

Ephesos from Late Antiquity until the Late Middle Ages

Proceedings of the International Conference at the
Research Center for Anatolian Civilizations, Koç University, Istanbul
30th November – 2nd December 2012

SABINE LADSTÄTTER – PAUL MAGDALINO (EDS.)

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ÖAI

Österreichisches Archäologisches Institut
Sonderschriften Band 58

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



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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)

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1. Auflage 2019

Verlagsort: Wien – Herstellungsort: Wien – Printed in the EU

ISSN 1998-8931

ISBN 978-3-903207-42-4

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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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ANDREAS KÜLZER

ROADS AND ROUTES

COMMUNICATION NETWORKS IN THE HINTERLAND OF EPHEOS

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 Pergamon¹. 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 km² in size as opposed to the previous size of almost 180,000 km²,³ retained the name *Asia*, and was administered from Ephesos. In addition, the city was allowed to remain a centre of a diocese⁴. 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 districts⁵. In the beginning there were four of these units: in addition to *Anatolikon*, *Armeniakon* and *Opsikion*, the theme of *Thrakēsion* located in western Anatolia⁶. 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 centre⁷. 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.

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 Aquilius, 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 undertaken⁹. 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 structure¹⁰. 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 decline¹². 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 warehouses – the Vita of St Theodōros of Sykeōn of the 6th–7th century provides an often-cited example for this¹³. 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 conditions¹⁴. 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 century¹⁵. 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 pathway¹⁶.

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

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 construction¹⁷. 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 Empire¹⁸.

The precise number of roads which were upgraded or newly laid out in western Asia Minor during the Republican period is unknown¹⁹. 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 Valley²⁰. – 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 Turkey²¹.

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 Çamlık, approximately 7 km south of Selçuk, dates already from the period of Manius Aquilius and was therefore erected between 129 and 126 B.C.²². From Çamlık, 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 200/201²³. 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 century²⁴.

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 found²⁵. 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 one²⁷. 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 Yenipazar²⁸. Crossing from one of these roads to the other was hardly possible owing to the lack of bridges to the west of Antiocheia²⁹.

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 Phrygia³⁰. The road is represented in the *Tabula Peutingeriana*, issued in its final Late Antique version in about 435³¹, 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 improvements³². 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 forked³³. 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 Ephesos³⁴, 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 stadia³⁵.

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 period³⁶. Continuing on from Thyraia, the road turned to the north and passed the extensive settlement of Bukolion near today's Ali Paşa Çiftlik³⁷. 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

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.

Mētrópolis, 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 Ödemiş³⁹.

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 Üçtepelер. The goal of both routes was the Lydian metropolis of Sardis⁴⁰. 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 century⁴¹, 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 Mētrópolis (Yeniköy)⁴². Near Sağlık, 8 km to the south of Torbalı, a milestone has been discovered which provides evidence of the extension of the road by Manius Aquillius⁴³. Additional milestones from the Roman imperial period were found in Yeniköy itself, in Şehitler, as well as in Torbalı⁴⁴. 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 Sardis⁴⁵.

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 route⁴⁶.

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 Kuşçuburun and in Gaziemir, formerly Seydi, provide evidence of the further course of the road up until Smyrna⁴⁷. 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 century⁴⁸.

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 Aliğa and in the territory around Kazıkbağları, the former Elaia⁴⁹; amongst the six milestones originating from the area around the last-mentioned site, there is one which dates to the Republican period⁵⁰.

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 Peninsula⁵¹. 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 Aquilius and indicates the interest of the Romans, from an early point on, in establishing this communication route⁵². – 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 Laodikeia⁵³. This road is documented in the *Itinerarium Antonini* (335, 3–337, 2); a number of milestones are found along its course⁵⁴.

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 431⁵⁵.

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 metropolis⁵⁶. 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 conjectured⁵⁷. 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 roads⁶⁰. 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

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 Maiandros⁶¹, 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 Phrygia⁶².

To the north of Ephesos, barely 5 km distant from Panayır Dağ, the mountain chain of Galēasion (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 bay⁶³. 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 plain⁶⁴. 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 Galēasion 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 pass⁶⁵. In the region of the modern village of Ahmetli, approximately 5 km south of Mētropolis, remains of these roads were discovered⁶⁶. 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 Galēasion 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 west⁶⁸. 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 (Kısıık 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 established⁶⁹.

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-Project⁷⁰. 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 times⁷¹. 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 slabs⁷³. 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.

BIBLIOGRAPHY

- ATL 1939 B. D. Meritt – H. T. Wade-Gery – M. F. McGregor, *Athenian Tribute Lists I* (Cambridge, MA 1939).
- Avramea 2002 A. Avramea, *Land and Sea Communications, Fourth–Fifteenth Centuries*, in: A. E. Laiou (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century* (Washington, D.C. 2002) 57–90.
- Barnes 1982 T. D. Barnes, *The New Empire of Diocletian and Constantine* (Cambridge, MA 1982).
- Belke 1998 K. Belke, *Von der Pflasterstraße zum Maultierpfad? Zum kleinasiatischen Wegenetz in mittelbyzantinischer Zeit*, in: S. Lampakēs (ed.), *Η Βυζαντινή Μικρά Ασία (6ος – 12ος αι.)* (Athens 1998) 267–284.
- Belke 2008 K. Belke, *Communications: Roads and Bridges*, in: E. Jeffreys – J. Haldon – R. Cormack (eds.), *Oxford Handbook of Byzantine Studies* (Oxford 2008) 295–308.
- Belke – Mersich 1990 K. Belke – N. Mersich, *Phrygien und Pisidien* (Vienna 1990).
- Blysidu et al. 1998 B. Blysidu – E. Kountoura Galakē – S. Lampakēs – T. Lounghēs – A. Sabbidēs, *Η Μικρά Ασία των θεμάτων. Έρευνες πάνω στην προσωπογραφία των βυζαντινών θεμάτων της Μικράς Ασίας* (Athens 1998).
- Brubaker – Haldon 2011 L. Brubaker – J. Haldon, *Byzantium in the iconoclast era, c. 680–850: a history* (Cambridge 2011).
- Darrouzès 1981 J. Darrouzès, *Notitiae episcopatum Ecclesiae Constantinopolitanae: Texte critique, introduction and notes* (Paris 1981).
- Daubner 2006 F. Daubner, *Bellum Asiaticum. Der Krieg der Römer gegen Aristonikos von Pergamon und die Einrichtung der Provinz Asia* ²(Munich 2006).
- Debord – Varinlioğlu 2010 P. Debord – E. Varinlioğlu, *Cités de Carie: Harpasa, Bargasa, Orthosia dans l’antiquité* (Rennes 2010).
- Demandt 2007 A. Demandt, *Die Spätantike. Römische Geschichte von Diocletian bis Justinian 284–565 n. Chr.* ²(Munich 2007).
- Dimitroukas 1997 I. C. Dimitroukas, *Reisen und Verkehr im Byzantinischen Reich vom Anfang des 6. bis zur Mitte des 11. Jahrhunderts* (Athens 1997).
- Foss 1979 C. Foss, *Explorations in Mount Tmolus*, *CalifStClAnt* 11, 1979, 21–60.
- Foss 2002 C. Foss, *Pilgrimage in Medieval Asia Minor*, *DOP* 56, 2002, 129–151.
- French 1991 D. French, *Sites and Inscriptions from Phrygia, Pisidia and Pamphylia*, *EpigrAnat* 17, 1991, 51–68.
- French 1997 D. French, *Pre- and Early-Roman Roads of Asia Minor: The earliest Roman paved roads in Asia Minor*, *ADerg* 5, 1997, 179–187.
- French 2012 D. French, *Roman Roads and Milestones of Asia Minor, III. Milestones. Fasc. 3, 1 Republican*. British Institute at Ankara, *Electronic Monograph 1* (Ankara 2012).
- French 2014 D. French, *Roman Roads and Milestones of Asia Minor, III. Milestones. Fasc. 3, 5 Asia*. British Institute at Ankara, *Electronic Monograph 5* (Ankara 2014).
- Greenfield 2000 R. P. H. Greenfield, *The Life of Lazaros of Mt. Galesion: an eleventh-century pillar saint. Introduction, translation, and notes* (Washington, D.C. 2000).
- Haensch 1997 R. Haensch, *Capita provinciarum. Statthaltersitze und Provinzialverwaltung in der römischen Kaiserzeit* (Mainz 1997).
- Hild 2014 F. Hild, *Meilensteine, Straßen und das Verkehrsnetz der Provinz Karia* (Vienna 2014).
- Höcker 2001 C. Höcker, *Straßen- und Brückenbau*, in: *DNP XI* (2001) 1030–1036.
- Holmberg 1933 E. J. Holmberg, *Zur Geschichte des Cursus publicus* (Uppsala 1933).
- Hopfgartner 1962/1963 L. Hopfgartner, *Die Entdeckung des spätbyzantinischen und genuesischen Ephesos*, *StGenu* 4, 1962/1963, 1–81.
- Keil 1908 J. Keil, *Zur Topographie der ionischen Küste südlich von Ephesos*, *ÖJh* 11, 1908, Beibl. 135–168.
- Keil 1910 J. Keil, *Forschungen in der Erythraia I*, *ÖJh* 13, 1910, Beibl. 5–74.
- Keil 1912 J. Keil, *Forschungen in der Erythraia II*, *ÖJh* 15, 1912, Beibl. 49–76.
- Keil – Premerstein 1915 J. Keil – A. Premerstein, *Bericht über eine dritte Reise in Lydien und den angrenzenden Gebieten Ioniens*, *DenkSchrWien* 57, 1 (Vienna 1915).
- Kerschner – Prohaska 2011 M. Kerschner – W. Prohaska, *Die Tempel und Altäre der Artemis in Ephesos und ihre Baumaterialien*, *ÖJh* 80, 2011, 73–153.
- Kislinger 1989 E. Kislinger, *Gasthaus B. Byzantinisches Reich*, in: *Lexikon des Mittelalters IV* (1989) 1134–1136.
- Kislinger 2011 E. Kislinger, *Reisen und Verkehrswege in Byzanz: Realität und Mentalität, Möglichkeiten und Grenzen*, in: *Proceedings of the 22nd International Congress of Byzantine Studies, Sofia, 22–27 August 2011, I ›Plenary Papers‹* (Sofia 2011) 341–387.

- Kleberg 1957 T. Kleberg, Hôtels, restaurants et cabarets dans l'antiquité romaine. Études historiques et philologiques (Uppsala 1957).
- Koder 1986 J. Koder, The Urban Character of the Early Byzantine Empire: Some Reflections on a Settlement Geographical Approach to the Topic, in: The 17th International Byzantine Congress, Major Papers (New Rochelle, NY 1986) 155–187.
- Koder 2001 J. Koder, Der Lebensraum der Byzantiner. Historisch-geographischer Abriß ihres mittelalterlichen Staates im östlichen Mittelmeerraum. Nachdruck mit bibliographischen Nachträge (Vienna 2001).
- Koder 2012 J. Koder, Regional Networks in Asia Minor during the Middle Byzantine Period, Seventh–Eleventh Centuries. An Approach, in: C. Morrisson (ed.), Trade and Markets in Byzantium (Washington, D.C. 2012) 147–175.
- Kosmetatou 2003 E. Kosmetatou, The Attalids of Pergamon, in: A. Erskine (ed.), A Companion to the Hellenistic World (Oxford 2003) 159–174.
- Kötting 1980 B. Kötting, Peregrinatio religiosa. Wallfahrten in der Antike und das Pilgerwesen in der alten Kirche ²(Münster 1980).
- Külzer 2010a A. Külzer, Handelsgüter und Verkehrswege: Wirtschaftliche Aspekte byzantinischer Pilgerzentren, in: E. Kislinger – J. Koder – A. Külzer (eds.), Handelsgüter und Verkehrswege: Aspekte der Warenversorgung im östlichen Mittelmeerraum (4. bis 15. Jahrhundert) (Vienna 2010) 185–196.
- Külzer 2010b A. Külzer, Ephesos in byzantinischer Zeit: ein historischer Überblick, in: F. Daim – J. Drauschke (eds.), Byzanz – das Römerreich im Mittelalter, Monographien des Römisch-Germanischen Zentralmuseums 84, 2, 2 (Mainz 2010) 521–539.
- Külzer 2016 A. Külzer, Byzantine Lydia: Some Remarks on Communication Routes and Settlement Places, in: P. Magdalino – N. Necipoğlu – I. Jevtić (eds.), Trade in Byzantium. Papers from the Third International Sevgi Gönül Byzantine Studies Symposium, Istanbul, 24–27 June 2013 (Istanbul 2016) 279–295.
- Külzer 2018 A. Külzer, Dornröschen erwacht... Neue Forschungen auf der Halbinsel Erythraia (Çeşme Yarımadası) im westlichen Kleinasien, in: J. Drauschke – E. Kislinger – K. Kühtreiber – T. Kühtreiber – G. Scharrer-Liška – T. Vida (eds.), Lebenswelten zwischen Archäologie und Geschichte, Festschrift Falko Daim (Mainz 2018) 139–146.
- Lilie 1977 R.-J. Lilie, »Thrakien« und »Thrakiesion«. Zur byzantinischen Provinzorganisation am Ende des 7. Jahrhunderts (Mit zwei Karten), JÖB 26, 1977, 7–47.
- Lohmann 2002 H. Lohmann, Zur historischen Topographie des südlichen Ionien, OrbTerr 8, 2002, 163–272.
- Luther 1989 U. M. Luther, Historical Route Network of Anatolia (Istanbul–Izmir–Konya) 1550's to 1850's: A Methodological Study (Ankara 1989).
- Magie 1950 D. Magie, Roman Rule in Asia Minor, 2 vols. (Princeton 1950).
- Marek 2010 C. Marek, Geschichte Kleinasien in der Antike (Munich 2010).
- Meriç 1985 R. Meriç, Zur Lage des ephesischen Außenhafens Panormos, in: Lebendige Altertumswissenschaft. Festschrift Hermann Vetters (Vienna 1985) 30–32.
- Meriç 2009 R. Meriç, Das Hinterland von Ephesos. Archäologisch-topographische Forschungen im Kaystros-Tal, ErghÖJh 12 (Vienna 2009).
- Meriç et al. 1981 R. Meriç – R. Merkelbach – J. Nollé – S. Şahin, Die Inschriften von Ephesos 7, 1 Nr. 3001–3500 (Repertorium); 7, 2 Nr. 3501–5115 (Repertorium), IK 17, 1. 2 (Bonn 1981).
- Miller 1916 K. Miller, Itineraria Romana. Römische Reisewege an der Hand der Tabula Peutingeriana dargestellt (Stuttgart 1916).
- Mitchell 1993 S. Mitchell, Anatolia. Land, Men, and Gods in Asia Minor, I. The Celts and the Impact of Roman Rule; II. The Rise of the Church (Oxford 1993).
- Mommsen 1862 T. Mommsen, Verzeichniss (sic!) der römischen Provinzen, aufgesetzt um 297. Mit einem Anhang von K. Müllenhoff, Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin, Phil.-hist. Klasse (Berlin 1862) 489–538.
- Petzl 2007 G. Petzl, Tituli Lydiae linguis Graeca et Latina conscripti. Philadelpheia et Ager Philadelphenus, TAM 5, 3 (Vienna 2007).
- Philippson 1936 A. Philippson, Das südliche Ionien. Mit Karte: Ionien, südlicher Teil, bearbeitet von L. Lynker (Berlin 1936).
- Poljakov 1989 F. Poljakov, Die Inschriften von Tralleis und Nysa 1: Die Inschriften von Tralleis (Bonn 1989).
- Pülz 2010 A. Pülz, Ephesos als christliches Pilgerzentrum, MiChA 16, 2010, 71–102.
- Pülz 2012 A. Pülz, Archaeological Evidence of Christian Pilgrimage in Ephesus, Herom 1, 2012, 225–260.

- Pülz – Ladstätter 2006 A. Pülz – S. Ladstätter, Meryemana bei Ephesos. Zur archäologischen Untersuchung des Jahres 2003, *AnzWien* 141, 2006, 71–104.
- Rathmann 2003 M. Rathmann, *Viae publicae*, in: *DNP* XII 2 (2003) 164–171.
- Rathmann 2013 M. Rathmann, Die Tabula Peutingeriana und die antike Kartographie, *Periplus* 23, 2013, 92–120.
- Riplinger 1989 T. Riplinger, *Asia Minor. The Byzantine Empire (7th–9th Century AD)*, TAVO B, VI, 08 (Wiesbaden 1989).
- Schneider 1982 H.-C. Schneider, *Altstraßenforschung* (Darmstadt 1982).
- Schwertheim 2005 E. Schwertheim, *Kleinasien in der Antike. Von den Hethitern bis Konstantin* (Munich 2005).
- Şimçek 2013 C. Şimçek, *Laodikeia (Laodicea ad Lycum)* (Istanbul 2013).
- Stock et al. 2013 F. Stock – A. Pint – B. Horejs – S. Ladstätter – H. Brückner, In search of the harbours: New evidence of Late Roman and Byzantine harbours of Ephesus, *Quaternary International* 312, 2013, 57–69.
- Talbert 2010 R. J. A. Talbert, *Rome's World: The Peutinger Map Reconsidered* (Cambridge 2010).
- Talbert et al. 2000 R. J. A. Talbert – R. S. Bagnall – J. McK. Camp II – J. F. Drinkwater – C. Foss – W. V. Harris – R. C. Knapp – S. T. Parker – M. Roaf – C. M. Wells – J. J. Wilkes, *Barrington Atlas of the Greek and Roman World, Atlas, Map-by-map-directory I–II* (Princeton, NJ 2000).
- Thonemann 2011 P. Thonemann, *The Maeander Valley: A Historical Geography From Antiquity to Byzantium* (Cambridge 2011).
- von Diest et al. 1913 W. von Diest – H. von Coler – K. Graefinghoff – F. Hiller von Gaertringen – H. Pringsheim – K. Regling, *Nysa ad Maeandrum nach Forschungen und Aufnahmen in den Jahren 1907 und 1909* (Berlin 1913).
- Weber 1976 E. Weber, *Tabula Peutingeriana. Codex Vindobonensis 324. Vollständige Faksimile-Ausgabe im Originalformat und Kommentar* (Graz 1976).
- Weber 2012 E. Weber, Ein neues Buch und das Datierungsproblem der Tabula Peutingeriana, *Tyche* 27, 2012, 209–216.
- Wilkinson 1977 J. Wilkinson, *Jerusalem Pilgrims Before the Crusades* (Warminster 1977).
- Yaman 2004 Y. Yaman, *Köy Köy Türkiye yol atlası* (Istanbul 2004).
- Zuckerman 2002 C. Zuckerman, Sur la Liste de Vérone et la province de Grande Arménie, la division de l'Empire et la date de création des Diocèses, *TravMem* 14, 2002, 617–637.

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