropolis, it was possible to estimate the age-at-death with histomorphological methods[12], resulting in more reliable and precise results for adults. Pathological bone changes were investigated by means of the methods proposed by M. Schultz and compared with known cases in literature[13]. The macroscopic examination, including low magnification (magnifying glass, binocular microscope), was conducted in Selçuk. When necessary, bone samples were exported to Germany and the diagnoses of pathological changes were verified by means of x-ray or light microscopy with employment of methods of palaeohistopathology[14].

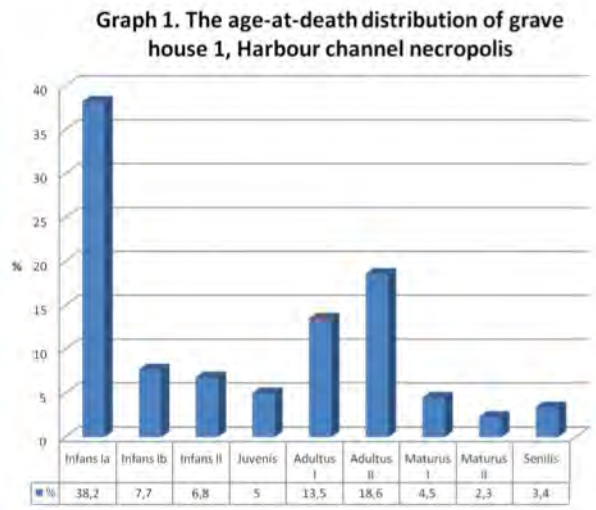
3 RESULTS

3.1 Palaeodemography

3.1.1 Palaeodemography of Roman Individuals

The 169 identified individuals from Grave House 1/08 from the Harbour Necropolis included 59 identified individuals from Grave 1, 24 from Grave 2, 61 from Grave 3, 11 from Grave 4, and 14 from Grave 5. Of these individuals, 97.5 (57.7 %) were infants and juveniles and 71.5 (42.3 %) adults from all age groups. The 0.5 implies that statistically, one individual belonged to 50 % to the age group juvenile and to 50 % to the age group adult I. Among the juvenile and adult individuals, it was possible to identify 37 males and 34 females. Eight skeletons were not preserved well enough to estimate their sex. The overview of the age-at-death of the whole population is given in graph 1. The average age-at-death of the whole population was low, with only 17.8 years. With regard to the high proportion of sub-adult individuals

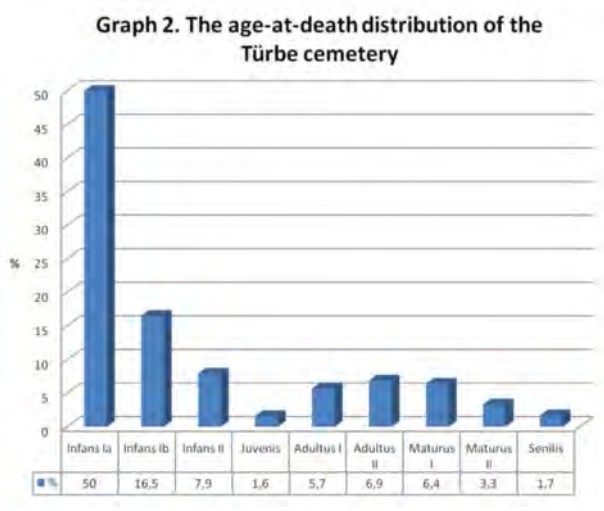
[7] For complete results see Scheelen et al. 2015.
[8] Cf. İşcan – Steyn 2013.
[9] For complete results see Parrer 2015; Scheelen et al. 2015.
[10] E.g. Ferembach et al. 1980; see also Knussmann 1988; Rösing et al. 2007; Stloukal et al. 1999.
[11] Acsádi – Nemeskéri 1970; Stloukal et al. 1999.
[12] Nováček 2012.
[13] Schultz 1988; cf. e.g. Adler 1998; Aufderheide – Rodríguez-Martín 1998; Ortner 2003.
[14] Schultz 1986; Schultz 2001; Schultz 2003.



and, therefore, an apparently very high infant mortality, especially in the first two years of age (about 38 % of all those buried did not survive their first two years), this result does not really represent the actual population living in ›familia‹ at any moment. Therefore, the demographic data from adults, or at least from juveniles and adults, are more informative for preindustrial populations[15]. The people who survived their childhood and became at least 20 years of age, died in average with 36.8 years. Male age-at-death was on average lower, being 34.9 years. Females died on average with 37.9 years. Both males and females died mostly in the adult age class, between 20 and 40 years (29 men and 23 women died in this age class). It is not possible to distinguish any significant disproportions due to, for example, higher mortality of females in childbirth. Apparently, among the ›survivors‹ of this period, the female individuals became more often comparatively old. Seven females died at an age of above 50 years, but only two or three males (one male individual was estimated between 40–60 years).

3.1.2 Palaeodemography of early Ottoman Individuals

The MNI estimation of the scattered bones from the surroundings of the Türbe adds to the 17 graves *in situ* at least another 110 individuals. Among these, 96.5 (76 %) were sub-adult or juvenile individuals and 30.5 (24 %) adults from all age classes. Juveniles and adults included 14 males, 9 females and 9 skeletons of undistinguishable sex. The overview of the age-at-death of the whole population is shown in graph 2. The average age-at-death of the whole population was, due to this extreme high number of sub-adult individuals (50 % of the population did not survive their first two years of life), very low; only 12 years. With respect to the adults, the average age-at-death of the individuals above 20 years was 40.5 years, higher than in the Late Roman population. The average age-at-death of males was 36.7 years, females died on average at the age of 39.7 years[16]. Males died mostly at an age between 30 and 50 years, females mostly between 20 and 30 years, which could indicate a higher risk for female individuals at their main reproductive age. Again, surviving this



[15] Cf. Acsádi – Nemeskéri 1970; Stloukal et al. 1999.

[16] The higher average age-at-death of 40.5 years, even though neither males nor females in average reached this age, results from the fact that many of the adult individuals with indeterminable sex from the cemetery around the anonymous Türbe had reached a comparatively high mature or senile age-at-death.

critical period resulted in a better chance of reaching a comparatively high age for females (twice as many elderly females compared to males). Unfortunately, due to the low number of adult individuals, these results have to be considered only as tendencies without statistical significance.

3.2 Some aspects of palaeopathology

Palaeopathology is a scientific discipline positioned between human biology, medicine and archaeology. It deals with pathological changes in archaeological human remains (e.g. skeletons or mummies) and palaeopathologists avail themselves of the methods of modern medicine, e.g. light microscopy, scanning electron microscopy, radiology and computer tomography as well as, for example, proteomics or DNA typing. All these methods offer the option to investigate the health condition of a whole population or to reconstruct a ›patient's record‹ of single individuals[17]. In this paper, some aspects of the investigation of the Ephesian population are presented.

3.2.1 Scurvy

Scurvy is a disease arising from a deficiency of vitamin C[18]. As the human body is not able to produce or to store ascorbic acid (vitamin C), this illness is typically induced by malnutrition or the lack of fresh nutrition with an adequate quantity of vitamin C, which, with time, is degraded in stored food. Because of the lack of ascorbic acid, the body is not able to synthesize neither collagen properly, nor collagen-based structures[19].

The lack of vitamin C causes an insufficient metabolism of iron, as vitamin C is necessary for proper treatment and absorption of iron within the intestines, and this can secondarily cause anaemia. Moreover, malnutrition can commonly result in several separate diseases, as it is probable that a lack of one necessary nutritional component (e.g. vitamin C) could mean that other components (proteins, iron etc.) are also lacking. Therefore, it is common to observe several diseases due to malnutrition (especially scurvy and anaemia) in conjunction in one skeleton[20]. The weakened organism with constrained immune system is more susceptible to other illnesses, for example inflammations and infections[21]. The usual cause of death in cases of scurvy and other forms of malnutrition is not the deficiency status itself, but rather those secondary diseases which would not present any severe danger to a healthy person.

The immediate symptoms of scurvy are lethargy and general weakness, soon followed by a weakened immune system, poor wound healing, shortness of breath (dyspnea), as well as bone, joint and muscle pain. In adults, after some months, multiple hematomas (petechia) follow, mostly located at biomechanically highly loaded parts of the body (e.g. joints and muscle attachment marks). Emotional changes, gum disease (open wounds in the mouth resulting in inflammations of the gum, e.g. periodontal disease), loosening and ultimately loss of teeth are common[22]. In children, chronic scurvy (in infants called Moeller-Barlow disease) causes further, partially severe disturbances in development. Children show the symptoms described much faster than adults[23].

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[17] Cf. Nováček et al. 2017.
[18] Aschoff – Koch 1919.
[19] Maat 1986; Stuart-Macadam 1989; Armelagos et al. 2014; Crandall – Klaus 2014; Mays 2014.
[20] Cf. Mays 2014; Zuckerman et al. 2014.
[21] Cf. Armelagos et al. 2014.
[22] Aschoff – Koch 1919; Ortner et al. 2001.
[23] Cf. Brickley – Ives 2006; Bourbou 2014.

6 Porotic bone layer on the internal surface of the skull vault, likely due to a bleeding (photo K. Scheelen-Nováček)

7 Lower jaw of an infant with porotic bone surface, probably due to scurvy (photo K. Scheelen-Nováček)

8 Right humerus of an infant: porotic bone layers next to the elbow, likely due to a bleeding (photo K. Scheelen-Nováček)

The improper synthesis of collagen can be diagnosed in the skeleton. In addition to the higher rate of fractures (bone itself contains collagen as the main organic component), it is possible to diagnose periostal bleeding due to high penetrability of weakened capillary barriers and, therefore, haematomas on the surface of the bone. Such haematomas are re-modelled by the bone-producing cells of the periost and can be found on the surface of the bone, depending on its state of preservation[24]. Such structures can be observed in different parts of the skeleton, typically in the skull vault (fig. 6), eye sockets (*Cribra orbitalia*)[25], as well as in the postcranial skeleton. The changes to the gums and jaws can be found as new bone formations on alveolar edges or inside the alveoli (bleeding, fig. 7), or as various porosities and changes of the bony palate and jaws due to secondary inflammations[26]. Nevertheless, it is not possible to establish a direct connection between inflammations of the bones of the mouth cavity or tooth loss and scurvy, as both are mainly and first to be associated with oral hygiene. In adults, because of the low speed of turn-over of the bone tissue, it is usually not possible to diagnose scurvy reliably, except in extreme cases[27]. In children and juveniles, the emergence of the new bone formations as well as their re-modelling is much faster, due to a higher turn-over rate of the growing bone tissue. Their localisation may differ from that observed in adults[28].

[24] Cf. Schultz 1982; Schultz 1993; Schultz 2001.
[25] Cf. Wapler et al. 2004; Walker et al. 2009.
[26] Cf. Ortner et al. 2001; Ortner 2003; Zuckerman et al. 2014.
[27] Maat 1986; van der Merwe et al. 2010.
[28] Schultz 1982; Schultz 1993; Zuckerman et al. 2014.

9 Light microscopic view of a layer of the porotic bone formation seen in fig. 6. A new bone layer on the original surface, which is hardly involved at all, probably partially healed haemorrhagic process, plain light, 16 × magnification (photo J. Nováček)

It is possible to find new bone formations more commonly and then usually at mechanically loaded sites, such as joints, muscle attachment marks and nutritional foramina of the bones (fig. 8), making a reliable diagnosis of scurvy and distinction from traces of violence (child abuse) possible[29]. This concerns mostly infants after weaning and older children as, with the mother's milk, all necessary nutrition is delivered, unless the mother suffers from severe malnutrition herself. Cases of mothers with no vitamin C content in their milk, as their nutrition is being primarily passed on to the baby, are possible, but not commonly observed. Thus, new-borns and foetuses are not of major importance for this investigation. For older children of the age category Infans Ia, the presence of malnutrition probably indicates the end of breast feeding[30]. A reliable way to distinguish new built bone layers due to healed bleeding is light microscopic analysis of thin sections (fig. 9)[31]. The layers are laid down onto the original surface, which is not involved in the pathological process.

Scurvy in Grave House 1/08: n = 20/97.5 (19.5 %).
Scurvy in the Türbe cemetery: n = up to 16/96.5 (16.6 %).

With respect only to the infants older than foetus and new-born, the following statistics can be observed:

Scurvy in Grave House 1/08: n = 20/74 (27 %).
Scurvy in the Türbe cemetery: n = up to 16/73.5 (21.8 %).

The frequency of scurvy in both populations is very similar, although a little higher in the Roman individuals. Regarding only the infants older than foetus and new-born, the difference between the two populations grows, which probably can be explained by the small sample sizes.

Most cases of scurvy in the Roman population from the Harbour Necropolis were found in Grave 1 (n = 12/32.5, 36.9 %). The individuals from the other graves show a rather low frequency of scurvy (n = 8/65, 12.3 %). Partly, this results from the facts that in Graves 4 and 5, no cases of scurvy were observed. Nevertheless, also in Grave 2 and Grave 3, with 2 (12.5 %) and 6 (14.5 %) cases, the frequency of scurvy was significantly lower than in Grave 1.

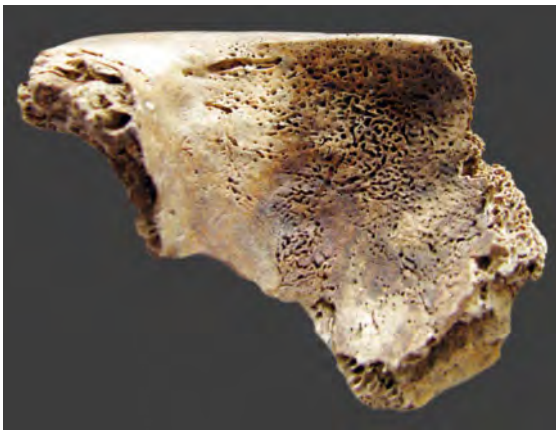
3.2.2 Anaemia

Anaemia, meaning ›lack of blood‹ in Ancient Greek, results from a decreased number of red blood cells or a lower than normal quantity or quality of haemoglobin, the red blood cell protein able to bind oxygen or carbon dioxide. In general, the basic problem is the lack of oxygen in body organs, resulting in an increased production of new red blood cells, as the only possibility the organism has to increase the oxygen saturation of blood. As the red

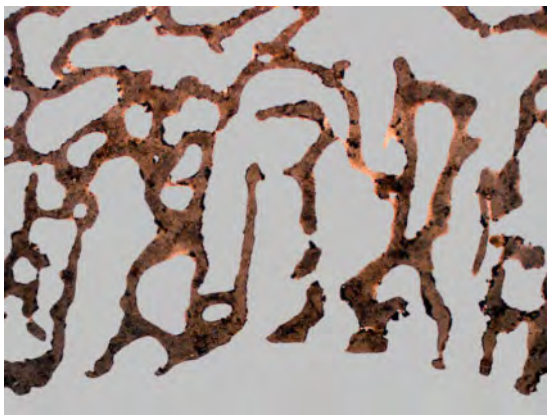
[29] Ortner et al. 2001; Bourbou 2014; Lewis 2010.
[30] Stuart-Macadam 1989; Bourbou et al. 2013.
[31] Cf. Schultz 2001.

10 Infant skull with thickening (osseous hypertrophy of the spongy bone) of the frontal and parietal tubers, probably due to anaemia (photo K. Scheelen-Nováček)

11 Detail of the thickening seen in fig. 10 (photo K. Scheelen-Nováček)



12 Porotic hypertrophy of the bone of the eye socket (*Cribra orbitalia*) (photo K. Scheelen-Nováček)



13 Light microscopic view of the porotic hypertrophy seen in fig. 12. Bone trabeculae grow out of the spongy bone, the original surface is completely removed. Very probable hypertrophy of the red bone marrow, probably anaemia, plain light, 16 × magnification (photo J. Nováček)

blood cells are produced in the red bone marrow, it is possible to diagnose anaemia in the skeleton[32]. Commonly, anaemia is connected to the lack of iron or protein in the nutrition, as both are necessary in haemoglobin synthesis, but its aetiology is far more complicated and complex[33]. Especially in the Mediterranean region, thalassemia should be considered[34], or, in swampy regions, cases of severe malaria infection[35]. Also, long term slow blood loss, such as severe intestinal parasite infestations, ulcers and non-healing wounds, as well as tumours, can cause anaemia[36].

The first symptoms of anaemia are paleness and coldness of the skin. Due to the lack of oxygen, these symptoms are soon followed by muscular weakness, fatigue, dizziness and, in severe cases, incidental fainting. Just like scurvy, anaemia causes general malaise (weak immune system). The lack of oxygen in internal organs also causes dyspnoea (shortness of breath). The reaction of the organism to this is an increase in the cardiac output, to assure the oxygen transport. In the longer term, the increased cardiac output raises the danger of ischemic diseases or, in severe cases, heart failure. In children, chronic anaemia can cause disturbances in behaviour and growth[37].

In skeletons, especially in those of children and sub-adults, but in severe cases in those of adults, too, it is possible to diagnose anaemia on the skull as well as the postcranial bones[38]. Depending on the age of the individual, the red bone marrow is present in many bones. The typical trait of anaemia on the skull is an osseous hypertrophy of the spongy bone of the skull vault (*Cribra cranii externa*, figs. 10 and 11). Also, the osseous hypertrophy of the spongy bone of the eye sockets (*Cribra orbitalia*, fig. 12) can, in many cases, be associated with anaemia, although other reasons for this phenomenon are also well known[39]. Especially in less severe stages, it is hardly possible to distinguish between an anaemic hypertrophy of the eye sockets and a layer of a porotic, new bone structure due to haemorrhage or inflammation[40]. In the light-microscopic perspective (fig. 13), the new bone structure which has grown out of the depth of the spongy bone becomes visible. It can clearly be differentiated from the formation of a bone layer on the original surface of the bone, as is seen in haemorrhagic processes (cf. fig. 9)[41].

Anaemia in Grave House 1/08: concerning the sub-adult population only, n = 17/97.5 (17.4 %). Including the cases of diagnosed anaemia in adults, n = 22/169 (13 %).

Anaemia in the Türbe cemetery: sub-adults only, n = up to 17/96.5 (17.6 %), whole population n = up to 20/127 (15.7 %).

As already seen in the occurrence of scurvy, the total frequencies of anaemia in Grave House 1/08 of the Harbour Necropolis and in the population buried around the anonymous Türbe in the Artemision are very similar. Again, the frequency in the Roman population is raised by the high number of anaemia cases in Grave 1 (n = 13/59, 22 %). In the remaining Roman population from the other four collective graves, the number of anaemia cases is rather low (n = 9/110, 8.2 %). It is not possible to appropriately review the reason for such a huge difference in the frequencies of diseases in just one grave out of five without going beyond

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[32] Cf. Stuart-Macadam 1989; Ortner 2003; Walker et al. 2009.
[33] Schultz 1982.
[34] A gene defect on the chromosome 11 or 16: Angel 1964; see also Hershkovitz – Edelsohn 1991; Hershkovitz et al. 1991.
[35] Angel 1966; see also Aufderheide – Rodríguez-Martín 1998; Ortner 2003; Smith-Guzmán 2015.
[36] Cf. Schultz et al. 2007; Sullivan 2005.
[37] Cf. Ryan 1997.
[38] Stuart-Macadam 1992; Lagia et al. 2007.
[39] Wapler et al. 2004; Walker et al. 2009.
[40] Zuckerman et al. 2014.
[41] Schultz 2001; Schultz 2003.

the scope of this paper. Nevertheless, it seems likely that, concerning the pathology frequency, either Grave 1, or the other four graves from Grave House 1/08 are not representative for the Roman population of Ephesos. In any case, the huge difference in the frequency of both scurvy and anaemia between the different graves of Grave House 1/08 indicates major differences concerning the living conditions of the individuals buried in them[42]. In future, further excavations of (Late) Roman graves and investigations of (Late) Roman skeletons might give more detailed information concerning this topic.

3.2.3 Rickets

Rickets is a disease due to a lack of vitamin D, which is a compound of fat soluble derivates of the steroids, the most important of them being D_2. The human body is able to synthesize vitamin D from cholesterol; this is only possible with adequate exposure to sunlight. Therefore, not only malnutrition, but also the lack of sunlight can be a trigger of rickets[43]. Rickets is usually a disease of infants and children. The similar, mostly less severe, disease in adults is called osteomalacia[44]. Vitamin D is vitally required for proper absorption of calcium and other minerals from the intestine, resulting in severe skeletal changes in the case of malnutrition. Rickets is nowadays among the most common childhood diseases in many developing countries. Often, it occurs in babies which are solely breastfed by mothers who already suffer from vitamin D deficiency[45].

The patients suffer from bone, joint and muscle pain or tenderness, muscle weakness (rickety myopathy), severe diarrhoea or vomiting as well as dental problems. Later, in chronic cases, rickets causes an increased tendency towards bone fractures. In sub-adults, the growing, weakened bones tend to be severely deformed, under the load of the body. Only in such cases, in which a child is strong enough to move, do skeletal deformities develop (fig. 14)[46]. If the child is too weak to move at all, the bone tissue is completely misshapen as discussed below, but the bones are not deformed.

Rickets manifests on the skull as well as on the postcranial skeleton[47]. On the skull, typical new bone formations grow on the glabella and the frontal and parietal tubers. These are strongly porotic and usually built in layers one upon the other. The skull vault is thickened. *Cribra orbitalia*-like structures in the eye sockets are also common[48]. Especially in less than extreme cases, macroscopically, these two traits are hardly distinguishable from changes due to anaemia[49]. In the light microscopic perspective, however, the difference between the newly built bone formation radiating from the spongy bone outside (fig. 13, anaemia) and layers one upon the other of new bone instead of the original compact bone tissue (fig. 16) is clearly visible. The original compact bone is gone. This is a distinct difference compared to a case of scurvy (cf. fig. 9). The compact bone tissue is similarly new built in cortical bone-like layers. It has been partially or even completely replaced. This morphology causes the weakness of the long bones and, therefore, their common deformation in children suffering from rickets.

Rickets in Grave House 1/08: n = 0/97.5 (0 %).
Rickets in the Türbe cemetery: n = 10/96.5 (10.4 %).

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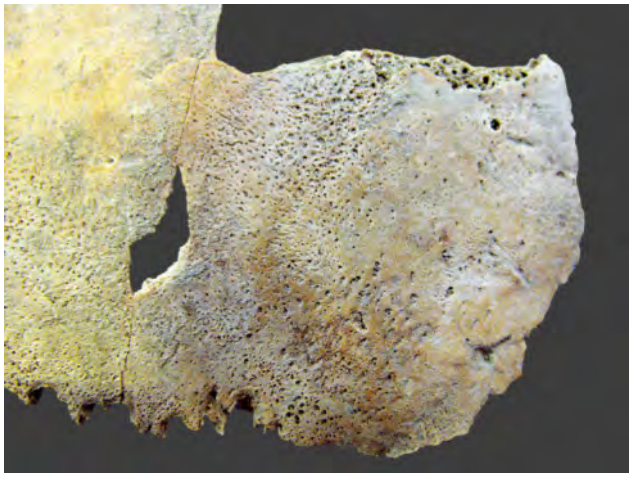
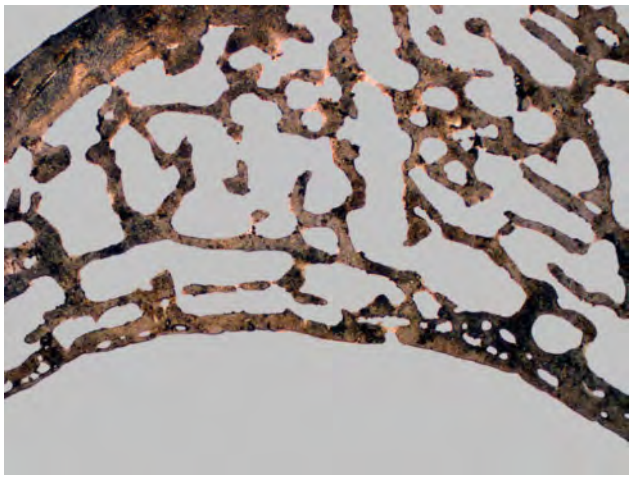
[42] Cf. Nováček et al. (forthcoming).
[43] E.g. Schnabel 2007; see also Hintzpeter 2008.
[44] E.g. Aufderheide – Rodríguez-Martín 1998; Ortner 2003.
[45] Balasubramanian – Ganesh 2008; Paterson – Ayoub 2015.
[46] Cf. Maat 1986; Stuart-Macadam 1989; Mays et al. 2006; Brickley – Ives 2008; Lewis 2010.
[47] Cf. Mays et al. 2006; Brickley – Ives 2008.
[48] Cf. Wapler et al. 2004; Schultz 2001.
[49] See Schultz 1993, fig. 15.

14 Ulna of an infant deformed probably due to rickets (photo K. Scheelen-Nováček)



15 Porotic surface of the skull vault (photo K. Scheelen-Nováček)



16 Light microscopic view of the porotic surface seen in fig. 15. Several layers of newly built bone instead of the original surface, which is not recognisable. Probably rickets, plain light, 16 × magnification (photo J. Nováček)

3.2.4 Inflammations of the nasal cavity and the upper respiratory passages

Inflammatory processes of the upper respiratory passages (or of the mucous membranes of the bony cavities) can be detected on the bone in the nasal cavity (rhinitis) as well as in the paranasal sinuses (sinusitis)[50]. As the mucous membrane is in direct contact with the periostal layer of the bony cavity, an inflammation may cause a severe irritation to, or produce a direct inflammation in the periost (periostitis)[51]. As a reaction, an irritated or even infected periost may produce new bone tissue in a typical pattern, which can be detected on the bone surfaces (fig. 17).

In general, it is possible to divide the reasons for inflammations of the upper respiratory passages into two main groups. These are, firstly, impacts of weather conditions (›common

[50] E.g. Roberts 2007; Merrett – Pfeiffer 2000.
[51] E.g. Schultz et al. 2007.

17 Maxillary sinus with prominent new bone formations due to a chronic irritation of the periost, probably originating from an inflammation of the mucous membrane (photo K. Scheelen-Nováček)

cold‹) and usually non-specific pathogens, which are mostly viruses[52]. The second major reason of such inflammations are effects of long term irritations as, for example, smoke from fireplaces of badly aired housing and the related irritation of the mucous membranes[53].

It is necessary to keep in mind, that not every inflammation of the upper air ways produces new bony formations on the skeleton. The visible changes on skeletons are surely witnesses of particularly severe or at least longer enduring inflammations[54], mostly with chronic progress.

The population density has a major influence on the spreading and frequency of such diseases of the upper respiratory passages. As the body's own immune reaction to virus agents (›common cold‹) is impaired for only a few days, a higher population density raises the danger and the probability of a repeated infection[55]. Inflammations of the upper respiratory passages are causally related to inflammations of the mucous membranes of the middle ear cavity (*Otitis media*) as well as pneumonias and pleurisies, which could be life-threatening without proper treatment.

Respiratory passage inflammations in Grave House 1/08: n = 53/169 (31.4 %)
Respiratory passage inflammations in the Türbe cemetery: n = 18/127 (14.2 %)

The frequency of inflammations of the respiratory passages is high in the skeletons from four of the five graves of Grave House 1/08 from the Harbour Necropolis, except for Grave 5, no cases were observed[56]. Nevertheless, in Grave 1 it is again significantly higher (Grave 1: 25/59, 42.4 %, all other graves: 28/110, 25.5 %) than in the other four graves[57]. This fact supports the hypothesis of a somehow different situation with respect to the health condition of the buried in Grave 1 and those from the other four graves. However, it is beyond doubt that the frequency of severe inflammations of the respiratory passages in Grave House 1/08 from the Roman Harbour Necropolis, with or without the individuals from Grave 1, was much higher than in the Early Ottoman population from the cemetery around the anonymous Türbe.

4 DISCUSSION AND CONCLUSION

The results of the radiocarbon analysis of the skeletons from Grave House 1/08 from the Roman Harbour Necropolis of Ephesos show that the large Graves 1 and 3 remained in use for about two and a half centuries. The mixed sample of both male and female individuals, as well as the large number of children, indicates that these two graves were probably used by a certain group of people, for example, different members of one household or *familia*. The same can be assumed for the individuals from Grave 2, which probably represent the secondary deposition of human skeletal remains from another grave. The smaller Graves 4 and

[52] Up to 80 % of all cases: Schulte – Spranger 1985.
[53] Schultz 1982; Gresky – Schultz 2011; Pirson et al. 2011.
[54] Schultz et al. 2007.
[55] Grupe et al. 2004.
[56] For detailed results, see Nováček et al. (forthcoming).
[57] Cf. Nováček et al. (forthcoming).

5 were in use only for a limited period. A probable reason could be problems with leaking water from the harbour channel, but also further reasons cannot be excluded.

Summarising the palaeodemography of the population buried around the anonymous Türbe, there is a large group of children, mostly under two years, and rather few adult burials. This might indicate an extremely high infant mortality in this Early Ottoman population. On the other hand, it is possible, that the excavated area directly around the Türbe was preferably used to bury children, next to the monument of an honoured person[58]. A similar custom is known from the Central European Middle Ages, where especially small children were commonly buried directly next to the church walls[59], as well as from a recently published Byzantine cemetery on Samos[60]. In this case, this population could not be considered as representative.

In the investigated Ephesian skeletons, the frequency of scurvy is at least slightly higher in the Roman population. Partly, this can be explained by the unusual high number of cases in Grave 1 from Grave House 1/08. The frequency of anaemia was nearly the same in both populations. The high number of cases indicate that, obviously, the at least seasonal lack of fresh fruits and vegetables, as well as problems with ponding and, connected to this, a high number of mosquitos and other parasites, remained a problem in Ephesos from the Roman up to Early Ottoman time. In contrast, rickets was only diagnosed in children from the cemetery around the anonymous Türbe. The difference between diagnosing no cases of rickets in the investigated Roman individuals, and a rather high frequency in the Early Ottoman population, indicates a major difference in the living conditions, that is, the life-style of the two populations. Yet, it is only possible to speculate about the reasons for this phenomenon. One possibility could be that the infants from the Türbe cemetery were exclusively breast-fed, by mothers, who already suffered from vitamin D deficiency. This nowadays frequently occurs, for example, in case of Muslim mothers who extensively cover their body and face[61]. Another well possible cause might be that the Early Ottoman children who already were weakened by other diseases, for example, scurvy, anaemia, or severe infections, were kept in their homes by their caring families. Lying in bed in small, dark houses for several weeks or even month, without exposure to sunlight, it is well thinkable that the children additionally developed rickets[62].

Concerning the individuals buried in Grave 1 from Grave House 1/08 of the Roman Harbour Necropolis, some difference regarding the frequency of pathological changes on the bone was apparent. Thus, it is not determinable whether the people buried in Grave 1 can be considered as representative for the Roman population of Ephesos, or whether their comparatively poor health condition was rather unusual. On the present level of anthropological knowledge on the Roman skeletons from Ephesos, it is not even possible to make an educated guess.

The frequency of traces of chronic inflammations of the upper respiratory passages in the skeletons is much higher in the skeletons from Grave House 1/08 than in those from the cemetery around the anonymous Türbe. The reason could possibly be found in the considerably higher population density of Roman Ephesos in comparison to Early Ottoman Ayasoluk[63]. Although the town of Ayasoluk was flourishing again after the reconquest and incorporation into the Ottoman Empire[64], presumably the population density still was much lower than in

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[58] Cf. Scheelen et al. 2015.

[59] Stephan 2011; see also Scheelen et al. 2015; Kienast et al. 2017. It was believed that the water running down from the church eaves could in a way baptize and hence purify the still unchristened babies following their premature death; thus, preventing them from not being able to enter the Kingdom of God.

[60] Kienast et al. 2017.

[61] Balasubramanian – Ganesh 2008; Paterson – Ayoub 2015; Nichols 2012.

[62] Schultz 2011.

[63] See Nováček et al. (forthcoming); Scheelen et al. 2015.

[64] Dalanay 2015; Ladstätter 2015.

Roman times. Therefore, infections concerning the respiratory passages probably couldn't spread as well[65] as in the crowded streets of Roman Ephesos.

Adults from the cemetery around the anonymous Türbe died in average a bit later than those from Grave House 1/08 (less than 37 versus slightly over 40 years)[66]. This might indicate that all in all, the living conditions in Early Ottoman time were a bit more beneficial for the health and survival of the population than during Roman time. Given the much higher number of traces of chronic inflammations of the upper respiratory passages, such chronic infections might have had a major impact on the overall survival chances of an individual. However, due to the small sample (n = 31) of adult skeletons from the cemetery around the anonymous Türbe, a statistical variation cannot be excluded. Nevertheless, a change in living conditions from the Roman Age to Early Ottoman times is, beyond doubt, documented by the skeletal record.

A major problem in a macroscopic investigation on its own, especially in less severe cases of disease, is the distinction between different changes to the bone. Many macroscopically visible traits of scurvy, anaemia and rickets are very similar to each other, especially in the initial phases[67]. Therefore, they are neither reliably identifiable nor distinguishable from each other without further microscopic investigation. Moreover, commonly, the individuals investigated did not only suffer from one of the diseases mentioned, but from a variety all at the same time. In this paper, three different examples of diseases due to malnutrition are presented, each one linked to a further deficit (cf. figs. 6. 12 and 15), but looking very similar to each other when observed in the bone. The photographs of light microscopic thin sections (cf. figs. 9. 13 and 16), which were prepared from the same bones as seen in the previous figures, clearly show the huge impact of light microscopic evaluation on the final diagnosis.

The palaeopathological methods utilised, as well as the statistical investigation of the whole of the populations excavated, offer new ways of gaining insight into the research of the past. Hopefully, future excavation work carried out in Ephesos will uncover further human remains from all time periods to improve the statistical significance and to extend the time horizon.

ACKNOWDELGEMENTS

We would like to thank Sabine Ladstätter, director of the Ephesos excavation and of the Austrian Archaeological Institute at the Austrian Academy of Sciences, for the possibility to investigate the skeletal human remains from Grave House 1/08 and the cemetery around the anonymous Türbe. Especially, we would like to thank Martin Steskal, head of the Harbour Necropolis research project and excavator of Grave House 1/08, as well as Gottfried Parrer, excavator of the cemetery around the anonymous Türbe in the Artemision, for their great support concerning our work. We are much obliged to Gro Bjørnstad (Oslo), Michael P. Richards and Megan Wong (Burnaby) for their friendly collaboration and scientific exchange. Finally, we would like to thank Cyrilla Maelicke for proof-reading the English manuscript, as well as Michael Brandt and Marc Moll, who gave instructions for preparing the light microscopic thin sections.

The Austrian Science Fund (FWF, P22083-G19) and the Austrian Archaeological Institute at the Austrian Academy of Sciences financially supported the projects. The Turkish Ministry of Culture and Tourism (Ankara) kindly granted all necessary permits.

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[65] Grupe et al. 2004.
[66] Cf. Nováček et al. (forthcoming); Scheelen et al. 2015.
[67] Cf. Schultz 1993.

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Andrea M. Pülz

IMAGES ON BYZANTINE SMALL FINDS FROM EPHESOS*

Among the Byzantine small finds from Ephesos pictorial representations are found mainly on crosses. The group which includes cross pendants, reliquary crosses and processional or hand crosses, comprises approximately 80 items made primarily of copper alloys. In this paper some selected examples will be introduced, based on the iconographic themes and technological aspects of their decorations to achieve a typological and chronological classification.

CRUCIFIXION AND MARY KYRIOTISSA

The first iconographic topic is the representation of the ›Crucifixion and Mary Kyriotissa‹ on cross pendants[1].

The pendant EM 2/11/07 (figs. 1 a and b)[2] from the Basilica of St John in Ephesos is made of copper alloy. The Latin shaped cross has slightly flaring arms and terminates in a straight line. The relief decoration on both sides is obtained by casting and is re-worked afterwards by engraving and circle-dot-punches. The cross is heavily scattered through use[3].

The pendant front shows Christ on the cross, standing frontal, wearing a *colobium*. Above and below the crucifixion there are two pairs of busts, on each side of Christ is another bust. Inscriptions are no longer visible, neither are details of the figures, because of the quite poor condition of the cross. On the back there are the Virgin and Child flanked by four haloed angels. The outline of the cross is decorated on both sides with a dot-and-circle ornament[4].

The same iconographic scheme can be found on another cross from the Basilica of St John, namely EM 2139 (figs. 2 a and b)[5].

As a prototype, cross pendants made of gold, which can be dated to the 6th and 7th centuries[6], should be mentioned. Here only one side is decorated. The illustrations reflect the Early Christian iconographic repertoire: Christ appears in a rigid frontal pose, wearing a *colobium* or a *himation*. On the top of the vertical crossbar a pendant from London, for example, shows a medallion with the personifications of sun and moon, while the counterpart below depicts a medallion with two squatting soldiers[7].

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* The crosses from Ephesos were part of the project on the Byzantine small finds and their workshops in Ephesos funded by the Austrian Science Fund (FWF). I want to thank S. Ladstätter (director of the excavations in Ephesos as well as the director of the Austrian Archaeological Institute), the Ephesos Museum in Selçuk (F. Kat and C. Topal), M. Büyükkolancı (director of the excavations of Ayasoluk) as well as the Antikensammlung of the Kunsthistorisches Museum in Vienna (G. Plattner and M. Laubenberger) for the possibility to work with the material.

1 Pitarakis 2006, 57–60.

2 See also A. M. Pülz 2017, 26 cat. no. 46 pl. 9.

3 The technological descriptions of the Ephesian crosses come from D. Zs. Schwarcz and B. Bühler (VIAS), who were kindly carrying out the technological studies on the Byzantine metal objects.

4 Cotsonis 1994, cat. no. 10; Nagler 2014, 73; C. Schmidt in: Wamser 2004, 194; Pitarakis 1998; Pitarakis 2006, 68 and n. 257.

5 See also A. M. Pülz 2017, 25 cat. no. 45 pl. 8.

6 Pitarakis 2006, 55–57. Cf. for example a cross pendant in the British Museum in London: Pitarakis 2006, 55 fig. 34; Frings – Willinghöfer 2010, 229 cat. no. 171 (C. Entwistle) with lit. Another example is a cross pendant made of gold in the Dumbarton Oaks Collection in Washington, D.C.: Ross 1965, 21 f. cat. no. 15 pl. 23.

7 British Museum London, inv. no. 1949,12–3,1: Pitarakis 2006, 55 fig. 34.

a b

1 a. b Cross Pendant, copper alloy. Ephesos-Museum, Selçuk, inv. no. 2/11/07: front (a) and back (b) (© OeAW-OeAI, N. Gail)

a b

2 a. b Cross Pendant: copper alloy. Ephesos-Museum, Selçuk, inv. no. 2139: front (a) and back (b) (© OeAW-OeAI, N. Gail)

Cross pendants, with both sides decorated, but of the same iconographic type of the crucifixion, date from a later period, namely from the 7th to 10th centuries[8].

The accompanying inscriptions, for example on a cross from the Byzantine Museum in Athens (8th to 9th c.), identify the busts above as Peter and Paul, and those below as Adam and Eve. Right and left of Christ are Mary and John. On the now decorated back one can find the Virgin with Child as Kyriotissa surrounded by four angels. This cross is one of the first where both halves are decorated with images, as an indication of the dual nature of Christ, namely human and divine[9].

Another example of this iconographic type can be seen on a cross, which was found in Cyprus. Here Mary with the child is flanked by two angels (dating late 7th to 9th c.)[10].

A further comparison that belongs to this type, is a cross pendant from the eastern Mediterranean, which can be dated to the 9th or 10th century and which is now in Cambridge[11]. Again, one sees Christ on the cross, frontal with a big head, wearing a *colobium*, the arms outstretched like branches, with completely disproportionate hands. He is flanked by two busts which represent John and Mary, as well as on the top and bottom by two pairs of figures, which D. Buckton assumes may represent the four Evangelists. The best parallel to the Ephesian crosses though is a cross with unknown provenience, now in the M. Latsis Collection which is dated to the 7th to the early 9th centuries[12]. Here the Kyriotissa is flanked with angels like Michael and Gabriel.

Because of the comparable iconography and style both crosses (figs. 1 and 2) from the Basilica of St John can be assigned to the same time period. As a basis for the dating of this type one can take into account icons that have the same iconography, such as an icon from the Monastery of St Catherine at Mount Sinai with the Crucifixion scene, dating from the late 8th or the beginning of the 9th century[13].

This series of pendant crosses discussed above can be considered as prototypes for the production of the reliquary cross series, which was developed towards the end of the iconoclastic era. At this time the double-sided decoration becomes a standardised feature within the extensive series of crosses made of copper alloy, all dated between the 10th and the 12th centuries. They were mass produced in workshops throughout the Byzantine Empire, from Asia Minor, Greece and the Balkans to Italy and the Crimea[14].

CRUCIFIXION AND THE VIRGIN ORANS

The representation of the ›Crucifixion and Virgin Kyriotissa‹ was replaced with the iconographic type of the ›Crucifixion and Virgin Orans‹[15], which was very popular especially after the iconoclasm in the second half of the 9th century[16].

Prototypes for this iconographic scheme are an enamelled reliquary cross from the Beresford Hope Collection in the Victoria and Albert Museum in London, dating from the end of

[8] Pitarakis 2006, 57. 179.
[9] Byzantine Museum Athens, inv. no. T.234: Pitarakis 2006, 55–57 fig. 35.
[10] Private Collection Nicosia: Pitarakis 2006, 391 suppl. cat. no. 2.
[11] Fitzwilliam Museum, Department of Applied Arts Cambridge, inv. no. M.11-1978: Buckton 1994, cat. no. 144 (D. Buckton).
[12] C. K. in: Papanikola-Bakirtzi 2002, 188 f. cat. no. 209.
[13] Weitzmann 1976, no. B 32.
[14] Vassilaki 2000, 308 cat. no. 23 (B. Pitarakis).
[15] Cf. cross in the Vatican Museum Rome, inv. no. 1102, 9th c.: Brandt – Effenberger 1998, 53 f. cat. no. 20 fig. 41; see also Pitarakis 2006, 189 cat. no. 1 fig. 36.
[16] Cotsonis 1994, 89 no. 8; Nagler 2014, 145 cat. no. 7 pl. 8.

a b

3 a. b Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 1/32/90: front (a) and back (b) (© OeAW-OeAI, N. Gail)

the 9th or the early 10th century[17], or an enamelled reliquary cross mounted on a book cover in the Treasury of San Marco in Venice[18].

This iconographic theme – the Crucifixion on the front and the Virgin Orans on the back – is used quite often on reliquary crosses found in Ephesos and its surroundings, both on cast and engraved images.

Reliquary Crosses with Cast Decoration: Type 1

The following crosses from Ephesos and its environs can be added to this type: EM 1/32/90 (figs. 3 a and b); 26/34/77 (fig. 4); 10/30/78 (fig. 5); 1/6/89 (fig. 6); 4/33/77 (fig. 7); 11/11/93; 21/9/95. They are preserved in different qualities.

EM 1/32/90 is a reliquary cross from Selçuk (figs. 3 a and b)[19]. The object has a Latin cross shape with flaring arms and terminates in straight ends. The copper alloy cross is made of two separate pieces. The hollow interior is designed to store relics. The relief decoration is cast, inscriptions and details of the figures are re-worked by engraving and punching. A hinge with a large eyelet holds the two halves together. The images are elaborate, precise and graphic in all areas. The engravings are deep and edged.

[17] Buckton 1994, 132 cat. no. 141 (D. Buckton); see also Yeroulanou 2000, 229 fig. 173; Cormack – Vassilaki 2008, 104 f. cat. no. 54.

[18] Buckton 2000, 178 fig. 114.

[19] See also A. M. Pülz 2017, 26 cat. no. 50 pl. 10.

4 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 26/34/77: front (© OeAW-OeAI, N. Gail)

5 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 10/30/78: front (© OeAW-OeAI, N. Gail)

6 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 1/6/89: back (© OeAW-OeAI, N. Gail)

7 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 4/33/77: back (© OeAW-OeAI, N. Gail)

Compared to the other reliquary crosses found in Ephesos one can notice a clearly more naturalistic representation of the figures. On the front Christ's head with a cross nimbus is bent to one side. He is dressed with a *colobium*. The individual fingers are shown, the thumbs are spread apart, dot-punches in the hands symbolize the nails. The bare feet also have dot-punches on the instep. They stand on an irregular ground drilled in vertical rows of punch marks (*suppedaneum*).

Beneath Christ's arms is the following inscription from John 19. 26–27: IΔE O YIOC COY (»Behold thy son«) and IΔOY H MHTHP COY (»Behold thy mother«).

Inserted at the end of the horizontal crossbar are the figures of the Mother of God on the left and John on the right[20].

Above the head of Christ are the *tabula ansata* and the word Φ(ῶ)C (»light«) inscribed between the sun and the moon. A deep engraved line serves as a framework for the iconographic scene which follows the contours of the cross.

In the centre at the back stands the Virgin Mary in an orant pose. She is wrapped in a Maphorion and has a nimbus with dot-punch decoration. The fingers are clearly shown and realistic, the thumbs are spread. The face appears rather masculine and shows two roundish eyes, a nose that has a triangular form, as well as a horizontal line for the mouth. The rather clumsy features can not be compared with the image of Christ on the front, but rather with the diminutive figures of John and Mary. Right and left of her elbows are the initials for M(HTHP) Θ(EOY).

The virgin is surrounded by the four Evangelists in medallions. Their faces are individually formed, but similar in style to the representation of Mary. Hair and beard are indicated. The shoulders are round, the left arm is holding a book in front of the chest. In the corners there are the initials of the Evangelists.

One can find this scene of Christ crucified and flanked by the Mother of God and John already on the Fieschi Morgan Reliquary in *cloisonné* enamel dating from the early 9th century[21], whose crucifixion iconography was then, on a reduced level, passed on to the mass-produced reliquary crosses made of copper alloy[22].

There are countless comparable examples, which can all be dated to the 10th and 11th centuries with the same iconographic theme, of which just a few have been singled out here.

First a reliquary cross from the Preslav Museum originating from Constantinople or Anatolia[23], then a reliquary cross from the Byzantine necropolis in Sinope[24], a reliquary cross from the collection of Christian Schmidt in Munich[25], another one in the British Museum in London[26] or an example from the Church of St Polyeuktos in Istanbul[27]. Parallels derive also from Amorium[28] and Bulgaria[29].

Best comparable is a reliquary cross of copper alloy, which is now located in the Benaki Museum in Athens and is dated in the 11th century[30]. Even without a technological analysis of

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[20] Right and left in the descriptions are always from the viewer's point unless otherwise noted.
[21] Cf. Evans – Wixom 1997, 74 cat. no. 34.
[22] Mundell Mango 2000, 201; Cormack – Vassilaki 2008, 102 cat. no. 52.
[23] Preslav Museum, Preslav, inv. no. 1485, 10th/11th c.: Pace 2001, 147 cat. no. 38; see also Pitarakis 2006, 96 cat. no. 23.
[24] Unknown place of storage, 10th/11th c.: Akurgal – Budde 1956, 37; see also Pitarakis 2006, 100 cat. no. 36.
[25] Collection C. Schmidt, Munich, inv. no. 1695, 10th c.: Wamser 2004, 194 f. cat. no. 261 (C. Schmidt).
[26] British Museum London, inv. no. M&LA 1985, 3-5,1, 9th to 10th c.: Buckton 1994, 134 cat. no. 143.
[27] Archaeological Museum Istanbul, inv. no. F997, 10th–12th c.: Gill 1986, 270 cat. no. 635 fig. 435; see also Pitarakis 2006, 212 cat. no. 81.
[28] Yaman 2012, 336–338 fig. 8: inv. SF 6680: from a grave.
[29] Dončeva-Petkova 2011, cat. nos. 219–231.
[30] Benaki Museum Athens, inv. nos. 21990–21991, 10th to 11th c.: Vassilaki 2000, 308 cat. no. 23 (B. Pitarakis); see also Cormack – Vassilaki 2008, 429 cat. no. 197 (B. Pitarakis); Pitarakis 2006, 195 cat. no. 19.

the Benaki cross it seems that both crosses are model-like; take for example the fan-shaped folds of the tunic and the Maphorion crossed over the chest of the Virgin Orans.

Also the two other examples from Ephesos with the depiction of Christ crucified, EM 26/34/77 (fig. 4)[31] and EM 10/30/78 (fig. 5)[32], which are poorly preserved and not nearly as well designed as EM 1/32/90 (figs. 3a and b), can be added to the aforementioned parallels[33].

The reliquary crosses where only the back side with the representation of the Virgin Orans is preserved, EM 1/6/89 (fig. 6)[34] and EM 4/33/77 (fig. 7)[35], have close counterparts in a cross originally from Constantinople or Anatolia, which today is stored in the Ikonenmuseum Recklinghausen[36], in a cross from Corinth[37] as in one example dated to the 9th century in Ioannina[38].

Reliquary Crosses with Engraved Decoration: Type 2

The same iconographic theme, though simplified, is also found on the group of the reliquary crosses with engraved decoration, Type 2: EM 2/30/78 and 4/30/78 (figs. 8 a and b); 24/18/93 (figs. 9 a and b); 2136 (fig. 10); 7/30/78; 1/30/78.

Christ crucified is represented without the accompanying figures of the Mother of God and John, while the victorious formula, IC XC NHKA, which replaces the quotations from the Gospel, is usually found under the outstretched arms of Christ. The adoption of this victory formula serves as an important indication, namely that this series of engraved reliquary crosses can be set in the period between the end of the 10th and the beginning of the 12th century. The shift to this phrase also shows the desire to simplify the work for the engraver because of the growing production range. The usage of the victorious formula can also be found on aniconic crosses or on the decoration of manuscripts, icons and ivory objects from the 9th to the 12th century, where it presumable had an apotropaic effect[39]. So this formula together with the image of the crucifixion emphasizes the amulet-like character of the crosses and the relics they contain[40].

The cross EM 2/30/78 and 4/30/78 (figs. 8 a and b)[41], belonging to the engraved type, was found in the Basilica of St John[42], is made of copper alloy and has a Latin cross shape with flaring arms terminating in three-quarter circular disks and drops on the corners.

The engraved illustrations are generally extremely schematic and reduced, while indicating some details such as clothing, the nimbus or the *tabula ansata*. In the iconography of the Virgin Orans one can find differences to the cast decoration[43]: instead of the Evangelists often bushes, palm leaves or stars are shown, symbols of paradise. Sometimes two angels or saints are depicted as in EM 2/30/78 and 4/30/78 (figs. 8 a and b).

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[31] Cf. A. M. Pülz 2017, 27 cat. no. 51 pl. 11.
[32] See also A. M. Pülz 2017, 27 cat. no. 52 pl. 11.
[33] Cf. other reliquary crosses in: Pitarakis 2006, cat. nos. 19–165 with lit.; Dončeva-Petkova 2011, cat. nos. 219–231.
[34] See also A. M. Pülz 2017, 27 cat. no. 53 pl. 11.
[35] Cf. A. M. Pülz 2017, 27 cat. no. 54 pl. 11.
[36] Ikonenmuseum Recklinghausen, inv. no. 231, 10th to 11th c.: Stiegemann 2001, 310 f. inv. no. IV.36 (E. Haustein-Bartsch); see also Pitarakis 2006, 201 cat. no. 42.
[37] Archaeological Museum Corinth: Davidson 1952, 257 f. pl. 110.
[38] P. D. in: Papanikola-Bakirtzi 2002, 188 f. cat. no. 210: Byzantine Museum in Ioannina inv. no. AK 556.
[39] Walter 1997; see also Pitarakis 2006, 69. 72.
[40] Vassilaki 2000, 311 cat. no. 25 (B. Pitarakis).
[41] See also A. M. Pülz 2017, 28 cat. 58 pl. 13.
[42] Beside EM 2/30/78 and 4/30/78 there are three more crosses of the engraved type which were found in the Basilica of St John: EM 2136, 7/30/78 and 1/30/78. For the exact location see Hörmann et al. 1951, 193 f. 260 f.
[43] Pitarakis 2006, 87.

a b

8 a. b Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 2/30/78: front (a) and 4/30/78, back (b) (© OeAW-OeAI, N. Gail)

a b

9 a. b Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 24/18/93: front (a) and back (b) (© OeAW-OeAI, N. Gail)

10 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 2136: front (© OeAW-OeAI, N. Gail)

Comparable to the engraved cross from the Basilica of St John is for example a reliquary cross from the Benaki Museum in Athens[44], which dates from the late 10th to the 11th century.

The cross EM 24/18/93 (figs. 9 a and b)[45] from Bayındır has a good counterpart in an image on a cross half, said to come from Bulgaria, which is now part of the collection of Christian Schmidt in Munich (10th to 12th c.)[46]. Both stylistic as well as iconographic the two schematic representations of Christ are very similar even if the monogram IC XC is missing on the cross from Munich. A more elaborated parallel comes from the Benaki Museum in Athens and is said to be from the 11th century[47]; one has only to compare the dress of the Virgin or the additional decorations with punches. Other comparisons worth mentioning are for example a cross in the University Museum of Toronto[48] or a cross in the Schnütgen Museum in Cologne[49], the latter showing also star motifs on both sides of Mary. The same iconography can also be found on Bulgarian examples dating to the 10th and 11th centuries[50].

The reliquary cross EM 2136 (fig. 10)[51] allows a more accurate chronological classification: Because of the specific head shape, the cross nimbus and the strands of hair of Christ, this example and its comparisons can be dated to the first half of the 11th century[52].

Engraved reliquary crosses, which show Christ with *colobium* and the Virgin Orans, appear to replace the cast representations of the same iconographic programme during the 11th century[53]. The existence of numerous engraved crosses with identical stylistic details that implies a common hand or workshop and the large amount of cast crosses with the same iconographic programmes suggest a mass production of this series. At the same time, the huge quantity of preserved crosses – there are as many as about 700 known pieces of reliquary crosses[54] – found scattered throughout the Byzantine Empire, points to an extensive trade with these objects during the Middle Byzantine period. The 11th and 12th centuries are considered a high point of the trade in devotional objects and the abundance of these crosses reflects their widespread use[55]. Because, presumably, they were passed on from generation to generation, it is likely that the crosses of the 10th and 11th centuries continued in use during the 12th and part of the 13th centuries[56].

Processional Crosses with Engraved Decoration

The depiction of Christ on the cross flanked by the Mother of God and John as on the reliquary crosses appears also on processional crosses where it directly relates to the medieval iconography of the crucifixion on the Halberstadt Paten (mid-12th c.)[57].

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[44] Benaki Museum Athens, inv. no. 35559: Pitarakis 2006, 260 f. cat. no. 232.
[45] See also A. M. Pülz 2017, 29 cat. 59 pl. 14.
[46] Collection C. Schmidt, Munich, inv. no. 655: Wamser 2004, 196 cat. no. 263 (C. Schmidt).
[47] Benaki Museum Athens, inv. no. 35552: Vassilaki 2000, 311 cat. no. 25 (B. Pitarakis).
[48] University Museum Toronto, inv. no. M82.504, end of 10th to 11th c.: Campbell 1985, 116 cat. no. 159; see also Pitarakis 2006, 261 cat. no. 235.
[49] Schnütgen Museum Cologne, inv. no. H876, 10th to 11th c.: Stiegemann 1996, 201 cat. no. 52.3; see also Pitarakis 2006, 265 cat.no. 249.
[50] Dončeva-Petkova 2011, cat. nos. 82 and 84.
[51] See also A. M. Pülz 2017, 28 cat. no. 55 pl. 12.
[52] See below p. 193.
[53] Pitarakis 2006, 152. 179.
[54] Cf. Pitarakis 2006, catalogue.
[55] Sandin 1992, 63.
[56] Pitarakis 2006, 140.
[57] Mundell Mango 2000, 199 f.; for the processional crosses see for example a cross in the Benaki Museum Athens, inv. no. 11442, 1st half of the 11th c.: Vassilaki 2000, 360 f. cat. no. 41 (A. Drandaki); see also Lafontaine-Dosogne 1982, 173 cat. no. Br.16; Sandin 1992, 297–307 cat. no. 42. – A processional cross in Princeton: The Art Museum Princeton University, inv. no. 33-20, 1st half of the 11th c.: Ćurčić – St. Clair 1986, cat. no. 68; see also Sandin

S. 1 : 1,5

11 a Processional Cross, copper alloy. Antikensammlung, Kunsthistorisches Museum, Vienna, inv. no. VI 3072: front (© OeAW-OeAI, N. Gail)

This iconographic type is also found on an engraved processional cross from Ephesos[58], which is now in the Kunsthistorische Museum in Vienna, inv. KHM VI 3072 (figs. 11 a and b). The cross has slightly flaring arms which terminate in large roundels and small circular serifs at the corners.

On the front (fig. 11 a) Christ with cross nimbus is wearing a *colobium*. The head is inclined to the left. The face shows almond shaped eyes with elongated, curved eyebrows, a very straight nose and a V-shaped beard. The individual strands of hair fall right over his shoulder with slight curls in the neck. A single strand is hanging over his forehead.

1992, 324–328 cat. no. 47; Cotsonis 1994, 64 fig. 24 (photo). – A processional cross in Genoa: Cotsonis 1994, 29. 32 cat. no. 63 fig. 12 a–b. – A processional cross in Munich: private collection C. Schmidt, Munich, inv. no. 87: Wamser – Zahlhaas 1998, 66–69 cat. no. 62 (A. Oepen). – For the Halberstadt Paten see Evans – Wixom 1997, cat. no. 30.

[58] Noll 1974, 27 f. figs. 23 f. cat. no. 15; see also Sandin 1992, 308–315 cat. no. 43; Seipel 2005, cat. no. 104; Nagler 2014, 240–242 cat. no. 20 pls. 28. 29; A. M. Pülz 2017, 32 f. cat. 72 pls. 22–23.

S. 1 : 1,5

11 b Processional Cross, copper alloy. Antikensammlung, Kunsthistorisches Museum, Vienna, inv. no. VI 3072: back (© OeAW-OeAI, N. Gail)

The left crossbar shows the small figure of Mary. Her lower body is shown frontally, while her upper body turns towards Christ. She wears a Maphorion and a nimbus. Both hands are stretched towards Christ. Opposite of her is John, his upper body tilted slightly back in the direction of the crucifixion. He is shown beardless and youthful, dressed with tunic and mantle. He holds the book of Gospels in his left hand while his right hand is raised.

In the upper disc, the frontal bust of John the Baptist is shown. In the preserved right disc is the Archangel Gabriel, stylistically similar to Mary and John. He is shown frontally wearing a *loros* and has a nimbus. In his left hand he holds a globe, in his right a *labarum*, both adorned with small crosses. The outlines of the wings are achieved through double engraved lines.

On the back centre stands the Virgin Orans (fig. 11 b). She is shown frontally with her arms raised. Her figure is very protracted. She has a nimbus and wears a tunic and Maphorion. The materiality of her dress is strongly emphasized by the different folds. Horizontal ribbons adorn the tubular sleeves. To her right and left are Paul and Peter. The upper disc contains the bust of Matthew. The preserved left disc shows the young Luke with a short beard, similar in dress and attitude to Matthew.

In terms of manufacturing technology and palaeography the cross in Vienna belongs to a group of objects made of copper alloy during the first half of the 11th century, namely a processional cross in the Benaki Museum in Athens[59] and a processional cross in Princeton[60], both attributed to the same craftsman, as well as a reliquary cross from Paris[61]. The letters of the inscriptions are of uncial form with double strokes; these are also found in manuscripts as well as on chalices and patens from the second half the 10th century and from the 11th century. These characteristic letters can also be seen, for example, on a votive plaque with the image of St Hermolaos from the 11th century[62].

Also the figurative style and the iconography of the cross in Vienna correspond to the aforementioned crosses, although at the Benaki Cross Christ is shown with a loincloth.

However, the slim proportions and other stylistic details like the almost triangular arms or lack of bleeding wounds on the cross in Vienna differ and were probably not carried out by the same hand[63].

Archangels with *loros*, globe and *labarum* are found very frequently[64]. There is for example an equivalent with the representation of Gabriel on a copper alloy paten from the 11th or 12th century in the Dumbarton Oaks Collection[65]. Characteristics like the crossed *loros*, which covers the whole upper body of Gabriel with a dense network of small-scale ornaments, as well as the steeply raised wings have parallels in a processional cross from Kassandra which is dated to the 11th century[66]. An influence of enamel work from the early 11th century is probably also noticeable on the figure of Gabriel on the Vienna cross as it is on the depictions of the archangel on the cross of Kassandra[67].

The elongated proportions of the Virgin Orans on the back of the Vienna cross (fig. 11 b) are to be seen in contrast to the majority of images of the Virgin Mary on copper alloy crosses such as the Benaki cross. The horizontally structured sleeves that do not occur on the Benaki cross, apparently belong to a type which can be found on a paten from the Ashmolean Museum in Oxford (dating from the 9th to 11th c.)[68] or on a cameo in London (10th to 12th c.)[69], both with the representation of the Virgin Orans.

However the best match for the cross in Vienna might be a processional cross from the private collection of Christian Schmidt in Munich, which suggests a common workshop or even craftsman. The cross in Munich is made of copper alloy and engraved, it is said to come from Asia Minor or the Balkans, and is dated to the 10th or the first half of the 11th century[70].

Although the shape of the cross is different, the image of the crucified Christ with the sideparting, the slightly wavy, long hair and the individual strand hanging over his forehead offers stylistically identical details. Though the *colobium* shows vertical folds, the outstretched arms, the open palms with the details of the fingers and the horizontally positioned V for the crook of the arm, however, are, again, similar to the Vienna cross. Due to the lack of an

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[59] See above n. 57: inv. no. 11442, 1st half of the 11th c.: Vassilaki 2000, 360 f. cat. no. 41 (A. Drandaki); see also Lafontaine-Dosogne 1982, 173 cat. no. Br.16; Sandin 1992, 297–307 cat. no. 42.

[60] See above n. 57: The Art Museum Princeton University, inv. no. 33-20, 1st half of the 11th c.: Ćurčić – St. Clair 1986, cat. no. 68; see also Sandin 1992, 324–328 cat. no. 47; Cotsonis 1994, 64 fig. 24 (photo).

[61] Bibliothèque national, Cabinet des Médailles Paris, inv. no. Schl. 36, 10th to 11th c.: Cat. Paris 1992, 320 cat. no. 234.

[62] Pitarakis 2006, 163; Evans – Wixom 1997, 160 cat. no. 106.

[63] Sandin 1992, 314.

[64] Weitzmann 1972, cat. no. 30. For the *loros* see Parani 2003, 18–27. 42–50.

[65] Sandin 1992, 312; see also Ross 1962, 73 f. cat. no. 90 pl. 49.

[66] Buschhausen 1967, 281–296.

[67] Buschhausen 1967, 288; for the enamelled angel see a medallion on the Pala d'oro in San Marco, Venice: Hahnloser 1965, 51 cat. no. 105 pl. 52.

[68] Mundell Mango 2000, 198. 203 fig. 136; Mundell Mango 1994, 222.

[69] Lafontaine-Dosogne 1982, 125 cat. no. St.4; for the comparison see already Sandin 1992, 313.

[70] Private collection C. Schmidt, Munich, inv. no. 87: Wamser – Zahlhaas 1998, 66–69 cat. no. 62 (A. Oepen).

explanatory text as in the case of the Vienna cross, namely the inscription ›John the Baptist‹, under the upper disc, the empty space on the cross in Munich was used by stretching the upper vertical cross bar with the *tabula ansata*. The representations of the sun and the moon, and especially the form of the letters as uncials with double strokes are comparable to the piece in Vienna.

Whereas the figures show an identical style, the main difference between the two crosses lies in details of the iconographic programme itself. On the left side of the crucifixion on the cross in Munich the bust of Mary is set in a medallion while on the Vienna Cross Mary is depicted standing. The position of their hands, however, is the same: the oversized hands point in the direction of Christ. Both figures wear a long-sleeved tunic with the same horizontal folds on the shoulders and a Maphorion. The multiple dot ornament in the form of crosses, found only once on the garment on the Vienna cross is similar to the piece in Munich. Although the right half of the Munich cross is missing, one can assume that John was depicted as a bust in a medallion.

On the Munich Cross the discs are missing, instead you can find a saint with a pointed beard at the upper end of the vertical crossbar. He has a different hairstyle, namely fringes, compared to John on the Vienna cross, who wears parallel long strands of hair like Christ. According to the inscription the figure is St Akindynos of Persia, who died a martyr's death in the 4th century. He is holding a barely recognisable cross over his chest. The seam of his dress is decorated with rows of punched marks, in contrast to John's which is ornamented with stripes. These decorative stripes are meant to represent the richly embroidered dress seams, which one can find on works in enamel known from as early as the 10th and 11th centuries or on the images on the silver cross from Adrianople[71].

The back of the Munich Cross shows not the Virgin Orans, but the figure of St Anastasia. Both figures are similarly dressed, although their faces differ. Anastasia for example has clearly a rounder face. Nimbus and Maphorion are alike, the position of the hands, however, differs: while Mary is depicted in an orant pose, Anastasia holds both hands in front of the body with a cross in her left. To the right and left side of Anastasia we have to assume busts in medallions, of which only St Procopius, martyred in 303 under Diocletian, is preserved in the right cross arm. He is beardless, with nimbus and short hair. The same iconography is found on St George depicted on the upper crossbar.

To this homogeneous group around the processional crosses in Vienna, Munich and the Benaki Museum also belong reliquary crosses like one example from Ephesos, EM 2136 (fig. 10): Again, one can see the head of Christ tilted to the left, with the cross nimbus and strands of hair falling over his right shoulder. Unfortunately, the single characteristic wisp on the forehead is, due to the bad state of preservation, no longer there. The form of the letters, however, is singular. Other reliquary crosses with the same characteristics are kept in Ankara[72] and Brussels[73]; another processional cross with the same image is in London[74].

SAINTS IN AN ORANT POSE

From the 11th century onwards workshops produced engraved crosses with a wider range of the iconographic repertoire. Based on the standard compositions like the ›Crucifixion‹ and the ›Virgin Orans‹ one can now find images of saints also in an orant pose. The figures themselves,

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[71] For this comparison see Wamser – Zahlhaas 1998, 68 (A. Oepen); for the Adrianopel cross see Evans – Wixom 1997, 59 f. cat. no. 23; see also Mundell Mango 2000, 199 fig. 140.

[72] Museum of Anatolian Civilizations Ankara, inv. no. 8-2-69; end of 9th to 11th c.: Pitarakis 2006, 257 cat. no. 221.

[73] Musées Royaux d'Art et d'Histoire Brussels, inv. no. ACO.75.1.1, end of 10th to 11th c.: Lafontaine-Dosogne 1982, 168 cat. no. Br.11; see also Pitarakis 2006, 258 cat. no. 223 fig. 107.

[74] Pitarakis 2006, 163 fig. 108; see also Temple 1990, 100 cat. no. 66.

12 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 30/5/90: back (© OeAW-OeAI, N. Gail)

13 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 9/30/78: back (© OeAW-OeAI, N. Gail)

however, are standardised and can be characterised by particularly simplified alignment. Typically, the figural representations are mixed with geometrical patterns, thereby obtaining a special visual language. Series with these images, which are produced in workshops throughout the Empire with the main distribution in Asia Minor, are rather of inferior quality. Unlike other media the iconography on the crosses shows ever-constant physiognomic features, where no formal distinction between the different saints can be made. The emphasis lies solely on the orant pose. The different figures can only be identified by existing inscriptions[75].

A series of reliquary crosses depicts the Virgin Orans on one side and, as a counterpart on the other side, a saint likewise in the orant pose, such as it is shown on an 11th-century reliquary cross, with the Virgin Mary and St Stephen, in the Benaki Museum in Athens[76].

The Mother of God, who was in earlier times often called Theotokos, is now listed under several names[77]: ΜΗΤΗΡ ΘΕΟΥ (›Mother of God‹, i.e. EM 30/5/90[78], fig. 12), ΜΗΤΗΡ ΧΡΙΣΤΟΥ (›Mother of Christ‹, i.e. EM 9/30/78, fig. 13) or ΠΑΝΑΓΙΑ (›All holy‹, i.e. EM 3/33/77[79], fig. 14).

In addition, there are also crosses that have saints on both halves. Generally they have beardless elongated faces with a nimbus shaped in the form of the face, large ears and a youthful appearance, which can hardly be distinguished from those of the Mother of God. These crosses are very popular in the 10th, 11th and especially 12th centuries, for example on the Balkans, perhaps related to the numerous images of soldier saints and the wars in this region at these times[80].

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[75] Vassilaki 2000, 312 cat. no. 26 (B. Pitarakis); see also Pitarakis 2006, 180.
[76] Benaki Museum Athens, inv. no. 35556, 11th c.: Vassilaki 2000, 312 cat. no. 26 (B. Pitarakis); see also Pitarakis 2006, 88 fig. 61bis.
[77] Vassilaki 2000, 312 (B. Pitarakis); see also Kalavrezou 1990.
[78] See also A. M. Pülz 2017, 29 cat. no. 60 pl. 14.
[79] See also A. M. Pülz 2017, 29 cat. no. 62 pl. 15.
[80] Marjanović-Vujović 1987, 77.

The most frequently portrayed saint on the engraved crosses is St George[81], originally descended from Cappadocia. He is regarded as guardian, dragon slayer or soldier: usually he is shown in an orant pose, as well as sometimes as a bust in a medallion. The common picture reflects his popularity in Asia Minor in the Middle Byzantine period[82].

From Ephesos several crosses with depictions of St George are known, for example a quite stylized presentation of him on a processional cross made of copper alloy from Torbalı in the Ephesos Museum Selçuk, EM 1/83/92[83] (fig. 15). The item is very finely engraved and stippled with triangular punches. The Latin cross shape has flaring arms and terminates in slightly concave retracted ends, the corners are decorated with circular discs or serifs. They all show a motive of deep cross-shaped lines and semi-circles in the corners. The tang is separately attached by a rivet.

14 Reliquary Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 3/33/77: back (© OeAW-OeAI, N. Gail)

In the middle stands St George in an orant pose with inscription. He is wearing a long garment and a cloak decorated with oblique hatchings. In the centre the skirt exhibits a vertical strip with an intertwined interlace motif. The arms of the figure are depicted anatomically incorrect. The schematic head is elongated, the eyes are cut almond-shaped, the eyebrows arched. He has a straight nose and a double line for the mouth. Around the head, there is one line that probably suggests the hair and another which represents the nimbus. The figure is clearly beardless. Above the figure there is a sort of canopy, decorated with triangular punches and oblique engraved hatchings at the corners. Below on either side is a half palm leaf. In the horizontal crossbar two more schematic figures are shown, identified by an inscription as John and Peter. They are displayed in the style of St George but are represented as busts. They are clad in a coat with oblique decoration.

A nearly similar schematic and anatomically incorrect reproduction of St George can be found on a reliquary cross made of silver with Niello decoration, which is part of the collection of Christian Schmidt in Munich[84]. The cross is said to come from the Eastern Mediterranean and is dated in the 11th century.

A comparable ornamental motif with intertwined interlaces can be located in the middle strip of the skirt of a MHTHP ΘEOY representation from the 11th century, mounted on a reliquary cross in the Sadberk Hanım Museum in Istanbul[85].

According to these comparisons the cross from Torbalı (fig. 15) can also be assigned to the 11th century.

Another processional cross with the depiction of St George derives from the Basilica of St John, EM 11/30/78[86] (fig. 16). The cross is made of copper alloy, the representation is finely engraved and decorated with triangular punches. In the corners of the flaring arms there

[81] For the representation of St George on reliquary crosses see Pitarakis 2006, 91 f.
[82] Walter 1995; Walter 2003, 109–144.
[83] See also A. M. Pülz 2017, 3 cat. no. 68 pl. 18.
[84] Collection C. Schmidt Munich, inv. no. 475: Wamser 2004, 193 cat. no. 255 (C. Schmidt); see also Stiegemann 2001, 311 cat. no. IV.37 (C. Schmidt).
[85] Sadberk Hanım Museum Istanbul, inv. no. H.K. 296-4825: Pitarakis 2006, 313 cat. no. 403 fig. 100.
[86] See also A. M. Pülz 2017, 31 cat. no. 69 pl. 19.

15 Processional Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 1/83/92: front (© OeAW-OeAI, N. Gail)

are small circular discs or serifs, which are decorated with rows of circle-and-dot punches. An engraved line follows the entire shape of the cross.

The frontal figure of St George is dressed with an oblong garment, decorated with many different motives. Under the skirt the legs adorned with dots are visible, the feet are turned laterally outwards. The upper part of the body has rounded shoulders and is almost semi-circular, the coat is decorated with little crosses. The elongated head narrows towards the chin. The very schematic face has almond shaped eyes, a long pointed nose, a mouth made of double lines and bulges as ears. Vertical engraved lines indicate short fringes. The nimbus is filled with a row of punch marks.

The cross belongs to a series of representations, which includes a processional cross made of copper alloy, also with the depiction of St George, located now at the Royal Ontario Museum in Toronto dating from the 11th century[87]. Like the piece from Ephesos the outline of

[87] Royal Ontario Museum Toronto, acc. no. 962.171.1: Cotsonis 1994, 102 cat. no. 12 fig. 36 (date: 11th or 12th c.); see also Keeble 1982, cat. no. 5. According to Pitarakis 2006, 162 fig. 104 the cross is to be dated in the 11th c.

16 Processional Cross, copper alloy. Ephesos-Museum, Selçuk, inv. no. 11/30/78: front (© OeAW-OeAI, N. Gail)

the cross is engraved with a single line, the serifs however remain undecorated. The corners are ornamented with three engraved lines and not with two as on the cross of the Basilica of St John – probably following the extra-mounted circular serifs on the embossed silver crosses[88]. The iconographic type of representation seems the same, although the details differ. The figure is shown schematically, flat, frontal and highly stylized. The garment is richly ornamented and accords, for example, in the diamond pattern of the skirt or the bulky upper body and arm position, but differs in terms of the decoration of the upper part of the body.

The same stereotypical characters can be found on engraved reliquary and processional crosses from the 11th century, for example, in Istanbul[89], in Berlin[90], Chicago[91] and New York[92].

Since the comparable examples, which by their engravings imitate the decorative patterns of the more complex fabricated and embossed silver crosses, are assigned to the 11th century, the cross from the Basilica of St John (fig. 16) belongs in this period as well.

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[88] For example on a processional cross made of silver with the representation of the *Deesis* and saints, 11th c., in the Cleveland Museum of Art: Cotsonis 1994, 68–75 cat. no. 2.

[89] See above n. 85. Sadberk Hanım Museum Istanbul, inv. no. H.K. 296-4825: Pitarakis 2006, 313 cat. no. 403 fig. 100.

[90] Reliquary cross in the Museum für Spätantike und byzantinische Kunst, Staatliche Museen zu Berlin, inv. no. 2500, 11th c.: Wulff 1909, 197 cat. no. 930 pl. 45; see also Pitarakis 2006, 313 cat. no. 404 fig. 101.

[91] Reliquary cross in the Smart Museum, University of Chicago, inv. no. 1988.45, 11th c.: Pitarakis 2006, 316 cat. no. 411 fig. 103.

[92] Processional cross in: Nesbitt – Demirjian 1988, 15 cat. no. 10; see also Pitarakis 2006, 162 fig. 105 (photo).

CONCLUSIONS

Based on the range of the Ephesian material shown here one can conclude that the crosses known from Ephesos correspond to the common iconographic programmes of the Middle Byzantine period. In case of the reliquary crosses there is neither a focus in the illustrations linked to St John and his pilgrimage site in Ephesos, nor to other saints specially worshipped in Ephesos and local traditions. That means that the eponymous patron of a church or pilgrimage site apparently does not necessarily serve as a representation depicted on pilgrimage implements; one need only to compare the images on the pilgrim ampullas[93].

Likewise there is so far no reference to a production workshop for reliquary crosses in Ephesos itself, even if one can not be excluded principally. The materials originally kept in the reliquary crosses, which have been preserved in some crosses, although not in Ephesos, are bone fragments, pieces of cloth, small stones, residues from balsam, incense or perfume[94]. In relation to Ephesos one can assume that the reliquary crosses served as boxes for the Ephesian *manna*[95].

According to the current state of knowledge, we have to assume that the reliquary crosses were either brought to Ephesos by foreign pilgrims of St John for the *manna* or derive from the Ephesians themselves, having returned from a pilgrimage.

Approximately 20 per cent of the currently known reliquary crosses come from archaeological contexts and here mostly from graves[96]. They were found either on the chest of the deceased or in their hands. The owners of these crosses were, judging from anthropological features, apparently both men and women as well as children from all social classes[97]. In literature the reliquary crosses often are called pectoral crosses, worn suspended from a chain around the neck. Size, weight and the massive attachments of the reliquary crosses, however, raise the question of the usefulness of this function. Also, the double-sided decoration would not necessarily be required on pectoral pendants, apart from an ›Art in Secret‹[98]. Even if some reliquary crosses were found on the chest of the deceased, one should not assume an exclusive role as pectoral crosses but consider the possibility of multi-functional objects. This suggests for example the discovery of a reliquary cross from Assos: The position of the cross in the area of the apse near the eastern wall of the burial chapel of the Middle Byzantine church implies that originally the reliquary cross was hung in the apse[99]. In my opinion an everyday use of reliquary crosses, such as a pendant around the neck of the Christian, is to be excluded. Rather, they may have been pilgrim souvenirs from abroad brought home, where they perhaps found use in the domestic Christian worship.

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[93] Cf. the pilgrimage ampullas discussed by A. Pülz: Pülz 2017.
[94] Vassilaki 2000, 308 cat. no. 23 (B. Pitarakis).
[95] Pülz 2012, 240.
[96] For the analysis see Pitarakis 2006, 139.
[97] Pitarakis 2006, 142.
[98] See for example some exquisite gold jewellery from the Early Byzantine period: Deppert-Lippitz 1995, 134 f.
[99] Böhlendorf-Arslan 2011, 239 f.

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FORM AND MEANING IN THE MOSQUE OF İSA BEY AT AYASOLUĞ*

INTRODUCTION

Every Muslim city needs a mosque, encapsulating the central paradox of Islamic civilization: where the community gathers in conformity, the individual finds a platform upon which to discover the self. Ayasoluğ was no exception. At a time when the Emirate was at the height of its power and had many achievements to its credit, İsa Bey determined to build a mosque that would vie with those of the other great cities of the period. Declining to challenge the sacred site of the basilica of St John, he chose a site at the foot of the hill. His building still stands, ruined and faded perhaps, but like the Parthenon, impressive in its sonorities and speaking of the beauty of a rich austerity. It was truly for its time and place a magnificent achievement and exercised a profound influence on the subsequent development of early Ottoman architecture.

FROM CATHEDRAL TO MOSQUE

Ephesos fell to the Turks under Sasa Bey on 24th October, 1304, after which the occupying forces, despite assurances to the contrary, immediately set to looting the great church of St John and subsequently to deporting the majority of the population to Tire, seemingly owing to fear of revolt. This latter point is important and we shall return to it later. Yet by the reign of İsa Bey's predecessor, Hızır Bey (c. 1325 – c. 1360), the city appears to have made a rapid recovery and was once again a centre of international trade. Yet there was still religious tension between the incoming Moslem and the native Christian populations. The Dusturname-i-Enveri, a Turkic epic celebrating the heroic deeds of Umar Bey, a brother of İsa and Hızır states quite baldly that »The Aydınoğlu, coming to Ayasoluğ, having conquered it and its dependencies, made many of its churches into mosques«[1].

This was of course common practice as can be seen from the numerous ecclesiastical acta and other sources that survive from the period[2]. But what is interesting is that the Arab traveller, Ibn Battuta, tells us that the principal mosque was in fact the converted Church of St John and accurately describes the building, although it had been plundered and looted during the conquest[3]. Indeed this is attested by other travellers, such as Bodensele and later, sometime between 1336 and 1341, by Ludolf of Suchem, who amusingly

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* Due to the suprising and regrettable death of Adrian Saunders his contribution is printed in its original form.

[1] Le Destan d'Umar Pacha, Dusturname-i-Enveri (trans. I. Melikoff-Sayar, Paris 1954) 47.

[2] So George Pachymeres II, 589. He describes the treasures of the church being everywhere confiscated.

[3] Ibn Battuta. Seyahatname (Turkish translation M. Şerif Paşa, Istanbul 1907, repr.) 220 ff. Also, The Travels of Ibn Battūta (ed. H. A. R. Gibb, Cambridge 1962) II, 444 f.

relates that although the church was the principal mosque of the city, the local Turks were in the habit of allowing Christians to venerate the tomb of St John upon payment of a fee[4].

But the most telling testimony to the reuse of Justinian's great church as a mosque comes from the surviving correspondence of Matthew, Metropolitan of Ephesos, who after many vicissitudes finally reached Ayasoluğ[5] some time between June 1339 and February 1340. His was an unhappy experience and he felt acutely the humiliation of being the metropolitan of one of the greatest sees of Orthodoxy, living in a hovel and serving six priests, in a run down chapel, while on the hill – »… living nearby the great church, we see the Corybants leaping up on the roof, daily, shouting out aloud the utterances of their worship as loudly as they can. And upon whichever of our churches we happen, we are thrown aside like some hierarchs without cities and without metropolitanates«[6].

Allowing for the exaggerations of Byzantine rhetoric, with its venomous reference to Corybants, it is a vivid picture.

What does emerge from Matthew's account of his reception by Umar in Smyrna and Hızır in Ayasoluğ, is that the Turkish authorities were in no hurry to receive a high ranking official from Constantinople bearing letters from the Emperor and claiming jurisdiction over the conquered peoples in the Emirate. We mentioned fear of revolt before. It is not stretching the bounds of probability too far to suggest that both Umar and Hizir saw the presence of the Metropolitan as a renewed focus for resistance against their own new and still potentially unstable regime.

Despite Ibn Battuta's fulsome description of the church, which praises its fine structure and the costly materials from which it was constructed, one wonders what sort of condition the building was in before and after its conversion to a mosque. We know that by the middle of the 12th century, the fabric of the church was probably already in serious decline. George Tornikes, to his horror, like so many Constantinopolitan prelates, found himself appointed Metropolitan of the city from 115–1156, or as he saw it, condemned to a virtual exile far from the capital. He describes the Ephesians as »more savage than tigers and more treacherous than foxes«, and vividly describes the basilica itself: »Hedgehogs lived in it, owls slept in it, and the upper story because of the abundance of birds had become like a marsh. The whole building was filled with the hooting of owls and was spattered with bird droppings.« He further describes the physical condition of the building. »The art had deteriorated and the church was a positive menace. Daily, bits of mosaic cascaded from the domes.« He adds that when he walked around the church, »he did so in constant fear of being brained by falling mosaics and plaster«[7]. Somewhat later, the earliest account of the city under the Turks comes from St Sabas the Younger, coming to Ephesos whilst following the pilgrimage route from Mount Athos to Jerusalem in 1310. He also saw much sadness and decline[8]. Again, these accounts are surely exaggerated, for the building was still standing and contained plenty of plunder for the incoming Turks and was sound enough to be reused as a mosque. We should also set against these Byzantine accounts the description of prosperity given by Ibn Battuta, an impression confirmed by the material remains. Byzantine authors of the period tended to dwell rhetorically on the plight of their fellow countrymen and co-religionists, rather than describing the prosperity that returned to the city with the peace imposed by the rulers

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[4] *Turci … locum sepulchri s. Iohannis in quondam crypta christianis ostendunt pro pecuniis.* Cited in S. Vyronis, The Decline of Medieval Hellenism in Asia Minor (Berkeley 1971) 348 n. 283.

[5] The precise dates are uncertain.

[6] Vyronis op. cit. 343 ff.

[7] This paraphrase is based on C. Foss, Ephesus after Antiquity. A Late Antique, Byzantine and Turkish City (Cambridge 1979) 135 f.

[8] Foss op. cit. 14 and n. 15.

of the House of Aydın. What we should probably envisage, therefore, is rather a venerable building that showed evident signs of decay and that by the time of its conversion to a mosque in 1304, having been thoroughly looted, was probably little more than a patched and empty shell, but still serviceable. More seriously, it was still seen as a primarily Christian place of worship by much of the surrounding population and the pilgrims who continued to visit it.

What was needed then in the Turkish 14th century was a building that was authentically Islamic and that was able to make statements about the Aydınoğlu dynasty and the universality of their faith. It is my contention that İsa Bey's mosque, conceived on a monumental scale, was deliberately designed to do just that. After the economic decline of the last Byzantine decades had been halted, Ayasoluğ was now enjoying a rapid and spectacular economic recovery[9] under the House of Aydın and as the new capital of the Emirate was to become the showplace of the regime.

THE BUILDING OF THE MOSQUE

Unlike his brothers, İsa Bey had not during the lifetime of his father, Mehmet Bey, been allotted territory to rule. Instead he had remained behind in the then capital of the Emirate, Birgi. This to my mind is extremely significant, as he would thus have lived in the shadow of his father's own magnificent mosque, constructed in 1312[10]. The mosque at Birgi is large and spacious and is innovative in several of its features. It represents in a sense a transitional stage from the traditional pillared halls of Anatolia, such as the Eşrefoğlu mosque at Beyşehir, and the lofty Syrian style of İsa Bey's own mosque in Ayasoluğ. With four rows of pillars, the mosque has four side aisles opening onto a higher central aisle culminating in a dome over the mihrab. The reused ancient stone pillars are widely spaced, thus avoiding the ›forest‹ appearance of the Anatolian buildings, giving a sense of lightness and elegance. The dome privileges the mihrab, finely executed in the Seljuk manner in turquoise and plum coloured faience, leading the eye toward the spiritual and architectural focus of the whole structure. Furthermore, the structure is adorned with finely written sacred calligraphic texts and wood carving of superlative quality. The cumulative effect is one of restful refinement and quiet contemplativeness. As so often in the architecture of the Beylik period, many of these features are quite innovative, if not unique, confirming the impression that the architecture of the period was always experimental, and had not settled down to using a vocabulary of accepted forms. Indeed, this is a feature that can be observed here in Selçuk, not only in the great mosque, but to a striking degree in the articulation of the bath houses, or hammams, surviving from the period. That many of the unusual features of İsa Bey's mosque derive ultimately from the mosque at Birgi cannot be coincidental. It is surely the case that by deliberately echoing motifs, even the choice of texts used in the mosque, İsa Bey is quite consciously establishing a connection between his and his father's building; it is a true successor, and so expresses a clear statement of the legitimacy of İsa's rule, his connection to his father and to the previous capital of the emirate, and by its size, a clear statement of the expansion, power and prosperity of the dynasty.

İsa Bey chose to build his mosque at the foot of Ayasoluğ hill, to the west, overlooking and dominating the extensive quarters that extended over the district. Recent excavation has

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[9] Recovery was rapid. At the beginning of the Beylik period we read of the Turks trading relics – a fragment of the true cross, a shirt woven by the Virgin Mary and St John's autograph of the Apocalypse – for grain in 1307. R. Muntaner, Chronicle (trans. by Lady Goodenough, Cambridge, Ontario 2000) cap. 234. P. Lemerle, L'émirat d'Aydın (Paris 1957) 26 n. 1 notes that these relics appear to have been translated by the Latins to Phocaea. He stresses that the dating for this decade is extremely uncertain. By the end of the ensuing decade however, the signs of rapid recovery and growth are undeniable and Ayasoluğ plays a major role for the rest of the century.

[10] Foundation inscriptions given in R. H. Ünal (ed.), Birgi: Tarihi, Tarihi Çografyası ve Türk Dönemi Anıtları (Ankara 2001) 76 ff. A plan of the building is given on p. 62.

uncovered, and still is revealing a prosperous and well populated settlement engaged in a wide range of mercantile and industrial activities, interspersed with numerous foundations and structures – tombs, baths, and so on – of an explicitly Islamic nature. İsa Bey's mosque would and still does dominate the quarter and can be seen from a great distance. But there is, I believe, another reason for the location. The great church on the hill, now functioning as a mosque, still contained the tomb of St John. The writer of one of the books of the New Testament, the Islamic ›injil‹, knew and was loved by Jesus Christ. He was thus a companion of a Prophet revered by Islam. It was fitting therefore, in my opinion, that İsa Bey also chose to build at the foot of the hill as a sign of respect and humility. The location of the mosque thus functions on two levels: firstly as an expression of power and dominance over the new capital, and secondly as an expression of İsa's subordination to a major religious figure, establishing thereby his righteousness as an Islamic ruler.

Despite the more subtle links to Birgi, which we shall examine in detail later, it is clear that the new mosque was designed from the start to be something strikingly new. İsa engaged as his architect a Syrian, Ali Ibn al-Dimashqi, who worked boldly and innovatively, introducing something entirely original into the architecture of Asia Minor. The scale is colossal, the whole forming a huge rectangle measuring 56.53 × 48.68 metres and the building followed the layout of the monumental Umayyad mosque of Damascus, constructed in 706–714/15. As its predecessor, the prayer hall occupies one broad flank of the rectangle, the rest forming an open court surrounded by columned arcades, with a fountain, or *şadirvan*, in the middle. The German scholar, Katherina Otto-Dorn, has stated that this is the oldest known example of a Turkish mosque with a courtyard[11]. This however cannot be right. Godfrey Goodwin correctly points out that the Ulu Cami at Manisa, constructed by Ishak Bey of the Saruhan clan in 1374, shortly before İsa Bey started construction on his own building, also has a courtyard as an integral part of the structure[12]. The İsa Bey courtyard is unique in that the courtyard forms an integral part of the sacred space and can, like the prayer hall, function as a space for prayer, thus making it a part of the prayer hall[13], and allowing a flow of space from court to hall. This is incidentally confirmed by an interesting reference in the account of the mosque given by the Ottoman traveler, Evliya Çelebi. He notes that visitors to the mosque were required to remove their shoes at the entrance to the courtyard, thus preserving the ritual purity of the space[14]. This is in fact a Syrian custom and suggests that the architect's intention was indeed to create a series of integrated sacred spaces, where prayer as well as the other intellectual activities of the mosque could be performed.

Leaving aside such examples as the mosque at Dunaysır in south-eastern Turkey (culturally and geographically a part of medieval Syria), İsa's mosque is certainly the earliest example of a Turkish mosque with a domed central aisle and transverse transepts, building on the sense of space encountered in his father's mosque, and extending outwards from the mihrab in the manner of the Umayyad mosque to enhance that sense radically. Indeed the modern visitor to the mosque is still struck immediately by the overwhelming calmness and size of the space. A further feature is that the mosque originally had two minarets, one at each end of the prayer hall, forming an architectural transition from hall to court. Apart from the pairing of minarets over a portal in the Persian manner in the mosque-madrassas of eastern Anatolia at Erzurum and Sivas, this occurs nowhere else in the period and certainly not in conjunction with prayer halls, and it is not until the Ottoman period that we encounter multiple minarets attached to mosques, and then only in royal foundations endowed specifically by

[11] K. Otto-Dorn, Die İsa Bey Moschee in Ephesos, IstForsch 17 (Berlin 1950) 115–131.
[12] G. Goodwin, A History of Ottoman Architecture (London 1971) 93 ff.
[13] This develops in Turkey into the Ottoman *son cemaat yeri*.
[14] E. Çelebi, Seyahatname 10 (Istanbul 1935) 137–144. He also observes the similarities to the Umayyad mosque in Damascus.

the Sultan[15]. Given the connection with royalty in the Ottoman period, it is not unreasonable to suppose that the building of two minarets in our mosque was motivated by considerations of prestige, and demonstrated the increased prosperity and well-being of İsa's reign. These minarets are interesting for another reason. The patterning on the brickwork, forming a tessellation of lozenge shapes, is found on nearly all the beylik minarets in Selçuk and furthermore on minarets of the same period at Tire, another important city of the beylik further up the valley between Selçuk and Birgi. While there can be no doubt that the two minarets were an integral part of Ali Ibn al-Dimashqi's plan, this suggests that the construction and design of the minarets were left to local architects, thus connecting the building visually to other prominent landmarks in the beylik.

As at Birgi, the building was lavishly faced on its principal outer façade with polished marble taken from the abundant resources available in ancient Ephesos, and spolia or reused sculptural fragments were incorporated into the structure. On the base of the surviving minaret, for example, a fragment of a richly decorated entablature from a Roman building has been placed high up on the corner, visually balancing the arch opposite and giving the eye relief from what would have been a heavy and blank surface. This reuse and deliberate placing of ancient spolia is by no means uncommon – a good example can be seen, during the 13th century Pervane-oğullar period, in the framing with two Corinthian column capitals of a building inscription at Sinop in the citadel walls, thus privileging the inscription and enhancing visually once more a large expanse of blank façade. A most unusual example can be seen at Birgi, where despite the Islamic prohibition of images, a stone lion placed on the corner serves to balance the elaborate door composition in the centre of the façade, with the minaret on the same corner. In the mosque of İsa Bey, of course the most impressive example of reuse of spolia is the re-erection of the four colossal columns, most probably from the harbour baths at Ephesos, in the prayer hall. They have been placed with care, two red Aswan granite columns at either end framing a pair of monoliths in grey, that themselves frame the view towards the mihrab, itself decorated in the Syrian manner with sinuous bands of marble in grey and black. Yet perhaps the most interesting use of spolia can be seen on the lintel of the door in the west portal. I should like to suggest that the calligraphy on this Arabic piece is much more simple than the florid style favoured in the rest of the building. Indeed, it seems on stylistic grounds to be so much earlier. I wonder therefore if perhaps the inscription was brought from a much earlier building, from further afield and placed in İsa Bey's mosque. Of course, this is hypothetical, but not unlikely. Inscriptions do move from building to building, as indeed some of the inscriptions of this mosque now rest in Islamic buildings elsewhere, as we shall see. If this is so then some very interesting implications are raised. The visible presence of classical spolia in this Islamic building does establish a connection with and an appropriation of the past and its association with an Islamic present – were that to include Islamic spolia as well, then we should have a broader sweep of history culminating in the grandeur of this mosque and coming to completion in the enhanced prestige of İsa Bey's rule, and connecting İsa Bey to the heritage of an authentic Islamic past.

Like his father's mosque in Birgi, İsa Bey's mosque was richly decorated, although the smaller and more intimate scale of the former renders the decorative elements more prominent. At Birgi, calligraphy is finely executed in wood and adorns the window shutters and the magnificent mimber, or pulpit, by the carver, Muzaffir ed-Din bin Abdu'l Wahid. The mihrab in rich dark Turquoise, balanced by the tile composition of the dome-aisle arch, sheds a subdued radiance, and the effect is that of drawing the viewer into a close relationship with the composition of the whole. In the mosque of İsa Bey the sheer size of the structure

[15] So the duplication of minarets on the very Ottoman mosque of Muhammad Ali in Cairo sends significant messages to the viewer and to the government in Constantinople as to how the Pasha understood his own usurped authority.

makes such effects impossible, and the emphasis is on grandeur rather than intimacy. An engraving by Faulkner suggests that a panel of calligraphy in tile ran round the prayer hall. Of this, if ceramic, nothing survives. I suggest however that it was painted and that two small fragments do survive. The exterior calligraphies, meanwhile, are deeply cut, allowing the light to enhance and embolden the effect, while those in the prayer hall, though high up and thus difficult to read, tend to provide accent and detail to the main elements of the structure. As so often in an Islamic building, the main decorative elements are concentrated in the portal, the windows, the mihrab and mimber, underscoring in the latter two locations the importance of the *qibla*, or direction of Mecca, and so the orientation of the whole building.

The principal façade on the west is superbly revetted with marble and carries the richest decoration of the whole building. The windows are framed with elaborate *muqarnas*, or stalactite vaulting and inlaid stonework, which, occurring throughout the mosque, is executed in the Syrian manner and features many Egyptian decorative motifs, creating complex interlacing patterns. These patterns may have been repeated in the colonnade, where exiguous fragments of incised plaster bearing such interlaced patterns still survive on the courtyard walls. It would be unusual for the walls to be decorated thus, but may however be evidence that the patterns used in the mosque were sketched and planned on the wall plaster during the mosque's construction. Given the uniqueness of these patterns in Anatolia, it can hardly be doubted that Ali ibn al-Dimashqi was responsible for the design of these himself[16]. Indeed in the earlier period, it was not uncommon for architects also to take responsibility for the decorative scheme. That over the West portal is particularly interesting, as the circle forming the centre should properly contain the name of God – Allah – but due to subsequent restoration does not[17]. It can however clearly be seen in the engraving by the 19th century traveller and antiquarian, Edward Faulkner. That it was not replaced when the damaged façade was restored is inexplicable, as it gives focus to the whole design and symbolizes eloquently the ›centred-ness‹ of God, a common theme of Islamic spirituality. The composition is further compromised by the loss of a very elaborate calligraphic inscription that filled the top of the portal. Be that as it may, the whole, though attenuated, is impressive, as the portal rises, like a Persian *pishtak*, or monumental portal arch, and dominates the façade. The other portals, on the northern and eastern facades are also decorated, relieving the weighty expanse of wall, but they too have lost their inscriptions[18]. These we know, and can identify in their new locations in Izmir, from further engravings by Faulkner to have been finely carved, combining kufic and thuluth styles of calligraphy against a lacy floral background – a striking and commonly used technique that can be seen most strikingly in the 14th century mosque of Sultan Hassan in Cairo. In İsa Bey's mosque the technique is best displayed in the fine panel of calligraphy surviving over the mihrab and reconstructed from fragments recovered from Izmir, reading:

In kufic: »In the name of God the Compassionate and Merciful. God, the All High and Most Blessed, be He glorified, said:

In thuluth: »God and His Angels send blessings on the Prophet: O Ye that Believe, Send blessings upon him, and salute him with all respect.«[19]

The loss, or displacement of these portal inscriptions is greatly to be regretted, as like the mihrab inscription, they carried texts appropriate to their location. Indeed it should

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[16] Perhaps not quite unique. there is the one-off example of the portal of the Karatay Medresesi in Konya.

[17] A. Haydar Bayat, Anadolu Beylikleri Döneminin En Önemli Eserlerinden Aydınoğlu İsa Bey Camii Kitabeleri. TTK (Ankara 1991) 953.

[18] That from the north is now in the İzmir Kestanepazarı Camii, and that from the east is in the İzmir Çorakkapı Camii. Bayat. op. cit. 944–945.

[19] Qu'ran XXXIII, 56.

be pointed out here that the function of Islamic calligraphy was not merely to adorn, in the absence of a specifically figurative art. These calligraphic compositions were also meant to be read by those who could, as they allowed the building to speak. The texts of the İsa Bey mosque fulfilled these functions, with the portal inscriptions reading as follows: On the east a statement that those who are truly pious shall dwell in Paradise and a further text admonishing patience and its reward[20], and on the north a definition of the articles of rightly guided belief – in God, the last Day, prayer, almsgiving and not worshipping any other but God. Reference is made to the brotherhood of the faithful[21]. Taken with the creed of Islam on the West door, that there is no god but God, and Muhammad is His Prophet, the three add up to an impressive statement of what Islam is, how it is attained and what are its rewards. When taken further in association with the Mihrab inscription, extolling the Prophet, then the whole becomes an eloquent exposition of the two halves of the creed: there is no god but God – and what that implies in terms of worship and practice – and Muhammad is His Prophet, chosen by God as his final messenger. The remaining inscriptions in the prayer hall and over the windows are taken from a body of authentic sayings of the prophet, known as *ahadith* (singular – *hadith*) These sayings comprise a huge stock of information on the subject of religious practice and attitude. One in particular deserves our attention. Over the lower window to the right of the principal west portal is quoted a saying of the Prophet: »Indeed these works are performed with intent.« This inscription is interesting for several reasons: firstly because it underscores a fundamentally important Islamic doctrine that action is invalid if intention has not been expressed, in other words that an action is validated by spiritual awareness of the meaning of that action; secondly, because it refers then to the admonitions given elsewhere on the building regarding the nature of belief and practice; and thirdly because it validates doctrinally and spiritually the construction and thus the meaning of the mosque. But what is also very significant is that the majority of these texts are repeated from İsa Bey's father's mosque at Birgi, thus establishing explicitly, rather than suggestively, a connection with that earlier building.

There remains one more inscription to be considered. This is the foundation inscription that runs in a broad band in the portal above the west door[22]. Most mosques have a foundation inscription. This one gives the name of the founder, İsa Bey, the date, 9 Shawwal 776 (13 March 1375), and then most unusually, the name of the architect, Ali Ibn al Dimishqi. It is very rare in this period for a craftsman to be associated publicly with a Sultan or ruler[23], but here we have it, interestingly in slightly smaller lettering towards the end of the inscription. Yet again we can find parallels in Birgi, and in Ayasoluğ the practice becomes common with many stonemasons and calligraphers signing their work. We are tempted to see in this an explicit reference to İsa Bey's known patronage of artists, following in the footsteps of his father, again enhancing his prestige as a scholarly and generous patron.

To recap, then, what we really see in this mosque is a procession of images, reinforced by the calligraphic texts that make poetic statements both about the truths and about the accessibility of Islam. The principal portal dominates the mosque. Opening onto a huge and once colonnaded courtyard, now grassed and shaded by trees with the quiet gurgling of a central fountain – it recalls the images of Paradise ubiquitous in the Holy Qu'ran: shade, trees, greenness and the flowing of water. Thus the portal leads the eye of the viewer upwards and inwards. Its bold interlacing of black and white marble creates an intricate

[20] Qu'ran XV, 45/6; XXXIX, 73.
[21] Qu'ran IX, 11, 18.
[22] Text in Bayat, op. cit. 953. Also H. Akın, Aydın Oğullari Tarihi Hakkında Bir Araştırma (Istanbul 1946) 118–119.
[23] There is a further example in the bilingual Greek Arabic inscription in the citadel at Sinop. But that is unique for a number of reasons. This reference and a photograph were kindly supplied by Professor Scott Redford. During the Ottoman period, artists regularly sign their work, but again rarely in association with the reigning Sultan.

geometry, which though incomplete as a design still spells the name of God, a design which is later echoed in the mihrab in the prayer hall. Inside, as the viewer allows his eyes to be led skyward to the dome over the mihrab, tiles of turquoise and black depict a geometry of stars, interlaced in a pattern of bewildering complexity; and so the mosque, as so often in the Islamic tradition, illustrates the visible signs in the universe that point to divine truth: »In no way did God create this except in truth and he shows these signs to men that understand.«[24]

Or more explicitly: »See, in the creation of the heavens and the earth and the alternation of day and night, there are signs for those with insight.«[25]

So the prayer hall itself, running along the east side of the court, with a double dome leading to the mihrab has a well defined focus. The great columns of Egyptian granite, with rich floral and stalactite capitals, carry the natural growth of the court and of the world outside the mosque into the hall – as in a well crafted sentence, one idea leads to another; trees still flourish under the heavens. And always there is the mihrab, the focus of the community and the individual, hinting at the tension often expressed in Islam between One-ness and multiplicity. In the words of Annemarie Schimmel: »God is One, but with creation, duality comes into existence, and from duality, multiplicity grows.«[26]

The form of the mosque really does express the role of the individual in the community and in the world who prostrates himself before God in worship, and the community itself – the *ahl-al qibla* – the people united in the direction of prayer – as the identity of Islam.

Yet a mosque is not only a place of prayer. Mosques were, and are, places of enquiry and debate; the Arabic word *jami'* – Turkish *cami* – means a place in which to gather. Such was the reputation of Ayasoluğ during the reign of İsa Bey that scholars came from all around – Islamic scholarship has always been the scholarship of the travelling scholar *par excellence* and herein lies the most remarkable thing of all. İsa Bey himself was skilled in Arabic and Persian – the literary languages of the period, as is shown by his surviving commonplace books containing poetry, works of religion, philosophy and the calendar. His was a wide and typically Islamic culture, combining practical erudition with speculative thought. Like his brother and predecessor, Hızır Bey, he invited scholars to his court. In this, Muslim emirs tended to similarity with renaissance princes, insofar as scholarship and art broadcast that all important virtue of ›glory‹. Just as the princely courts of Italy enhanced their prestige by offering generous patronage to writers, scholars, artists and architects, so İsa Bey did the same. We have seen, for example, evidence of his willingness to acknowledge his architect, as his father did his artists, giving credence to the precepts contained in that most renaissance in spirit of Arabic texts – al Ghazali's »Mirror of Princes«. İsa Bey and his brothers knew enough of Europe to see themselves as ›princes‹, an ideology later so important during the Ottoman period.

For his mosque he sponsored the production of a magnificent Qu'ran in thirty parts[27], of which one part survives in a private collection[28], and encouraged the work of a number of prominent men of letters. We may consider a few examples. From Konya came Hajji Pasha who had learned of İsa's patronage and generosity while he was studying at Cairo at the famous hospital or *bimaristan* of Sultan Qalawun. Whilst he was at Ayasoluğ, he wrote an

[24] Qu'ran, X. 5
[25] Qu'ran, 3, 190.
[26] A. Schimmel, Deciphering the Signs of God: A Phenomenological Approach to Islam (New York 1994) 228.
[27] Foss op. cit. 161, must be wrong when he refers to the production of thirty Qu'rans.
[28] S. Ünver, Ilimler Tahrimizde Aydınoğlu İsa Beyle Şahsina Ait Mecmuanin Ehemmiyeti Hakkında, Belleten 24, 1960, 451.

important medical text, which he later translated into Turkish[29], dealing with diagnosis and treatment derived partly from Galen and Ibn Sina[30], thus carrying on the Aydınoğlu tradition of sponsoring medical research – we know of important medical schools at Birgi and Tire, where many of the books produced during İsa's reign still survive. We know also of one Yakub bin Mehmet Fahri who produced a translation of the Persian romance ›Khosroes and Shirin‹[31]. A companion of Hajji Pasha, Yusuf an-Nuri, also came from Cairo and translated works on religion and the theory of the administration of the state. Yet another who had been studying in Cairo, Ahmedi, the greatest Turkish poet of the 14th century, took up residence in Ayasoluğ, where alongside an Arabic-Persian dictionary and prose and verse works for İsa's son, Musa, he also produced his Divan of verse, this time in Turkish[32]. Subsequently, as the balance of power shifted once more toward the end of the century with the rise of the Ottomans, he was later to dedicate his original Turkish Alexander romance, the *Iskendername,* to Süleyman, Governor of Aydın and son of the Ottoman sultan, Beyazit I. Two things are striking here. Firstly Cairo was seen as prestigious; it was the seat of the renowned Al Azhar and was famed throughout the Islamic world as a seat of learning. İsa Bey brings Cairo to Ayasoluğ. Second, and of more significance to Turkish Islamic culture, is the rapid development of written Turkish. Hitherto, literary culture was based closely on Arabic, with Persian as the language of the court and of poetry. İsa Bey's own commonplace books show us that he himself was experimenting with the use of Turkish as a literary language, and against this we may set the activities of these and many other scholars at his court. It is surely not pressing a point too far to suggest that the development of Turkish was one of the projects of the reign, and that thus both İsa Bey and his scholars were responsible for the birth of an authentic Turkish literature here in Ayasoluğ.

But İsa Bey did not sponsor only Muslim scholars. A Christian too could be honoured. Michael Ducas, grandfather of the historian Ducas, took refuge at the court of İsa Bey, having escaped from Constantinople because of a conspiracy. He was learned in the sciences and, in particular, medicine. Warmly received by the Emir, he was salaried and allowed to make his home at Ephesos[33]. His presence here together with Hajji Pasha suggests the development of an influential medical school, similar to those of Birgi and Tire.

This however could not and did not last. The Ottomans arrived in 1390. Beyazit I, the new ruler, however, treated İsa with respect, even marrying one of his daughters, Hafsa Hatun. İsa Bey having made his submission was reduced to the status of provincial governor. The date of his death is unknown, but he came to rest beside his father and brothers in the family mausoleum at Birgi. The end of this remarkable period came with the arrival of Tamerlane in 1402 and a period of chaos ensued before the Ottoman Sultanate could reassert its power in the region. The subsequent history of Ayasoluğ and its mosque is a sad story of decline into squalor and obscurity, during which the buildings of the town became disaffected and fell into decay, the population dwindled and eventually moved away and the mosque fell into ruin, visited by only a few travellers who thought they were visiting the church of St John. Modern Selçuk, once a remarkable city, is now a small market town and İsa's mosque, though still magnificent, a shadow of its former self, its silent court the preserve of swallows. But its complex web of imagery can still be seen and appreciated and the once proud messages that it proclaimed still sound across the landscape.

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[29] The *Shifa'ul askam wa Dawa' al-Alam*.

[30] This book is now in the Library of Ahmet III in the Topkapı Saray.

[31] I. H. Uzunçarsılı, Anadolu Beylikleri, TTK (Ankara 1937) 113. Now in the Süsheim Collection in the University of Melburg.

[32] Foss op. cit. 161.

[33] Foss op. cit. 162. Citing M. Ducas, *Historia Turcobyzantina* 47.

Martin Steskal

BATHING IN EPHESOS IN THE BYZANTINE AND TURKISH PERIOD*

Ephesos offers an individual interested in bathing a wide area of research spanning many centuries. This is not surprising as a visit to the baths was an integral part of daily life for every Roman since the early empire. The ritual of a bath visit was so deeply engrained in the population that the bathing operation remained a core institution for the various social groups throughout the centuries and across religious boundaries[1]. The Roman bathing tradition survived in the area of eastern Roman influence after the end of antiquity. Roman bathing lived on in the Islamic bath, the hammam, and again experienced a revival. In Ephesos, a site with an extraordinarily large number of well-preserved baths (fig. 1), this development can be reconstructed over long periods of time and reflects the full breadth of Roman baths and Islamic bathing culture. And yet, we must admit that it is difficult to understand the state of the Late Antique bathing culture in Ephesos from the Mid-Byzantine period to the beginning of the Late Byzantine period (i.e. from the 7th to the 13th c.). We do not know of a single bath that was constructed during this time – even worse: we do not know of a single bathing structure that survived the Early Byzantine period[2]. It is only with the beginning of the rule of the dynasty of the Aydınoğulları who controlled the Ayasoluk/Ephesos area from the early 14th century[3] that we are again confronted with a large number of monuments that inform us about the – now Islamic – bathing and body culture. Let us first consider the Byzantine period.

Of the numerous Ephesian bathing structures built since the Imperial period it is only possible to determine that four were in use in the 5th/6th centuries, i.e. the Early Byzantine period[4]. They are the Vedius Gymnasium in the north of the city (fig. 2), the so-called Sarhoş Hammam in the centre of the Byzantine city (fig. 3), the Baths of Scholastikia along the Curetes Street (fig. 4), and a small bath to the south of the baptistery in the Church of Mary (fig. 5). Due to the current state of research on the other bathing complexes, such as the

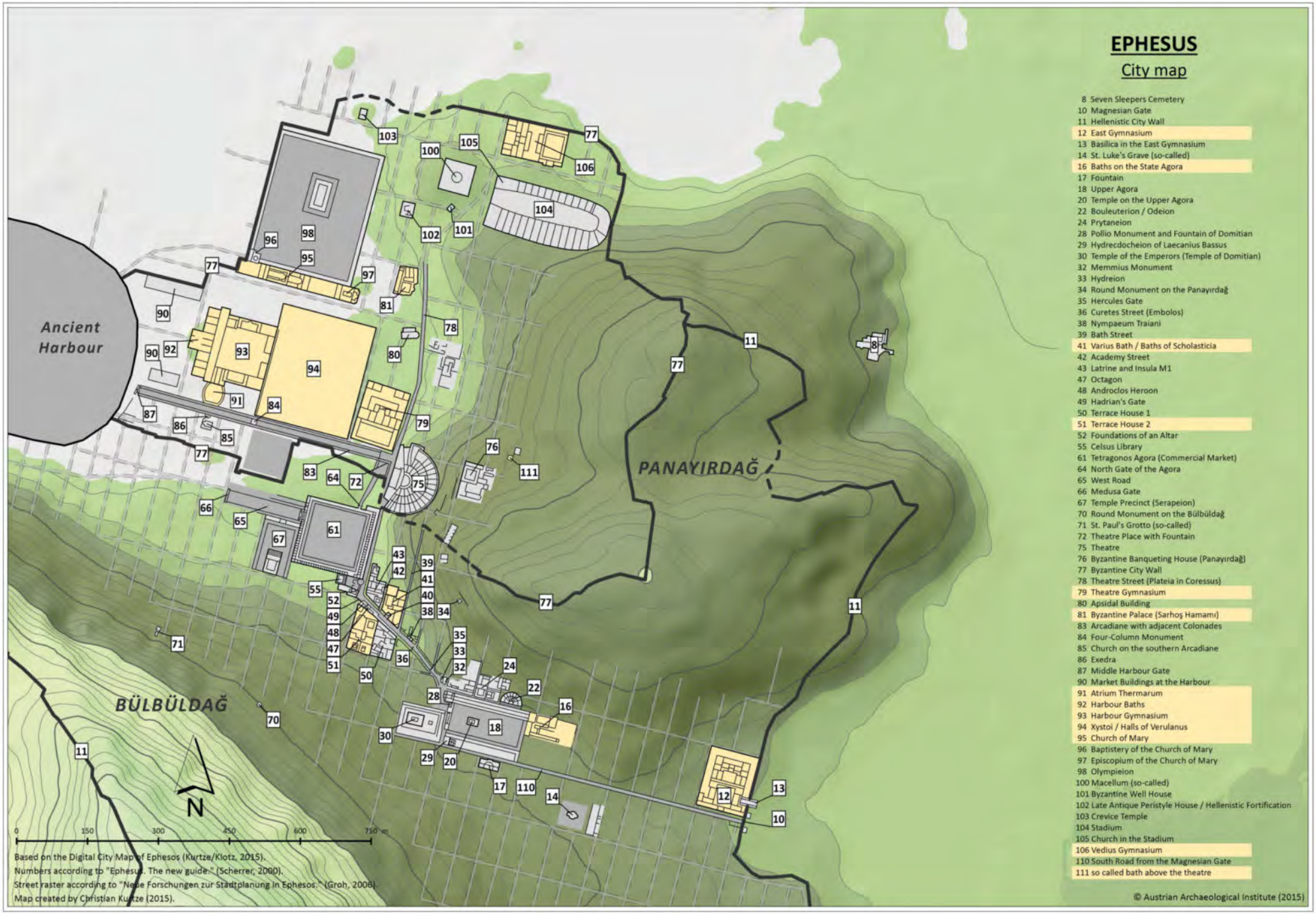
* I am grateful to S. Ladstätter, A. Pülz, P. Magdalino and Y. Dalanay for important suggestions and discussions. For the revision of the English manuscript I would like to thank N. M. High-Steskal.

1 Cf. Yegül 1995, 315; Yegül 2010, 199–230.

2 This finding applies to many other sites in Anatolia. Cf. Berger 2011, 56: »As to the material remains of Byzantine baths in Anatolia and Constantinople, one is struck by how very little has remained of them. One of the reasons is that heat and humidity put a permanent stress on walls and vaults so that, without proper maintenance, they decayed quickly.«

3 Cf. also Külzer 2010, 521–539; Foss 1979, 141–180; Pfeiffer-Taş 2010, 13–16; Daş 1998, 385–397.

4 A probable bathing structure in the Episkopeion to the east of the great apse of the Church of Mary (cf. Wiplinger – Wlach 1996, 156 f.) is dated around or shortly after 500. The identification as a bath though and the structure itself need further examination. According to Karwiese 2000, 182 f. the Episkopeion was abandoned in the middle of the 7th c. – Around 766 a *caldarium* of a not specified Ephesian bath was used as a prison for monks who were brought there by the iconoclast commander of the Thrakesion Thema, Michael Lachanodrakon. The unidentified bath was already out of use at this time. See *Vita Stephani Iunioris* (ed. Migne 1857–1866, cols. 1164–1165). I am grateful to Y. Dalanay for this reference.



1 City map of Ephesos showing buildings including baths (© OeAW-OeAI, C. Kurtze).

Harbour Gymnasium[5], the Theatre Gymnasium[6], the so-called Bath above the Theatre[7], the Baths at the Upper Agora[8] and the East Gymnasium[9] it is not possible to securely conclude whether these baths were still in use in the Early Byzantine period[10]. Some can be shown to have already ceased to function, such as the private baths of the Residential Unit 6 of Terrace House 2: the bath in the eastern corridor of the peristyle built around 120[11], and the late-Severan bath of the upper floor. For some of the aforementioned complexes there are some clues that might indicate their continued use into the Early Byzantine period[12]. One example is the bath-gymnasium complex north of the Arkadiane, the Harbour Gymnasium, constructed under Domitian. The building is divided into three parts: the baths in the west, the palaestra with a 90 × 90 m large, square peristyle courtyard in the middle and the 200 × 240 m large Halls of Verulanus in the east. Since 2006 the Late Antique/Byzantine constructions built on top of the palaestra of the Harbour Gymnasium as well as the Halls of Verulanus are being re-examined. The large Ephesian complex of about 70,000 m^2 was destroyed in the third quarter of the 3rd century – probably through a natural disaster[13]. Renovation work had already been carried out under Diocletian through the proconsul Artorius Maximus[14] when the baths were reopened in the mid-4th century under Constantius II as the *thermae Constantianarum*[15]. The destruction of the palaestra and the Halls of Verulanus made large areas available that were then used for the construction of lavish private houses. According to our current knowledge the baths were not built over, which might indicate that they were still used by the residents of these private houses. Current studies suggest that the houses remained in use until the second half of the 7th century. Although it cannot be proven that the baths were still in use at this period it can be assumed.

The situation in the 11,000 m^2 large baths on the Upper Agora was similar. They date to the 2nd century. The history of use of this building has not yet been clarified but renovation activities in the building are known to have taken place up until the 5th century. In the early 5th century a new mosaic floor was placed in the basilica situated to the south of the bath-

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[5] On the Harbour Gymnasium cf.: Keil 1933, 14–23; Benndorf 1906, 181–204; Benndorf 1898, 62–69; Heberdey 1904, 43; Maccanico 1963, 45–47; Friesen 1993, 121–137; Yegül 1995, 272 f.; Scherrer 1997, 112; Foss 1979, 60.

[6] On the Theatre Gymnasium cf. Keil 1929, 42–45; Keil 1930, 18–29; Keil 1932, 16–25; Maccanico 1963, 42 f.; Yegül 1995, 279–282.

[7] From 2009 to 2016 the building was re-examined by C. Baier as part of his dissertation. The forthcoming publication of this dissertation will provide completely new results about the appearance, dating and function of the whole area. In the meantime cf. Baier 2013, 46–51; Keil 1932, 12 figs. 5. 6; Fasolo 1962, figs. 46–48; Uytterhoeven 2011, 302 f. Contra: Groh et al. 2006, 87, who suggests that the building is a *castellum* based on the water outlets directed to the west and at different heights. Unaware of the new state of research still interpreted as a Late Antique/Early Byzantine structure by Steskal 2010a, 585 f.; however, it appears to be an Imperial nymphaeum that was later transformed into a bath building.

[8] On the building: Keil 1930, 29–31; see also Eichler 1968–71, 15; Alzinger 1970, 1617–1619; Vetters 1972, 85; Vetters 1973, 178; Foss 1979, 83; Thür 2007, 403–414.

[9] On the East Gymnasium among other: Keil 1932, 23–52; Keil 1933, 6–13; Maccanico 1963, 43–45; Yegül 1995, 279–282; Foss 1979, 83.

[10] Cf. Steskal 2010a, 576–587.

[11] In the middle of the 2nd c. a *balneum privatum* was secondarily added in the rooms 31aSO as well as M1–M3 that consisted of an *apodyterium*, a *frigidarium*, a *sudatorium* (?) and a *caldarium*. After a couple of small adaptations in the late-Severan period the bath was destroyed through the earthquake in 270/280. Cf. esp. Thür 2014, 842–845; Thür 2008, 1057–1072; Thür 2002, 63–65. Numerous finds from the area of the bath that date to the 6th/7th c. (Ladstätter 2014, 461–472) suggest that the rooms continued in use. H. Thür rules out that the rooms of the eastern corridor of the peristyle were still used for bathing. – The accessibility to the Residential Unit 6 from the adjacent northern Alytarchs' Stoa appears to have existed until the 5th c.: cf. Quatember et al. 2009, 111–154.

[12] Cf. Thür 2014, 842–845.

[13] Cf. Heberdey 1898, 72–74; Benndorf 1906, 184; Foss 1979, 60; Yegül 1995, 313.

[14] IvE 621.

[15] IvE 1314. 1315.

2 Ephesos, Vedius Gymnasium (© OeAW-OeAI, N. Gail)

ing rooms[16]. A bust from the end of the 5th or beginning of the 6th century was discovered incorporated into the wall as a spoliated piece, and serves as a *terminus post quem* for further modifications[17]. It is not clear whether the building was still used as a bath at this point. And again it is only possible to venture a guess.

On the basis of its building inscription we are much better informed about the Vedius Gymnasium which was dedicated around 150 as the latest of the four Ephesian bath-gymnasium complexes (fig. 2)[18].

The bath-gymnasium consists of a 48 × 60 m large palaestra to the east of the bathing complex with a 40 × 50 m large courtyard surrounded on all sides by a portico. On the south side of the peristyle the complex could be entered or exited through a triaxial propylon. An exedra, the so-called marble hall[19], is integrated into the bathing complex and accessible through the east side of the bath. The double-T-shaped halls in the bath appear to be a further development of the U-shaped *basilicae thermarum* as for example visible in the Theatre or East Gymnasium. The bathing rooms are arranged along a central axis to which the palaestra also conforms and thus the typology of the ground plan of this structure resembles the bath-gymnasium complex of Sardis[20].

In the last couple of years the history of use of the Vedius Gymnasium was clarified to a large extent: today we know that the complex was in use after a large-scale revitalization in

[16] Cf. Scheibelreiter 2006, 36 f.
[17] Auinger – Rathmayr 2007, 240 f.
[18] On the Vedius Gymnasium: Steskal – La Torre 2008a with further lit.
[19] Formerly referred to as ›Kaisersaal‹; on the function of these rooms cf. Steskal – La Torre 2008b, 295 f. with further lit.; see also Auinger 2011, 117–129.
[20] Cf. Yegül 1986; Yegül 1995, 282–284.

3 Ephesos, Baths of Scholastikia (© OeAW-OeAI, M. Steskal)

the first quarter of the 5th century at least until the end of the century, before it was destroyed by a large fire in the middle of the 6th century[21].

In the course of the revitalization of the building multiple furnishings were updated, as for example the *opus sectile* pavement in the marble hall. In the *basilica thermarum* the original mosaic floor was replaced by marble-slab flooring. The porticos of the palaestra were decorated with new polychrome mosaic floors.

After the abandonment of the building the strong northern façade of the complex was integrated into the Byzantine city wall. The rooms of the building, especially in the basement, were sporadically reused as living quarters into the 8th century. As a result the bathing operations did not survive the Early Byzantine period.

The 2,500 m^2 large Baths of Scholastikia at the lower Embolos were excavated in the 1950's (fig. 3)[22]. The asymmetric complex designed without a palaestra dates to the 2nd century and is also referred to as the Varius Bath. In the first half of the 6th century the apparently dilapidated baths were renovated through an endowment of the Christian Scholastikia[23]. The bathing complex includes all of the essential rooms of a Roman bath: *apodyterium*, *tepidarium*, *frigidarium*, *caldaria* and a *sudatorium*. The Baths of Scholastikia are the first

[21] Cf. Steskal 2008, 92–96 with further evidence.

[22] On the building: Miltner 1955, 34–44; Miltner 1956–1958, 17–25; Miltner 1959, 250–256; Bauer 1996, 284; Foss 1979, 70.

[23] IvE 453. This dating has been confirmed by the analysis of the architectural and archaeological findings of the neighbouring ›Stoa of the Curetes‹ on the lower Embolos. The upper story of the stoa was connected with the *basilica thermarum* of the Baths of Scholastikia. Cf. Thür 1999, 115–117; Thür – Pietsch 1997, 6–12; Waldner 2009, 164–167. 207 f. – In the Baths of Scholastikia as well as the ›Stoa of the Curetes‹, building elements of the Prytaneion were integrated as spolia; cf. Steskal 2010b, 82 f.

4 Ephesos, so-called Byzantine Palace (Sarhoş Hammam) (© OeAW-IKAnt, A. Pülz)

5 Ephesos, Bath in the Church of Mary (© OeAW-OeAI)

baths to be described here that were definitely in function in the 6th century. It is not known how long the baths remained in use.

The ca. 900 m² large bath in the ›Byzantine Palace‹, the so-called Sarhoş Hammam provides further evidence of Byzantine bathing tradition in Ephesos (fig. 4)[24]. Since 2005 A. Pülz has been working on an extensive study of this building. The actual bathing rooms are in the north-east of the building and unlike the rest of the building the rooms are oriented according to the Theatre Street to the east. Typically for the Early Byzantine complexes, warm bathing rooms with a hypocaust system are the most prevalent. The Byzantine Palace has been tentatively dated to the 5th or 6th century, although a date of the Early Imperial period has sometimes been suggested[25]. Integrated into the Byzantine Palace it forms a very generously proportioned private bath that was very likely still in use in the 6th century.

Very little is known about a ca. 100 m² small bath to the south of the baptistery of the Church of Mary (fig. 5)[26]. It seems to have been integrated into a former forecourt in the second half of the 6th century[27]. The bath consisted of two warm bathing rooms with a hypocaust system and three additional rooms. However, it is unclear whether the bath was still in use in the Middle Byzantine period unless further research is carried out in this part of the building.

As we have seen the fragmentary state of research on the Byzantine period generally only permits tentative conclusions[28]. Although many large baths – most of them integrated in to the

[24] On this building: Vetters 1966, 278–280; see also Miltner 1958, 115–117; Miltner 1956–58, 3–17; Miltner 1959, 243–249; Foss 1979, 50 f.; Berger 1982, 50; Lavan 1999, 148 f.; Uytterhoeven 2011, 309.

[25] Groh et al. 2006, 83; see also Karwiese 1995, 188.

[26] Cf. Reisch et al. 1932, 76.

[27] According to Karwiese 1999, 84 the pillar basilica in the eastern section of the building was erected after an earthquake destruction of the former church (557 A.D.). The erection of a basilica with a central dome over the nave in the western section happened at the same time. The integration of the small bathing unit is said to be contemporary.

[28] Cf. the literature noted by Ladstätter – Pülz 2007, 401 f.; on the Late Antique sculptural furnishings cf. Auinger – Rathmayr 2007, 237–269.

bath-gymnasium complex typical of Asia Minor[29] – are known in Ephesos during the Imperial period they only reflect a small percentage of the original number of public *thermae*, *balnea*, private and rental baths. This incomplete basis of knowledge deteriorates over the course of the centuries. It is not known how many bathing complexes might have existed in Ephesos but the number was high enough to require an association for the guild of the bath attendants (*balneatores*) in the first third of the 3rd century[30].

Our knowledge about private baths is even more limited than that about public complexes. Most of these baths would have been quite basic in their furnishings and would have primarily consisted of a vestibule and a *caldarium*. In the baths without a hypocaust heating system moveable braziers were common. People mainly bathed in moveable bath tubs; bathing basins are only found when the living space permitted it or the patron was ready to make the necessary space available. Generally the baths were in close proximity to other wet rooms, i.e. latrines or kitchens, in order to centrally manage the water installations and preparation of warm water. The sewer system could also work more efficiently through such a concentration. A comparison with other metropoleis of the imperium reinforces the assumption that the number of bath complexes in Ephesos must have been a lot higher than the state of preservation might suggest.

An inventory of the city of Rome from the time of Constantine I mentions 867 bathing complexes, among them eleven *thermae* and 856 *balnea*[31]. Numerous baths in private houses must be added to the tally. Of most of these buildings not a single stone remains[32]. Particularly the small baths that often only consisted of a vestibule and a *caldarium* are difficult to verify but they would have supplied a significant portion of the inhabitants with bathing facilities. For Constantinople the *Notitia Urbis Constantinopolitanae* in 425 mentions 153 *balnea*[33] in addition to nine large *thermae*; the actual number probably was a lot higher. The Syrian *Notitia Urbis Alexandrinae* from the middle of the 4th century notes 1,561 baths in Alexandria[34]. Generally a high number of baths was a sign of a city's wealth and prosperity[35].

Alongside the publicly owned *thermae* and *balnea* and private baths, so-called *balnea meritoria*, also existed; these were commercially operated rent or lease baths[36]. Generally, sponsorship and liturgy had steadily declined as means of financing public baths since the 3rd century[37] and state intervention gained in importance. This phenomenon became more prevalent in Late Antiquity; especially because the entrance fee to a bath could never cover

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[29] On the development of this building type cf. Yegül 1995, 250–313; Nielsen 1993, 104–111; Farrington 1987, 50–59; Maccanico 1963, 32–60; Ward-Perkins 1994, 292–296.

[30] In an honorary inscription on a marble pillar for the Asiarch M. Fulvius Publicianus Nikephoros a συνερ[γ]ασία βαλανέων πρεβάτων τῶν ἐν Ἐφέσῳ is mentioned: IvE 2078. Cf. Meusel 1960, 27; Heberdey 1912, 183 no. 78; Knibbe 1985, 71–77.

[31] Cf. Yegül 1995, 315; Yegül 2011, 15; Brödner 1997, 260; Meusel 1960, 18 f. In this context the term *thermae* refers to large, mainly symmetrical complexes with a palaestra that typologically in most cases reflect the ground plan of the so-called Imperial type. The small, mainly asymmetric bathing complexes without a palaestra are referred to as *balneum*. Cf. also Krencker 1929, 174–187; Rasch 1996, 201–230; Nielsen 1993, 3.

[32] In addition to the material remains as well as the epigraphical and literary sources the *Forma Urbis Romae* from the *Templum Pacis* and architectural drawings from the Renaissance inform us about the inventory of the city of Rome. On the *Forma Urbis Romae*: Carettoni 1960; Rodriguez Almeida 1981. Of the architectural drawings those by A. Palladio from the 16th c. must be mentioned who prepared a guide to the ancient buildings of Rome; cf. Bertotti Scamozzi 1797. General literature on the baths of Rome: Yegül 1995, 128–183; see also Nielsen 1993, 36–59; Weber 1996, 73–96; Heinz 1983, 60–70. 75–77. 89 f. 112–141; Brödner 1997, 48–51. 218–233. 258 f.

[33] *Notitia Dignitatum* (ed. Seeck 1876, 229–243); cf. Berger 1982, 28. 144; Berger 2011, 50; Yegül 1995, 315; Yegül 2011, 15. General literature on the baths of Constantinople: Berger 1982, 144–159; see also Brödner 1997, 265–267; Yegül 1995, 324; Magdalino 1990; Mango 2015.

[34] Meusel 1960, 18 f.

[35] Berger 1982, 21.

[36] Cf. Meusel 1960, 23–27.

[37] Cf. Meusel 1960, 100; Foss 1979, 24; Drecoll 1997; Roueché 1997, 353–368.

the actual costs[38]. A constitution of Honorius and of Arcadius from 395 made provision for a third of the revenues from public property to be used for the repair of city walls and for the heating of public baths[39]. A law mentioned in the *Codex Iustinianus* of the 6th century enumerates the financing of baths alongside grain provision and the construction of water conduits and harbours among the governmental expenditures[40].

Particularly the public baths retained their important role up until the Early Byzantine period before »the crisis of the 6th and 7th centuries ended this ancient tradition along with many others«[41]. The Roman bathing tradition was enjoyed for a long period of time in the east of the empire; in contrast it appears that the end of the Roman bathing culture in the west, particularly in Italy, took place a lot earlier[42]. The bathing operations could only remain in business in the larger centres until the 6th century – foremost in Rome where the baths of Caracalla were restored in the 6th century under Theodoric[43]. The large baths of Rome were partially still in operation in the 5th century; however, numerous aqueducts were destroyed through the invasion of the Goths in 537. This devastation and the circumstance that the maintenance as well as the operation of the water supply and the baths could no longer be sustained due to the economic and political instability finally led to the abandonment of the large baths in Rome. Except for Constantinople the 6th century is characterised by an end to the new construction of public baths. But under the emperor Justinian I destroyed and dilapidated baths were reconstructed although reduced in size[44]. In Constantinople one large bath complex is known to have been in use into the 8th century: the celebration of the anniversary of the rule of the emperor Philippikos Bardanes took place in the Zeuxippos bath in 713[45]. Even this bath complex was deserted in the course of the 8th century. This is simultaneously the last and oldest reference to *thermae* still in use. A general tendency can be identified to vacate large buildings early on and limit oneself to smaller buildings[46]. While the bathing habits conformed to Roman traditions in the large complexes – this is reflected in the retention of the canonical sequence of rooms *frigidarium, tepidarium* and *caldarium* – in the small complexes after the 6th/7th century the *caldarium* developed into the main room. The *frigidaria* were rapidly given up[47]. In the Islamic baths they are missing completely.

It can be suggested that in Ephesos – as also in other metropoleis of the empire – the large and very costly *thermae* were gradually replaced by smaller structured *balnea*. It was not only more economical to operate but because they required less space it was easier to place them in strategic locations within the city where enough visitors could come and allow for the operation to pay for itself. It is doubtful whether the operation of baths was ever a lucrative business. In most cases it probably was not possible to operate such a business without endowments or public or municipal funding. Donors and the public offices were aware of

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[38] Cf. Berger 1982, 29 f.

[39] *Codex Theodosianus* (ed. Mommsen 1954, 15, 1, 32).

[40] *Codex Iustinianus* (ed. Krueger 1906, 1, 4, 26).

[41] Berger 1982, 21. 34; Yegül 1995, 314 believes that this decline took place about a century later: »Among the religious, moral, and economic forces that defined the position of baths and gymnasia in the post-Classical world, the opposition of Christianity to bathing and the economic crisis of the seventh and eighth centuries were the most important. Despite the guarded acceptance of public baths by Christian society, there are definite signs of paucity in construction of new bathing structures after the seventh and eighth centuries, …«

[42] Cf. Yegül 1995, 315; Yegül 2010, 199–201.

[43] On the baths of Caracalla cf. DeLaine 1997.

[44] Prokopios, *De Aedificiis* (ed. Dewing 1954, 2, 6, 10–11; 5, 3 and 4, 15; 6, 4, 11 and 5, 10); summary of bathing complexes in the Early Byzantine period: Berger 1982, 46–55.

[45] Theophanes, *Chronographia* (ed. de Boor 1893, 383, 7–17) as well as Berger 1982, 24. 147; Berger 2011, 52; Yegül 2010, 184–186.

[46] Yegül 1995, 321: »In the late antique/early Byzantine city, private patronage disappeared almost completely. … Although construction of thermae was infrequent, small baths continued to be built and flourished in every centre during the late antique period.«

[47] Cf. Berger 1982, 85 f. 96; Berger 2011, 53.

the importance of this deeply rooted – Roman – tradition for the population and were ready to support the upkeep of this important element of daily life.

The decline of Roman bathing culture was primarily the result of changed economic and political prerequisites; in this case the influence of Christianity was less of a cause than is often assumed. The church fathers repeatedly spoke out against public bathing; but in this context they did not critique the accepted health and hygiene benefits but instead were opposed to individual aspects of bathing that they could not reconcile with Christian ideas of morality. The unconstrained nudity contradicted the Christian principle of chastity because this could have misled individuals to immoral thoughts and actions[48]. The joint bathing of a man and a woman was also viewed critically[49]. Although mixed bathing (*balnea mixta*) was known since the early 1st century[50] this Roman custom appears to have been met with reservations particularly in the Graeco-Hellenistic areas[51]. The joint bathing of both sexes was apparently common in Rome since the early Empire and led to a series of bans under Hadrian that directly referred to the *balnea mixta*[52]. The explicit ban of ›mixed bathing‹ appears to have been finally reinforced by Marcus Aurelius[53], for a short time revoked by Elagabalus[54] and then apparently reinstated by Severus Alexander[55]. This ban was not very successful: according to A. Berger the joint bathing of men and women did not go out of fashion until the decline of Late Antique bathing culture[56]. In addition abstinence from bathing (ἀλουσία) was elevated to the rank of a virtue after the 4th century and considered to be an essential part of asceticism[57]. The bathing customs even left their mark on the legislation and canon law: at the synod in Laodicea (325 or 381) priests and monks were strictly forbidden from bathing with women[58]. The emperor Justinian I declared that the joint bathing of women with strange men was an acceptable reason for husbands to seek a divorce[59]. The repetition of such laws in later periods suggests that the joint bathing continued to be common practice[60]: »… even the Quinisextum (Trullanum) from 692, which added disciplinary canons not considered in the fifth and sixth ecumenical council, repeats the ban on joint bathing.« The implementation of this religiously motivated ban on bathing was quite uneven; in the end they never were

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[48] Hunger (1980, 353. 356 f.), according to this mainly women were warned of the baths and only sickness was accepted as an excuse to visit the baths. Cf. also Yegül 1995, 314: »The Church often tried to create the impression that the baths of the pagan world were linked with the devil, but this did not stop the ecclesiastical use of many already existing baths after they were purified. Sometimes, baths were even owned and operated by the Church as a profitable business venture.«

[49] Berger 1982, 41–45; Berger 2011, 51. Since it was difficult to regulate the *balnea mixta* through bans recommendations were formulated such as to visit the bath at different times or when there were less visitors. This was necessary where it was not possible to architecturally separate the sexes.

[50] Cf. Heinz 1983, 148 f.; Nielsen 1993, 146–148; Weber 1996, 155; Merten 1983, 79–100; Ward 1992, 125–147 as well as Meusel 1960, 158–162 with the literary references.

[51] Cf. Ginouvès 1962, 223.

[52] Cf. Cassius Dio, Ρωμαϊκὴ ἱστορία (ed. Cary 1982, 69, 8, 2): καὶ δῶρα διὰ σφαιρίων καὶ ἐν τῷ θεάτρῳ καὶ ἐν τῷ ἱπποδρόμῳ χωρὶς μὲν τοῖς ἀνδράσι χωρὶς δὲ ταῖς γυναιξὶ διέρριψε; καὶ γὰρ λοῦσθαι χωρὶς ἀλλήλων αὐτοῖς προσέταξεν· – Historia Augusta, Hadrian (ed. Magie 2006, 18, 10): *lavacra pro sexibus separavit.* – The authenticity of some of the references from the Historia Augusta are problematic.

[53] Cf. Historia Augusta, Marcus Aurelius (ed. Magie 2006, 23, 8): *lavacra mixta summovit*.

[54] Cf. Historia Augusta, Elagabalus (ed. Magie 2006, 31, 7), who valued the presence of women in the bath: *in balneis semper cum mulieribus fuit.*

[55] Cf. Historia Augusta, Severus Alexander (ed. Magie 2006, 24, 2): *balnea mixta Romae exhiberi prohibuit, quod quidem iam ante prohibitum Heliogabalus fieri permiserat.*

[56] Berger 1982, 45.

[57] Hunger 1980, 353–356; see also Berger 1982, 34 f.; Yegül 2010, 206; Yegül 2011, 24.

[58] Cf. also Hunger 1980, 357.

[59] *Novellae Iustiniani* (ed. Schoell – Kroll 1895, 117, 8, 4).

[60] Hunger 1980, 357.

able to completely enforce[61]: »Theory and practice appear to not have supported each other – as so often in life.« In the 5th century Sozomenos refers to the ἀλουσία only as an optional performance of religious penance[62]. The theory of asceticism was entirely contradicted by the luxurious furnishing of private baths, the bathing complexes in the imperial palaces but also the baths of high religious leaders up into the 9th century[63]. Especially in the prosperous cities of the eastern empire the ancient value system remained for a very long time. From the perspective of the reality of daily life we more likely have to consider a continuity of ancient tradition than sudden changes. Christianity alone would not have been able to sustainably influence people's behavior on such a crucial point of daily life. In the case of Constantinople P. Magdalino even argues for church-owned baths which replaced the old public baths as a subsidised form of public welfare. They were run by the *diakonia*, a charitable association[64]. The sometimes harsh and moralizing words from Christian representatives have to be understood as an attempt to distance oneself from other communities – a phenomenon very common for groups still seeking for a clear identity. The critical factor for the abandonment of baths was rather the financial burden in operating these buildings.

Whenever bathing was intended for health purposes it was explicitly allowed, as F. Yegül correctly states[65]: »For the most part, the Church was ready to accept bathing if the component of pleasure was taken out of it – that is, if bathing was reduced to a functional, hygienic, and medicinal activity.« The influence of baths for the church can be demonstrated by the many baths located by churches or in pilgrimage centres[66] as Berger recognizes well: »These baths were viewed as such an essential part of the church building that Theodosius I included them in a law concerning the church's right of asylum.«[67] However, in contrast to Constantinople we are still lacking evidence for the church-run charitable bathing of the poor in Ephesos.

Roman baths were important features of the urban fabric and shaped the appearance of ancient cities. The abandonment of bath buildings, especially the large *thermae*, changed the cityscapes fundamentally. The institutions of the church more and more became the core of urban life. As a consequence the cities lost their ancient character.

Of all the post-Roman bathing institutions, Islamic baths adhered most closely to the Roman traditions[68]. In contrast to the Roman baths, though, they are very closely tied to religious rituals. This must be understood within the context of the ritual cleansing of a Mus-

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[61] Hunger 1980, 358. Cf. also Yegül 1995, 314: »… baths remained one of the popular institutions of late antique and early Byzantine cities. The position of the Church on the subject was, at best, ambivalent.«

[62] Sozomenos, *Historia ecclesiastica* (ed. Hansen 2004, 888, 7, 16, 7); see also Berger 1982, 36.

[63] Yegül 1995, 319 f.: »On the other end of the scale from the Church's interest in Christ's poor were the interests of some of the popes in maintaining the traditions of luxury bathing in the Lateran Palace, in the mode of the Classical past.«

[64] Magdalino 1990, 166–188. The character of these baths was multiple. Magdalino 1990, 182: »In any case, the *diakonia* did not have to monopolise the facilities, whether it owned them or not. It could, conceivably, pay for their use on certain days, or at certain times of day, leaving them free at other times to admit a different clientele. On the face of it, there was nothing to prevent the same baths from providing both charitable and commercial services; indeed, a combination of charitable subsidy and commercial profit surely made better economic sense than exclusive reliance on one or the other.«

[65] Yegül 1995, 317; on the position of Christianity towards bathing culture cf. also Yegül 2003, 57 f.; Nielsen 1993, 148; Brödner 1997, 257–267; Yegül 2010, 201–206.

[66] Berger 1982, 38.

[67] *Codex Theodosianus* (ed. Mommsen 1954, 9, 45, 4).

[68] Yegül 2011, 24–37; Yegül 2010, 206 f. 212: »As Christianity, at least in a narrow and partial sense, shied away from baths and bathing with all their social connotations, Islam, rising in the east, began to embrace late Roman and Byzantine baths and, surprisingly, many of their institutional and cultural traditions and technological accomplishments. Among the Islamic communities at the edge of the desert in northern Syria, the transformation from pagan to Islamic baths was smooth and seamless. … The acceptance of baths as a social and cultural institution is among the many important ways in which medieval Islamic society became the inheritor and the perpetuator of Classical culture – as the transformation in this area from pagan to Byzantine baths had been.«

lim before entering a mosque, before prayer or the reading of the Koran[69]. Since a devout Muslim prays five times per day he must perform the so-called small ablution. He washes his hands, forearms, face and feet. The ›full ablution‹ can only be carried out in an Islamic bath. The instructions are that no part of the body can remain dry and only running water can be used. As a result there are no bath basins but instead water is poured over the body. Basically the Hammam is a sweat bath, where the high room temperature (ca. 50 °C) leads to thorough cleansing through sweat. The prevalence of Roman hypocaust and duct heating in all Islamic baths is a technical similarity to the Roman baths.

In comparison to the Roman bath complexes, the Islamic baths are also quite different: the Islamic baths do not include a palaestra – a connection between bathing and exercise is not desired. In regards to the bathing ritual, the lack of *frigidaria* is apparent. Symmetry is only rarely taken into consideration for the ground plans; the complexes are quite reduced in size. Unlike the Roman baths light was supplied through openings in the dome; side windows are not common. Generally the Islamic bath – in contrast to Roman culture – is not a part of daily life. Visits to the baths did take place frequently but at irregular intervals[70].

In Ephesos we cannot identify any bathing complexes from the Middle Byzantine period, which does not mean that they did not exist. The situation changes in the Late Byzantine period, specifically with the beginning of the reign of the dynasty of the Aydınoğulları in the early 14th century. In modern-day Selçuk we can still see the result of this rule in the form of multiple accessible Turkish hammams from the time between 1350 and 1450. Two examples will be discussed in the following (fig. 6).

According to the results of the excavations of the early 2000's the so-called İsa Bey Hammam[71] was constructed during the rule of İsa Bey around 1360 (fig. 7). The use of the complex as a bath ended at the latest under the rule of Murad II in the middle of the 15th century.

The centre of the bathing complex is formed by a core structure with a long and rectangular plan. This structure measures 11.85 × 20.80 m. The hot bathing room, a *sıcaklık* (room R 10), was designed with a cross-shaped ground plan and had a central dome with openings for light. The walls of the building are constructed of alternate rows of stone and brick. The adjoining bathing rooms R 07, 08, 09 and 11 could be entered through narrow doorways and were separate bathing rooms with greater privacy, so-called *halvetler*. They also had domes with small light shafts. In R 12 a warm water reservoir was situated with a heating room in room R 13.

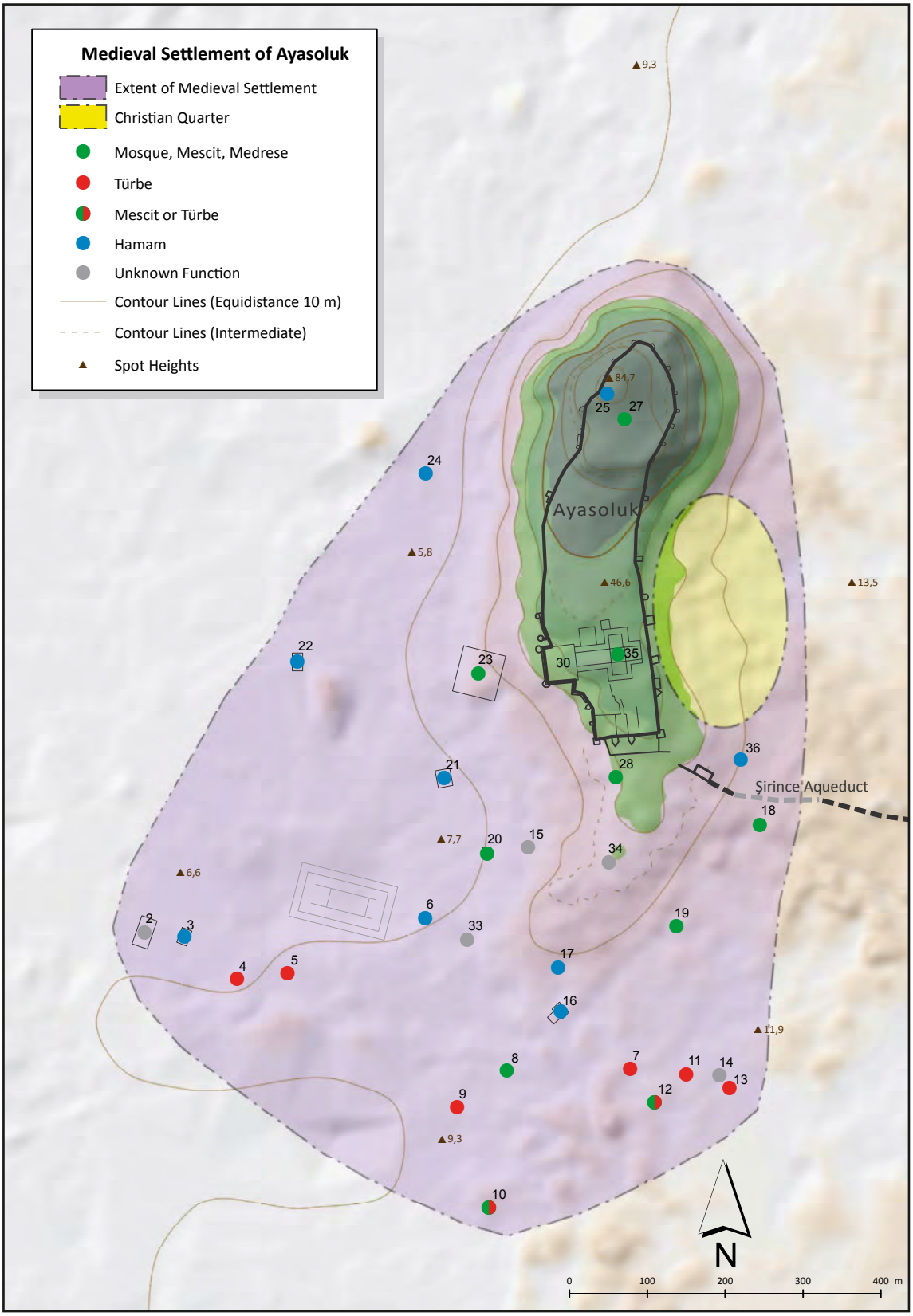
Directly in the longitudinal axis of the core building a large room measuring 4.30 × 4.30 m (R 04) is situated with a very distinctive ribbed dome. The slightly heated room, the so-called *ılıklık*, with a surrounding bench did not have any bathing function but instead was used as a waiting area for the hot bathing room or also a quiet area after the exhausting sweat bath.

According to the traditional room sequence of a Turkish bath, the domed room R 05, the so-called *traşlık*, was for personal care such as massages, shaving, etc. The small room R 06 could have been the latrine. The two domed rooms R 02 and 03 have been identified as passage ways, so-called *aralıklar*, although room R 03 was later walled up. The north side of the core building was characterised by a 10.25 × 12 m large vestibule, a *soyunmalık* (R 01). Roman columns were reused for the forecourt of the bath.

Further additions were made to the construction of the core building on the east, west and north sides: room R 30 was a water reservoir and room R 31 an adjoining well room. R 26 through R 29 were used as shops that opened on to the street.

The addition to the west was a separate, secondary bath house, possibly a women's bath. Room 17 functioned as a hot bath room, a *sıcaklık*, and room 19 was a slightly heated room,

[69] Yegül 2011, 29 f.
[70] Cf. Yegül 2011, 32.
[71] Cf. Krickl – Pfeiffer-Taş 2002, 221–236; Pfeiffer-Taş 2001, 117–134; Daş 1998, 385–388.



2 Odeion (so-called Tribune)
3 Hamam 7
4 Hamam 6
5 Türbe 6
6 Hamam 5
7 Türbe at the Hospital
8 Karakol Yani Mosque
9 Türbe 5
10 Mescit or Türbe
11 Şehabettin Dede Türbesi
12 Mescit or Türbe
13 Yahşi Bey Türbesi
14 Unidentified Monument
15 Unidentified Monument (so-called Türbe 8)
16 Hamam at the Museum
17 Hamam 8
18 Akıncılar Mescidi
19 İshakbey Mosque
20 Kılıçarslan Mescidi
21 İsabey Hamami, Hamam 2
22 Anonim Hamami, Hamam 3
23 İsabey Mosque
24 Garden Hamami, Hamam 4
25 Kale Hamami
27 Kale Mescidi
28 Alparslan Mescidi
30 Basilica of St. John
33 Unidentified Monument (so-called Türbe 7)
34 So-called Library
35 Mosque (medieval installation in the Basilica of St. John)
36 Hamam (excavation in 1974, today not visible)

6 Islamic baths in Ayasoluk/Ephesos (© OeAW-OeAI, C. Kurtze)

7 Ayasoluk/Ephesos, so-called İsa Bey Hammam (Photo F. & O. Durgut)

8 Ayasoluk/Ephesos, Hammam 3 (Photo F. & O. Durgut)

an *ılıklık*, with benches. Room 03 was used as a separate bathing room, a *halvet*. In room 16 was the water reservoir of the complex.

Due to the settling of the foundations towards the west, the bath probably was in need of repair soon after its opening. Through additional sinking considerable cracks developed in the wall and the domes, which explains the short period of use of the complex. It ceased to be used after only 60 to 80 years in use before the middle of the 15th century. Already in the middle of the 15th century burials took place in the space of the former bath.

In an area currently used for agriculture, about 200 m west of the İsa Bey mosque is the Hammam 3[72], constructed at the end of the 14th century (fig. 8). Since it does not have a building inscription the name or exact construction date are not secure. The building was archaeologically and architecturally studied from 2001–2006 and has been preliminarily described in the publication on the findings in a shaft well in the hammam:

The outer walls have been preserved to the height of the beginning of the dome[73]. The bath could be accessed through room 18; it can be referred to as a *soyunmalık*. Room 02 functioned as the entry and passage way, i.e. *aralık*, that led into the *ılıklık*, room 03, where the benches were discovered *in situ*. Of the dome of the room some of the Muqarnas furnishings still exist. To the west of this lukewarm room the formerly domed rooms 04 and 05 with hypocausts were located that probably were for personal care and thus can be referred to as a *traşlık*. In the centre of the complex is a hot bathing room 06, the *sıcaklık*, with a high dome flanked by semi-domes with high-quality Muqarnas decorations. Two additional bathing rooms (07 and 08), so-called *halvetler*, followed to the south of the hot bathing room. The water supply to the bathing rooms was provided by two water reservoirs to the south and west of the hammam (09 and 12) although the necessary *praefurnia* were also discovered in area 10. Rooms 14 and 15 are structures added later in the north of the complex which could have been the women's bath.

In conclusion it is possible to identify three baths in Ephesos that were definitely still in use in the Early Byzantine period. These are the Vedius Gymnasium, the Baths of Scholastikia and the bath in the Byzantine Palace. For the other complexes only guesses can be made due to the state of research. None of these baths appear to have survived the Early Byzantine period. Although we do not know of any baths from the Middle Byzantine period, we do need to assume that they existed. Nonetheless a general tendency can be observed towards abandoning expensive large buildings in favour of smaller complexes. While the large buildings felt indebted to the Roman bathing tradition with its canonical succession of rooms, *frigidarium, tepidarium* and *caldarium*, the smaller complexes began forgoing the *frigidarium*. This development culminated in the complete lack of cold bathing rooms in the Islamic baths. Beginning in the 14th century, numerous bathing complexes developed again in Ayasoluk/Ephesos under the influence of the family of the Aydınoğulları, which demonstrate that a bathing culture was well established in this period. The Islamic bathing culture thus resumed the bathing tradition deeply rooted in Roman life. In connection with the prescribed cleansing as part of prayer they are closely linked to religious ritual. The architecture of Islamic baths took up Roman heating systems but it differentiates itself through a reduction in room size, the lack of areas for sport and cold bathing rooms as well as the source of light. Generally they are less bound to strict room sequences. Despite all these differences the Islamic bathing tradition maintained essential elements of the hygienic and social function of this important part of Roman life over the centuries and prevented the complete rupture in tradition that took place during the Middle Ages in Europe.

[72] The identification as the Burak Bey Hammam as proposed by Pfeiffer-Taş 2011, 91 is still a subject of debate.
[73] On the building description cf. Pfeiffer-Taş 2010, 17–20; Daş 1998, 391–393.

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MEDIEVAL EPHESOS AS A PRODUCTION AND CONSUMPTION CENTRE[1]

INTRODUCTION

All archaeologists know that progress in archaeology is always a painstakingly slow and arduous process. So progress consists in the efforts of each generation of archaeologists to formulate views on archaeological finds with greater diagnostic and explanatory power than the existing views of previous generations, in the knowledge that their own views must be open for refinement and improvement. Archaeology is therefore a never-ending discussion, and by no means an exact science. From this perspective, it is clear that it may be very fruitful to take a second look at how previous generations spoke of their finds of broken pots, and to compare those views with current assessments. It is from this perspective that I aim to present in this article some new ideas on the pottery from medieval Ephesos, and thus on the post-classical history of the site as a ceramic production and consumption centre.

It is now quite clear that as a result of recent archaeological finds made in the context of the Austrian excavations at Ephesos/modern Selçuk we have to acknowledge that the existing picture of the occupation of medieval Ephesos is limited and needs substantial re-writing. In his laudable book »Ephesus after Antiquity. A Late Antique, Byzantine and Turkish City« the historian C. Foss summarises this old consensus. He states that »by the end of Byzantine rule, Ephesos had moved and declined to become an inland fortress, while the old city by the Harbor was largely abandoned and ruined«[2].

Recent archaeological research on Byzantine and medieval Ephesos has, however, shown that life in the city did not came to a halt with the end of the Roman Empire, nor did it with the end of the Byzantine Empire. On the contrary, the archaeological record clearly suggests that business went on in Ephesos and that the ancient city was not totally abandoned, despite the often cited attacks by Persians, Arabs, and in later times by Turks or Ottomans[3]. In fact,

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[1] First of all, I would like to thank the organizers, Prof. P. Magdalino and Ass. Prof. S. Ladstätter, for inviting me to the seventh annual RCAC Symposium in 2012. I would furthermore like to thank Sabine in her capacity as the director of the Austrian Archaeological Institute in Vienna (OeAI) and the Ephesos excavation for their cooperation with Leiden University (NL) and the possibility of studying and publishing the post-antique ceramics from Ephesos (in English commonly rendered in the Romanized form as ›Ephesus‹). In addition, I would like to express thanks to Dr. S. Canby for allowing me permission to study J. T. Wood's vessels in the storage rooms of the British Museum in London (UK). I am also indebted to C. Kurtze, N. Gail and H. Huijgens for helping me with the maps and photographs used in this article. Thanks are also due to my colleagues S. Bellibaş, E. Fındık, G. Parrer, L. Zabrana, Y. Dalanay, U. Schachinger, N. Schindel, R. Sauer and Y. Waksman for working closely together with me on the Byzantine and medieval ceramic finds from Ephesos/Selçuk. Finally, I would like to express my gratitude to the Netherlands Organisation of Scientific Research (NWO) awarding me with a VIDI research grant for the years 2010–2015 that allowed me to do research in Ephesos. The text of this contribution was already submitted in September 2013.

[2] See Foss 1979, 116. 131 where he is suggesting that »the archaeological record of the long centuries of Byzantine rule is scanty«.

[3] E.g., Miltner 1958, 128; see also Foss 1979, 103–119. 141–144. 162–167; Böhlendorf-Arslan 2004, 241 f. versus Külzer 2010, 524, who takes a more subtle view.

medieval Ephesos (especially under the rule of the Lascarids and the House of Aydın, also known as Aydınoğulları) seems to have been a centre of production and consumption at a crossroads of major economic and cultural developments in the region.

Even though many details are still unknown to us, I hope to show here that the consensus of decline in Ephesos during post-classical times is contradicted by recent archaeological evidence and that a more differentiated, exciting picture of Byzantine and medieval Ephesos is now slowly emerging – at least from a ceramic perspective. In this paper I discuss a few aspects of current research on the material culture in Ephesos from Byzantine to Late Ottoman (and even recent) times, as work is still in progress. From all the excavated material I am presently studying, I have chosen two case studies, which are typical for reviewing the ceramic finds of medieval Ephesos, in order to give a first indication of the problems and the possibilities that arise during the processing of this material.

In fact, I will focus here on finds from an old excavation as well as from a recent excavation, which are situated near to each other in the area south of the Ayasoluk Hill and the İsa Bey Mosque (built in 1375). At first, I will discuss material from old excavations with unknown contexts in the Artemision, and then afterwards from recent excavations with better stratigraphy at a Türbe, located south of the Artemis Temple[4].

ARTEMISION

Ephesos was, of course, distinguished for its Temple of Artemis. This huge temple, forming part of the ›Artemision‹, was according to some Greek writers one of the Seven Wonders of the Ancient World[5]. Unfortunately, it is nowadays represented only by some inconspicuous columns, revealed during excavations in the late 19th and early 20th centuries[6]. Until now, not much was known archaeologically about the site in its later periods, or about the transition period between ancient Ephesos and medieval Selçuk (Theologos/Ayasoluk). The principal aim of my research was, therefore, to start with the diagnosis, documentation and dating of the medieval ceramic finds excavated at the Artemision complex.

Unfortunately, most of the upper layers from the Artemis temple had been severely disturbed by digging carried out by the British archaeologists J. T. Wood and D. G. Hogarth in 1869–74 and 1904–05. And later this happened with the digging carried out by the first Austrian campaign under O. Benndorf and C. Humann in 1895 directly to the west and the north of the British excavation area. This seriously hampered any detailed stratigraphical study. Furthermore, no medieval ceramics found at these excavations have been preserved in the Ephesos storage rooms in Selçuk, but sixty vessels were shipped by J. T. Wood to the British Museum in the first half of the 1870s[7].

Nevertheless, the excavations by A. Bammer in and near the altar of the Artemis Temple in 1965–66 yielded a substantial amount of post-classical ceramics, as did his excavation of a medieval pit in the wrongly called Hekatompedos, which is in fact the archaic altar of the temple, in 1982. In addition, an almost complete medieval *pithos* (or large jar) was recovered in 1988 in the northern profile of the excavation area[8].

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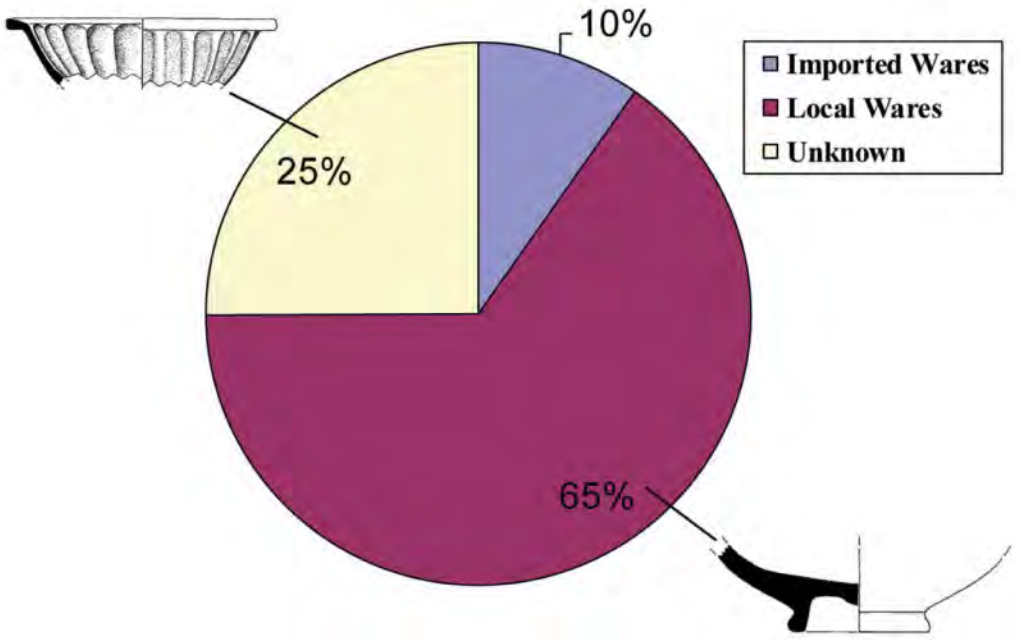
[4] Although the focus in this chapter is mostly on table wares of the Middle Byzantine, Late Byzantine and Beylik periods, the publication of unglazed wares of these periods found in Ephesos is also appearing in the near future; see Vroom – Fındık 2015, 227–229 pls. 17–26 and Vroom 2018.

[5] E.g., Antipater of Sidon (*Anthologia Graeca* IX, 58); Philo of Byzantium (*De septem mundi miraculis*).

[6] Cf. for more information on the excavation of the medieval layers at the Artemision: Weissl 2005, 9–16. See in general for the first excavations at the site, Wood 1877; Wood 1890; Canby 2000, 129; Hofbauer 2002, 177; Donkow 2004, 109–111; Challis 2008, 114–139; Zabrana 2011, 341–347.

[7] Canby 1997, 11. The 14th-century coin hoard excavated by T. J. Wood is discussed by J. Baker in this volume.

[8] Weissl 2005, 13 f. fig. 4. According to Bammer, the excavations in the Artemision also yielded some Byzantine and medieval architectural structures and medieval graves. See for example, Bammer 1999 on the architectural



1 a Ephesos, Artemision: percentages of medieval imported wares, locally made wares and wares of an unknown provenance (ca. 12th–15th c.) (J. Vroom)

THE POTTERY FINDS

The bulk of the pottery finds from the late 19th- and 20th-century excavations at the Artemis Temple turned out to be from the later Middle Ages, specifically from the Late Byzantine, the Beylik[9] and the Early Ottoman periods in western Turkey[10]. That is to say, most fragments can be dated to the 13th to 15th centuries. As there was no real stratigraphy, the imported wares proved most helpful in establishing a time span for the assemblage. The imported wares (25 % of the total) range from 13th- to 14th-century Green Celadon Ware from China to Spanish Lustre Ware from Valencia of the late 14th to 15th centuries (fig. 1 a)[11].

From western Turkey originates the so-called Miletus Ware, a regional type of decorative painted tableware which dates from the same period[12]. As the first examples were first found in Miletos by the German archaeologist F. Sarre at the beginning of the 20th century, this pottery type became known as ›Miletus Ware‹[13]. However, we now know this is a wrong term, because the pottery was made at various workshops in Turkey (among others, at Iznik).

Nevertheless, the majority of the excavated material from the Artemision (65 % of the total) is clearly locally produced, which seems to suggest that there was one or more potter's workshops operating at this location in medieval times (fig. 1 a). Evidence for this local production can be seen in the find of potters' tools, among them several mould fragments

remains of a Byzantine church in the Artemision, which according to him seems to have been transformed at a later stage into a mosque. However, there is as yet no evidence for a church or a mosque in the Artemision.

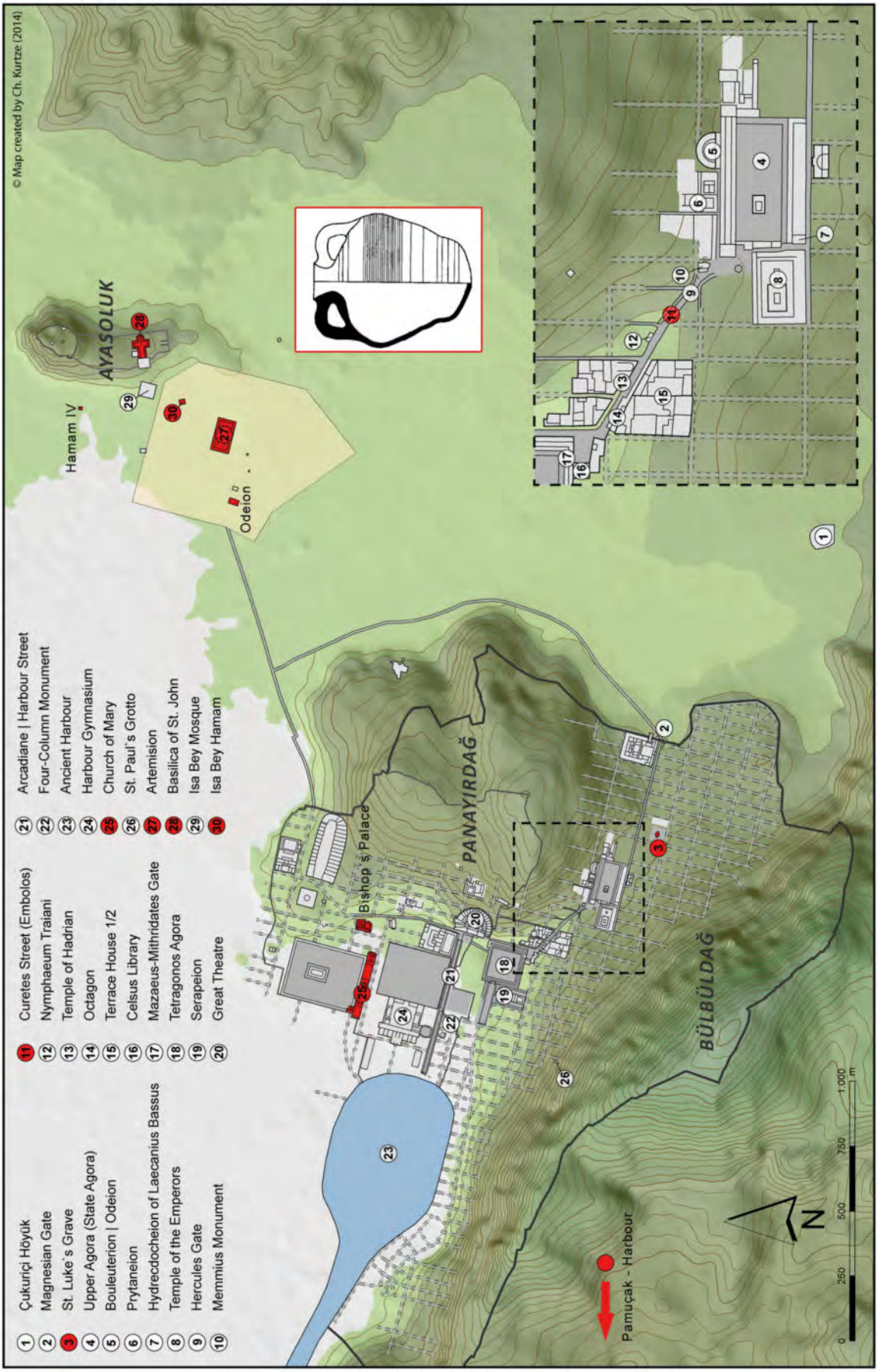
9 The Beylik period in western Turkey is sometimes described as ›Seljuk‹, ›Emiratzeit‹ or the ›era of the Aydınoğlu dynasty‹.

10 See for more information, Vroom 2005a and especially n. 1 for a detailed list of previous publications on medieval pottery from Ephesos.

11 Vroom 2005a, 19 f. nos. 1–1a pls. 1. 6; 23 f. nos. 6–7 pls. 1. 7.

12 Vroom 2005a, 24–26 nos. 9–15 pls. 1–2. 7–9; Vroom 2005b, 156 f.

13 Sarre 1935, 72–75. 87 pls. 50–53; cf. Pancaroğlu 2011 for Sarre's interpretation of Seljuk art.



1 b Map of Ephesos with distribution of Günsenin amphorae 1, highlighted in red (J. Vroom after © OeAW-OeAI, C. Kurtze; drawing after Vroom 2005b, 94, MBYZ 13.3)

and tripod stilts for the production of glazed wares (fig. 4 a left)[14]. It is clear, though, that the local products made at the Artemision were very much influenced by shapes, designs and decoration-techniques of pottery from the Near East, for instance, from Syria and Iraq.

However, a medieval kiln or workshop for pottery production has yet to be identified in the Artemision area. The tripod stilts and potter's moulds came from the centre of the Artemis temple, east from the altar. This is an area which was already excavated in the 19th century, and it is quite possible that in those days a potter's workshop or kiln was not recognised and therefore destroyed in the search for more ancient treasures[15]. It is therefore interesting to know that in the storage rooms of the British Museum in London I distinguished among the 60 medieval pots shipped by Wood to London two moulds and three tripod stilts, of which two tripod stilts were fired together with ring feet of Monochrome Green Glazed vessels of the Beylik period[16].

Samples from the Artemis Temple pottery assemblage were selected for archaeometrical research, especially for thin-sectioning, heavy mineral and chemical analyses, which were carried out by R. Sauer of the Institute for Art and Technology, University of Applied Arts at Vienna and Y. Waksman of the CNRS Ceramic Laboratory at Lyon, France[17]. One of their results was that they were able to distinguish three different types of Ephesian clays (local fabrics A–C) used by the medieval potter(s), who apparently were using similar clay beds as potters of the Archaic and Roman periods in Ephesos.

POTTERY OF THE BYZANTINE PERIOD

Apart from finds of the Beylik and Early Ottoman periods I was able to distinguish some earlier fragments of Middle Byzantine times and some more pieces of the Late Byzantine era in the Artemision assemblage. Most of these ceramics look similar to the ones found on Ayasoluk Hill during excavations at St John's Basilica[18]. A detailed description of some of these Byzantine fragments from the Artemision are included in a small catalogue at the end of this article (see appendix: figs. 7–8, cat. 1–11).

The Middle Byzantine sequence begins with imported sherds of 10th- to 11th-century Glazed White Ware II from Constantinople (fig. 7, cat. 1)[19], followed by two body fragments of Unglazed Incised Ware that could come from Chalkis in central Greece (fig. 7, cat. 2–3) dated to the 11th–12th centuries[20]. Of nearly the same period are one piece of Slip-Painted Ware decorated with dots (fig. 7, cat. 4), two fragments of Brown and Green Painted Ware (fig. 7, cat. 5–6) and one sherd of Fine Sgraffito Ware (fig. 8, cat. 7)[21]. These glazed tablewares are generally dated in the 12th to early 13th centuries, and probably imports from the Aegean as the fabrics look different from the local ones. Recent chemical analyses by Y. Waksman has

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[14] Vroom 2005a, 28 no. 16 pl. 9; 33 nos. 31–32 pls. 4. 11; see also Canby 1997, fig. 5 for a mould from Wood's excavations at the Artemision and now in the storage rooms of the British Museum.

[15] It is clear that medieval potter's tools (tripod stilts) were even found in destroyed contexts in the centre (the Sekos) of the Artemis Temple; see Weissl 2005, 15 n. 33.

[16] British Museum OA+15657 and OA+2214. Most of the 60 vessels from Wood's excavations at the Artemision and now stored in the British Museum can be dated in Beylik times; cf. Canby 1997, 29 figs. 1–24; Canby 2000, figs. 32–33.

[17] Sauer – Waksman 2005.

[18] Cf. Parman 1978; Parman 1980, figs. 1–10 pls. 1–5; Parman 1989, figs. 2–3. 8 a–16; see also Sotiriou 1921–22; Hörmann et al. 1951.

[19] See in general for Glazed White Ware II, Hayes 1992, 18–29; Vroom 2005b, 74–77; Vroom 2012, 359–362. Glazed White Ware II was also found at the St John's Basilica excavations; cf. Parman 1980, fig. 1; Parman 1989, 280 fig. 11. The date of these sherds coincides well with coins of the 10th or 11th c. found at the Artemision; see Foss 1979, 137 appendix VII.

[20] Vroom 2003, 145–147 fig. 6, 4; Vroom 2005b, 70 f.

[21] Morgan 1942, 72–83. 95–103 fig. 72, 127–135; Vroom 2003, 150–152 figs. 6, 17–22; Vroom 2005b, 80–83.

indeed confirmed that these wares were not locally produced in Ephesos, but that they came from a single workshop area situated in the western Aegean, such as Chalkis on the island of Euboia[22].

Of slightly later date we may notice fragments of Monochrome Yellow Sgraffito Ware (fig. 8, cat. 8), Monochrome Ochre-yellow Sgraffito Ware (fig. 8, cat. 9–10) and Monochrome Green Sgraffito Ware (fig. 8, cat. 11)[23]. These last ones belong to the ›Zeuxippus Ware Family‹ and are locally or regionally produced variants of the so-known Zeuxippus Ware, a type of 13th-century glazed pottery with incised decoration that was first recognised during excavations at the Baths of Zeuxippus in Istanbul[24]. It is very well possible that these Zeuxippus Ware-variants from the Artemision were manufactured at the recently discovered pottery workshop at nearby Anaia/Kadıkalesi (Kuşadası), where similar looking Late Byzantine glazed tableware was made in large quantities[25]. In short, all these pottery fragments clearly refer to some kind of occupation in the Artemision area during Middle and Late Byzantine times.

In addition, a few pieces of a Middle Byzantine amphora type were recovered at the Artemision. They belonged to the so-called Günsenin 1 amphorae (or Saraçhane 54 amphorae) produced at Ganos (modern Gaziköy) and Chora (modern Hoşköy) on the northern shore of the Sea of Marmara, as well as at two kiln areas on Marmara Adası (ancient Prokonnesos): one on the north coast at Saraylar and the other at Topağaç on the south-east coast of the island[26]. A distribution map of this wine amphora type, which can approximately be dated in the 10th and 11th centuries, clearly shows its use in the area south-west of the Ayasoluk Hill as well as in various parts of the ancient city of Ephesos (fig. 1 b). Fragments or more complete examples were until now recognised at St John's Basilica, Hammam 4, İsa Bey Hammam, the Odeion in the Artemision, the Türbe, St Mary's Church, the so-called Byzantine Palace, the Embolos, the so-called St Luke's Tomb, and the medieval harbour near Pamucak[27].

TÜRBE

After this short overview of ceramic finds from the Artemision, I turn now to the second case-study. It concerns material from recent excavations, which were carried out between 2009 and 2012 under the direction of S. Ladstätter[28]. The finds come from a Türbe, numbered 6, which is situated south of the Artemis Temple. If we zoom in on this Türbe, we can distinguish walls of a second building to the southwest (fig. 2 a). The excavations inside and around the Türbe yielded stratified contexts containing various types of Middle and Late Byzantine ceramics, as well as pottery of the Beylik and Ottoman periods. Unfortunately, the majority of this material was often broken in very small fragments, due to alluvial sedimentation in this area.

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[22] See forthcoming results of these analyses on Byzantine pottery finds from Ephesos, as well as Waksman and von Wartburg's 2006-article on this so-called Middle Byzantine group (including Slip-Painted Ware, Green and Brown Painted Ware, Fine Sgraffito Ware, Incised Sgraffito Ware, Painted Incised Sgraffito Ware, Champlevé Ware and Monochrome Plain Ware) and Waksman et al. 2014.

[23] See also Böhlendorf-Arslan 2004, 242–244 pl. 126 nos. 573–576 and in particular pl. 126 no. 574.

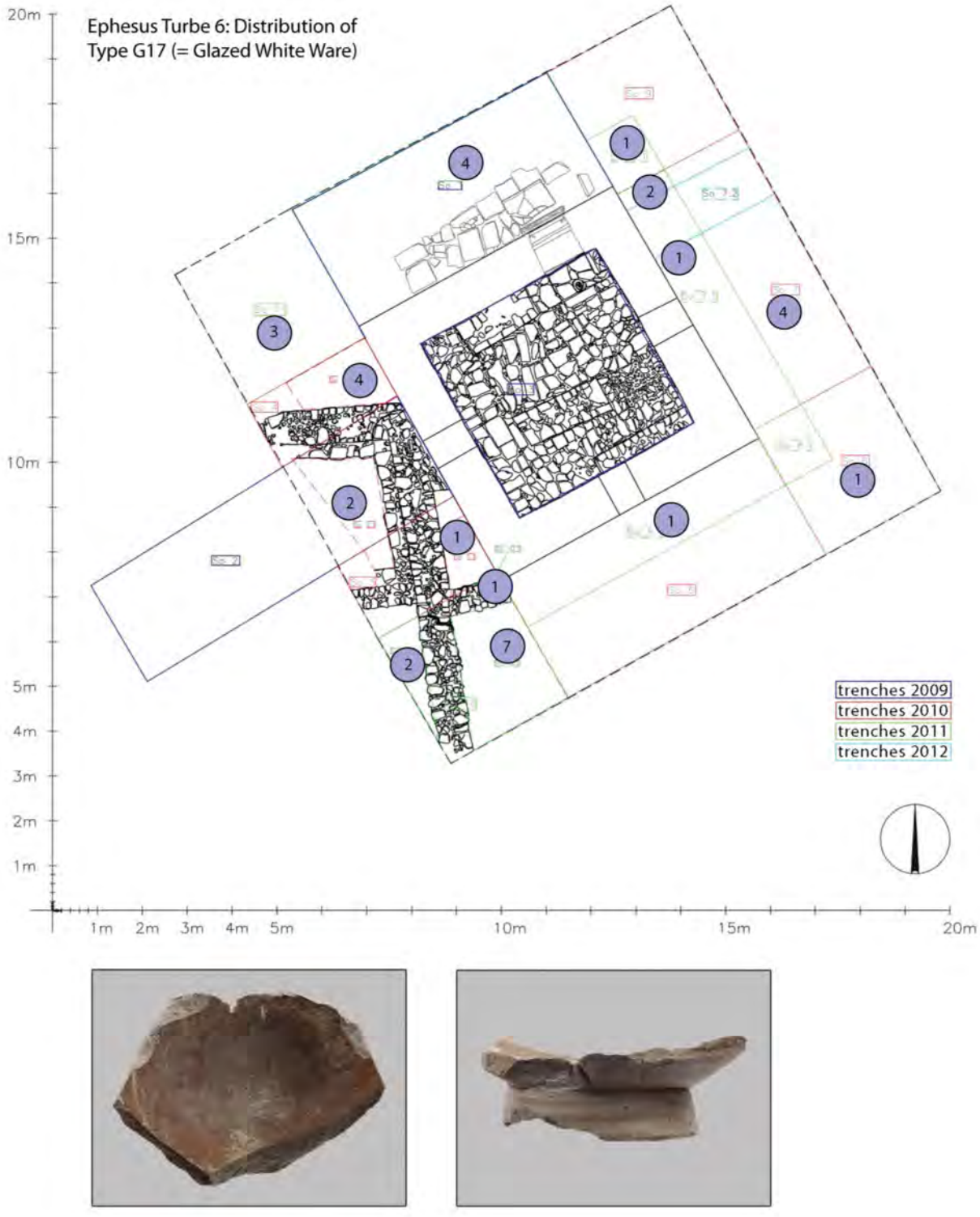
[24] Vroom 2005b, 108–111.

[25] Mercangöz 2013a, 32–37 figs. 1–4 and I–5; see also İnanan 2013.

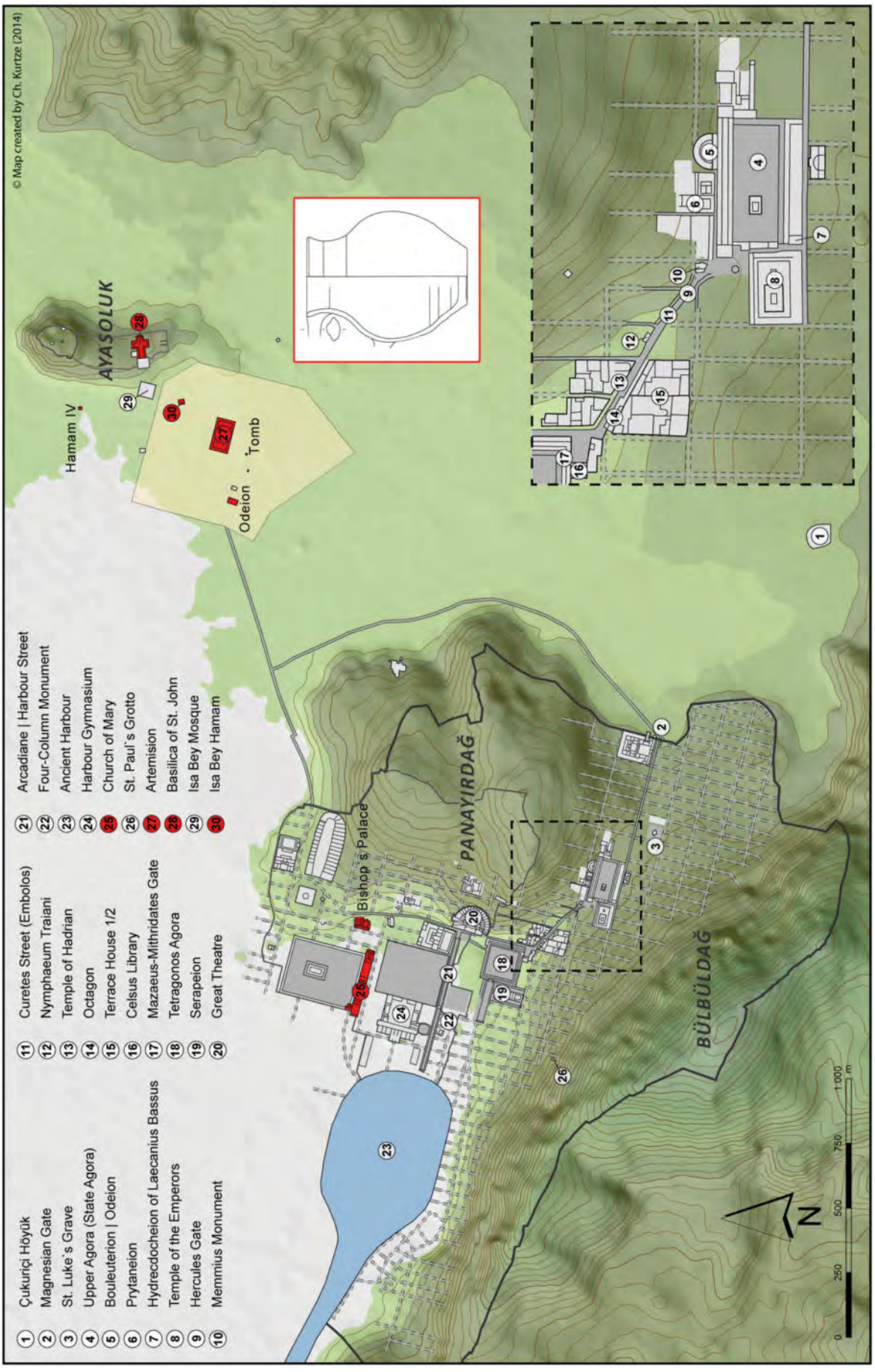
[26] Günsenin 2009, 147 fig. 10, 1; see also Hayes 1992, 73–75 fig. 24; Vroom 2005b, 95 f.

[27] This information is mostly based on my own observations of the material recovered in Ephesos/Selçuk. See for further literature, Parman 1989, fig. 7 a; Iro et al. 2009, 55 f. pl. 7 no. 8; Liko 2010, 187 nos. 34. 49. I would like to thank M. Büyükkolancı for the information about his excavation of a cistern full with Günsenin 1 amphorae on Ayasoluk Hill, as well as M. Sevim for the information about ca. 60 Günsenin 1 amphora fragments and 5 complete examples, which were found during rescue excavations conducted by the Efes Müzesi at Aqualand near Pamucak. Other 10th to 11th-c. amphorae (Saraçhane amphorae 55 and 58) from St Mary's church were published in Turnovsky 2005, figs. 9–10; for earlier Byzantine amphorae found in Ephesos see Ladstätter 2010, figs. 30–31.

[28] More detailed information about the 2009–2012 Türbe excavations is presented in Ladstätter 2015.



2 a Ephesos, Türbe 6: distribution of Glazed White Ware II and IV, including one base fragment of Glazed White Ware II (below) from the Türbe (J. Vroom after © OeAW-OeAI, C. Kurtze; photos © OeAW-OeAI, N. Gail)



2 b Map of Ephesos with distribution of Glazed White Ware I, II and IV, highlighted in red (J. Vroom after © OeAW-OeAI, C. Kurtze; drawing after Ladstätter 2008, pl. 297 K 239)

POTTERY OF THE BYZANTINE PERIOD

Until now, twelve different tablewares of the Middle and Late Byzantine periods were recognised within the Türbe pottery assemblages, ranging in date from the 10th to the 13th centuries (table 1). The earliest Byzantine pottery in this list includes fragments of Glazed White Ware II and IV manufactured in Constantinople/Istanbul and well-distributed on various sites in western Turkey[29]. One undecorated base fragment with a brownish glaze on the interior can already be dated in the 10th–11th centuries (fig. 2 a)[30]. The same figure shows the widespread and even distribution of Glazed White Ware II finds in the excavated trenches next to the Türbe (fig. 2 a). When zooming out, we perceive a distribution map of these wares throughout the site of Ephesos, including fragments of Glazed White Ware I and Glazed White Ware II varying in date from the 7th to the 11th centuries (fig. 3). We may notice a concentration of these Constantinopolitan wares south-west of the Ayasoluk Hill as well as on the ancient site of Ephesos. Apart from the Türbe, similar finds were until now recovered at St John's Basilica, Hammam 4, the Artemision (fig. 7, cat. 1), İsa Bey Hammam, the Odeion in the Artemision, the Stadium, Vedius Gymnasium, the Byzantine Palace, St Mary's Church and the Late Antique-Medieval City Quarter south of St Mary's Church[31].

In addition, the Türbe excavations yielded pieces of all major pottery of the Middle Byzantine period, including Slip-Painted Ware and Brown and Green Painted Ware that can generally be dated in the late 11th to late 12th centuries – a period when new shapes and decoration styles appeared in the Aegean (tab. 1)[32]. The list also shows fragments of Fine Sgraffito Ware and Painted Fine Sgraffito Ware of Middle Byzantine times from the Türbe excavations, which can be dated in the second half of the 12th century. Like the above mentioned similar examples recovered in the Artemision, these decorative glazed wares belong to the so-called Middle Byzantine group manufactured in production areas in the western Aegean, probably Chalkis on the island of Euboia[33]. The discovery of these tablewares as main cargo on various shipwrecks (e.g., Skopelos, Pelagonnesos-Alonnesos, Kastellorizo) show the importance of maritime trade for the distribution of these Byzantine pottery types[34].

Interesting are three fragments of Incised Sgraffito Ware of the Middle Byzantine era, with the incised and gouged motif of a human figure on the interior (fig. 3 a). The depiction is of a man with long wavy hair carrying a lance and pennons (*phlamoula*)[35]. Incised male human figures (warriors, hunters, musicians) were common scenes on the interior of decorative Byzantine vessels from the end of the 12th to the early 13th centuries[36]. They have been interpreted as heroes of Akritic songs, such as the Byzantine epic hero and border-warrior with the name Digenis Akritas referring to the so-known *akritai*, the frontier guards[37]. Until now, most

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[29] Böhlendorf-Arslan 2004, 96–104 map 3 mentioning Adrianople, Iznik/Nicaea, Hagios Aberkios, Ilion, Gülpinar, Amorion, Pergamon, Ephesos, Magnesia, Miletos, Hierapolis, Kyaneai, Myra, Siliyon. See also François 1997; Vroom 2006a; Vroom 2013, fig. 2.

[30] A more decorated example of Glazed White Ware II from the Ayasoluk Hill with an impressed bird in the interior centre was published in Parman 1980, 325 f.; Parman 1989, 280 fig. 11.

[31] This information is mostly based on my own observations of the material recovered in Ephesos/Selçuk. See for further lit., Parman 1980, fig. 1; Parman 1989, fig. 11; Ladstätter 2008, 115 K 239 pls. 297. 330 (Glazed White Ware I vessel at the Vedius Gymnasium).

[32] Vroom 2003, 231–233; Vroom 2005b, 80–83; see also Liko 2010, 189 no. 334 pl. 101 for another find of Green and Brown Painted Ware at the so-called Tomb of St Luke, as well as Parman 1989, fig. 13 for similar finds on the Ayasoluk Hill.

[33] Vroom 2003, 150–153 and 163 f.; Vroom 2005b, 80–91; see also Vroom 2014, 80–91 with updated information on the origin of these wares as well as Waksman et al. 2014.

[34] Papanikola-Bakirtzi 1999, 118–157.

[35] See Armstrong – Sekunda 2006, 17 with further lit.

[36] Vroom 2015.

[37] Jeffreys 1998. The Byzantinist A. Kazhdan (1991, 47) remains cautious about the Digenis Akritas imagery on the ceramics: While 35 plates have the warrior wearing the *podea* or pleated skirt (sometimes called a *fustanella*) attributed to Manuel I, the »new Akrites«, in a Ptochoprodromic poem, and 26 have him slaying a dragon, neither

3 a Ephesos, Türbe 6: three fragments of Incised Sgraffito Ware with incised design of a human figure (© OeAW-OeAI, N. Gail).

fragments with such depictions were recovered in Greece, for instance at Corinth, Sparta, Thebes, Athens and Thessaloniki. In addition, they occur in the Crimea (Chersonnesos) and in Turkey (e.g., Istanbul, Pergamon, Ayasoluk, Miletos, Bodrum Museum and Anaia/Kadıkalesi)[38]. However, it should not be excluded that the warrior on the Türbe fragments could represent St Christopher the Dog-headed, because of the crudely made snout-like animal's head of this male figure, but this is not sure[39].

Furthermore, I draw attention to some 13th-century ceramic fragments of the Late Byzantine period from the Türbe assemblage, including Monochrome Sgraffito Ware and the so-called Zeuxippus Ware variants in green and ochre-yellow glazes that originate from the nearby workshop at Anaia/Kadıkalesi (tab. 1)[40]. The ceramic tradition obviously changed during the 13th century in western Turkey, giving way to innovative products with thinner walls, better glazes, different shapes and decoration techniques, new workshops (among them Anaia/Kadıkalesi, Miletos, Magnesia and Pergamon) and to an increasing manufacture of glazed tablewares[41].

In this period we also start to distinguish in the Türbe assemblage the first imports of Islamic fritwares, which all have a siliceous frit body artificially made from quartz, ground glass and fine white clay. Some pieces are simply covered with a turquoise alkali glaze, or decoratively painted in black under a turquoise glaze[42]. Others have painted floral motifs in blue and black under an alkali glaze[43]. These fragments come from workshops in Syria (probably from Raqqa), showing thus contacts between both regions in the 13th and 14th centuries[44].

POTTERY OF THE BEYLIK AND EARLY OTTOMAN PERIODS

The bulk of the pottery finds found at the Türbe excavations belong to the Beylik and Early Ottoman periods. Table 2 shows an overview of twelve different wares, ranging in date from the 14th to the 16th centuries. These include examples of Monochrome Sgraffito Ware and Polychrome Ware, being typical for the Beylik period and mostly dating from the second half of the 14th century[45]. These tablewares differ from the previous Byzantine pottery types, because of their larger sizes, their thicker walls and their bases (having fine cracks on the

iconographic element is sufficient to identify the hero specifically as Digenes because both the skirt and the deed characterise other *akritai* named in the »Akritic Songs«.

[38] See in general for these finds, Frantz 1940–41; see also Morgan 1942, pls. 43. 49. 50. 53; Notopoulos 1964; Papanikola-Bakirtzi 1999, 58 no. 50; 176 no. 203; 179 no. 206; 182 no. 209; 184 no. 211; Mercangöz 2013a, 51 fig. I-21 a–c.

[39] Armstrong – Sekunda 2006, 13 f.; see also Papanikola-Bakirtzi 1999, 48 no. 34; 50 no. 37; 178 no. 205.

[40] Mercangöz 2013a; see also İnanan 2013; Liko 2010, 187 no. 40 pl. 101 for another find of a 13th-century Zeuxippus Ware variant at the so-called Tomb of St Luke. According to Vetters (1972–75, 318) large quantities of ›Late Byzantine pottery‹ were also recovered from the top layers of the chambers on the Domitian Terrace in Ephesos.

[41] Vroom 2003, 233 f.; Vroom 2011.

[42] Watson 2004, 295–300.

[43] Watson 2004, 400–405.

[44] See also Mercangöz 2013b, 167 fig. X-2 for similar looking Islamic ceramics found at Anaia/Kadıkalesi.

[45] Cf. for comparable pottery finds of the Beylik period at the St John's Basilica, Sotiriou 1921–22, 190–193 figs. 64–66; see also Hörmann et al. 1951, 262–265 pls. 60–61; see also Wallis 1891, appendix plates III 1. 6. 11; IV 1–6; V 1. 2, 4. 6. 8. 10; VI 10; Karwiese 1989, 34–36. 39 pl. 58 and Bulut 1997 for more Beylik ceramics found in Ephesos.

exterior surfaces). Their incised decoration often contains Islamic geometrical-floral designs (palmettes, interlaces) that seem to be copied from other media (such as motifs in eastern style on contemporary tombstones), so that one could wonder if there was perhaps a *koiné* of artistic interpretation at the time. Similar looking examples have been recovered in Miletos, Manisa and Balat. In addition, we may notice in this period fragments of Monochrome Glazed Wares, as well as pieces of Slip-Painted Ware of the Early Ottoman period.

3 b Ephesos, Türbe 6: three fragments of Spanish Lustre Ware with painted decoration (© OeAW-OeAI, N. Gail)

Characteristic for the period are locally manufactured products, regional wares as well as imports from further afield, which can be dated in the late 14th and 15th centuries. It concerns here fragments of Miletus Ware, which were manufactured at various sites in western Turkey, and Spanish Lustre Ware from production centres in the Valencia region[46]. This last ware (also known as *loza dorada*) yielded a vessel with Gothic writing in blue paint on its interior centre, showing the Latin letters IHS (which means ›Iesus Humanitatis Salvator‹) – a common motif in this period (fig. 3 b)[47]. The distribution of this fine tableware and other merchandise throughout the Mediterranean can be linked to larger international maritime trade routes mostly carried out by Venice and Genoa, as well as to a regional diffusion of this pottery through intermediate ports by private initiatives, for example, by Italian merchants or by tradesmen from the Crown of Aragon[48].

Apart from glazed tablewares, the excavations at the Türbe also yielded locally made Unglazed Domestic Ware and Unglazed Relief Ware of the Beylik period[49]. They include fragments of large jugs with a high cylindrical neck and a moulded decorated body with various geometric and floral motifs[50]. It seems as if these vessels were made in two separate parts, each formed in a hollow earthenware mould containing countersunk ornament[51]. The parts were then joined horizontally round the bulge and the seam smoothed down. A strainer in the neck shows that the vessels were used for pouring and serving liquids on or near the table. A very micaceous slip on the exterior surface provided a metallic ›golden-looking‹ effect. Well-preserved examples of this pottery type were recovered in a well-dated context of the second half of the 14th century during excavations of the Gülgün Hatan Hammam in Manisa, where they were actually built into the roof of the building[52]. Other good examples of these jugs can be found in the museums of Selçuk, Istanbul, Diyarbakır and Mardin; outside Turkey they circulated in the Crimea and in Rhodes[53]. They appear to be influenced by shapes and decoration techniques from Syria, northern Iraq and Iran[54].

These local products perhaps come from a collapsed kiln structure, which was excavated underneath the second building wall south of the Türbe and which was destroyed by the

[46] See n. 10 and n. 11.
[47] Vroom 2005b, 134 f. for finds of Spanish Lustre Ware in the Aegean.
[48] Spallanzani 2006, 97–103.
[49] Vroom 2005a, 34–36 nos. 33–40 pls. 4–5. 11.
[50] See also Wood 1877, 198 f. and Canby 1997, figs. 1–15 for similar looking jugs found during Wood's excavations at the Artemision.
[51] Vroom 2005a, 33 nos. 31–32 pls. 4. 11.
[52] Gök Gürhan 2011.
[53] E.g., Byzantio & Arabes 2011, 106–109 nos. 49–50 but wrongly described here as ›Mosul ewers‹ produced at Syrian workshops.
[54] Vroom 2005a, 34 f. with further lit.

3 c Ephesos, Türbe 6: distribution of potter's tools (V1 = below left), kiln separator (V4 = below centre) and kiln furniture (V5 = below right) (J. Vroom after © OeAW-OeAI, C. Kurtze; photos: © OeAW-OeAI, N. Gail)

foundation of the building (fig. 3 c)[55]. Near to this structure a kiln separator has been found (fig. 3 c), and in the so-called filling of the kiln – a layer of fired soil with much rubble and ashes – three potter's tools in the form of tripod stilts for separating glazed pottery during firing in the kiln (fig. 3 c). So, it is clear that some kind of pottery production was taking place here in medieval times. As three overfired rim fragments were found in the same kiln context, it was possible to date the kiln from the end of the 13th or the beginning of the 14th century.

Finally, I discuss here the last four pottery types of Late Ottoman-recent times found at the Türbe excavations, which can be dated to the late 19th/early 20th century (tab. 2). These include Late Slip-Painted Ware (also known as ›Didymoteicho Ware‹ produced either at Çanakkale or at Didymoteicho, Thrace), an almost complete Polychrome Painted jug, glazed cooking pots from Siphnos and from Vallauris in southern France and – to my surprise – even a stoneware fragment of a juniper/›*jenever*‹ flask from the Bols Company in the Netherlands[56].

METAL AND GLASS FINDS

Together with these ceramics various Late Ottoman and more recent metal finds were recovered at the Türbe, such as iron tools and iron cutlery of the 19th century including a knife, fork and spoon (fig. 6 b below). It is tempting to connect these 19th-century pottery and metal finds with the first generation of excavators and workmen in Ephesos – especially when these teams were working at the nearby Artemision excavations in the 1860s[57]. We know for instance that some of these archaeologists used the Türbe as a shed for rest and recreation and for storage of their tools. Looking at pictures of these first excavations in the Artemision, taken by J. Trotman in the 1860s and stored in the Beazley Archive in Oxford, J. T. Wood and his excavation team are clearly visible in front of the Türbe (fig. 6 b above). So, in a way, our recovery of their metal knives, forks, spoons and implements completes the archaeological circle.

Furthermore, in the same excavation area several medieval glass finds were recovered, which once belonged to colourless vessels with applied small droplets (or ›prunts‹) and applied trails (sometimes in a blue colour) on the outside. Unfortunately, the glass pieces from the Türbe are quite small, but they look very similar to medieval beakers with applied bluish trails and bluish rims from excavations in Lagopesole (in southern Italy)[58], as well as to prunted beakers from Corinth (Greece), from sites in southern Italy and in the Near East, and in particular to trailed beakers from Anaia/Kadıkalesi (nearby Kuşadası) and from the Seljuk Palace inside the inner Citadel of Alanya[59]. The parallels from these sites can all roughly be dated to the 13th and 14th centuries.

Together with the medieval beakers many broken fragments of glass bracelets were found south of the Türbe, often very decorative in twisted and monochrome varieties with different colours. They appear to belong approximately to the same period as the beaker fragments, and they look very similar to 13th-century glass bracelets excavated at nearby Anaia/Kadıkalesi[60]. Particularly noteworthy is also the discovery in this excavated area of furnace debris, production surplus and 24 slag fragments, one of which contains a piece of blue glass

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[55] Another destroyed pottery kiln was found in 2006 at Hammam 3 together with wasters, overfired products and tripod stilts. This kiln was apparently destroyed because of the building of the hammam, and its use dated by the excavators in the 2nd half of the 14th c. due to two coin finds; cf. Pfeiffer-Taş 2011.

[56] See in general, Vroom 2005b, 186 f. 192 f.; Vroom 2007; François 2011, figs. 4. 9 (found in Izmir).

[57] Most of these metal finds are associated with 19th and 20th-century coins, which were dated by N. Schindel (OeAW-IKAnt).

[58] Fiorillo 2005, tab. 27, dated 1266–1315.

[59] E.g., Davidson 1952, fig. 14 nos. 742. 744. 746; see also Bakirer 2009, figs. 1–9; Oral Çakmakçı 2013, 139 fig. VIII-4.

[60] Cf. Oral Çakmaçi 2013, 148 figs. VIII-13–14.

inside. Although the evidence seems to suggest that the recovered kiln structure next to the Türbe (mentioned above) was used exclusively for pottery, this slag clearly also indicates the existence of medieval glass production in this part of Ephesos.

DISTRIBUTION MAPS

After this short summary of medieval pottery and glass finds from the recent Türbe excavations I present some distribution maps showing the latest views on ceramic production and consumption, starting with an overview of medieval workshops of pottery manufacture in Ephesos/Selçuk. We undoubtedly distinguish in figure 4 a an industrial area, concentrated southwest of the Ayasoluk Hill (fig. 4 a). Pottery production areas were until now recognised at Hammam 3, İsa Bey Hammam, the Artemis temple, the Türbe and in the Odeion in the Artemision[61]. We may assume that there was probably also pottery production on the Ayasoluk Hill as well. The products that these workshops were manufacturing include Unglazed Relief Ware (often jugs with a moulded decorated body and covered with a micaceous ›golden-looking‹ slip), Monochrome Green Glazed Ware (open vessels as well as oil lamps), Monochrome Turquoise-blue Glazed Ware, Brown and Green Sgraffito Ware, as well as domestic Unglazed Wares (sometimes covered or decorated with either a white slip or a ›golden‹ slip)[62]. We know from written sources that potters were still active in the late 15th century, as three of them (*çölmekçi*) are mentioned in the list of artisans in the first Ottoman tax register (*defter*) containing Ephesos or rather ›Ayasoluğ‹[63].

The next map shows the find of an uncommon glazed bowl of the second half of the 13th century recovered at an excavation trench in the so-known Hammam 4 area (fig. 4 b). It concerns here one of the first products of the workshops in the Veneto region (in and near Venice), also known as ›Roulette Ware‹ (or in Italian *ceramica graffita a spirale-cerchio*)[64], and it is to my knowledge the only example ever found in Turkey until now (fig. 4 b left, cat. 12). This vessel was excavated in 2012 at Hammam 4 together with a 13th-century Crusader coin, being identified by U. Schachinger as coming from the Peloponnese from the mint of the Villehardouin dynasty (1209–1278)[65]. We know from written texts about the settling of Venetians and Genoese in Ephesos (referring even to ›Venetian quarters‹), and this bowl seems to confirm such a Venetian presence in the 13th century[66].

It is interesting also to consider the wider distribution of the types of imported Byzantine and medieval wares so far recovered in Ephesos. The next map thus shows the spread of ceramic imports during Middle Byzantine times, concentrating on finds from the 10th to 12th centuries (fig. 5 a). As may be noticed, the circulation of ceramics in this period of time is mostly regional, concentrated around Constantinople/Istanbul and the Aegean. Interesting is also the fact that there are hardly any imports from the West in this period. It is clear that Byzantine Ephesos was importing decorative tablewares in substantial quantities from the Aegean area, and that the use of Günsenin 1 amphorae from the Marmara region for wine consumption was common all over the city area.

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[61] This information is mostly based on my own observations of the material recovered in Ephesos/Selçuk. See for further lit., Pfeiffer-Taş 2010; Pfeiffer-Taş 2011.

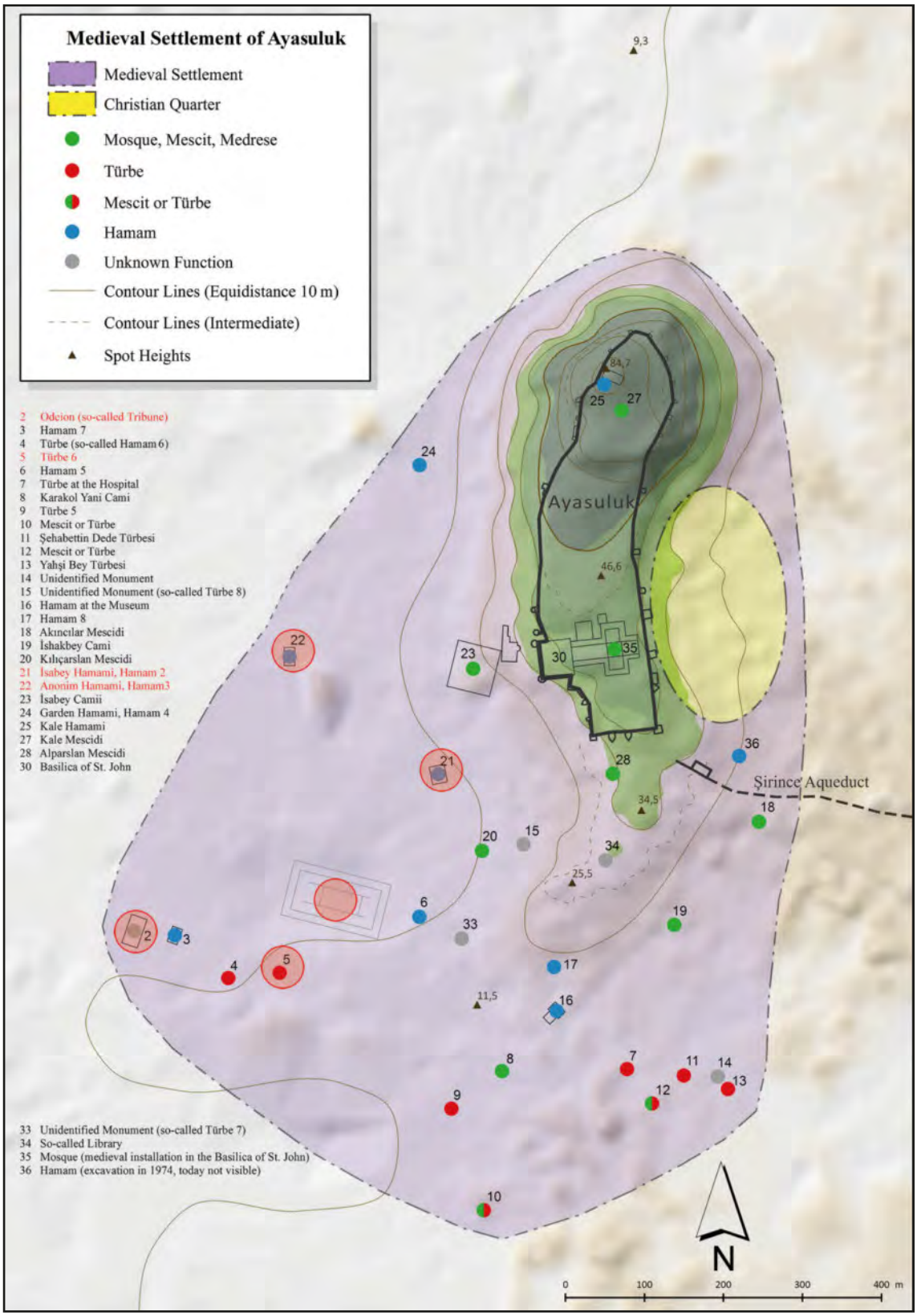
[62] Vroom 2005a, 26–36 pls. 2–5. 9–11.

[63] This is recorded in Telci 1997, 291, BOA, TD (Başbakanlik Osmanli Arsivi, Tahrir Defter) 8, dated to 1478 and in Telci 2010, 60–65 tabs. 5–6; see also Kiel 1998, 105 referring to 70 Christian households and 425 Muslim households recorded in the same document.

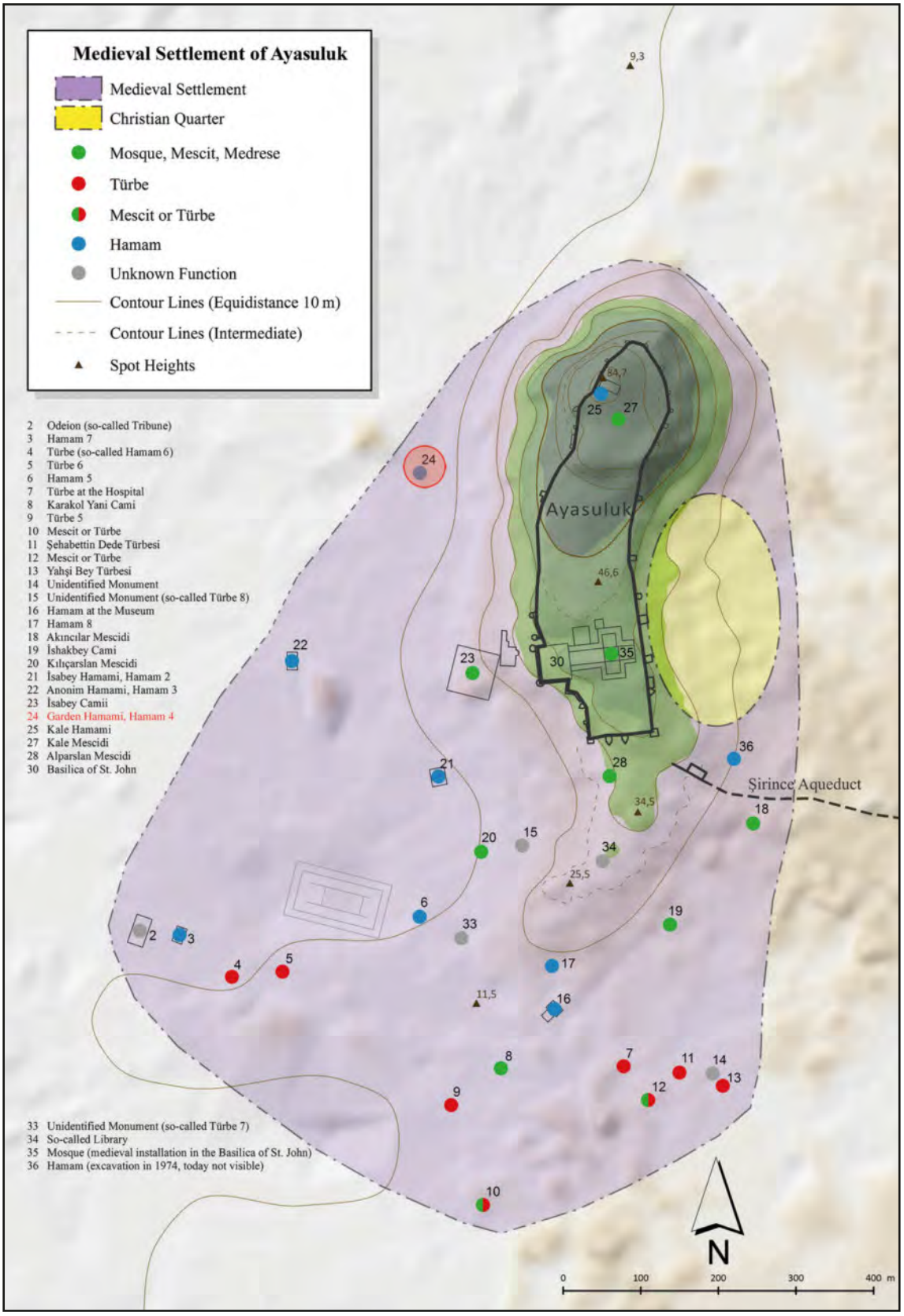
[64] The term was introduced in Gelichi 1988. See also Vroom 2005b, 132 f.; Vroom 2006b, 231 f. figs. 2–3 with further lit.

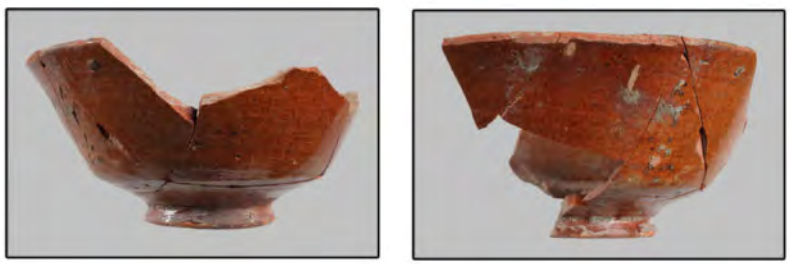
[65] I would like to thank U. Schachinger for this information.

[66] Foss 1979, 121. 153–154; see also Zachariadou 1985. Apparently, two tombstones of 1284 and 1293 inscribed to Genoese of the local colony were found at St John's Basilica; cf. Foss 1979, 121 n. 18; Külzer 2010, 528.



4 a Ephesos: distribution of pottery workshops in the Late Byzantine and Beylik periods, with a tripod stilt (below left) and a mould (below right) from the Artemision excavations (J. Vroom after © OeAW-OeAI, C. Kurtze; photos: N. Gail, J. Vroom)





4b Ephesos: find of ›Roulette Ware‹ (left, cat. 12) from the Veneto region in Hammam 4 (J. Vroom after © OeAW-OeAI, C. Kurtze; photos: N. Gail)

5 a Map of the eastern Mediterranean with circulation of imported pottery during the 10th–12th centuries (J. Vroom)

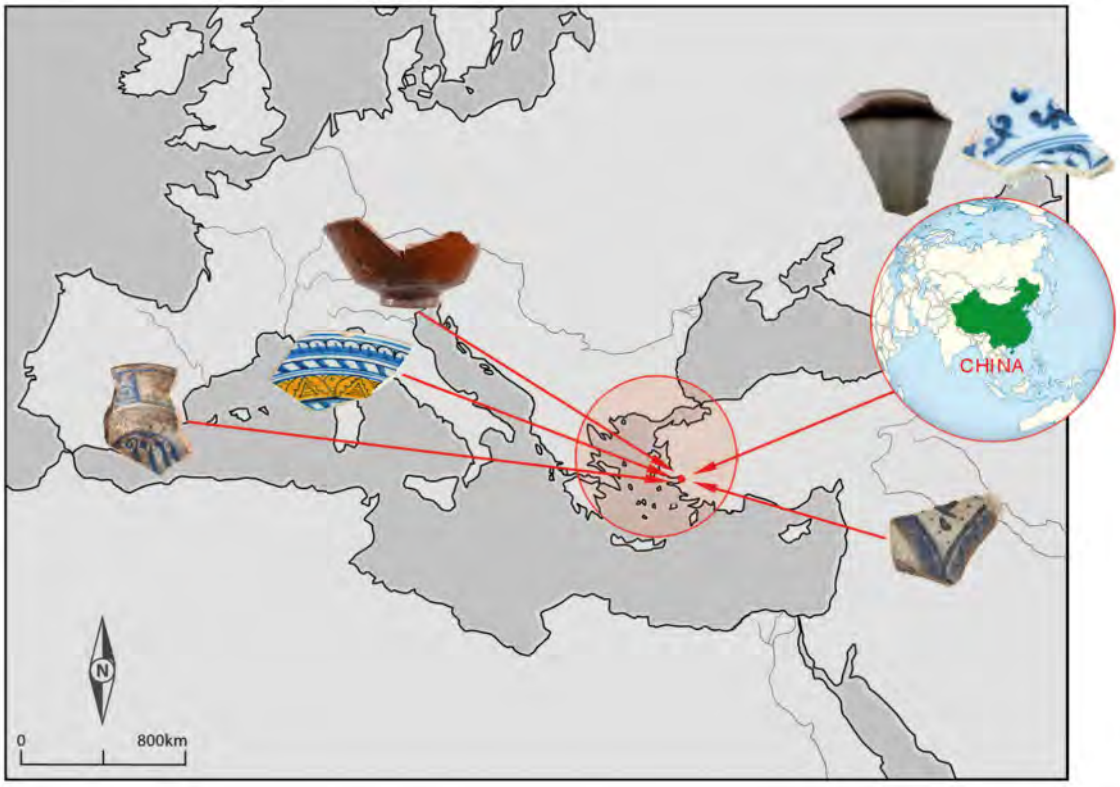
The following map, however, shows a very different picture of pottery distribution in Ephesos, ranging from the 13th to 16th centuries (fig. 5 b). Now we suddenly notice – next to the regional Aegean connection – much more long-distance contacts in this period, with wares coming from Spain, Italy, Syria and even from far away regions such as China. Apparently, an international-orientated pottery trade carried on during the Beylik and Early Ottoman periods, taking already off in the latest phase of the Late Byzantine period especially after the loss of Acre in 1291. This far-reaching international trade network, extending from the western Mediterranean to the Far East, shows the level of prosperity in Ephesos during the 14th and early 15th centuries.

The third map shows the distribution of Late Ottoman-recent wares found in Ephesos (fig. 6 a). The regional Aegean area is here important again, with some odd pottery types coming from north-western Europe. These include Dutch stone wares and glazed cooking pots from southern France.

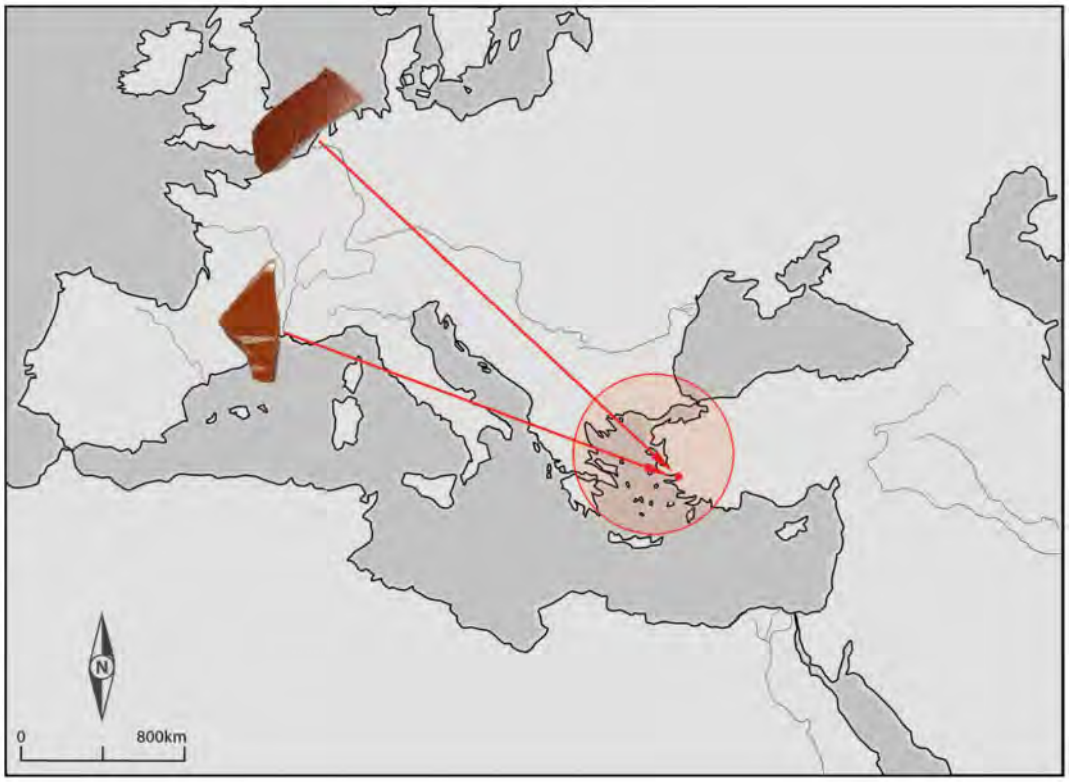
CONCLUSION

As the work on the Byzantine, Medieval and Ottoman finds from Ephesos/Selçuk is also part of my research at Leiden University, I continue to compare long-term patterns of production, distribution and consumption between Ephesos and the other three coastal urban sites in my project, that is to say, Butrint in southern Albania, Athens in Greece and Tarsos in south-eastern Turkey. In addition, it is my desire to look in more detail into the spatial distribution of finds on these four sites and create distribution maps of ceramics for each site. These last maps will be useful to highlight the various locations in the urban areas of different types of pottery in terms of shape, chronology, function and provenance. This approach may help us to understand changes in the types and location of activities in the urban landscape of each city over time.

Pottery finds are not merely a dating tool. They are also sources of anthropological information about the use, function and status of wares, both within communities and in relation to the arrival of newcomers and the subsequent appearance of new dynamics in regions, societies and cultures. The case of medieval Ephesos is particularly interesting, as the settlement seems to have been still active as a sizeable town when the first post-Seljuk generation of Turkish invaders arrived at the beginning of the 14th century. The archaeological record shows that during the subsequent Beylik period this activity intensified, since there was some considerable production of glazed and unglazed ceramics and glass, as well as distribution of imported wares in Ephesos (ranging from Spain to China). As the archaeological research is still continuing, I hope to be able to provide more new ceramic information and new ideas about medieval Ephesos in the near future.



5 b Map of Europe with circulation of imported pottery during the 13th–16th centuries (J. Vroom; photos: N. Gail, J. Vroom)



6 a Map of Europe with circulation of imported pottery during the 19th–20th centuries (J. Vroom; photos: N. Gail)

6 b Picture of J. T. Wood and his excavation team in front of Türbe 6 in Ephesos (above). 19th- and 20th-century metal finds from the Türbe 6 excavations (below) (© OeAW-OeAI, N. Gail)

APPENDIX: CATALOGUE OF POTTERY FINDS FROM EPHESOS/SELÇUK

Middle and Late Byzantine pottery finds from the Artemision excavations

Cat. 1 **Fig. 7**
Open vessel (dish [?]), base fragments (Art.65.K14. B13.01)
pres. H. 1.4 cm, pres. W. 7.6 cm, Diam. of base 6.5 cm, Th. of wall 0.4 cm
Moderately soft, fine, light grey fabric (2.5 Y 8/1), with some tiny to fine mica and some fine black and red inclusions. Transparent lead glaze, pale yellow-greenish in tinge (7.5 Y 7/3) in and out. The glaze is semi-glossy, uneven and very thin. Low standing ring with central nipple?
Glazed White Ware II from Constantinople/Istanbul

Cat. 2 **Fig. 7**
Closed vessel, body fragment (Art.66.K17.01)
pres. L. 5.3 cm, pres. W. 5.7 cm, Th. of wall 0.9 cm
Soft, fine, orange-red fabric (2.5 YR 6/8), with a few tiny to fine limestone, some fine to medium white quartz, many tiny to fine red and brown inclusions (mudstone [?]) and some fine voids. Soapy feel. Dull orange wash (5 YR 7/4) on the outside. Incised spirals beneath ridged lower neck. Straight symmetrical neck; convex convergent upper body.
Unglazed Incised Ware from the Aegean

Cat. 3 **Fig. 7**
Closed vessel, body fragment (Art.88.K954.01)
pres. L. 3.4 cm, pres. W. 4.2 cm, Th. of wall 0.9 cm
Soft, medium fine, orange-red fabric (2.5 YR 6/6), with some fine to large limestone, a few medium to large white and grey quartz and many tiny to fine red and brown inclusions (mudstone [?]). Soapy feel. Dull orange wash (7.5 YR 6/6) on the outside. Incised spirals on the exterior.

Unglazed Incised Ware from the Aegean

Cat. 4 **Fig. 7**
Open vessel, body fragment (Art.91.K.492.01)
pres. L. 2.4 cm, pres. W. 2.5 cm, Th. of wall 0.4 cm
Soft, fine, orange-red fabric (2.5 YR 7/6), with some tiny to fine mica and some fine white and grey quartz. White slip on the exterior. Transparent lead glaze, brownish in tinge (7.5 YR 5/6) on the inside; pale green lead glaze (PMS 359 U) on the outside. Slip-Painted decoration of two dots (pale yellowish in tinge: 5 Y 8/4) on the interior.
Slip-Painted Ware from the Aegean

Cat. 5 **Fig. 7**
Open vessel (dish [?]), rim fragment (Art.91.K.492.02)
pres. H. 5.1 cm, pres. W. 7.5 cm, Diam of rim 26 cm, Th. of wall 0.5–0.6 cm.
Soft, fine, orange fabric (7.5 YR7/6), with some fine limestone and brownish inclusions and a few voids. White slip and transparent lead glaze on the interior and on the exterior rim (with two splashes of white slip coming down). Painted decoration of green (PMS 362 U) and brown (10 YR 3/3) circles and horizontal lines on the inside. The glaze is matt, even and thin. Everted rim; straight symmetrical neck; straight divergent lower body.
Brown and Green Painted Ware from the Aegean

Cat. 6 **Fig. 7**
Dish, rim fragment (Art.65.K10.B8.01)
pres. H. 3.5 cm, pres. W. 7.5 cm, Diam of rim 20 cm, Th. of wall 0.5–0.6 cm
Moderately soft, fine, orange-red fabric (7.5 YR7/6), with a few medium limestone, a few tiny to fine mica, some fine white and grey quartz, many tiny to fine red and brown inclusions (mudstone [?]) and some medium voids. Rough feel. Thick white slip and a transparent lead glaze in and out. The glaze is matt, even and thin. Painted decoration of green splash (PMS 358 U) on interior rim and a wavy stripe in brown-black (5 YR 3/1) on the inside. Straight rim and direct lip; convex divergent body.
Brown and Green Painted Ware from the Aegean

Cat. 7 **Fig. 8**
Open vessel (dish [?]), body fragment (Art.65.K14.B13.01)
pres. L. 6.2 cm, pres. W. 7.4 cm, Th. of wall 0.9 cm
Hard, fine, light red fabric (2.5 YR 6/8), with some fine to medium limestone, a few fine white quartz and a few medium red-brown inclusions (mudstone [?]). Smooth feel. White slip in and out. A kind of rouletting on the exterior. Pale yellowish lead glaze (5 Y 8/4) on the inside. Incised decoration of abstract motif on the interior.
Fine Sgraffito Ware (›developed style‹ decoration) from the Aegean

Cat. 8 **Fig. 8**
Open vessel, body fragments (Art.93.K369.01)
pres. L. 5.2 cm, pres. W. 7.6 cm, Th. of wall 0.5–0.6 cm
Hard, fine, light red fabric (10 R 6/6) with a few fine mica, some fine red and brownish inclusions and some fine voids. Smooth feel. Thick white slip in and out. Transparent lead glaze on the interior. The glaze is very glossy, crazed (fine, open) and thin Overfired on one side. Incised decoration of small spirals on the interior, high lightened with ochre-yellow splashes (5 Y 7/8).
Monochrome Yellow Sgraffito Ware (local/regional)[67]

Cat. 9 **Fig. 8**
Bowl, base fragment (Art.89.K.2977.01)
pres. H. 2.3 cm, pres. W. 8.4 cm, Diam of base 7.5 cm, Th. of wall 0.7–0.9 cm
Hard, medium fine, orange-red fabric (2.5 YR7/6), with a few fine to medium limestone, a few fine white quartz and many tiny to fine black inclusions. Smooth feel. White slip and yellow-ochre lead glaze (2.5 Y 7/8) on the inside. The glaze is glossy, uneven and very thin. Gouged decoration of circle and spiral in central interior. Three tripod stilt marks in the centre. Low ring foot with flat resting surface; concave underside with slightly central nipple; straight divergent lower body.
Monochrome Ochre-yellow Sgraffito Ware (Zeuxippus Ware Family) (local/regional)[68]

Cat. 10 **Fig. 8**
Bowl, body fragment (Art. 65.K8.01)
pres. L. 3.7 cm, pres. W. 3.5 cm, Th. of wall 0.7 cm
Hard, fine, light red fabric (10 R 7/8), with a few fine limestone, many tiny to fine black inclusions and a few fine voids. Smooth feel. White and ochre-yellow lead glaze (2.5 Y 7/8) on the inside. The glaze is glossy, even and thick. Gouged decoration of three circles on the interior. Broken off ring foot.
Monochrome Ochre-yellow Sgraffito Ware (Zeuxippus Ware Family) (local/regional)

Cat. 11 **Fig. 8**
Bowl, base fragment (Art.65.K8.02)
pres. L. 9.3 cm, pres. W. 7.4 cm, Diam of base 5 cm, Th. of wall 0.6 cm
Moderately soft, fine, orange-red fabric (2.5 YR7/6), with a few fine limestone and a few fine white quartz. Smooth feel. White slip all over on the interior and in drops on the exterior. Green lead glaze (PMS 377 U) in and out (nearly until ring foot). The glaze is glossy, even and thin. Incised and champlevé decoration of circles and one central spiral on the interior. Three tripod stilt marks in the centre. Ring foot (broken off); convex divergent lower body.
Monochrome Green Sgraffito Ware (Zeuxippus Ware Family) (local/regional)[69]

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[67] Cf. Francois 1997, fig. 1 no. 21; fig. 4 nos. 22–23. 28–29 (Iznik).
[68] Cf. Waksman – Spieser 1997, fig. 14 series R no. 47 (Pergamon).
[69] See also Böhlendorf-Arslan 2004, pl. 126 no. 574.

Late medieval pottery find from Hammam 4

Cat. 12 **Fig. 4 b**
Bowl, complete profile (EHIV.SE2012/23)
pres. H. 6.2 cm, Diam. of base 5 cm, Diam. of rim 14 cm, Th. of wall 0.4 cm
Moderately hard, fine, light red fabric (10 R 6/8), with some tiny to fine mica, a few fine limestone and shell (?) Smooth feel. Transparent lead glaze (2.5 YR 5/8 in tinge) on the in and outside (until the ring foot). The glaze is glossy, even and thick. Ring foot with central nipple; straight divergent lower body; straight divergent upper body; straight rim with rounded lip.
›Roulette Ware‹ from the Veneto region, northern Italy[70]

Table 1: Glazed wares of the Middle Byzantine and Late Byzantine periods from the 2009–2012 Türbe excavations in Ephesos

Glazed wares of the Middle Byzantine period (ca. 10th–12th c./early 13th c.)		
1	Glazed White Ware II and IV	Constantinople
2	Slip-Painted Ware	Western Aegean
3	Green and Brown Painted Ware	Western Aegean
4	Fine Sgraffito Ware	Western Aegean
5	Painted Fine Sgraffito Ware	Western Aegean
6	Spatter Painted Ware	Western Aegean
7	Black and Glaze Painted Ware and variants	Western Aegean
8	Incised Sgraffito Ware	Western Aegean
Glazed wares of the Late Byzantine period (ca. 13th– early 14th c.)		
9	Monochrome Green Sgraffito Ware	Local/regional; Anaia
10	Monochrome Yellow Sgraffito Ware	Local/regional; Anaia
11	Islamic Ware and other	Syria
12	Polychrome Sgraffito Ware	Local/regional

Table 2: Glazed wares of the Beylik, Ottoman and recent periods from the 2009–2012 Türbe excavations in Ephesos.

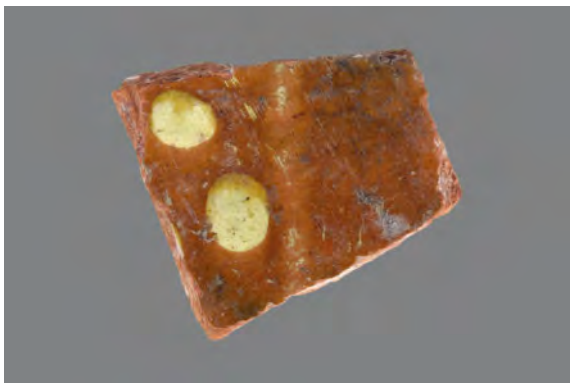
Glazed wares of the Beylik period (ca. mid-14th to early/mid-15th c.)		
13	Monochrome Sgraffito Ware	Local/regional
14	Polychrome Sgraffito Ware	Local/regional
15	Blue-and-white Frit Ware	Syria
16	Turquoise Frit Ware	Syria
Glazed wares of the Beylik – Early Ottoman period (ca. 15th c.)		
17	Monochrome Green Glazed Ware	Local/regional
18	Miletus Ware	Local/regional
19	Spanish Lustre Ware	Valencia
Glazed wares of the Ottoman period (ca. late 15th –18th c.)		
20	Slip-Painted Ware	Local/regional
21	Monochrome Glazed Ware	Local/regional
22	Monochrome Sgraffito Ware	Local/regional
23	Monochrome Painted Ware	Local/regional
24	Polychrome Glazed Ware	Local/regional
Glazed wares of the Late Ottoman-recent periods (ca. 19th –20th c.)		
25	Monochrome Brown Glazed Ware	Local/regional
26	Late Slip-Painted Ware	Local/regional
27	Polychrome Painted Ware	Local/regional
28	Glazed cooking pots and stoneware	Northern Europe

[70] Cf. Gelichi 1984.

Cat. 1

Cat. 2

Cat. 3



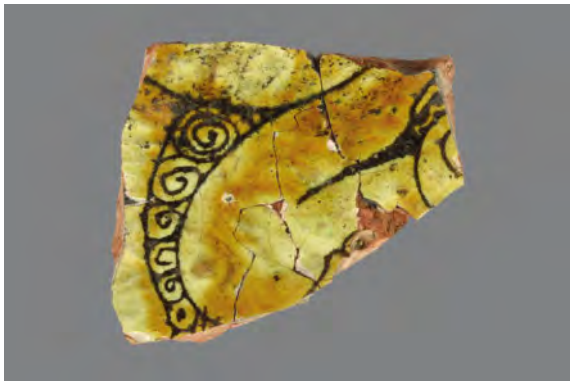
Cat. 4

Cat. 5

Cat. 6

7 Cat. 1–6 Ephesos, Artemision: ceramic finds mentioned in the catalogue, reproduced without scale (© OeAW-OeAI, N. Gail)

Cat. 7



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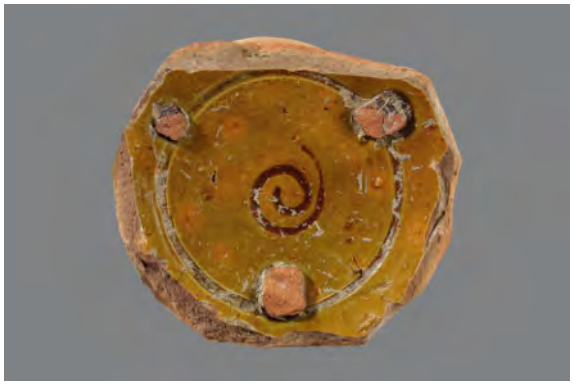

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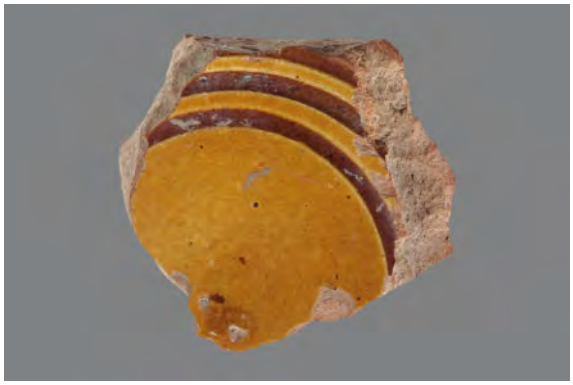

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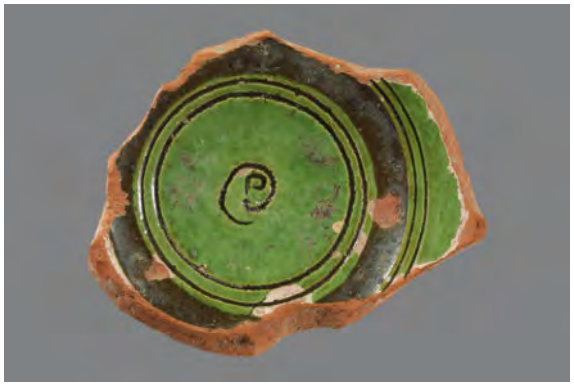

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8 Cat. 7–11 Ephesos, Artemision: ceramic finds mentioned in the catalogue, reproduced without scale (© OeAW-OeAI, N. Gail)

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Norbert Zimmermann

THE SEVEN SLEEPERS OF EPHESOS: FROM THE FIRST COMMUNITY CEMETERY TO A PLACE OF PILGRIMAGE*

The so-called Cemetery of the Seven Sleepers (fig. 1) is an extensive burial area outside the city of Ephesos. According to the legend, seven young men were walled up in a cave for their Christian belief during the persecution of Decius (249–251). But instead of dying, God merely let them fall asleep. About 200 years later, around the year 446, he re-awoke them in order to confirm to Emperor Theodosius II (408–450) the resurrection of the body. Above the cave in which they were buried shortly thereafter, the emperor, in reverence, arranged for a church to be erected. The complex traditionally connected to the legend was excavated between 1926 and 1929 in the course of the Austrian mission in Ephesos by F. Miltner; the results were published in 1937[1].

The oldest transmission of this legend derives from the Syrian Jacob of Saruq in about 500, although a Greek original version might have already existed in the mid-5th century in Ephesos itself[2]. In the years between the Third Ecumenical (Marian) Council of 431 and the ›Robber‹ Council of 449, the Ephesian bishops had very close relationships with the court of Theodosius II, and therefore this seems to be the best historical moment for the ›invention‹ of a story about the resurrection of seven men at Ephesos involving the emperor. The legend itself seems to be part of a master plan to establish Ephesos as a city of resurrection, with St John asleep and breathing dust from his grave, the re-awoken Seven Sleepers, and later the tomb of Mary Magdalene, the first witness of the Resurrection of Christ[3]. While the pilgrim Egeria, who visited pilgrimage sites at Ephesos around 400, did not yet mention the Seven Sleepers[4], in about 530 Theodosios Archidiakonos included their church in his list of pilgrimage sites at Ephesos[5]. This is, next to the legend, the oldest source for a pilgrimage monument of the Seven Sleepers and originally both the legend and their monument were directly connected to Ephesos. In the West the legend was circulated by Gregory of Tours and it also found its place in the Koran as Surat 18, ›the cave‹, causing Islamic veneration of the Sleepers until today[6]. However, archaeological evidence for the veneration of the Seven Sleepers at this site dates only from the Middle Ages, when the place thought to contain their graves was adapted for visits, and pilgrims addressed their invocations directly to the seven youths in the form of inscriptions and graffiti. The evidence therefore suggest that this is the

* I am grateful to the organizers of the conference and the editors of this volume for the opportunity to contribute some aspects of my ongoing work on the Seven Sleepers Complex at Ephesos. A first and more detailed version was published in Zimmermann 2012. The present article however is enriched with more elaborate plans, for the execution of which I thank I. Adenstedt (OeAW-IKAnt).

1 Praschniker et al. 1937.

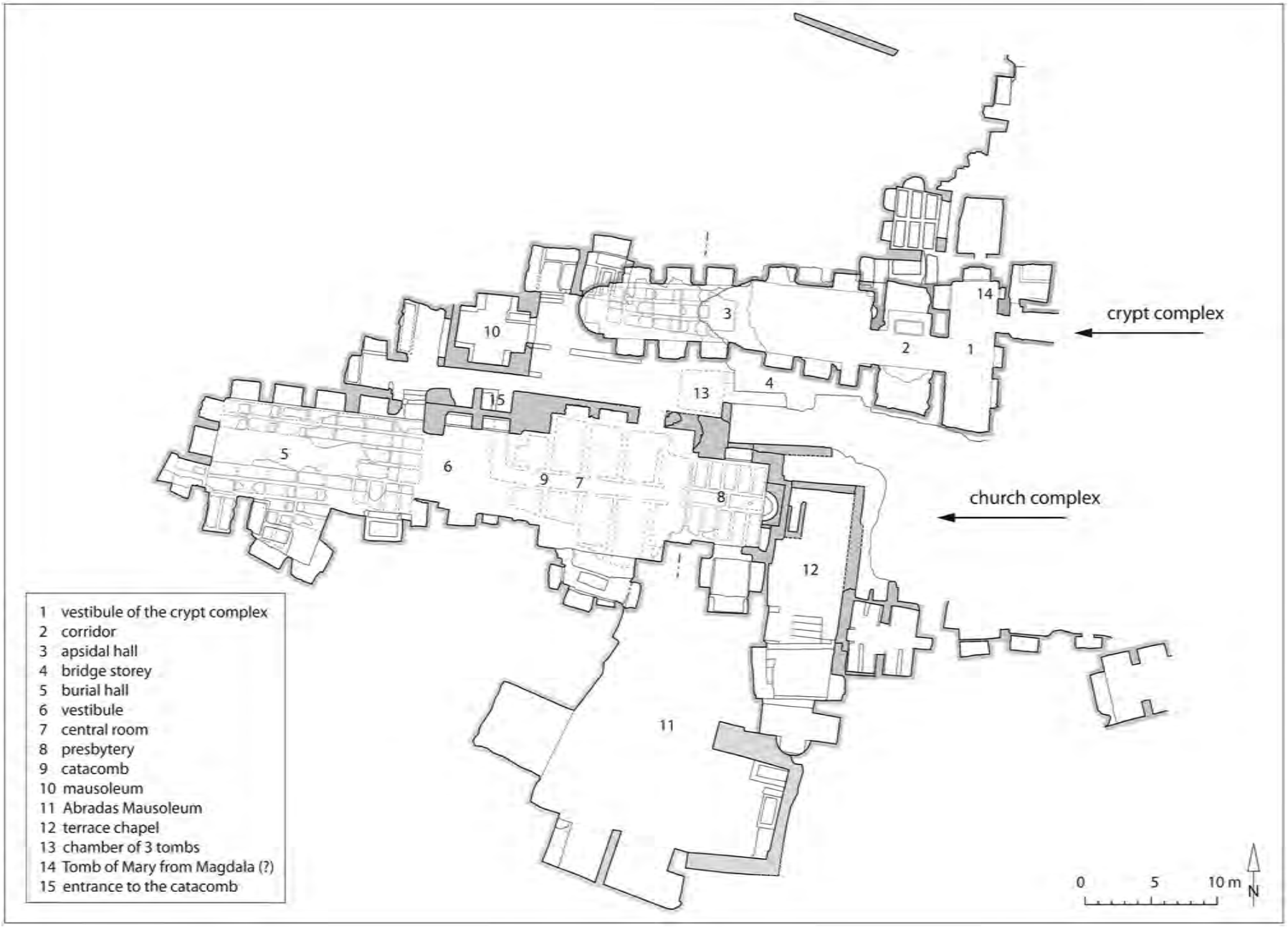
2 For the discussion of the language and dating of the legend see Koch 1883; see also Huber 1910; Weyh 1911; Allgeier 1915; Allgeier 1916–1918, 33–87; Allgeier 1922, 311–331; summarising Stichel 2000; Sauser 2003.

3 Foss 1979, 33; see also Stichel 2000.

4 Aetheria 23, 10.

5 Theodosius, *De situ Terrae Sanctae* 26.

6 Kandler 1994. I am grateful to H. Koloska (Berlin) for discussing central aspects of the transformation of the legend during the Islamic tradition with me; see now Koloska 2015, 59–75, and Koloska 2017.



1 Plan of the Cemetery of the Seven Sleepers at Ephesos (drawing: I. Adenstedt, © OeAW-IKAnt)

site at which Theodosius II established the cult of the Seven Sleepers, even if the details of the legend cannot be as convincingly explained in the archaeological record as the excavators initially believed. Especially the early period of the monument has to be regarded differently, and this will be the main aspect of the present paper. In a second part, the development of the cemetery into the venerated pilgrimage site of Byzantine times will be briefly recorded in its material remains.

Since the site as a whole is rather confusing, I shall begin by explaining it. The burial complex was integrated into an uneven rock gully on the eastern slope of the Panayır Dağ, the northernmost of the two mountain ridges enclosing the city. In general, two long burial halls overlap somewhat offset from each other; they were placed in an east-west direction on two levels into the rocky couloir (fig. 1). The lower part is referred to as the *crypt complex* and the upper one as the *church complex*[7]. The entrance of the *crypt complex*[8] is a wide, barrel-vaulted *vestibule*. In the entrance axis, passing through a kind of *corridor*, one arrived in a barrel-vaulted *apsidal hall* oriented to the west, with its side walls articulated by arcosolia niches arranged in two rows, one on top of the other. The overall length of the suite of rooms comprising *vestibule – corridor – apsidal hall* is 32 m, with the *apsidal hall* attaining a height of 5.5 m. The floor of the entire suite of rooms is completely filled with barrel-vaulted chamber graves. Whereas the *apsidal hall* was opened up from the east with a large light well, the *corridor* was spanned by a low vault with an upper storey referred to as the *bridge storey*. The side walls of both storeys were also originally prepared for burials. There were a total of around 70 graves in the floor and 20 arcosolia graves.

Slightly offset to the south-west, the *church complex*[9] is located in the upper storey, obliquely above the *crypt complex*; it was also oriented in a west-east direction, and contained four spatial units. To the west lies the best-preserved part, the longitudinal *burial hall*, partly hewn into the rock. To the east follow the *vestibule*, then the square *central room*, and the easternmost room, the *presbytery* with a small, circular apse at the east end. Beneath the *central room* is a system of grave chambers, designated as a *catacomb*[10] and concealed in the floor. This *catacomb* consists of a central, only from the north accessible corridor, which opens to five grave chambers each at the right and the left. The masonry work of the *church complex* is preserved up to shoulder height. The building construction suggests that the *central room* was deliberately erected above the *catacomb* in a monumental fashion, as is suggested by the most unusual fact that it was vaulted with a dome. The corridor and the rooms of the *catacomb* were, anyway, at little over 1.50 m, of only limited height and were used from the beginning on for burial use. We will return to this detail later on. In the *church complex* all the floors were systematically covered with chamber graves as well. The length of the suite of rooms, from the *burial hall* to the apse of the *church*, measures 45 m, while the *burial hall* attains a height of 7.5 m. In addition to the *catacomb* graves about 100 floor and 40 arcosolia graves were laid out in this upper level. The entrance to the *church complex* lay on the west of its northern flank, next to the entrance to the *catacombs*. Adjacent to the north a free-standing *mausoleum* with floor- and wall-burials also belongs to this structural assemblage so that the number of original and coherently laid graves can be determined as at least 250. To the south the so-called small *terrace chapel* was added at a somewhat later date and in the 6th century the large, probably domed *Abradas Mausoleum* was erected at a slightly higher level[11]. Additional mausolea, tomb-chambers and, repeatedly, individual graves in every available surface area provide evidence of the lively burial activity here over a long period of time.

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[7] All of the names given to parts of the Seven Sleepers complex follow Praschniker et al. 1937.
[8] Praschniker et al. 1937, 48–60.
[9] Praschniker et al. 1937, 18–41.
[10] Praschniker et al. 1937, 27–32.
[11] Praschniker et al. 1937, 70–87.

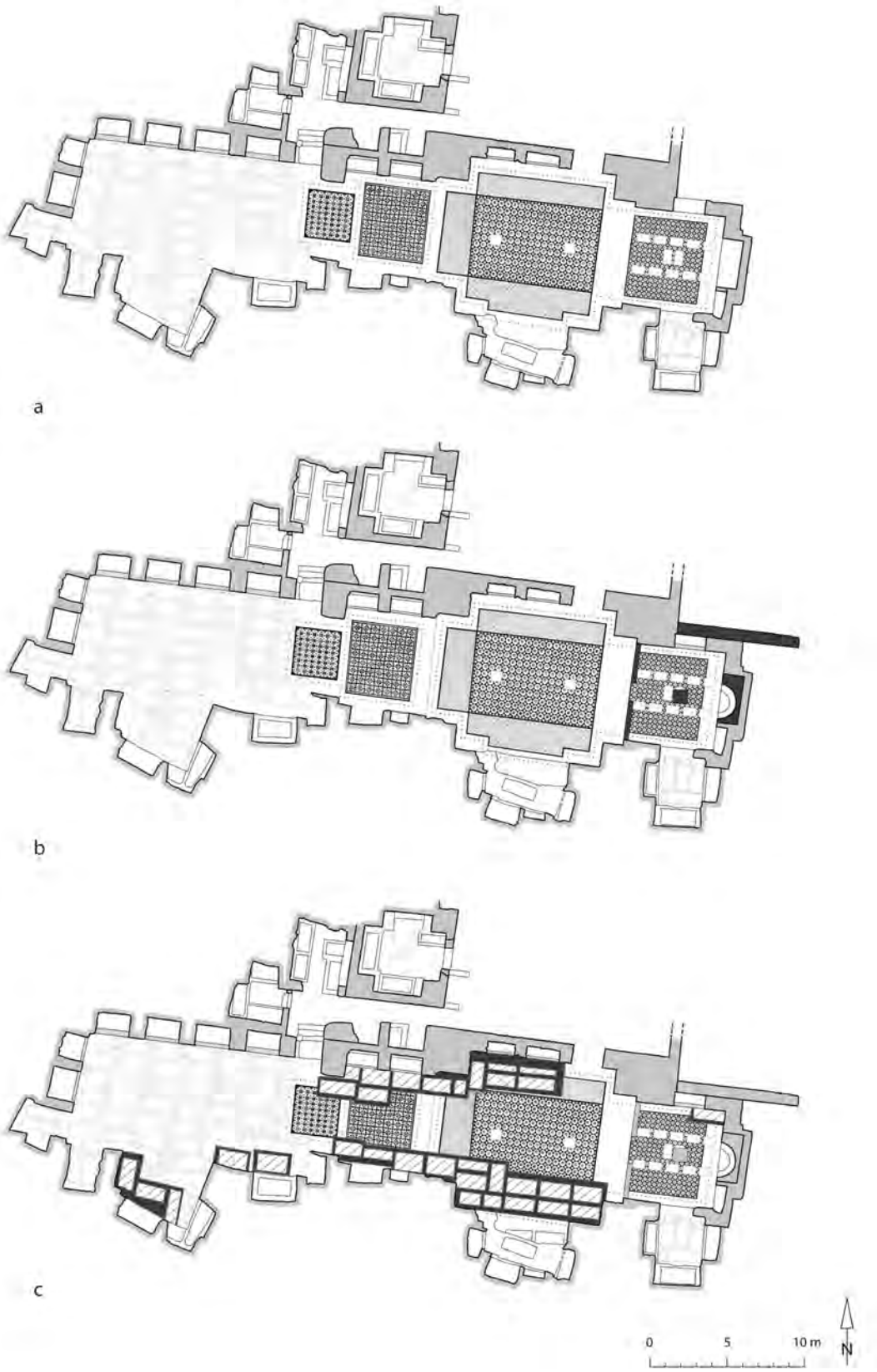
2 Circular wall of the apse, inserted in the original rectangular niche of the *church complex* (© OeAW-IKAnt, N. Zimmermann)

In accordance with the legend, the excavators assumed that the site must have been developed during the reign of Theodosius II. The preserved elements of decorative schemes and furnishings, such as floor mosaics, inscriptions, stucco decoration and the remains of wall painting, however, shed serious doubt on this dating, as we shall now see. The first question is which parts of the building can be assigned to the original complex.

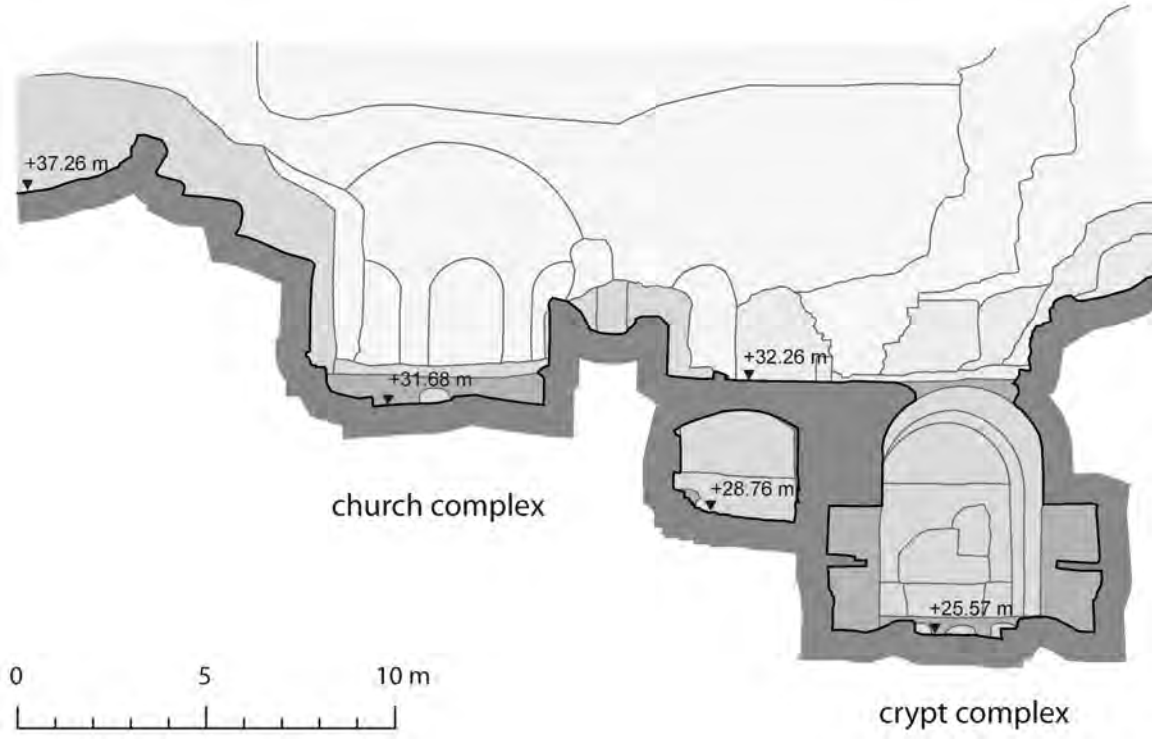
Miltner interpreted the *church* with the *catacomb* as the nucleus structure of the complex, and attributed the entire *crypt* to a second construction phase[12]. This was already rejected by M. Restle in 1971 who doubted that the *crypt complex* could be built almost beneath the church without destroying it, and subsequently he saw both parts as one building or built in order from bottom to top[13]. His stylistic dating for the painting of scattered flowers in the ceiling of the *apsidal hall* to the end of the 4th century seemed to correspond to three coins, which were discovered in the plaster of the mosaic in the *presbytery* by W. Jobst in 1972[14] and date to about 380. So, since the 1970s both *church* and *crypt complex* were thought to go back to Theodosius I, and the cult of the Seven Sleepers was believed to have later been inserted into the already existing complex by Theodosius II[15]. The discussion about the original construction date came up again with the evidence of Terrace House 2, where both forms of decoration, scattered flowers and the same geometric mosaics, were widely used in the second quarter of the 3rd century[16]. In recent years, it has been possible to review the entire architecture, all types of decoration and the inscriptions as well, and to establish a new chronology for the origin and the development of the Seven Sleepers monument. There follows an overview of the most important results of that research.

The first important result is that the church, which has always been interpreted as part of the original building, was inserted secondly into an already existing structure. This can clearly be seen at its eastern wall, where the corners of the original rectangular niche as well as the inserted apse are easily visible (fig. 2). At the same time as the semi-circular apse was inserted, a door in the north wall was closed, and the liturgical elements such as the altar and the fence were erected on the original mosaic pavement, thus transforming the eastern part of the building into a presbytery (figs. 3 a–b)[17]. This installation is the only real secondary

[12] Praschniker et al. 1937, 88–92.
[13] Restle 1971, 192–198. 206.
[14] Jobst 1972–75, 178–179.
[15] Foss 1979, 42–44. 84–86; see also Pillinger 1996, 50–51; Pillinger 2001; Bauer 2008, 179–206.
[16] The dating of Terrace House 2 is extensively discussed in Krinzinger 2002, for the wall paintings in detail see Zimmermann 2002.
[17] Zimmermann 2012, 377–382.



3 a–c Reconstruction of three stages of development of the *church complex*:
a. Original phase, 3rd century
b. insertion of the church, late (?) 4th century
c. Secondary graves above ground level, 5th–6th century (drawing: I. Adenstedt, © OeAW-IKAnt)



4 North-south-section across *crypt*- and *church complex* (drawing: © OeAW-IKAnt, I. Adenstedt)

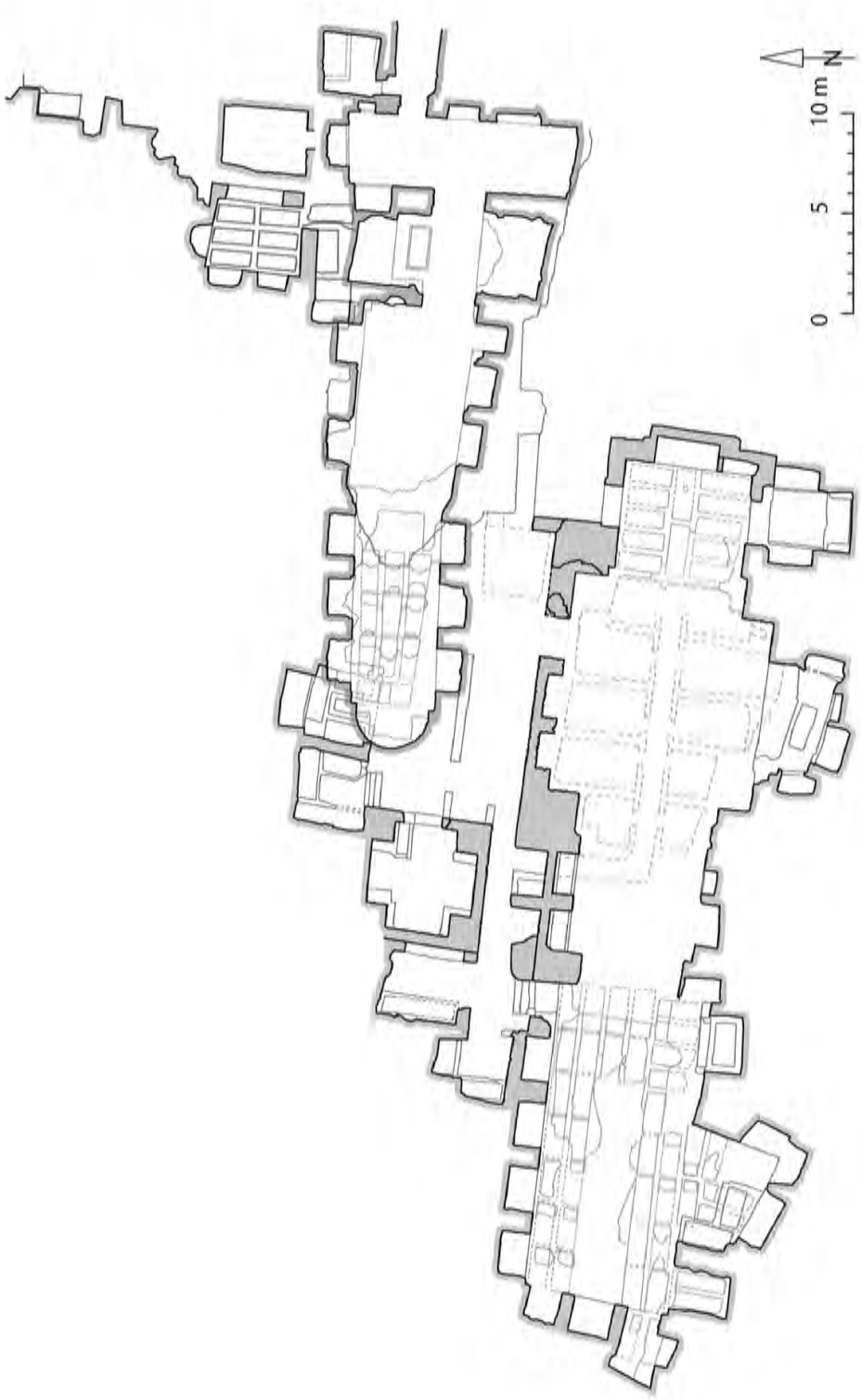
structural change in the architecture that remains visible in the entire complex today, and Jobst's three coins may indicate the date of these changes[18].

But were the *church*- and the *crypt complex* erected as one? And how far did the first building extend? The answer is given by the latest analysis of the architecture[19]. It is most unlikely that the *crypt* was cut beneath the *church complex*, according to the hypothesis that Restle had already rejected on grounds of stability. This becomes visible in a section (fig. 4), showing the so-called *chamber of 3 tombs* (no. 13 on fig. 1), situated between the *crypt* and the *church* level. In its inner and outer structure it is completely integrated into both levels, carrying on the north side the south wall of the *crypt*, and on the south side the northern basement of the *central hall*. Moreover, the height of the apse of the *crypt* defines the height of the platform in front of the *mausoleum* and the entrance to the *church*, at the upper level. It is therefore most probable that these identical height notations belonged to one construction concept and were not reached by chance. At least the layout of the *crypt* and the *church complex* together with the *mausoleum* followed one general master plan, although maybe built in different sections, according to specific requirements and topographical preconditions. A new reconstruction plan of this first nucleus shows its first extension (fig. 5). But when was this cemetery built, by whom, and why? The answers can be given with the help of the remaining furnishings and finds.

Jobst reconstructed the original floor mosaic of the eastern part of the *church complex* (*presbytery*, *central hall*, and *vestibule*) as four decoration fields, defining different spaces. Already he was surprised that none of the geometrical patterns fitted into the panorama of

[18] They were found beneath the altar; see Scheibelreiter-Gail 2011, 218. Unfortunately the original context cannot be investigated anymore, as the altar and the floor around it collapsed in the meantime.

[19] The new documentation was generated in the summer of 2010 by a 3D Laser-scanner, provided, grace to J. Riegl, by Riegl Laser Measurement Systems (Austria), and conducted by I. Mayer (Technical University Vienna).



5 First nucleus of the cemetery of the Seven Sleepers (© OeAW-IKAnt, drawing: I. Adenstedt)

other church pavements at Ephesos or elsewhere[20]. Now the identical motifs at Terrace House 2 can be dated to late Severan times (ca. 230), and, even an identical workshop seems to be possible[21].

A late Severan date is supported by the widespread remains of wall paintings. They show socle zones with meander ornaments and in the main zone marble imitation, scattered flowers on a white ground and single birds such as peacocks, doves and songbirds[22]. While the isolated motif of scattered flowers is hard to date because of its long use in a similar form, the wall system with an identical combination of socle and main wall exists everywhere in Terrace House 2 of around 230[23]. If the *church complex* of the Seven Sleepers site were really a church of the mid-5th century one would clearly expect to find Christian paintings, not ›neutral‹ decorative ornaments.

As a third element, the remains of high quality stucco, preserved in the arches or ceilings, show similarities with Severan stuccos at Terrace House 2 as well[24]. They do not seem to belong to Late Antiquity, although so far we have no examples of late antique stucco from Ephesos to compare them with.

A last strong argument for an earlier dating of the monument is given by a group of 12 of the 34 burial inscriptions found during the excavation[25]. Some inscriptions are clearly Late Antique and Christian for their style and content, like the two from the presbyters Melitos and Anatolios, which probably belonged to tombs set secondarily onto the mosaic in the church[26]. But, the group of inscriptions that interest us here belonged to the earliest burials in the cemetery, and were spread all-over on both levels, scratched directly into the rock, painted onto the original stucco, or engraved on white marble plaques that most probably once covered the access shaft of the floor graves, as lifter holes document. All of them show the same antique style of letters, with the Greek letters Epsilon, Sigma, and Omega (E, Σ and Ω) still without the later lunar form (ε, c, ω). This style can generally be attributed at least to the 3rd century. Apart from their unitary form, the formula varies a lot. While five of the inscriptions show the traditional χαῖρε and the name of the deceased, five extend to the very unusual χαῖρε ἐν θεῷ, not yet documented elsewhere in Asia Minor, but most probably Christian in its meaning (fig. 6). Perhaps it is an indirect quotation from the letter of St Paul to the community at Philippi, where the salutation χαῖρε ἐν κυρίῳ becomes a repeated message in a clearly eschatological sense[27]. Finally, two inscriptions became visible under the stucco of the lunettes of their arcosolia. They were engraved into the rock, obviously when the cemetery was still under construction. Their formula is also unique at Ephesos: μνησθῇ ὁ θεὸς, and the names of the ones to be remembered (fig. 7). This is a biblical quotation as well, of the request of one of the two thieves crucified beside Jesus, to be taken with him to paradise[28]. While χαῖρε ἐν θεῷ has no continuity, μνησθῇ ὁ θεὸς became a widespread Christian burial formula in the entire Byzantine world[29]. It seems to be attested here for the first time. The entire group with the early letters, but very differing formula, might indicate the search to find an expression for a new Christian content. A very similar character was attributed to the earliest Christian inscriptions in Rome by epigraphists, and this brings us to the same time period of the 3rd century.

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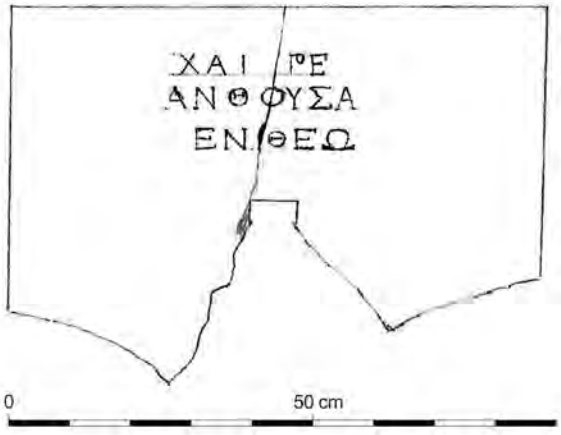
[20] Jobst 1972–75, 179.
[21] For the detailed discussion of the single decoration patterns see Zimmermann 2012, 382–384; in general Scheibelreiter 2008; see also Scheibelreiter-Gail 2011, 113. 217 f.
[22] Zimmermann – Ladstätter 2010, 154–158; see also Zimmermann 2012, 384–388.
[23] Zimmermann 2002, 115.
[24] Zimmermann 2012, 388–393.
[25] Praschniker et al. 1937, 201–205.
[26] Praschniker et al. 1937, 202 inscriptions nos. 6. 7; see also Destephen 2008, 148. 662.
[27] Philipper 4, 4.
[28] Luke 23, 42.
[29] See Felle 2006, 422 f.



6 Inscription with χαῖρε ἐν θεῷ-formula (after Zimmermann 2012, fig. 37)

7 Inscription with μνησθῇ ὁ θεὸς-formula (after Zimmermann 2012, fig. 42)

The inscriptions confirm in their distribution, together with the paintings, mosaics and stuccos, the 3rd-century establishment and use of both the church and the crypt complex, and the Christian character of the cemetery. It seems that individual and family burial places within the structure existed side by side, such as the mausoleum, the niches, the arcosolia, and also very standardised, small units such as the tombs in the ground floor of the halls[30]. But, once passing through the entrance door of the *vestibule* in the lower level, one entered a complex, which was constructed in one pour and belonged to solely one property. Sadly, we do not have any indication for the owner of the complex. We can only assume that this was the cemetery of an Early Christian community, administered by the bishop himself. As a Christian community cemetery, it is however the first known in Asia Minor so far. Generally, Christian community cemeteries of similar shape and date are known from Spain, North Africa or Rome with its catacombs. But, the monuments with the most similar structure are the so-called *circeforme* Constantinian basilicas in Rome, with an ambulatory around the apse, and the entire pavement covered with tombs[31]. This similarity certainly depends on the same function of both, the Ephesian and the Roman architecture. Anyway, a pre-Constantinian Christian cemetery is an important discovery for Asia Minor.

The much shorter, second part of the paper is dedicated to the further development of the cemetery in the course of the following millennium. Unfortunately, from later times there are only few remains visible. As already shown, a church was inserted in the upper hall, with an altar and a fence defining the presbytery, probably in the late 4th century (fig. 3 b). As mentioned before, a few inscriptions are attributed to a group of later tombs, added above the pavement level and datable generally to the 5th and 6th centuries (fig. 3 c). These small adaptations are the only structural additions to the early nucleus. It is interesting, however, that these secondary tombs – over ground level and therefore of elevated social class – seem to be concentrated in front of the main entrance and generally in the *central room*, choosing the closest possible contact to the presumably venerable tombs in the catacomb[32]. At the same time, the cemetery grew further in all directions but mostly on a natural terrace to the south. The already mentioned huge mausoleum of a certain Abradas, in the form of a domed cross,

[30] Even one sarcophagus of the 3rd c. was used for a prominent burial in a niche on the right side of the *corridor* of the *crypt complex*. It was thought to be put here in a secondary use, see Koch 1999, 561 fig. 134, 2–3, but is now proved to be contemporaneous to the cemetery and probably still standing in its original position.

[31] Brandenburg 2004, 55–91.

[32] There are of course other possible explanations for the positions of the casket tombs, such as the wider space in the central room and stability reasons. Generally, the urge for a vicinity to venerated tombs (*ad* or *retrosanctos*) seems to be much less developed in Asia Minor than it was in the West, see Zimmermann, 2016, 747 f.

8 Wall painting around a niche in the vestibule of the cemetery: Mary with child (left) and Mary of Magdala (?) (© ÖAW-IKAnt N. Zimmermann)

marks the end of burial activities here in the time of Justinian (fig. 1)[33]. It is at the same time the latest detectable architectural structure, but still there is no indication for pilgrimage or veneration, or any artefact connecting the cemetery to the Seven Sleepers has been found[34]. The Early Middle Ages left no visible remains, but the sources report that, in the meantime, a further saint was venerated in the Ephesian cemetery of the Seven Sleepers, at least from the 6th century onwards: Mary Magdalene[35]. Her allocation here has no historical basis, but follows the same meaningful logic that had already brought St Mary to St John: once the places of their commemoration were established at Ephesos, Mary of Magdala, as member of the same family, could be associated as well. In this view, the place for the veneration of the Seven Sleepers, witnesses of bodily resurrection, is a proper place for Mary Magdalene, the

[33] Praschniker et al. 1937, 52 no. 33.
[34] For Christian pilgrimage to Ephesos see Pülz 2010.
[35] Pülz 2010, 85–90.

first witness of Christ's resurrection[36]. In 899, Emperor Leo the Wise transferred her relics to Constantinople. As reported in the Menologion, they were taken out of her grave at the entrance of the cemetery of the Seven Sleepers[37]. Miltner interpreted a solitary tomb at the entrance of the catacomb as her grave[38], which however does not seem to be reasonable. Instead it is interesting that a niche in the lower *vestibule*, at the right side of the main entrance of the entire complex, has sparse remains of a Byzantine painting (fig. 8). Unusually enough, Mary is shown with Child at the left side and, in the central position directly above the niche, a single female saint. The surface is nearly destroyed, but through the general context the saint could hypothetically be identified as Mary Magdalene[39] and the niche as her tomb. Therefore, the painting would have been executed after the iconoclasm and before the translation in 899. Nevertheless, the Russian Abbot Daniel, who visited Ephesos during his pilgrimage to the Holy Land in the 12th century, reported that the skull of Mary Magdalene was shown to him here[40]. In the light of this report, a later date for the painting could also be considered.

Anyway, the more important material evidence for veneration at the site are the installations for pilgrimage and the paintings in the *catacomb*. In the central gallery of the *catacomb* at least three layers of plaster were added onto the original Roman one, but unfortunately only very poor remains of paintings are visible, and only on the uppermost layer. During the excavation, the best preserved parts were fortunately documented as watercolours[41].

As mentioned before, we do not know why in the 3rd century the ten rooms of the *catacomb* were treated so differently in their layout and entrance situation from all the other tombs of the entire cemetery (fig. 10). But, at least nine of them were originally clearly used for burials, each one equipped with several tombs, suggesting a kind of family use. While the entrance was situated outside of the *central hall*, two openings for light connected the hall and the *catacomb* directly with each other. The traces of the upper layer of plaster finally provide hints for the Byzantine veneration of the Seven Sleepers.

At one time, a monumental image of the Ascension of Christ covered the area in the vault above the stairway entrance to the *catacomb* (no. 15 in fig. 1), while the entrance walls to the left and right showed two registers of saints each. The first register contained persons connected to the ascension, such as Mary and the Apostles, the second register mostly depicted anonymous saints. Of special interest is one saint on the right side, identified by both iconography and Greek inscription. It is Christopher holding the Infant Jesus on his shoulder (fig. 9). This iconography was developed in the early 13th century in the West[42]. Besides the given *terminus post quem*, one can recognise the transfer of a western model and therefore maybe the influence of a western employer.

The upper layer of painting in the *catacomb* passageway shows a row of radiate crosses encrusted with gems, appearing on the ceiling alternately on a white surface and a blue sphere. In addition, a section of no longer existent painting from the wall surface below the radiate crosses, was documented as a watercolour: an under life size frontal figure of a saint with a nimbus, youthful and without beard, stood between two entrances to burial chambers. Therefore it is probable that representations of the Seven Sleepers were depicted at the sides of their revered burial chambers, at least in the 12th century. Only extensive restorations could clarify the sequence of layers and result in a more secure dating[43].

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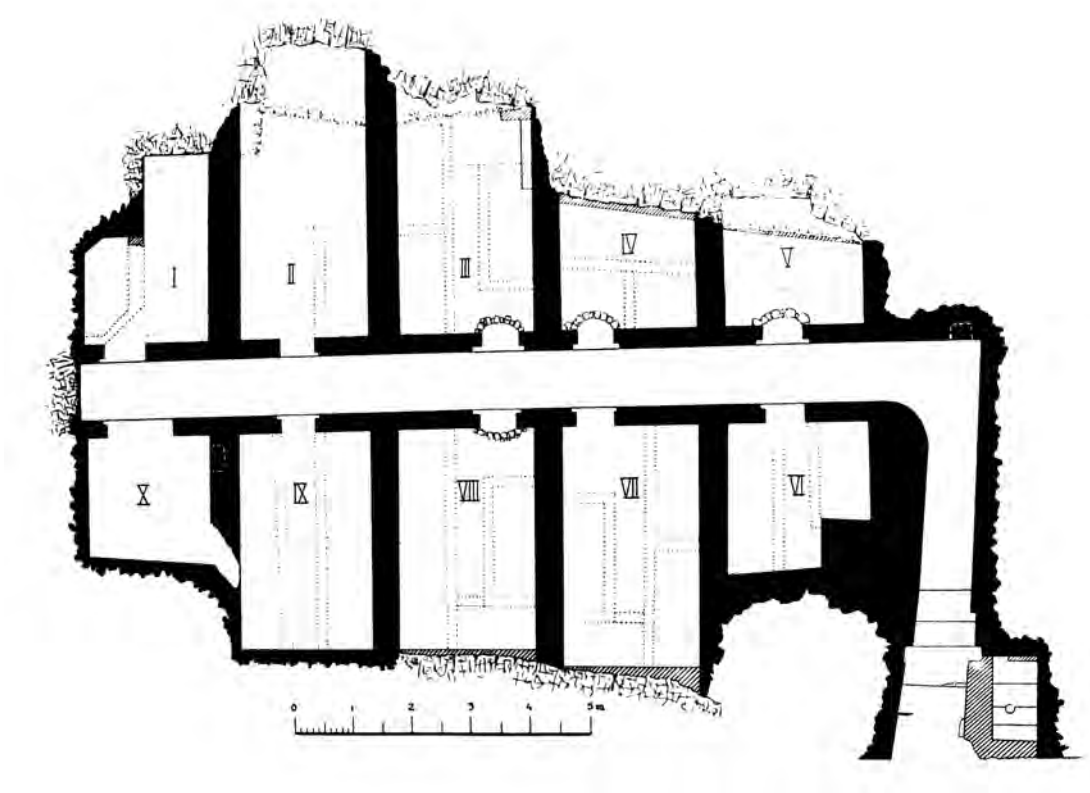
[36] Stichel 2000.
[37] Patrologia Graeca 117, 553; see also Zimmermann – Ladstätter 2010, 205–207.
[38] Praschniker et al. 1937, 31.
[39] Mary Magdalene has no specific iconography in Byzantine art.
[40] Foss 1979, 127.
[41] Zimmermann 2010, 650–656; see also Zimmermann – Ladstätter 2010, 203–207.
[42] Praschniker et al. 1937, 219 f.; see also Werner 1973, 499–504.
[43] Zimmermann 2010, 652 f.; see also Zimmermann – Ladstätter 2010, 203 f.

9 Christopherus: fresco painting in the entrance of the catacomb (watercolour, © OeAW-OeAI/ Archive)

Another inquiring observation characterises the manner of veneration: at least in six of the rooms the entrances were closed with little apses and the ceilings decorated with crosses, as remains of both show at the ground and the ceiling (fig. 10). They probably had little windows to allow a view on the sleepers, which were exhibited in their tombs. Only the last room on the northern side was totally open and completely covered with a Byzantine painting, which unfortunately is completely destroyed today[44]. Anyway, the excavators were able to document a group of 50 graffiti in Greek, Armenian, and Latin dating from the 13th to 15th centuries, which were engraved on the Byzantine plaster layer. The graffiti were made not only by local pilgrims, but visitors coming from North Italy, Spain, France and the lower Rhineland, i.e. Maastricht and Utrecht[45]. The here documented invocations of the Seven Sleepers finally confirm their veneration at the site and the immense popularity and distribution of the legend.

[44] Only recently, almost after the submission of this article, we recognised that the painting was not destroyed but completely covered with an incrustation. It has been possible to identify the content of this Byzantine wall painting at the main wall of the room, in front of the entrance: here, a representation of the Seven Sleepers appeared, showing them as awoken, standing saints who directly face the entering pilgrims. It is now clear that the room became the real sanctuary and the endpoint of the Byzantine pilgrimage to the Seven Sleepers. For a first report on the new painting see Zimmermann (forthcoming).

[45] Praschniker et al. 1937, 206–210.



10 Plan of the catacomb (after Praschniker et al. 1937, 28 fig. 20)

With these traces, the history of the monument ends. We have no clear idea, if the monumental halls and domes of the complex were still intact, when the last paintings were made or the last graffiti were engraved. As it seems, the monument did not last very much longer than the Byzantine Empire, and for centuries the remaining structures were covered by the stones of the collapsed walls and ceilings[46]. Only in the last decades has a certain pilgrim activity returned to the monument from both Christian and Islamic visitors as well as tourists[47].

To sum up, one can say that the latest research has enriched the history of the monument with evidence both for its origins as a Christian community cemetery, the first known so far in Asia Minor, and for its later evolution into a pilgrimage centre, known and visited by Christians throughout the Middle Ages from both the East and the West.

[46] In the early 17th c. the complex seemed to be destroyed, see Praschniker et al. 1937, 92.

[47] Concerning the vast veneration of the Seven Sleepers in the Islamic world and widespread monuments for their commemoration, it is interesting that there are no signs or sources for a medieval Islamic veneration at the Ephesian site.

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