

The Byzantine Harbours of Constantinople

Falko Daim · Ewald Kislinger (eds)



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Translators' note:

Each author has made an individual decision on the style of naming places and people, including whether to use Latin or Greek forms, meaning that spellings will vary throughout the book, which is reflected in the index.

Foreword

During the work on the Istanbul underground about twenty years ago, the remains of the medieval Harbour of Theodosius were rediscovered, along with nearly 40 shipwrecks. This was an archaeological find of the century and a substantial argument for including the Byzantine harbour landscape in the Priority Programme 1630 of the DFG (Deutsche Forschungsgemeinschaft/German Research Council) »Harbours from the Roman Imperial Period to the Middle Ages«.

One of the individual projects within this Priority Programme is »Ports and Landing Places on the Balkan Coasts of the Byzantine Empire (Fourth to Twelfth Century): Technology and Monuments, Economy and Communication«. It is part of the Leibniz ScienceCampus Mainz/Frankfurt: Byzantium between Orient and Occident, a collaboration between the Römisch-Germanisches Zentralmuseum in Mainz (RGZM), the Johannes Gutenberg University Mainz and other partners, especially the Viennese School of Byzantine Studies (at the University of Vienna and Austrian Academy of Sciences/ÖAW).

As was generally the case throughout history, Constantinople also played a central role in seafaring. Situated at the southern mouth of the Bosphorus on a peninsula between the Sea of Marmara and the Golden Horn, the daily life of the inhabitants in many respects depended on the sea, and the harbours formed the interface between the city and the sea. For centuries, Constantinople was one of the most important and powerful trading centres in the Mediterranean. In addition, the Byzantine Empire also dominated the Mediterranean militarily for a long time (thalassocracy) and its main fleet was stationed in Constantinople.

Written sources mention a number of smaller and larger harbours that were repeatedly rebuilt, renamed or even newly built over the centuries. These harbours have been researched over the years. Wolfgang Müller-Wiener earlier brought these results together in his work »Die Häfen von Byzantion – Konstantinupolis – Istanbul« (»The Harbours of Byzantion, Constantinople, Istanbul«), published posthumously in 1994. However, research on the topography of the city and on Byzantine seafaring, which has intensified since then, has yielded new data and perspectives.

During a special course held at the University of Vienna in 2014, the idea arose to not only include the harbours of Constantinople in the DFG project's catalogue in an overview, but also dedicate a separate anthology to them that would

reflect the current state of research. The development of the Constantinopolitan harbours covers the entire Byzantine period from the fourth to the fifteenth centuries. In addition, the immediate periphery must also be considered: on the one hand, the harbours on the Asian side of the Bosphorus; and, on the other hand, the landing stages in the immediate Thracian vicinity of the city walls, both on the Golden Horn and on the Sea of Marmara.

The first edition of this book was published in 2016 in German as Volume 4 of the Leibniz ScienceCampus's book series »Byzantium between Orient and Occident« (BOO). The eight contributors produced a total of twelve essays and have all worked within the frame of the Priority Programme 1630 of the DFG or co-operated with it. This was reviewed several times, mostly appreciatively, but also with suggestions for possible deepening and broadening of the contents.

In response to this, the two editors of this volume, Falko Daim and Ewald Kislinger, decided in 2020 to publish an expanded version in English to reach a broader audience. The original contributions were not only translated but updated, and the now eleven authors of different nationalities and mother tongues have delivered a total of fifteen essays for the English edition. They have endeavoured to reflect the broad linguistic spectrum of publications on the topic in Byzantine studies, considering a narrow approach (as seen in some recent companions) to be less fruitful. All publications on the subject that were published, known to us, and accessible by the end of 2020 have been taken into account.

Without the commitment of all the authors, this volume could not have been completed so swiftly, including the addition of an index, which was the special responsibility of Klaus Belke. Johannes Preiser-Kapeller and Michael Ober were in charge of the maps and plans. Our sincere thanks must also go to other colleagues: Leo Ruickbie and Antje Bonselmann-Ruickbie, who prepared the English translations with great dedication and expertise, with additional input from Laury Sarti, and provided editorial co-ordination, and Franz Siegmeth, who prepared various illustrations for printing. We would also like to express our thanks to Claudia Nickel and Stefan Albrecht at the RGZM publishing house.

As has always been the function of the harbours themselves, this volume is not intended to be an end but a starting point for new research.

*Mainz and Vienna, March 2021
Falko Daim and Ewald Kislinger*

On Better and Worse Sites: The Changing Importance of the Harbours of Constantinople

The harbours of ancient Byzantium and later Constantinople in its early days were orientated towards the south-eastern coast of the Golden Horn where it opens into the Bosphorus. Neorion and Prosfhorion¹ were situated here, semi-circular harbours of the old type, probably lined with colonnades, and also the ferry crossings to Chalcedon und Sykai (Pera)². The Harbour of Julian was added in the south of the peninsula, facing the Sea of Marmara, soon after Constantinian expansion of Constantinople³. The original name of this harbour provides an approximate dating, especially since there was a statue of Emperor Julian (reg. 360-363)⁴. It collapsed in the year 533, which, together with the construction work of Justin II (reg. 565-578)⁵, paved the way for a renaming after his wife Sophia. Further to the west was the small Harbour of

Eleutherios, said to have been created under Constantine the Great. More details are unknown because it was filled in with excavated earth from levelling work for the erection of the Column of Theodosius in the Forum Tauri⁶. It was generously compensated for by the westward re-establishment of the Harbour of Theodosius (probably equivalent to the Harbour of Caesarius) at the mouth of the Lykos/Lycus⁷.

The urban growth – whose two phases are clearly marked by the Constantinian and Theodosian city walls⁸ – and in conjunction with that the expansion of the harbours, is thus concentrated in the south, on the coast of the Propontis. Until the seventh century, however, there was still a balance between the infrastructure and the flow of goods, such as food supplies, but also building materials like timber and

- 1 On the two harbours, see my chapter on Neorion and Prosfhorion in this volume – Cf. Janin, Constantinople 236 – Müller-Wiener, Häfen 6-7. – Berger, Regionen und Straßen 362. 364-365. – Schreiner, Constantinopoli 106-107. – Leszka, Konstantynopoliński porty 6. 8. 12. – Magdalino, Harbors 13-14 (undocumented); Stavroulaki, Seaports (without merit). – Dark, Eastern Harbours 152-163 (cf. Dark, New Post Office). – Berger, Häfen von Byzanz und Konstantinopel is for the better part based (as admitted by the author, 111) on the research by Müller-Wiener, Häfen, therefore, does not need to be quoted here. Berger, Häfen 77. 80-81 contains a number of borrowings from the above-mentioned article, but with additional (though sparse) footnotes. – Günsenin, »City« Harbours 99-105 is based (see 99) on Janin, Constantinople, Müller-Wiener, Häfen and Mango, Développement, Recent archaeological evidence is considered in the short overview, particularly on the district of Sirkeci. A number of mistakes in writing of historical denominations are striking: Portus Theodosiacus and Kontoskalion (op. cit. 103. 104 with n. 2). Improved in Günsenin, Harbours and Shipbuilding 414-416.
- 2 Notitia urbis Constantinopolitanae 233, 15 (*scala Timasii*); 234, 19 and 11. – Chronicon Paschale 569 and 572 (Dindorf): the relics of three saints (Samuel, Joseph, the son of Jacob, and Zachariah) landed in 406 or 415 at the skala Chalkedonensia. On their location, see Berger, Regionen und Straßen 362. 364. – For completeness, the landing place below the Arcadianai baths in the Acropolis area is mentioned: Prokopios, De aedificiis I 11, 1-2 (IV 41 Haury/Wirth), where – obviously, so as not to cause a stir – the imprisoned Pope Martin I was disembarked before his trial in 653, according to his Greek *vita* (Vita Martini ch. 6 [258 Peeters]). See also, Chiesa, Biografie 216 n. 10. – Also, the Mangana, the arsenal for weapons and siege equipment, would have had access to the sea, as well as the south-lying palace of the same name (Schneider, Mauern und Tore 95 and 105 [plan 5]. – Demangel/Mamboury, Quartier des Manganes 7-8 n. 2 pl. II).
- 3 See the contribution by Heher, Harbour of Julian, in this volume. – Cf. Müller-Wiener, Häfen 8-9. – Janin, Constantinople 231-234. – Mango, Développement 38-40. – Magdalino, Constantinople 20-22. – Berger, Regionen und Straßen 360-361. – Berger, Häfen 82-83. 85. – Leszka, Konstantynopoliński porty 7-9. 13. 15. – Günsenin, Harbours and Shipbuilding 417. – The Kontoskalion Harbour cannot be equated with the Eleutherios Harbour (slightly east of the Theodosios Harbour), as assumed by Günsenin, »City« Harbours 104 and Ivanov, Konstantinopol 416-418. The latter had been filled with the excavated material from the former during the construction of the Forum Tauri under Emperor Theodosius I (379-395), see Külzer, Harbour of Theodosius, in this

volume. – In the Vlanga quarter (in the area of the Theodosios Harbour, not at the Kontoskalion, see Günsenin, »City« Harbours 104), Jewish tanners were settled in the Palaeologan period (who before had been active near the south banks of the Golden Horn, see below). The contributions by Berger, Langa Bostani (1993) seems to have been unknown to Günsenin, »City« Harbours (2012). – On the private imperial harbour a little further east, see Heher, Boukoleonhafen, and Heher, Harbour of the Bukoleon, in this volume. – Berger, Häfen 83 without knowledge of Heher, Bukoleonhafen. – Günsenin, »City« Harbours 103.

- 4 Zosimos, Historia Nova III 11 (II 25 Paschoud). – Prokopios, De aedificiis I 4, 28 (IV 26 Haury/Wirth). – Ioannes Malalas, Chronographia XVIII 82 (404 Thurn). – The Notitia urbis Constantinopolitanae 232, 9 referred to as the *portus novus* in region III. Berger, Regionen und Straßen 360-361; English translation in Matthews, Notitia 88. – For the dating of the sources, see Berger, Regionen und Straßen 350-351: main part around 425.
- 5 Leon Grammatikos, Chronographia 135 (Bekker). – Symeon Logothetes, Chronicon 147 (Wahlgren). – Patria Konstantinupoleos III 37 (230 Preger). – Damage caused by fire may have preceded it (Ioannes Malalas, Chronographia XVIII 131 [422 Thurn]). – Theophanes, Chronographia 235 (de Boor).
- 6 Patria Konstantinupoleos II 63 and III 91 (184-185 and 248 Preger). – Müller-Wiener, Häfen 9 n. 25: located below the Myrelaion complex. – Berger, Untersuchungen 581-582. – Mango, Développement 55. – Cf. Külzer, Harbour of Theodosius, in this volume.
- 7 Notitia urbis Constantinopolitanae 239: *portus Theodosiacus* in region XII. Matthews, Notitia 95. – See Külzer, Harbour of Theodosius, in this volume. – Cf. Müller-Wiener, Häfen 9. – Janin, Constantinople 226-228. – Mango, Développement 39-40. – Berger, Regionen und Straßen 372-373. – Kislinger, Lebensmittel. – Ercan, Yenikapı. – Leszka, Konstantynopoliński porty 10-11. – Günsenin, Harbours and Shipbuilding 417-418. However, the Belisar Tower was not situated in the area of the Theodosios Harbour (see Günsenin, op. cit. 418), but at the western end of the Boukoleon Harbours. – Pulak/Ingram/Jones, Yenikapı 102-103. – On the identification, see Guiland, Études de topographie II 95-96 and Berger, Untersuchungen 575. Like the Harbour of Julian, that of Theodosios may previously have been a bay: Mango, Shoreline 20 fig. 1; Günsenin, Harbours and Shipbuilding 419.
- 8 Asutay-Effenberger/Effenberger, Eski İmaret Camii. – Asutay-Effenberger/Effenberger, Verlauf der Konstantinsmauer. – Asutay-Effenberger, Landmauer. – Müller-Wiener, Bildlexikon 286-311 (each with older literature).

bricks⁹, which is reflected in the various granaries: the *horrea Troadensia*, *Valentiaca* and *Constantiaca* are located in the fifth region near the Strategion¹⁰ (and thereby near the Harbour of Prosporon). Periodic inspections by the emperor are testified only for these¹¹, but this could be due to the fact that the custom originated in earlier times, when the later *horrea Alexandrina* and the Theodosius granary in the ninth Region on the Sea of Marmara (on the eastern edge of the Harbour of Theodosius in region XII)¹² had not yet existed. At the Harbour of Julian/Sophia, the Church of St Thecla *en tois kithopoleiois*¹³ indicates the handling and sale of barley and another granary, which in addition to the five other (probably larger) granaries mentioned in the *Notitia urbis Constantinopolitanae* (242, 29 Seeck) signifying a balanced development of such facilities on the Golden Horn and Propontis.

However, the period during which the different *horrea* were active was varying. The granary complex at the Harbour of Theodosius in the southwest was known as *tēs Lamias* from the seventh century¹⁴ (which incidentally confirms the ongoing operation of the harbour even before the recent ship finds¹⁵), not far from the square *tou Amastrianou*¹⁶. This in turn was located just north of the harbour. According to a

somewhat confused history in the *Patria Konstantinoupoleos*, sailors traded grain in the square; a bronze bushel that was used (earlier) as a standard weight was placed on an archway as a warning to always sell at the correct value of gold coin (*nomisma*)¹⁷. The Empress Eirene had halls (*triklinous*) built at the bakery (or bakeries) of the *Lamia/tēs Lamias tou pistoreiou* (or *ta pistoreia*) – again a local reference to grain is made – which, according to the source context, served as public outlets¹⁸.

In addition to charitable facilities, other establishments flourished near the harbours, as in different times and different places: establishments of commercial hospitality, public houses with their range of alcoholic drinks for sailors and dockworkers, sometimes also associated with prostitution¹⁹. At the same time, state authority had a presence at the harbours: officials of the eparchy exercised control, such as the *limenarchoi* (harbour masters), and levies such as the *limenatikon* and *skaliatikon* (from *skala*, landing stage) were collected. The *parathalassitai* administered justice in disputes among sailors, official surveys of ships took place at the Neorion, the *logothetes tou dromou* was responsible for privileged foreigners²⁰.

9 Themistios, Oratio 6. 83c-d and Or. 27, 336 d (124 Schenkl/Downey 160-161; Downey/Norman). – Magdalino, *Maritime Neighborhoods* 211-212. – Magdalino, *Grain Supply* 43-46. – Müller, *Getreide*. – Kislínger, *Pane*. – Durlíat, *L'approvisionnement* 26-27. – Prigent, *Rôle des provinces d'Occident*. – Kislínger, *Lebensmittel*. – Wade, *Maritime Cults* 269. – Several finds of shipwrecks at Yenikapı/Harbour of Theodosios (e. g., YK 1, 5, 11, 14, 23, 24; see Pulak/Ingram/Jones, *Yenikapı* 105-110 and n. 13. – Jones, *Yenikapı* 12. – Jones, *Cargo Vessel*. – Kocabaş, *Shipwrecks* 109-111 distinguishes between »sea going traders« [YK 3, 8, 15, 17-22] and »local trading vessels« [YK 6-10, 12, 14, 31-32]), proving its commercial significance (and those of most other harbours of the city) for their subsistence. On the basis of the »local trading vessels« the importance of the local subsistence in the Mediterranean is proven, as stated by Horden/Purcell, *Corrupting Sea* 143-152. 365-377. – The wines from all parts of the empire served at the banquet on the occasion of the crowing of Justin II were probably brought to Constantinople by ship (Corippus, *In Laudem Justinii III* 83-93, 96-102, cf. I 109-111; Kislínger, *Weinhandel* 141-147; about wine merchants in antiquity s. Broekaert, *Navicularii* 266-268). – According to Günsenin, »City« *Harbours* 104, from the 7th to the 13th c. local supplies were not predominantly unloaded at the harbours on the Golden Horn, but mostly at the harbours on the Propontis coast. – For the later centuries, see Jacoby, *Mediterranean Food and Wine*, and Günsenin, *Ganos*, and Jacoby, *Mediterranean Food and Wine*; Günsenin, *Ganos* and Howard-Johnston, *Commerce à Byzance* 337-338; about emporoi (traders) and kapeloi (small local merchants) in antiquity s. Broekaert, *Navicularii* 257-258. – On archaeological finds of amphorae in the area of the Theodosios Harbour (probably for wine), see Günsenin, *Harbours and Shipbuilding* 420 with fig. 3 (YK 12). – The trade privileges of the branch of Monemvasia in Pegai (today Karabiga, 56 km west of Bandirma), dating from 1328 and c. 1363-1373, testify to the continuous role of Constantinople as a maritime trade centre: Kislínger, *Zweite Privilegirkunde*. – On the significance of the sea trade in general, see Necipoğlu, *Byzantine Economy and the Sea* 437-438: »Maritime trade was more profitable than overland trade [...] the sea always remained a major factor fostering trade and a generally flourishing economy of Byzantium«.

10 *Notitia urbis Constantinopolitanae* 233-234, 15-17. English translation in Matthews, *Notitia* 90. – Mango, *Triumphal Way* 187-188 (appendix: The Situation of the Strategion). – Drakoulis, *Functional Organization* 153-182 merely provides a wordy presentation of the source and relevant literature. – Kislínger, *Eugenios-Tor* 728. – Kislínger, *Lebensmittel* 311. 314-315. – Berger, *Regionen und Straßen* 384-385. – Westbrook, *Forum of the Strategion*. See also n. 45. – For comparisons from the Aegean in Antiquity, see Bouras, *Geography of Connections* 214-215.

11 Konstantinos Porphyrogenetos, *De cer.* II 51 (III 394-398 Feissel). – Marcellinus Comes, *Chronicon ad a.* 431 (15 Croke) concerning a ceremonial visit by Theodosios II could also refer to the southern *horrea*. – Westbrook, *Forum of the Strategion* 10.

12 *Notitia urbis Constantinopolitanae* 237, 6. – Berger, *Regionen und Straßen* 369 does not want to rule out that the Alexandrina granary could have been situated at the Harbour of Julian because of the boundaries of region IX.

13 *Synaxarium Ecclesiae Constantinopolitanae* 78 (Delehaye).

14 Haldon, *Comes horreorum*. – Durlíat, *L'approvisionnement* 22. 29-30. – Muddell-Mango, *Commercial Map* 200-201.

15 Berger, *Langa Bostani*, however, sees a broad harbour function only given until the beginning of the 8th c., because it has been documented. – Cf. Berger, *Regionen und Straßen* 373: »Der Theodosiushafen schließlich [...] in einer tiefen Bucht, die im Lauf der folgenden Jahrhunderte verlandete« (The harbour of Theodosios [...] in a deep bay, which silted up in the course of the following centuries) (*scil.* after 425), which would have increasingly affected its operability as a harbour. – Mango, *Développement* 55.

16 Magdalino, *Constantinople* 2 (map). – Janin, *Constantinople* 68-69.

17 *Patria Konstantinoupoleos* II 51 (179 Preger). – Parastaseis syntomoi chronikai § 12 (72-74 Cameron/Herrin). On the original location perhaps at one of the Propontis granaries, see Magdalino, *Constantinople* 24 n. 50. – Kislínger, *Lebensmittel* 308-309 n. 31.

18 *Patria Konstantinoupoleos* III 85 (246 Preger). In the case of at least this facility the late antique concept of the *pistrina publica* is likely – their number was above average in regions V and IX (i. e., near granaries): *Notitia urbis Constantinopolitanae* 234, 24 and 237, 15. Berger, *Regionen und Straßen* 384-385. – Adapted to feeding the poor during the Middle Byzantine period (cf. Volk, *Gesundheitswesen* 87. 96-97. 130. 182. 208). Magdalino, *Constantinople* 25 n. 54 rightly refers to the nearby Myrelaion structure (Mango, *Développement* 59) that was in the early 10th c. re-dedicated by Romanos I Lekapenos as a charitable institution, with hospital (*xenon*), nursing home (*gerokomeion*) and a daily distribution of bread (Theophanes Continuatus, *Chronographia* 430 [Bekker]). Kislínger, *Hospitals*, in: Daim, *Brill's History and Culture of Byzantium* 469-471.

19 On a state inn for arriving travellers at the Harbour of Julian, built by Isaac II Angelos, see Niketas Choniates, *Historia* 445, 19-23 (van Dieten), where the *xenodochion* (on this term, see Kislínger, *Kaiser Julian* 373-378; Kislínger, *Lodging* 346-347) is denominated as *pandocheion*, thus in an archaising way. – General observations (Antiquity), see Rauh/Dillon/Davina-McClain, *Ochlos nautikos*; Stasolla, *Strutture per l'accoglienza* (on Rome, Palermo, Cagliari, Naples, Pisa, Gaeta); Byzantium: Kislínger, *Lebensmittel* 310 n. 47 and Kislínger, *Reisen* 372-374 n. 188. 194; Veikou/Nilson, *Ports and harbours* 268-269; entirely unscholarly: Stavroulaki, *Seaports* 28-30 (inns, public houses at/near harbours). On taverns in the area of Heptaskalon, see Preiser-Kapeller, *Heptaskalon*, in this volume, Magdalino, *Review* 261, and earlier Kislínger, *Lebensmittel* 317 with n. 97 and 98. – Macrides, *Travel*, unfortunately, contains no contribution specifically on the hospitality industry and lodging in the Byzantine sphere.

20 *Book of the Eparch/Eparchenbuch* 17.3-4 (128 Koder); *Peira* 218 (Zachariä von Lingenthal) – Ahrweiler, *Fonctionnaires*. – Penna, *Imperial Acts* 21-24. – ODB III 1586-1587. – Makris, *Studien* 246-247. 251-252.

In summary, these harbours fulfilled a threefold purpose: first, they served as shipping centres for handling and storing goods; second, the harbours and the neighbouring areas provided a place of rest and recreation for sailors; third, they were part of a pan-Mediterranean system of long-distance and regional shipping routes²¹. The harbours of Constantinople as a whole were a hub of international dimensions and an essential element for the importance of the city, and the Golden Horn was of great significance for this²². »The sea, its mariners, and who serviced the maritime trading industry influenced life in the eastern capital [...] Constantinople was shaped by its maritime setting«²³.

From the Harbour of Julian, a broad street led to the Tetracylon/Anemodoulion, a gate construction that arched over the intersection with the Mese²⁴. All around to the south was a market quarter called *artopoleia*, where not only bread was sold, but also snack bars were installed (as they are today in such an environment), selling fish, cheese, pulses and wine. Andrew of Constantinople (also Andrew the Fool) chose to stay here in the tenth century²⁵. What is relevant for us, is that, once again, the surrounding neighbourhood attests to the continuing functioning of a granary (cf. the Church of St Thecla *en tois krithopoleiois*, n. 12) at this harbour in the Middle Byzantine period, thus not only that of the *Lamia-horreum*.

The three granaries at the Harbour of Proosphorion on the Golden Horn, on the other hand, disappeared from the sources after the sixth century. If the *horrea* can be equated with *parathalassia apothekai* (magazines near the sea), then the last document from 561 attests to their destruction dur-

ing a fight of the circus factions, the Greens and the Blues²⁶. This would match the information that the markets for maritime merchandise (*agorai tōn thalassion emporeumatōn*) at Neorion were relocated to the Harbour of Julian by Justinian I (reg. 527-565)²⁷. The Harbour of Neorion continued to exist, and Emperor Leontius even had it dredged in 698²⁸. During the months of fighting between Emperor Anastasius II and the usurper Theodosius in 715, Neorion functioned as the base for the imperial fleet, alongside Hagios Mamas on the Bosphorus²⁹. In general, it can be assumed that the harbours on the easily defensible Golden Horn³⁰ served the navy since the first Arab siege of 668/669³¹, including a shipyard or shipyards. Ensuring the secrecy of armaments and weapons, especially that of Greek or liquid fire (*hygron pyr*)³², was certainly the primary motive in shielding this military complex from spying eyes, which was made easier by the concentration of civilian seafaring elsewhere. Berger is incorrect in believing that the Harbour of Julian/Sophia (later Kontoskalion) on the Sea of Marmara had been a »naval base« in the Middle Byzantine period³³. This only applies to the Palaeologan period (see below and n. 133).

From the sixth century, the harbours on the Propontis were preferred for handling goods for the simple reason that they were closer to the commercial and political centre, which extended parallel to the south coast of the city along an east-west axis, with the Mese as its main artery³⁴. Several squares opened along this portico-lined street, such as the Forum of Constantine or the Forum Tauri³⁵, to mention only the most important. This is where many traders and craftsmen had their shops³⁶, and around the Forum Tauri in region VIII

21 On Constantinople as a starting point for Mediterranean sea routes, see Kislinger, *Sea Routes* 320-322 and Kislinger, *Markets and Fairs, Trade Routes* 390-393, both in Daim, *Brill's History and Culture of Byzantium*. – On connectivity, see Kolditz, *Horizonte maritimer Konnektivität*; Bouras, *Geography of Connections; Avramea, Land and Sea Communications; McCormick, Origins* 502-508. 531-547. 593 (map 20.2 shipping routes: simplified segments); Külzer, *Pilgerwege und Kultorte* 183-187. – Heher/Preiser-Kapeller/Simeonov, *Vom Lokalen zum Globalen* 201-209, on the Orbis Stanford Geospatial Network Model of the Roman World, which classifies and analyses junctions according to degree-centrality (intensity of connections), betweenness-centrality (importance within the whole system) and closeness-centrality (distance to other junctions). In the general network, several clusters exist. Its junctions share a higher degree of connectivity, e.g., the Propontis region and the Black Sea area. Constantinople is the hub of both clusters. – The compilation of common law orders in seafaring in the *Nomos Rhodion Nautikos* (8th c.?) emphasises their empire-wide importance with a need for harbours (Letisios, *Seegesetz der Rhodier*; Howard-Johnston, *Commerce à Byzance* 313-316. 340-341). – The internationality of Constantinopolitan harbours is demonstrated by, e.g., small finds from the Theodosian Harbour, such as a gold ring belonging to Undila (possibly of Gothic origin, 6th c.) and a (Middle Byzantine?) roof tile, which names amongst others a certain Karellos/Karilos, a name commonly found in the Latin-speaking provinces of the Western Merovingian sphere: Tsivikis, *Epigraphy* 121-122 and 124-125. – Feuser, *Hafenstädte* 1-2. 4-5. 15.

22 See Kislinger, *Golden Horn*, in this volume.

23 Wade, *Eternal Spirit of Thalassa* 54. – Criticism of sailors' negative influence on urban society in Libanius, *Oratio XI* 38 (V2 448-449 Foerster); Sokrates, *Historia Ecclesiastica VI* 15, 11 (337 Hansen). – Wade, *Lock Up your Valuables* 53-54. 71. 73. 75. – Cheynet, *Poids politique des marins*. – Kolditz, *Horizonte maritimer Konnektivität* 73 n. 75. – For traders in Antiquity cf. Feuser, *Hafenstädte* 284-286.

24 *Patria Konstantinupoleos II* 46/46a (174-175 Preger). – Cf. *Parastaseis syntomoi chronikai* § 40 (106-110 Cameron/Herrin). – Berger, *Untersuchungen* 315. – Anderson, *Anemodoulion*. – Kislinger, *Lebensmittel* 313-314. – Bauer, *Stadt, Platz und Denkmal* 351-353. – Bread was sold in the Artopoleia area, not grain, so Howard-Johnston, *Commerce à Byzance* 329 (with insufficient knowledge of relevant literature). The Middle Byzantine grain trade took place at tou Amastri-

anou (see above n. 16), near the Propontis *horrea*. – In Berger, *Regionen und Straßen* 397 (fig. 5). 405-406, the hypothetical road from the Harbour of Julian (Kumkapi) contradicts an intersection with the Mese (and continuation by the Makros Embolos) at the site of the Tetracylon (on this denomination, see Berger, *Toponyms of Constantinople* 164).

25 *Vita Andreae Sali* 28, 38, 92-94 (Rydén). – Cf. *Parastaseis syntomoi chronikai* § 13 (76 Cameron/Herrin): Artotyrianon. – Mango, *Développement* 55. – Magdalino, *Constantinople* 22-23.

26 Ioannes Malalas, *Chronographia XVIII*, 135 (424 Thurn). The mansion of Andreas en tō Neoriō was also destroyed (loc. cit.).

27 *Parastaseis syntomoi chronikai* § 72 (152 Cameron/Herrin). – *Patria Konstantinupoleos II* 68 (188 Preger).

28 Theophanes, *Chronographia* 370 (de Boor).

29 Theophanes, *Chronographia* 385-386 (de Boor). – Ahrweiler, *Byzance et la mer* 430-431.

30 For the blockade chain attached to this entrance as needed, see Pryor/Wilson, *Chain*. – Guillard, *Chaîne (= Guillard, Études de topographie II* 121-146). – Kedar, *Chains* 5-6. 22-24. 26. – Makris, *Studien* 182-184. – Kislinger, *Golden Horn*, in this volume.

31 Jankowiak, *First Arab Siege*.

32 Haldon, »Greek Fire« Revisited.

33 Berger, *Häfen* 83. See the earlier reference in Berger, *Häfen von Byzanz und Konstantinopel* 114: »... der Hafen der Sophia, in dem Zeit seines Bestehens immer die byzantinische Kriegsflotte lag«. Cf. now Heher, *Harbour of Julian*, in this volume, and Günseken, *Harbours and Shipbuilding* 417.

34 Another example for the interaction between harbours and urban life is given by ancient and Byzantine Syracuse (Castagnino Berlinghieri, *Portualità di Siracusa*), where its centre, Ortygia, also from its peninsular shape is comparable to Constantinople.

35 Bauer, *Stadt, Platz und Denkmal* 148-268. – Müller-Wiener, *Bildlexikon* 255-265. – Berger, *Taurus e Sigma*. – Barsanti, *Il foro di Teodosio*.

36 Detailed information goes beyond the current subject, see Mundell-Mango, *Commercial Map* 199-203. – Thomov/Ilieva, *Shape of the Market*. – Schreiner, *Costantinopoli* 108-111.

(and VII?) were two *macella*³⁷. To the west, the Mese and its extensions were connected to the long-distance overland routes through the Balkans (which supplied merchandise from the surrounding area)³⁸ and also allowed the connection of the Harbour of Theodosius to the urban infrastructure. In its eastern part, the Mese led to the »government quarter« with the Imperial Palace, Hagia Sophia and Hippodrome, all in close proximity and complementary in function. This is where secular and religious power manifested itself physically and where it was staged ceremonially before, and also sometimes with, the public³⁹. This quarter connected – slightly out of alignment to the south-west – to the Acropolis, with its temples, two theatres and the *lusorium* of ancient Byzantion⁴⁰, hence represented continuity adapted to the new dimensions, rather than change.

This southward shift of the centre from the Golden Horn to the Sea of Marmara resulted from the interaction with the function of the Mese as an economic focus and attraction (fig. 1). It is unlikely that the process was planned as comprehensively as the results show. The authorities wanted only to accomplish the structural growth of the city initially enforced in the fourth to fifth centuries, using the newly developed areas, not least for the new harbours of Propontis. Harbours and granaries are essential utilitarian facilities in the larger concept of large-scale city planning, beginning with the Theodosian dynasty⁴¹. The old residential areas on the slope of the Golden Horn (regions V-VII und X)⁴², including utilities (such as market halls/*macella*⁴³ and water supply⁴⁴), were supposed to be preserved. Accordingly, as mentioned at the beginning, a bipolarity existed (examples are the dispersion of *macella*) from the fourth to the sixth century, but it is questionable whether this was completely stable.

Conveniently located, not overcrowded quarters of a large city with good infrastructure, near the political and cultural

hot spots were always attractive in history for the rich and powerful, who had the necessary means and prerequisites to live there. In the area south of the Mese where the ground slopes down to the Sea of Marmara, a specific Byzantine attraction was a wide and beautiful view⁴⁵. Corippus praised the palace of Julian II and Sophia above the Harbour of Julian, which was thus removed from its noise and odours: »Welcome to the noble couple was the place where they used to observe the surging of the sea and the curved ships who brought all goods from the continents«⁴⁶. Justin and his consort were not among the first at this site, who had moved to this area and further increased its value; they also found followers⁴⁷.

In addition to the basic economic and sometimes military function of harbours, in Constantinople as elsewhere, it is also important to consider their representative ceremonial role. This ranged from imperial landings and the reception of state guests to the transfer of relics⁴⁸. Thanks to the contributions by Simeonov and Heher in this volume and elsewhere, a detailed analysis can be omitted here. A change can be observed in this area as well: the focus was relocated from the ancient Prosporon/Strategion area to Hebdomon in Early Byzantine times, then to the Boukoleon Harbour, and in the Late Byzantine period, also the Golden Horn became a preferred locus for all the above mentioned representational and trade-related tasks⁴⁹.

Around 540, Byzantine Constantinople reached its highest population of just under half a million people⁵⁰. Analogous to the expansion of the empire (*renovatio imperii romani*, with expansions into the central Mediterranean) a quick and long-lasting steep decline happened, not only in a territorial, but also a demographic sense. This had been caused primarily by constant war on all fronts (against Sasanids and then Arabs in the east and southeast, Avars and Slavs in the Balkans,

37 Notitia urbis Constantinopolitanae 236, 17. – Mundell-Mango, Commercial Map 193-194. – Kislinger, Lebensmittel 312-313. Leomakellon and Dimakellon (also mentioned in Kleinchronik 14, n. 1a, [Kleinchroniken 130 Schreiner]) and *tau Makellou* (at the Forum of Constantine: Sokrates, Historia Ecclesiastica I 38, 9 [89-90 Hansen]) and *ta Makellou* (the existence[?] of which is based only on Manuscript D of the Vita Andreae Sali. ch. 2 [18 Rydén, app. crit.] and with reference thereon Janin, Siège de Constantinople 29) must – contrary to Berger, Untersuchungen 184 and 515 – be distinguished.

38 Kislinger, Verkehrswege und Versorgung (with further literature). – Kùlzer, Ostthrakien 192-202.

39 For a short selection, I refer to Dagron, Déroulement des courses. – Hippodrom/Atmeydanı. – Bauer, Visualisierungen von Herrschaft. – Featherstone, Der Große Palast. – McCormick, Eternal Victory. – Majeska, Emperor in his Church. – On out-reaching productions, see Berger, Straßen und Plätze.

40 Berger, Regionen und Straßen 357-360.

41 Magdalino, Renaissances 58-59.

42 Notitia urbis Constantinopolitanae 233-236. 237-238. English translation in Matthews, Notitia 89-91. 93-94. – Berger, Regionen und Straßen 377. 382-383.

43 Notitia urbis Constantinopolitanae 234. – Kislinger, Lebensmittel 312-314. – Mundell-Mango, Commercial Map 193-194. – Berger, Regionen und Straßen 385-386. – On the concept generally and its evolution, see De Ruyt, Macellum. – Cf. Lavan, Retail and Regulation 342-343. 346. 367 on such facilities elsewhere.

44 Hadrian's water system supplied ancient Byzantion, that of Valens also encompassed the area around and south of the Mese and (by means of the Cistern of St Mocius) in the southwest of the city: Bono/Crow/Bayliss, Water Supply. – Crow/Bardill/Bayliss, Water Supply, esp. 9-20. – Crow, Infrastructure 268-279

fig. 1. – Crow, Ruling the Waters. – Sürmelihiindi et al., Byzantine Water Management. – Mango, Water Supply. – Berger, Regionen und Straßen 379-381.

45 Saliou, Trait  d'urbanisme § 52-56 (72-75). – Saliou, Lois des b timents 238-246. – Velenis, Wohnviertel 229. – Dark, Eastern Harbours 157. – Gr nbart, Inszenierung 74. 90-92.

46 Flavius Cresconius Corippus, In laudem Iustini I 109-111. – Cf. I 101-103 (39 Cameron). In general Libanius, Oratio XI 37 (I/2 448 Foerster). On the comparable later expansion of the imperial palace complex southward and the emergence of the Boukoleon part including harbour, see Heher, Boukoleonhafen 123-124.

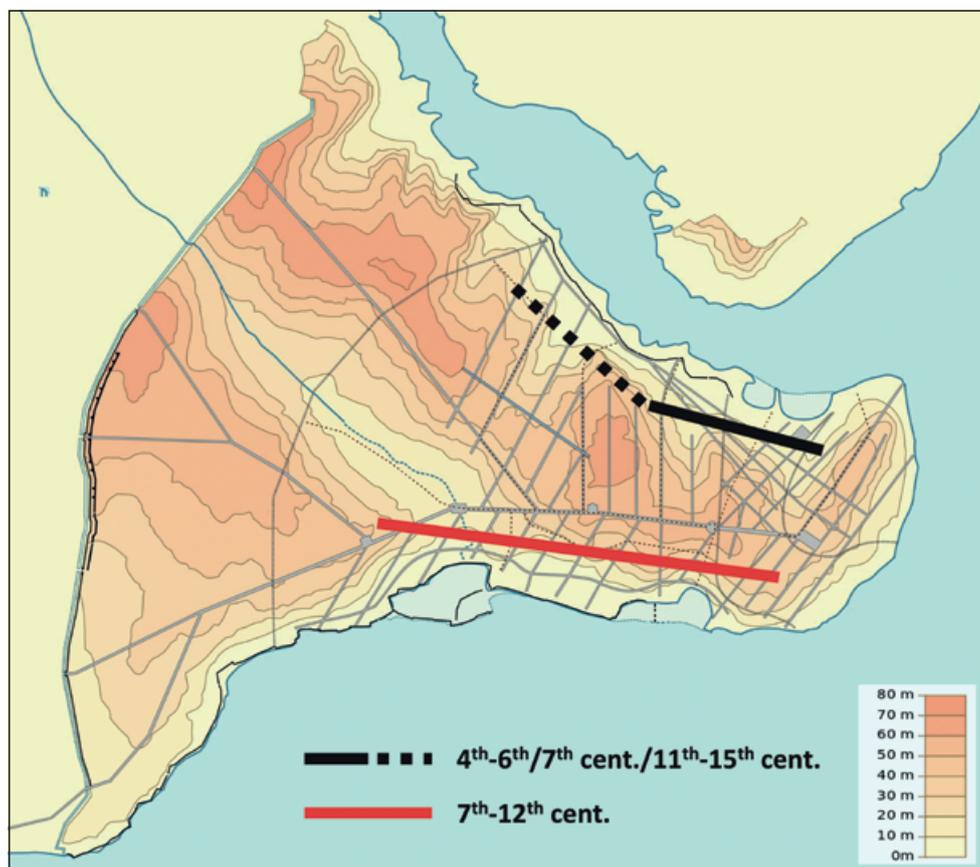
47 Nikephoros Phokas the Elder and his son Bardas followed after Justin II in the position above the Harbour of Sophia (Leon Diakonos, Historia V 5 [83-84 Hase]. – Niketas Choniates, Historia 445). The Empress Eirene resided in the Palace of Eleutherios (Vita Basilii Minoris III 36, 1), near the one of Arcadius (Notitia urbis Constantinopolitanae 237, 7). – Mango, D veloppement 59. – Magdalino, Maritime Neighborhoods 216.

48 Heher/Simeonov, Ceremonies by the Sea 223-227. – On the image of the harbour in literary comparison, see Chrysos, Limen. – In general: Bauer, Stadtverkehr in Konstantinopel; Berger, Straßen und Plätze. For parallels from antiquity Feuser, Hafenst dte 271-274.

49 Heher/Simeonov, Ceremonies by the Sea 227. 230-233. 235-236. – Vu eti , Repr sentative Aspekte von H fen 135-140. – Schreiner, Brautgedicht und Pseudo-Kodinos, Trait , chap. 12 (286-287 Verpeaux).

50 Koder, Lebensraum 117-118. – Low estimate of 375 000 inhabitants before 541 given by Schreiner, Costantinopoli 81-83; higher estimate of 600 000 given by Durliat, Ville antique 232-275 n. 210. – Jacoby, Population.

Fig. 1 The harbours and economic axes of Constantinople and their locations over time. – (Map E. Kislinger / J. Preiser-Kapeller).



Lombards in Italy)⁵¹ and widespread pestilence⁵². When the Justinian plague ebbed away after a massive eruption in 743-750⁵³, which affected Constantinople in 747-748, the city probably reached its population low point. Although 40 000 inhabitants may be too pessimistic an estimate⁵⁴, even if double that is estimated, the city would have lost more than 80 per cent of its population level of 540. The fallout of this for the cityscape was, on the one hand, the contraction of settlement, especially on the Mese axis (the better position was still preferred) and the transverse from the Harbour of Julian via Makros Embolos («great shopping street»; now Uzunçarşı Caddesi) to Perama⁵⁵. On the other hand, sparsely populated and deserted areas created a spatial surplus that also had its advantages. As the harbours were no longer able to operate at full commercial capacity due to lower demand, their num-

ber could be reduced for this purpose, or, as already stated, diversification of use became possible: the Neorion Harbour on the Golden Horn thus passed to the navy for centuries to come (see above).

In the hinterland of the neighbouring Proshporion Harbour to the east, the Strategion – still one of the city's great squares in the fifth century⁵⁶ and a centre for the regions of the lower Golden Horn – retained its function as a cattle market for the time being⁵⁷. It was only under Constantine V (reg. 741-775) that this was transferred to the Forum Tauri⁵⁸, that is, at the time of the city's population low point. The decisive factor was probably the question of local supply⁵⁹ of the densely populated zone in the area of the Mese and to its south, which Constantine V focused on regarding the city planning⁶⁰, which overrode the hygiene aspect.

51 Overviews offer *pars pro toto*: Whitby, Maurice. – Pohl, Avars. – Zanini, Italie bizantine. – Kaegi, Early Islamic Conquests. – Stratos, Byzantium. – Eickhoff, Seekrieg und Seepolitik 9-50.
 52 Stathakopoulos, Famine and Pestilence. – Meier, Pest, and the chapters in Meier's volume by W. Brandes (201-224) and K.-H. Leven (11-32). – Congourdeau, Pandémies. – Meier, «Justinianic Plague» rightly criticises a recent attempt to minimise the effects of this pandemic, but overemphasises the importance of Meier, Pest. – On Constantinople, see Kislinger, Pane 279-293.
 53 Stathakopoulos, Famine and Pestilence 379-386.
 54 Mango, Développement 53-54.
 55 Mundell Mango, Commercial Map 197 fig. 31.
 56 Notitia urbis Constantinopolitanae 233, 11-12 speaks of *Strategium*, in *quo est forum Theodosiacum et obeliscus Thebaeus quadrus*. English translation in Matthews, Notitia 90. – Parastaseis syntomoi chronikai, § 24 (84-86 Cameron/Herrin) differentiate a large and small Strategion. Mango, Triumphal Way 187: »It can be provisionally suggested, that we have here a civic forum flanked

by a smaller marketplace«. – Mundell Mango, Commercial Map 192. – Westbrook, Forum of the Strategion 5-7. – Bauer, Stadt, Platz und Denkmal 224-228. – An arch or entranceway crowned with a Fortuna (Marcellinus comes, ad annum 510 [35 Croke]. Mango, Développement 19 n. 32) was considered by the Patria Konstantinupoleos I 51 (141 Preger) to be the Arch of Urbicius (opening to his nearby house, see n. 81) on the speculative Byzas Wall.
 57 For a similar use of the lower Agora near the harbour in Ephesos, see Foss, Ephesos 63. 82 fig. 12.
 58 Patria Konstantinupoleos III 149 (263-264 Preger). – Magdalino, Renaissance 75; cf. even earlier Kislinger, Lebensmittel 314-315 and Kislinger, Von schlechteren und besseren Lagen, in: Daim, Häfen 12.
 59 Nikephoros Patriarches, Breviarium ch. 85 (160 Mango) on the rich supply of markets under Constantine V.
 60 Magdalino, Constantine V, 10-11. – Cf. (2001). – Magdalino, Maritime Neighborhoods 213 n. 28.

Since the water supply via the Valens Aqueduct to the *nymphaeum maius* was disrupted in the course of the Avar siege of 626⁶¹, the reservoirs⁶² that this had fed could only be filled by rain water, but this was apparently sufficient given the reduced population. Only as a result of the state-ordered resettlements from various provinces in 755⁶³ did the situation threaten to become precarious in the event of prolonged drought. When that occurred in 766, Constantine V had the Valens Aqueduct repaired, for which he now had to bring builders to Constantinople from the Pontus, Hellas, the islands and from Thrace⁶⁴. In distant Naples, the measure became the fairytale-like expulsion of a dragon from the aqueduct, which had previously carried off many inhabitants with its exhalations (see n. 81 on the miasma concept). Lack of water due to blocked or interrupted supply lines, resulting in a lack of hygiene, encouraged the spread of disease, especially the plague outbreak of 747-748, and the intervention of the emperor was according to this legend brought nearer in time and combined with this⁶⁵.

Trade in pigs at the Forum Tauri⁶⁶, to which the animals were driven up from the Harbour of Julian⁶⁷, and that with horses (brought from Thrace?) at the Amastrianum⁶⁸ are further indications of mercantile concentration in appreciated and promoted residential areas. In contrast, the ambience around the palace was supposed to be dominated by the fragrances of musk, frankincense and myrrh, products of the druggists from the Milion to the Chalke Gate⁶⁹. An Early Byzantine slaughterhouse at the Forum of Constantine was probably relocated due to the unpleasant smells⁷⁰.

Less noble districts, which had become more remote due to the negative demographical growth of Constan-

tinople, such as Leomakellon near the coast at Basilike pyle (Unkapanikapısı)⁷¹ on the Golden Horn⁷² (or rather more precisely at the Heptaskalon⁷³) or around the site of the Strategion, were better suited for such purposes or also trades with an associated fire risk, such as glass-blowing: »However, if any necessity required it within the cities, the *hyalourgoi* must operate in isolated locations away from the residential areas«⁷⁴. Such a workshop (*ergasterion hyelopses-tikon*) on the steep street (Dikymbalos) to the Hagia Sophia obviously complied with the legal requirements; nevertheless, a fire broke out from it that raged to the Chalkoprateia Church⁷⁵. It was primarily for religious reasons that the Jewish community established a separate settlement. However, in 1044(?), or at least before 1082, they had to move from the south bank of the Golden Horn to the northern one⁷⁶. The evil odour emanating from the tanneries no doubt also motivated the change⁷⁷. This, too, fits for the time before the image of a predominantly commercial zone in the hinterland of the devalued and re-designated harbours on the Golden Horn.

As a reason why it ever came to this image, the plague was made responsible⁷⁸. The thousands of dead in the first wave in 542 were taken to the Golden Horn, stacked on the other bank at Sykai, buried in mass graves⁷⁹ or thrown into the sea⁸⁰. In other epidemics similar procedures may have been used. The associated miasma of the area⁸¹ is implicitly linked to a renewed outbreak of the plague in 698 when the Neorion Harbour was dredged⁸². The causality can also be modified. In the poor, overpopulated tenements of adjoining urban areas, the plague – probably reaching the city by sea, with harbours being the typical gateway of a

61 Nikephoros Patriarches, Breviarium ch. 85 (160 Mango).

62 Crow/Bardill/Bayliss, Water Supply 20.

63 Theophanes, Chronographia 429 (de Boor). The measure is certainly to be seen as a reaction to the loss of population caused by the plague outbreak of 747-748.

64 Theophanes, Chronographia 440 (de Boor). – Magdalino, Water 132. – Magdalino, Renaissance 72-73. 75. – Perhaps the expulsion of various monastic communities from their monasteries and their re-dedication as barracks for new elite units (Theophanes, Chronographia 437 [de Boor]). – Magdalino, Constantine V, 3. 6. 12) was not solely ideologically motivated, but partly due to lack of accommodation and construction workers, or perhaps due to earthquake damage (Magdalino, Renaissance 74). – The reproach of the Emperor for selling liturgical objects in order to finance the construction costs of houses, baths and theatres also points in this direction (proceedings of the Second Council of Nicaea 787: Mansi, Collectio XIII 333 A-B, see ACO series secunda, volume tertium, pars tertia 756, 9-11 (Lamberz/Dubielzig).

65 Gesta episcoporum Neapolitanorum 422-423 (Waitz). – Acconcia Longo, Agiografia e narrativa tra Oriente e Occidente 245-248. – On this plague wave, see Stathakopoulos, Famine and Pestilence 384-385.

66 Book of the Eparch/Eparchenbuch 16.2 and 16.3 (124-126 Koder). – Book of the Eparch/Eparchenbuch 15.5 (124 Koder) also testifies to trade in lambs from Easter to Pentecost.

67 Patria Konstantinupoleos II 46a (175 Preger). – Kislinger, Lebensmittel 313-314.

68 Book of the Eparch/Eparchenbuch 21.3 and 21.8 (136-138 Koder).

69 Book of the Eparch/Eparchenbuch 10.1 (110 Koder).

70 Sokrates, Historia Ecclesiastica I 38. 8-9 (89-90 Hansen). – Kislinger, Lebensmittel 314.

71 On this equalisation earlier Schneider, Mauern und Tore 77. – Asutay-Effenberger, Porta veteris rectoris 133.

72 Kislinger, Lebensmittel 316. – Asutay-Effenberger/Effenberger, Eski Imaret Camii 23-24. – Berger, Ufergegend 153.

73 Vita der Theodosiae 131 (Gedeon). – On the Heptaskalon, see Preiser-Kapeller, Haptaskalon, in this volume.

74 Julianus Ascalonites § 11.1 (Saliou, traité d'urbanisme 40-41). – Hexabiblos II 4, 19 (117-118 Pitsakis). – Velenis, Wohnviertel 227.

75 Invention des reliques et miracles de Ste Photine (BHG 1541 m), ch. 9 (122-123 Halkin). – See Talbot, Photeine 101 n. 52. – Henderson/Mundell Mango, Glass 344-346. – Mundell Mango, Commercial Map 202-203, n. 119. – Mango, Triumphal Way 188, still locates some Ottoman workshops for glass production slightly northeast.

76 Jacoby, Quartiers juifs 170-171. 181-183. – Jacoby, Jews 223-225.

77 Benjamin de Tudela, Itinerarium 24 (Adler).

78 Magdalino, Maritime Neighborhoods 217-219.

79 Prokopios, Bella II 23, 9-11 (I 257 Haury/Wirth).

80 Ioannes Ephesius, Vitae sanctorum Orientalium 89 (Brooks).

81 Gen. Pseudo-Athanasius Alexandrinus, Quaestiones ad Antiochum, erot. 103 (PG 28, 661 A-B). – Anastasios Sinaites, Quaestiones et responsiones, erot. 66 (118-119 Richard/Munitiz). – Aetius Amidenus, Libri medicinales V 95 (II 80-81 Olivieri). – Paulos Aiginetes, Epitome iatrike II 34 (I 107-108 Heiberg). – The relevant sources quoted by Magdalino, Maritime Neighborhoods 218, n. 65 and 66 are in parts from outdated editions. – For further examples of the *miasma* idea, see Acconcia Longo, Agiografia e narrativa tra Oriente e Occidente 247 n. 61.

82 Theophanes, Chronographia 370 (de Boor). – Berger, Häfen 80-81 follows Theophanes' arguments and sees the cause of the plague wave of 698 in silt and waste, without a mention of Stathakopoulos, Famine and Pestilence, esp. 364-365. Considering the knowledge of transmission paths of the plague, the common opinion that waste was the real catalyst of the pandemic seems unlikely. However, this was rather based on the negative image of the urban quarter since 542. See on this Magdalino, Constantinople 99; Magdalino, Maritime Neighborhoods 218-219 and Kislinger, Von schlechteren und besseren Lagen 12-13 in Daim, Häfen (German version [2016] of the present article).

pandemic⁸³ – will have raged more fiercely than in richer neighbourhoods with higher sanitary standards⁸⁴. It was logical in a catastrophic situation to bury the dead nearby. The interests of the local survivors were of no great concern, their demographic and public weight shrank due to the epidemics, the already second-rate area now became the slum of the city: »The Golden Horn took a long time to shake off its bad reputation ...«⁸⁵.

The first signs of change again became evident in the tenth century⁸⁶. In the Book of the Eparch, the *makelarioi* are instructed to buy (and to slaughter) sheep until the beginning of the pre-Easter Lent at the Strategion – from which the bronze sculptural decoration had been taken away a few decades earlier⁸⁷. Only the trade with lambs remained at the Forum Tauri from Easter to Pentecost⁸⁸. In a high-turnover period, the market was left close to the customer, whereas otherwise it was removed from the centre again. The measure was taken for hygienic reasons, and is likely to be connected with the noticeable increase in population as the Empire began to tackle the last wave of Arab attacks at sea and soon asserted itself against the Bulgarians⁸⁹. It is significant from the supply logistics point of view that in 960, when preparations for the then successful landing on Crete were made, additional grain needed for this purpose was to be bought in from the east and west⁹⁰. About eighty years later, already the mere supply for the metropolitan population, which had to be secured in the face of a shortage, necessitated a similar course of action⁹¹.

Demographic growth was also manifested in urban development, and areas that were lying fallow for much of the time gained in interest. After Urbicius, author of a *taktikon* under Anastasios (reg. 491-518), whose house lay in the Strategion (after 548 it became a Syrian monastery⁹²), we encounter with Antonios, a prominent resident near the Neorion wharf⁹³. Antonios was Patrikios in the time of Michael III (reg. 842-867) and owned an elegant house in the old harbour district, the private bath of which he opened for charitable purposes. The group of believers (presumably a brotherhood), which continued this work, however, was

financially weak, thus corresponding to the social image of the district, the diaconia *tēs Theotokou en tō Neoriō* was in decline⁹⁴. An imperial prospect was found in the tenth century with Romanos Lekapenos. However, it was originally intended to demolish the existing buildings to make way for the emperor's palace. A vision of St Mary ordered a halt to the work; the bath was renewed and, as a *metochion*, attached to a monastery⁹⁵. As a former commander of the navy⁹⁶, it was not accidental that Romanos wanted to settle near the Neorion and evidence suggests that he succeeded⁹⁷: a palace situated on a terrace above the Golden Horn could be that of Romanos. It was later named after the families of Botaneiates and Kalamanos, and passed to the Genoese in 1192⁹⁸. Regarding the development of ownership and the locality, it would then be a parallel to the residence of Justin II at the Harbour of Julian/Sophia.

The Monastery of Manuel was financially supported by Romanos I. It had three *skalai* below »his« palace⁹⁹ and was not the only monastery that had possessions along the banks of the lower Golden Horn. Almost all of them, as Magdalino could prove¹⁰⁰, emerged in the tenth and eleventh centuries, and received their endowment and validation in this time. There was still sufficient space available in the expanding Constantinople, not least in the area between the Phosphorion Harbour and the ferry to Perama. For a long time a problem area of the city, this stretch of shore and the inland areas were revitalised. Michael VI (reg. 1056-1057) even went to renew the overgrown Strategion, a logical step »in a part of the city that was returning to importance«, which earned him ignorant mockery¹⁰¹. The ambience of the Golden Horn did not count as one of the city's best areas.

Exceptions such as the palace of Despot Constantine Angelos or the house of Sebastocrator Isaac Comnenos (later the Monastery of Christos Euergetes)¹⁰² prove the rule for the time being. These were also located on the coast north-west of Perama, in the upper part of the Golden Horn, which would then experience a sustained appreciation with the beginning of the Comnenian period. The new dynasty raised the Blachernae quarter as the new seat of imperial power. This

83 Stathakopoulos, *Famine and Pestilence* 31. 137-138. – Kislinger/Stathakopoulos, *Pest und Perserkriege* 85-93. – McCormick, *Bateaux de vie, bateaux de mort*. – Bergdolt, *Der Schwarze Tod* 35-41.
 84 Conrad, *Pest*. – Dark, *Houses* 87-89. – Westbrook, *Forum of the Strategion* 24.
 85 Magdalino, *Constantinople* 99.
 86 *Book of the Eparch/Eparchenbuch* 15.1 and 15.5 (122-124 Koder).
 87 *Patria Konstantinupoleos II* 61 and III 24 (184. 221 Preger). – Bauer, *Stadt, Platz und Denkmal* 227-228. – Bassett, *Urban Image* 242-244. – Magdalino, *Water* 137-138.
 88 *Book of the Eparch/Eparchenbuch* 15.1 and 15.5 (122. 124 Koder). – Mundell Mango, *Commercial Map* 199-200.
 89 Tougher, *Leo VI* 164-193. – Eickhoff, *Seekrieg und Seepolitik* 258-261. – Stephenson, *Balkan Frontier* 18-23. – Kislinger, *Verkehrsrouten* 164-165.
 90 Theophanes Continuatus, *Chronographia* 479 (Bekker).
 91 Ioannes Skylitzes, *Synopsis* 400 (Thurn).
 92 *Patria Konstantinupoleos III* 22 (220 Preger). – Ioannes Ephesius, *Vitae sanctorum Orientalium* 683 (Brooks). – PLRE II 1190. – Janin, *Constantinople* 400. – Berger, *Untersuchungen* 404-405.
 93 *Synaxarium Ecclesiae Constantinopolitanae* 935-936 (Delehaye). – PmbZ I no. 558.

94 Magdalino, *Constantinople* 34. 106. – Generally on this subject see Magdalino, *Church, Bath and Diakonia*. Repeated in Magdalino, *Water* 134-135.
 95 *Synaxarium Ecclesiae Constantinopolitanae* 937-938 (Delehaye).
 96 PmbZ II no. 26833.
 97 See the convincing arguments by Magdalino, *Constantinople* 94.
 98 Cupane, *Traumpaläste* 411-426. – Grünbart, *Inszenierung* 74-75. – Dark, *Eastern Harbours* 57 (terrace at the Cemal Nadir sokak). – Berger, *Ufergegend* 162 (western slope of the Acropolis).
 99 Theophanes Continuatus, *Chronographia* 432-433 (Bekker). – Magdalino, *Constantinople* 91-92 n. 208. – Hesitant but ultimately similar Berger, *Ufergegend* 162.
 100 Magdalino, *Constantinople* 92-93.
 101 Ioannes Skylitzes, *Synopsis* 482 (Thurn). – Magdalino, *Constantinople* 57-58. The presence of sieve makers at the end of the 12th c. on the site indicates that the Strategion had not really risen: Ioannes Nomikopulos, *Ekphrasis* 296 (Karpozelos).
 102 Magdalino, *Constantinople* 89-90 n. 198, 80. – Asutay-Effenberger, *Kynegion District*, in this volume rejects the common identification of the Monastery of Christ the Benefactor with Gül Camii.

focus formation starts in parallel with another change (which, however, happened separately despite a relative proximity), which has a primary interest from the perspective of those interested in the harbours: the emergence of western commercial settlements further southeast of the Golden Horn. It is assumed that the relevant contracts and political background are known and do not need to be discussed here¹⁰³. The essential question is why the choice fell on the Golden Horn and not the economic centre with the Mese and the Propontis harbours.

»There can be no doubt, that the establishment of the Italians increased the commercial importance of the Golden Horn. But would the Italians have asked for concessions in this area if it had not been fairly important already to their business interests?«¹⁰⁴. Indeed, positive arguments could be provided, such as the proximity to branches of other economic operators, mainly Arab traders in Perama or at the end of the Makros Embolos. Besides familiarity of the Venetians (and those from Amalfi) with the Neorion Harbour and the wharf area – first at Neorion, then in Sykai – as sailors in imperial service¹⁰⁵. Nevertheless, this approach, even the overall concept, over-estimates in a central element the political creative force of the participants from the West. It was the Byzantine state, which, albeit facing hostile pressure at the beginning of the Comnenian period, issued trade agreements and concessions. These were formally expressed in the gracious granting of a privilege. Before doing so, concrete interests of the empire were taken into account or even preceded. The recipients, first Venice and then Pisa (1112), were at best able to express their wishes, that is all they could, and there was no question of free choice on their part¹⁰⁶. The threefold Genoese proposal of 1155 (settlement west of the Venetians was preferred, second choice was the Prosfhorion district, otherwise beyond the city in Sykai/Pera¹⁰⁷) shows the still narrow limits of foreign influence on the choice of location.

An Italian preference for the Golden Horn cannot be deduced from this, Genoa orientated itself only on the current market situation in the literal and figurative sense.

Similarly, the Arab proximity to Perama¹⁰⁸, arranged some 70 years before, will have prompted Venice to accept the granted assignment of land on the Golden Horn – and thus away from the prosperous Mese and the Propontis harbours. But Muslim trade partners had been placed there by the Byzantine state authority, so they were still doing better than the merchants of the Rhus, who had to move to quarters in Hagios Mamas on the Bosphorus¹⁰⁹. Political considerations, based on the strength and importance of the powers behind the merchants, will have influenced the allocations¹¹⁰. Venice was certainly favoured from the Byzantine point of view, since the location of its settlement provided direct access to the shops and stores markets via the Makros Embolos.

Secrecy around the Byzantine naval base (see above p. 11) was no longer a problem, the inexorable silting up of the Neorion Harbour in the tenth century had possibly led to the relocation of the arsenal to Sykai; in any case, the fleet was practically non-existent by the reign of Alexios I¹¹¹. Its relative re-emergence in the twelfth century took place mainly in Sykai with Latins (from the settlements) providing a welcome reserve of personnel¹¹². Finally, it operated – as the fire attack in 1203/1204 suggests – from the north-west bank (possibly the Blachernae quarter) of the Golden Horn¹¹³.

Even with the population growth in the tenth century, it generally remained the case that the former backyard of the city, profiting from this growth anyway, was always sufficient for foreigners. On the occasion of the violent explosion of 1182 against Western traders and other residents in the settlements¹¹⁴, especially the Venetians, Eustathios of Thessalonica openly spoke (certainly with a polemical undertone) of the Latin race, which had its separate place on the bank of the Horn of Byzantium, coinciding with ancient custom¹¹⁵.

103 A brief selection includes Lilie, Handel und Politik. – Pacta veneta 992-1198. – Pacta veneta 1265-1285. – Nicol, Byzantium and Venice. – Banti, Amalfi, Genova, Pisa e Venezia. – Ballard, Romanie génoise. – Origone, Bisanzio e Genova. – Ballard, Amalfi et Byzance. – Skinner, Medieval Amalfi. – Italiens à Byzance. – Jacoby, Venetian Quarter. – Maltéizou, Quartiere veneziano.

104 Magdalino, Maritime Neighborhoods 219.

105 Magdalino, Maritime Neighborhoods 220. – Magdalino, Constantinople 95. 98-99. – On Sykai, see Müller-Wiener, Häfen 12-13.

106 In contrast to Magdalino, Maritime Neighborhoods 220.

107 Sanguineti/Bertolotto, Documenti 346. – Magdalino, Maritime Neighborhoods 221-222.

108 Reinert, Muslim presence in Constantinople. Against Reinert and with Magdalino, Constantinople 98, I am of the opinion that the mosque grew out of an earlier merchants' accommodation near the Makros Embolos (*mitaton*: Book of the Eparch/Eparchenbuch 5.2 [Koder]). – Pontani, Note 302-304 seeks to derive an equation between *synagogion* (*recte* mosque) and *mitaton* from Niketas Choniates, Historia 553, 91-95 (van Dieten). The source merely states that the entire area was referred to (in *demodes dialektos*) as *mitaton*, which reflects the far longer existence of the merchants' accommodation compared to the more recent mosque. – Cf. Di Branco, Ismailiti a Bisanzio 119-120, who loc. cit. also proves that Pontani has overlooked another Niketas passage (Historia 525, 19-20 [van Dieten]), in which *synagogion* clearly refers to a mosque. – Turchetto, Mitaton 269-270. 283 follows Pontani *de facto*, in wanting to situate the *mitaton* (correctly) within the sea walls (272), but at the same time putting it slightly southeast of the Church of St Eirene of Perama (271 fig. 2) without any evidence for this. – Cf. Jacoby, Venetian Quarter 159.

109 Hellmann, Handelsverträge zwischen Kiev und Byzanz. – Shepard, Constantinople – Gateway to the North. – Kislinger, Reisen 368-369 with n. 165.

110 Significant is the award of *skalai* in the flourishing middle section of the Golden Horn to Germans and French (Jacoby, Venetian Quarter 158-159; Magdalino, Constantinople 89), that is (nationals from) states that played an important role in Manuel's foreign policy (Magdalino, Empire 41-43. 46-53. 59-66).

111 In the time of Romanos Lekapenos, the arsenal was no longer explicitly associated with the Neorion (Theophanes Continuatus, Chronographia 391 [Bekker]). In a note in the Patria Konstantinupoleos II 88 (196 Preger), the harbour itself is called *limne* (stagnant water, bog). – In the 13th c., Georgios Pachymeres V 10 (II 469 Failler) calls the Neorion arsenal really old (*palaia exartysis*). – On the decline of the navy, cf. Kislinger, Ruhm 43-52.

112 Lilie, Handel und Politik 614-619. 624-625. 630-633. – Ahrweiler, Byzance et la mer 282-283. 295. 431-433. – Müller-Wiener, Häfen 12-13.

113 On 1203/1204 Devastatio Constantinopolitana 90-91 (Hopf). – On the possible base at the Monastery of Christos Euergetes, see Georgios Pachymeres, Relationes historicae V 10 (II 469 Failler). – Müller-Wiener, Häfen 8-9. 24. – Cf. Asutay-Effenberger, Kynegeion District, in this volume.

114 Brand, Byzantium 40-43.

115 Eustathios Thessalonikes, Expugnatio 34 (Kyriakidis). – See Jacoby, Quartiers juifs 181-182. – Magdalino, Constantinople 99: »Before they were privileged foreigners, they were just foreigners, and the Golden Horn was their rightful place«; Rapp, Constantinople and its foreigners 101: »merchants or diplomats, were not normally made to feel »at home«, but constantly were reminded of their status as outsiders and guests.

The new arrivals knew better how to use their opportunities than their hosts could have imagined. Although entering the Golden Horn required making a sweeping arc past Chalcedon due to the Bosphorus' current, the Golden Horn was itself an enormous natural harbour¹¹⁶, where large numbers of ships found anchorage that was easily accessible from the shore. Cargo could then be unloaded and loaded at the various *skalai* (landing stages parallel to the shore and, presumably, landing stages extending into the water)¹¹⁷. The traditional harbour concept was thereby modified and enlarged. Analogous to the Mese at the harbours of Propon-tis, the *emboloi* here also formed the backbone of the economic axis¹¹⁸.

The various commercial settlements grew¹¹⁹, encouraged by the diminishing power of the Byzantines towards 1204 to oppose the increasingly demanding wishes of the Italian maritime powers. It was earlier noted for the period from the late fourth century to sixth/early seventh century (see above pp. 9-10) that there was a parallel existence of two economic centres and harbour zones in one city. This is now repeated from the end of the eleventh century to the Fourth Crusade (1203/1204) with the Mese and Propontis harbours, and at the same time, the riparian zone including land clusters from Proosphorion to Perama. Constantinople was able to cope with this once more and even needed it, because of its again considerably increased population¹²⁰.

Again, this mercantile concentration would not be permanent. A drastic sequence of events led to the elimination of an axis (fig. 1) and once again, a significant decline in population affected sustainability for centuries. The political background – in the sixth to seventh centuries it had been constant wars and substantial territorial losses – now formed, more seriously, the destruction of the empire in the wake of the conquest of Constantinople in 1204¹²¹. The directly contributory factor of the plague of 542 corresponded to the fires of 1203/1204¹²², added to this was damage from the rioting of the local mob and looting by the conquerors¹²³. The artifi-

cial Latin empire¹²⁴ was too weak (also financially), to remedy the resulting damage in its urban area of responsibility to some extent. Its hinterland, which had previously supplied demand¹²⁵, noticeably diminished. In addition, the court and the upper classes were now lacking as wealthy consumers. In modern terms, the economy collapsed massively.

Now masters of over three-eighths of the city, the Venetians alone remained a significant economic force¹²⁶. Because the trade network of the Italian maritime powers – actively expanding into the Black Sea region after 1240¹²⁷ – stabilised the entire Rho-mania area, Constantinople was able to maintain its function as a hub and market, even after the Byzantine *reconquista* of 1261, naturally adapting to the reduced internal needs of the city. The total turnover of Byzantine merchants, at best as a junior partner¹²⁸, and large parts of the retail trade¹²⁹ took place in the western settlements and their neighbourhoods. However, the Mese axis had lost its commercial importance¹³⁰. Of the Propontis harbours, that of Theodosius was now almost completely silted up¹³¹, the Kontoskalion¹³² (formerly the Harbour of Sophia) was used by the imperial navy, or what was left of it¹³³. On two occasions, the harbour areas of Constantinople once again rose in importance, for naval construction in 1348/1349¹³⁴ and during the final siege of the city in 1453¹³⁵. The maritime events were each focused on the Golden Horn; it was, as ancient Byzantium had already recognised, the more important and better location.

Postscript: In the context of the video conference »Columns of Constantinople«, organised by the Department of Byzantine Archaeology at the University of Freiburg (Germany) on 13 November 2020, Dr Jesko Fildhuth spoke on »Landmarks or Sea marks? Seeing the Columns of Constantinople«. The author of the above contribution agrees with Fildhuth that the towering columns at the Forums of Constantine, Theodosius and Arkadios could have served for the orientation of incoming ships. However, I do not see this as the original or

116 Prokopios, *De aedificiis* I 5, 13 (IV 29 Haury/Wirth). See Kislinger, Golden Horn, in this volume.
 117 Michael Attaleiates, *Historia* 199 (Pérez-Martin). Earlier owners were, among others, monasteries (see above for that of Manuel) or charitable institutions (such as the Xenon of Isaac II Angelos by the Church of the Forty Martyrs Niketas Choniates, *Historia* 445 [van Dieten]. – *Acta et diplomata graeca III* 16). The proceeds of the *skalai* (Antoniadis-Bibicou, Douanes 134-135) helped to meet their expenses.
 118 Jacoby, *Houses and Urban Layout* 271-274. – Magdalino, *Maritime Neighbourhoods* 223-224.
 119 Jacoby, *Venetian Quarter* 156-159. – Lilie, *Handel und Politik* 79-81. 101-102. – Balard, *Romanie génoise I* 109-112. 179-182.
 120 Magdalino, *Constantinople* 61-65 n. 28. 45-46. – Schreiner, *Constantinopoli* 83 estimates 400 000 inhabitants.
 121 Queller/Madden, *Fourth Crusade*. – Carile, *Partitio terrarum imperii*.
 122 Niketas Choniates, *Historia* 553-554 (van Dieten). – Geoffrey de Villehardouin, *Conquête I* § 203. – Madden, *Fires*.
 123 Niketas Choniates, *Historia* 553-555. 558-559. 570. 647-655 (van Dieten).
 124 Van Tricht, *Latin renovatio*. – Carile, *Storia dell' impero Latino*. – Jacoby, *Urban Evolution*.
 125 The lament of Michael Choniates, *Epistulae* 50, 10 (69-70 Kolovou) from Athens, that all goods flow to Constantinople and therefore lack in the province, aptly characterises the situation before 1204.

126 Jacoby, *Economy of Latin Constantinople*. – Jacoby, *Venetian Government*.
 127 Jacoby, *Economy of Latin Constantinople* 209-213.
 128 Oikonomides, *Hommes d'affaires*. – Laiou-Thomadakis, *Mediterranean Trade System*. – Jacoby, *Mediterranean Food and Wine*. – Kislinger, *Gewerbe*.
 129 Berger, *Ufergegend* 154-155. – Kislinger, *Lebensmittel* 316-318 n. 97 and 99. – Mundell Mango, *Commercial Map* 205-206.
 130 Concerning »commercial buildings« in this area, we know of only two bakeries in the »Old Forum« (that of Constantine) and wine taverns in the harbour area: Kidonopoulos, *Bauten* 203-204. 211-212. – Kislinger, *Lebensmittel* 310 n. 47.
 131 Berger, *Langa Bostani* 471-472.
 132 Makris, *Studien* 176-184. 288-290. – Müller-Wiener, *Häfen* 26-28. – Cf. Heher, *Harbour of Julian*, in this volume.
 133 Ahrweiler, *Byzance et la mer* 375-378. 433. – Georgios Pachymeres, *Relationes historicae V* 10 (II 469 Failler) notes bitterly that the Golden Horn must now be shared with the ships of the enemies.
 134 See Preiser-Kapeller, *Haptaskalon*, in this volume. – Nicol, *Last Centuries* 228-233. – Nicol, *Reluctant Emperor* 96-99.
 135 Runciman, *Fall of Constantinople* 100-111. – Pertusi, *Caduta di Costantinopoli*.

primary purpose for their construction. This is, for that matter, partly impossible due to the time difference in building forums and harbours (Column of Constantine, Harbour of Julian). However, the positioning of the forums and columns

along the Mese axis undoubtedly underlines their significance for the growing importance of the harbours on the Propontis at that time. (I would like to thank my colleague Fildhuth for making his lecture manuscript available to me.)

Summary / Zusammenfassung

On Better and Worse Sites: The Changing Importance of the Harbours of Constantinople

Alternating phases of growth and demographic decline in Constantinople led to the displacement of the central traffic axes and their associated harbours on two occasions. Ancient Byzantium was orientated towards the Golden Horn, where its two harbours of Neorion and Prosfhorion were located. When Constantinople became the imperial capital after 330, the population increased and the urban area was extended, with new harbours, named after Julian and Theodosius, established on the southern shore facing the Sea of Marmara. With the Mese, the main street as the spine running east-west, an additional traffic axis was created. As the population decreased after the sixth/seventh century, partly as a result of plague outbreaks, the Mese alone remained. The Golden Horn was now off-centre and became the base for the imperial navy. It was only the revival from the tenth century onwards, which also saw the return of mercantile activity to the area. The commercial settlements, which Byzantium had to cede to the Italian maritime powers, were granted to them on the Golden Horn, apparently in the false assumption of keeping them well away from the commercial centre. The opposite occurred, the entire coastal strip at the mouth of the sea gained in importance: by the twelfth century, it was of equal rank and after 1204 became the new centre of Constantinople's maritime economy.

Von schlechteren und besseren Lagen. Häfen zu Konstantinopel im Wandel ihrer Bedeutung

Die abwechselnden Phasen von Wachstum und demographischer Schrumpfung resultierten zu Konstantinopel in einer zweimaligen Verlagerung der zentralen Verkehrsachse und der zugehörigen Häfen. Das antike Byzantium war auf das Goldene Horn hin orientiert, dort lagen seine beiden Häfen, Neorion und Prosfhorion. Als Konstantinopel nach 330 zur Reichshauptstadt avancierte, wuchs daraufhin die Bevölkerung, das Stadtareal wurde erweitert, neue Häfen, benannt nach Julian und Theodosios, entstanden an der Südküste am Marmarameer. Mit der Mese, der in Ost-West-Richtung verlaufenden Hauptstraße als Rückgrat war somit eine zusätzliche Verkehrsachse entstanden. Sie allein verblieb, als die Bevölkerung, unter anderem durch die Pestwellen bedingt, vom 6./7. Jahrhundert an schrumpfte; das jetzt im Abseits liegende Goldene Horn wurde zum Stützpunkt der kaiserlichen Marine. Erst der neuerliche Aufschwung ab dem 10. Jahrhundert brachte auch merkantile Aktivitäten dorthin zurück. Die Handelsniederlassungen, welche Byzanz den italischen Seemächten einzuräumen hatte, wurden ihnen am Goldenen Horn zugewiesen, offenbar in der falschen Annahme, sie derart abseits des kommerziellen Zentrums zu halten. Das Gegenteil trat ein, die ganze Ufergegend am Meeresarm gewann an Bedeutung, wurde schon im 12. Jahrhundert gleichrangig und nach 1204 wiederum zum neuen wirtschaftlich-maritimen Zentrum Konstantinopels.

Constantinople/Istanbul: The Early Pictorial Sources

The illustrations included in the individual chapters on the harbours have a varying degree of testimonial value, both in terms of the state of the city of Constantinople/Istanbul and in terms of the representation of the harbours and landing places. This applies especially to the early city views from the fifteenth and sixteenth centuries. Therefore, in the following, individual *vedute* will be considered more closely with regard to their time of origin and their possible sources.

Cristoforo Buondelmonti

The view of Constantinople connected with the name of Cristoforo Buondelmonti ranks first. It is preserved in numerous copies of the *Liber insularum Archipelagi* (hereinafter referred to as *LIA*) (fig. 1). Cristoforo Buondelmonti (c. 1380/1385 to around 1431) travelled extensively through the islands of the archipelago, visiting the Ionian west coast, Constantinople and Mount Athos since the year 1414¹. He collected the results of his geographical and archaeological research in two works: the *Descriptio insulae Cretae* (hereinafter referred to as *DIC*) and the *LIA*. In 1417, he dedicated a first version of the *DIC* to his mentor Niccoli Niccolò, as the acrostic in the chapter beginnings shows². He sent a new version of the *LIA* to his patron Cardinal Giordano Orsini († 1438) in 1420³. Again, he used an acrostic indicating the cardinal as described in the prologue: *In quibus dum rubeas ennumerabis ipsarum litteras, nomen meique tui et quo in locoque tempore prefececam opus manifestabis* (»If you follow the red initial letters of the chapters subsequently, you will be able to find the letters of my and your name as well as where and when I wrote my work«)⁴. The first letters of the 82 chapters make up the words: *CRISTOFORVS BONDELMONT DE FLORENCIA*

PRESBITER HVNC MISIT CARDINALI IORDANO DE VRSINIS MCCCCXX (»The Presbyter Cristoforus Bondelmont from Florence sent this to Cardinal Jordanus Ursinus in 1420«)⁵. Where he wrote the work, however, does not emerge from the acrostic. The sixty-seventh letter D of DE VRSINIS introduces the chapter on Constantinople: *Devenio ad Lesam, nunc Constantinopolim urbem*.... Buondelmonti concludes the epilogue (chapter 82) with two remarks: that he had already sent the cardinal an initial version on the Cyclades, and that now, after more careful investigations, he wanted to give him a second, more elaborate version (*secundam copiosiore etiam tibi desculptionem uoli destinare*)⁶. That this copy contained the 79 images of the islands and cities can be found in chapter 2 of the prologue: »To capture everything even better: the mountains are represented in black, the plains in white and the waters in green«⁷. There was no doubt that in the pictures of the islands and cities the places mentioned in the text were also indicated and provided with inscriptions⁸. Buondelmonti must, therefore, have been in Constantinople for the first time before 1420 and had ample opportunity to explore the city and make a detailed *vedute*.

The first copies of Buondelmonti's works were already produced during his lifetime; the majority of the copies date from the second half of the fifteenth century. Hitherto, the impressive number of more than 70 manuscript copies of the *LIA* has been validated, including those in Greek, Italian and English translation⁹. Several manuscripts are dated by copyist entries or can be narrowed down to a time frame by the names of their owners, by watermarks in the paper, occasionally by textual or internal indications, which at the same time demonstrate the rapid spread of the *LIA* in Europe (Italy, France, Flanders and England)¹⁰. However, the textual tradition of the *LIA* is complicated, since in addition to the long

1 On the person, see Weiss, Buondelmonti. – For Buondelmonti's work, see Barsanti, Costantinopoli. – Vagnon, Cartographie 273-304. – Chatzidakis, Ciriaco d'Ancona 41-48.

2 Barsanti, Costantinopoli 83. 102. 111-127. – Ragone, Buondelmonti 193-194 and n. 51.

3 This is probably the long version A, which has survived at least in three manuscripts: 1: Milan, Biblioteca Ambrosiana, Ms. A.219 inf.: Gerola, Vedute 270-279 (Constantinople chapter). – 2: Ravenna, Biblioteca Civica Classense, Ms. Lat. 308: Gerola, Vedute 270-279 (Constantinople chapter). – 3: Greenwich, National Maritime Museum, Ms. p. 20. – See Barsanti, Costantinopoli 160. – Ragone, Buondelmonti 195. 200.

4 See Bayer, Transkription 8 § 2 (14). – See Effenberger, Illustrationen, pl. 1. Here ends the year number MCCCCXX or possibly MCCCCC. On the possible solutions of the chapters 81 and 82 beginning with X, see Ragone, Buondelmonti 199 n. 70.

5 Barsanti, Costantinopoli 85 n. 7. – Ragone, Buondelmonti 195.

6 Bayer, Transkription 59 § 82.

7 Bayer, Transkription 8 § 2 (15).

8 A list of the cardinal's surviving books, published in 1786, lists a *Liber insularum egei pelagi* and a *Liber insularum archipelagi et figuratus*, see Effenberger, Illustrationen 14 n. 28 and 20 (evidence).

9 List of 60 copies: Luttrell, Halikarnassos 193-194. – Ragone, Buondelmonti 202-203 meanwhile assumes »circa settantacinque« copies.

10 On dated and datable copies of the *LIA* and on previous owners, see Barsanti, Costantinopoli 86-91. – Ragone, Buondelmonti 181 n. 12.

version A, an abbreviated version B (the majority of surviving copies) and a short version C can be distinguished¹¹. The only printed edition of Gabriel R. L. de Sinner (1824), which belongs to version B, was compiled from three manuscripts in Paris (Bibliothèque nationale de France, MS. Lat. 4823, 4824 and 4825)¹². The text of the Düsseldorf manuscript, which also follows version B, is available in a transcribed, translated and annotated edition¹³.

An unresolved problem is the acrostic's deviation of the date in the incipit that is found in both version A and in copies of version B: *Incipit Liber insularum archipelagi editus per presbyterum Christophorum de Bondelmontibus de Florentia, quem misit de civitate Rhodi Romam Domino Jordano Cardinali de Ursinis anno Domini MCCCCXXII* («Book about the islands of the archipelago written by the presbyter Christophorus Bondelmonti from Florence, which he sent from the city of Rhodes to Rome to Cardinal Jordanus Ursinus in the year of the Lord 1422») ¹⁴. A manuscript in the Vatican, made between 1422 and 1435 on Rhodes by Onofrio da Penna, secretary of King Ladislao d'Angiò-Durazzo (1386-1414) and Queen Giovanna II of Naples (1414-1435), contains the short version C of the *LIA* (without the view of Constantinople), as well as a new elaboration of the *DIC*, with Buondelmonti's colophon on fol. 50^v¹⁵: *Scripti hunc librum figuramque insule in urbe Constantinopoli, die .xviii^o. mensis Ianuarii .m^occcc^o. xxij^o.* («This book and the depiction of the island [Crete], I completed in the city of Constantinople on 18 January 1422»). This entry testifies to Buondelmonti's second stay in Constantinople at the end of 1421 or the beginning of 1422¹⁶. The following insertion is found in the Constantinople chapter of Chigianus (see n. 15) and another manuscript copy of version C made before 1453¹⁷: *ideo quam brevis potui hic de ruynis eius scripsi, licet in membrana maxima Bittoldo ducis Russie miserim, ad videndum suis omnibus extra atque infra attinentiis* («therefore, I want to write here only briefly of their remnants, especially since I have sent a large sheet to Witold, Duke of Russia, to show what all is contained outside and within [the city]»). Witold (Biteldos, Vitovt, Vytautas), Grand Duke of Lithuania (r. 1392-1430)¹⁸, was the father-in-law of the Muscovite Grand Prince Vasily I Dmitriyevich

(r. 1389-1425). His daughter Anna – Witold's granddaughter – probably came as an infant bride to Constantinople in 1411 and was married to the future Byzantine Emperor John VIII Palaiologos (r. 1425-1448) in 1414. The Russian deacon Zosima had been part of the bridal legation and in 1419/1420 and 1421/1422 again visited Constantinople. He also visited the Princess's grave at Lips Monastery; she had died of the plague in 1417¹⁹.

However, the date of composition of the large-sized view of Constantinople that was sent to Witold is difficult to determine. How and by which intermediary Buondelmonti was commissioned to produce the *membrana maxima*, remains a mystery despite many efforts to illuminate the historical context²⁰. It would seem logical that Buondelmonti first explored the city and its surroundings with official permission before producing the *membrana maxima* and only afterwards created the standard *vedute* added to the *LIA*, the *secunda copiosior* of 1420. Thus, the *membrana maxima* would already have been produced during his first stay in Constantinople (before 1420). In any case, it can be assumed that the dissemination of the Constantinople *veduta*, which began soon after 1420, can only have been stimulated by one or more early copies of Buondelmonti's own hand.

The Constantinople *veduta* is preserved in numerous copies of the *LIA*, but the individual reproductions are of different quality. A systematic «Kopienkritik» (copy criticism) on the basis of all surviving versions is still pending²¹. Although the Buondelmonti-type *vedute* have a largely consistent standard of buildings and monuments, there are divergences with respect to those mentioned and illustrated in the three *LIA* versions²². In any case, all copies made after 1453 are predominantly anachronistic. Monuments that no longer existed before or after 1453, yet were still reproduced, include the Church of Blachernae (burnt down in 1434), the equestrian statue on the Column of Justinian, the cross on the Column of Constantine and the kneeling emperor on the *columna virginea*, the Column of Michael VIII Palaiologos²³. Most of the churches inscribed with their names were either no longer extant (e.g., the Church of the Holy Apostles demolished in 1462) or converted into mosques, but on many copies

11 Barsanti, Costantinopoli 160-164. – Ragone, Buondelmonti 193 n. 50 (list of the surviving manuscripts of version C).

12 Sinner, Buondelmonti. – See Garand, Tradition 69-76. – Buondelmonti's *LIA* in Greek translation in the manuscript Istanbul, Topkapı Sarayı Kütüphanesi, Ms. Seragliensis Graecus 24.

13 Beyer, Transkription 50-53.

14 On this unsolved contradiction, see Barsanti, Costantinopoli 161. – Ragone, Buondelmonti 195-196.

15 Città del Vaticano, Biblioteca Apostolica Vaticana, Ms. Chigi F. IV.74: Barsanti, Costantinopoli 86-87. – Ragone, Buondelmonti 206-208. The subscriptio is still present in the following copies of the *LIA* and *DIC*: 1: Paris, Bibliothèque nationale de France, Cartes et Plans, Ms. Rés. Ge. FF 9351: Luttrell, Halikarnassos 194 no. 31. – 2: Padua, Biblioteca Universitaria, Ms. 1606: Luttrell, Halikarnassos 194 no. 30. – 3: Città del Vaticano, Biblioteca Apostolica Vaticana, Ms. Ross. 703 (according to the entry on fol. 24^r copied by Bartolomeo de Columnis of Chios, in which the incipit on fol. 1^r gives the year 1425). – On the dating of the individual versions, see Ragone, Buondelmonti 193-194.

16 The short version C of the *LIA* contains neither the acrostic nor the incipit of 1422.

17 Venice, Biblioteca Marciana, Ms. Lat. X.215 (= coll. 3773), fol. 44^r (previously owned by Francesco Barbaro, 1390-1454). The Constantinople chapter printed in Gerola, Vedute 270-279. – See Barsanti, Costantinopoli 168-169. – Ragone, Buondelmonti 205-208.

18 PLP 2 (1977) 68 no. 2708. – Mickūnaitė, Making a Great Ruler.

19 Majeska, Russian Travelers 170. 188-189. 309. 311-312 § 34. – On Anna see PLP 1 (1976) 94 no. 1003.

20 Ragone, Membrana maxima. – Ragone, Buondelmonti 205-217.

21 On this problem, see Barsanti, Costantinopoli 164-197.

22 Effenberger, Illustrationen 18 n. 19 are first, those mentioned, but illustrated without inscription; second, those mentioned, but not illustrated, and third, those not mentioned, but with records of illustrated buildings and monuments. The list is in need of revision, as all Constantinople copies would have to be considered. With regard to the Monastery of Christ Pantepoptes, see n. 25. – Gerola, Vedute 266-269, has put together the inscriptions for 10 versions in a synoptic table. In addition, however, there are further inscriptions on *vedute* not used by him.

23 Asutay-Effenberger/Effenberger, Columna virginea.

they still bear a crowning cross. Only in a few cases, reliably datable elements are included by later copyists, such as the representation of the Yedikule Fortress (built 1457/1458) on a *veduta* in Paris²⁴. Here you will also find the only labelled reproduction of the Monastery of Christ Pantepoptes known to me²⁵.

Likewise, the harbours depicted have not been updated to include changes made after 1453. Referred to in the *LIA* are the *olim portus velanga*²⁶, *contescali vel arsana*²⁷ and *portulus imperatoris*²⁸; depicted on several copies are the former harbour by the Mermerkule (Marble Tower; *portus sed destructus preceptu turchorum*), the Harbour of Theodosius (Vlanga), Bucoleon (*portus olim palatii imperatoris*) and Kontoskalion (*Receptaculum dictum contiscali*)²⁹. The harbour by the Mermerkule is often marked by a south-westerly pier and on representations where the mole is missing the impression is created that the ditch was in direct connection with or ran into the Sea of Marmara³⁰. Although it is not possible to decide whether the harbour depiction is a more recent element and is based on local historical memory referring to the events of 1390/1391³¹, but I do not consider tracing it back to one of Buondelmonti's replicas to be out of the question.

In most of the Buondelmonti views of Constantinople (fig. 1), the river Lycos begins within the city (incorrect), runs north of the Column of Theodosius (incorrect)³² or between this and the Column of Arcadius (correct)³³ and ends in the Harbour of Kontoskalion (incorrect). The Lycos flows correctly into the bay of Vlanga in only a few copies from the second half of the fifteenth century³⁴. In contrast, a body of water rises at the Church of Peribleptos and pours into the harbour bay of Vlanga in numerous *vedute*³⁵. Both errors could be traced back to Buondelmonti's original version, since it was apparently forgotten where the extensively canalised Lycos ended. However, it cannot be ruled out that the sewers of the Kainoupolis district flowed into the still open bay of the Kontoskalion. This may also explain the inexorable silting up of the inner harbour basin, which led to its disuse in the middle of the sixteenth century. The anonymous Armenian pilgrim

who visited Constantinople in 1434 is the only one who mentioned the sweet water that sprang from under the Monastery of Peribleptos³⁶. That the water actually flowed down the valley as an open brook before the spring in the Hagiasma of the Armenian church Surp Kevork was set³⁷, must surely be assumed. On the contrary, although the above-mentioned Parisian copy (see n. 24) shows the Church of Peribleptos, but indicates the mouth of the brook just below the Stoudios Basilica and has also moved the harbour of Vlanga here with the indicated mole.

The large-format view in the Düsseldorf version of the *LIA*, which can be dated to 1485-1490 on the basis of the watermarks and image-related evidence (fig. 2)³⁸ differs fundamentally from the traditional Constantinople depictions. This view is again based on accurate local knowledge of Mehmed II's city, supplemented by a few updates from the time of Bayezid II³⁹. Besides Constantinople, Eyüp, Pera and a part of Üsküdar (Scutari), it also covers the territory on both sides of the Bosphorus to the coast of the Black Sea. This representation also contains numerous »deliberate« anachronisms⁴⁰ and, as an innovation, the Valens aqueduct, which is missing on all the Buondelmonti *vedute*⁴¹. However, the minarets of the Fatih Camii have been omitted. Vlanga (inscription: *Vlanga locus aquosus*) is only depicted here as a completely walled-in area with eleven towers (fig. 3)⁴². The views of the Buondelmonti type normally show a southern pier and usually mark the former harbour basin as already silted up (fig. 1)⁴³. The Kontoskalion – here already operating as a galley harbour (Kadirgalimani) and shipyard – is subdivided into outer and inner harbour basins (inscription: *mare*) and closed with an iron gate, with five ship sheds (inscription: *darsinale*) including warships of the Kadirga type lying within⁴⁴ and a galley moored on the inner bank (fig. 4)⁴⁵. Another arsenal, probably built under Mehmed II, with two ship sheds and a landing stage in front of a gate of the Serail or the Marmara seawall (Değirmenkapi?), with the inscription *darsinale regiu(m)*, is located in the area of the former Mangana (fig. 5)⁴⁶. A regular pier is located in front of the cannon foundry (Tophane), two

24 Paris, Bibliothèque nationale de France, Ms. Nouv. Aqu. Lat. 2383, fol. 34v: Effenberger, Polichnion, with fig. 1. – Ganschou, «La Tour d'Irène» 159-200 fig. 4.
 25 Buondelmonti mentioned the *cisterna panda pophti* (Bayer, Transkription 91 § 40), whereby is meant the Çukurbostani (Cistern of Aspar) by the Yavuz Selim Camii. As a result, locating the monastery on the sixth hill, proposed by Mango, Monastery of Christos Pantepoptes, gains further support.
 26 Beyer, Transkription 50 (8): *olim portus velanga*. – On the harbour, Külzer, Harbour of Theodosius, in this volume.
 27 Ibid. 50 (9): *condescali uel arsana*. – On the harbour, see Heher, Harbour of Julian, in this volume.
 28 Ibid. 50 (11): *portulus imperatoris*. – On the harbour, see Heher, Harbour of the Boukoleon, in this volume.
 29 The different name variants on six copies in Gerola, Vedute 269-269.
 30 On the scarce information on the Brachialion, which sealed off the ditch against the sea, see Simeonov, Brachialion, in this volume.
 31 On this, see Majeska, Travelers 100-104 (account of Ignaty of Smolensk) 408-415 §§ 81-87.
 32 Venice, Biblioteca Marciana, MS. Lat. XIV.45 (=4595): Barsanti, Costantinopoli fig. 61; see also figs 83-84. 86-87. 90-91.
 33 Barsanti, Costantinopoli figs 48. 60. 64. 72. 75. 77-78. 100.
 34 Ravenna, Biblioteca Civica Classense, Ms. Lat. 308, fol. 58v: Barsanti, Costantinopoli 100 fig. 64. – Città del Vaticano, Biblioteca Apostolica Vaticana, Ms.

Ross. 702, fol. 32v (watermark c. 1475/1478): Barsanti, Costantinopoli 182 fig. 78. – London, British Library, Ms. Arundel 93, fol. 155v (colophon from 1485): ibid. 196. 207 fig. 75.
 35 See Barsanti, Costantinopoli figs 48. 61. 64. 77. 83-84. 87. 91; only the water course without connection to the Church of Peribleptos: fig. 72.
 36 Brock, Description 88. 98-99. – The Peribleptos Monastery had a good natural spring, as the Turkish name Sulu Manastr (»monastery with water«) indicates. The source was once under the altar of the neighbouring Church of St Stephen of Aurelianus, see Müller-Wiener, Bildlexikon 200.
 37 Atzemoglu, T'agiasmata 51-52.
 38 Effenberger, Illustrationen 67-68.
 39 The Türbe of Mehmed II, which was built after his death (1481).
 40 Effenberger, Illustrationen 67.
 41 Effenberger, Illustrationen 48 no. 35 fig. 32.
 42 Effenberger, Illustrationen 31-33 no. 13 fig. 32. – See Külzer, Harbour of Theodosius, in this volume.
 43 For example, see Barsanti, Costantinopoli figs 48. 60-61. 64. 70-75. 77-81. 83-84. 87. 91. 94. 97.
 44 On the types, see Bostan, Osmanlı Bahriye Teşkilâtı 85.
 45 Effenberger, Illustrationen 29-31 no. 12 fig. 32. – See Heher, Harbour of Julian, in this volume.
 46 Effenberger, Illustrationen 26 fig. 32 no. 7.



Fig. 2 View of Constantinople, Pera and the upper Bosphorus by Cristoforo Buondelmonti, *Liber insularum archipelagi*. Düsseldorf, Universitäts- und Landesbibliothek, MS. G 13, fol. 54r, c. 1485-1490 (the manuscript is on loan from the City of Düsseldorf to the Universitäts- und Landesbibliothek of Düsseldorf).



Fig. 3 Detail from fig. 2 showing the Harbour of Theodosius, the Church of St Mary Peribleptos and the Basilica of St John Stoudios. – (Düsseldorf, Universitäts- und Landesbibliothek, MS. G 13, fol. 54^r, c. 1485-1490).

more and a galley on the shore of Üsküdar (Scutari). It also becomes clear that the entire shore zone of the Golden Horn of Galata served as a harbour (fig. 1).

Giovanni Andrea Vavassore

The 1530 woodcut by Giovanni Andrea Vavassore with the cityscape of Constantinople (fig. 6)⁴⁷ is attributed to a prototype that cannot have been made earlier than 1478/1479⁴⁸. The *terminus post quem* is given by the representation of the wall of the Topkapı Sarayı, which was completed in

1478/1479⁴⁹. The Vavassore view has some inconsistencies in the city centre (the possible doubling of the sphendone of the Hippodrome, wrong or transposed inscriptions) and is probably based on an intermediate draft that would have already contained these errors⁵⁰. Dependant on the latter are probably also the Constantinople *veduta* in Sebastian Münster's *Cosmographia* of 1550⁵¹, the large, double-sided engraving by Giulino Ballino of 1567⁵² and the Constantinople view in the *Civitates* of Georg Braun and Franz Hogenberg (1572)⁵³. They all contain deviations and innovations in individual cases compared to Vavassore's view. The common intermediary draft was probably based on a large-format

47 I know of only four copies of the woodcut: 1: Nürnberg, Germanisches Nationalmuseum, SP 8190, Kapsel 1102 (52.6 cm × 36.8 cm): Fauser, Repertorium 379 no. 6817. – Berger, Vavassore 329-355 fig. 1. – Manners, Image 91-94 fig. 8. – 2: Staatsbibliothek Bamberg, Sign. IV C 44 (kindly pointed out by Bernhard Schemel): Effenberger, Illustrationen fig. 5. – 3: Lyon, Bibliothèque Municipale. – 4: California State Library, Coll. Fullerton.

48 Analysis of individual buildings: Berger, Vavassore 339-355.

49 It can be ruled out that in the Vavassore woodcut buildings from the time of Bayezid II (1481-1512) are already included, see Necipoğlu, Visual Cosmopolitanism 70 n. 125.

50 Stichel, Coliseo 448-459.

51 Sebastian Münster, *Cosmographia*, Basel 1550 (simultaneous German and Latin editions) 940-941 (as well in all reprints from 1552-1628). – See Fauser, Repertorium LXI, 379 no. 6818 (woodcut by David Kandel). – Effenberger, Illustrationen fig. 6 (after the Latin edition in the Staatsbibliothek Bamberg, Sign. J. H. Geogr. f. 2).

52 Giulino Ballino, *Disegni*, without pagination. – See Fauser, Repertorium XXII, 379 no. 6820 (unsigned; stamped 1567). – Effenberger, Illustrationen fig. 7.

53 Braun/Hogenberg, *Civitates orbis terrarum*, Cologne 1572, vol. 1 pl. 51 (= pl. 52 in the German edition). – See Fauser, Repertorium XXXIV-XXXV, 379 Nr. 6824 (Kupferstich). – Berger, Vavassore 329-331 fig. 2.



Fig. 4 Detail from fig. 2 showing the harbour and arsenal of Kadırgalımanı and the stables. – (Düsseldorf, Universitäts- und Landesbibliothek, MS. G 13, fol. 54', c. 1485-1490).



Fig. 5 Detail from fig. 2 showing the Sultan's arsenal and landing stage at Topkapı Sarayı. – (Düsseldorf, Universitäts- und Landesbibliothek, MS. G 13, fol. 54', c. 1485-1490).

Fig. 6 View of Constantinople, Pera-Galata and the Asiatic coast by Andrea Vavassore. Woodcut, c. 1530, after an original from 1478/1479-1481. – (Bamberg, Staatsbibliothek, IV C 44).

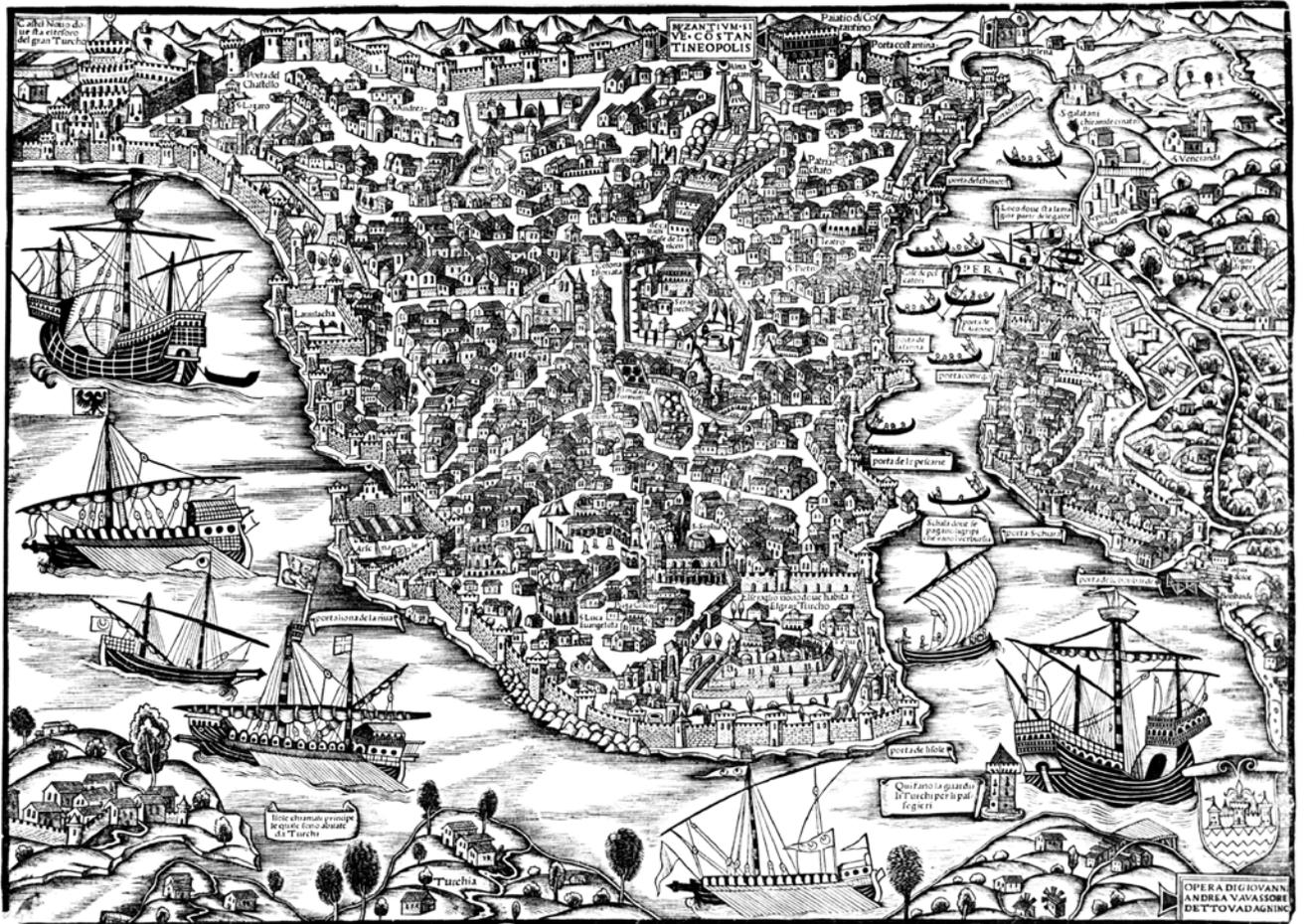




Fig. 7 Detail from fig. 6 showing the area between Yedikule and Vlanga. – (Bamberg, Staatsbibliothek, IV C 44).

view of Constantinople consisting of several single sheets. There are some candidates for this. The inventory of the bequests of the Florentine cartographer Francesco Rosselli († after 1508) lists among the printing plates different views of Constantinople: *Gostantinopoli in 6 pezzi*; *gostantinopoli in tela cholorita inn istampa del pupillo*; *francia chon parte gostantinopoli, in mezzo gogleie comune*⁵⁴. Also in the extensive printmaking collection of Johannes Columbus (1488-1539) in Seville was a five-page woodcut by the Florentine Lucantonio degli Umberti (Venice, c. 1510-1529)⁵⁵ and an eight-leaf view of Constantinople. On the latter, Peter Barber remarked: »Its composition, as described in the inventory, leaves little doubt that it was the model for the single-sheet woodcut of about 1520 by Giovan Andrea Vavassore [...] It is possible that the print may have some relationship with or may even be the six-sheet printed view of Constantinople by

Rosselli with two sheets of decorative material added«⁵⁶. I think that this is not very convincing, since there is mention of six (Rosselli) and once of eight single sheets (Columbus) and the description in the inventory gives too few references to individual representational elements⁵⁷.

However, regardless of this, the prototype and the postulated intermediate draft already contained numerous ships of different types (galleons, galleys), some of which carry flags with the Byzantine double eagle, Venetian lion, Ottoman crescent and Genoese cross. In this respect, Gülru Necipoğlu referred to the treaty between Mehmed II and Venice of 1479 and considered the creation of the Vavassore prototype soon after that date as possible⁵⁸. Whoever created the prototype, the question also arises how he was able to explore the city and in particular the two serails within its walls in such detail, which could certainly only have happened with the permission of Mehmed⁵⁹. This suggests a dating of the original before 1481⁶⁰.

Vavassore's *veduta* shows the city from a bird's eye view like Buondelmonti's depiction (fig. 1), but from the Asian side. Noticeable distortions can be found in the southern part of the city (top left). The church with the river, i. e., the Church of Peribleptos, is wrongly labelled as St Lazarus (fig. 7)⁶¹. Against the course of the coastline, the Vlanga (inscription: Lauulaca) is stylised as a rectangular walled area with six towers and is marked with three bushes in accordance with its function as a bostan (garden). To the west is the fenced-in area of Küçük Langa Bostani. The watercourse is no longer shown as in the Düsseldorf view. In the case of Kadırgalimanı, Vavassore offers an irregularly immured area for the inner part of the Tersane with the portal-like iron gate (see p. 63, fig. 8). The five ship sheds with far too small entrances and the single galley in the inner basin are apparently rotated by 180° for better clarity. The above-mentioned Vavassore-type *vedute* have freely spun out the interior (see pp. 64-65, figs 10-12). The former imperial harbour and the façade of the Palace of Bucoleon are missing. Only the inscription *porta leona de la riuva* next to a gate in the sea wall refers to the portal with

54 Del Badia, Bottega 24-30. – Hind, *Early Italian Engraving* 1, 304. 305-306 (inv. III no. 60; inv. I no. 4; inv. III no. 47). Manners, *Image* 94 and *Stichel, Coliseo* 454. 459, however, judges tracing back Vavassore's woodcut to Rosselli with scepticism, although the latter basically insists on a large-sized six-part prototype.
55 Barber, *Maps* vol. 1, 261 n. 77; vol. 2, 569, inv. no. 3159. – See also Hind, *Early Italian Engraving* 1, 211-214.
56 Barber, *Maps* vol. 1, 255; vol. 2, 573, inv. no. 3178. The author does not cite the works of Berger, Vavassore and Stichel, *Coliseo*, nor is he aware that another copy of Vavassore's woodcut exists in the Staatsbibliothek of Bamberg.
57 Necipoğlu, *Visual Cosmopolitanism* 70 n. 125, is also sceptical.
58 Necipoğlu, *Visual Cosmopolitanism* 27.
59 On the depiction of the three kiosks in the Topkapı Sarayı, see Necipoğlu, *Visual Cosmopolitanism* 27.
60 The latest date for the creation of the original – 1490 – was long argued on the grounds that the church in Vavassore's woodcut named as *S. Luca Eu-angelista* was the Nea Ekklesia or the Güngörmez kilisesi, which served as a *baruthane* (powder magazine) and on 12 July 1490 was destroyed by lightning, see Mango, *Brazen House* 180. – Mango, *Développement* 9 n. 9. – Mango, *Nea Ekklesia*: ODB II (1991) 1446; followed by Effenberger, *Illustrationen* 19. The Ottoman written sources for the thunderstorm on 12 July 1490 in Konyalı,

Istanbul Sarayları 18-19. The church appears to be much more detailed and still intact, but without an inscription on the engraving in Panvinio, *De ludis circensibus* 61 pl. R. Mango, *L'Euripe de l'hippodrome* 182 n. 5, dated the original to after 1491, because the Firuz Ağa Camii, built 1491, was already depicted. The Nea Ekklesia possibly existed as a ruin for a longer period. The Bolognese scholar Luigi Fernando Marsili (1658-1730), who, as a young man, lived in Istanbul in 1679/1680 in the service of the Venetian Bailo, reported: *giù verso le stalle v'è una chiesa di stile greco, cinta con pilastri di muro, avendo tre capelle e la porta. Di fuori ha aspetto buonissimo, e nella volta si scoprono anche alcune vestigie di mosaico* (»Down in the direction of the stables, there is a Greek-style church, surrounded by pilasters on the wall, which has three chapels [apses] and a door. From the outside it has a very beautiful appearance, and on the vaulting one spot even some remnants of mosaic«), see Paribeni, *Chiesa antica greca nel serraglio posta* 318 (Bologna, Biblioteca Universitaria, Fondo Marsili, MS. 51, c. 356^v). By *stalle* he means the stables of Mehmed II, which are shown for the first time in the Düsseldorf Istanbul view with the inscription *stabula regis*, see Effenberger, *Illustrationen* 28 no. 10 fig. 32 (see my fig. 4). The church was, therefore, west of the stables in the former palace area. – See now Effenberger, *St. Grovus*.

61 Berger, Vavassore 349 no. 35.



Fig. 9 Detail from **fig. 2** showing the Hagia Sophia and the Column of Justinian with equestrian statue. – (Düsseldorf, Universitäts- und Landesbibliothek, Ms. G 13, fol. 54r, c. 1485-1490).

spolia below the (demolished) western palace front (see p. 69, **fig. 2**; p. 76, **fig. 19**)⁶². The Golden Horn was probably (mis) understood by the Venetian Vavassore alone as the »Canal Grande« and filled with eight gondolas that serve as *traghetti* (**fig. 6**).

Hartmann Schedel

The 1493 *Liber chronicarum*, the world chronicle of the Nuremberg physician and Humanist Hartmann Schedel (1440-1514), contains three views of Constantinople⁶³: a large-scale representation of the entire urban area including Pera on two pages on folios 129r-130v (see p. 44, **fig. 5**); a reduced reproduction of this representation on folio 249r; and a section of the eastern city area on folio 257r (**fig. 8**),

on which the devastating storm of 12 July 1490 is represented (see n. 60 above). It must be the case that the woodcutter Wilhelm Pleydenwurff produced images from various models from before 1493 for all three illustrations⁶⁴. This issue arises, above all, for the compilation of buildings, which only occurs on folio 257r⁶⁵. The Hagia Sophia is depicted with two minarets, the wooden minaret on the west side and the minaret of Mehmed II on the southeast corner, although the imprecise depiction seems to suggest the eastern aspect⁶⁶. What is striking is the great agreement with the Düsseldorf reproduction of the Hagia Sophia (east side with apse and minaret) and the Column of Justinian with a rider (**fig. 9**)⁶⁷. The same connection between church (without minarets) and column also appears in the two other Constantinople depictions in the *Liber chronicarum*, but the rider there is incorrectly turned to the left (west). I have already discussed the question of the possible template for the Hagia Sophia and Justinian's Column, including the equestrian statue that no longer existed after 1456. It could not be proved that the Constantinople view by Peronet Lamy († 1453), contained in two copies of the *Notitia Dignitatum*, goes back to Ciriacus of Ancona, and it could neither be proven that either of the two copies was known to Schedel or the illustrators of the *Liber chronicarum*⁶⁸. The Church of St John the Theologian on Diippion (mistakenly referred to as *Joh<ann>is bapt<is>te*) is only illustrated once, but without an inscription, in the above-mentioned (p. 22) Parisian Buondelmonti *vedute* from the period after 1457/1458⁶⁹. The stables of Mehmed II, here differentiated as horse and camel stables (*Stabula equitum* and *Stabula camelorum*, respectively), are shown as an open, four-sided courtyard with gates and windows, as well as on the İstanbul miniature of Matrakçı Nasuh from 1537⁷⁰. In the slightly older Düsseldorf depiction it is reproduced as a free-standing building within a courtyard with two entrances (**fig. 2** and **4**)⁷¹. Stephan Gerlach (in İstanbul from 1573 to 1578) described the stables as follows: »Further I came to the Emperor's stables, an exceedingly large, long and wide building, in which several hundred horses can stand [...] The place where the horses stand is a building, as otherwise a karavanseray, in

62 Effenberger, Illustrationen 28-29. – On the Bukoleon Palace, see Heher, Harbour of the Bukoleon, in this volume.

63 Fauser, Repertorium LXV-LXVI, 378-379 nos 6810-6816 (all prints from 1493-1497).

64 Berger/Bardill, Representations of Constantinople 2-14 see the originals in Buondelmonti's *vedute* and in the prototype of Vavassore's view. Not all attempts at identification are convincing. The towering »pole« on a two-level substructure between the columns of Justinian and Theodosius certainly stands for the Obelisk of Theodosius in the Hippodrome. The completely immured and tree-covered district with the gate from which a brook gushes out, is Vlanga (as Külzer in this volume concurs), a combination of the Buondelmonti and Vavassore type. The immured district on the Golden Horn does not indicate the outer wall of Leo V, but the Phanarion. Both are illustrated only on the Düsseldorf view (the latter with inscription *fanarium*), see Effenberger, Illustrationen 39-40 nos 21-22 **fig. 32**. The Phanarion by itself only appears in Vavassore's *veduta*. This would indeed speak in favour of the fact that an intermediate template or a copy of the Vavassore type was known to the illustrator.

65 Analysis: Berger/Bardill, Representations of Constantinople 15-24.

66 Effenberger, Minarette.

67 On the Düsseldorf *veduta*, only the minaret on the southeast corner of the Hagia Sophia is indicated, the wooden minaret on the southern staircase tower of the west side was not visible from the chosen viewpoint.

68 It is the copy of the lost Speyer Codex in Oxford, Bodleian Library, MS. Canon. Misc. 378 (the Constantinople miniature on fol. 84r), of which another copy exists in Munich, Bayerische Staatsbibliothek, Clm 794 (the Constantinople depiction, fol. 167r; see Effenberger, Minarette 197-200, colour **fig. 9**).

69 Westbrook, Freshfield Folio, wants to identify the building on folio 21 of the »Freshfield Album« (Cambridge, Trinity College, MS. O.17.2) with the Church of St John on the Diippion, but ignores the pictorial sources (and, accordingly, the literature, which deals with it), which show a double shell octagon with drum. For an important written testimony, see Grémois, Note. – For the church, see now Magdalino, The Church of St John the Apostle.

70 İstanbul, University Library, MS. Yıldız Ty 5964, fols 8b and 9a: Yurdaydın, Matrakçı Nasuh pl. 8a.

71 See above n. 60.

the middle a beautiful large open space, a lot of water in it, and a high house, like a quadrangular tower⁷². The Han character of the building seems to have been characterised best on sheet 257^r. From the arsenal of Kadırgalimanı only the roofs of the five ship sheds can be seen behind the sea wall, but it is confirmed once again that there were only five sheds. Most striking is the reproduction of the Muchrutas (a Seljuk pavilion), which apparently still existed within the indicated palace ruins⁷³. The buildings in Topkapı Sarayı (*Domus mag<ni> turci*) and in the serail garden (*Viridium*) are also of interest. The missing upper floor of Bab-ı Hümayun and the two towers flanking Babüselam reappear almost simultaneously on the Düsseldorf view (fig. 2) and on sheet 257^r of the *Liber chronicarum* (fig. 8). The Hagia Eirene (erroneously referred to as *S. Joh<ann>es Chrysostoma*⁷⁴) is also placed only on the Düsseldorf *veduta* in the first courtyard of the serail with the inscription *S. elini*⁷⁵. The church in the corner of the serail appears for the first time on the Düsseldorf view in the same place and is labelled here as *S. Maria*. I consider it to be the Hodegetria Church⁷⁶. The inscription *S. Geor<g>ius* must be related to the Georgios Church further to the north in the Mangana quarter. The damaged church building (*Destruct<i>o antiqua*) outside the line, which according to the inscription *circulus deust<i>onis* marks the limit of the effects of the storm, must mean the Baruthane and not the Nea Ekklesia (see n. 60 above)⁷⁷. Incidentally, the view on page 257^r illustrates oral reports of the storm, for the text states: »as the trustworthy Venetians and other merchants said«. Perhaps the whole representation goes back to a locally made leaflet that recorded this event⁷⁸ and that the woodcutters have implemented it in their manner, using the Column of Justinian with the equestrian statue from an unknown original.

Ottoman Representations

The *Kitab-ı Bahriye* («Book of Seafaring») by the navigator and cartographer Piri Reis, of which numerous copies have been preserved, was made between 1521 and 1526⁷⁹. The two-page İstanbul map is from the bird's-eye view, as are the Buondelmonti and Vavassore-type views, but as seen from the north. The illustration includes Constantinople, Galata-Pera, the Asian side with Üsküdar and Kadıköy and the Princes' Islands. The interior of the city is packed with



Fig. 10 Detail from the depiction of Constantinople in the *Kitab-ı Bahriye* of Piri Reis (London), showing the Harbour of Theodosius with free-standing tower. – (London, Khalili Collection. From Asutay-Effenberger, Landmauer fig. 47).

mosques and houses in a condensed manner, with the most important buildings and city gates labelled with the Ottoman names⁸⁰. The Harbour of Theodosius is reproduced as on the Buondelmonti copies in the state before the complete closure of the alluvial bay. It was only depicted with the free-standing tower in the sea, which was also erroneously represented as a round tower (fig. 10)⁸¹. This state of the harbour, which was long obsolete at the time of origin of the map, is therefore likely to date back to an unknown original, which must be older than the prototype of the Vavassore view of 1479/1481⁸². A copy of the Buondelmonti type can probably be ruled out, especially since neither moles nor signs of sedimentation can be identified.

The İstanbul miniature by Matrakçı Nasuh from 1537 follows a different depiction principle⁸³. İstanbul is seen from the side of the Theodosian walls, thus reproduced from the west⁸⁴. Galata-Pera is only to be considered correctly if the double leaf (each 31.2 cm × 22.5 cm) is turned by 90° in a clockwise direction⁸⁵. Many buildings can be identified and prove the high value of this *veduta* as a witness for the state of the city at the time of Suleiman the Magnificent⁸⁶. Within the two cities, the individual buildings are usually arranged horizontally, but the painter had to solve the problem of

72 Gerlach, Tagebuch 336B-337A (21 April 1577).

73 Recognised by Asutay-Effenberger, Muchrutas.

74 Berger/Bardill, Representations of Constantinople 20-21.

75 Effenberger, Illustrationen 23-24 no. 2 fig. 32.

76 Effenberger, Illustrationen 27-28 no. 9 fig. 32. – Grotowski, The Hodegon.

77 Alternatively: Berger/Bardill, Representations of Constantinople 23.

78 Berger/Bardill, Representations of Constantinople 15: »apparently based on a sketch made on the spot by Schedel's informers«.

79 Orbay, İstanbul viewed 117-289. – Soucek, Piri Reis 132-135. – Effenberger, Illustrationen fig. 11 (copy in Berlin, Staatsbibliothek, Orientabteilung, Sign. Dietz A fol. 57, c. 1663-1724/1725).

80 Asutay-Effenberger, Landmauer 216-223 fig. 47 (London, Khalili Collection). – Asutay-Effenberger, *Kitab-ı Bahriye*.

81 In the London copy, the tower has the inscription »Kulle-i Hamza«, see Soujek, Piri Reis 134. – Asutay-Effenberger, Landmauer 219.

82 Effenberger, Illustrationen 32.

83 Orbay, İstanbul viewed 47-67. – Halbout du Tanney, İstanbul.

84 Yurdaydın, Matrakçı Nasuh pl. 8b.

85 Yurdaydın, Matrakçı Nasuh pl. 8a.

86 Denny, Plan of İstanbul (often with wrong identifications).



Fig. 11 Detail from the view of Istanbul by Matrakçı Nasuh, showing Kadırgalimanı and Langa Bostanı. – (From Halbout du Tanney, Istanbul fig. 21).

how to depict walls and alignments of buildings running in a west-east direction. Thus, the towers and curtain walls of the sea walls at the Golden Horn along the shore are shown standing upright. On the Sea of Marmara, the painter tried to make a perspective view, which reached to the *sphendone* of the Hippodrome, but on the vertical coastline, the towers seem to »topple over« into the sea. In the case of the walled and almost square-shaped district of Langa Bostanı, the eight

towers stand on three sides on an imaginary level and tilt inwards, while the two large corner towers on the sea side »topple over« back into the sea (fig. 11). There are lovely details inside, such as a large bed of flowers and vegetables, three trees and two draw wells. The inner basin, the retaining wall and the large gate of Kadırgalimanı are depicted, but the artist made a mistake by moving the five ship sheds to the opposite end of the inner bay.

The *Hünername* («Book of Skills») created by Seyyid Lokman in 1584/1585 for the Sultan Murad III (1574-1595) contains a map of İstanbul (44.0 cm × 27.5 cm) attributed to the painter Veli Can⁸⁷. In addition to the actual city, the map extends from the Golden Horn to the confluence of the combined rivers of Alibey suyu and Kağıthane suyu, a large part of Galata with the Tersane-i Amire of Kasımpaşa, the villages Hasköy and Sütlüçe, the cult district of Eyüp, the settlements on the foreland of the Theodosian walls and a corner of Üsküdar. In the view, a different kind of representation of the building is encountered, which actually forces the image to be rotated and viewed from several angles. This is exactly how the draughtsman must have done his work and chosen different city points⁸⁸. The lower third of İstanbul is viewed from the Marmara side, the upper part assumes the view from the Golden Horn. The fact that the buildings are

turned upside down in each case may not have disturbed the observers, as the city is actually made to be experienced by its two main sides. Nevertheless, the view is relatively reliable in topographical terms. Although labels are missing, most buildings can be identified. The apparent doubling of the walled Harbour of Theodosius could be clarified⁸⁹. The reproduction of Kadırgalimanı is inaccurate⁹⁰.

In summary, only the Düsseldorf view (fig. 2) reflects the contemporary situation of both the former Harbour of Theodosius and the situation of Kadırgalimanı during the reign of Mehmed II in a way that corroborates or complements the written sources. This is due to the fact that with this *veduta* we have a contemporary pictorial document that was made by a draughtsman who was well-versed in local circumstances (if not particularly gifted) and whose intention was no longer to illustrate the Constantinople chapter of the *LIA*.

Summary / Zusammenfassung

Constantinople/İstanbul: The Early Pictorial Sources

The illustrations included in the individual chapters on the harbours have a varying degree of testimonial value, both in terms of the state of the city of Constantinople/İstanbul and also terms of the representation of the harbours and landing places. This applies especially to the early city views from the fifteenth and sixteenth centuries. In this chapter, the harbours on the *vedute* of the Buondelmonti and Vavassore types, of Hartmann Schedel, as well as several early Ottoman views (Matraçı Nasuh, Piri Reis, Lokman's *Hünername*) will be discussed. For the illustrations of the Buondelmonti and Vavassore types, possible underlying pictorial sources will be analysed. The Düsseldorf view of İstanbul in Cristoforo Buondelmonti's *Liber insularum archipelagi* of 1485/1490, which already conveys the state of the city at the time of Mehmed II or Bayezid II, proves to be significant in many respects.

Konstantinopel/İstanbul: die frühen bildlichen Zeugnisse

Die den einzelnen Hafen-Kapiteln beigegebenen Abbildungen haben einen unterschiedlichen Zeugniswert sowohl in Bezug auf den Zustand der Stadt Konstantinopel/İstanbul als auch mit Blick auf die Darstellung der Häfen und Anlegestellen. Dies betrifft vor allem die frühen Stadtansichten aus dem 15. und 16. Jahrhundert. In dem Beitrag werden die Hafenanlagen auf den Veduten vom Buondelmonti- und vom Vavassore-Typus, Hartmann Schedel sowie einige frühe osmanische Ansichten (Matraçı Nasuh, Piri Reis, *Hünername* des Lokman) untersucht. Für die Darstellungen vom Buondelmonti- und Vavassore-Typus werden die möglicherweise zugrundeliegenden Bildquellen behandelt. Als in vielerlei Hinsicht aussagekräftig erweist sich die Düsseldorfer İstanbul-Ansicht im *Liber insularum archipelagi* des Cristoforo Buondelmonti von 1485/1490, die bereits den Zustand der Stadt zurzeit Mehmeds II. bzw. Beyazits II. überlief.

87 İstanbul, Topkapı Sarayı Kütüphanesi, Hazine 1523, vol. 1, fols. 158b. 158a^r. – Anafarta, *Hünername* pl 37. – Orbay, *Istanbul Viewed* 73-116. – Effenberger, *Illustrationen* fig. 12.

88 Orbay, *Istanbul Viewed* 90-114.

89 Effenberger, *Illustrationen* 32.

90 See Heher, *Harbour of Julian* fig. 13, in this volume.

Some Reflections on the Archaeology of the Late Antique and Byzantine Harbours of Constantinople

This chapter aims to complement the other contributions of this volume¹ with particular remarks on the physical remains of the harbours of Constantinople. Due to the impossibility of covering the entire spectrum of archaeology within a chapter, the following archaeological commentary will focus primarily on the architecture of harbour facilities *per se*, which consist of features such as quay structures, breakwaters with mole or wall superstructures, as well as jetties and pier remains. In striking contrast to the relative abundance of historical accounts, the visual and archaeological knowledge of harbour structures along the coasts of the Golden Horn and the Sea of Marmara was for a long time limited to sparse visual evidence, such as photographic illustrations, maps, plans and historical depictions, together with short references and rather vague field notes². In fact, it was not until 2004 that a comprehensive insight into the harbours of Byzantine Constantinople, notably the harbour of Theodosius at Yenikapı, Chrysopolis at Üsküdar and Neorion/Prosphorion at Sirkeci was possible for the very first time due to the large-scale rescue excavations conducted prior to the so-called Marmaray-Metro Construction Project³. Following the geographical order of the Volume, the paper is structured on the basis of the archaeological data. Hence, starting with the site of Yenikapı.

The Theodosian Harbour at Yenikapı

With an exceptionally large excavation area of 58 000 m² (fig. 1), the archaeological site at Yenikapı revealed, not only a total number of 37 shipwrecks of the Early to Late Byzantine periods⁴, but also a multitude of architectural remains. The latter are situated both at the eastern and the very western

end of the harbour excavation area. Amongst the various harbour structures brought to light, the most striking features form two massive jetties located in the eastern harbour basin (fig. 2)⁵. Both jetties are oriented in a north-south direction corresponding to a perpendicular position to the northern shoreline of the late antique harbour basin (fig. 3). In contrast to the very poor state of preservation of the western jetty, the eastern one is in surprisingly good condition and completely preserved over a length of 35 m and a total width of 4 m (fig. 4)⁶.

The structure consists of two different parts: a solid and homogeneous foundation, which has a uniform and linear shape; and a superstructure of large ashlar blocks (fig. 5). The foundation is characterised by a compact composition of mortar mixed with rubble stones and ceramics (figs 6-7)⁷, resembling the construction method of *opus caementicium*. Considering the unique conditions in the marine environment, it can be assumed that the construction of the foundation required a certain type of hydraulic concrete, mixing quicklime, seawater and an aggregate as a mortar-binding material⁸. Whether the aggregate used for the concrete composition consists of pozzolanic mortar, the so-called *puteolanus pulvis* (a volcanic sand from the Gulf of Naples near Puteoli)⁹, or any other volcanic ash or aggregate, still needs to be investigated through archaeometric analysis. Although Brandon aptly suggests that the concrete foundation of the eastern jetty represents a structure that can no longer be defined as »Roman marine concrete«¹⁰, it nevertheless follows Roman harbour construction techniques. As described by the Roman architect and engineer Vitruvius Pollio, as well as later by the Byzantine scholar and historian Procopius of Caesarea, hydraulic concrete installations protruding into the

1 A first German version without the present article was published in 2016: Daim, Häfen.

2 Dark, Harbours 152-154; Demangel, Contribution 42. 46-47; Krischen, Landmauer tab. 18; Schneider/Meyer-Plath, Landmauer tab. 25a-b; Mamboury/Wiegand, Kaiserpaläste, tab. XXVIII-XXX, XXXV-XXXVI; Mango, Spolia figs 1-3; Müller-Wiener, Häfen, tab. 48,2; Simeonov, Brachialion, in this volume, figs 3-4. 12; G. Simeonov, Hebdomon figs 1. 14, in this volume.

3 Kızıltan, Yenikapı, Sirkeci and Üsküdar.

4 For a detailed study of the shipwrecks see Kocabaş, Yenikapı Shipwrecks; Kocabaş et al., Collection; Pulak/Ingram/Jones, Byzantine Shipwrecks; Pulak et al., Shipwrecks of Yenikapı. A short but excellent overview with an historical analysis is provided by Külzer, Harbour of Theodosius esp. 84-89, in this volume.

5 A jetty forms a permanent solid structure built out into the sea or harbour basin as part of a harbour or dockyard alongside which ships could berth for loading and unloading activities: Ginalis, Byzantine Ports 35; Dear/Kemp, Ships and the Sea 290-291.

6 Ercan, Yenikapı 121.

7 Gökçay, Architectural Finds 177.

8 For the technology and character of Roman marine and hydraulic concrete see Blezard, Cements; Brandon et al., Building for Eternity 1-4. 141-187.

9 As has been used for example at Roman Imperial harbours such as Caesarea Maritima, Pompeiopolis, Cosa, etc.: Brandon et al., Building for Eternity 73-81. 94-101; McCann, Cosa; Oleson, Technology; Raban, Caesarea Maritima 64 ff.

10 Brandon et al., Building for Eternity 136.

water, such as jetties or moles, were constructed by using rectangular wooden formworks or chests (as Procopius refers to them)¹¹. Such wooden formworks or caissons were prepared on land and subsequently sunk into the water in order to be placed on the seabed for the filling of the hydraulic concrete mixture¹².

Remains of such wooden caissons have actually been preserved at the eastern jetty at Yenikapı, indicating that the feature is composed of a series of individual concrete masses (figs 4, 6)¹³. Four samples from parallel vertical boards of the wooden formwork had been dated through dendrochronological analysis to the period between AD 657 and 786¹⁴. Hence, the construction of the jetty may well be allocated to further historically documented harbour works such as the construction or repair of the harbour fortification surrounding the harbour basin at the turn of the seventh to the eighth century or further restoration measures in the first half of the ninth century¹⁵.

A dating to the Middle Byzantine period is further supported by the upper construction part, which sits on the homogeneous concrete foundation. This superstructure consists of large ashlar blocks (fig. 8). These, however, do not represent only uniform building materials, but also a mixture of various re-used blocks fitted in for the construction of the walking level. Accordingly, apart from mostly limestone blocks of different shapes, marble blocks and even three *spolia* blocks are used. The latter pertains to the fragments of a frieze block decorated with a band of acanthus leaves confined by strips of egg-and-dart and Lesbian *cymatium* (fig. 9)¹⁶. Based on the decorative style, a *terminus post quem* of the mid-fifth to the mid-sixth century may be considered for the three decoration fragments¹⁷. As such, the superstructure again indicates that the construction of the eastern jetty may not be dated earlier than the beginning of the seventh century. Additionally, the superstructure does not form a continuous level of ashlar blocks. Instead, the blocks were merely placed at the edges of each concrete unit, thus forming chambers. The chambers were subsequently filled again with a rough conglomerate of quarry stones and

mortar, most likely another hydraulic concrete composition (figs 10-11).

It is very likely that the chamber system technique was intentionally chosen for achieving a robust construction, but pertaining an inexpensive technique with available construction materials and labour means¹⁸. Accordingly, this may well correspond to a time when the Byzantine Empire was in need of swift action, as it was facing serious economic difficulties¹⁹. Yet, when did this occur?

The technique used in Yenikapı has counterparts in a number of harbour sites primarily along the central Greek coasts, such as the harbours of Anthedon, Larymna, Theologos or Aegina and the outer harbours of Thessalian Thebes, but also at the Corinthian harbour of Lechaion²⁰. The marked proliferation of these harbours seems to be directly linked to the growing importance of Boeotia and Thessaly as major producers and suppliers of grain and likewise other agricultural products, particularly from the seventh century onwards, in relation to the well-known consequences of the Arab conquests²¹. The increasing role of this new maritime network has clear reflections in Constantinople, and particularly in its largest harbour located in Yenikapı.

A reference to a warehouse/granary called *Horrea* or *Horion Lamias* situated on the eastern side of the Theodosian harbour from the seventh century onwards is particularly noteworthy within the historical context²². This granary²³, identified with the so-called *Horrea Alexandrina* listed in the *Notitia urbis Constantinopolitanae* from the fifth century AD²⁴, not only indicates continuous trade and shipping activities in the Theodosian harbour up to the late Middle Byzantine period, but also its possible close relationship to the harbour network of Central Greece²⁵. This phenomenon possibly evinced by the etymology of granary's name, Lamia, which has been previously explained by a female monster²⁶. Nevertheless, as the *Horrea Alexandrina* signified the shipment of grain from Alexandria in Egypt, it is very likely that the *Horion Lamias* is associated with the city of Lamia²⁷ – thus indicating the shipment of grain from central Greece, as a substitute of

11 Vitruvius, *De Architectura* V. 12. 3 (129 Rose/Müller-Strübing); Prokopios, *De Aedificiis* I 11, 18-20 (IV 44 Haury/Wirth).

12 Brandon et al., *Building for Eternity* 189-222.

13 Ercan, Yenikapı 122-123; Gökçay, *Architectural finds* 177; the up-to-five preserved units show an inclination towards the harbour basin of +1.15 m, +1.21 m, +1.15 m, +1.42 m and +1.57 m: Ercan, Yenikapı 123.

14 Kuniholm et al., *Of Harbors and Trees* 63.

15 Külzer, *Harbour of Theodosius* 40, in this volume; Müller-Wiener, *Häfen* 9.

16 Ercan, Yenikapı 121.

17 Comparative examples from the sea walls, as well as the sea gate at the Boukoleon Palace, suggest a date during the reign of Emperor Justinian I (6th c.): Mamboury/Wiegand, *Kaiserpaläste* tab. XVII-XVIII; Mango, *Spolia* 648 fig. 7.

18 Ginalis, Anthedon.

19 Ibid.

20 Ginalis, Anthedon; Ginalis, *Byzantine Ports* 190; Knoblauch, *Ägina* 73; Paris, Lechaion 10-11; Rothaus, Lechaion 295-296; Schäfer, Larymna 533-537; Schläger/Blackman/Schäfer, Anthedon 36, Abb. 14; Triantafyllidis/Koutsoumba, Aegina 169.

21 Ginalis, Anthedon; Ginalis, *Byzantine Ports* 176-177. 193. 238-239. 244-245; Karagiorgou, *Urbanism* 31. 168 ff.; Trombley, Boeotia 991-992.

22 *Miracula Artemii* (Crisafulli/Nesbitt) 107 (16); *Patria Konstantinoupoleos* 51. 85 (II 179, 246 Preger).

23 For warehouses, granaries and other commercial facilities see Ginalis, *Byzantine Ports* 48-54.

24 *Notitia urbis Constantinopolitanae* X 6. 9 (237 Seeck); Magdalino, *Constantinople* 23; Mundell Mango, *Commercial Map 200-201* fig. 4; Kislinger, *Better and Worse Sites* 9-10, in this volume.

25 Magdalino, *Grain Supply* 37.

26 Ercan, Yenikapı 78; Janin, *Constantinople* 351-352.

27 Until the middle of the 6th c. the important Phthiotian city, which during the Byzantine era belonged to the province of Thessaly, was known with its ancient toponym »Lamia«; the bishopric was refounded in the 8th-9th c.: Koder/Hild, *Hellas und Thessalia* 53-54. 81. 283-284. Written accounts adopted the Slavic origin toponym »Zetounion« (from the Palaeoslavlic word »zito«, meaning »grain« or »cereal crop«) only after the 9th c. However, its wider surrounding agriculturally fertile area remained known and associated with the toponym »Lamia«: Avramea, Thessalia 199; de Rosen, *Rhomanian Boeotia* 138-139; Karagiorgou, *Urbanism* 94-95. 107-110. 113; Pallis, *Lamia* 59.

Egypt. In this respect, the creation of the theme of Hellas in AD 695²⁸ could again serve as an historical reference point for the construction of the eastern jetty at the turn of the seventh century to the eighth century²⁹.

Some of the ashlar blocks feature small notches of either rectangular or trapezoidal shape, also known as dovetail grooves (fig. 12). Metal clamps, which were formed by pouring liquid lead into these grooves, provided a strong bonding between the individual blocks in order to achieve a high stability and long-lasting resistance³⁰. However, the isolated appearance of grooved ashlar blocks indicates that the use of metal clamps was not an essential measure for the stability of the jetty's upper part. Consequently, certain blocks seem to have been removed from their original place in the structure, rendering the notches more or less unnecessary. In fact, the use of dovetailed lead fixings seems to be a characteristic of ancient harbour architecture, for instance known from Caesarea Maritima³¹. Possibly taken from an earlier harbour facility, it presumably originated either from another jetty or an older quay installation along the eastern end of the harbour (see below).

Grooved stone blocks in a similarly re-used context can also be found at other Byzantine harbour sites, such as at Thessalian Thebes, Lechaion or along the Küçükçekmece Lake³². Similar to Anhedon, the chambers of rubble stones and mortar were finally covered with a last layer of limestone ashlar blocks and stone slabs, respectively (fig. 13)³³. Whether the jetty bore a further superstructure of brickwork remains unknown. During the Byzantine era, the Roman tradition of combining concrete with brick for the construction of arched harbour structures most likely continued (as shown for example by Cristoforo Buondelmonti's depiction of Constantinople in his *Liber insularum archipelagi*)³⁴. Since the brickwork usually rests directly on the concrete foundation, in this case, such a structure on top of the ashlar block chambers should not be excluded.

Finally, in contrast to the usually rectangular-shaped wooden chests, a pentagonal shape was chosen for the southernmost caisson. Visually, this results in giving the jetty a pointed end (fig. 4). Due to this singular ground plan, it has been suggested that the last part of the jetty may be associated with the previous existence of a lighthouse³⁵. However,

beyond the fact that no evidence of such a structure could be determined whatsoever³⁶, a lighthouse or lid beacon within the interior harbour zone is not plausible considering its location within the harbour basin. As such, it can be suggested that the pentagonal shape, together with the incorporated ornamental *spolia*, rather served purely visual aesthetics³⁷.

A further wall joins the eastern jetty at its southern end, which extends the structure approximately 20 to 25 m towards the south (fig. 14). The wall consists of one row with two preserved layers of large, re-used ashlar blocks and rubble that are set in a system of headers (fig. 15). A second row most probably existed. This implies a maximum total width of around 2 m (half the size of the above-described Middle Byzantine jetty). Without any use of mortar binding, the blocks seem to have been placed loosely on the ground, providing the impression of a rather provisional construction. On top of the well-worked ashlar blocks, undressed stones are placed up to the height of the walking level of the adjacent eastern jetty. Despite the big difference in size to the latter, the structure should also be identified as a jetty.

However, based on the rough construction technique, as well as the fact that it forms an annexe to the Middle Byzantine equivalent, a much later date has to be assumed. This is supported by the processing of re-used ashlar blocks, which were most likely dismantled from the eastern jetty to its north. The extension of the eastern jetty towards south is due to the constant siltation process of the harbour basin by the Lycus river (Bayrampaşa Deresi today), which emptied into the bay of the Theodosian harbour (fig. 3)³⁸. The loose arrangement of ashlar blocks, without any mortar binding, indeed indicates that they must have been placed either on dry ground or in relatively shallow water. As such, the water depth in the harbour basin must have dropped by a large extent and the navigable sea level must have retreated farther south at some point after the ninth century. This obviously required building measures to reach the necessary draught for the docking of the vessels. Based on the wreck finds in that area, the eastern part of the eastern harbour basin remained in use for harbour activities at least until the eleventh century³⁹.

In contrast to the general assumption that the Theodosian harbour must have been entirely silted up by the end of the twelfth century at the latest, Külzer rightly suggests a limited

28 Koder/Hild, *Hellas und Thessalia* 57; Živčević, *Date of the Creation* 142-143. About the considerable extension of the Slavic controlled territories in central and southern Greece from the late sixth to the early 9th c., see Koder, *Siedlungsgebiete*; Kislinger, *Regionalgeschichte als Quellenproblem* and Kislinger, *Dyrrhachion*.

29 Ginalis, *Anhedon*.

30 Ercan, *Yenikapı* 121; Ginalis, *Byzantine Ports* 184, 242.

31 Kingsley, *Barbarian Seas* 136; Raban, *Sebastos, Royal Harbour* 115. A connection between the lead clamps and the so-called ἀργυρος χυτός («liquid silver» or rather quicksilver), referred by the Late Byzantine historian Pachymeres is highly questionable and has been rightly doubted by Heher, *Harbour of Julian* 60, in this volume.

32 Aydingün, *Excavation Site 17* figs 49-50; Aydingün/Aydingün/Öniz, *Küçükçekmece* 440-441; Ginalis, *Byzantine Ports* 184, III. II. II. 48b.

33 Ginalis, *Anhedon*; Schläger/Blackman/Schäfer, *Anhedon* 47.

34 Aidoni et al., *Journeys* 22; Effenberger, *Pictorial Sources* fig. 1, in this volume. For arched harbour structures in Roman times see Blackman, *Ancient harbours* II 197, 202 ff; Blackman, *Sea Transport* 648-649.

35 Kocabaş, *Theodosian Harbour* 25.

36 Ercan, *Yenikapı* 134-135.

37 *Ibid.* 121.

38 Ercan, *Yenikapı* 86 fig. III. 13; Külzer, *Harbour of Theodosius* 41, in this volume; Pulak/Ingram/Jones, *Byzantine Shipwrecks* 39. The existence and strong impact of the Lycus River on the development of the Theodosian Harbour is also reflected in medieval drawings of Constantinople, such as in the *Liber insularum archipelagi* by Cristoforo Buondelmonti; Effenberger, *Pictorial Sources* figs 1-2, in this volume.

39 Kocabaş, *Yenikapı Shipwrecks* 31 fig. 5; Külzer, *Harbour of Theodosius* 47-48; Pulak/Ingram/Jones, *Byzantine Shipwrecks* fig. 3.

but continuous use far into the Late Byzantine period⁴⁰. This may be supported, not only by written accounts, but also by the existence of Late Byzantine kilns, supposedly unearthed in close vicinity to the eastern jetty. Located just northeast of the jetty, the kilns may be related to this very last phase of at least minor harbour activities up to the fifteenth century. A further indication for a continuous use even far beyond that is given by the latest archaeological activities of the Istanbul Archaeological Museum in the eastern part of the Yalı Mahalləsi area (at the south-eastern end of the Theodosian harbour area)⁴¹. During the archaeological excavations, an approximately 40m long and 4-5m wide jetty was uncovered, belonging to the very last construction phase at the Theodosian harbour during the Ottoman period⁴². Interestingly enough, the jetty again features a construction system using wooden chests filled with a conglomerate of mortar mixed with rubble stones, which resembles a certain hydraulic concrete mixture.

Finally, despite its at least partial rededication around the twelfth century, similar to the site of Chrysopolis, the continuous use of the harbour area far into the Late Byzantine period and even beyond can be seen here as well (see further down). This is verified by harbour construction works dating as late as the Ottoman period. A 1.95m wide jetty (Kibotos Iskele) inclining towards the sea can be allocated to these late harbour works (fig. 16).

The second prominent jetty is located in the western part of the eastern harbour basin (fig. 2). The roughly 20m long structure is in very poor condition compared to its eastern counterpart despite its massive appearance. Nevertheless, the archaeological remains allow us to reach to firm conclusions regarding its architecture, its structural composition and thus its chronology. The jetty consists of three preserved solid and homogeneous masses (fig. 17). These show a compact conglomerate of mortar, mixed with rubble stones and ceramics, which again resembles a hydraulic concrete mixture. Whether that comprises Roman pozzolan mortar or any other volcanic ash or other aggregate, has yet to be examined here, too. Despite the apparent visual resemblance to the eastern jetty, the structural composition of the concrete bears some differences. While the concrete mixture of the eastern jetty shows a high percentage of small to middle-sized rubble stones and a comparatively low percentage of mortar (fig. 7), the composition of the western jetty reveals a much higher percentage of mortar into which middle-sized to large boulders were embedded (fig. 18). On a closer examination, one

can observe that the embedded stones are not waste quarry stones but whole river stones. These most probably derive from the nearby Lycus River, which emptied into the eastern harbour basin⁴³.

The use of construction material from the immediate vicinity may point to the earliest construction phase and the foundation of the harbour in the Early Byzantine period. This is supported, not only by the shipwreck YK 37 (dated to the fifth century) in its immediate vicinity (figs 19-20)⁴⁴, but also by the implementation of Roman engineering and construction techniques using rectangular wooden formworks. Although no physical remains of caissons were discovered at the western jetty, the gaps between the individual masses again clearly indicate the utilisation of such chests. In addition, the colossal dimensions and compactness of the hydraulic concrete masses (compared to the eastern jetty) imply a much earlier construction date on their own.

Unfortunately, apart from large stone blocks scattered around the concrete masses, as well as layers of massive ashlar blocks at the southern front of the jetty, no further construction components have been preserved that could provide any additional indications (fig. 21). As for the southern end of the jetty, it should be noted that the ashlar blocks do not rest continuously on the hydraulic concrete mass (as is the case at the eastern jetty). Instead, they give the impression that they are fitted into the washed-out and eroded concrete. This building measure could have aimed for two possible purposes: either to stabilize the jetty against the risk of collapsing; or, more likely, to extend the structure further south. As such, the massive ashlar blocks may be considered as later additions. A step-like arrangement of the ashlar blocks towards a wooden pier (see below) supports this interpretation. Marble column pieces and a marble impost block with the monogram of Emperor Justinian I have been unearthed immediately in front of the jetty (fig. 22), providing a *terminus ante quem* of the mid-sixth century for its erection. Consequently, it may be assumed that the western jetty was erected as early as the end of the fourth century or the beginning of the fifth century and underwent repair or extension during the sixth century. This is further supported by another type of harbour infrastructure: wooden piers⁴⁵.

Throughout the harbour basin, a large number of wooden piles belonging to piers have been brought to light, ranging from the fifth to the fifteenth centuries based on dendro-chronological analysis⁴⁶. A great majority of them is oriented

40 See Külzer, Harbour of Theodosius, in this volume; Ercan, Yenikapı 62. 92. 96. 118; Kocabaş, Theodosian Harbour 32; Magdalino, Maritime Neighbourhoods 215.

41 For further information on the archaeological fieldwork conducted in this area, see Öncü/Çölmekçi, Istanbul Boğazı; Öncü/Çölmekçi, Istanbul Boğazı 2016.

42 Akkemik et al., Dendroprovenancing.

43 Ercan, Yenikapı 59 fig. III.2; Külzer, Harbour of Theodosius fig. 4.

44 YK 37 forms the northernmost wreck find and belongs to the earliest group of vessels retrieved from the Theodosian Harbour: Kocabaş, Yenikapı Shipwrecks 34 fig. 5.

45 Different to permanent solid jetties, the pier forms a structure of timber supported on wooden piles. Piers were constructed in addition to jetties in order to

provide additional mooring space for ships within the harbour basin. As shown for example by the late antique to medieval harbour of Olbia, piers were used equally to jetties within harbour areas, leading into the basin at a right angle to the shoreline: Dear/Kemp, Ships and the Sea 427; Ginalis, Byzantine Ports 35-37; Kingsley, Barbarian Seas 89-90.

46 Kuniholm et al., Of Harbors and Trees 47; it has to be mentioned that the dating of the wooden remains always refer to the time of their cutting and not necessarily to their immediate use for construction. A certain time period has obviously to be calculated from the time of cutting the woods, the transport and processing of the material to their use for building activities.

in a north-south direction (fig. 23). In line with the distribution of shipwrecks⁴⁷, the earliest pier constructions have been discovered at the northern end of the harbour basin, pointing to their connection to the harbour's quay area. According to the analysis of a series of posts, almost all wooden piers show multiple phases, which correlate with numerous repairs as well as enlargements (thus reaching total lengths of up to over 40m) going along with the siltation process towards south and southeast⁴⁸. The longest-lasting pier with a usage of over 80 years and three phases of repair/extension (four phases in total) constitutes the so-called »Marmaray İskele 1« at the western end of the harbour⁴⁹. While the earliest phase dates to around the year AD 527, its latest posts are from around the year AD 610. A date around AD 553 is also given for the wooden pier connected to the southern end of the western jetty (fig. 24)⁵⁰. This again provides a *terminus ante quem* of the mid-sixth century for the erection of the western jetty. Simultaneously, dendrochronological analysis attests to its continuous use up to the ninth century, which is similarly confirmed by the nearby shipwrecks YK 27, YK 28 and YK 32, dated to the seventh to ninth centuries (figs 19-20)⁵¹.

At the western end of the harbour basin a further series of harbour installations has been uncovered (figs 3. 25). The wealth of different overlapping facilities provides a very complex picture, leading scholars to different interpretations and still puzzling the excavators. Concerning harbour-related structures, the most striking feature forms a quayside⁵². Due to the limitation of the excavation area, only a total length of 25.50m could be revealed (fig. 26). The 2.80m wide quay shows a southwest-northeast orientation and consists mostly of a single row with 1-2 layers of ashlar blocks⁵³. The latter, however, are not comprised of standardised or uniform construction material, but rather randomly arranged, 2.75m x 1.35m large stones. Interestingly enough, these stones represent almost exclusively re-used material of bossage and local dressed stone slabs (fig. 27). The compilation of re-used stone material is supported by the use of two inscribed *spolia* blocks (figs 28-29a)⁵⁴. Similar to the extension of the eastern jetty (see above), again no mortar binding was used, and the blocks are only loosely placed on the ground and on top of each other⁵⁵.

One of the ashlar blocks features a 10cm wide hole pierced horizontally through the stone, whereas one of the inscribed *spolia* blocks points to a second perforation (fig. 29a-b). Rather than interpreting them as being part of a lifting device⁵⁶, the holes were intended for the mooring of ships. Besides vertically projecting bollards, perforated stone blocks or so-called »mooring stones« formed the most commonly used device for berthing ships since classical antiquity⁵⁷. By piercing the blocks of the quay's frontal façade, the mooring device was incorporated into the wall as a single architectural unit with the quay.

As for the dating of the quay line, it has been suggested that the harbour facilities at the western end belong to the earliest construction phase, possibly dating to the initial building project of the Theodosian harbour between AD 390 and 425⁵⁸. However, one gets the impression that the rough and seemingly provisional construction does not reflect a representative installation for an imperial harbour of the fourth/fifth century – especially given the fact that comparably large harbour sites, such as Caesarea Maritima, Demetrias, Thessalian Thebes, Corinth's eastern harbour of Lechaion or Ephesus, show a far more elaborate architecture⁵⁹. *Prima facie*, an earlier construction period significantly preceding the Byzantine era may at first be suggested by the building material and the inscribed *spolia* used⁶⁰. On closer examination, however, the construction assembly is of clearly re-used context, which suggests a rather later date. This is in fact supported by further excavation works undertaken in the Light Rail System area north-west of the Yenikapı site.

Among a series of building remains, which are roughly dated between the sixth/seventh and the ninth century, a 13m long and 3m wide structure has been unearthed⁶¹. Running in an east-west direction parallel to the Theodosian harbour and extended by wooden piles suggests an identification as a jetty with a pier projection belonging to a further harbour infrastructure. Whether its preserved part is sitting on a hydraulic concrete foundation within wooden caissons is not known to the authors. The partly destroyed jetty shows a solid architecture consisting of ashlar blocks with mortar binding and a flat surface covered by a thick concrete layer (fig. 29c). Hence, it is more reminiscent of the elaborate and

47 Kocabaş, Yenikapı Shipwrecks fig. 5.

48 Gökçay, Architectural Finds 168. 176; Kuniholm et al., Of Harbors and Trees 58-63. 66-77; Pearson et al., Dendroarchaeology 3407 fig. 8.

49 Gökçay, Architectural Finds 168; Kuniholm et al., Of Harbors and Trees 67; Pearson et al., Dendroarchaeology 3408.

50 Pearson et al., Dendroarchaeology tab. 1.

51 Kocabaş, Yenikapı Shipwrecks 21. 23 fig. 5; Kuniholm et al., Of Harbors and Trees 61; Pearson et al., Dendroarchaeology; Külzer, Harbour of Theodosius 46, in this volume.

52 A quay forms a projection along the shoreline of the harbour, usually constructed of stone masonry. The solid structure constitutes the main facility for the accommodation of ships to load and unload cargo or embark and disembark passengers: Dear/Kemp, Ships and the Sea 450; Ginalis, Byzantine Ports 32-34.

53 Ercan, Yenikapı 120; Gökçay, Architectural Finds 170; Kocabaş, Theodosian Harbour 25.

54 Ercan, Yenikapı 120; Gökçay, Architectural Finds 170.

55 Ibid.; Kocabaş, Theodosian Harbour 25.

56 Kocabaş, Theodosian Harbour 25.

57 For mooring devices see Blackman, Bollards 115-122; Ginalis, Byzantine Ports 38-43.

58 Gökçay, Architectural Finds 170; Külzer, Harbour of Theodosius 39, in this volume.

59 Ginalis, Byzantine Ports 162-193; Kingsley, Barbarian Seas 132-138; Külzer, Ephesos 49-57; Paris, Lechaion; Rothaus, Lechaion; Steskal, Ephesos; <https://www.theguardian.com/science/2017/dec/14/new-underwater-discoveries-in-greece-reveal-ancient-roman-engineering> (accessed 8 July 2019).

60 The incorporated inscribed *spolia* blocks provide a *terminus post quem* of the Roman Republican period for the erection of the quayside. While Gökçay dates the incorporated inscribed *spolia* blocks to the 4th c. BC, Ercan suggests a date between the third and the second centuries BC: Ercan, Yenikapı 120; Gökçay, Architectural Finds 170.

61 Kızıltan, İstanbul Kazıları 362.

representative architecture of imperial harbour installations than the quay facility described above. Its location north of the maritime circuit wall enclosing the Theodosian harbour basin (see further down) implicates the existence of a harbour site prior to the foundation of the Theodosian harbour. As such, a date to the fourth century or even earlier may be suggested⁶².

Accordingly, the shoreline along the Sea of Marmara must have possessed permanent harbour facilities as early as the Roman and possibly the Hellenistic period as shown by the inscribed *spolia* from the quay line. Harbour activities prior to the Byzantine era are indeed attested by a large number of trading goods and other archaeological objects found throughout the harbour basin⁶³. If that should indeed be the case, contrary to the general perception, the shoreline must have been quite different as late as the fourth century. This goes along with Mango's suggestion of a much deeper bay, which had only gradually been filled in due to the siltation by the Lycus river, as well as the continuous land reclamation for the shaping of the new capital under the reign of emperor Constantine I and his successors⁶⁴.

The jetty and its associated pier construction as well as the gradual transformation of the coastline provide a rough *terminus post quem* for the construction of the quayside, but the question of its exact date remains. In this regard, the above-mentioned wooden pier »Marmaray İskele 1« may shed further light on its historical placement. Running from the quay in a bow towards the southeast, the 43.5 m long wooden pier is immediately associated with the coastal facility. With its four construction phases ranging roughly between the years shortly after AD 527 and 610⁶⁵, it provides a *terminus ante quem* of the first half of the sixth century for the construction of the quay.

As a matter of fact, despite the potentially large time frame between the Hellenistic, Roman and Early Byzantine periods, a sixth century date appears to be likely. Considering the extensive building activities under the reign of Emperor Justinian I, which included the construction of harbour sites according to Procopius⁶⁶, it is conceivable that the Theodosian harbour underwent some repair or perhaps extension as well. Although no literary sources refer to any public work of

such scale and significance, the construction of the granaries on the island of Tenedos under the reign of Emperor Justinian I must have had quite an impact on the harbour activities and hence the required infrastructures and harbour installations⁶⁷. Thus, although a late fifth century date or the reigns of Justinian's immediate predecessors, Emperor Anastasius I (491-518) and Justin I (518-527) are equally conceivable for its erection, the wooden remains of the pier show a perfect match with that of Justinianic sites such as Capidava⁶⁸. As such, the construction of the quayside has most likely been implemented as part of the extensive building programme during the reign of Justinian himself.

The last phase of the wooden pier »Marmaray İskele 1« shows a continuous use of the western harbour basin at least up to the mid-seventh century. This is supported by the shipwreck YK 11, which was unearthed in close vicinity to the eastern end of the wooden pier (fig. 19)⁶⁹. However, the condition of the ship's hull points to its abandonment in shallow water. As such, at the time of its dereliction at some point during the seventh century, the western harbour basin must have already suffered from heavy siltation by the Lycus River.

Additionally, due to different environmental effects such as earthquakes during the sixth century, a sudden alteration of the coastline, which, along with the siltation by the river Lycus, led the harbour basin to become shallower, may have required the shift of harbour infrastructures or even the construction of new facilities⁷⁰. This correlates well with the building activities in the eastern harbour basin discussed above, as well as further historically documented harbour works such as the construction of the eastern jetty or the repair and extension of the sea walls around the harbour at the turn of the seventh to the eighth centuries.

To its west, the quayside is confined by a breakwater of 20 m length, aligning on a northwest-southeast direction (fig. 30)⁷¹. Similar to the quay line, unfortunately it could not be uncovered in its entirety. Thus, its structural and functional characteristics can no longer be reconstructed with certainty. However, some technical and architectural conclusions can still be drawn. Reaching up to the surface of the quay, the breakwater must have protruded from the surface of the sea (fig. 31)⁷². Consequently, it can be identified as of

62 The authors hope that more detailed information on the jetty and its pier projection will be disclosed and published in future by the Istanbul Archaeological Museum.

63 Asal, Yenikapı excavations 7; Ercan, Yenikapı 58; Külzer, Harbour of Theodosius 37, in this volume; Öncü, Greek-Roman period.

64 Mango, Shoreline 20-21 fig. 1.

65 Kuniholm et al., Of Harbors and Trees 67-68 fig. 6; it has again to be made aware that the dating of the wooden remains always refer to the time of their cutting and not necessarily to their immediate use.

66 Prokopios, De Aedificiis I 8. 1-9 and I 11. 16-20 (IV 33-34. 43-44 Haury/Wirth); Ercan, Yenikapı 48. 50. 125; Hohlfelder, Building Harbours 369.

67 Prokopios, De Aedificiis V 1. 7-16 (IV 150-152 Haury/Wirth); Koder, Aigaion Pelagos 287-291; Külzer, Harbour of Theodosius 39, in this volume; Müller, Getreide 5-11.

68 Kuniholm et al., Of Harbors and Trees 67-68 fig. 6.

69 Pulak/Ingram/Jones, Byzantine Shipwrecks 47-50. Due to its small dimension (with a documented length of 9 m and a width of 3 m), the likewise 7th-cent.

YK 11 wreck has been identified as a local cargo vessel for coastal shipping. Hence, it might form the link between the quayside and the harbour activities at the western harbour basin of the Theodosian Harbour and the granaries on the island of Tenedos: Külzer, Harbour of Theodosius 39 n. 48, in this volume.

70 Ercan, Yenikapı 106; Guidoboni, Earthquakes 292-295; Külzer, Harbour of Theodosius 39, in this volume.

71 Ercan, Yenikapı 86. 135; Gökçay, Architectural Finds 170-171. A breakwater forms an artificially placed construction, which provides protection to unsheltered harbour sites against the prevailing strong sea waves, currents and tides. By breaking the force of the sea, it assured a safe anchorage for ships: Dear/Kemp, Ships and the Sea 65; Ginalis, Byzantine Ports 26; Feuser, Hafensstädte 229-230.

72 Whether the height of its projection from the water allowed waves to break over it in order to prevent siltation by creating controlled currents within the harbour basin, remains unanswered. The erection of sea walls points to the absence of an effective de-silting measure, which resulted in an even faster siltation of the harbour basin (see below).

type »Mound Breakwater«⁷³. Typically for a mound-formed type, the breakwater consists of two different construction parts: one internal and one external. Built in cross-sections, it started from the core to the outer protective covering. The core comprises a mixture of debris or soil with small stones in order to gain maximum compactness, whereas the external part consists mainly of larger quarry stones.

The purpose of the external part was mainly to prevent the movement and washing out of the internal rubble material. According to the stone size used for the core part as well as the thickness of the outer covering, sometimes a second layer of stones was required to cover the whole mound⁷⁴. This, however, cannot be verified here. Its efficiency and stability depended, not only on the size of the feature, the thickness of the stones and the weight of the composition, but also on the gradient of the slope. The slope provided stability for the construction material by preventing possible undermining by the sea. The gradient of the slope differs between the inner and the outer part of the breakwater. While the inner part (the side towards the harbour basin) drops quite abruptly with a steep vertical angle, similar to the breakwater at the harbour of Chrysopolis at Üsküdar (see below), the outer part (the side towards the open sea) probably possessed a gentle inclination, which must have started nearly from the middle of the structure. This provided the construction with the necessary stability against the strong winds and absorbed the force of the waves from the open sea. Beyond its structural composition, the breakwater shows residues of mortar (most probably again a certain type of hydraulic concrete) encrusted with the rubble filling of the breakwater's external section. This forms a compact mass, which probably acted as reinforcing binding material for the weight of any superstructure⁷⁵. Indeed, a wide flat surface follows the steep-angled inner edge, which supports a wall 2.3m high and 1.35m wide (figs 26. 30. 32)⁷⁶.

Concerning the construction date of the breakwater, it has to be noted that the chronological determination of breakwaters turns out to be difficult, since they pertain to a type of construction that has remained architecturally unchanged for millennia. As such, a relatively accurate dating often relies on constructional details, as well as on associated buildings and archaeological finds, respectively. While its structural characteristics and the use of mortar (hydraulic concrete) allow a time frame between the Roman Imperial and the Middle Byzantine periods, the fact that the breakwater is stratigraphically overlapping the quay is certainly decisive for its dating

(fig. 31). Consequently, contrary to the interpretation of the excavators, the quay provides a *terminus post quem* of the late fifth to early sixth century for the construction of the breakwater and thus also for its wall superstructure. A sixth century date is also supported by its neighbouring Harbour of Julian/Sophia (later the Kontoskalion Harbour), for which the construction of a breakwater under the reign of Emperor Anastasius I (491-518) is attested⁷⁷ (fig. 33).

As for the wall superstructure, according to the excavators it is supposed to belong to the Theodosian sea wall, forming its extension along the breakwater⁷⁸. However, taking into account the proposed dating limit by its breakwater foundation, together with further construction measures to the north and west of the harbour facilities⁷⁹, a date after the mid-sixth century should be considered. On closer examination, this wall seems indeed to be architecturally slightly different to the Theodosian walls surrounding the city. The Theodosian walls are constructed with a core of mortar faced with carefully cut limestone blocks and regular bands of brick⁸⁰. Although the wall on the breakwater consists of successive courses of ashlar blocks with traces of brick bands that recall the Theodosian walls, it shows a much simpler and irregular construction with building material comprising small to medium-sized stone blocks and *spolia* (fig. 30).

Whether the erection of the breakwater and that of its wall superstructure are to be dated to the same period remains speculative. This question is closely related to the yet unexplained function of a series of holes drilled below the wall in an east-west direction. This continuous row of holes would appear to indicate that wooden beams connected the breakwater conglomerate to the superstructure (figs 30. 32)⁸¹. Traces of mortar coating suggest that at least the lower part of the wall and the holes were plastered. This would have protected the wooden features, which easily deform, swell or decompose when in contact with water. Unfortunately, it is still unknown whether the drilled wooden beams were only intended to provide greater stability for the wall or whether they functioned as connecting elements for the mortar binding. From an engineering perspective, however, this building measure is probably best explained as a binding element for a later, additional construction.

Consequently, it can be suggested that the two features most likely belong to different construction phases. This argument is supported by a short stretch of further wall just west of the sea wall (figs 25-26). Despite a slightly different orientation, these wall remnants may represent a potential sea wall

73 For the construction and typology of breakwaters, see Cornick, *Engineering* 116. 118ff; Ginalis, *Byzantine Ports* 26-31.

74 Ginalis, *Byzantine Ports* 28, III I.7a, vol. II.

75 Gökçay, *Architectural Finds* 170.

76 Gökçay, *Architectural Finds* 172.

77 Heher, *Harbour of Julian* 52, in this volume. It should be mentioned that Heher wrongly agrees with van Millingen, *Walls* 291. 294 in the interpretation of the construction works as a mole. The term *προβόλιον* should rather be interpreted as breakwater (see also *προβόλιον* and *προβάλλω* in LSJ 1470. 1472). This is verified by Cristoforo Buondelmonti's depiction of the harbour and

later by the harbour reconstruction of Müller-Wiener: Effenberger, *Pictorial Sources* figs 2. 4, in this volume; Heher, *Harbour of Julian* fig. 7; Müller-Wiener, *Häfen* 37.

78 Gökçay, *Architectural Finds* 170; Kocabaş, *Theodosian Harbour* 25.

79 Some wall remains of the building complex associated with the harbour installation revealed stamped bricks dated to the 6th c. *in situ*: Ercan, *Yenikapı* 114.

80 For the Theodosian walls of Constantinople, see Asutay-Effenberger, *Landmauer* 13-71; Mango/Kiefer/Loerke, *Monuments* 519-520; Turnbull, *Walls*; van Millingen, *Walls*.

81 Gökçay, *Architectural Finds* 171.

as well, belonging to the initial phase of the breakwater and thus predating the sea wall discussed above. These eventually served as a supporting structure for the later sea wall with its buttresses that is visible today (fig. 26). Consequently, it can be proposed that the breakwater initially carried a different sea wall, which was erected, together with its substructure, probably around the sixth century (either together with the quay or slightly later). Subsequently, it must have been replaced by the above-discussed sea wall at some later point, postdating the entire building complex. According to written accounts, the sea walls supposedly underwent repairs either during the reign of Tiberius II (698-705) or Anastasius II (713-715)⁸².

In fact, an identical building activity with identical construction phases can be observed at the Byzantine harbour of Thessaloniki, where rescue excavations unearthed a section of the sea wall with successive courses of ashlar blocks having traces of brick bands and buttresses⁸³. Similar to its equivalent at the Theodosian harbour, based on the archaeological analysis and the written account of Caminiates, at least two major construction phases have been determined for the Byzantine era⁸⁴. While it is suggested that the earlier one is dated to the Early Byzantine period, the following construction phase has to be placed at some point between the mid-seventh and the second half of the ninth centuries. Hence, similar to the inner circuit walls enclosing the harbour basin of the Theodosian harbour (fig. 34), a construction date at the turn of the seventh to the eighth centuries, may also be considered for the later sea wall⁸⁵. However, only a closer investigation of the building material at both harbour sites, such as the mortar filling or the incorporated bricks, will provide accurate dating information.

In conclusion, the archaeological excavations at Yenikapı revealed a nearly complete historical sequence of human activities in the Theodosian harbour, ranging from its foundation in the late fourth or early fifth centuries (if not already from the pre-Byzantine era) up to its final rededication in the fifteenth century. This provides not only information on traded goods and artefacts in daily life, but also much sought-after information on shipbuilding traditions, as well as on harbour installations and their architecture from Late Antiquity to the Late Middle Ages. Interestingly, as far as the physical remains of coastal facilities are concerned, they nicely demonstrate the evolution of harbour activities. The earliest infrastructures, which belong to the first construction phase of the harbour around the end of the fourth or the beginning

of the fifth centuries, were erected along the northern coast of the harbour basin just west of the outlet of the Lycus River (fig. 3). These include a jetty (the western jetty) and wooden piers. The wreck finds of YK 22, YK 26, YK 34, YK 35 and YK 37 (figs 2. 19-20), together with stamped bricks dumped next to the piers (fig. 35), attest to the loading and unloading of traded goods as early as the fifth century⁸⁶.

Based on the distribution of commercial installations listed in the fifth-century *Notitia urbis Constantinopolitanae*⁸⁷, it can be assumed that some harbour infrastructure may also have existed east of the river estuary (fig. 36). Accordingly, granaries (so-called *Horrea*) and marketplaces (so-called *Fora*) in its northern and eastern periphery, such as the *Horrea Alexandrina*, the *Horrea Theodosiana*, the Forum of Theodosius or the Forum of Amastrianus, show a close connection to the Harbour of Theodosius⁸⁸. Although the grooved ashlar blocks on the eastern jetty may have belonged to a potential quay structure along the eastern end of the harbour, further physical remains of harbour facilities have yet to be discovered. Concerning the western harbour basin, the current state of archaeological knowledge suggests that no harbour installation existed at that time.

However, the pre-Byzantine building material of the western quayside allows the assumption that an earlier harbour site, possibly from the Hellenistic or Roman periods, may have existed. If so, this must have been situated slightly farther north or north-west and was later dismantled for the construction of the new quayside in the Early Byzantine period. Whether its facilities had been in use until the reign of Emperor Constantine I (306-337) remains unknown for the time being.

A wall, approximately 54 m long and 4.40 m wide, was unearthed just north-west of the quay and breakwater (figs 26. 37). Running beneath the sea wall discussed above, the excavators speculated that this 1.9 m high wall fragment formed the southern limit of the so-called »Constantinian« wall⁸⁹. The latter reached the shoreline of the Sea of Marmara further west, implying that a certain section of the wall ran along the coast. According to Mango, however, the sea walls could hardly have existed under the reign of Constantine I due to the steady change of the coastline, as well as the continuous land reclamation of the deep bay (which later became the Harbour of Theodosius) up until the very end of the fourth century⁹⁰. Only by AD 439, at the earliest, the construction of maritime circuit walls was finally ordered. At any rate, it seems that new harbour construction works on this shore

82 Külzer, Harbour of Theodosius 40; Müller-Wiener, Bildlexikon 313.

83 Leivadioti, Thessaloniki 87, Εκ. 49α-β.

84 Kameniatis, De expugnatione VIII 3 (9 Böhlig); *ibid.* 22-25. It should further be noted that pre-Byzantine building remains have been discovered as well, indicating an earlier construction phase dating to the Roman period: Leivadioti, Thessaloniki 20-21.

85 Dark, Post Office Site 318; Külzer, Harbour of Theodosius 40; Mango, Shoreline 24-25; Müller-Wiener, Häfen 9.

86 Ercan, Yenikapı 115-116; Külzer, Harbour of Theodosius 45-46.

87 *Notitia Urbis Constantinopolitanae* 237. 239 (Seeck); Mundell Mango, Commercial Map.

88 Ercan, Yenikapı 21. 59. 65. 78; Heher, Harbour of Julian 52, in this volume; Külzer, Harbour of Theodosius 39, in this volume; Mundell Mango, Commercial Map 192-193 fig. 4.

89 Ercan, Yenikapı 110-111; Gökçay, Architectural Finds 172.

90 Mango, Shoreline 18-24; Many scholars accept the fact that the majority of the buildings attributed to Constantine I could not have been completed under his reign, but during the reign of his son Constantius II. The wall discussion basically relates to this debate: Magdalino, Maritime Neighbourhoods.

were not undertaken at least before the end of the fifth century.

Consequently, the Harbour of Theodosius was probably extended towards the west at the time of the »reconquest« and annexation of North Africa under the reign of Emperor Justinian I, which opened new markets and trading connections for Constantinople. It must have been that time when the previous harbour installation was abandoned and eventually partly removed to be used for the construction of the new quayside⁹¹. Therefore, it is in the sixth century that the Harbour of Theodosius, not only experienced its most prosperous time, but also seems to have reached its largest extent and final face.

The use of the entire harbour area did not last for long. The last phase of the wooden pier »Marmaray Iskele 1«, together with the shipwreck YK 11, demonstrate that the western harbour basin remained in use only until the end of the seventh century or beginning of the eighth century. This was caused by the Lycus River and a series of other environmental effects, which led to a slow but constant siltation of the harbour basin. The archaeological data obtained from the harbour installations, as well as the distribution and dating of the wreck finds, show that the siltation process took place from west to east⁹².

Due to the loss of Egypt, Palestine and Syria to the Arabs in the seventh century, it was obviously no longer necessary to use the harbour at full capacity⁹³. Therefore, in contrast to the neighbouring Harbour of Julian/Sophia⁹⁴, costly dredging works were not undertaken. Despite the reduction in the size of the harbour area and thus also the restriction of harbour activities, the Harbour of Theodosius continued to be a major hub for maritime trade throughout the Middle Byzantine period. The consequences of the Arab conquest of Egypt, which was the breadbasket of Constantinople, eventually entailed the reconfirmation of Byzantine authority over the Greek peninsula in the second half of the seventh century⁹⁵. Thus, while the facilities at the western end of the harbour were abandoned after all, new infrastructure was constructed in the eastern harbour basin. Accordingly, in order to meet the new requirements, a massive eastern jetty was constructed in close vicinity to the newly renamed granary of Lamia at the turn of the seventh to the eighth centuries.

At some point after the ninth century, the siltation process reached the eastern harbour basin with the water depth constantly dropping. The retreat of the navigable sea level

towards the south by the end of the twelfth century, at the latest, eventually required further building measures at the eastern end of the eastern harbour basin in order to reach the necessary draught for docking vessels. However, the extension of the eastern jetty towards the south shows that these may no longer have comprised major and elaborate harbour constructions. While the wreck sites attest to the use of the Harbour of Theodosius only up until the end of the Middle Byzantine period, some Late Byzantine kilns, together with written sources and depictions, point to minor harbour activities up to the fifteenth century⁹⁶.

Finally, based on the archaeological study of the Harbour of Theodosius, a very last observation is worth mentioning. The above-discussed constant siltation process of the harbour basin is not just associated with the Lycus River and a series of other environmental effects, as well as human impact (e.g., by dumping waste material into the harbour). Additionally, sea currents passing through the harbour mouth had a considerable effect. Consequently, the unequivocal west-east shift of the siltation process is closely related to the angle of the confluence between the incoming currents and the river outflow (fig. 38). Thus, the position and direction of the harbour mouth must have played a decisive role.

Accordingly, this may provide an indication for a potential reconstruction of the orientation of the breakwaters and its sea wall superstructures. Most recent harbour reconstructions suggest two equal breakwaters with a centrally located harbour entrance in an eastern orientated direction (fig. 39)⁹⁷. In order to perform the west-east effect on the siltation process, the harbour entrance must have been located on the eastern side (fig. 40). This is also indicated by the different courses of the two breakwaters. Based on the aforementioned reconstruction models, the western breakwater ran in a more or less straight east-west direction, whereas the eastern one showed first a clearly north-south orientation before turning west where it continued to the centre of the harbour basin.

In line with Mango's and Janin's suggestions⁹⁸, it should rather be assumed that only one long western breakwater existed, which formed a large eastern harbour entrance. The use of a single breakwater is supported by historical depictions, such as Buondelmonti's drawing of Constantinople in his *Liber insularum archipelagi*, and also by the Byzantine harbour of Thessaloniki⁹⁹. In fact, the same building technique can also be seen in photographs of the other harbour sites along the coast of the Sea of Marmara, the Harbour

91 The re-use of construction material from preceding harbour installations is also suggested for the harbour of Thessaloniki: Leivadoti, Thessaloniki 21.

92 Ercan, Yenikapı 135; Külzer, Harbour of Theodosius 41, in this volume.

93 Of course, one should not ignore the impact of the decline in population due to famine and pestilence: Stathakopoulos, Famine and Pestilence.

94 Heher, Harbour of Julian 52-53, in this volume.

95 Ginalis, Byzantine Ports 238-239; Trombley, Boeotia 991-992. Contrary: Koder/Hild, Hellas und Thessalia; Lillie, »Thrakien« und »Thrakiesion« 35-41; Haldon, Palgrave Atlas. – For the Arab conquests see: Kaegi, Early Islamic Conquests.

96 Effenberger, Pictorial Sources 20 fig. 1, in this volume; Ercan, Yenikapı 62. 92. 96. 118; Kocabaş, Theodosian Harbour 32; Külzer, Theodosius-Hafen 41-42;

Magdalino, Maritime Neighbourhoods 215. Although it is beyond the scope of this article, it is important to note that at an elevation nearly equal to the later kilns, a small church was constructed to the southeast of the jetty possibly after the 10th or 11th c. For the archaeological analysis of the church and the theory about its abandonment in the 13th c., see Gökçay, Architectural Finds 166-180; Ercan, Yenikapı 80-82; Marinis, Architecture 208.

97 Berger, Langa Bostani figs 1-4; http://www.byzantium1200.com/port_t.html (5 February 2020).

98 Janin, Constantinople Map 1; Mango, Shoreline fig. 1.

99 Effenberger, Pictorial Sources figs 1-2, in this volume; Leivadoti, Thessaloniki Σχεδ. 2.

of Julian/Sophia, the Boukoleon harbour and the mooring areas at Hebdomon (modern Bakırköy) and Brachialion (see below)¹⁰⁰.

Interestingly, all the harbours along the Sea of Marmara coast obviously possessed one single breakwater coming from the west. Exactly the same orientation of entrances is also shown by the siting of the modern harbours. All the harbour sites facing the Sea of Marmara possess just one single breakwater coming from the west, thus forming an eastern harbour entrance. With a southeast to east direction, they enclose and protect the harbour basins against the prevailing south-western and southern winds¹⁰¹. At the same time, the south-eastern to eastern currents must have made entrance into the harbour basins easier and also acted as a natural measure against their siltation during the Byzantine era.

Further Remarks on the Physical Remains of the Harbours of Constantinople and its Hinterland

Regarding the physical remains of harbour installations at other coastal sites in Constantinople, archaeological investigations were recently carried out at the harbours of Chalcedon at Kadıköy and that of Neorion/Prosporon¹⁰² at Sirkeci¹⁰³. While the salvage excavation at Kadıköy supposedly revealed the remains of a jetty using a hydraulic concrete base similar to that found at the Harbour of Theodosius and Chrysopolis, a number of architectural elements and plenty of pottery finds belonging to the Early to Late Byzantine periods were brought to light at Sirkeci. These architectural elements comprise wooden structures, possibly connected with the harbour's surrounding warehouse facilities¹⁰⁴.

Within the archaeological context of the wider harbour bay, an eyewitness report by Charles Marling from 1906 provides vague but important information on further harbour features within the Neorion/Prosporon Harbour¹⁰⁵. According to his letter to Arthur B. Skinner, he observed a row of stone blocks of around 1 m in dimension during rescue excavations at the new post office south-east of the Ottoman Spice Bazaar, which he interpreted as a quay structure¹⁰⁶. The method of construction, the use of building material and geological and ceramic evidence led Dark to support an Early Byzantine (fourth to seventh centuries) date¹⁰⁷. In fact, considering the characteristics of quay structures at other harbour

sites, an earlier date of the Roman, if not even Hellenistic, period may equally be suggested.

Similar data has been revealed by the Sirkeci Station Rescue Excavation between 2004 and 2012. Just as Dark suggested for the site at the new post office, a large building complex of the fifth to seventh centuries was documented at the eastern shaft of the Sirkeci Metro Station (north of the train station)¹⁰⁸. After removing the Early Byzantine strata, however, wooden structures and so-called »waterfront stones« were revealed¹⁰⁹. Together with wooden ships remains, these seem to belong to the harbour facility of the Prosporon harbour itself. Unfortunately, no further data has yet been published, which could provide more detailed information. Only a single photograph offers a first glimpse of the so-called »waterfront stones« after all.

It shows a semi-circular three-levelled row of stones, which can be identified as a quayside (fig. 41). Each row is offset by around 20 cm and consist of roughly 1.20 m × 0.90 m large ashlar blocks. Among the almost uniform rectangular ashlar, at least two stone blocks possess lifting bosses for their placement on site. Such construction measures are mostly known from harbour sites of the Hellenistic period like the harbour of Amathus on Cyprus¹¹⁰. Archaeological finds dating as early as the seventh century BC have indeed been documented during the rescue excavation. However, since the quay line only includes a very small number of stone blocks with lifting bosses, which also seem to have been placed randomly, it can be assumed that these form reused material from a possible earlier harbour installation. The fact that metal clamps characteristic for classical antiquity are missing as well further supports a post-Hellenistic date. On the other hand, no mortar binding material seems to have been used either, which gives the quay construction an isodomic character. As such, given the use of hydraulic concrete for the Early Byzantine harbour facilities at Yenikapı, a date to the Roman period may rather be suggested. This is also indicated by its architectural characteristics, with the three-stepped construction method finding parallels both in Hellenistic and Roman harbours such as Mytilene, Leptis Magna or the river quay of the Tiber in Rome¹¹¹. Finally, remains of two marble columns can be observed just next to the quayside. Although they seem to be of later, possibly even Early Byzantine date, they appear to be aligned with the quay. As such, the columns either belonged to an associated building, or formed mooring facilities for berthing ships.

100 Heher, Harbour of Julian 54. 63-64, in this volume; Heher, Bukoleon 67 fig. 5, in this volume; Simeonov, Hebdomon 127, in this volume; Simeonov, Brachialion 139, in this volume.

101 Heher, Boukoleonhafen 133.

102 The division of the wider bay along the northern coast of the peninsula and hence the exact location and separation of the two harbours is still uncertain: Kislinger, Neorion, in this volume; Dark, Harbours 153-154; Dark, Post Office Site 317.

103 Kızıltan, Yenikapı, Sirkeci and Üsküdar 15-16. The archaeological works at Kadıköy have not yet been published.

104 See Mundell Mango, Commercial Map 200-201 fig. 4; Kislinger, Neorion 94 n. 42, in this volume.

105 Kislinger, Neorion 93. 95 fig. 2; Dark, Post Office Site 315.

106 Unfortunately, the archaeological structure has never been published.

107 Dark, Post Office Site 317-318.

108 Gür, Rescue Excavations 17; Gür/Emre, Sirkeci 32-33.

109 The architectural interpretation of the remains will be subject of examination by K. Gür within the scope of an ongoing doctoral dissertation at Istanbul Technical University. For preliminary results, see Gür, Rescue Excavations 16-17; Gür/Emre, Sirkeci 32-33; Kızıltan, İstanbul Kazıları 364.

110 Empereur et al., Amathus 62-65.

111 Blackman, Ancient Harbours II 203 fig. 11; Ginalis, Byzantine Ports 34. 40; Theodoulou/Kourtzellis, Lesbos Underwater 97. 99.

Whether the harbour structures unearthed at the Sirkeci Station and those observed by Charles Marling during the rescue excavations at the new post office belong to the same harbour installation remains unclear. Considering the almost identical dimensions given for the stone blocks, it is quite feasible to assume it though. Far more convincing that the two sites may actually reflect parts of the eastern and western areas of one and the same infrastructure is their distance of only 300m as well as their identical height in relation to the shoreline¹¹².

However, it is entirely possible that one belongs to the Neorion and the other to the Proosphorion harbour as well. Whatsoever, permanent harbour infrastructures at the Neorion/Proosphorion Harbour can be traced back at least to Hellenistic times with the current facility most likely representing the Roman phase by reusing material from the earlier harbour installation. A continuous use of both quay lines up to the Byzantine era has yet to be ascertained but seems likely. In any event, as one of the most important and most frequented harbours of Constantinople, the detailed analysis of the harbour remains of Neorion/Proosphorion as well as that of Chalcedon will provide new ground-breaking information for harbour studies of the pre-Byzantine, Early Byzantine and Late Byzantine periods.

For the rest of the Constantinopolitan harbours, information is even more limited. In the case of the Harbour of Julian/Sophia, the sources of information comprise only sporadic and rough drawings¹¹³. For the Harbour of Julian/Sophia (fig. 33), as well as for the mooring areas at Hebdomon at Bakırköy (fig. 42) and Brachialion at Mermer Kule (fig. 43), one can rely at least on a few photographs. Nevertheless, the drawings and photographs generally provide only rough impressions of the various harbour infrastructures. The only exceptions are the harbours of the Boukoleon Palace and Chrysopolis at Üsküdar.

The Boukoleon Harbour

The intensive studies of the Boukoleon Palace and its surrounding sea walls entailed a more detailed photographic documentation of at least part of its harbour facilities (fig. 44). As for the latter, Heher rightly assumes that, with the extension of the Great Palace towards the south, the first mooring facilities must have existed as early as the time of Emperor Justinian I¹¹⁴. This is supported by Procopius' reference to the anchoring of Belisarius in front of the palace, as well as by

ceramic finds and the sea walls in this section, which show a construction phase of the sixth century¹¹⁵. The photographic documentation of the harbour mainly includes a quayside at the eastern end of the harbour (fig. 45) that runs in front of Justinian's house (leading from the grand staircase to the lighthouse tower) (fig. 46). Fortunately, the high quality of Mamboury and Wiegand's photographic record still allows a clear recognition of the quay structure. Accordingly, it is clearly visible that it consisted of massive limestone ashlar and large marble blocks (0.6m × 0.7m), according to Mamboury and Wiegand having a total width of at least 6m and at the grand staircase even up to 12m¹¹⁶.

On closer examination, it can be observed that not all of the blocks show an identical orientation. While the quay is seemingly constructed of rows of east-west-running stone blocks, north-south-running rows of ashlar were inserted at regular intervals (figs 47-48). This gives the impression of a chamber system, among others strongly resembling the quaysides of the harbours of Anthedon and Larymna (see below)¹¹⁷. The chambers must have been filled with a type of hydraulic concrete, consisting of a conglomerate of rubble stones and mortar with inclusions of coarse ceramic. These were subsequently covered with the limestone ashlar blocks and with marble blocks around the grand staircase, as this has been nicely reconstructed by Helbert (fig. 49)¹¹⁸. Anna Komnene claimed that the harbour had been built using mortared fieldstones and marble blocks¹¹⁹. This is also indicated by Mamboury and Wiegand's report of large limestone blocks, quarry stones and brick mortar¹²⁰. Recent core drillings in front of Justinian's house and the southeast corner of the grand staircase further attested this construction method¹²¹. At a depth of approximately 3.75-4.8m, the latter revealed an artificial conglomerate of clayey sand with brick and stone, as well as marble fragments. This is followed by a stratum of mudstone, made of dark grey stones between 4.8m and 6.9m, and finally a layer of brown-grey gravel/rubble stones and clayey sand with brick inclusions down to a depth of 10m. While the top layer (approximately 1m thick) obviously represents the cover plates of ashlar and marble blocks with their mortar binding, the following layers most likely form the compact mortar filling of the quay chambers.

Similar structural remains have also been documented around 50m east of the so-called Tower of Belisarius and 40m south of the façade of the western palace section (fig. 46). Mamboury and Wiegand referred to an »isolated foundation of quarry stones with brick mortar, followed by

112 Kislinger, Neorion 93 fig. 2, in this volume.

113 See Heher, Harbour of Julian figs 2. 7. 9, in this volume.

114 See Heher, Harbour of the Bukoleon 70-71; Heher, Boukoleonhafen 123. 125.

115 Prokopios, Bella III 12. 2 (l 365 Haury/Wirth); Heher, Harbour of the Boukoleon 71, in this volume; Özgümüş, Bukoleon 66.

116 Mamboury/Wiegand, Kaiserpaläste 13.

117 Ginalis, Anthedon; Schäfer, Larymna 533-537 fig. 14; Schläger/Blackman/Schäfer, Anthedon 36 figs 9. 14.

118 The marble blocks have most likely been re-used, as this is the case also for the use of marble *spolia* for the construction of the sea wall's lower section: Mango, Boukoleon 47.

119 Heher, Boukoleonhafen 133; Heher, Harbour of the Bukoleon 80.

120 Mamboury/Wiegand, Kaiserpaläste 6. 13.

121 Bolognesi Recchi Franceschini, Monumental Itinerary 55-56.

four layers of bricks», which they interpreted as the foundation of the eponymous animal statue »Boukoleon«¹²². Heher rightly doubts this interpretation and in turn proposes an identification as a quay line belonging to a large ceremonial square. Alternatively, he suggests that it may have been part of a breakwater or mole construction¹²³.

Given the description of the structural remains, the feature obviously constituted a hydraulic concrete foundation with a brick superstructure. As such, it can indeed be identified as the architectural element of some sort of harbour infrastructure. The proposed existence of a quay-like facility that featured a ceremonial area is therefore conceivable. However, given the location of the remains, it seems more likely to assume a mole construction on the inner side of a breakwater, which enclosed the harbour basin coming from the western sea wall or the Tower of Belisar¹²⁴. This would not only explain Buondelmonti's drawing of an enclosed harbour basin¹²⁵, but also agree with Nicetas Choniates's statement »...περὶ τὰς ἀκτὰς σαλευῖον καὶ τοὺς προβλήτας, οἱ τὸ παράλον τεῖχος τῆς πόλεως διελήφασιν, τὰς τῶν κυμάτων ἀποθραύοντες ἐμβολὰς«¹²⁶.

Concerning its superstructure, it seems that the brickwork rests directly on the concrete foundation. As such and in contrast to the eastern jetty at the Harbour of Theodosius, we might find here a continuation of the Roman tradition combining concrete with brick for the construction of an arched mole structure. Given the arches or blind arcades at the western sea wall, the existence of an arched mole seems not too far-fetched. Whether the latter formed just blind arcades as decorative elements or proper arches remains unknown. In fact, in order to find a way to act against the problem of siltation in a small harbour like the harbour of the Boukoleon Palace, such a building measure would have certainly made sense. While the breakwater substructure reduced the force of the waves and hence broke the strength of the sea, it allowed the waves to break over it. Passing through the arches of the mole, these subsequently created currents within the harbour basin¹²⁷.

As for the dating of the quay construction at the eastern end of the harbour, the chamber system of intersecting lateral and longitudinal walls finds comparison in the eastern jetty at the Harbour of Theodosius, as well as in quaysides and jetty or mole constructions of the seventh to eighth centuries at a series of harbour sites, such as Anthedon, Larymna, Theologos, Aegina, Thessalian Thebes and Lechaion¹²⁸. Consequently,

the quayside at the Boukoleon harbour seems to again represent Middle Byzantine harbour architecture.

A Middle Byzantine date for the harbour has also been suggested by Mango and Heher¹²⁹. As opposed to Heher's assumption that the quayside could only have been constructed after the third and last construction phase of the sea wall during the ninth to tenth centuries, a date around the turn of the seventh to the eighth century should rather be accepted. This matches perfectly with the erection of the second construction phase of the sea wall and the Tower of Belisar, as well as that of the grand staircase as a monumental access to the palace during the reign of Justinian II (685-695 and 705-711) or Tiberius III (698-705)¹³⁰. An additional 3.2m was added to the 6m wide sea wall during the third construction phase, meaning that it can be assumed that the quayside originally had a total width of 9.2m. Unsurprisingly, this coincides exactly with the width of the seventh-to-eighth-century-dated southern quay at the harbour of Anthedon and the eastern quayside at Larymna (for which a width of 4.6m is given for a single chamber)¹³¹. Accordingly, the quayside would originally have had a double-chamber construction.

As a result, Mango is right in assuming that an independent palace harbour approximately 1.45ha in size, with a harbour basin of up to 250m long and 40m wide, intended for private imperial use, was constructed, or simply altered to its final shape, at some point after the sixth century and before the ninth century¹³². Based on the analysis of the architectural remains of the various harbour features, a slightly different picture than that presented by Helbert (fig. 50) can be suggested: a significant difference may be proposed for the western harbour basin. While the existence of a quayside along the entire façade of the Boukoleon Palace can indeed be assumed, the harbour cannot have reached as far south as the Tower of Belisar. The breakwater, with its mole superstructure, should rather be considered as an extension of the western sea wall. As such, it can be doubted whether the palace harbour ever featured a supposed ceremonial square.

Accordingly, it can be suggested that, with the new harbour situation in the Middle Byzantine period, the main embarkation and disembarkation area even shifted from the western to the eastern harbour basin. This is supported by the massive quayside in front of Justinian's house (figs 47-48) and by the change of the access point to the Boukoleon Palace. While the first mooring facilities were accessible through a 2.7m wide gate at the western harbour basin during the

122 Heher, Boukoleonhafen 134; Mamboury/Wiegand, Kaiserpaläste 5, tab. VII, XXXV.

123 See Heher, Harbour of the Bukoleon 82, in this volume; Heher, Boukoleonhafen 135.

124 Even though the structural remains could have easily belonged to a jetty as well, such identification has to be ignored. Even with a calculated quayside of around 9m along the eastern harbour side, the distance of at least 40m to the Tower of Belisar is far too great for a jetty in this harbour.

125 Effenberger, Pictorial Sources fig. 1, in this volume.

126 Niketas Choniates, Historia 129 (van Dieten); Heher, Harbour of the Bukoleon 80.

127 Ginalis, Byzantine Ports 31.

128 Ginalis, Anthedon; Ginalis, Byzantine Ports 190; Knoblauch, Ägina 73; Paris, Lechaion 10-11; Rothaus, Lechaion 295-296; Schäfer, Larymna 533-537 fig. 14; Schläger/Blackman/Schäfer, Anthedon 36 figs 9, 14; Triantafyllidis/Koutsoumba, Aegina 169.

129 See Heher, Harbour of the Bukoleon 79, in this volume; Mango, Boukoleon 47.

130 Bolognesi Recchi Franceschini, Seventh Survey 137-138; Heher, Boukoleonhafen 126, 129; Heher, Harbour of the Bukoleon 73; Mango, Boukoleon 47.

131 Ginalis, Anthedon; Schäfer, Larymna 533.

132 Heher, Boukoleonhafen 132-135; Mango, Boukoleon 47.

reign of Justinian I, in correspondence with the alteration of the harbour at the turn of the seventh century to the eighth century the construction of the second phase of the sea wall shifted the gate to the eastern harbour basin¹³³. This seems also to have been taken into account in the later construction of the grand staircase, which shows a large eastern gate (figs 44b-d. 51)¹³⁴.

The Harbour of Chrysopolis at Üsküdar

Originally forming a deep sheltered bay, the harbour site of Chrysopolis at Üsküdar was used as a strategic interstation for the shipping lane through the Bosphorus since classical antiquity¹³⁵. Alongside the coastal sites of Chalcedon at Kadıköy, Hieria (Hieron) and Eutropiu Limen at Kalamış bay, it additionally acted as an important ferry harbour linking Constantinople with its Asian coast opposite. Furthermore, it formed a so-called *Epineion*¹³⁶ for Bithynia from the Roman Imperial period onwards and especially during the Byzantine era¹³⁷. Hence, it is not surprising that again plenty of archaeological evidence of harbour activities were brought to light during the Marmaray-Metro Construction Project between 2004 and 2008¹³⁸. The salvage excavations revealed, not only a large number of ceramic artefacts, marble objects, stone anchors and a variety of architectural elements ranging from pre-Classical times to the Ottoman period, but also various building remains belonging to harbour infrastructures¹³⁹. These include a breakwater with a possible mole construction¹⁴⁰, jetties, wooden pier remains and a potential quayside¹⁴¹. The harbour situation is again quite complex due to the strong alteration of the coastline. The harbour site of Chrysopolis must have shifted quite frequently through time as a result of the constant regression of the bay due to siltation from the estuaries of the rivers Bülbül and Çavuş¹⁴². Therefore, it must be assumed that the harbour sites of the Archaic, Classical, Roman and Byzantine periods are situated in different locations. Similar harbour situations are also documented at other coastal sites in Asia Minor such as Ephesus or Clazomenae¹⁴³.

As for the unearthed harbour structures, the most striking features again constitute wooden remains, which belong to

various sections of pier constructions, as well as to jetty formworks or caissons. Although the wooden pier structures could not be entirely excavated, remains with a dimension of 8.4 x 4 m and even as large as 8.2 x 5.25 m have been uncovered¹⁴⁴. Unlike the equivalent remains documented at the Harbour of Theodosius at Yenikapı, the piers do not consist of vertical piles only. For the first time, horizontal grid systems with a floor level have also been preserved, which provide an unique insight into the engineering details of pier constructions as shown for example by the depiction of Gregory of Nazianzus' departure from Constantinople dated to the eleventh century (fig. 52)¹⁴⁵. The horizontal grid consists of 0.25 m wide and 5.2 m long carved wooden logs set in a grid on top of each other and pegged on the vertical piles driven into the ground (fig. 53). A mortise-and-tenon joinery system was applied for the fastening of the wooden elements¹⁴⁶. One pier section indicates that the uppermost layer of logs corresponds to the orientation of the pier. This last layer of logs was subsequently covered with planks, thus set perpendicular to the orientation of the pier (fig. 54). As for the construction material itself, it seems that the timbers were fired and pitched in order to provide longer resistance to deterioration in the maritime environment¹⁴⁷.

The pier sections possess a roughly northwest-southeast orientation. Interestingly, its various parts show a different river sediment infill. While the north-western section is filled with pure sand, at the south-eastern end boulders can also be found. Whether the latter derive from the siltation process or whether they were set in order to reinforce the pier in connection to another harbour structure and support it against environmental impact, respectively, remains to be clarified. Corresponding to an alignment perpendicular to the north-west oriented shoreline, it points to the fact that at the time of the construction of the piers, the coastline must have considerably shifted (up to 1 km) towards the north-west opening of the deep bay¹⁴⁸.

This shift of the coastline also altered its physical condition¹⁴⁹. Thus, the change from a deep sheltered bay to an exposed open shoreline eventually required building measures for the protection of the harbour site. Accordingly, a breakwater had been erected. Like the breakwater at the Harbour of Theodosius (see above), the composition consists of large

133 Heher, Boukoleonhafen 129; Heher, Harbour of the Bukoleon 75-77 fig. 21.

134 Mamboury/Wiegand, Kaiserpaläste tab. XXIII.

135 Karagöz, Khrysopolis Liman 401. 404. 414; Karagöz, Khrysopolis – Scutari 3 fig. 7; Karagöz, Excavations 86.

136 During classical antiquity, the epineion (ἐπινεῖον) constituted a harbour area outside its associated city, but yet forming a part of it. During the Roman Imperial period, these so-called out-ports developed into independent coastal sites, often taking over the role and significance of their preceding ancient cities. The latest by the Early Byzantine period *epineia* formed crucial coastal centres, which acted as vital economic hubs and linking stations for the settlement network within a certain province: Ginalis, Byzantine Ports 15. 250-252.

137 Belke, Bithynien und Hellespont 296-298; Belke, Gates 166, in this volume; Karagöz, Khrysopolis Liman 406. 412.

138 Belke, Gates 165; Karagöz, Excavations 85; Kızıltan, Yenikapı, Sirkeci und Üsküdar 15.

139 Karagöz, Excavations 89-101.

140 A mole forms a masonry structure along the inner side of the breakwater. This increases the mooring space for the loading and unloading of ships within the harbour basin in order to extend the commercial and traffic-related functions of the quay: Ginalis, Byzantine Ports 26. 30; Feuser, Hafenstädte 229.

141 Karagöz, Khrysopolis Liman 402. 408-414; Karagöz, Chrysopolis 46-49. 52.

142 Belke, Gates 165-166; Karagöz, Khrysopolis – Scutari fig. 7; Karagöz, Excavations 101.

143 Ersoy, Clazomenae 2-6; Steskal, Ephesos 327.

144 Karagöz, Khrysopolis Liman 408-410; Karagöz, Yapı 422.

145 Cod. Taphou 14, f. 265; Aidoni et al., Seaports 21 fig. 5.

146 Karagöz, Chrysopolis 49-50; Karagöz, Excavations 101.

147 Karagöz, Yapı 422.

148 Belke, Gates 165; Karagöz, Chrysopolis 46; Karagöz, Khrysopolis – Scutari 5.

149 Physical conditions indicate the consistence and configuration of a specific coastline, which is affected by the predominating waves, currents, tides and winds: Ginalis, Byzantine Ports 9; Karmon, Components 1.

quarry stones piled up on top of an internal core of rubble material¹⁵⁰. In order to provide the construction with stability against strong winds and absorb the force of the waves to prevent a possible undermining, the structure shows an inclination towards the sea (fig. 55). In contrast to the sloping outer part of the breakwater, the inner part drops abruptly with a steep vertical angle. The upper part of the breakwater is flattened, consisting of cut stones.

A row of limestone blocks ranging in size from 0.5-2.9 m × 1-2 m × 0.25-0.9 m, with inserted *spolia* of marble column fragments from the fifth to sixth centuries, may also be allocated to a mole construction at the steep-angled inner edge of a breakwater (fig. 56). The existence of a mole is further supported by traces of intensive loading and unloading activities of traded goods attested to by numerous amphora fragments¹⁵¹. After removing the limestone ashlar blocks, almost completely preserved wooden formworks were revealed, forming the foundation of the mole construction (fig. 16). These caissons are 5.25 m long and 1.8 m wide and filled with a rough conglomerate of quarry stones and mortar, which most likely forms a certain type of hydraulic concrete composition¹⁵². According to the latest publications of the excavation results that refer to studies on the analysis of the mortar, its composition can allegedly be identified as the pozzolanic mortar described by Vitruvius and Procopius¹⁵³. Based on Brandon's definition¹⁵⁴, it seems more likely that this material no longer represents »Roman marine concrete«, but rather follows Roman harbour construction techniques by using a similar reacting aggregate. Consequently, it has further to be examined whether the concrete mixture indeed comprises Roman pozzolanic mortar or any other volcanic ash or aggregate.

If the extent of 13 m in east-west direction and 7 m in north-south direction mentioned by Karagöz is to be attributed to the size of the mole construction and its breakwater substructure¹⁵⁵, then the dimension can be considered to be relatively small. However, it seems to have been sufficient for the demands of the harbour and to keep it operational for centuries. Concerning the functional efficiency, waves must have been able to break over the structure in order to counteract the constant siltation process from the rivers by creating controlled currents within the harbour basin. As such, the breakwater must have protruded from the surface of the sea. Level measures between +0.48 and +0.71 m indeed give that impression. Consequently, similar to the breakwater at

the Theodosian harbour, it can again be identified as of type »Mound Breakwater«.

As for the dating of the harbour site, in contrast to the large time span of the archaeological finds, the earliest harbour facilities are not to be dated before the Roman Imperial period and most likely belong to Early Byzantine times, as attested by the wooden piers¹⁵⁶. If any permanent harbour structures of the Classical to Hellenistic periods ever existed, then they must have been situated further inland. In contrast to the general understanding of the harbour situation¹⁵⁷, which is similar to the quayside in the western basin of the Harbour of Theodosius (see above), any Roman coastal facilities must also be located slightly further southeast. These may again have at least partly been re-used for any Early Byzantine harbour works. Unlike Procopius' detailed description of construction works at the harbour of Eutropiu Limen and possibly also at Hiereia during the sixth century¹⁵⁸, no such building activities at Chrysopolis are confirmed by any Early Byzantine sources.

The building material, the marble column *spolia* of the mole and the wooden piers located farther to the southeast indicate that additional harbour infrastructures must have existed in the Early Byzantine period. This is supported by a large number of ceramic artefacts such as oil lamps or *Unguentaria*, all dating to the fifth to sixth centuries. In fact, these may again belong to the extensive building activities under the reign of Emperor Justinian I or his immediate predecessors. Indeed, a considerable amount of African Red Slip Ware (ARS) shows trading connections to North African markets following its re-conquest and annexation in the 530s¹⁵⁹.

After the Early Byzantine period, the harbour obviously suffered increasingly from constant siltation by river alluvium and other environmental impacts, such as earthquakes, or geopolitical events¹⁶⁰. This eventually led to the shift of the harbour area farther north-west, but when did the relocation of the harbour site and, accordingly, the erection of a new harbour installation take place? While the pottery (particularly the African Red Slip Ware) and the re-used *spolia* from the preceding Early Byzantine harbour site provide a *terminus post quem* of the sixth century, the construction of a large ecclesiastical complex on part of the supposed harbour basin in the twelfth to thirteenth centuries may be taken as a *terminus ante quem*¹⁶¹. On the one hand, it is not just to assume that it must have taken some time for the Early Byzantine harbour site to become unusable for ships, thus making relocation

150 Karagöz, Khrysopolis Liman 410; Karagöz, Chrysopolis 46.

151 Karagöz, Khrysopolis Liman 411; Karagöz, Chrysopolis 47; Karagöz, Khrysopolis – Scutari 3.

152 Karagöz, Khrysopolis Liman 413 fig. 13; Karagöz, Chrysopolis 47-48.

153 Vitruvius, *De Architectura* V. 12. 3 (129 Rose/Müller-Strübing); Prokopios, *De Aedificiis* I 11. 18-20 (IV 44 Haury/Wirth); Karagöz, Khrysopolis Liman 413; Karagöz, Chrysopolis 47.

154 Brandon et al., *Building for Eternity* 136.

155 Karagöz, Khrysopolis Liman 412; Karagöz, Chrysopolis 47. The dimension of the breakwater must have been slightly larger (presumably at least 15-20 m for the east-west and 10 m for the north-south extent) though.

156 Karagöz, Khrysopolis Liman 408; Karagöz, Chrysopolis 49.

157 Belke, *Gates* 166, in this volume; Karagöz, *Yapı* 421-423.

158 Prokopios, *De Aedificiis* I 11. 16-23 (IV 43-45 Haury/Wirth); Belke, *Gates* 167, 170, in this volume; Hohlfelder, *Building Harbours* 368-370.

159 Karagöz, Khrysopolis Liman 414; Karagöz, Chrysopolis 44-45.

160 Belke, *Gates* 166; Karagöz, Khrysopolis Liman 412. 414; Karagöz, Khrysopolis – Scutari 3.

161 For the archaeology of the structure see Karagöz, Chrysopolis 42-46; Karagöz, *Excavations* 98-101; for the possible identification of the complex see Belke, *Gates*, in this volume; Hellenkemper, *Politische Orte* 251-252.

necessary. On the other hand, the erection of ecclesiastical facilities and possibly further urban infrastructure on the harbour area also implies a long-completed siltation process and the consolidation of the soil. Therefore, the specified time period must be narrowed down to possibly between the end of the seventh or the beginning of the eighth and the end of the tenth centuries.

The discovery of a single mooring stone also supports this argument (fig. 57). The nicely perforated berthing device, which probably belonged to the frontal façade of a quayside, bears an inscription reading ΝΗΚΗΦΟΡΟΣ (Nikephoros)¹⁶². Whether the name refers to one of the three Byzantine emperors (Nicephorus I, Nicephorus II Phocas or Nicephorus III Botaneiates), to the Patriarch Nicephorus I, or to any other associated person remains certainly speculative. As Belke correctly points out, different written sources from the eighth to ninth centuries mention harbour activities, indicating the existence of a functioning harbour at Chrysopolis as early as the beginning of the eighth century¹⁶³. This allows a dating of the newly erected harbour to the early Middle Byzantine period, which, as already rightly suggested by Karagöz¹⁶⁴, makes an allocation to the reign of Emperor Nicephorus I (802-811) most likely.

Finally, despite its at least partial rededication around the twelfth century, like the Harbour of Theodosius, the continuous use of the harbour site of Chrysopolis far into the Late Byzantine period, and even beyond, can be seen here as well. This is verified by harbour construction works dating to as late as the Ottoman period. A 1.95 m wide jetty leading from the above-mentioned mole towards the sea can be counted among these late harbour works (see Kibotos Iskele fig. 16). Interestingly enough, the jetty again features a construction system using wooden chests filled with a conglomerate of mortar mixed with rubble stones, which resembles a certain hydraulic concrete mixture¹⁶⁵. The individual caissons are subdivided so as to form a double-box construction. Stone slabs or finely cut stone blocks, which are inserted into the surface of the compact mortar, form the final walking level. Based on dendrochronological analyses of the wooden formworks, the jetty can be dated to the seventeenth to eighteenth centuries¹⁶⁶. This reveals, not only the persistence of the harbour area, but also a continuation of ancient harbour construction techniques even up until early modern times.

The harbour area of Chrysopolis reveals intensive harbour activities with multiple construction phases. Although not as rich in material data as the Harbour of Theodosius (see above), archaeological investigation attests to an identical building history with harbour constructions dating to the end of the Roman Imperial (second to fourth centuries), the Early Byzantine (sixth century) and the Middle Byzantine periods (at the turn of the seventh century to the eighth century, or the

ninth century at the latest). Although the harbour continued throughout the Late Byzantine period, the construction of new harbour facilities has archaeologically been documented only for the Ottoman period so far.

Conclusions

Until recently, the physical harbour remains of Constantinople have attracted only marginal attention and, therefore, in contrast to historiographical and literary-based studies, have rarely been the subject of systematic investigations by archaeologists. Only with the Marmaray-Metro Construction Project and the Sirkeci Station Rescue Excavation – particularly thanks to the meticulous work conducted by the Istanbul Archaeological Museum – a new impulse to the field of harbour archaeology was given. Although the archaeological studies of the harbour sites of Constantinople are still fragmentary, a large spectrum of infrastructures has already been revealed. These include facilities such as quay structures, breakwaters and their mole or wall superstructures, as well as jetties and wooden piers, which provide a further *tessera* in the puzzling mosaic of Byzantine harbour engineering and architecture.

Based on the observations discussed in this paper, the harbour architecture of Byzantine Constantinople shows clear chronological stages that conform to the general historical picture of Constantinople presented in other chapters of this volume.

Accordingly, during the first centuries of the Byzantine Empire, the harbour architecture seems to be still clearly marked by Roman traditions. This is especially reflected in the implementation of wooden formworks, so-called chests (kibotos), filled with Roman marine concrete (a specific type of hydraulic concrete mixture consisting of a compact, symmetrical uniform and linear shaped composition of pozzolanic mortar, mixed with rubble stones and ceramics). In all likelihood connected with the extensive building programme during the reign of Justinian I, harbour activities, and thus harbour works (including the foundation of new harbour sites), reached their peak. However, this does not always go along with the construction of elaborate facilities, but rather with the re-use of building material from preceding harbour installations.

Additionally, a transition of harbour architecture must have taken place in the sixth century, during which Roman traditions were adapted to new geopolitical and social circumstances. Although still based on the principles of Roman and Early Byzantine engineering, eventually a new highly sophisticated harbour architecture evolved during the Middle Byzantine period. Both quay structures and jetties now consisted of longitudinal and lateral walls that formed a chamber

162 Karagöz, Chrysopolis Liman 414 fig. 14.

163 See Belke, Gates 166, in this volume.

164 Karagöz, Chrysopolis Liman 414.

165 Karagöz, Chrysopolis 48; Karagöz, Chrysopolis Liman 412-413.

166 Karagöz, Chrysopolis Liman 412; Kuniholm et al., Of Harbors and Trees 53.

system. This offered an equally robust building technique, but avoided expensive and possibly unavailable construction material and skilled labour for complex stone masonry. The chambers were subsequently again filled with a rough conglomerate of quarry stones and mortar. However, it is most likely that the hydraulic concrete composition no longer represented »Roman marine concrete«, but a new hydraulic concrete mixture, using a similar reacting aggregate.

In contrast to permanent harbour structures, wooden piers remained architecturally unchanged throughout the Byzantine era. Finally, the archaeological remains also reflect harbour works for the Late Byzantine period, but only to a limited extent. Besides wooden piers, these comprise often rough and seemingly provisional constructions that no longer reflect any representative infrastructure. Interestingly, by the use of a double-box construction method, Roman harbour engineering seems to have continued even into early modern times.

Summary / Zusammenfassung

Some Reflections on the Archaeology of the Late Antique and Byzantine Harbours of Constantinople

In 2004, one of the largest infrastructural projects ever conducted in Istanbul brought to light the first material evidence on the largest harbour of the Byzantine capital at Yenikapı district, notably the Theodosian harbour. Performed by the Istanbul Archaeological Museum, the archaeological excavations of a number of construction sites have among 37 shipwrecks of the Early to Late Byzantine periods also yielded evidence on Byzantine harbour architecture. Nevertheless, while the shipwrecks and small finds have received tremendous scholarly attention, the architecture and engineering techniques of the Byzantine harbour infrastructures have been largely omitted, despite their evident significance.

With these premises, this chapter presents the first comprehensive analysis of the archaeological evidence related to the harbours of Byzantine Constantinople with a particular focus on the study of their architectural characteristics. On the basis of the available material remains from the Theodosian harbour at Yenikapı, the harbour of Chrysopolis at Üsküdar and Neorion/Prosphorion at Sirkeci, the chapter aims to interpret various architectural features in the light of dendrochronological and archaeological evidence. In doing so, the authors try to contextualize the physical remains of these harbour sites and put them into a wider historical frame. This suggests a slightly alternative chronology, which shall initiate a scholarly debate on the development of harbour architecture and underwater construction techniques in Byzantium.

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Überlegungen zur Archäologie der spätantiken und byzantinischen Häfen von Konstantinopel

Im Jahr 2004 brachte eines der größten jemals in Istanbul durchgeführten Bauprojekte erstmals materielle Hinterlassenschaften verschiedener Hafengebiete zum Vorschein, so auch des Theodosioshafens im Bezirk Yenikapı. Die vom Archäologischen Museum Istanbul an einer Reihe von Baustellen durchgeführten Ausgrabungen haben neben 37 Schiffswracks der früh- bis spätbyzantinischen Epochen auch zahlreiche Bauelemente der Hafeneinrichtungen freigelegt, welche bedeutende Einblicke in die byzantinische Hafearchitektur liefern. Dennoch wurden, anders als bei den Wrackfunden und ihren Schiffsladungen, der Architektur und dem Ingenieurwesen der byzantinischen Hafeninfrastruktur bislang kaum wissenschaftliche Aufmerksamkeit geschenkt, trotz ihrer offensichtlichen Bedeutung.

Unter dieser Prämisse, versucht dieses Kapitel eine erste umfassende Analyse der archäologischen und architektonischen Befunde zu geben, wobei ein besonderer Schwerpunkt auf die historische Bauforschung der Häfen Konstantinopels gelegt wird. Auf der Grundlage der verfügbaren materiellen Hinterlassenschaft aus dem theodosianischen Hafen in Yenikapı, dem Hafen von Chrysopolis in Üsküdar und Neorion/Prosphorion in Sirkeci, werden verschiedene architektonische Merkmale im Lichte dendrochronologischer und archäologischer Untersuchungen interpretiert und in einen gesamthistorischen Kontext gestellt. Dabei ergeben sich neue Überlegungen und Datierungsvorschläge zu den besagten Hafenstandorten, welche eine wissenschaftliche Debatte über die Entwicklung byzantinischer Hafearchitektur in Zusammenhang mit historischen Bautechniken im maritimen Bereich einleiten mögen.

Fig. 1 Aerial view of the archaeological excavations at Yenikapı. – (From Kızıltan et al., *Istanbul Marmaray* 26).



Fig. 2 Yenikapı excavation site plan. – (Drawing A. Ercan after Kızıltan et al., *Istanbul Marmaray Site Plan*).



Fig. 3 Yenikapı harbour architectural plan. – (Drawing A. Ercan after Dirimtekin, Fetihden Plan 5-6, from Ercan, *Yenikapı* 104).

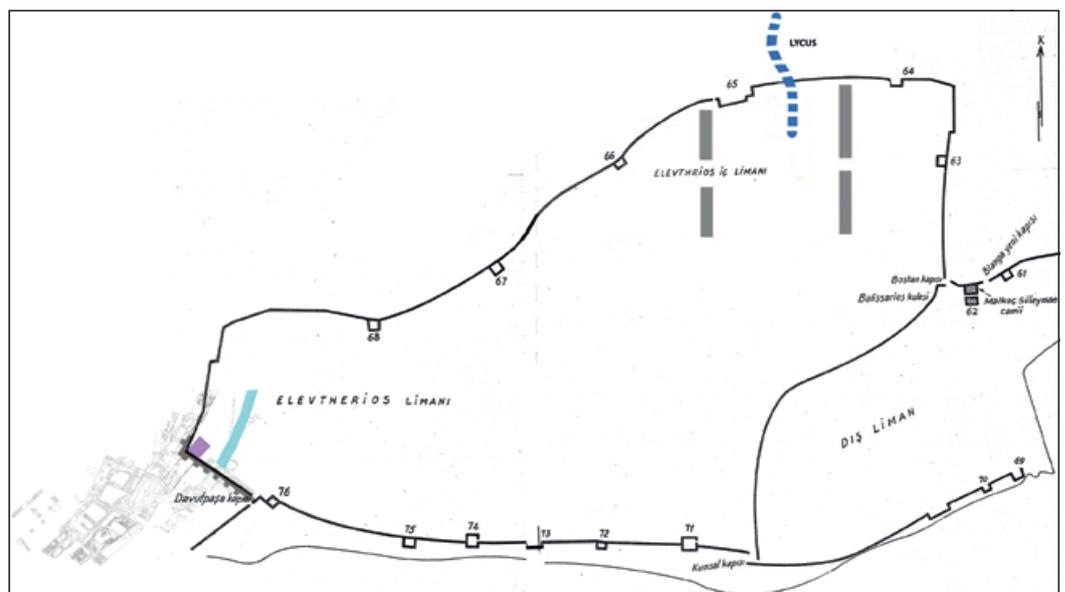




Fig. 4 Yenikapı, eastern jetty from the south. – (Photograph A. Ercan, from Ercan, Yenikapı 121).



Fig. 5 Northern facade of the eastern jetty, Yenikapı. – (Photograph A. Ercan, from Ercan, Yenikapı 163).



Fig. 6 Yenikapı, formwork of the eastern jetty, from the east. – (Photograph A. Ercan, from Ercan, Yenikapı 122).

Fig. 7 Yenikapı, concrete filling of the wooden formwork. – (Photograph A. Ercan, from Ercan, Yenikapı 122, detail).



Fig. 8 Yenikapı, *spolia* block from the southern facade. – (Photograph A. Ercan, IAM Archive).



Fig. 9 Yenikapı, *spolia* block from the eastern facade. – (Photograph A. Ercan, from Ercan, Yenikapı 164).





Fig. 10 Yenikapı, chamber filling of the eastern jetty. – (Photograph A. Ercan, from Ercan, Yenikapı 164).



Fig. 11 Yenikapı, eastern jetty looking south with remains of chamber filling. – (Photograph A. Ercan, from Ercan, Yenikapı 162).



Fig. 12 Yenikapı, grooves for metal clamps at eastern jetty. – (Photograph A. Ercan, from Ercan, Yenikapı 163).

Fig. 13 Yenikapı, stone slab covering of eastern jetty. – (Photograph A. Ercan, from Ercan, Yenikapı 162).



Fig. 14 Yenikapı, extension of the eastern jetty looking east. – (Photograph A. Ercan, IAM Archive).



Fig. 15 Yenikapı, wall extension of eastern jetty looking north. – (Photograph A. Ercan, from Ercan, Yenikapı 161).



Fig. 16 Harbour structures at Üsküdar. – (Photograph E. Engin, from Karagöz, Khrysolis Liman 413).



Fig. 17 Yenikapı, western jetty. – (Photograph A. Ercan, IAM Archive).

Fig. 18 Yenikapı, western jetty. – (Photograph A. Ercan, from Ercan, Yenikapı 162).

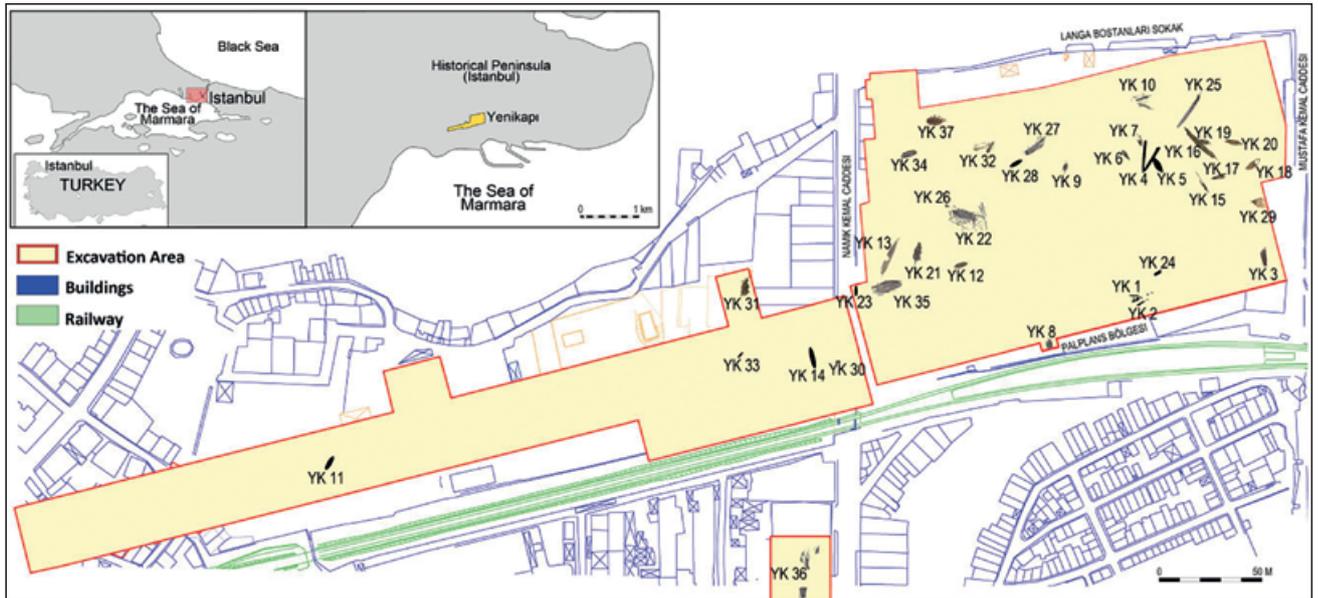


Fig. 19 Yenikapı, distribution of shipwrecks on site. – (Drawing IU Yenikapı Shipwrecks Project Archive, from Kocabaş, Byzantine-era Shipwrecks 10).

Fig. 20 Yenikapı, locations of shipwrecks in the eastern harbour basin. – (Drawing A. Ginalis after Kızıltan et al., Istanbul Marmaray Site Plan).

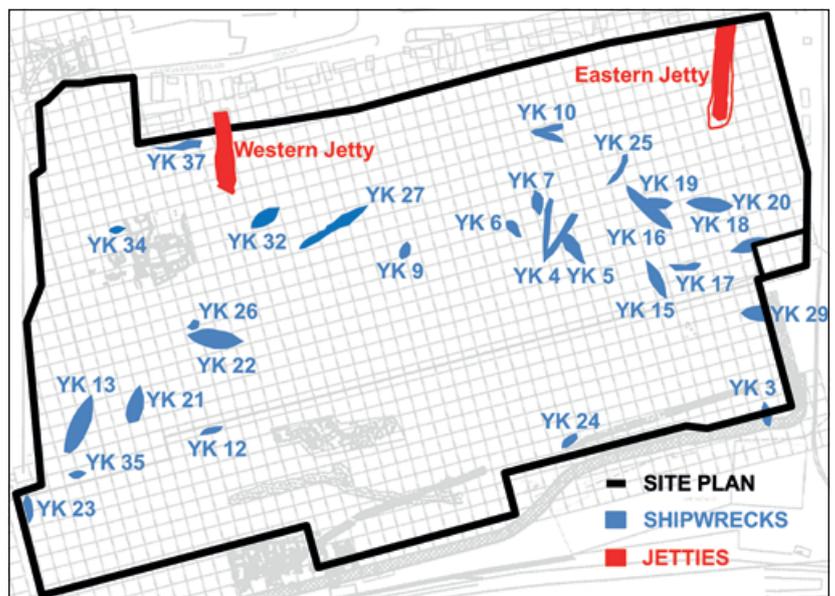




Fig. 21 Yenikapı, western jetty looking north-west. – (Photograph A. Ercan, from Ercan, Yenikapı 162).



Fig. 22 Yenikapı, architectural members found by the western jetty. – (From Kızıltan et al., Istanbul Marmaray 149).

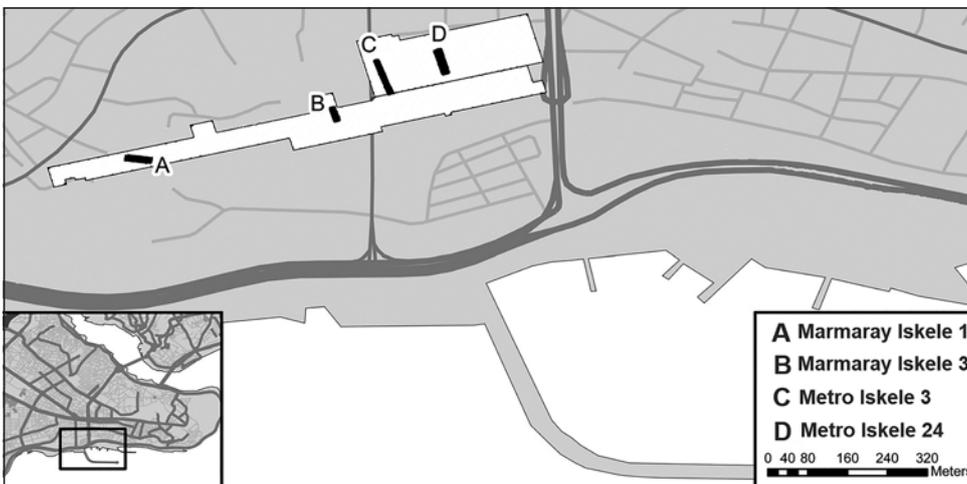


Fig. 23 Yenikapı, locations of wooden piers. – (Drawing A. Ginalis, after Pearson et al., Dendroarchaeology 3404).

Fig. 24 Yenikapı, wooden pier south of western jetty. – (Photograph A. Ercan, IAM Archive).



Fig. 25 Yenikapı, architectural remains on the western end of the harbour, looking south. – (Photograph B. Köşker, IAM Archive, from Gökçay, Architectural Finds 170).



Fig. 26 Yenikapı, quayside and sea wall on the western end of the harbour. – (Photograph B. Köşker, IAM Archive, from Ercan, Yenikapı 113).





Fig. 27 Yenikapı, quayside discovered at the western end. – (Photograph B. Köşker, IAM Archive, from Ercan, Yenikapı 120).



Fig. 28 Yenikapı, inscribed *spolia* block on the quayside. – (Photograph B. Köşker, IAM Archive).

Fig. 29 a-b Yenikapı, *spolia* block and pierced stone block on the quayside. – c Jetty with pier extension in the Light Rail System Area north-west of Yenikapı excavation site. – (a-b photographs B. Köşker, IAM Archive; c from Kızıltan, İstanbul Kazıları 360).





Fig. 30 Yenikapı, quayside, western end of the harbour looking west. – (Photograph B. Köşker, IAM Archive).



Fig. 31 Yenikapı, western end of the quayside. – (Photograph B. Köşker, IAM Archive).



Fig. 32 Yenikapı, row of holes for wooden beams. – (Photograph B. Köşker, IAM Archive, from Gökçay, Architectural Finds 171).

Fig. 33 The Harbour of Julian/Sophia. – (Photograph Sébah & Joaillier, <http://www.eskiistanbul.net>).



Fig. 34 Yenikapı, part of inner circuit wall enclosing the harbour basin. – (Photograph A. Ercan, from Ercan, Yenikapı 159).





Fig. 35 Yenikapı, group of stamped bricks scattered on the seabed. – (Photograph A. Ercan, from Ercan, Yenikapı 160).

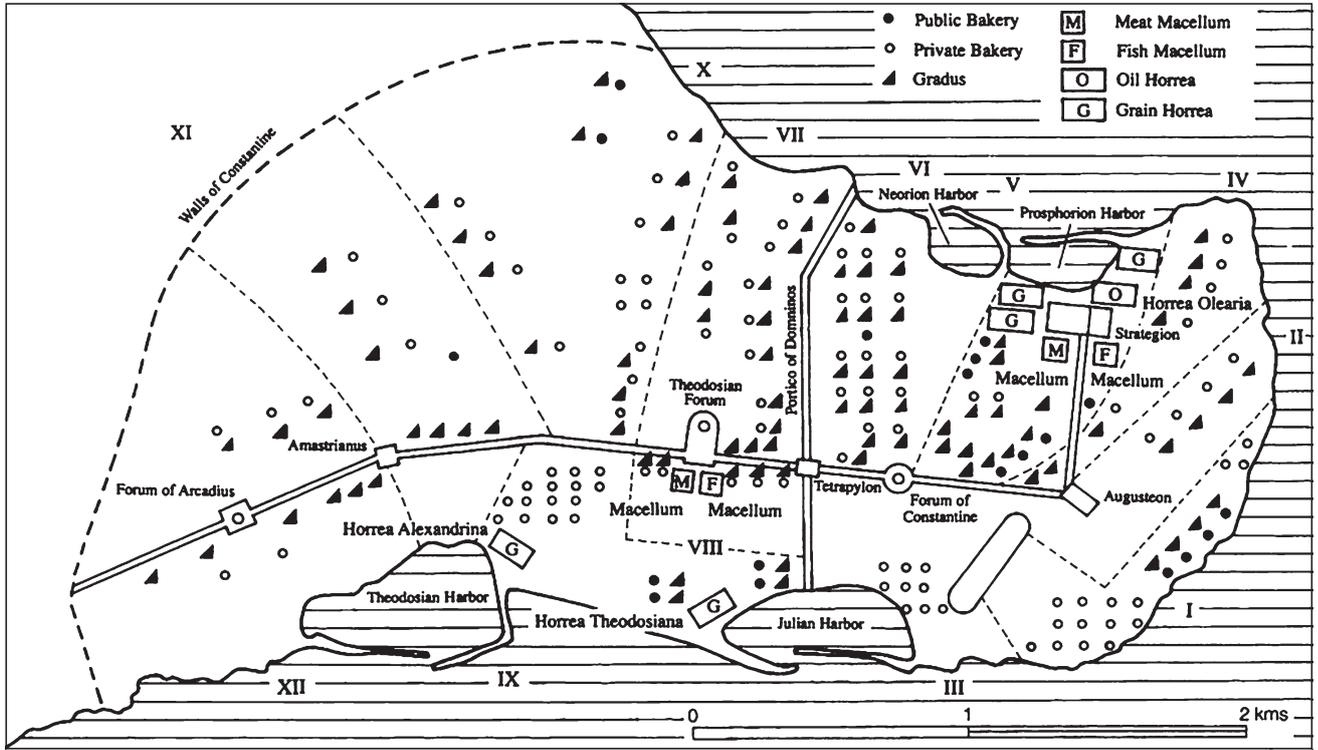


Fig. 36 Map of the distribution of commercial installations in the regions of Constantinople. – (Drawing A. Wilkins, from Mundell Mango, Commercial Map fig. 4).



Fig. 37 The so-called »Constantinian Wall«. – (From Kızıltan et al., Istanbul Marmaray 92).

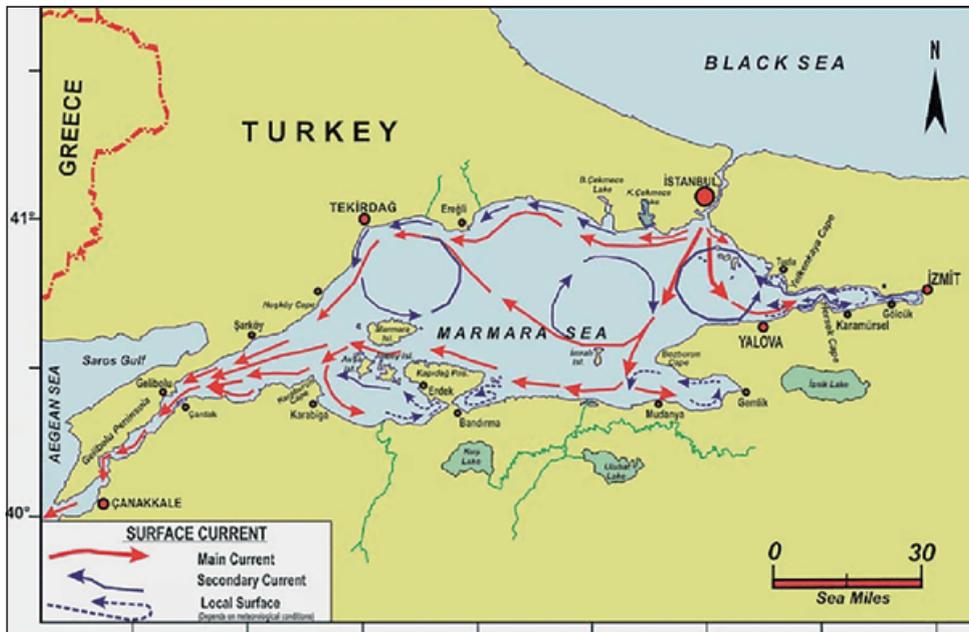


Fig. 38 Surface currents in the Sea of Marmara. – (Drawing M. Eryılmaz, from Meriç et al., Alien Benthic Foraminifers from Turkish Strait System. *UEGEO* 5/1, 2018, 70).



Fig. 39 Reconstruction of the Harbour of Theodosius (at Yenikapı). – (From Byzantium1200.com, © Byzantium 1200).



Fig. 40 Map of Constantinople highlighting the Harbour of Theodosius. – (Drawing A. Ginalis after Constantinople during the Byzantine period by Cplakidas, licensed under CC BY 3.0).

Fig. 41 Quay section at Sirkeci (East Shaft). – (From Kızıltan, *Istanbul Kazıları* 365).





Fig. 42 Remains of the harbour at Hebdomon. – (From Demangel, Contribution 46-47).



Fig. 43 Remains of harbour structures at Brachialion. – (Photograph Sébah & Joaillier, from <http://www.eskiistanbul.net>).



Fig. 44 Eastern harbour basin of the Harbour of the Boukoleon Palace. – (Photograph E. Mamboury / Th. Wiegand, from DAI Istanbul (D–DAI–IST–1007, D–DAI–IST–1015, D–DAI–IST–2777).

Fig. 45 Façade of the Harbour of the Boukoleon Palace, facing the harbour. – (Photograph E. Mamboury / Th. Wiegand, from DAI Istanbul (D–DAI–IST–1020).



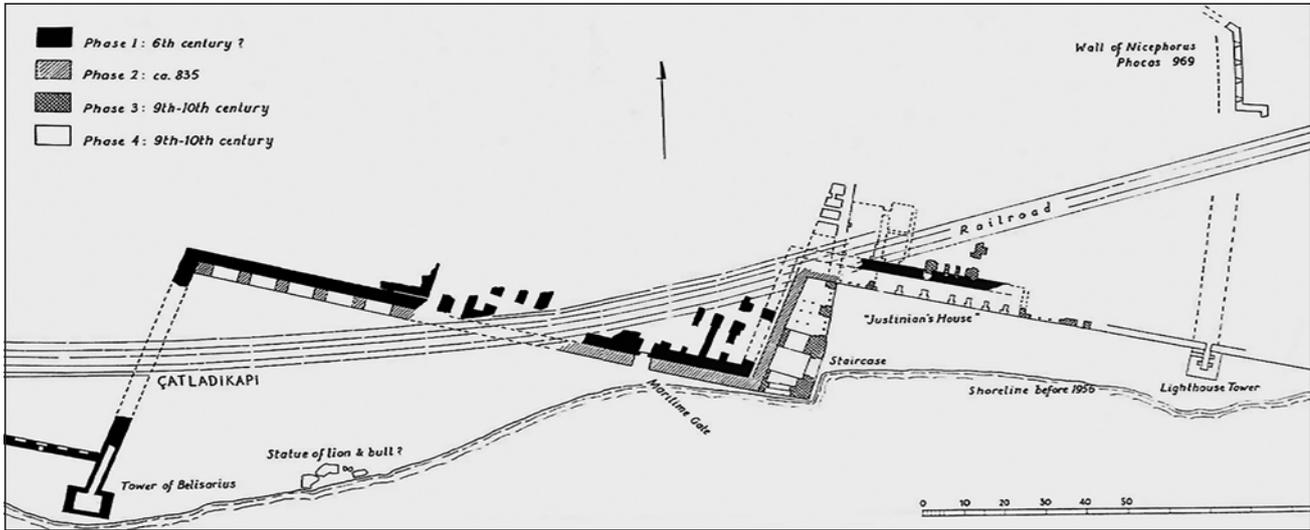


Fig. 46 Construction phases of the Harbour of the Boukoleon Palace. – (From Mango, Spolia 651).



Fig. 47 Quayside along the eastern harbour basin at Boukoleon. – (Photograph G. Berggren, from <http://www.eskiistanbul.net>).



Fig. 48 Chamber system applied at the quayside of the Harbour of the Boukoleon Palace. – (Photograph A. Ginalis after E. Mamboury / Th. Wiegand & G. Berggren, from DAI Istanbul (D-DAI-IST-1020) / <http://www.eskiistanbul.net>).

Fig. 49 Reconstruction of the quayside of the Harbour of the Boukoleon Palace. – (Drawing A. Helbert, from <http://www.antoine-helbert.com/fr/portfolio/annexe-work/byzance-scenes.html>, 16 September 2020).



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Fig. 50 Reconstruction of the Harbour of the Boukoleon Palace. – (Drawing A. Helbert, from <http://www.antoine-helbert.com/fr/portfolio/annexe-work/byzance-architecture.html>, 16 September 2020).



Fig. 51 Eastern gate of the grand staircase at the Harbour of the Boukoleon Palace. – (Photograph E. Mamboury / Th. Wiegand, from DAI Istanbul (D-DAI-IST-1003).

Fig. 52 Departure of Gregory of Nazianzus from a wooden pier construction. Codex Taphou 14. F. 265', Library of the Greek Orthodox Patriarchate Jerusalem. – (From Aidoni et al., Journeys 21).



Fig. 53 Remains of a wooden pier section at Üsküdar. – (Photograph Ş. Karagöz, from Karagöz, Chrysopolis 48).



Fig. 54 Wooden pier with cover planks at Üsküdar. – (Photograph Ş. Karagöz, from Karagöz, Marmaray-Üsküdar 104).



Fig. 55 Excavation site at Üsküdar. – (Photograph Ş. Karagöz, from Karagöz, Marmaray–Üsküdar 99).



Fig. 56 Mole construction at Üsküdar. – (Photograph E. Engin, from Karagöz, Khrysopolis Liman 403).



Fig. 57 Inscribed mooring stone at Üsküdar. – (Photograph D. Güner, from Karagöz, Khrysopolis Liman 414).

Harbours and Moorings of Constantinople

The Harbour of Theodosius in Yenikapı, İstanbul: A Harbour Area Through the Ages

In 2004, the implementation of the so-called *Marmaray* project started in İstanbul, after more than 20 years of intensive planning work by the Turkish Ministry of Transport (Ulaştırma, Denizcilik ve Haberleşme Bakanlığı) and the municipal administration (İstanbul Büyükşehir Belediyesi). The project was intended to expand the İstanbul railway system by establishing a new railway line, 76 km long, with 40 new stations, running close to the coast of the Propontis and partly below the Bosphorus. The new line was planned to connect the European and the Asian parts of the city in order to reduce the significant transport problems between the continents¹. However, the construction work had hardly begun, especially in the urban districts of Üsküdar on the Asian side and Sirkeci and Yenikapı on the Thracian side of İstanbul, when extensive archaeological structures were discovered². Their examination was essential; the Archaeological Museum İstanbul (İstanbul Arkeoloji Müzeleri) started the excavations as early as 2004. The site at Yenikapı, which we will focus on in this chapter, was initially excavated under the direction of Director İsmail

Karamut. In the second period, from 2009 until completion of fieldwork in 2013, his successor Director Zeynep Kızıltan was responsible for the excavations³ (fig. 1).

The scientific analysis of the excavated area of 58 000 m², the largest excavation in the İstanbul urban area, has yielded impressive results. Already in the uppermost layers, about 3 m above the current sea level, building structures were revealed that could be assigned to Ottoman workshops and craft enterprises. At a depth of more than 6 m below the sea level, traces of Neolithic settlements and graves came to the light, including footprints and utensils dating back to 8 500 years ago: they belong to the earliest human remains in eastern Thrace⁴. In the intervening layers, at a depth between 1 and 6 m below the current sea level, the archaeologists discovered architectural elements from Late Antiquity and the Middle Ages, including building structures and foundations, quays and moorings, countless commodities and everyday objects, and several thousand animal skeletons. Particularly noteworthy are the 37 shipwrecks from the period between the

- 1 Kızıltan, Marmaray Projesi 18-21. – Kızıltan, *Stories* 4f. – Özmen, Marmaray 22-27. – Başaran, *Iron Ways* 1-9. – Buket et al., *The Marmaray Project* 1f. – Bıcak, *Museo Archeologico* 41-44. The name of the project »Marmaray« is composed of the words *Marmara* and *ray*, Turkish for »track«, or »rail«. The transcontinental traffic has hitherto been via ferries or the Bosphorus bridges. In 1973, the 1 560 m long *Boğaz Köprüsü* was opened, in 1988 the 1 510 m long *Fatih Sultan Mehmet Köprüsü*, 5 km further north. Finally, in August 2016, the 1 875 m long *Yavuz Sultan Selim Köprüsü* in the mouth area of the Bosphorus in the Black Sea was inaugurated after a three-year construction period.
- 2 For an introduction to the excavations in Üsküdar, see: Kızıltan/Pekin, Marmaray 33-95. – On Sirkeci: *ibid.* 97-123, on Yenikapı: *ibid.* 165-299 and *passim*. – Karamut, *Excavations* 10-17. – Kızıltan, *Marmaray Metro Projeleri* 1-16.
- 3 Interesting information concerning the excavation process and the upcoming scientific evaluation of the finds are provided by interviews with Ufuk Kocabaş (»Work completed on historic sunken Yenikapı ships in İstanbul«, *Hürriyet Daily News* of 26 August 2013) and with Zeynep Kızıltan (»Marmaray and metro ar-

- chaeological findings may take İstanbul's history back 6 500 years«, *Hürriyet Daily News* of 2 December 2013). – The Marmaray Tunnel below the Bosphorus was opened at the end of October 2013; cf. the *Railway Gazette* of 29 October 2013: »Marmaray tunnel opens to link Europe with Asia«. The opening of the entire 76 km long route took place on 12 March 2019, cf. *Bahn Manager Magazine* of 24 April 2019. – Concerning the accurate position of the different Harbours of Constantinople and its hinterland, see Ginalis et al., *Harbours* 58f.
- 4 <http://news.bbc.co.uk/2/hi/europe/7820924.stm> (27 October 2014). – Gökçay, *Yenikapı kazılarında* 168f. – Algan et al., *Short Note* 459. – Algan et al., *Holocene Coastal Change* 43f. – Perinçek, *Geoarcheology* 70. 71-73. 72 (fig. »Earth layers«). 83. – Yılmaz, *Yenikapı kazı bulguları*. – Polat, *Neolithic Period* 75-93. – Günsenin, *Harbours and Shipbuilding* 419. – The oldest evidence of human life in the region was discovered in Yarımburgaz, 9 km north of Küçük Çekmece, 2 km north of Altınşehir; the remains belong to the Palaeolithic period, cf. Stiner et al., *Cave Bears*. – Tourloukis, *Pleistocene Archaeological Record* 40.

Fig. 1 Marmaray project, plan and section views. – (From Buket et al., *The Marmaray Project* 1 fig. 1).

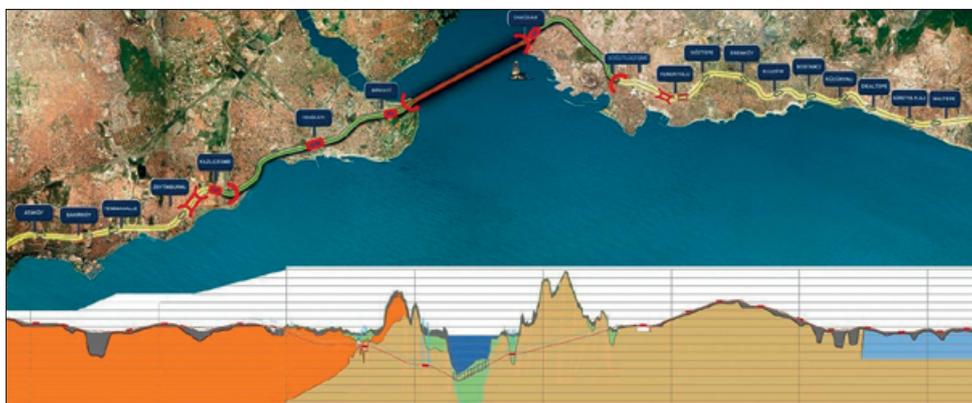




Fig. 2 The Yenikapı excavation site. – (From Başaran, Iron Ways 7 fig. 7).

fifth and the late eleventh centuries, which definitely locate the *Portus Theodosiacus* (Harbour of Theodosius), a harbour whose precise position was long discussed in academic literature⁵. The abundance of findings made the name of the Yenikapı district a synonym for a major archaeological project, and the harbour, which was only mentioned in academic literature before, reached the consciousness of wider circles to become one of the most famous harbours of the Byzantine Empire⁶. Consequently, scientific publications have been published in the meantime on the Harbour of Theodosius and the many findings made at the site. In addition to exhibition catalogues and essays with an archaeological, historical and architectural focus, there are publications on geological, an-

thropological, palaeobotanical and zoological issues⁷. Most of these studies, regardless of their specific focus of interest, include some historical information about the harbour. However, these passages are usually selective and do not always reflect the current state of research. Even essays written by academic specialists on the »Harbours in Constantinople« contain multiple contradictions, ambiguities, errors and misunderstandings⁸ (fig. 2).

Concerning the site of Yenikapı, one should mention a publication by the young Turkish scholar Ayşe Ercan: in her master's thesis that was submitted in 2010 at the Koç University in İstanbul, she presented the history of the site up to the year 2009⁹. The essay contains an analysis of the archaeological excavation results and an interpretation of the relevant written sources¹⁰. Furthermore, it deals with the scholarly literature on the topography of Constantinople and the Harbour of Theodosius, understandably in a selective manner.

Her chapter on the research history of the harbour starts with the important book *Byzantine Constantinople* by Alexander van Millingen. Published in 1899, it is still worth reading. Based on individual archaeological research and using a scholarly tradition from the sixteenth century, van Millingen located the Harbour of Theodosius in the district of Langa Bostanı and equated the harbour with the earlier Harbour of Eleutherios¹¹. Various academic studies on the topography of Constantinople followed these ideas; among others, Ayşe Ercan referred to the well-known publications by Raymond Janin, Feridun Dirimtekin and Rodolphe Guiland¹². Concerning the research of Wolfgang Müller-Wiener, however, just a small selection of his thoughts and considerations is presented¹³. By contrast, she referred to the important studies on urban development by Cyril Mango, Marlia Mundell Mango and Paul Magdalino¹⁴; not to forget A. Berger, who made valuable contributions to the topography of the Byzantine capital, such as his analysis and translation of the *Patria Konstantinupoleos* or the detailed study on the district of Langa Bostanı¹⁵.

5 Pulak, Yenikapı Bizans batıkları 202. – Ingram/Jones, Yenikapı 8. – Kızıltan, Marmaray Metro Projeleri 2. – Kocabaş, Byzantine Shipwrecks 51. – Akkemik/Kocabaş, Galleys 32. – Wade, Maritime cults 272. – Külzer, Häfen und Landplätze 237f. – The Greek term for the harbour is ὁ Θεοδοσιακὸς λιμὴν; cf. Janin, Constantinople 520.
6 Senckenberg Society for Natural Science, press release 24 May 2013: »außergewöhnliche Fundstätte«. – Spiegel Spezial 6 (2008) 58: »eine der größten Ausgrabungen der Türkei [...] Funde faszinieren die Historiker«. – Die Welt, 8 December 2008: »Der Schatz der Türken unter der U-Bahn [...] einmalige Funde [...]« etc.
7 For example, Bicak, Museo Archeologico. – Bony et al., High-energy Deposit. – Ingram/Jones, Yenikapı. – Kızıltan, Stories. – Kocabaş, Old Ships. – Kocabaş, Camaltı Burnu I Shipwreck. – Kocabaş, Marmaray – Metro Kurtama. – Kocabaş, Byzantine Shipwrecks. – Kocabaş, Latest Link. – Lipshitsch/Pulak, Types of Wood. – Onar et al., Horse Skeletons 1. – Onar et al., Overview. – Onar et al., Animal Skeletal Remains. – Onar et al., Dogs Yenikapı. – Onar et al., Horse Skeletons 2. – Özsait-Kocabaş, Yenikapı 12 Shipwreck. – Özsait-Kocabaş, Yenikapı. – Pulak/Ingram/Jones, Byzantine Shipwrecks. – Yılmaz, Yenikapı kazı bulguları. – Akkemik/Kocabaş, Galleys.
8 Even the excellent manual of Restle, İstanbul 54 is very brief concerning the harbours of Constantinople, which is probably an attempt to avoid any mistakes in view of the complicated research situation.
9 Ercan, Yenikapı.
10 Unfortunately, mostly be using translations, without quoting the original sources.

11 Ercan, Yenikapı 7f. – Van Millingen, Walls 36. 264. 268f. 296-300. 307f. The accurate locating of the Harbour of Theodosius in Langa Bostanı, as well as the idea of a correspondence with the Harbour of Eleutherios, leads back to the year 1561 to Petrus Gyllius and his work *De topographia* IV 8, 213.
12 Ercan, Yenikapı 8. – Janin, Ports 73-79. – Janin, Constantinople 225-228. – Dirimtekin, Fetih. – Guiland, Ports 206-225. – Guiland, Études de topographie II 93-95.
13 Ercan, Yenikapı 8 refers exclusively to the Turkish translation Müller-Wiener, İstanbul'un Tarihsel Topografyası. A quote from the original publication Müller-Wiener, Bildlexikon 60f. and, even more, from Müller-Wiener, Häfen 8f. 108 with its numerous corrections would have been more valuable, see for example n. 50 below.
14 Ercan, Yenikapı 8f. – Mango, Shoreline. – Mango, Développement. – Mundell Mango, Commercial Map 189-207. A reference to the revised English version of Magdalino, Constantinople would have been better than the reference to the older and shorter French version Magdalino, Études. – A quote of Magdalino, Maritime Neighborhoods is missing.
15 Ercan, Yenikapı 101f. – Berger, Untersuchungen. – Berger, Langa Bostanı 467-477 and pl. 51. Some of Berger's considerations and suggestions are incorrect; see the detailed analysis of Effenberger, Illustrations 31-33, a valuable text that was not considered by Ercan. – In 2015, Berger published a study entitled »Konstantinopel und seine Häfen« (Berger, Häfen). Unfortunately, this paper did not refer to Effenberger's considerations, nor to the new results of the archaeological excavations. The state of research remains unchanged as against 1993, when the Langa Bostanı article was published.

We will leave Ercan's overview here; her chapter provides a representative overview of the relevant academic literature on the history of the Harbour of Theodosius and its hinterland before the Yenikapı excavations began. The numerous new insights gained through intensive archaeological research justify a new treatise on this special harbour.

The excavations at Yenikapı revealed a different coastal profile for the İstanbul peninsula during the Neolithic period: the coastline varied completely compared to the situation in Classical Antiquity or the modern age. Analyses of the soil layers indicate a permanent changing sea level and constant alterations of the coastline. At the beginning of the so-called Fikirtepe culture in the second half of the seventh millennium BC, the sea level was about 15-20m below today's level¹⁶. In the sixth millennium BC, it had risen considerably, as the Neolithic settlement traces indicate, which lay below the current sea level for more than 6m. The later harbour area, however, was on the terrain. The sea-level continued to rise and, already in the second millennium BC, an inlet had formed in the area of Yenikapı¹⁷.

In the harbour area, as well as in several other parts of today's İstanbul, there are traces of Iron Age settlements. Thracians also settled in the region: their settlement was, according to ancient tradition, called Lygos¹⁸. Hellenization of the peninsula began in the seventh century BC, as settlers from Megara, Argos and Corinth arrived, led, according to legend, by the hero Byzas. This first Greek settlement, named Byzantium after the hero, replaced the Thracian settlement. It was on the headland at the entrance to the Golden Horn, the area of modern Topkapı Saray (Sarayburnu); however, its exact position and dimension remain unknown¹⁹. The harbour facilities of this early settlement were located in the area of the Golden Horn, which favoured landings due to the geomorphological condition and its sheltered places. For centuries, until late Antiquity, the favoured anchorages of the settlement were located here²⁰. Dionysius of Byzantium gave an excellent description of the suitable harbour places in the second century AD; the

excavations at Sirkeci impressively testify to the utilization and early trading activities in the area of the harbours of Prosfhorion and Neorion²¹.

The excavations at Yenikapı revealed that the above-mentioned inlet on the coast of the Sea of Marmara was regularly used, despite its comparatively remote position. Trading activities were documented here almost from the beginning of Greek colonization. The only significant river in the hinterland of Constantinople was the Lycus (Bayrampaşa deresi), about 5.6km long; it flows into the inlet. In the 1950s, the river was built over and today it is no longer visible²². In the area of the small bay, Corinthian globular flasks (*aryballoi*) were found dating back to the early sixth century BC, as well as different wine jugs (*oinochoai*) from the archaic period. Similarly, vessels, plates, bowls, drinking cups (*kantharoi*) and amphorae from the Classical period were found (the latter produced in Thasos, Chios or Samos); however, the archaeological findings were significantly lower than in the harbour areas on the Golden Horn. It is possible that the inlet, where access is easy only during favourable weather and wind conditions, served as a refuge harbour on the Propontis shore for those merchant ships that, for whatever reason, could not enter the main harbours²³. Special facilities did not exist at that time; according to a common practice, the ships were simply pulled onto the beach. The trading activities on the bay continued in Roman times: the excavations in Yenikapı revealed amphorae and marble sculptures²⁴.

Ancient Byzantium, concentrated on the Sarayburnu, saw several phases of urban expansion, in the period of the Emperors Septimius Severus (193-211), Constantine the Great (324-337) and Theodosius II (408-450). Its urban area grew from less than 2 km² to approximately 14 km², and its population increased from about 20 000 in the early fourth century to at least 200 000 in the fifth century²⁵. The enormous increase in population, which had already started in the time of Emperor Constantine, required an improvement of logistics and urban supply; equally, an expansion of the existing harbour system was necessary.

16 Algan et al., Holocene Coastal Change 42. 44. – Gökçay, Yenikapı kazılarında 168 f. – Özdoğan, Eastern Thrace 663-665.

17 The coastline has changed several times over the centuries, sometimes differing by up to 400m from today's line. From the 11th c. onwards, however, the situation was comparable to that of our period: Algan et al., Short Note 461. – Algan et al., Holocene Coastal Change 31-44, esp. 43 figs 9a-e. – Asal, Theodosius Limanı 180. – See also Stanley/Blanpied, Water Exchange. – Çağatay et al., Sea of Marmara. – Spiegel Spezial 6, 2008, 60. – Ercan, Yenikapı 24. 106. – Perinçek, Geoarcheology 75. 83. 88-90.

18 Plinius, Nat. hist. IV 11, 46. – Firatlı, First Settlement 21-25. – Külzer, Ostthrakien 462. – Algan et al., Holocene Coastal Change 42. 44. – Gökçay, Architectural Finds 168.

19 See Herodotus 4, 144. – On the history, see Merle, Geschichte. – Nevskaja, Byzanz. – Loukopoulou, Thrace propontique 41-66 etc. – Müller, Bildkommentar 800-802. – Boardman, Greeks 241 f. 246. – Asal, Commerce 180-182. – Külzer, Ostthrakien 68-76. 461 f. – Günsenin, Harbours and Shipbuilding 412.

20 Müller-Wiener, Bildlexikon 16-19. – Magdalino, Maritime Neighborhoods 211. – Magdalino, Harbors 13 f. – Külzer, Ostthrakien 448-450. – Ercan, Yenikapı 10-14.

21 Dionysii Byzantii Anaplus 13-31 (Güngerich). – Oberhammer, Keras 257-262. – Hartinger, Periplusliteratur 143-155. – Mango, Développement 14 f. – Ercan,

Yenikapı 14-22. – Günsenin, »City« Harbours 100-103. – Asal, Yenikapı Excavations 7. – Magdalino, Harbors 13 f. For the two harbours mentioned, cf. also Kislinger, Neorion, in this volume.

22 The course of the Lycus has changed many times over the centuries, and consequently the length of the river varied: cf. Algan et al., Holocene Coastal Change 42 f. fig. 9 (a)-(e). The data given refers to the modern period and should be used for a rough orientation only. – See Mango, Développement 19. – Mango, Shoreline 20. – Külzer, Ostthrakien 498.

23 Asal, Yenikapı Excavations 7. – Öncü, Greek-Roman Period 94-103. – Pulak/Ingram/Jones, Byzantine Shipwrecks 1-2. – On the disturbance of maritime traffic on the Propontis coast due to the south wind Notos, see also Ercan, Yenikapı 23.

24 Asal, Yenikapı Excavations 7. – Öncü, Greek-Roman Period 103. – Algan et al., Holocene Coastal Change 43. – Kızıltan, Marmaray Metro Projeleri 9.

25 Jacoby, Population 106 f. – Müller-Wiener, Bildlexikon 16-20. – Koder, Lebensraum 115-118. – Mango, Développement 13-50. – Asal, Yenikapı Excavations 8. – Around 540, the population of Constantinople has reached its highest level, about 500 000 people were living there, cf. the introduction of Kislinger, Better and Worse Sites, 12-13 in this volume.

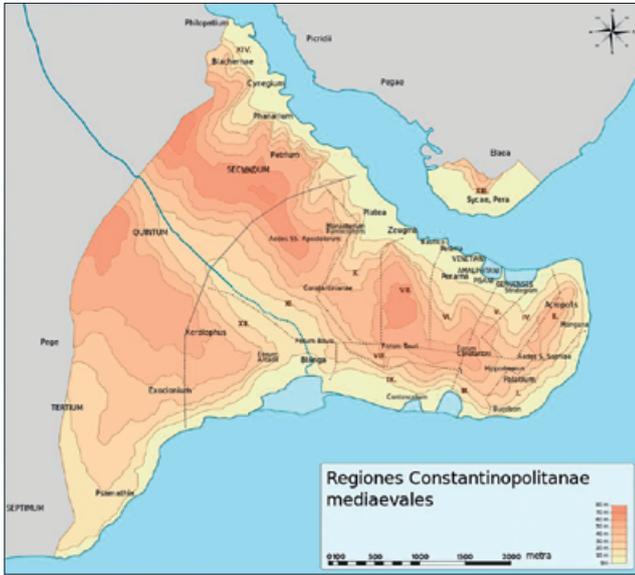


Fig. 3 The urban districts of Constantinople. – (Byzantine Constantinople regions © 2012 by Andrew Dalby is licensed under CC BY 3.0).

Construction of a harbour on the coast of the Propontis began under Emperor Julian (361-363), who stayed in the city for some months in 361²⁶. Built in the area of today's Kumkapı district, the place was initially named *Limen tu Iulianu* (λιμὴν τοῦ Ἰουλιανοῦ) after its patron; however, the Emperor himself did not live long enough to see its completion, which occurred during the reign of later rulers²⁷. In the *Notitia Urbis Constantinopolitanae*, probably written around 425, it is called *portus novus* and assigned to the third city region (*regio tertia*)²⁸. The harbour was dredged at the beginning of the sixth century and, after a conspicuous renovation in the third quarter of the sixth century, named after Sophia, the wife of Emperor Justin II (565-578): *Limen tes Sophias* (λιμὴν τῆς Σοφίας). Probably from the thirteenth century onward, it was also referred to as *Kontoskalion* (Κοντοσκάλιον) or *Kontoskelion* (Κοντοσκέλιον). Repeatedly dredged during the Palaeologian period (after 1261, 1427), the harbour was

still in use in the fifteenth century²⁹. Towards the end of the sixteenth century, a large part of the swamp area was filled, but the western harbour basin functioned until the middle of the eighteenth century³⁰ (fig. 3).

The Harbour of Julian is often identified in the academic literature as the oldest artificial harbour in the region of the Constantinopolitan Propontis coast; however, it is more correct to describe it as the first identifiable harbour in this special geographical area³¹. The *Patria Konstantinupoleos* mention a *Limen tu Eleutheriu* (λιμὴν τοῦ Ἐλευθερίου), which would have been constructed during the reign of Constantine the Great. This harbour, however, was nondurable: already during the construction of the Forum Tauri in 380, in the reign of Emperor Theodosius I (379-395), it was abandoned and filled with rubbish and earth³². Despite this explicit statement in a Byzantine source, in 1561, Petrus Gyllius equated both harbours and located it in the district of Langa Bostanı³³. His theory was accepted in the scholarly community, thanks to the support of Alexander van Millingen, and is incorrectly repeated up to the present; historical remarks on the Harbour of Eleutherios continue to mention facts that, in reality, relate to the Harbour of Theodosius³⁴.

In fact, the Harbour of Eleutherios should be located elsewhere, not least because of the position of the Forum Tauri and the logical consideration that the excavated earth should be transported by the shortest possible route. Therefore, the harbour was located east of Yenikapı, possibly in a small inlet south of the later Myrelaion Church, near the church of ta Amantiu³⁵. There was probably an interlinkage between the harbour and the Palace of Eleutheriu (παλάτιον τῶ Ἐλευθερίου), also mentioned in the *Patria Konstantinupoleos*, which was rebuilt on older fundamentals during the reign of Empress Eirene (797-802). Unfortunately, there is no further information about Eleutherios, not even an approximate temporal classification of his lifetime, in the surviving sources³⁶.

The Harbour of Theodosius is first mentioned around the year 425 in the *Notitia Urbis Constantinopolitanae*, where it is placed in the twelfth region (*regio duodecima*)³⁷. It was

26 Zosimus, *Historia Nova* III 11. – Janin, *Constantinople* 231. – Berger, *Häfen* 83. – Dark, *Eastern Harbours* 160-163. – See also Heher, *Harbour of Julian*, in this volume.
 27 Ercan, *Yenikapı* 27 »[...] on the southern shore at today's Kadırga«. – The idea of a completion of the entire harbour already in 362, as mentioned by Günsenin, *Harbours and Shipbuilding* 416, is not plausible; the construction period would be much too short. – See also Heher, *Harbour of Julian*, in this volume.
 28 *Notitia urbis Constantinopolitanae* 232 (Seeck). – On the chronology: Speck, *Notitia* 144-150. – Berger, *Langa Bostanı* 468. – Drakoulis, *Functional Organization* 153. A former generation of scholars misdated the text to the period between 447 and 450. – For further historical information, see Magdalino, *Renaissances* 57-64.
 29 Guillard, *Ports I* 181-204. – Berger, *Untersuchungen* 425 f. 483 f. – Müller-Wiener, *Häfen* 8 f. – Effenberger, *Illustrationen* 29-31. – Lipshitz/Pulak, *Types of Wood* 164. – Ercan, *Yenikapı* 24-34. – Magdalino, *Harbors* 14. – The idea of Kontoskelion and Kontoskalion being two separate places, as reported in Janin, *Constantinople* 228 f. 230 f. and in Mango, *Développement* 38, is nowadays out of date.
 30 Müller-Wiener, *Häfen* 26-28 – Lipshitz/Pulak, *Types of Wood* 165. – Ercan, *Yenikapı* 34 mentioned the year 1748, referring to Müller-Wiener, *Istanbul'un Tarihsel Topografyası* 63.

31 Ercan, *Yenikapı* 27. – Magdalino, *Harbors* 14.
 32 *Patria Konstantinupoleos* II 63. 184 f. (Preger). – Berger, *Untersuchungen* 581 f. – See also the introductory chapter by Kislinger, *Better and Worse Sites*, in this volume.
 33 Petrus Gyllius, *De topographia* IV 8, 213.
 34 Vgl. van Millingen, *Walls* 36. 264. 268 f. 296-300. 307 f. – Janin, *Constantinople* 225-227. – Müller-Wiener, *Bildlexikon* 60 f. – Majeska, *Russian Travelers* 268 f. – Ercan, *Yenikapı* 34-37 and elsewhere. – Differently: Guillard, *Ports II* 206-210. – Berger, *Untersuchungen* 575 f. 581 f. – Berger, *Langa Bostanı* 469. – Müller-Wiener, *Häfen* 9. – Magdalino, *Harbors* 15. – Günsenin, »City« *Harbours* 103 is indecisive. – Günsenin, *Harbours and Shipbuilding* 417.
 35 Berger, *Untersuchungen* 197 *Gesamtplan* (no. 181 *Ta Amantiu nos* 182 f. *Myrelaion*) 582. – An incorrect identification by Janin, *Constantinople plan I* »Byzance/Constantinople. Carte archéologique et topographique«.
 36 *Patria Konstantinupoleos* III 173 (269 Preger). – Guillard, *Ports II* 208. – Janin, *Constantinople* 34. 131. 348. – Berger, *Untersuchungen* 581 f. 588-590. – Magdalino, *Harbors* 15. – Magdalino, *Renaissances* 76 f.
 37 *Notitia urbis Constantinopolitanae* 239 (Seeck).

built some time before, probably around the year 390 under the reign of the eponymous Emperor Theodosius I³⁸. The harbour was constructed to relieve the already existing landing stages for ships bringing supplies to the capital³⁹. In addition to various everyday objects, one must mainly think of grain that came from the fertile soils of Egypt to feed the local population, similar to the situation of western Rome. The grain fleets are documented for Constantinople already in the fourth century: the first supply ships landed here soon after the inauguration of the imperial capital, since Emperor Constantine had ordered the distribution of free bread in 332⁴⁰.

There are different views on the average size of these transport vessels: for the supply of imperial Rome, ships with a tonnage between 100 and 500t are attested⁴¹. The loading capacity of the supply vessels of Constantinople was estimated at a maximum of 340t (50000 *modii*), but the average capacity was estimated at only 68t (10000 *modii*)⁴², an assessment which should certainly be revised upwards⁴³. In any case, the ships needed a sufficient berth for their size and, at certain periods of time, their large numbers. It was therefore obvious to build a harbour for them.

In this harbour, granaries were needed, in which the cargo could be stored after offloading. These warehouses are already testified in the early fifth century: the *horrea Alexandrina* and the *horreum Theodosianum* in the twelfth city region (*regio nona*) neighbouring the ninth city region are found in the *Notitia Urbis Constantinopolitanae*. Thereby, the source indicates the origin of the grain from Egypt and confirms the harbour in its function as a trans-shipment centre⁴⁴. The local storage houses may have been comparable in size to other granaries. Length measurements between 65 and 70m, with an average width of 27m, are known from Roman Asia Minor, for example; and there were larger facilities at later periods⁴⁵.

Originally, there may have been no separating walls between the harbour basin and the granaries. Only in 439, after the completion of the great land walls⁴⁶ under the city prefect Cyrus, did Emperor Theodosius II order the construction of a

sea wall to protect the previously largely unprotected coast of the Propontis from enemy invasions and raiding parties. The exact course of this first fortification is unknown. It is possible that it cut across the harbour area, separating the harbour basin from the hinterland, but the wall may also have included the mole upstream of the harbour and preserved the landing area as a whole⁴⁷. A heavy earthquake damaged the wall in 447; an inscription mentions the damage and the repair. Natural catastrophes also damaged the walls in the following centuries and made permanent repairs necessary⁴⁸.

The construction of an enormous granary with measurements of approximately 87m × 28m on the island of Tenedos during the reign of Emperor Justinian I (527-565) had an indirect impact on the Harbour of Theodosius. The adverse northeastern winds and unfavourable currents made it sometimes difficult for the cargo ships that transported grain from Egypt, to enter the Dardanelles. In many cases, the ships had to wait for an incalculably long period before a passage was possible, while putrefaction could lead to a loss of goods and earnings. After the building of the granary, however, the cargo could be unloaded on the Aegean island and the huge ships were able to return immediately to the Oriental coast, saving time and costs. The cargo was then reloaded onto smaller ships that could more easily manoeuvre through the Dardanelles; they transported the goods to the capital⁴⁹. To make it clear: the cargo size of ships entering Constantinople was reduced and a larger number of ships was needed to transport the same amount of goods. However, this could be organized easily. It would be a mistake to associate the existence of the granary in Tenedos with a loss of importance of the Theodosian Harbour⁵⁰.

In the middle of the sixth century, more precisely in the acts of the fifth Ecumenical Council in Constantinople in 553, a »harbour of Kaisarios« is mentioned for the first time, when ambassadors of Pope Vigilius (537-555) visited a house near the *Portum Caesarii*⁵¹. A long scholarly discussion whether this place was identical to the Harbour of Theodosius or not,

38 Mango, *Urban Centre* 121. – Ingram/Jones, *Yenikapı* 9. – Pulak et al., *Shipwrecks of Yenikapı* 23. – Pulak/Ingram/Jones, *Yenikapı* 102. – Günsenin, *Harbours and Shipbuilding* 423f.

39 There are structures and a breakwater, possibly belonging to the 4th c., which were later built over by the Theodosian Walls, see Gökçay, *Architectural Sinds* 170-173. – Magdalino, *Harbors* 14.

40 Teall, *Grain Supply* 91-98 etc. – Demandt, *Spätantike* 396f. – Müller, *Getreide* 2-11. – Durliat, *L'approvisionnement* 19-33. – Kislinger, *Pane*. – McCormick, *Origins* 92-98. 108f. 111. – Avramea, *Land and Sea Communications* 83f. – Kiziltan, *Marmaray Metro Projeleri*. – Kislinger, *Verkehrsrouten* 154.

41 Galsterer, *Versorgung* 27. – Müller, *Getreide* 9.

42 Mango, *Développement* 38.

43 Müller, *Getreide* 10 and A. 37. – Mango, *Développement* 38. The quays required would have had a length of nearly 4km!

44 *Notitia urbis Constantinopolitanae* 237 (Seeck). – Magdalino, *Maritime Neighborhoods* 211. – Mundell Mango, *Commercial Map* 193. – Pulak/Ingram/Jones, *Yenikapı* 102. – Wade, *Maritime Cults* 273. – Günsenin, *Harbours and Shipbuilding* 417.

45 Cf. Müller, *Getreide* 6f. – Kislinger, *Pane* 284 concerning the well-known storehouses of Patara and Andriake. – Müller-Wiener, *Häfen* 9 and A. 26 concerning storehouses in Aspendos, Ostia and Rome. On the granaries in the Western parts of the Roman Empire, see Rickman, *Granaries*. The famous granary of Tenedos will be covered below. Many granaries are only known from literary

evidence and their exact dimensions remain unknown, such as a storehouse in Kallipolis in eastern Thrace that is documented in the 6th c. (Procopius, *De aedificiis* IV 11; Külzer, *Ostthrakien* 215. 426 etc.).

46 The most important academic study on this subject is Asutay-Effenberger, *Landmauer*.

47 Chronicon Paschale I 583 (Dindorf). – Müller-Wiener, *Häfen* 9. – Dagron, *Naissance* 268-272. – Berger, *Untersuchungen* 232f. 478. – Gökçay, *Architectural Finds* 170f. – Magdalino, *Harbors* 14.

48 Müller-Wiener, *Bildlexikon* 312f. – Guidoboni, *Earthquakes* 292-295. – Ambra-seys, *Earthquakes* 165-168. – Ercan, *Yenikapı* 12f. 26.

49 Procopius, *De aedificiis* V 1, 7-16. – Müller, *Getreide* 5-11 (also concerning the statement of Procopius, the storehouse could »take the cargo of a whole fleet«). – Kislinger, *Pane* 283-284 – Koder et al., *Aigaion Pelagos* 69f. 99. 287-291. – Avramea, *Land and Sea Communications* 84. – The smaller ships were easier to attack than the larger ones. Slavic raids on supply ships even on the open sea are documented in the third quarter of the 7th c.: Kislinger, *Reisen* 347 and n. 32.

50 This was the opinion of Müller-Wiener, *Häfen* 9: »[...] probably it was only used by the fishermen living on the south coast«. – Equally Ercan, *Yenikapı* 37 »[...] lost the largest part of its raison d'être etc«.

51 Mansi, *Collectio* IX 200A. – Cf. van Millingen, *Walls* 301-315. – Guillaud, *Ports* II 210. – Janin, *Constantinople* 227f.

ended with a positive result, while the attempt to equate it with the Heptaskalon located on the Golden Horn, is obsolete and no longer justifiable⁵². The name Kaisarios may come from a toponym in the neighbourhood of the harbour: a quarter of that name is attested in the description of a devastating fire on 12 October 561/562⁵³. The reason for the change of name remains unknown⁵⁴. The name was repeatedly mentioned in the seventh century: in October 610, Emperor Phocas, who had come to power eight years earlier by a *coup d'état*, used the circus factions of the Blues and the Greens in his defensive campaign against Heraclius, who was approaching from the West. While the Blues took up position in the Hormisdas quarter (τὰ ἐπὶ Ὁρμίσδου), the Greens defended the Harbour of Kaisarios (τὸν λιμένα τὸν Καισαρίου) and the Harbour of Sophia (τὸν λιμένα [...] τὸν Σοφίας)⁵⁵. This was a military operation, which, as everyone knows, was unsuccessful and could not prevent Heraclius from accession to power. Two generations later in 671/672, Emperor Constantine IV (668-685) stationed several dromons equipped with flamethrowers in the harbour, in reaction to the advance of the Arab fleet towards Constantinople⁵⁶. The place name used in the source is unusual: Theophanes wrote of ships in the »Proclianesian harbour of Kaisarios« (ἐν τῷ Προκλιανησίῳ τῶν Καισαρίου λιμένι), a phrase that is probably derived from the proper name Proclianesios, a name that is impossible to connect with any historical person. In this context, Kaisarios may again be understood as the name of a quarter⁵⁷.

The sea walls suffered during armed conflicts, but much more from natural disasters such as storm surges or earthquakes. For example, earthquakes followed by tsunamis are documented for the years 554, 557, 740 and 989⁵⁸. At the turn of the seventh to the eight centuries, the «neglected» wall underwent a fundamental renovation. According to the

Patria Konstantinopoleos, this renewal took place in the reign of Emperor Tiberius III Apsimar (698-705)⁵⁹. Theophanes, on the other hand, attributed it to the reign of Emperor Anastasius II (713-715), in a context with the simultaneous renovation of the land walls, the armament of the towers with catapults and other ordnance, and the development of the Byzantine fleet⁶⁰. This renewed and towered wall probably ran north of the basin of the Harbour of Theodosius, thereby disconnecting the whole area from its hinterland and the granaries that were still in use⁶¹.

Massive ice sheets damaged the seawall in the winter of 763⁶². Sieges, such as the one by the usurper Thomas (821-823), also caused damage; therefore, major restoration work was carried out in the reign of the Emperors Michael II (820-829) and Theophilus (829-842)⁶³. At that time, various noble families owned residences near the harbour, probably beyond the seawall. At a slightly later date, they are mentioned in a saint's *Vita* from the first half of the tenth century⁶⁴. Nearby was also an otherwise unknown nunnery Mouzalon (Μουζάλων)⁶⁵.

At that time, the Harbour of Theodosius was still frequented by numerous ships, as the archaeological remains manifested impressively. The river Lycus that flowed into the harbour basin contributed to a silting up; however, this happened slowly from west to east, and it was not before the twelfth century that the operation possibilities of the harbour were sensitively disrupted⁶⁶.

Even before his accession to the throne, Andronicus I Comnenus (1183-1185) owned a house in the area, which was probably named after a former owner »the one of Blangas«; this building gave its name to the whole quarter for the next centuries to come⁶⁷. As emperor, Andronicus I initiated repairs of the city's fortifications, which were partially in a bad

52 Müller-Wiener, Häfen 9 and A. 25 corrects his older idea (Müller-Wiener, Bildlexikon 61 f.) about an identity of Heptaskalon and Kaisarios. Berger, Untersuchungen 575 is right. – Berger, Langa Bostani 468 f. – Berger, Häfen 82. – Mango, Développement 38. – Magdalino, Harbors 13 f. – For Heptaskalon, see also Preiser-Kapeller, Heptaskalon, in this volume.

53 Theophanes, Chronographia I 235 (de Boor): γέγονεν ἐμπυρισμὸς μέγας ἐν τοῖς Καισαρίου κτλ. For an English translation, see Mango/Scott, Theophanes 347 f.

54 Ercan, Yenikapı 38-40. – Magdalino, Harbors 14.

55 Ioannes Antiochenos, Fragmenta 321. 20 f. (552 Roberto). – Chronicon Paschale I 700 (Dindorf). – Guillard, Ports II 211 (with reference to the geographical order of the harbours, starting from the west). – Janin, Constantinople 227. – Ercan, Yenikapı 40 f. – See also Magdalino, Renaissances 64-70.

56 Theophanes, Chronographia I 353 (de Boor); English translation: Mango/Scott, Theophanes 493. – Müller-Wiener, Bildlexikon 62. – Pryor/Jeffreys, Dromon 607. – Ercan, Yenikapı 40.

57 Some speculations in Guillard, Ports II 212. – In contrast Mango/Scott, Theophanes 493: »a person called Proclianus remains unexplained«. – Berger, Ports 86, n. 34 accepted this statement; however, he interpreted the term »Kaisarios« as a personal name. – Among others, Magdalino, Review 257 is also unable to solve the enigma of this phrase.

58 Between the 4th and the 14th c., there is geological evidence for 22 tsunamis in the Sea of Marmara; 28 tsunamis are mentioned in literary sources, with a remarkable concentration in the Early Byzantine period. Already 13 respectively 18 tsunamis are documented between 325 and 557; cf. Altinok et al., Tsunamis 528. 530. – In general, Yalciner et al., Tsunami. – Hébert et al., Tsunami Hazard. – Perinçek, Geoarcheology 69. 75-77. 89 f. – The literary sources are listed and translated in Guidoboni, Earthquakes 336 f. 340-345. 364 f. 404 f. – Equally in Ambraseys, Earthquakes 206 f. 208-211. 227-229. 256-257.

59 *Patria Konstantinopoleos* II 109 (208 f. Preger); here is also a statement that the wall was in a poor condition. – Berger, Untersuchungen 675 f. 691.

60 Theophanes, Chronographia I 384 (de Boor); English translation: Mango/Scott, Theophanes 534 f.

61 Müller-Wiener, Häfen 9. – Magdalino, Maritime Neighborhoods 213. – Mundell Mango, Commercial Map 192 f. 201 f. – Ingram/Jones, Yenikapı 10.

62 Theophanes, Chronographia I 434 f. (de Boor); English translation: Mango/Scott, Theophanes 600-602. – Teleles, Phenomena I 342-350.

63 *Patria Konstantinopoleos* II 109 (208 f. Preger). – Müller-Wiener, Bildlexikon 313. – Berger, Untersuchungen 675 f. – Concerning the civil war between Michael II and Thomas, see Stouraites, Bürgerkrieg 163-165; Lemerle, Thomas le Slave.

64 *Vita Basilii Minoris* 292 f., ch. 11, 332 f., ch. 36 [...] πάλιν ἐν τοῖς παλαιῶσι τῶν Ἐλευθερίου [...] οἶκός ἐστι παμμέγιστος, ὃν εἶναι φασὶ τινες Ῥωμαίου τοῦ βασιλέως. – Mango, Life of St Andrew 303 f. and n. 36. – Magdalino, Maritime Neighborhoods 214. – Mango, Développement 59.

65 *Vita Basilii Minoris* 322 f. chap. 29, 323 n. 89.

66 Asal, Commerce 184-187. – Ingram/Jones, Yenikapı 10. 13. – Kocabaş, Old Ships 32. – Kocabaş, Byzantine Shipwrecks 51. – Kocabaş/Özsait-Kocabaş, Milestone 37 f. – Günserin, Harbours and Shipbuilding 420. – YK 11 is the only ship discovered in the west of the harbour that belongs to the 7th c. – For historical and economic background information, see also Jacoby, Maritime Trade 627-648.

67 Niketas Choniates, Historia 130,75 f. (van Dielen): [...] Ἀνδρόνικος εἰς τὸν οἰκίον οἶκον παρελθὼν, ὅς τοῦ Βλάγγα ἐπικέκληται [...]. – van Millingen, Walls 299. – Berger, Langa Bostani 469 and n. 8. – Janin, Constantinople 325 mentioned a theory about a connection with the word τὰ αἰλακα, »moats«. – Ercan, Yenikapı 80 is unfortunately incorrect.

condition: and these measures probably included the walls in the harbour area⁶⁸. Similar activities were undertaken during the reigns of the emperors Michael III (842-867), Leon VI (886-912), Nicephorus II Phocas (963-969), and Basil II (976-1025). However, it is not always possible to establish a clear link to the area of the later Yenikapı district⁶⁹.

The destruction caused by the great fire of 1203 affected, among other regions, the area of the Harbour of Sophia and the quarter of *ta Eleutheriou*⁷⁰. The extent to which the area of the Harbour of Theodosius further in the west was affected remains uncertain.

Soon after the end of Latin rule over Constantinople in 1261, the area of the Harbour of Theodosius was again mentioned in the surviving sources as the Vlanga Quarter. To ward off potential attacks by the troops of Charles of Anjou, Emperor Michael VIII Palaeologus (1259-1282) intended to build a second strong wall within the sea wall around the year 1270⁷¹. Likewise, the »Kontoskalion Harbour near Vlanga« was fortified during this time⁷².

Three years earlier, in 1267, the Emperor had decided to settle Jewish craftsmen in the area of Constantinople. Jewish quarters had existed in the capital as early as the fifth century, but they were located on the Golden Horn and in Pera. Concerning the period of Latin rule, there are no reliable statements in the written sources⁷³. In 1293, however, the Arabian historian al-Ġazari mentioned the existence of a Jewish quarter whose gates would be closed every evening. In the 26 years since 1267, the Jews had been assigned their own separate quarter⁷⁴. Some of these Jews worked as tanners, a smell-intensive industry, which was usually only undertaken in urban outskirts where there were fewer inhabitants. The mentioned area, however, was inhabited, not only by Jews, but also by Christians: in a letter addressed to Emperor Andronicus II (1282-1328), Patriarch Athanasius I (1289-1293, 1303-1310) protested passionately but in the end unsuccessfully against the presence of Jews in a Christian neighbourhood⁷⁵. In a letter dated 1296, Maximus Planudes (c. 1260-1330) gave an account of conflicts between the two religious groups in the neighbourhood of the Church of St John Prodromos and an abandoned monastery nearby, and lamented the existence of the resident tanners, whom he wanted transferred to another place⁷⁶. This request was unfulfilled, as Venetian documents from the years 1319 and

1320 mention Jewish tanners still on the shores of the Propontis⁷⁷.

Stephen of Novgorod, a Russian pilgrim who visited Constantinople around the year 1350, referred in his travelogue to numerous Jews who settled beside the city fortifications on the shores of the sea. Therefore, the city gates that opened towards the sea were called the »portes juives«, the »Jewish Gates«⁷⁸. This note was correctly related to the Vlanga district, with its three local city gates, that is located on Stephen's way from the Harbour of Kontoskalion to the Studios Monastery⁷⁹.

At least three texts from the Late Byzantine period mention skeletal remains in the vicinity of the walls, with different explanations. The Russian pilgrim from Novgorod, who mentioned the phenomenon first, established a relationship with a legendary incident from the time of the siege of Constantinople by the Persians (and Avars) in 626⁸⁰. In contrast, the Florentine Cristoforo Buondelmonti (c. 1380/1385-1431), who travelled to Constantinople in the years before 1420 and again in 1421/1422, saw the bones in question in »a field [...] that was once a harbour called Vlanga«, by making a reference to the Crusades⁸¹. The Burgundian Bertrandon de la Broquière (c. 1400-1459), who visited the Byzantine capital at the end of 1432, beginning of 1433, mentioned as well an accumulation (»une montaignette«) of bones dating back to the period of the Crusades, near a harbour on the south coast of Constantinople. This landing place was small, but still in use; his statement that »only three or four galleys« could find a place for landing there is an important testimony for the continuing use of at least some parts of the Harbour of Theodosius in the late Palaeologan period⁸².

The connection with the area of Yenikapı is obvious; however, the skeletal remains can hardly be linked to the events mentioned in the sources because the time spread is much too long. In addition, a link to the recapture of Constantinople in 1261 is impossible⁸³: it is unlikely that a field full of human bones in front of the city walls was not cleaned up for nearly 150 years. A connection with the tanneries is more logical: the remains, assuming their actual existence, were obviously not human bones, but animal remains and waste products from local workshops⁸⁴.

Despite his literary reference to the Vlanga district, Cristoforo Buondelmonti made also a pictorial one: His *Liber insularum Archipelagi*, composed before 1420, which passed

68 Niketas Choniates, *Historia* 320,72-74 (van Dielen). – Ercan, Yenikapı 26.

69 Müller-Wiener, *Bildlexikon* 313 f. – Berger, Häfen 83.

70 Niketas Choniates, *Historia* 554,38-555,54 (van Dielen). – Madden, *Fires* 73-84.

71 Nikephoros Gregoras, *Relationes historicae* V 2 (l 124 Failler). – Müller-Wiener, *Bildlexikon* 314. – Effenberger, *Illustrationen* 30.

72 Georgios Pachymeres, *Relationes historicae* V 10 (ll 469,24 Failler): τὸ πρὸς τῷ Βλάγγῳ Κοντοσκέλιον ἀνοικοδομεῖν ἤλθεν κτλ. – Effenberger, *Illustrationen* 30. – Concerning trade in the area of Constantinople in that period, see also Jacoby, *Commercial Exchange* 187-194. – Magdalino/Necipoğlu, *Trade*. – Necipoğlu, *Byzantine Economy* 444-448.

73 Jacoby, *Quartiers juifs* 168-189.

74 Cf. Jacoby, *Quartiers juifs* 189 f. – Müller-Wiener, *Bildlexikon* 61. – Ercan, Yenikapı 37.

75 Jacoby, *Quartiers juifs* 190 f.

76 Jacoby, *Quartiers juifs* 191. – Ercan, Yenikapı 80 f.

77 Jacoby, *Quartiers juifs* 191.

78 Khitrowo, *Itinéraires russes* 121. – Majeska, *Russian Travelers* 38. – The visit was probably made in 1349: Ševčenko, *Notes* 168-172. – Majeska, *Russian Travelers* 17. – On the city gates, see Berger, *Langa Bostanı* 468 fig. 1; 469 fig. 2 etc.

79 Majeska, *Russian Travelers* 17. 268 f. – Ercan, Yenikapı 84.

80 Majeska, *Russian Travelers* 268-271. – Berger, *Langa Bostanı* 469 f.

81 Gerola, *Vedute* 271 f. – Majeska, *Russian Travelers* 269 f. – Effenberger, *Illustrationen* 14. 16. 31-33.

82 Bertrandon de la Broquière, *Voyage* 152 f. – Majeska, *Russian Travelers* 269 f. – Berger, *Langa Bostanı* 472. – Effenberger, *Illustrationen* 31. – Pulak/Ingram/Jones, *Byzantine Shipwrecks* 3. – Mundell Mango, *Commercial Map* 198 f. is incorrect. – Bony et al., *High-energy Deposit* 121.

83 Bertrandon de la Broquière, *Voyage* 152 f. – Majeska, *Russian Travelers* 271.

84 The idea that the bones were indicators for the presence of a former local cemetery, as Magdalino, *Harbors* 14 suggests, seems implausible.

down in several manuscripts, includes a city map of Constantinople, which is the oldest surviving representation of the city⁸⁵. More than 70 manuscripts are known today and several include the map of the Byzantine capital, with differing quality and accuracy⁸⁶. Notwithstanding all the schematisations and simplifications, the area around the Harbour of Theodosius, usually labelled as *vlanga*, *portus volanga* or similar, can be clearly identified⁸⁷. In front of the sea wall, there are considerable alluvial deposits. This alluvium is traversed by a stream leaving the wall in a slight meander, the Lycus, being responsible for the deposits. To the west, a mole leads far out into the Propontis. During the restoration measures of the sea walls, Emperor John VIII Palaeologus (1425-1448) had this mole provided with two large towers at each end. These fortifications are depicted in the important Düsseldorf manuscript of the *Liber insularum archipelagi* written after 1484, while they are missing in various corresponding illustrations in other manuscripts of this text⁸⁸.

According to a Venetian eyewitness, the alluvial land formed by the Lycus was used by ships of the Ottoman fleet for landing on 29 May 1453. Starting from this point, some Ottomans invaded the city and plundered the neighbouring Jewish quarter⁸⁹. Apparently, as a result of the devastation, Sultan Mehmed II (1451-1481) decided in the same year to remove the Jews from the Vlanga district and to relocate them to Balat at the Golden Horn⁹⁰ (fig. 4).

The Düsseldorf Codex of the *Liber insularum archipelagi* does not only show the mole towers of the Harbour of Theodosius, erected in the late Palaeologan period, but also a wide-walled area in the hinterland of the harbour, designated with the caption *locus aquosus* as marshland, this in an evident contrast to other city representations attributed to Buondelmonti⁹¹. The region is represented on the cityscape of Giovanni Andrea Vavassore that was created around 1530 by using a (lost) original from the period between 1479 and 1490⁹². A. Berger and A. Effenberger investigated that estate, especially concerning the date and development of single parts of the wall⁹³. Both scholars tried to solve these problems by a comparative analysis of early modern maps, using, in addition to the plan of Vavassore, drawings by Matrackçı Nasuh (1537), Piri Reis (originally 1521) and the one in the *Hünername* of Seyyid Lokman (1584/1585). In particular, due to the depiction of Constantinople in the Düsseldorf manuscript, the German researchers recognised that, before 1480, a wall with eleven towers enclosed the entire harbour district, modern Büyük Langa Bostanı and the Yalı area. However,

another wall postulated by A. Berger that divided the area of Büyük Langa Bostanı is dubious; at any rate, there are no archaeological traces of that wall. The idea may have originated from an erroneous interpretation of the illustrations of the arched sea wall on the different maps⁹⁴ (fig. 5).

The Venetian Giovanni Maria Angiolello (c. 1451/1452-1525) came to İstanbul as a prisoner of war; he was in the service of Mehmed II in the second half of the 1470s. In his report from around 1480, he consequently likened Blanga to an unguarded fortress⁹⁵. Equally, the fortress character of the quarter appears in the depiction of Constantinople in the world chronicle of the Nuremberg scholar Hartmann Schedel (1440-1514), the *Liber chronicarum* of 1493 (fig. 5). In his map, there is no pier or a still existing harbour facility, just a sea wall, and in its centre the estuary of a river, the Lycus, flowing into the Propontis⁹⁶. Immediately beyond the mouth of the river, there is another rampart to the landward side; a tree appearing behind a gate might suggest a garden. Of course, oversized schematics make accurate interpretation difficult. A second representation of Constantinople in the mentioned chronicle, in connection with statements concerning a weather disaster in the year 1490, is unrewarding in our context. Being more stylised it shows only a part of the city, and, next to the closed sea front, there is a depiction of neither a river mouth, the mentioned tower-reinforced mole, nor inner city gardens⁹⁷.

The mentioned gardens are presented in the well-known description of the Vlanga quarter that Petrus Gyllius published in his 1561 book *De topographia Constantinopoleos*. Prominently highlighted, the area of the former Harbour of Theodosius was described as widely covered up and located »in the gardens that is today called Blancha«⁹⁸. These gardens were characterised as spacious and rambling. Vegetables were cultivated in that area and bigger trees consequently rare. Several ponds with permanent water, obviously remnants of the former harbour, assured the irrigation of the plants. A 12-foot-wide and 600-step-long mole was still in place. The mouth of the harbour opened to the east with a nearby tower surrounded on all sides by water; here shipping traffic was still possible. According to A. Effenberger, the whole description should be related to the area of Yeni Mahalle, which at that time was still a small harbour basin with a peculiar mole⁹⁹.

These last modest remains of the former harbour of Theodosius were filled with dug earth in 1759/1760, with soil that was brought from the building yard of Laleli Camii. Sultan

85 Effenberger, Illustrationen 17f. – Berger, Langa Bostanı 470-472. – Berger, Häfen 84. – Ercan, Yenikapı 84-87.

86 Effenberger, Illustrationen 14f. – See also Drakoulis, Buondelmonti 221 (Plan).

87 Gerola, Vedute 268f. – Effenberger, Illustrationen 31.

88 Effenberger, Illustrationen 31. 67f. 91 figs 1-2; 103. – Drakoulis, Buondelmonti 221. – Mango, Shoreline 26. – Berger, Langa Bostanı 470-472 tab. 51 fig. 1. – Müller-Wiener, Bildlexikon 314.

89 Nicolò Barbaro 56. – Jacoby, Quartiers juifs 194f. – Berger, Langa Bostanı 472. – Ercan, Yenikapı 88.

90 Jacoby, Quartiers juifs 195f. 218. – Ercan, Yenikapı 84.

91 Effenberger, Illustrationen 31. 103-104.

92 Effenberger, Illustrationen 19. 92 fig. 5.

93 Berger, Langa Bostanı 470-477. – Effenberger, Illustrationen 31-33.

94 Effenberger, Illustrationen 32-33. 92-95 figs 5-12; 103-104.

95 Effenberger, Illustrationen 20. 33 and n. 399. – Giovan Angiolello, Viaggio 25 (Bazzolo).

96 Ercan, Yenikapı 88. 148 fig. II.13.

97 Effenberger, Illustrationen 19 and n. 108; 91 fig. 3.

98 Petrus Gyllius, De topographia IV 8, 212f. – Berger, Langa Bostanı 476.

99 Effenberger, Illustrationen 32.



Fig. 5 View of Constantinople. – (Hartmann Schedel, Liber chronicarum [Nürnberg 1493] fols CXXIX^v, CXXX^r).

Mustafa III (1757-1773) created a new district in the area called Yeni Mahalle, which was frequently inhabited by Armenians¹⁰⁰. The cityscape of Konstantinos Kaldes, a painter and theologian, from 1851 and now preserved in the Benaki Museum in Athens, shows only high density areas in the region of Yenikapı; the former harbour area left no trace¹⁰¹.

In the 1870s, a railway embankment was built through the Langa Bostanı district and several new roads and streets also divided the whole area¹⁰². The construction of a quayside around 1960 and later embankments changed the character of the landscape completely by moving the area of the old Harbour of Theodosius further inland. With the increasing establishment of factories and workshops, the gardens diminished almost completely and the entire landscape altered. Only a very limited area in the so-called Küçük Langa Bostanı retained its former rural character until a few years ago¹⁰³.

The Excavation Site of Yenikapı: Some Remarks on the Archaeological Findings

Thanks to the realisation of the *Marmaray* Project and the start of the excavations in Yenikapı in 2004, the Harbour of Theodosius came back to life. The analysis of the archaeological data will continue for several years, with numerous remarkable insights concerning Byzantine daily life, enriching our knowledge¹⁰⁴. For example, in one of the oldest ships, there was a small wooden box measuring 15.3 cm × 8.8 cm × 7.2 cm, containing several superimposed wax tablets and fixtures for retaining balance weights. Obviously, the unique object was used for accounting and controlling the cargo; today's newspapers even compared the object to a modern tablet computer¹⁰⁵ (fig. 6)!

Within the spacious excavation site, a large number of impressive and sometimes massive architectural remains were discovered, stretching from the fourth to the thirteenth centuries. For example, there was a rambling masonry dock in the bay of Yenikapı already in the fourth century AD, which was regularly used for loading and unloading ships. More

100 Müller-Wiener, *Bildlexikon* 61. – Berger, *Langa Bostanı* 467. – Günsenin, *Harbours and Shipbuilding* 418. – For the Laleli Camii, see Restle, *Istanbul* 193f.

101 Benaki-Museum, inv. no. 30411.

102 Berger, *Langa Bostanı* 468. 471 fig. 4. – Günsenin, »City« *Harbours* 104. – Paribeni, *Torri di Vlanga Bostani* 239 presents a pen drawing of the area from 1884.

103 Berger, *Langa Bostanı* 467f. – Günsenin, *Harbours and Shipbuilding* 418. – See the picture by Kocabaş/Ozsait-Kocabaş, *Milestone* 37.

104 The numerous small finds include, among others, game boards and figures, combs, keys, scales and weights, fibulae, jewellery, ceramics, and lead plaques inscribed with apotropaic formulae, see Baran Çelik, *Daily Life* 216-229. –

Kızıltan/Pekin, *Istanbul* 253-305. – Wade, *Perceptions* 61. 69. – Baran Çelik, *Biçimli Fibulaları* 431-444. – Baran Çelik/Son, *Istanbul Kazı Buluntuları* 38-45. – Öncü/Çölmekçi, *Yenikapı Kazıları* 15-28. – Tsivikis, *Epigraphy* 121-125. – For a detailed report of the excavations at Yenikapı, see also Ginalis/Ercan-Kydonakis, *Reflections on the Archaeology*, in this volume.

105 The box was found in the ship YK 35 from the 5th c.; cf. Polat, *YK 35*, 188 fig. 205. – See *News Discovery* of 19 May 2014: »Byzantine iPad found in Ancient Shipwreck«. – *Green Prophet* of 20 May 2014: »The »original iPad« – 1200 years before Apple«, with an erroneous dating to the Middle Byzantine period. Time misjudgements like this often occur in newspapers and popular media.

than 25 m in length, it was constructed with huge rectangular stones, including some *spolia*, among them a marble stele from the fourth century BC¹⁰⁶. The Theodosian Wall partly overbuilt these older structures; in some parts, the new construction was put on wooden beams that covered the original architecture¹⁰⁷. To build the new wall, people used material from the older constructions, including stones from the fourth century dams. The walls in the harbour area were mostly abundant; routine maintenance and repairs took place on a regular basis throughout the centuries, although these measures are not always easy to date¹⁰⁸.

In the area of the Theodosian Harbour, the archaeologists discovered roads, paths and lanes, wells and walls, fortifications and towers, even a holy spring, a *hagiasma* connected to a church is documented¹⁰⁹. However, the function of different components and structures has not been clarified so far. The existence of a granary in the harbour area has been suggested; the size of the relevant foundations is about 12.3 m × 8.4 m, the interior was plastered with mortar. Unfortunately, modern building activities destroyed several parts of this unique building¹¹⁰. Further to the north, are the foundations of two larger rectangular buildings made from limestone, bricks and mortar. Their function remains unclear, but according to their building technique, they belong to the sixth century AD¹¹¹. Close to the west, there is a vaulted hypogeum. When it was first built in the twelfth century, it possessed four chambers; during the excavation, human bones and skull fragments were discovered in its north-western chamber¹¹². In its immediate neighborhood, between different stone masses, were several human graves; a nearby vaulted waterway dates to the twelfth century as well¹¹³. A large masonry pier in the eastern part of the harbour area belongs, according to its building technique and timber samples, to the late eighth century. Eventually, the structure was generated in context with building activities and restoration measurements in the close vicinity of the harbour, arranged by the Emperor Constantine VI and his mother Eirene¹¹⁴. In the southwestern part of the excavation area, there are four rectangular but partially demolished workshops, the smallest one measuring 2.8 m × 3.75 m, the largest one 6.5 m × 3.2 m. Their walls and floors are covered with lime; water pipes are set above the walls, they were necessary for the production of the goods manufactured here¹¹⁵.



Fig. 6 Wooden box from YK 35, 5th c. – (From Polat, YK 35, 188 fig. 205a).

In the northwestern area of the excavation site, a three-aisled church was discovered, which is normally attributed to the twelfth or thirteenth centuries¹¹⁶, but also to the late tenth or early eleventh centuries¹¹⁷. The church was made from masonry and bricks; in its final condition, it has a length of 9.5 m and a width of 11.45 m. It was originally constructed as a single nave church, both side aisles were added at a later period. Its location is particularly interesting: the church was constructed inside the harbour basin in an area that was silted up at a comparatively early date¹¹⁸. Adjoining the south side of the church is an »L«-shaped storage area with four rooms; they were made of stone in their lower parts, while the upper parts were probably wooden. Inside the church and around it, the archaeologists discovered numerous graves with human skeletons – 23 in all¹¹⁹.

Posts of wooden jetties can be found all over the site, often in seemingly random structures. The phenomenon is obviously a reaction of the progressive siltation of the harbour basin. The timbers date from between the fourth and the fourteenth centuries, with the oldest wood in the west of the basin and the youngest in the extreme southeast – this illustrates once more the progressive siltation of the harbour from west to east¹²⁰.

The real sensation of the excavation is the discovery of 37 ships in the harbour area – the largest collection of Byzantine ships ever found at an excavation site¹²¹. After an in-depth analysis of the archaeological data, it will be possible to enrich

105 Gökçay, *Architectural Finds* 170. – Gökçay, *Yenikapı kazılarında* 170. – Kızıltan, *Stories* 5f. – A brief overview of the architectural findings of Yenikapı in Kocabaş, *Yenikapı Shipwrecks* 7f. – Magdalino, *Harbors* 14. – Magdalino, *Review* 257. – Magdalino, *Renaissances* 60 n. 33 complains about the lack of detailed information; however, he should be aware of the fact that excavation reports with a special interest in harbour architecture are not accessible for a wider audience so far (August 2020).
106 Gökçay, *Architectural Finds* 170f. and fig. 4. – Magdalino, *Harbors* 14: »they overlie the remains of earlier structures«.
107 Gökçay, *Architectural Finds* 171-173.
108 Gökçay, *Architectural Finds* 173. 177f.
109 Gökçay, *Architectural Finds* 173.
110 Gökçay, *Architectural Finds* 173f.
111 Gökçay, *Architectural Finds* 174.

112 Gökçay, *Yenikapı kazılarında* 174.
113 Magdalino, *Harbors* 14.
114 Gökçay, *Architectural Finds* 174.
115 Gökçay, *Architectural Finds* 176. – Magdalino, *Harbors* 14.
116 Toksöy, *Faith* 232. – Toksöy, *İnanç* 232.
117 Gökçay, *Architectural Finds* 175. – Magdalino, *Harbors* 14.
118 Gökçay, *Architectural Finds* 175f.
119 Gökçay, *Architectural Finds* 177. – Magdalino, *Harbors* 14. – Günsenin, *Harbours and Shipbuilding* 420.
121 Liphshitz/Pulak, *Types of Wood* 164. – Ingram/Jones, *Yenikapı* 8. 10. – Kocabaş, *Latest Link* 13. – Pulak et al., *Shipwrecks of Yenikapı* 23. – Pulak/Ingram/Jones, *Byzantine Shipwrecks* 1. 4. – Pulak/Ingram/Jones, *Galleys* 8-25. – Kocabaş, *Studies* 26-41.

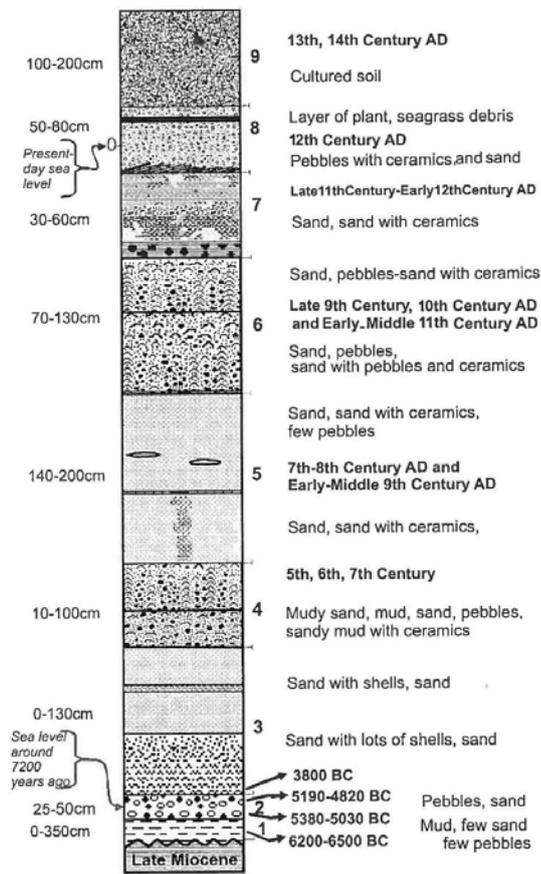


Fig. 7 Generalised stratigraphy of the Yenikapı excavation. – (From Perinçek, Geoarcheology 72 fig. 2).

the statements of the written sources on the history of the harbour.

The first ship was discovered in 2005¹²², the last one a few months before the finishing of the excavations in May 2013¹²³. This last one, ship YK 37, was obviously a simple merchant ship that sank in the eastern section of the harbour near the quay walls¹²⁴. As far as we know, there are no publications concerning its age determination up to now. Two ships were discovered in its immediate vicinity: YK 32 dates to

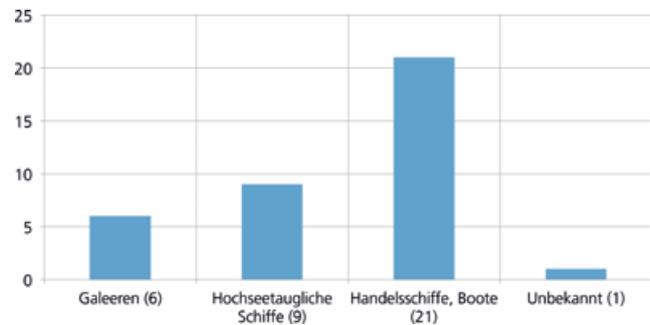


Fig. 8 Shipwrecks according to ship type. – (A. Külzer 2016).

the seventh to ninth centuries and YK 34 to the fifth century; therefore, they offer no evidence for the dating of YK 37.

The remaining 36 ships can be divided into three categories: there are six naval longships or galleys (YK 2, 4, 13, 16, 25, 36); nine ocean-going merchant ships (YK 3, 15, 17, 18, 20, 21, 22, 27, 29); and 21 smaller merchant ships or fishing boats¹²⁵. The dating of the ships depends on the excavation layers they belong to, the analysis of the applied shipbuilding technique, in some cases also on the more precise radiocarbon or ¹⁴C investigations¹²⁶. The results of the scientific analyses will slightly modify the current state of research (fig. 7).

The oldest ships YK 34 and YK 35 date back to the fifth century; both were merchant ships, the former sank without cargo, while the second ship was loaded with various items, such as lamps, kitchen utensils, a 45-cm model ship, the wooden box mentioned above, and more than 120 amphorae¹²⁷. The bones found in some of the vessels indicate the transport of dry fish¹²⁸. Slightly younger are YK 10, YK 22, and YK 26, which date back to the fifth or sixth centuries¹²⁹. The 8.5 m long and 4 m wide YK 11 is dated to the seventh century¹³⁰. The oldest galley found at Yenikapı is YK 16, dated to 720-742 and measuring 22.5 m long and 2.40 m wide¹³¹. YK 29, which was suitable for travelling on the open sea due to its construction, belongs to the same century¹³². The well-preserved ship YK 23 dates back to the late eight or early ninth centuries¹³³. Age determination is

122 Pulak et al., Shipwrecks of Yenikapı 23 f.

123 <http://sgsymposium.ku.edu.tr/yenikapı> (24 November 2014). Several academic papers written later than May 2013 still refer to the incorrect number of 36 ships discovered in Yenikapı.

124 Kocabaş, Yenikapı Shipwrecks 10 presents an accurate plan, which shows the find spots of all the 37 ships discovered in the excavation site. – See also Özsait-Kocabaş, Yenikapı 12, 358 fig. 1.

125 Kocabaş, Byzantine Shipwrecks 52 characterized the eight ships YK 3, 15, 17, 21, 22, 27, 29 and 31 as ocean-going; Kocabaş, Latest Link 9 the nine ships YK 3, 8, 15, 17, 18, 19, 20, 21 and 22. Our statement is based upon size, type and design of the ships.

126 Kocabaş, Old Ships 33-35. – Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 97-185. – For detailed information concerning the nine excavation layers (2a-c, 4a-b, 6a-b), some of them with further subdivisions, between the 7th millennium BC and the 13th-14th c. AD, see Perinçek, Geoarcheology 70 f. 72 etc. – See also Algan et al., Short Note 459-461. – Algan et al., Holocene Coastal Change esp. 31-44.

127 Kocabaş/Özsait-Kocabaş, Milestone 40. – Akkemik/Kocabaş, Trade Ships 5. – Akkemik, Woods 119-124.

128 Polat, YK 35. – Kocabaş/Özsait-Kocabaş, Milestone 40 f. – Asal, Yenikapı Excavations 8. – Akkemik/Kocabaş, Trade Ships 5. – Akkemik, Woods 125-136.

129 Kocabaş, Old Ships 33. – Kocabaş, Latest Link 9. – Kocabaş/Özsait-Kocabaş, Milestone 40. – Akkemik/Kocabaş, Trade Ships 5.

130 Ingram/Jones, Yenikapı 13 f. – Pulak et al., Shipwrecks of Yenikapı 27-30. – Pulak/Ingram/Jones, Byzantine Shipwrecks 9-12. – Pulak/Ingram/Jones, Yenikapı 106 »... built in the first half of the seventh century«. – Pulak/Ingram/Jones, Galleys 14. – Ingram, Yenikapı 11, 103-139. – Dimension data according to Kocabaş, Old Ships 214; the data refer to the state after excavation, without any restoration.

131 Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 176-182. – Kocabaş, Byzantine Shipwrecks 52. – Kocabaş, Latest Link 7-9. – Kocabaş/Özsait-Kocabaş, Milestone 44. – Akkemik/Kocabaş, Trade Ships 5. – Akkemik, Woods 57-64. – Essential for the type of galley: Pryor/Jeffreys, Dromon 163-173 etc.

132 Kocabaş, Byzantine Shipwrecks 53. – Kocabaş/Özsait-Kocabaş, Milestone 45. – Akkemik/Kocabaş, Trade Ships 5.

133 Ingram/Jones, Yenikapı 14. – Pulak et al., Shipwrecks of Yenikapı 27. 30. – Pulak/Ingram/Jones, Byzantine Shipwrecks 12-15. – Pulak/Ingram/Jones, Galleys 16. – Pulak/Ingram/Jones, Yenikapı 106 f.

Fig. 9 Shipwreck YK 12. – (From Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 115 fig. 11).



unfortunately inaccurate for the ships YK 28, YK 30 and YK 32, which belong to the period between the seventh and the ninth centuries, due to their discovery in excavation layer 5¹³⁴. The more than 11 m long YK 15, preserved only in small remnants, was also discovered in this earth layer¹³⁵ (fig. 8).

Due to radiocarbon analyses, some ships could be classified more precisely. YK 17, a seaworthy ship, even today

more than 8m (originally over 18m) long, also from excavation layer 5, can be assigned to the period between 652 and 870¹³⁶. YK 3, which was at the time of excavation still more than 9m long, dates from the period between 668 and 840¹³⁷. In the hull of this ship, the excavators discovered various building materials such as bricks, cement residues and broken marble pieces. Some scholars understood the records

134 Perinçek, *Geoarcheology* 72. 77f. 86. – Akkemik/Kocabaş, *Trade Ships* 5.

135 Kocabaş, *Byzantine Shipwrecks* 53 supposed an original length of more than 17m. Özsait-Kocabaş/Kocabaş, *Features of Yenikapı Shipwrecks* 164-167. – Kocabaş, *Byzantine Shipwrecks* 53. – Kocabaş, *Latest Link* 9. – Akkemik/Kocabaş, *Trade Ships* 5.

136 Özsait-Kocabaş/Kocabaş, *Features of Yenikapı Shipwrecks* 168-175. – Kocabaş, *Old Ships* 33f. – Kocabaş, *Byzantine Shipwrecks* 53. – Kocabaş, *Latest Link* 9. – Kocabaş/Özsait-Kocabaş, *Milestone* 44f. – Türkmenoğlu, *Yenikapı* 17, 121-125.

137 Kocabaş, *Byzantine Shipwrecks* 52f. supposed an original length of 20m and a width of 6m. – Kocabaş/Özsait-Kocabaş, *Milestone* 43.

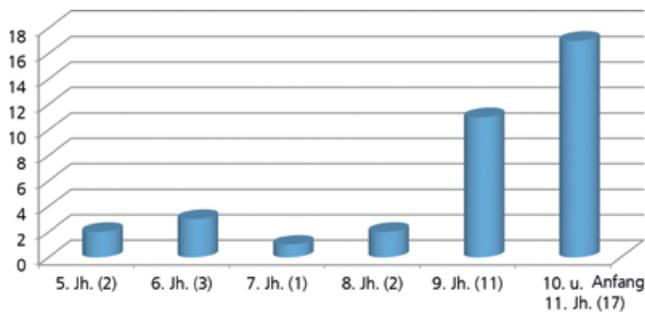


Fig. 10 Shipwrecks in chronological distribution. – (A. Külzer 2016).

as cargo; they thought about material handling from the Proconnesus Island in the Sea of Marmara to Constantinople. On the other hand, there is also the possibility that the ship was sunk with the help of rubble from the harbour¹³⁸. YK 27, 12 m long and 2.30 m wide, is assigned to the period between 672 and 869¹³⁹. YK 12, which was only 7 m long and 2.30 m wide at the time of its discovery, but estimated to have been originally 9.6 m long and 2.6 m wide, was built at the same time, using materials from the period between 672 and 870¹⁴⁰. At the time of its foundering, the single-masted merchant ship was loaded with amphorae filled with wine from Mount Ganos (Işıklar dağı). Besides weights, needles and tokens, noteworthy items onboard are a coal-burning stove, as well as pitchers, beakers and a few smaller amphorae that may have been used by the crew or the captain. A basket of cherry stones provides a remarkable clue to the season of its sinking, obviously in late spring or early summer¹⁴¹ (fig. 9).

At nearly 9 m long and 2.30 m wide, the ocean-going YK 20 belongs to the period between 687 and 975¹⁴². The 15 m long galley YK 13 was built with wood belonging to the period between 690 and 890¹⁴³. The today 12 m long, originally probably 14 m long YK 14 was initially dated to the late

ninth or early tenth centuries; however, due to radiocarbon and dendrochronological dating it originated from the ninth century, maybe even from the beginning of this century. The ship must have sunk soon after its launch, since the wreck has neither worm damage nor traces of repairs¹⁴⁴. The galley YK 2, which sank in the tenth century, probably due to a heavy storm, was also in mint condition¹⁴⁵. The galley YK 4, which was 18 m long and surpassed the aforementioned ship by over 3 m, was probably a victim of this disaster, too. In contrast to YK 13, YK 4 was already old at the time of its foundering, various stress marks indicate a construction in the middle of the tenth century or even earlier¹⁴⁶ (fig. 10).

The two remaining galleys, YK 25 and YK 36, likewise belong to the tenth century¹⁴⁷, as well as the originally about 10 m long and 3.5 m wide merchant ship YK 1. This well-preserved boat was loaded just before sinking, a rarely documented fact. Its cargo included potter's wheels and combs, an iron anchor and numerous amphorae filled with Ganos wine. Obviously, the ship was used in coastal trade¹⁴⁸. The roundship YK 5 is from the same period. It was at least 12 m long and, at the time of foundering, still in mint condition¹⁴⁹. The smaller ships YK 6, YK 7, YK 8, YK 9, YK 18, YK 24 and YK 33 belong to this period as well¹⁵⁰. The ships YK 19, 21 and YK 31 are roughly dated to the period between the ninth and eleventh centuries¹⁵¹. They belong to the sediment layer 6, a 70 to 130 cm thick layer that is generally dated from the tenth to the middle of the eleventh centuries. Interestingly, a layer of sand enriched with numerous ceramic fragments divides it. These are the effects of a tsunami that arose after the heavy earthquakes of 989 or 1010¹⁵². There is a further tsunami layer, between 30 and 40 cm thick, in the sediment layer 4; this one is connected to the seismic event of the year 557¹⁵³. The natural catastrophes of the sixth, tenth and early eleventh centuries mentioned in literary sources¹⁵⁴ are confirmed by the archaeological excavation results; they are

138 Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 156. – Kocabaş, Byzantine Shipwrecks 52 (decaying data 865-987). – Kocabaş, Latest Link 9. – Asal, Yenikapı Excavations 9. – Çetiner, Yenikapı 3. 61. – Demirkök et al., YK 3.
 139 Kocabaş, Byzantine Shipwrecks 53. – Kocabaş/Özsait-Kocabaş, Milestone 45.
 140 Kocabaş, Byzantine Shipwrecks 54. – Kocabaş/Özsait-Kocabaş, Milestone 43 f. – Denker et al., YK 12. – Akkemik, Woods 43-48. – Özsait-Kocabaş, Yenikapı 12, 357-390.
 141 Akkemik, Timbers 201-211. – Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 112-124. – Kocabaş, Old Ships 29. – Kocabaş, Latest Link 10-12. – Özsait-Kocabaş, Voyage. – Akkemik/Kocabaş, Trade Ships 5. – Özsait-Kocabaş, Yenikapı 12, 357. – On the amphorae, see Armstrong/Günsenin, Pottery Production 179-201. – Günsenin, Ganos 193-201. – Günsenin, Vin de Ganos 281-287. – Günsenin, Portus Theodosiacus 399-402. – On Mount Ganos, see Külzer, Ganos-Gebirge 41-52. 91-97. – On board and food, see Kisliger, Reisen 381. – Kisliger, Alltag 171-175.
 142 Kocabaş, Latest Link 9. – Kocabaş/Özsait-Kocabaş, Milestone 44. – Akkemik/Kocabaş, Trade Ships 5.
 143 Kocabaş, Byzantine Shipwrecks 52. – Kocabaş/Özsait-Kocabaş, Milestone 44. – Akkemik/Kocabaş, Trade Ships 5. – Akkemik, Woods 49-54.
 144 Lipshchitz/Pulak, Types of Wood 168. – Ingram/Jones, Yenikapı 14. – Pulak et al., Shipwrecks of Yenikapı 27. 30. – Pulak/Ingram/Jones, Galleys 16-18. – Pulak/Ingram/Jones, Yenikapı 107 f. – The recent dating according to Jones, Hull construction YK 14 253 f.
 145 Lipshchitz/Pulak, Types of Wood 168. – Ingram/Jones, Yenikapı 14. – Pulak et al., Shipwrecks of Yenikapı 26 f. 31. – Pulak/Ingram/Jones, Byzantine Shipwrecks 24-26. – Pulak/Ingram/Jones, Galleys 11-14. – Pulak/Ingram/Jones, Yenikapı 103. 111.

146 Lipshchitz/Pulak, Types of Wood 169. – Ingram/Jones, Yenikapı 14. – Pulak et al., Shipwrecks of Yenikapı 26 f. 31. – Pulak/Ingram/Jones, Byzantine Shipwrecks 26-30. – Pulak/Ingram/Jones, Galleys 11-14. – Pulak/Ingram/Jones, Yenikapı 111 f.
 147 Kocabaş, Latest Link 7. – Pulak et al., Shipwrecks of Yenikapı 23. – Akkemik/Kocabaş, Trade Ships 5.
 148 Lipshchitz/Pulak, Types of Wood 166 f. – Ingram/Jones, Yenikapı 14. – Denker et al., YK 1. – Pulak et al., Shipwrecks of Yenikapı 27. 31. – Pulak/Ingram/Jones, Byzantine Shipwrecks 21-24. – Pulak/Ingram/Jones, Galleys 20. – Pulak/Ingram/Jones, Yenikapı 106. 110.
 149 Lipshchitz/Pulak, Types of Wood 167. – Ingram/Jones, Yenikapı 14. – Pulak et al., Shipwrecks of Yenikapı 27. 31. – Pulak/Ingram/Jones, Byzantine Shipwrecks 17-19. – Pulak/Ingram/Jones, Yenikapı 108 f.
 150 Özsait-Kocabaş/Kocabaş, Features of Yenikapı Shipwrecks 103-111 (YK 6). 125-131 (YK 9). 132-139 (YK 7). 140-147 (YK 18). 148-151 (YK 8). – Kocabaş, Byzantine Shipwrecks 52 f. – Kocabaş, Latest Link 9 f. – Kocabaş/Özsait-Kocabaş, Milestone 43 f. – Pulak/Ingram/Jones, Byzantine Shipwrecks 19-21 (YK 24). – Pulak/Ingram/Jones, Yenikapı 109 f. (YK 24).
 151 Kocabaş, Latest Link 9. – Akkemik/Kocabaş, Trade Ships 5.
 152 Kocabaş, Old Ships 34. – Perinçek, Geoarcheology 78-80.
 153 Kocabaş, Old Ships 33-35. – Perinçek, Geoarcheology 75-77. 84-87. 90. – Bony et al., High-energy Deposit 128 f. remain sceptical about the accurate date of 557.
 154 See the register of written sources in Guidoboni, Earthquakes 336 f. 340-345. 404 f. – Pulak/Comastri, Earthquakes 20 f. – Ambraseys, Earthquakes 206 f. 208-211. 256 f. 259.

Fig. 11 Tsunami layer at the excavation site. – (From Kocabaş, Old Ships 35 fig. 11).



responsible for the preservation of the vast number of ships known today in the Harbour of Theodosius (fig. 11).

The distribution of the wrecks within the harbour area confirms the progressive silting up of the dock from west to east. In the western parts of the harbour basin, only a single ship was discovered: YK 11, a ship that belongs to the seventh century, being one of the oldest wreckages found in the whole landing area. The wrecks that were closest to this one lie at a distance of almost 200m to the east: YK 31 and 33 date to the ninth to eleventh centuries, YK 14 dates to the (early?) ninth century, and YK 30 to the period between the seventh and tenth centuries¹⁵⁵. YK 36 lies about 90m south of this site. The remaining 31 ships were found in the eastern part of the harbour basin, whose use between the fifth and the early eleventh centuries is thereby proved.

The Animal Skeletons of Yenikapı

In addition to the unique number of 37 shipwrecks and the numerous remarkable art and everyday objects, multitudinous animal skeletons were found at the extensive excavation site of Yenikapı. By 30 September 2010, the excavators discovered more than 20800 skeletons, which can be assigned to 54 species¹⁵⁶. Animals were used for the transport of people and goods, sometimes for military purposes; among other rea-

sons, they were needed as food sources or to supply leather, wool, milk and eggs. Some species could be used for personal protection or for hunting. Humans cultivated animals and different animal species followed the humans unaffiliated as synanthropic species. Therefore, their presence in the harbour area of a huge urban settlement is just consequential. The analysis of the skeletons provides significant information about the distribution of single animal species, about human food habits and the interaction of the contemporaneous people with animals in general. From a biological point of view, the determination of shoulder heights, head sizes, structures of dentition, weight can yield interesting details concerning the isochronal livestock, its visual nature and special living condition. A comparison with data from different historical periods may offer hints for some developments in domestication¹⁵⁷.

The largest group of skeletons in Yenikapı is that of horses, followed by cattle and sheep¹⁵⁸, and then, by a considerable margin, pigs, dogs, donkeys and goats¹⁵⁹. Noteworthy are the large number of camel bones, the relatively small number of cat skeletons and the basic presence of tortoises, sea turtles, ostriches, elephants and bears; even skeletons of two primates and a gazelle were found in the harbour area¹⁶⁰. Among the birds, the greatest number of skeletons come from chickens, geese and ducks. Among the fish and sea mammals, tuna, swordfish and predatory catfish (*Clarias*) are especially numerous¹⁶¹, not to forget the dolphins, of which

155 Kocabaş, Yenikapı Shipwrecks 11f. 18. 21. – Kocabaş/Özsait-Kocabaş, Milestone 38. – Pulak et al., Shipwrecks of Yenikapı 23. – Pulak/Ingram/Jones, Byzantine Shipwrecks 15-17. – Pulak/Ingram/Jones, Yenikapı 106. – Ingram, Yenikapı 11, 103-105. – Jones, Hull Construction Yk 14 253f.

156 Onar et al., Overview 6. – Onar et al., Animal Skeletal Remains 83 tab. 2: at this time, 20881 skeletons were documented. Further animal skeletons were discovered in the following months and years, but to my knowledge, they are not described in the scientific literature so far.

157 For example on dogs: Morgan, Deformations. – Clark, Dog. – Onar, Dogs Yoncatepe. – Onar/Belli, Shoulder Height. – Onar et al., Skull Typology. – Onar et al., Dogs Yenikapı. – On horses: Swabe, Animals. – Johnstone, Equids. – Levine et al., Horse Husbandry. – Onar et al., Horse Skeletons 1 and 2. – On sheep: Lallemand, Mouton. – Guintard/Lallemand, Sheep. – In general, see the erudite studies of Kroll, Tiere, and Kroll, Animals.

158 Onar et al., Animal Skeletal Remains 83 tab. 2: 6816 horses (plus another 178 other specimens that cannot be clearly classified as horse or mule, 503 mules and 26 animals that are not clearly identifiable as mules or as donkeys); 4209 cattle; 4018 sheep.

159 Onar et al., Animal Skeletal Remains 83 tab. 2: 925 pigs; 859 dogs; 794 donkeys; 738 goats. – Concerning dogs in Byzantium see also Rhoby, Hunde 807-820.

160 Onar et al., Animal Skeletal Remains 83 tab. 2: 246 camels; 78 cats; 9 tortoises; 37 sea turtles; 32 ostriches, 9 elephants and 9 bears. – Concerning cats in Byzantium, see also the erudite study of Kislinger, Cats 165-178.

161 Onar et al., Animal Skeletal Remains 85.



Fig. 12 Skeleton of a horse found in Yenikapi. – (From Kocabaş, Old Ships 28 fig. 6).

at least 90 skeletons have been verified¹⁶². Selected bones were analysed for age, by using the radiocarbon method, and the results cover the complete Byzantine period from the fourth to the fifteenth centuries¹⁶³ (fig. 12).

The evaluation of the horse bones, the largest collection so far discovered in the whole area of the former Byzantine Empire, led to interesting results. For example, there were more stallions than mares and no foals found; 95 % of the animals were younger than 10 years old at the time of death, most commonly being from 7-10 years¹⁶⁴. The height of the withers of most horses was between 144 and 152 cm¹⁶⁵. Numerous animals suffered from diseases and malformations, such as back deformities due to the carrying of excessive loads and unsuitable saddles, from bone fractures and bone growths in the muzzle area and jaw injuries due to improper bridles. Apparently, the Byzantines did not treat their horses well in everyday life, despite the testimony of scholarly treatises on equine medicine, the so-called *Hippiatrica*, which draw a rather incorrect picture of the attitude to horses at that time¹⁶⁶. Only 20 of the more than 6800 horse skeletons are complete, the majority of the skeletons is preserved in fragments¹⁶⁷. Cut marks from butcher's knives indicate that this was not caused by the effects of nature on the carcasses, but the result of deliberate dismemberment, which suggests that the animals were used for human consumption¹⁶⁸, as

well as providing usable parts such as the hide or mane. Dead animals that were not used for consumption or different purposes were probably simply thrown into the western part of the harbour, which was already muddy and no longer used for shipping. This seems to be the major reason for the numerous skeletal finds on the site¹⁶⁹.

Among the more than 240 camels found in the harbour area, there is only one complete skeleton, belonging to an animal between 8 and 10 years old. In contrast to many others, this skeleton shows no knife marks on the bones; it was apparently left as a complete individual after death, while a great number of its conspecifics were cut up and cooked in the Byzantine kitchens¹⁷⁰. The preserved skeletal parts and skulls of cattle, sheep and goats often show signs of slaughtering as well; the brain seems to have been regularly removed¹⁷¹. Both male and female animals were used to transport loads and larger objects, as the analysis of the bones manifests¹⁷². The examination of the dog bones shows a clear predominance of medium-sized animals, which could easily be accommodated in an urban environment; these animals were obviously not used as human food¹⁷³. The predominance of bones from large fish species indicates that these ones were already filleted in the harbour and afterwards sold, while smaller species, such as the popular seabream or bonitos, were purchased whole¹⁷⁴.

Noteworthy is the large number of dolphin skeletons found in the area of the Harbour of Theodosius. Their skulls are intact, but in many cases, they show knife marks in the vertebral area¹⁷⁵. Already in the second century AD, Oppian of Anazarbus criticised dolphin hunting and characterised the practice as »immoral« (ἀπίστροπος). This type of hunting was a custom of the Thracians and some other »barbarian« people. Among the Greeks, only the residents of Byzantium practised it; however, the custom was castigated as »shameful« (ἀτακτηρός) and »sacrilegious« (ἀτάσθαλος). The new discoveries from Yenikapi demonstrate that dolphin hunting continued in Constantinople from Antiquity to the Middle Ages¹⁷⁶. Dolphin meat was traded in the markets of the city. It is of course impossible to determine the price of the meat and the social class to which the buyers belonged, whether they were rather wealthy than poor people. There is no evidence in contemporaneous written sources.

The excavations of Yenikapi provide interesting information about the structure and architecture of the Harbour of Theodosius and its economic lifetime, as well as offering insight into certain aspects of daily life in Byzantium.

162 Onar et al., Overview 4. – Onar et al., Animal Skeletal Remains 83 tab. 2.
 163 Onar et al., Horse Skeletons 1, 139. – Onar et al., Overview 6. – Onar et al., Dogs Yenikapi 56.
 164 Onar et al., Horse Skeletons 1, 140. – Onar et al., Animal Skeletal Remains 83.
 165 Onar et al., Horse Skeletons 2, 37 (»large medium«). 40.
 166 Onar et al., Horse Skeletons 1, 140-143. 145. – Onar et al., Animal Skeletal Remains 83 f. On *Hippiatrica*, see Doyen-Higuet, *Hippiatrica* and McCabe, *Encyclopaedia*.
 167 Onar et al., Horse Skeletons 1, 140. – Onar et al., Animal Skeletal Remains 82.
 168 Onar et al., Horse Skeletons 1, 140. 145. – Onar et al., Overview 7.

169 Onar et al., Horse Skeletons 1, 145. – Onar et al., Overview 7.
 170 Onar et al., Animal Skeletal Remains 84.
 171 Onar et al., Overview 6 f. fig. 6. – Onar et al., Cattle 76.
 172 Onar et al., Cattle 72. 76 f.
 173 Onar et al., Skull Typology. – Onar et al., Dogs Yenikapi 55. 58: »light- and medium-sized mesocephalic dogs [...] slightly larger than Terrier breeds«.
 174 Onar et al., Overview 5.
 175 Onar et al., Animal Skeletal Remains 84.
 176 Oppian, *Halieutica* V 416-419. 519-588. – Vidali, *Delphindarstellungen* 49 f. – Matschke, *Fischer von Konstantinopel* 295. – Külzer, *Ostthrakien* 219.

They provide important information on the construction and equipment of ships and technical aids for their operation, on merchandise, food habits and other realities of life. An analysis of the recent data resulting from geological, archae-

ological, botanical and zoological research will offer a better knowledge of the realities of life in Byzantium and will allow a reinterpretation of former academic theories that were mostly based on literary sources.

Summary / Zusammenfassung

The Harbour of Theodosius in Yenikapı, İstanbul: A Harbour Area Through the Ages

The discovery of the famous Harbour of Theodosius in the Yenikapı district of İstanbul, more than fifteen years ago during work on the expansion of the metro system, was an archaeological sensation. In the largest excavation in İstanbul's history covering some 58 000 m², several building structures and architectural elements were uncovered, providing important information about the specific extent of the area. A total number of 37 shipwrecks from the fifth to the eleventh centuries provide a rich source for further research and numerous small finds provide insight into the daily life of the inhabitants of the Byzantine capital. The analysis of thousands of animal bones gives insight into eating habits, informing us about the realities of animal husbandry and animal use in medieval Constantinople. The earliest settlement traces in the harbour area datable to the Neolithic period. The inhabitants of ancient Byzantium used the bay for landing purposes. The Harbour, which is not identical with the Harbour of Eleutherios, was probably established around AD 390 under Emperor Theodosius I; it was mentioned in the literary sources for the first time around 425. Despite continuously silting-up, partly due to the sedimentary deposits of the river Lycus, some parts of the harbour were still in use in the late Palaeologan period. The last, modest remains of the harbour were completely filled in with earth around 1759/1760.

Der Theodosios-Hafen in Yenikapı, İstanbul: Ein Hafengelände im Wandel der Zeiten

Als vor mehr als fünfzehn Jahren im Verlauf von Arbeiten zum Ausbau des Metro-Systems im İstanbuler Stadtteil Yenikapı der berühmte Hafen des Theodosios gefunden wurde, kam dies einer archäologischen Sensation gleich. In der mit 58 000 m² größten Grabung in der Stadtgeschichte İstanbuls wurden viele Gebäudestrukturen und Architekturelemente freigelegt, die wichtige Kenntnisse über die konkrete Ausdehnung des Areals vermitteln. Insgesamt 37 Schiffwracks aus der Zeit zwischen dem 5. und dem 11. Jahrhundert stellen ein reiches Reservoir für künftige Forschungen dar, die zahlreichen Kleinfunde vermitteln Einblicke in den Alltag der hauptstädtischen Einwohner, die Analyse der Tausenden von Tierknochen erlaubt Kenntnisse über Nahrungsgewohnheiten wie über Realitäten der Tierhaltung und Tiernutzung im mittelalterlichen Konstantinopel. Die frühesten Siedlungsspuren im Hafengebiet datieren in die Jungsteinzeit; die Bewohner des antiken Byzanz nutzten die Bucht ebenfalls zu Anlegezwecken. Der eigentliche Hafen, der entgegen immer wieder zu lesenden Behauptungen nicht(!) mit dem Eleutherios-Hafen gleichzusetzen ist, wurde möglicherweise um das Jahr 390 unter Kaiser Theodosios I. angelegt, um 425 ist er erstmals literarisch erwähnt. Ungeachtet fortschreitender Verlandung, teilweise bedingt durch die Ablagerungen des Lykos, waren einige Teile des Hafens noch in der späten Palaiologenzeit in Verwendung; erst um 1759/1760 wurden die letzten bescheidenen Reste des Hafens vollständig mit Erdmassen aufgefüllt.

Harbour of Julian – Harbour of Sophia – Kontoskalion

First met in the sources as the Harbour of Julian, later as the Harbour of Sophia, then as Kontoskalion and finally as Kadirga Limanı, this harbour proved the most durable of those on the south coast of Constantinople. Despite its exposed position, which made conversions and dredging necessary, the harbour remained in use from the fourth to the sixteenth centuries¹.

The Construction of the Harbour under Emperor Julian (362)

Before Emperor Julian (360-363), who was renamed *Apostata* («the Apostate») because of his renouncement of Christianity, went to war against the Persians in 362, he spent several months in Constantinople. Among other things, he used the time for construction measures, including a very large harbour to protect ships from the south winds and a colonnade, rather sigma-shaped [i. e., C-shaped] than straight, which led to the harbour².

Julian would not live to see the completion of the ambitious project: he set out on the campaign against Persia soon after the construction of the harbour had begun and did not return. The emperor, however, had taken care to perpetuate himself as the founder of the harbour in the memory of the city: a statue in the middle of the harbour memorialised him until it fell victim to an earthquake in 535 and was replaced by a cross under Justinian I (527-565)³. In fact, the harbour seems to have been linked to the name of the emperor from

the beginning: the fifth-century *Codex Theodosianus* knows it as *divi Juliani portus*⁴, and Procopius in the sixth century reports of the »harbour of the city named after Julian«⁵. The name is also known to the author of the *Chronicon Paschale* in the seventh century⁶. The name remained in use until at least the eleventh century, when, however, the primary designation had already changed to the »Harbour of Sophia« (see below)⁷. However, the memory of the Emperor faded with time and thus the *Patria Konstantinoupoleos* mistakenly name it after a *consul* named Julian⁸.

Julian's harbour was in *Regio III*, a quarter on the south coast of Constantinople, which extended south and southwest of the Hippodrome⁹. Moreover, the continuous use of the harbour into modern times suggests that it must have been located in this region. In the nineteenth century, traces of an old harbour basin east of Kumkapı were still visible, which are likely to be associated with the Harbour of Julian¹⁰. Even today, the former harbour basin of the Ottoman Kadirga Limanı («Galley Harbour») stands out against the urban topography. The basin had a diameter of about 600m and a potentially usable quay length of about 1000m (map 1 p. 236)¹¹. Whether its present northern boundary, the arcuate Kadirga Limanı Caddesi («Galley Harbour Road»), is reminiscent of the extent of the first construction phase, or from a later expansion to the east, must remain open (see below)¹².

The colonnade mentioned by Zosimos, apparently slightly sigma-shaped, which lined the basin to the north, was a characteristic detail of the harbour: the *Notitia Urbis Constantinopolitanae*, which was largely written under Theodosius II

1 Standard literature: van Millingen, Walls 288-296. – Janin, Port Sophien 117-122. – Janin, Ports. – Janin, Constantinople 228-234. – Guillard, Ports 181-201. 225-230. – Müller-Wiener, Häfen 8-9. 26-28. – Müller-Wiener, Bildlexikon 62-63. – Stauridou-Zaphraka, Kontoskalio. – Cameron, Notes. – Makris, Studien 176-179. – Magdalino, Constantinople 20-22. 52. 76. – Magdalino, Maritime Neighborhoods 211-219. – Mango, Développement 38-39. 5-56. – Berger, Untersuchungen 428-430. 482-484. 566-580. – Berger, Häfen 83-85. – Effenberger, Illustrationen 30-31.

2 Zosimos, *Historia Nova* III 3 (II 25 Paschoud): ἔδωκε μὲν τῇ πόλει γερούσιαν ἔχειν ὡς περ τῆ Ῥώμῃ, λιμένα δὲ μέγιστον αὐτῆ δειμάμενος, τῶν ἀπὸ τοῦ νότου κινδυνουόντων ἀλεξήτηριον πλοίων, καὶ στοὰν σιγματοειδῆ μᾶλλον ἢ εὐθείαν, ἐπὶ τὸν λιμένα κατὰ γούσαν. There is no reason to follow the assumption of Berger, Häfen von Byzanz und Konstantinopel 112 and Günsenin, Harbours and Shipbuilding 414 that under Julian the building of the harbour was finished.

3 Ioannes Malalas, *Chronographia* XVIII 82 (404 Thurn): Τῷ αὐτῷ δὲ χρόνῳ ἔπρεσεν ἡ στήλη Ἰουλιανοῦ τοῦ παραβάτου ἢ σταθεῖσα μέσον τοῦ Ἰουλιανοῦ λιμένος· καὶ ἐπηξάν ἄντι τῆς αὐτῆς στήλης σταυρόν. – Berger, Untersuchungen 573.

4 Cod. Theod. XIV 6 5 (a. 419): *Omnes fornaces per omne spatium quod inter amphitheatrum [Kynegion] et divi Juliani portum per litus maris extenditur, tolli praecipimus propter salubritatem urbis et aedium regiarum vicinitatem.* –

At about the same time, the *Notitia urbis Constantinopolitanae* IV 10 (232 Seeck) refers to the harbour as *portus novus* (on this, see n. 14 below).

5 Prokopios, *De aedificiis* I 4 28 (IV 26 Haury/Wirth): τό τε Θέκλης μάρτυρος ἱερὸν, ὃ παρὰ τὸν τῆς πόλεως λιμένα ἐστίν, ὄνπερ ἐπώνυμον Ἰουλιανοῦ ξυμβαίνει εἶναι. – Cf. Stauridou-Zaphraka, Kontoskalio 1303. 1306.

6 *Chronicon Paschale* I 622 (Dindorf): ἐπὶ τὸν Ἰουλιανὸν λιμένα. – Ibid. 700: εἰς τὸν Ἰουλιανὸν λιμένα.

7 Theophanes, *Chronographia* AM 6024, AM 6187 (184. 368 de Boor, see n. 44). – *Vita Eustratii* 37 (391 Papadopoulos-Kerameus, see n. 99). – Symeon Logothetes, *Chronicon* 105,6 (147 Wahlgren, see n. 44) = Leon Grammatikos, *Chronographia* 135 (Bekker).

8 *Patria Konstantinoupoleos* III 39a (II 232 Preger): Ἐκλήθη δὲ Ἰουλιανὸς λιμὴν, ὅτι ὁ ὑπάτικὸς ὁ κτίσας αὐτὸν οὕτως ἐκαλεῖτο. – Cf. Berger, Untersuchungen 568.

9 *Notitia urbis Constantinopolitanae* IV 10 (232 Seeck). – Cf. Janin, Constantinople 50 and map III. – Berger, Regionen 360-361.

10 van Millingen, Walls 294.

11 Mango, Développement 39.

12 Matthews, *Notitia* 102 takes the road as the northern edge of the Harbour of Julian, as does Mango, Développement 39.

(408-450)¹³, has a »new harbour« (*portus novus*) in *Regio III* with a semi-circular portico (*porticus semirotonda*)¹⁴, undoubtedly this is to be understood as the Harbour of Julian¹⁵. The fact that the harbour is called »new« could refer to the fact that it was recently completed. Julian may have initiated the construction, but completion in the few months of his remaining lifetime had certainly not been possible. Maybe, however, the passage is simply from an older listing and had not been updated¹⁶.

The Harbour of Julian resulted in a significant improvement of Constantinople's southern Propontis coast. With the small so-called Hormisdas harbour near the Church of the Saints Sergius and Bacchus¹⁷ there may have been a jetty nearby since the time of Constantine the Great¹⁸, but with the Neorion and the Proosphorion, the city's two main harbours were situated on the Golden Horn¹⁹. The economic boom of the south coast was also reflected in the construction of the Harbour of Theodosius west of the Harbour of Julian in the fifth century²⁰. The granaries (*Horrea Alexandrina*, *Horeum Theodosianum*) that were built between the two major harbours testify to their importance for receiving the delivery of grain shipments from Egypt²¹. Berger's recent assumption that the Harbour of Julian was only a naval harbour, however, cannot be supported by the sources²².

Although the two new harbours of Julian and Theodosius provided protection against the strong currents and winds of the Bosphorus, they suffered similarly from the problem of silting up²³. The first dredging of the Harbour of Julian with the help of wheeled machines (*rotalibus machinis*) is recorded

for the year 509²⁴. In the course of this operation, Emperor Anastasius I (491-518) also built breakwaters²⁵. However, there must have been some earlier structure, especially as Zosimos emphasised that the harbour should protect ships from the south winds²⁶. Renovations may have become necessary though after a major fire in 465 had blazed a trail of devastation from the Golden Horn to the Harbour of Julian²⁷.

The shift of the most important structures from the Golden Horn to the southern coast of the peninsula became definite in the sixth century²⁸. The area surrounding the Harbour of Julian developed into an elite residential area²⁹. Even within the Great Palace, new buildings were now almost exclusively built on the lower, southern terraces³⁰ and for the first time also an imperial private harbour was built, which was located not far east of the Harbour of Julian³¹.

From the middle of the sixth century, the population of Constantinople shrank and with it the volume of regular supplies of grain from Egypt³². The Harbour of Julian still maintained its importance and the market for imported goods (*ἀγορὰ τῶν θαλασσίων ἐμπόρων*) was relocated here from the Neorion Harbour. Building ground must have been sufficiently available near the Harbour of Julian after a fire in December 560³³. The *Patria Konstantinoupoleos* attribute the initiative of relocating the market to an Emperor named Justinian³⁴, but in research, the dating is controversial. Magdalino considers an assignment to Justinian I (527-565) to be likely, especially because the areas on the Golden Horn had become unsafe³⁵: in 559, an invasion of Kutrigurs threatened the Thracian suburbs of Constantinople³⁶ and in 561, the

13 Only individual sections may come from older sources. On the dating, see Matthews, *Notitia* 84-85.
 14 *Notitia urbis Constantinopolitanae* IV 10 (232 Seeck): *Regio tertia [...] continet in se Portum novum. Porticum semirotondam, quae ex similitudine fabricae sigma Graeco vocabulo nuncupatur.*
 15 Berger, *Untersuchungen* 152. 568. – Berger, *Regionen* 361. – Mango, *Développement* 39. – Janin, *Constantinople* 232. The really »new« harbour at the time of the compilation of the *Notitia* was actually the Harbour of Theodosius, which is, however, listed among the buildings of the *Regio XII* (239 Seeck). – Cf. Matthews, *Notitia* 101. 109-110. – See also Külzer, *Harbour of Theodosius* in this volume.
 16 On this problem, see Matthews, *Notitia* 84-85.
 17 *Patria Konstantinoupoleos* III 39 (II 231 Preger): *ἔτι τὰ καλούμενα Ὁρμίσδου λιμὴν ἐτύγγανεν μικρὸς ἐν ᾧ ὄρμον αἱ νῆες πρὸ τῆς Σοφίας κτισθῆναι.* After the construction of the Harbour of Julian, the harbour became obsolete and was neglected: *ἐκ δὲ τῶν πολλῶν χρόνων ἀμεληθεὶς ἐγεμίσθη.* – Cf. Berger, *Untersuchungen* 566. – Guillard, *Ports* 181-182. – Müller-Wiener, *Häfen* 8.
 18 According to the *Patria Konstantinoupoleos* III 132 (II 257 Preger), Constantine the Great had the porphyry column for his forum delivered to the Harbour of Sophia (Harbour of Julian), but – if the text indeed reported an actual event – only a previous harbour could have been meant: *Ἐκλήθη δὲ σιδηρὰ ἡ πύρρα: ἐπὶ τοῦ μεγάλου Κωνσταντίνου ὁ μέγας κίων ὁ πορφυροῦς τοῦ Ἀνθίου τρεῖς χρόνους ἐποίησεν πλωζόμενος ἀπὸ Ῥώμης διὰ τὴν ὑπερβολὴν τοῦ μεγέθους αὐτοῦ· καὶ ἐλθὼν εἰς τὰς Σοφίας ἐν τῇ τρίτῃ θελόντων αὐτὸν ἐκβαλεῖν ἀπὸ τῶν σχιδῶν ἐχώσθη εἰς τὸν αἰγιαλὸν πῆχεις τεσσαρεῖς διὰ τὸ εἶναι χαῦνον καὶ ἀλσώδη τὸν τόπον· μέλλοντες δὲ τοῦτον ἐκσπάσαι οὐκ ἠδύνατο μετὰ ξύλων, ἀλλὰ μετὰ μοχλῶν σιδηρῶν: καὶ διὰ τοῦτο οὕτως ἐκλήθη.* – Cf. Guillard, *Ports* 186.
 19 See Kislinger, *Better and Worse Sites*, in this volume. – Müller-Wiener, *Häfen* 6-8. – Mango, *Développement* 38-39 with calculation for space requirements for mass deliveries.
 20 See Külzer, *Harbour of Theodosius*, in this volume. – Müller-Wiener, *Häfen* 9.
 21 *Notitia Urbis Constantinopolitanae* X 6, X 9 (237 Seeck): *the horrea* are located in the *Regio IX*, i. e., on the southern Propontis coast between the Harbour of Julian (*Regio III*) and the Harbour of Theodosius (*Regio XII*). – Cf. Magdalino, *Maritime Neighborhoods* 211-212. – Mango, *Développement* 39-40. 54-55. –

For the grain supply of Constantinople, see Durliat, *L'approvisionnement*. – Magdalino, *Grain Supply*.
 22 Berger, *Häfen* 83.
 23 Stauridou-Zaphraka, *Kontoskalio* 1303. – Magdalino, *Maritime Neighborhoods* 215. – On the necessary excavation works, see also below p. 96.
 24 Marcellinus Comes ad a. 509 (97 Mommsen): *Portus Iuliani undis suis rotalibus machinis prius exhaustus caenoque effosso purgatus est.* – Cf. Berger, *Untersuchungen* 573; Decker, *Agricultural Technology* 405.
 25 Suda, s. v. Anastasios (I 187 Adler): *ἔτι Ἀναστάσιος αὐτὸς ὁ βασιλεὺς ἔκτισε τὸ μακρὸν τεῖχος πρὸ μιλίων ν', εὖρος δὲ ποδῶν κ'. Καὶ τῷ Ἰουλιανοῦ λιμένι προβόλου τίθησιν.* – Cf. van Millingen, *Walls* 291.
 26 See n. 2 above.
 27 Schneider, *Brände* 238 with the sources. – Mango, *Développement* 51.
 28 See Kislinger, *Better and Worse Sites*, in this volume.
 29 Magdalino, *Maritime Neighborhoods* 216-219. – Right next to the harbour, for example, was the estate of Probus, a nephew of Emperor Anastasius I (*PLRE* II 912-913): *Chronicon Paschale* I 622 (Dindorf). – Theophanes, *Chronographia* AM 6024 (184 de Boor). – Cf. Guillard, *Ports* 187.
 30 Bolognesi Recchi Franceschini, *Gran Palazzo* 229-236. – Featherstone, *Der Große Palast* 23-26.
 31 Cf. Heher, *Boukoleonhafen and Heher, Harbour of the Boukoleon*, in this volume.
 32 Teall, *Grain Supply*. – Mango, *Développement* 54-56.
 33 Ioannes Malalas, *Chronographia* XVIII 131 (422 Thurn): *τῷ δὲ δεκεμβρίῳ μηνὶ γέγονεν ἐμπυρισμὸς μέγας ἐν τῷ λιμένι Ἰουλιανοῦ, καὶ πολλοὶ οἰκοὶ ἐκάησαν καὶ ἐκκλησία ἀπὸ ἀρχῆς τοῦ λιμένος ἕως τῶν Πρόβου (= Theophanes, *Chronographia* AM 6053 [235 de Boor]).* – Cf. Schneider, *Brände* 240.
 34 *Patria Konstantinoupoleos* II 68 (II 188 Preger). – The same in *Parastaseis syntomoi chronikai* 72 (I 67 Preger): *Περὶ τοῦ Νεωρίου: ... ἐν ᾧ καὶ ἀγορὰ τῶν θαλασσίων ἐμπόρων πρῶτον ἦν· ἐπὶ δὲ Ἰουστινιανοῦ μετεπιθήθη εἰς τὸν Ἰουλιανοῦ λιμένα.* – Cf. Magdalino, *Constantinople* 20-21. – Berger, *Untersuchungen* 428-430.
 35 The following after Magdalino, *Constantinople* 21.
 36 Agathias, *Historiae* V 14.5-6 (181 Keydell). – Theophanes, *Chronographia* AM 6051 (233-234 de Boor). – Cf. Kislinger, *Angriff*.

Blues ventured an uprising in Sykai³⁷. In addition, Magdalino assumes that during the plague waves of the second half of the sixth century the sluggish waters of the Golden Horn may also have contributed to avoiding the northern coast of Constantinople. As early as 542, many plague victims had been buried in and around the Golden Horn³⁸. Berger assumes that there was a confusion of the names in the *Patria*, arguing that the relocation of the market did not take place under Justinian, but under Justin II (565-578), under whose rule renovation work on the harbour was undertaken (see below). This would have been incomprehensible if the harbour had still worked efficiently in the reign of Justinian³⁹. Mango considers the attribution to an Emperor Justinian to be the fictitious embellishment of a real event. The relocation of the market would have taken place only in the seventh or eighth century, when the Neorion Harbour on the Golden Horn was expanded to become the base of the imperial navy⁴⁰. Earth-moving work is recorded there for the year 698⁴¹, as mentioned before, and the military harbour (*exartysis*) was certainly in use in 715⁴². Cameron and Herrin argue for the same date, but for a different motivation: a plague wave erupted immediately after the dredging of the Neorion in 698, and at least Theophanes suggests a causal connection. It is possible that the area of the Neorion was considered harmful to health and the market therefore relocated to the south⁴³.

The Adaptation of the Harbour under Justin II (569?)

Under Emperor Justin II (565-578), the Harbour of Julian was apparently renovated to an extent that justified considering him the new founder and henceforth naming the harbour the »Harbour of Sophia« after his wife⁴⁴. The *Patria* give an anecdote in which even the initiative for the construction of the harbour is attributed to the eponym:



Fig. 1 Follis with Justin II and Sophia on the double throne. – (From Boss/Hofmann, Münzen 61).

»The same Justin built the Harbour of Sophia on behalf of his wife Sophia. Before the harbour was built, there was a covered street built by Constantine the Great. And the western philosophers came [...] and discussed there with the inhabitants of Constantinople⁴⁵. [...] They were defeated under Justin and have not returned since then. But when four years had passed since then, it happened that the Augusta Sophia was standing on the terrace of the palace, and when she saw the ships being thrown around by the waves in the sea, she felt pity and sadness. And she went to the Emperor, her husband, and asked him to give her enough money to build up the harbour. And he bowed to her request and ordered the *patrikiōs* and *praipositos* Narses and the *protovestiaros* Troilos to build a harbour. They excavated a large pit and built it. That is why it received the name of Sophia«⁴⁶.

An active involvement of the Empress is not unlikely despite the problematic nature of the source, especially since Sophia always took a prominent role next to her husband: she was involved in fiscal and religious decisions, was named together with Justin in the acclamations and was depicted enthroned beside him on the back of copper coins (fig. 1)⁴⁷. Regardless of who took the initiative, the renaming of the harbour is

37 Ioannes Malalas, *Chronographia* XVIII 135 (424 Thurn).

38 Magdalino, *Maritime Neighborhoods* 215.

39 So argue Berger, *Untersuchungen* 430 and Guillard, *Ports* 182-183.

40 See Kislinger, *Better and Worse Sites*, in this volume.

41 Mango, *Développement* 55-56. – Excavation works: Theophanes, *Chronographia* AM 6190 (370 de Boor)

42 Theophanes, *Chronographia* AM 6207 (385-386 de Boor). – Cf. Ahrweiler, *Byzance et la mer* 430-435.

43 Cameron/Herrin, *Parastaseis* 267. – Theophanes, *Chronographia* AM 6190 (370 de Boor). – See also Kislinger, *Better and Worse Sites*, in this volume (n. 70).

44 There is no doubt about the identification of the Harbour of Sophia with the Harbour of Julian. Symeon Logothetes, *Chronicon* 105.6 (147 Wahlgren) explicitly endorses the renaming: Κτίζει δὲ καὶ τὰ παλάτια τὰ ἐν τῷ Ἰουλιανοῦ λιμένι, ἐπ' ὀνόματι τῆς γυναίκος αὐτοῦ Σοφίας, ἀποκαθάρσας τὸν λιμένα καὶ μέσον τοῦ λιμένος ἰδρύσας στήλας δύο, αὐτοῦ καὶ τῆς γυναίκος, μετονομάσας τὸν λιμένα Σοφίας (Leon Grammatikos, *Chronographia* 135 [Bekker]). – The same also in Georgios Kedrenos, *Chronicon* I 685 (Bekker). – Cf. also Theophanes, *Chronographia* AM 6024 (184 de Boor): τὸν Ἰουλιανοῦ, τὸν Σοφίας λέγω, λιμένα. – Ibid. AM 6187 (368 de Boor): ἐν τῷ Ἰουλιανῶν λιμένι τῶν Σοφίας. – Cf. van Millingen, *Walls* 289. – Mango, *Développement* 38-39. – Müller-Wiener, *Häfen* 8. – Guillard,

Ports 184-185. – Stauridou-Zaphraka, *Kontoskalio* 1306. – Magdalino, *Maritime Neighborhoods* 212.

45 The cryptic reference event of the victory against the »Western philosophers« could have entered the text later. Berger, *Investigations* 572 suspects that the original text actually referred to the fourth year of Justin's reign.

46 *Patria Konstantinupoleos* III 37 (II 229-230 Preger): Τὸν δὲ λιμένα Σοφίας ὁ αὐτὸς ἔκτισεν Ἰουστίνος εἰς πρόσωπον τῆς γυναίκος αὐτοῦ Σοφίας. Πρὸ δὲ τοῦ κτίσαι τὸν λιμένα ὑπῆρχεν στοὰ καμαροειδής, ἣν ἔκτισεν ὁ μέγας Κωνσταντῖνος [...] Χρόνων δὲ τεσσάρων ἔκτοτε διεληθόντων ἐγένετο Σοφίαν τὴν Αὐγούσταν ἴσασθαι εἰς τὸν ἡλιακὸν τοῦ παλατίου· καὶ ὄρωσα τὰ πλοῖα κλυδωνιζόμενα ἐν τῇ θαλάσῃ, σπλαγχνισθεῖσα ἠρξάτο ὀδύρεσθαι· καὶ εἰσελθοῦσα εἰς τὸν βασιλέα τὸν ἄνδρα αὐτῆς ἰκέτευεν αὐτόν, ὅπως παράσχη αὐτῇ χρυσίον ἰκανὸν εἰς τὸ ποιῆσαι λιμένα. Καὶ καμφθεὶς τῇ αἰτήσῃ αὐτῆς, προσέταξε Ναρσῆν τὸν πατρικίον καὶ πραιπόσιτον καὶ Τρώλιον τὸν πρωτοβεσπάριον αὐτοῦ κτίσαι τὸν λιμένα· οἱ καὶ βόθυνον μέγαν ὀρύξαντες ἀνωκοδόμησαν τοῦτον. Διὸ καὶ τὴν προσηγορίαν εἴληφεν τῆς Σοφίας.

47 Cf. Cameron, *Sophia*, especially 9-14. – Cameron, *Patronage* 82. – DOC I 204-217. 226-239. 243-249. 254-258 tab. L-LIX.

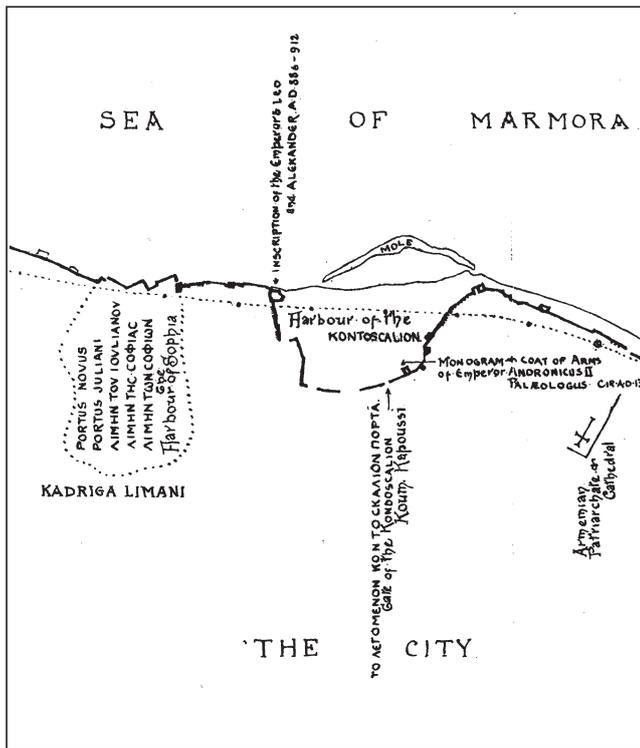


Fig. 2 The Harbours of Julian/Sophia and Kontoskalion (with mole) as separate basins in a sketch by van Millingen. – (From van Millingen, Walls).

not surprising given the close connection between Justin and Sophia⁴⁸.

The reliability of the other information contained is difficult to verify. In any case, the two officials mentioned are not found elsewhere⁴⁹. The claim that Justin had a large harbour basin dug out and thus created a new harbour may at first glance seem unlikely, especially as it has existed for centuries. The *Chronicle of the Logothete*, for example, speaks only of the emperor having had the harbour cleaned and renamed⁵⁰.

A look at the further development of the harbour, however, shows that in later centuries it consisted of two basins. Since no more extensive excavations after Justin have been recorded, it can be assumed that the Harbour of Julian had either reached its maximum extent at the time of its founding⁵¹, or that it was expanded under Justin II⁵². If the latter assumption

were correct, the harbour would have been limited in its first phase to the area just east of Kumkapi, where van Millingen at the end of the nineteenth century noted remnants of an old harbor basin (about 250m × 220m), including a breakwater (fig. 2)⁵³. The *Patria* mention a covered shopping arcade (στοὰ καμφοειδής), which is said to have fallen victim to Justin's building activity: this could be one of the four *porticus magnae* mentioned in the *Notitia* for the *Regio III*⁵⁴.

The hypothesis of an extension of the harbour to the east can also be supported by the only contemporary portrayal of the harbour by Flavius Corippus⁵⁵:

»One side [of the palace] looks out over the wide sea, the other backwards over the harbour – the harbour formed by the embrace of the arms of the two banks, with walls on top; they make it defy the swift winds and render the open sea quiet by (inside?) the anchorage. They break the waves of the sea with their marble barrier and keep away the waters as they flow back with their narrow neck. The royal couple loved this place; from it they used to watch the waves in the strait and the curving ships carrying all the trade of two worlds«⁵⁶.

The Harbour of Julian already had breakwaters – at least since Anastasius I (491-518) – but it is not mentioned that they were equipped with walls. Some of the pictorial representations of the harbour from the fifteenth century show semicircular breakwaters in front of the harbour entrance, but walls are missing (see below). The arms of the mole mentioned by Corippus could therefore be understood as a foreclosure of a new, eastern harbour basin to the outer area (the original Harbour of Julian). However, this assumption must also remain hypothetical. According to the state of knowledge, it cannot be decided to what extent the Harbour of Julian was enlarged or rebuilt under Justin II.

Apart from its shape and extent, the decorative design of the harbor also changed in the sixth century: the *Patria Konstantinupoleos* recorded that Justin had set up four statues on pillars in the middle of the harbour⁵⁷, which depict himself, his wife Sophia, his daughter Arabia and – depending on Tradition – Justin's mother Vigilantia⁵⁸ or the *praiapositos* Narses⁵⁹ responsible for the construction. The *Chronicle of the Logothete* reports only two statues at the Harbour of Sophia,

48 Cameron, Sophia 12.

49 Cf. PLRE III 930 (s. v. Narses 3). – PLRE III 1343 (s. v. Troilos 2): if the statement refers to a real person, then Troilos was a *comes sacrae vestis*, since the title of *protovestiarior* can only be traced back to the ninth c.

50 Symeon Logothetes, *Chronicon* 105,6 (147 Wahlgren) = Leon Grammatikos, *Chronographia* 135 (Bekker): ἀποκαθάρας τὸν λιμένα καὶ [...] μετονομάσας τὸν λιμένα Σοφίας.

51 Mango, *Développement* 39.

52 Müller-Wiener, *Bildlexikon* 62.

53 van Millingen, *Walls* 294.

54 *Notitia Urbis Constantinopolitanae* IV 16 (232 Seec). – On the *stoai*, see Mundell-Mango, *Commercial map* 194-197. 203-205.

55 Cf. Cameron, *Notes* 11.

56 Flavius Cresconius Corippus, In *Laudem Iustini* I 102-108 (39 Cameron): *Pars prospicit una | inmensum pelagus, pars respicit altera portum, | portum quem*

geminae complexant brachia ripae | moenibus adpositis, rapidos contemnere ventos | et faciunt, praebentque salum statione quietum: | aequoreos frangunt obiecto marmore fluctus, | et prohibent refluxus angustis faucibus undas. | gratior ille fuit dominis locus, unde solebant | undivagum spectare fretum curvasque carinas | omnia vectantes gemini commercia mundi (translation: ibidem 89).

57 Cf. Guillard, *Ports* 186. – See also Cameron's commentary in Flavius Cresconius Corippus, In *Laudem Iustini* 133.

58 *Patria Konstantinupoleos* II 62 (II 184 Preger): Περί τῶν Σοφίων. Ὁ λιμὴν τῶν Σοφίων ἐκτίσθη παρὰ Ἰουστίνου τοῦ ἀποκουροπαλάτου, τοῦ ἀνδρὸς Σοφίας τῆς Λωβῆς. Μέσον δὲ τοῦ λιμένος ἴστανται στήλαι τέσσαρες, Σοφίας καὶ Ἰουστίνου καὶ Ἀραβίας καὶ Βιγλεντίας τῆς μητρὸς αὐτοῦ.

59 *Patria Konstantinupoleos* III 37 (230 Preger): Μέσον δὲ τοῦ λιμένος ἀνήγειρεν δ' στήλας ἐπάνω τῶν δ' κίωνων, Σοφίας καὶ Ἀραβίας ἀνεψιάς αὐτοῦ, Ἰουστίνου τοῦ βασιλέως καὶ Νάρση τοῦ ἐκέῖσε παρισταμένου.

representing Justin and his wife⁶⁰. The reduced number of statues could be reconciled with information transmitted only in a manuscript of the *Patria*, according to which Emperor Philippikos Bardanes (711-713) had two of the four monuments destroyed because of the content of their prophetic inscriptions⁶¹.

Perhaps the statue of Justin is to be equated with a statue whose donor's inscription is preserved in the *Anthologia Graeca*:

»I, the prefect Theodoros, here on the shore of the sea
Built for the Emperor Justin this radiant statue,
that his serene gentleness still spread over the harbours«⁶².

Janin and Guiland relate the statue to the mentioned passage in the *Patria*⁶³. Cameron, on the other hand, proposes assigning it to Justin I (518-527)⁶⁴. He argues this on the grounds that the epigram did not indicate at which harbour the statue was located, that neither renovation nor founding was addressed, and, above all, that a certain Theodore is documented in the reign of Justin I, who held the office of the eparch several times and who is immortalised in several dedicatory inscriptions⁶⁵. The coincidence is noteworthy, but since *hyparchoi* of this name are also documented after the middle of the sixth century⁶⁶, an assignment of the statue to Justin II should not be completely ruled out. It is very likely that Justin had his Harbour of Julian embellished with a statue of himself and his wife. Since the old statue of Emperor Julian had been replaced by a cross in the meantime⁶⁷, the harbour served only for the self-portrayal of Justin (and possibly his family), who in some sources is now considered the sole builder of the facility⁶⁸.

It remains to discuss the date of the conversion. Georgios Kedrenos puts both the renovation of the harbour and the construction of the adjacent palace, which was also named after Sophia, in the fourth year of Justin's reign, i. e., in the

year 568/569⁶⁹. However, the *Chronicle of Theophanes*, written sooner after the events, tells that exactly this palace was founded by Tiberius I (578-582) in 579/580 to provide Justin's widow with a dignified home⁷⁰. In fact, the palace must have existed earlier than assumed in the two sources, especially since Corippus describes that Justin and Sophia had there learned of the death of Emperor Justinian (November 565)⁷¹. The date of the Palace of Sophia at Kedrenos is, therefore, to be rejected, but not necessarily that of the harbour⁷², because the *Patria* put the renovation in the 253rd year after the founding of Constantinople (for which the *Patria* assume the year 317), i. e., the year 569.⁷³

The Harbour of Sophia in the Seventh to Eleventh Centuries

The merchant ships, about which Empress Sophia was concerned, frequented the harbour renamed after her in the following centuries. The import market (see above) relocated under the rule of Justinian I (527-565) or Justin II (565-578) to the coast of the Propontis was probably still there at the time of the writing of the *Patria* (eighth-tenth centuries)⁷⁴. Neighbouring toponyms indicate the commercial importance of the *Region*: the Church of St Thekla bears the addition »on the barley market« (ἐν τοῖς Κριθοπωλείοις) in the tenth century⁷⁵. The alleged transformation of St Andrew's Church at the tower of Bukinon (see below) into a barn (χορτόβολον) and the nearby Church of St John the Baptist into a workshop (ἐργοστάσιον) under Constantine V (741-775) can also be connected with a mercantile use of the area⁷⁶. Most of the other churches and monasteries secularised by this emperor were located on the coast of the Propontis and could reflect the increased need for economic infrastructure⁷⁷.

60 Symeon Logothetes, *Chronicon* 105,3 (147 Wahlgren) = Leon Grammatikos, *Chronographia* (135 Bekker): μέσον τοῦ λιμένος ἰδρύσας στήλας δύο, αὐτοῦ καὶ τῆς γυναίκος. – The same in Georgios Kedrenos, *Chronicon* I 685 (Bekker). Theoretically, it could also be two different groups of statues: Cameron/Herrin, *Parastaseis* 209. – Cameron, *Patronage* 70.

61 *Patria Konstantinupoleos* III 37 (II 230 Preger): ἐξ ὧν αἰ δύο ἐπήρθησαν παρὰ Φιλίππικου· εἶχον δὲ γράμματα περὶ τῶν μελλόντων (only in manuscript C).

62 *Anthologia Graeca* XVI 64 (IV 338 Beckby): Τοῦτο παρ' αἰγιαλοῖσιν ἐγὼ Θεόδωρος ὑπαρχος στήσα φαιεῖον ἀγαλμα Ἰουστίνῳ βασιλεῖ, ὄφρα καὶ ἐν λιμένεσσιν εἶην πετάσσειε γαλήνην.

63 Janin, *Constantinople* 231. – Guiland, *Ports* 186.

64 Cameron, *Theodoros* 278-279.

65 PLRE II 1096 (s. v. Theodoros 57).

66 PLRE III 1263. 1271 (s. v. Theodoros 61. 124).

67 See n. 3 above.

68 Thus, Michael Glykas, *Annales* 506 (Bekker): οὗτος κτίσας παλάτιον ἐξῷ τῆς πόλεως καὶ λιμένα ἐν αὐτῇ τῇ πόλει, τὰ μὲν Σοφίας ἐκάλεσε τὰ δὲ Σοφιανὰς, εἰς ὄνομα τῆς γυναίκος αὐτοῦ Σοφίας. – The same in Ioel, *Chronographia* 98 (Iadevaia).

69 Georgios Kedrenos, *Chronicon* I 685 (Bekker): Τῷ ἰα' ἔτει ἐκτίσεν ὁ βασιλεὺς [...] τὰ παλάτια τὰ ἐν τῷ Ἰουλιανοῦ λιμένι. ἀποκαθαίρει δὲ καὶ αὐτὸν τὸν λιμένα καὶ στήλας δύο ἐν μέσῳ αὐτοῦ ἴσθησι, τὴν τε ἑαυτοῦ καὶ τῆς γυναίκος αὐτοῦ Σοφίας, μετονομάσας καὶ τὸν λιμένα Σοφίας. Despite the similarity of names, this palace of *tes Sophia* or *ton Sophion* (τῆς Σοφίας / τῶν Σοφιῶν) is not to be confused with the residence of *ton Sophianon* (τῶν Σοφιανῶν), which Justin had built between 565 and 567: Cameron, *Notes*, esp. 11-13. The situation is further complicated insofar as the area around the Harbour of Sophia and Palace of

Sophia likewise bore the name of *ton Sophianon* (τῶν Σοφιανῶν). No counterpart to the Kedrenos passage in Theophanes, *Chronographia* AM 6068-6069 (243 de Boor).

70 Theophanes, *Chronographia* AM 6072 (250 de Boor): Τοῦτ' ὡ ἔπει ἐκτίσεν ὁ βασιλεὺς Τιβέριος τὸ παλάτιον τὸ ἐν τῷ Ἰουλιανοῦ λιμένι καὶ ἐπωνόμασεν αὐτὸ ἐπ' ὀνόματι Σοφίας, τῆς γυναίκος Ἰουστίνου.

71 Flavius Cresconius Corippus, *In laudem Iustini* I 97-120 (39-40 Cameron). The text was written towards the end of 566. On the identification with the Sophiae Palace, see Cameron, *Notes* 12-13.

72 The claim of Cameron, *Notes* 15 (»We must now throw out Cedrenus' dating of both palace and harbour to the eleventh year of Justin's reign. The harbour was rebuilt at the same time as or soon after the Sophiae palace«) cannot be supported by any sources.

73 *Patria Konstantinupoleos* III 37 (II 229-230 Preger): Μετὰ δὲ τὸ κτισθῆναι τὴν Κωνσταντινούπολιν παρήλθον σὺν β' χρόνοι καὶ οὕτως ἐκτίσθη ὁ λιμὴν. – Cf. Berger, *Untersuchungen* 572.

74 Magdalino, *Maritime Neighbourhoods* 212.

75 *Synaxarium Ecclesiae Constantinopolitanae*, col. 75 (Delehay, manuscript O). – Berger, *Untersuchungen* 565. 578. – Müller-Wiener, *Häfen* 8. – Magdalino, *Maritime Neighbourhoods* 213. – Janin, *Siège de Constantinople* 149-150.

76 *Patria Konstantinupoleos* I 67 (Johanneskirche), III 135 (Andreaskirche) (II 147-148. 258 Preger). – Magdalino, *Maritime Neighbourhoods* 213. – Müller-Wiener, *Häfen* 8. – Janin, *Siège de Constantinople* 31-32. 443-444.

77 *Patria Konstantinupoleos* III 9, III 69 (II 216-217. 240-241 Preger). – Theophanes, *Chronographia* AM 6258 (439-440 de Boor). – Nikephoros Patriarches, *Antirheticus tertius* III, 493 D. – Cf. Magdalino, *Maritime Neighbourhoods* 213.

The large grain deliveries that came after the loss of Egypt, especially from Thrace, Macedonia and Asia Minor, were still housed in the stores on the coast of the Propontis. At least one of these *horrea* in the tenth century is demonstrably in operation at the Harbour of Theodosius, probably to be identified with the *horrea Alexandrina* or the *horreum Theodosianum* (see above)⁷⁸. The harbours of the Propontis seem to have prevailed over those on the Golden Horn until the eleventh century⁷⁹. In the immediate vicinity of the Harbour of Sophia, merchants⁸⁰, as well as illustrious people⁸¹, had their residences, including the estate of the powerful Phokas family from the late ninth century⁸².

Apart from these implicit references to activities around the Harbour of Sophia, the harbour is repeatedly mentioned in sources between the seventh and the thirteenth centuries, indicating its continuous use. In 610, Emperor Phokas (602-610) was confronted with the usurpation of Heraclius, who had set out from Carthage with his fleet towards Constantinople. In view of the threat from the sea, Phokas organised the defence of the Propontis harbours with the aid of the demes: while the Blues were to protect the Harbour of Hormisdas, the guarding of the Kaisarion harbour (Harbour of Theodosius), as well as the Harbour of Sophia, was entrusted to the Greens⁸³. It is there that Heraclius' fleet is said to have won the decisive victory⁸⁴. In addition, the defeated emperor was driven naked out of the Palace of the Archangel and loaded on a boat in the Harbour of Sophia, which would take him to the place of his execution⁸⁵.

The harbour also played a key role during another usurpation: in 694/695, the *patrikios* Leontios was appointed *strategos* of Hellas and was to set sail with three dromons from the Harbour of Sophia. Leontios, who had spent the past three years in prison on charges of high treason, seized the opportunity to travel to the Great Palace and overthrow Justinian II (first reign 685-695)⁸⁶. The fact that dromons were

stationed here suggests, at least, a partially military use of the Harbour of Sophia during this time⁸⁷. This partial naval function is supported by a passage in the *Patria*, which probably goes back at least to the sixth century: there once was a tower called Bukinon at the western end of the Harbour of Sophia, from which a trumpet signal was given (τὸ βούκινον from Latin *bucina/bucinum*, »trumpet«) when the fleet went to sea⁸⁸. In the late seventh century, however, the naval base was moved to the Golden Horn⁸⁹.

The next literary evidence for the Harbour of Sophia dates to 764/765: on the so-called Mole of St Thomas, Constantine V (741-755) is said to have had the Bulgar Christianos dissected alive and burned⁹⁰. The mole apparently owed its name to the Church of St Thomas in the Amantios quarter (*en tois Amantiou*), which must have been in the immediate vicinity of the harbour (to its west, according to Berger⁹¹) since the fifth century⁹². A speech on the occasion of the translation of the bones of John Chrysostom to Constantinople emphasises the location of the church by the sea⁹³ and also an epigram handed down in the *Anthologia Graeca* on the founder of the church alludes – exaggeratedly – to the waterfront of the church:

»Amantios, you built this house for God
In the middle of the sea, fighting the rolling waves.
Neither the winds from the south nor those from the north shake your sacred building.
This divine building hear guards it forever.
Long may you live for you to the renewed Rome
By plunging yourself into the waves«⁹⁴.

Berger suggests that the Harbour of Sophia suffered a massive reduction in size in the ninth century caused by the construction of a wall on the eastern pier and another wall across the harbour basin (fig. 3)⁹⁵. Thanks to the late medieval and early modern representations (figs 7-13), it is beyond question

78 Miracula Artemii 16 (16 Papadopoulos-Kerameus): ὄριον τῶν Καισαρίου τὸ ἐπιλεγόμενον Λαμίας (»glutton«), translation: Crisafulli/Nesbitt, Miracles 107. – Cf. Mango, Développement urbain 555. – Magdalino, Maritime Neighborhoods 213.
79 Magdalino, Maritime Neighborhoods 211. – Müller-Wiener, Häfen 13-14, wants to shift the focus to the north already in 7th or 8th c. (but still under the erroneous assumption of an early unusability of the Harbour of Theodosius). See also Kislinger, Better and Worse Sites, in this volume.
80 Evidence for the 9th c.: Pseudo-Symeon, Annales 674 (Bekker). – Die Vita Basilii Minoris III 2 (278 Sullivan/Talbot/McGrath) reports of a rich merchant or workshop owner (ἐργαστηρικός), whose house stood within the area of the Harbour of Sophia (ἐν τῷ λιμένι τῶν Σοφίων).
81 Magdalino, Maritime Neighborhoods 216-217.
82 Grégoire, Carrière 250 (source text edition) 253-254 (with wrong location at Tekfur Saray). – Cf. Leon Diakonon, Historia V 5 (83-84 Hase). – Cf. Magdalino, Constantinople 52.
83 Ioannes Antiochenos, Fragmenta 321.19-21 (553 Roberto): καὶ ὡς ἐθεώρει ὅτι ἐγγιζουσι τῇ πόλει, ἐνιππεύσας ὁ Φωκάς εἰσῆλθεν ἐν τῇ πόλει καὶ ἐπιτρέπει φυλάττεσθαι ἐκ τῶν Πρασίνων τὸν λιμένα τὸν Καισαρίου καὶ τὸν Σοφίας, τοὺς δὲ Βενέτους τὰ ἐπὶ Ὀρμίσδου. – Cf. Guillard, Ports 195. – van Millingen, Walls 292.
84 Georgios Kedrenos, Chronicon I 712 (Bekker): καὶ πολέμου συρραγέντος εἰς τὸν λιμένα τῆς Σοφίας μεταξύ Φωκά καὶ Ἡρακλείου, ἡττηθεὶς ὁ ἀλιτήριος ἔφυγεν εἰς τὰ βασίλεια. – Leon Grammatikos, Chronographia 146 (Bekker): καὶ πολέμου κροτηθέντος μεταξύ Φωκά καὶ Ἡρακλείου εἰς τὸν Σοφίας λιμένα, ἡττηθεὶς ὁ ἀλιτήριος ἔφυγεν εἰς τὰ βασίλεια. = Symeon Logothetes, Chronicon 108,7 (156 Wahlgren). – Cf. Guillard, Ports 195. – van Millingen, Walls 292.
85 Chronicon Paschale I 700 (Dindorf): Φῶτιος ὁ κουράτωρ τῶν Πλακιδίας καὶ Πρόβρος ὁ πατρικίος ἐπῆραν Φωκὰν ἐκ τοῦ Ἀρχαγγέλου τοῦ παλατιοῦ ὀλόγουμον, καὶ

ἀπῆγαγον διὰ τοῦ λιμένος ὡς ἐπὶ τὸν οἶκον τῶν Σοφίας, καὶ βαλόντες αὐτὸν εἰς κάραβον ἔδειξαν τοῖς πλοίοις.
86 Theophanes, Chronographia AM 6187 (I 368 de Boor). – Berger, Untersuchungen 573. – Cf. Müller-Wiener, Häfen 8.
87 Guillard, Ports 195.
88 Patria Konstantinupoleos III 38 (II 230-231 Preger). – Cf. van Millingen, Walls 293. – Berger, Untersuchungen 568-569. – Janin, Constantinople 326-27. – Janin, Églises 32. – Müller-Wiener, Häfen 8, however, with the location at the eastern harbour entrance. This hypothesis is to be rejected, as in 1203 a fire spread via the Bukinon westwards to the Eleutherios-district, see below, n. 115.
89 See Kislinger, Better and Worse Sites, in this volume.
90 Theophanes, Chronographia AM 6257 (436 de Boor). – Cf. Guillard, Ports 189: »et qui semble avoir été le môle qui couvrait l'échancrure sigmatoïde du mur maritime à hauteur de Kumkapı«. – van Millingen, Walls 292. – Berger, Untersuchungen 597.
91 Berger, Untersuchungen 597.
92 Theophanes Continuatus, Chronographia 462 (Bekker). – In 886/887, the church was destroyed by fire (see Schneider, Brände 240), but rebuilt: Janin, Constantinople 257-260.
93 Translatio Chrysostomi 314 (Dyobounos): ὁ τοῦ αἰδιδίμου ἀποστόλου Θωμᾶ ναός, ὁ πρὸς θάλασσαν κείμενος, ὃν Ἀμαντίου οἶδεν ὀνομάζειν ἡ πόλις.
94 Anthologia Graeca I 5 (I 124 Beckby): Τόνδε Θεῶ κάμες οἶκον, Ἀμαντίε, μεσσοῦθι πόντου, τοῖς πολυδινήτοις κύμασι μαρνόμενος. οὐ νότος, οὐ βορρῆς ἱερὸν σέο δῶμα πινάξει, νηῶ θεσπεσίῳ τῷδε φυλασσόμενον. ζῶις ἤματα πολλά· σὺ γὰρ νεοθῆλεα Ῥώμην πόντῳ ἐπαίξας θήκαο φαιδρότερην.
95 Berger, Häfen 83; Berger, Häfen von Byzanz und Konstantinopel 114.

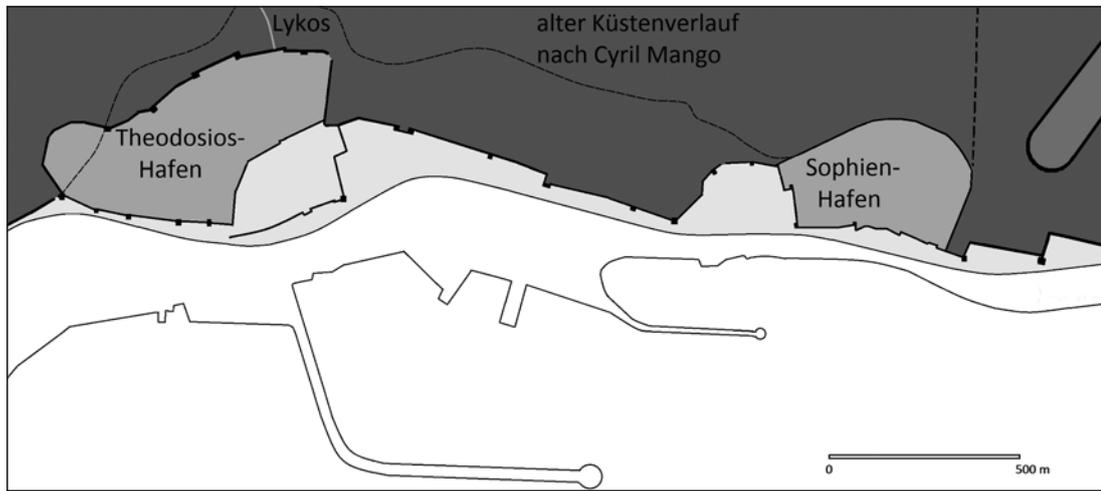


Fig. 3 The harbours on the Sea of Marmara according to A. Berger 2015. – (From Berger, Häfen 82 fig. 3).

that there was such a separating wall that divided the basin, but it is unclear when it was built. The only clue is a tower, which must have marked the southern end of this separation and was preserved into the nineteenth century⁹⁶. Berger argues that the tower indicates a reduction of the Harbour of Sophia. He dates this hypothetical reduction to around 830 when the Proosphorion and Neorion harbours would have also been downsized. According to Berger, an inscription⁹⁷ mentions the rebuilding of the tower under Emperor Leon VI (886-912), »which suggests that the reduction of the harbours must have been done some time before«. However, the said inscription only reads +ΠΥΡΓΟΣ ΛΕΟΝΤΟΣ Κ[ΑΙ] ΑΛΕΞΑΝ[ΔΡΟΥ] (»Tower of Leon and Alexandros«) and says nothing about the character of the construction measures. Even if it is only about the memory of a repair work, it remains unclear when the sea wall was created in this area. Nor is it possible to prove that the tower stood »on the old pier of the big harbour«⁹⁸. Obviously, a reduction cannot be ruled out, but it runs counter to the important role of the harbour in a period of demographic recovery. In any case, as already mentioned, the basic structures of the basin division could already go back to the construction measures of Justinian II.

In any case, the harbour remained active in the following centuries. Around the year 867, the ship on which Saint Eus-

tratus had left Bithynia for Constantinople was said to have sunk in the Harbour of Sophia; the saint and the crew had just left in time⁹⁹. There is nothing in the sources about what exactly caused the ship's undoing, but this incident could be seen as an indication of the constant difficulties caused by siltation in the area of the harbour entrance.

The next reference also has to do with a shipwreck. Leon of Synada tells of dramatic scenes when he wanted to travel to Rome in 996:

»The moment we left the Harbour of Sophia, the ship broke and almost capsized. This seemed to be a bad omen, yet it was not my destiny to fall overboard, but only change the ship«¹⁰⁰.

Only at the end of the twelfth century do we find another indication that the Harbour of Sophia was in use. According to Niketas Choniates, the *sebastokrator* Isaakios had his manor house at the harbour, which was converted into a lodging house for travellers (*pandocheion*¹⁰¹)¹⁰². The facility could accommodate more than a hundred guests. These dimensions are only comprehensible if the harbour was still heavily frequented during this time.

Analysis of the sources for the Middle Byzantine period does not reveal a military function for the Harbour of Sophia

96 Paspates, Anaskaphai 48. – van Millingen, Walls 186.

97 First printed in Paspates, Anaskaphai 48. – van Millingen, Walls 186. – Mango, Inscriptions 55.

98 Berger, Häfen 83.

99 Vita Eustratii 37 (391-392 Papadopoulos-Kerameus): Ὁ μέντοι ἡγιασμένος οὗτος πατήρ ἐν τῷ πλοίῳ εἰσεληλυθώς, αἰσίῳ τοῦ πλοῦς γεγονότος, διὰ τάχους τὴν βασιλεύουσαν κατέλαβεν· καὶ δὴ ἐν τῷ τοῦ Ἰουλιανοῦ λιμένι, ὃν δὴ Σοφίας καλεῖν ἢ συνήθεια εἶωθεν, εἰσερχομένου τοῦ πλοίου, βραχεῖ τι νι ὑφάλῳ ἐπιδραμόντος, ὅπην ὑπέστη δυναμένην αὐθωρὸν αὐτὸ καταποντίσαι. Τῶν οὖν ἐν αὐτῷ εἰσπλέοντων ἀγνοησάντων τὸ συμβᾶν αἰσθόμενος ὁ σημειοφόρος πατήρ εὐχὴν κατὰ διάνοιαν τῷ ἑτοιμῶς ἔχοντι ὑπακούειν τοῖς γνησίῳ δουλοῖς ἐποίητο πολυτρόπως ἀσινεῖς πάντας τοὺς ἐκεῖσε εἰσπλέοντας διασωθῆναι. Διαφυλαχθέντος οὖν ἀσινούσῳ τοῦ πλοίου καὶ μῆτε μικροῦ ὕδατος ἐκ τῆς γεγεννημένης ὀπῆς εἰσελθόντος ἐν αὐτῷ καὶ τῇ γῆ προσορμισθέντος ἐκβάλλεσθαι τοὺς ναυτικούς πάντα διὰ τάχους τὰ ἐν τῷ πλοίῳ ὄντα παρεκελεύσατο σκόλα. – Cf. PmbZ #10677.

100 Leon Synadenos, Epistolae 10 (14 Vinson): ἅμα γὰρ ἐλύσαμεν ἐκ τοῦ Σοφίας λιμένος καὶ ἡ ναὺς περιερράγη καὶ μικροῦ περιετράπη. Ἔδοξεν οὖν κακὸς οἰωνὸς τὸ γεγόμενον, ἀλλ' οὐκ ἦν ἐμὸν ἀποβῆναι, μόνον δὲ μεταβῆναι τὴν ναῦν. – Cf. Magdalino, Maritime Neighborhoods 214.

101 On the institution of the *pandocheion*: Constable, Housing. Niketas uses the antique term here. However, the facility may have been more of a Xenodochion than a commercial hostel: Kislinger, Lodgings 346-347.

102 Niketas Choniates, Historia 445 (van Dielen): Ἀλλὰ καὶ τὴν ἐπὶ τὸ κάταντες ἐν τῷ λιμένι τῶν Σοφίων ἐστὶν Ἰσαακίου τοῦ σεβαστοκράτορος εἰς πανδοχεῖον μετασκευάσας ἀνδρῶν μὲν ἑκατὸν παρέθηκε τράπεζαν καὶ κλῖνας ἰσομέτρους, τσσαταριθμῶν δὲ ὑποζυγίων ἵππων ἀνέστησε; – Cf. Guillaud, Ports 196. – van Millingen, Walls 292.

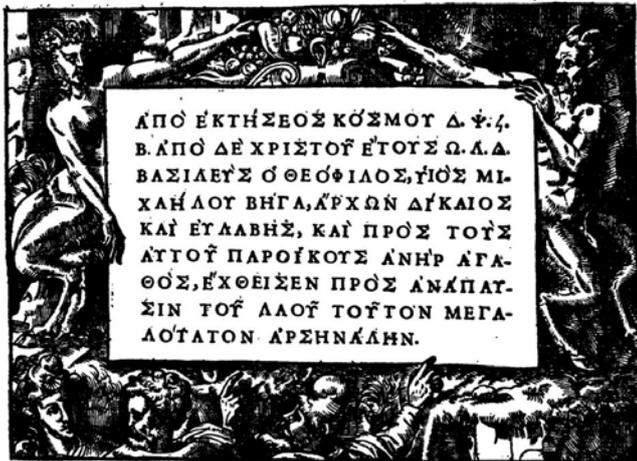


Fig. 4 The inscription supposedly discovered in the area of the harbour by André Thevet (1516-1590), reproduced in his *Cosmographie Universelle*. – (From André Thevet, *Cosmographie Universelle* 833).

between 700 and 1200¹⁰³. The French traveller André Thevet (1516-1590) claimed to have deciphered the following inscription in the area of the harbour that would prove that Emperor Theophilus (829-842) had a large arsenal built here (fig. 4)¹⁰⁴:

»In 4792th year since the creation of the world and in the 834th year of our Lord, Emperor Theophilus, son of Michael [βήγα?], lawful and pious ruler and for his subjects a good man, for the recovery [sic] of the people of this vast arsenal (*arsenales*)«.

However, the inscription is problematic in many ways and its authenticity has been rightly questioned¹⁰⁵. First, the dating cannot be correct, since the term *arsenales* only entered the Greek language in the fourteenth century. In addition, the year of the world (4792) given in the inscription cannot be reconciled in any way with a dating after the incarnation of

Jesus (834), which is in any case uncommon in Byzantine contexts. The genitive form of Michael (Μιχαήλου) lacks any orthographic basis; the apposition βήγα is completely incomprehensible in the form reconstructed by Thevet. The Frenchman translates (or better, transliterates) the word as *begue* («stammerer»), apparently inspired by a nickname given in the historiography of Michael II. At most, one could assume a reading of ρήγα (as a demotic genitive to ρήξ, «ruler»), but even this does not fit a contemporary inscription¹⁰⁶. Finally, the statement that the «Arsenal» was founded for the purpose of the diversion or recreation (πρὸς ἀνάπαυσιν) of the people does not make sense at all. Even in the case of the poor legibility of the inscription confirmed by Thevet, it contains too many discrepancies to qualify as a product of the ninth century. What exactly the French traveller believed he had read here has to be left open, but the evidence suggests that it is a forgery from the fifteenth to sixteenth centuries¹⁰⁷.

If in Middle Byzantine times there was an arsenal in the narrower sense, then this is to be assumed in the Golden Horn, where the navy was apparently mostly at anchor. As early as 715, the Neorion served as a naval base and shipyard¹⁰⁸, but other areas of the estuary may have been later used. In spring 971, John I Tzimiskes went to the Blachernae in order to inspect the dromons, which were equipped with Greek fire. From there he also watched some manoeuvres¹⁰⁹. In 1040, a fire raged in the shipyard (*en te Exartesei*) and destroyed part of the Byzantine fleet¹¹⁰. Müller-Wiener locates the shipyard in the bay in front of today's Kasımpaşa, i.e., where the Ottoman sultans would open their new arsenal (Tersâne-i Amire) in 1513¹¹¹, while Ahrweiler favours the surroundings of the Palace of Blachernae¹¹². It is possible that several naval bases in the Golden Horn were simultaneously in operation. As will be shown immediately, at least three of them existed in the thirteenth century before the shipyard was relocated to the Harbour of Sophia in 1270¹¹³.

103 Berger's assumption that the Harbour of Sophia was used only for the navy throughout the centuries (Berger, Häfen 83. 85; Berger, Häfen von Byzanz und Konstantinopel 114) is not corroborated by the sources.

104 André Thevet, *Cosmographie Universelle* 833 (cap. XIX). – Du Cange, *Constantinople II 156* gives the inscription with minor changes. For whatever reason, he reads the year of the world as VIMCCCXLII = 6342 = AD 834. He also adds that the inscription was found on the «Lion Gate» (he refers to the Çatladi Kapi), which probably did not connect the harbour area of the Harbour of Sophia with that of the palace harbour to the east until Ottoman times: see also Heher, *Harbour of the Boukoleon*, in this volume. – The inscription is also edited as CIG IV 8680.

105 Berger, *Untersuchungen* 577. – Ahrweiler, *Byzance et la mer* 432. – Mango, *Inscriptions* 55: «highly suspicious». – Less critical Müller-Wiener, *Häfen* 8; Müller-Wiener, *Bildlexikon* 62; Effenberger, *Illustrationen* 30.

106 With thanks to Andreas Rhoby/Vienna for this suggestion.

107 So argues Andreas Rhoby from an epigraphic point of view. – Berger, *Häfen* 86 (n. 59) also considers the inscription to be a «historical fiction of the sixteenth century».

108 Theophanes, *Chronographia* AM 6207 (385-386 de Boor). – Cf. Kislinger, *Neorion*, in this volume.

109 Leon Diakonos, *Historia* VIII 1 (129 Hase), translation: Talbot/Sullivan, *Leo the Deacon* 175-176.

110 Ioannes Skylitzes, *Synopsis* 411 (Thurn): Γέγονε δὲ καὶ αὐχμὸς κατὰ τοῦτον τὸν χρόνον, ὡς σχεδὸν ἀποξηρανθῆναι τὰς ἀφθόνοους πηγὰς καὶ τοὺς ἀενάουσι ποταμούς. ἐγένετο δὲ καὶ ἐμπρησμός ἐν τῇ Ἐξαρτήσει, κατὰ τὴν ἔκτιν τοῦ Αὐγούστου μηνός, καὶ ἐνεπρήσθησαν αἱ ἐκεῖσε ἰστάμεναι πᾶσαι τριήρεις μετὰ τῆς ἑαυτῶν παρασκευῆς. – Cf. Ahrweiler, *Byzance et la Mer* 128 (but with incorrect dating, see Kislinger, *Ruhm*) and the term *exartysis* 430-435. – Schneider, *Brände* 241 translates *exartysis* as «loading harbour» («Verladehafen»), which, however, does not do justice to the stationing of the warships.

111 Müller-Wiener, *Häfen* 12. 39-40. 65.

112 Ahrweiler, *Byzance et la mer* 433-434.

113 Makris, *Studien* 163-164, indeed claims that the shipyard was located at Kosmidion before being moved to the Harbour of Sophia, but this is not supported by the sources. – Cf. Simeonov, *Kosmidion*, in this volume.

Use as a Naval Shipyard (Thirteenth to Fifteenth Centuries)

The Harbour of Sophia must have gradually lost its importance from the late eleventh century, when the economic centre of Constantinople began to relocate (back again) to the Golden Horn, where Italian merchants had settled¹¹⁴. In August 1203, a major conflagration raged in Constantinople, leaving a trail of devastation across the city to the Harbour of Sophia¹¹⁵. It is possible that the harbour itself was badly affected as well. At least, nothing is known about its development at the time of the Latin rule in Constantinople (1204-1261)¹¹⁶, and, even after that, the name is met with only sporadically in the Byzantine sources.

The harbour area itself had not been completely abandoned, but from the thirteenth century¹¹⁷ it bore the names »Kontoskalion« and »Kontoskelion«¹¹⁸. The two new similar terms led to confusion in the scientific analysis. Occasionally, two different harbours were assumed and an equation with the Heptaskalon was postulated¹¹⁹. The term Kontoskalion/Kontoskelion, however, applies only to the successor of the Harbour of Sophia¹²⁰: the descriptions of the location in the written sources, as well as pictorial representations, do not permit any other location¹²¹. Some Byzantine authors even explicitly – and deliberately antiquated – continued to use the term »Harbour of Sophia«¹²².

The *Patria Konstantinoupoleos* state that the harbour owed its new name to the *tourmarches* Agallianos Kontoskeles, who had commissioned the work to be done here. The name was then transferred to a nearby gate¹²³. Stauridou-Zaphraka does accept the derivation of the personal name, but assumes a reverse development of the designation

(first gate, then harbour)¹²⁴. However, the etymology seems to have been subsequently constructed. The term »Kontoskalion« can be understood as the »harbour with a short jetty«, which would then have given the gate its name¹²⁵.

That the old harbour was still used under its new name is proven by the fact that Michael VIII (1259-1282) decided to make it the base of the navy, including a shipyard. In response to the imminent arrival of the fleet of Charles of Anjou in 1270¹²⁶, the emperor ordered repair works on the former Harbour of Sophia¹²⁷. They are described by the contemporary witness Georgios Pachymeres (1242-1310) as follows:

»He considered the Blachernae arsenal [on the Golden Horn] inappropriate because from there the ships would have to conduct the naval battle right in the face of the enemy [Italian] ships, which would be difficult because the enemy ships would then fiercely oppose them; he was also dissatisfied with the old ship's arsenal (I do not mean the old arsenal which the Latins used very recently, located near the Christos Evergetes Monastery, but that near the Neorion Gate from which the gate derives its name), because the Golden Horn is anyway a harbour and is suitable equally to the ships of both the Romans and the enemies.

But realising that the men would fight more valiantly and that the material would be safer if the ships fell into the back of the enemy, he decided to rebuild the Kontoskalion near Blanga [on the south coast of the city]; he walled up the place with large stones, then deepened the sea by pouring in liquid silver, built suitable roofs for the ships, and, at the outside of the entrance between the stone moles, placed strong iron gates to protect the fleet

114 Müller-Wiener, Häfen 20-24. – Magdalino, Maritime Neighborhoods 219-226. – Cf. Kislinger, Neorion, in this volume.

115 Niketas Choniates, *Historia* 553-555 (van Diäten), translation: Magoulias, City 303-304. – Cf. Berger, *Untersuchungen* 580. – Müller-Wiener, Häfen 24. The fire also spread to the district of Eleutherios via the so-called Bukinon (see n. 89 above). The fire also spread to the district of Eleutherios via the so-called Bukinon (see n. 89 above). – Cf. Schneider, *Brände* 241. – Madden, *Fires*.

116 Müller-Wiener, Häfen 24-26.

117 Müller-Wiener, *Bildlexikon* 62-63 assumes the renaming of the harbour already in the 11th c., but without evidence. Recently, this assumption was picked up by Günsegin, *Harbours and Shipbuilding* 427, again, however, without supporting arguments.

118 »Kontoskelion« is also documented in 1440 as the location of an inn (ὄσπητιον): *Acta et diplomata graeca* II 438 (no. 607).

119 Guillard, *Ports* 196-198. 225-230 thinks that, while the Harbour of Sophia continued as Kontoskalion, the Kontoskelion harbour is the successor to the harbour of Kaisarios; in the 13th c., it would have been renamed »Heptaskalon«. – Also Mango, *Développement* 38 regards Kontoskalion and Kontoskelion as two different harbours, just like Janin, *Constantinople* 228-233 and van Millingen, *Walls* 293. – Müller-Wiener, *Bildlexikon* 63 is undecided. – See, however, the contribution by Preiser-Kapeller in this volume.

120 Stauridou-Zaphraka, *Kontoskalio* 1308-1309. 1315.

121 See n. 146 below (encomion to John VIII) and 63-65 on the pictorial representations. – Nikephoros Gregoras, *Historia* XVII 4 (II 854 Schopen/Bekker), translation: van Diäten, Nikephoros Gregoras III 211-212, mentions the construction of a fleet under John Kantakuzenos in the shipyard near the Hippodrome, which was not far north of Kontoskalion: καὶ ἠθροίζετο ναυπηγῶν καὶ τεκτόνων πλῆθος ἅπαν ἐς τὸ περὶ τὸν τοῦ Βυζαντίου ἱππόδρομον νεώριον. ὁψὲ γὰρ ἔγνωσαν κακῶς βουλευσάμενοι Βυζαντιοὶ περὶ τὴν ἔξω τευχῶν συσκευὴν

τῶν νεῶν· καὶ ἡ τοῦ φθάσαντος πάθους ἀπειλὴ συνετωτέρους ἐπιποιήκει πρὸς τὴν τῶν δρωμένων ἐξῆς ἐπανόρθωσιν. It must be the same shipyard that John Kantakuzenos addresses in *Historia* IV 11 (III 72 and 76 Schopen), see n. 147, as Kontoskalion. – Cf. Guillard, *Ports* 199.

122 See, for example, Alexios Makrembolites, *Logos istorikos* 9 (152 Papadopoulos-Kerameus): Ἐν δὲ τῷ νεωρίῳ τῶν Σοφιανῶν παραγενομένοι ἐπειρῶντο καὶ τὰς ἐκεῖσε μακρὰς νῆας, ἃς ὁ αὐτοκράτωρ ἐν ὀλίγαις ἡμέραις περιουσίᾳ σπουδῆς ἐτεκτῆναι παρὰ πᾶσαν ἐλπίδα, καταθραύσαι ἢ τὴν τούτων κωλύσαι διέξοδον δι' ὧν ἐπετῆδευσαν ἐκεῖσε πετρογόμεναι καταδοῦσαι ὀλκάδων. – *Ibid.* 156-157: ἐν τῷ νεωρίῳ [...] τῶν Σοφιανῶν. – Cf. also *Patria Konstantinoupoleos* III 37 (II 229 Preger): τὸν δὲ λιμένα Σοφίας = τὸν λιμένα τὸν εἰς τὸ Κοντοσκάλιον (Manuscript E). – Cf. Stauridou-Zaphraka, *Kontoskalio* 1309. 1328.

123 *Patria Konstantinoupoleos* III 133 (II 257 Preger): Τὸ δὲ Κοντοσκάλιον ἢ πόρτα ἀπὸ Ἀγαλλιανῶν τουρμάρχου, παρισταμένου ὅτε ἐκτίετο ὁ λιμὴν, ἔλαβε τὸ ὄνομα· ἐκαλεῖτο δὲ ἐκείνος Κοντοσκελῆς· καὶ διὰ τοῦτο ἐκλήθη οὕτως. – This view is followed by Janin, *Constantinople* 228. 299 and Guillard, *Ports* 232-235.

124 Stauridou-Zaphraka, *Kontoskalio* 1328.

125 Berger, *Untersuchungen* 482-483. – Berger, Häfen 83. This derivation is already preferred by Johannes Löwenklau (»Leunclavius«) 876, C-D, instead of the etymology of the *Patria* known to him: *Ego vero pace Graecorum dixerim potius Contoscalinam vel Contoscalii vocatam a conta scala. Kovτός enim Graecis nunc parvus*.

126 On the background: Runciman, *Vesper* 144-148.

127 On the renovation works, see Müller-Wiener, Häfen 26. – Janin, *Constantinople* 232. – van Millingen, *Walls* 293-294. – Berger, *Untersuchungen* 580. – Makris, *Studien* 178. – Ahrweiler, *Byzance et la mer* 338-339. – Talbot, *Restoration* 253.

on the one hand, and on the other hand that our ships can attack the hostile ones (they cannot stop because of the ocean currents)«¹²⁸.

Thus, the shipyards had been partly at the Blachernae and earlier in front of the Neorion Gate (the Ottoman Bahçe Kapi)¹²⁹, i. e., where possibly remains of the Neorion harbour were preserved. Between the two shipyards – near the Christos Evergetes Monastery, which is located near the later Ayakapı Gate¹³⁰ – the Latins had apparently set up their arsenal. The situation in the Golden Horn contained the danger of being blocked in the event of war, so Emperor Michael relocated the shipyard to the Propontis coast.

How to imagine Michael's »walling up« is not clear. The statement could refer, however, to the fact that the emperor had a part of the harbour basin enclosed by a wall to form a shipyard area, as can be demonstrated for the fifteenth century (see below). The iron gates mentioned in this case would not have been intended to block the entire harbour basin, but to seal off the arsenal¹³¹. In any case, the rebuilding must have presented a major project that included not only the dredging of the basin, but also the restoration or new construction of shipsheds and defensive walls.

Even more confusing is the reference by the contemporary witness Pachymeres (1242-1310) that »liquid silver« (mercury¹³²) was poured into the harbour basin in order to deepen it. It is far from clear how such a procedure would have improved the harbour's quality. The closest – and still far-fetched – analogy stems probably from the harbour of Caesarea Maritima/Sebastos (Palestine, first century), where liquid lead was applied under water in order to fix iron brackets that connected the stone blocks of the mole¹³³. Yet, it was lead that the Roman architects had used and not mercury¹³⁴. Furthermore, there is no evidence whatsoever that Byzantine engineers of the thirteenth century knew of this technique. It was also suggested that ἄργυρον (»silver«) could be a misspelling of ἄργιλον (»clay«)¹³⁵. How »liquid clay« should have

contributed to the improvement of the harbour basin, however, is incomprehensible. It is probable, therefore, Georgios Pachymeres had simply misunderstood one of the measures taken by the emperor.

In any case, the necessity of a comprehensive overhaul suggests a lack of maintenance in the previous decades. The Propontis coast had lost its economic and military importance and under Latin rule Constantinople suffered a general decline. The new shipyard started to build a fleet of warships and enabled the reconstruction of the Byzantine navy¹³⁶.

After the passing of the acute threat in the person of Charles of Anjou, Emperor Andronikos II (1282-1328) was no longer prepared to raise funds for the maintenance of the fleet of approximately eighty ships¹³⁷. All the more astonishing is a report in the *Patria*, according to which exactly this emperor had the Kontoskalion harbour renovated again:

»Since it [the Kontoskalion Harbour] silted up over time, it has of late been excavated and renewed by the most famous of the emperors, the true harbour of Orthodoxy, our Emperor Andronikos Komnenos Palaiologos; he had it cleaned and deepened and widened; and he also had it walled, and he fortified the harbour with iron gates; and he commanded that the imperial warships remain in there, in safety and unshaken by the sea; and you can see that it is one of the largest and most impressive facilities in the city«¹³⁸.

The report of the *Patria* offers such close parallels to that of Georgios Pachymeres about Michael VIII (see above), that one can hardly judge the true extent of the interventions. It is perhaps simply a mistaken assignment in the *Patria*¹³⁹, or Andronikos had only completed the work begun by his predecessor¹⁴⁰. In the nineteenth century, van Millingen still saw on the sea walls near Kumkapı a »coat of arms« (a rising lion with sword, including four circles with monograms), which he attributed to Andronikos II. He wanted to connect it with the alleged building activities of the emperor at Kontoskalion (fig. 5)¹⁴¹.

128 Georgios Pachymeres, *Relationes historicae* V 10 (II 469-471 Failler): Καὶ τὸ ἐν Βλαχέρναις νεώριον οὐκ ἀποδεχόμενος, ὡς κατὰ πρόσωπον παρέχον ταῖς ναυσὶ πρὸς τὰς τῶν ἐχθρῶν τὴν μάχην – τὸ δὲ κατὰ πρόσωπον δυσχερὲς εἶναι ὡς ἀντιστατοῦσας ἰσχυρῶς μάχεσθαι –, τὸν ὁμοίον τρόπον καὶ τῷ παλαιῷ νεωρίῳ προσήχθητο – λέγω δὲ παλαιὸν οὐχ ὧ χθὲς καὶ πρῶην Λατῖνοι ἐχρῶντο, τῷ πρὸς τῆς μονῆς τοῦ Εὐεργέτου Χριστοῦ, ἀλλὰ τὸ πρὸς τῆς πύλης τοῦ Νεωρίου, ἐκείθεν ὠνομασμένη –, ὡς παντὸς τοῦ κατὰ θάλασσαν Κέρατος λιμένος ὄντος καὶ αὐτὸν ταῖς Ῥωμαίων ναυσὶν ὅσον καὶ ταῖς τῶν ἐχθρῶν διδόντος. Ἄλλ' εἰδὼς τὸ κατὰ νότον γινομένης μάχεσθαι ὅσον θαρραλεώτερον μὲν ἀνδράσιν, ἀσφαλέστερον δὲ πράγμασι [...] τὸ πρὸς τῷ Βλάγκᾳ Κοντοσκέλιον ἀνοικοδομεῖν ἤθελεν, ὥστε γυρῶσαι μὲν μεγίσταις πέτραις τὸν κύκλῳ τόπον, ἐμβαθύναι δὲ τὴν ἐντὸς θάλασσαν, ἄργυρον χυτὸν ἐμβαλόντα, ἐποικοδομησαί τε καὶ στέγη ταῖς ναυσὶν ἀποχρῶντα, πύλας δ' ἐπιθεῖναι ἀραρυίας ἐκ σιδήρου τῆς ἐν ταῖς πέτραις εἰσθήμῃ ἔξωθεν, ὡσθ' ἅμα μὲν ἀσφαλῶς ἔχῃεν τὸν στόλον, ἅμα δὲ καὶ ταῖς τῶν ἐχθρῶν ἀναγομέναις – μὴ γὰρ εἶναι διὰ τὸ ῥόωδες τῆς θαλάσσης ἴστασθαι – κατόπιεν ἑπιπίπτειν τὰς ἡμετέρας.

129 Effenberger, *Illustrationen* 78 tab. 3.

130 Asutay-Effenberger/Effenberger, *Eski İmaret Camii* 13-14. – See also Preiser-Kapeller in this volume.

131 Effenberger, *Illustrationen* 30.

132 LSJ 236, s. v. ἄργυρος χυτός. – Cf. Halleux, *Métaux* 179-188. The translation in the edition of Failler 468 with »argent fondu« is to be rejected.

133 Raban, *Sebastos* 243 (with fig. 38): »Frozen flows of lead were found at the foot of that tumbling mass under 10 m of water.«

134 It may be noted that Makris, *Studien* 289 translates without comment as »lead«.

135 Talbot, *Restoration* 253 referring to a suggestion made by H. Ahrweiler.

136 Ahrweiler, *Byzance et la mer* 336-340.

137 Georgios Pachymeres, *Relationes historicae* VII 26 (III 81-83 Failler). – Cf. Ahrweiler, *Byzance et la mer* 374-381. – Müller-Wiener, *Häfen* 26.

138 *Patria Konstantinupoleos* III 37 (II 230 Preger): ὁ Σοφιανῶν καλούμενος λιμὴν δὴ καὶ ἀναχωσθέντα τῷ χρόνῳ ἀνώρυξε καὶ ἀνηνέωσε τοῦτον νῦν ὁ ἐν τοῖς βασιλεῦσι διαφανέστατος, ὁ τῆς ὀρθοδοξίας ὄντως λιμὴν, ὁ αὐτοκράτωρ ἡμῶν κύριος Ἀνδρόνικος Κομνηνός ὁ ὁ Παλαιολόγος· ἀνακαθήρας γὰρ τὸν τοιοῦτον λιμένα καὶ εὐρύνας καὶ βαθύτατον ποιήσας καὶ θριγγεῖον τοῦτο ἀξιεπαινετώτατον ἤγειρε καὶ τὸν λιμένα διὰ πύλων σιδηρέων κατησφαλίσατο, τὰς βασιλικὰς τριήρεις ἀνεπιβούλους ἐν τούτῳ μείναι θεσπίσας <καὶ μὴ> σαλεύεσθαι· ὅπερ ὀράται τῇ πόλει μεγίστον ἔργον καὶ αξιορατίωτατον]. – Cf. Berger, *Untersuchungen* 574.

139 Makris, *Studien* 179.

140 Cf. Stauridou-Zaphraka, *Kontoskalio* 1326.

141 van Millingen, *Walls* 189-190. 294-295 (based on Curtis/Walker, *Broken Bits* 16).

The Kontoskalion harbour was still used in any case. Although Andronikos II had greatly reduced the Byzantine fleet, at least in 1305 a rudimentary navy was still in existence, which was in all probability stationed at the Kontoskalion¹⁴². Andronikos' plan to rebuild a fleet of at least twenty ships was prevented by his downfall¹⁴³. The activities in the Kontoskalion were nevertheless resumed: in 1341, the *meGas doux* Alexios Apokaukos used the funds confiscated from the supporters of John Kantakuzenos to equip sixty ships for the civil war. The following year he appeared before Thessaloniki with a formation of seventy ships in total¹⁴⁴.

A last unfortunate attempt to renew the Byzantine navy took place under John VI Kantakuzenos (1341-1354). Against the background of increasing conflicts with the Genoese inhabitants of Galata, the Emperor ordered the construction of some warships. As a shipyard, however, he chose, not the renovated Kontoskalion Harbour, but the inner area of the Golden Horn. As the situation escalated, it was easy for the Genoese to destroy the ships that were newly completed or still under construction¹⁴⁵. It was precisely this danger that had once moved Michael VIII to relocate the shipyard to the Propontis coast and now John VI also followed this example. In the Kontoskalion, he had four more dromons built and appointed the *meGas doux* Tzamplakon as their admiral¹⁴⁶. On the evening of 5 May 1349, the fleet sailed out of the Kontoskalion (with a crew of 300 on each ship), accompanied by five warships from outside and more than a hundred smaller boats, to engage the Genoese in a sea battle. However, before the ships entered the Golden Horn, disaster struck. The inexperience of the Byzantine sailors led first to manoeuvring errors and finally to a panicked rout, even before they came into contact with the enemy. John Kantakuzenos himself also reported design flaws: three of the big dromons had proven to be top heavy due to their overly high fighting platforms (*pyrgoi*) and capsized, which also panicked the crews of the other ships¹⁴⁷.

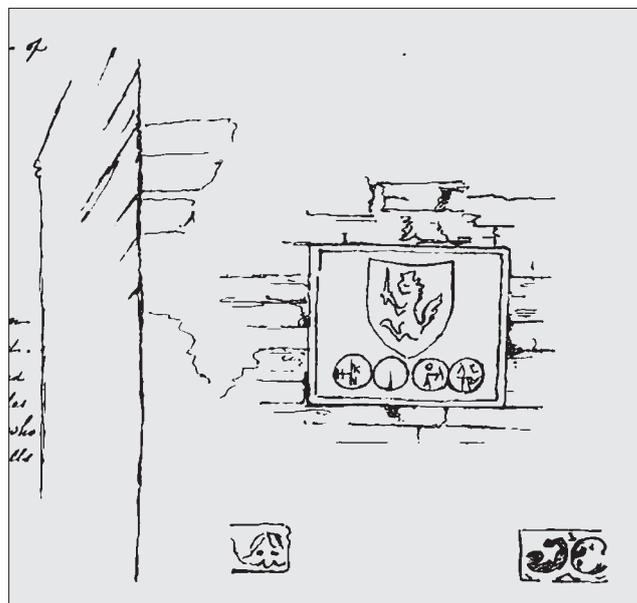


Fig. 5 The monogram of Andronikos II(?) on the sea wall at the Kontoskalion. – (From Curtis/Walker, Broken Bits 16).

The use of Kontoskalion as a military harbour is also mentioned by Stephen of Novgorod when he was in Constantinople in 1350. According to him, it could hold up to 300 dromons. However, it was impossible to leave the harbour in the event of unfavourable winds. There was also a large iron gate, through which the sea could penetrate into the city, which probably meant the gate between the western and eastern harbour basin (arsenal)¹⁴⁸.

Occasionally, older research literature provides yet more putative evidence for the Kontoskalion Harbour around the middle of the fourteenth century¹⁴⁹. However, these are founded on an untenable equation with the so-called Heptaskalon, which was situated in the Golden Horn¹⁵⁰.

142 Stauridou-Zaphraka, Kontoskalio 1326 claims that 1305 new warships were built. – However, Georgios Pachymeres, *Relationes historicae* XII 26 (IV 579-583 Failler) only speaks of the fact that such were prepared for use, so were already available.

143 Nikephoros Gregoras, *Historia* VIII 6 (I 317-318 Schopen/Bekker), translation: van Dieten, Nikephoros Gregoras II/1 40. – Cf. Müller-Wiener, *Häfen* 26-27.

144 Matschke, *Flotte* 196. – Cf. Müller-Wiener, *Häfen* 27.

145 Nikephoros Gregoras, *Historia* XVII 2 (II 846-848 Schopen), translation: van Dieten, Nikephoros Gregoras III 207. – Cf. Ahrweiler, *Byzance et la mer* 382-383.

146 Ioannes Kantakuzenos, *Historia* IV 11 (III 72 Schopen): και προς τῷ λεγομένῳ Κοντοσκαλίῳ νεωρίῳ αἱ τριήρεις ἐναυπηγοῦντο. – *Ibid.* (III 74 Schopen): Ἐν τούτοις δὲ οὐκ ὀλίγου τριβέντος χρόνου, και τῶν τριηρέων ναυπηγηθεισῶν, ναύτας τε κατέλεγεν ὁ βασιλεὺς και ὀπλίτας, και τὰ ἄλλα πάντα ἐξηρτύετο πρὸς μάχην. Στρατηγοὺς τε ἐφίστη, [...] ταῖς [τριήρεσι] δ' ἐν τῷ Κοντοσκαλίῳ ναυπηγηθείσας Τζαμπλάκωνα τὸν μέγαν δοῦκα. – Nikephoros Gregoras, *Historia* XVII 2 (II 854 Schopen/Bekker), translation: van Dieten, Nikephoros Gregoras III 211-212. – Cf. Guillard, *Ports* 199. – Stauridou-Zaphraka, *Kontoskalio* 1313. – Müller-Wiener, *Häfen* 27. – Makris, *Studien* 176. 178.

147 John Kantakuzenos, *Historia* IV 11 (III 74-77 Schopen). – Nikephoros Gregoras, *Historia* XVII 5-6 (II 857-863 Schopen/Bekker), translation: van Dieten, Nikephoros Gregoras III 214-217. – Alexios Makrembolites, *Logos istorikos* 13 (156-157 Papadopoulos-Kerameus): Τῇ δὲ πέμπτῃ ἐξήλθον θαρσαλέοι τε και εὐέλπιδες, γαυριῶντες ἅμα και χαίροντες, εὐχῆς πανδήμιου πρότερον γενομένης. Ἦσαν γὰρ τούτων πλήρεις τριήρεις ἑννέα – ἐν τῷ νεωρίῳ αἱ τέσσαρες ναυπηγηθεῖσαι τῶν Σοφιανῶν – ὧν ἑκάστη ὀπλίτας εἶχε τριακοσίους τοῦλάχιστον, τῶν

ἀπὸ σιδήρου ἀνδριάντων μικρῶν ἀποδέοντας· μεθ' ὧν ἕτερα πλοῖα διάφορα ἐν σχήματι τούτων, τὸν ἑκατοστὸν ἀριθμὸν ὑπερβαίοντα, ὁμοίως και ταῦτα καθωπλισμένα. Τὸ δὲ ναυτικὸν και οἱ ἐν τούτῳ πρωτεύοντες πρὸ πολλοῦ ἠγανάκτου – ὅτι μὴ ἀπελύοντο ζῶντας τοὺς ἀντιπάλους καταπιεῖν – και ἀναιδῶς κατὰ τοῦ κρατοῦντος ἐγόγγυζον, ὅτι και ἀκμήται τυγχάνοντες και πλείους τῶν ἀντιθέτων ἐπὶ πολὺ τὴν πρὸς αὐτοὺς πάλιν οὐκ ἐπιτρέπονται. – *Kleinchroniken* 8.51b (I 86 Schreiner): ἐποίησαν δὲ στόλον μέγα και τῇ δ' τοῦ μαρτίου, τῆς αὐτῆς β' ἰνδικτιωνος, ἐξήλθεν ὁ ἡμέτερος στόλος ἐκ τοῦ Κοντοσκαλίου. – Cf. *Kleinchroniken* 7.12 (I 65 Schreiner). – See also the commentary (also with dating) in *Kleinchroniken* III 275. – On the background to the failed attack and its development, see *Chronique brève de 1252* IV, 43-46 (Schreiner). – Cf. Stauridou-Zaphraka, *Kontoskalio* 1314. – Makris, *Studien* 176. – Matschke, *Flotte* 200-201.

148 Stephen of Novgorod, in: Majeska, *Russian Travellers* 38-39, also with English translation. See now also *Itinerarium Stefana z Nowogrodu, 238-241* and the commentary at 254 (n. 34) – Guillard, *Ports* 200. – Effenberger, *Illustrationen* 30. – Müller-Wiener, *Häfen* 27. – Makris, *Studien* 178 considers the number of ships to be exaggerated. Since the encomium to John VIII mentions the same number, he assumes a common source, maybe a mediaeval kind of guidebook.

149 For Example, Ioannes Kantakuzenos, *Historia* IV 22, IV 28, IV 39 (III 165, III 212, III 284 Schopen).

150 Cf. Preiser-Kapeller in this volume. On the discussion in the research literature on the location of the Heptaskalon, see Stauridou-Zaphraka, *Kontoskalio* 1310-1311 and 13123-1323 for her conclusive argument in favour of a location in the Golden Horn.

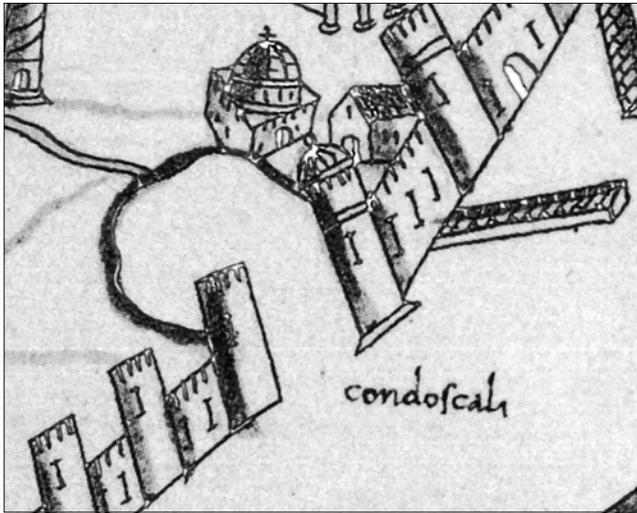


Fig. 6 Detail from the depiction of Constantinople in Cristoforo Buondelmonti's *Liber insularum archipelagi*. Bibliothèque Nationale de France, MS. Nouv. Aqu. Lat. 2383, fol. 34^v. – (Detail from Effenberger, Illustrationen fig. 1).

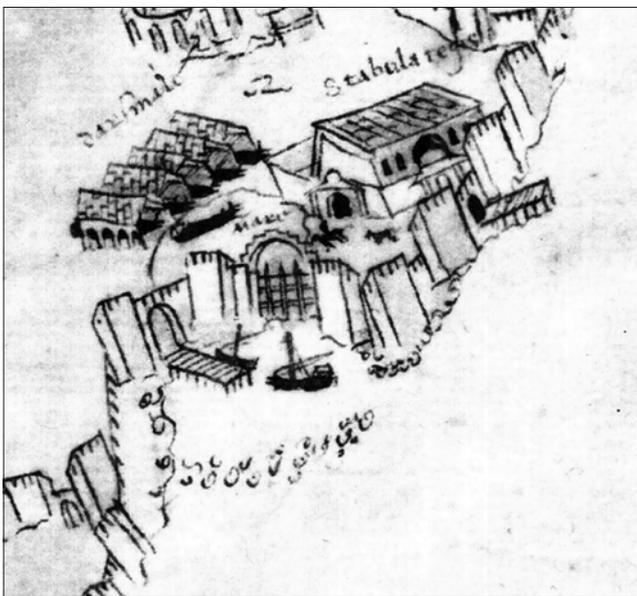


Fig. 7 Detail from the depiction of Constantinople in Cristoforo Buondelmonti's *Liber insularum archipelagi*. Düsseldorf, Universitäts- und Landesbibliothek, MS. G 13, fol. 66^r. – (Detail from Effenberger, Illustrationen, appendix, facsimile section).

The next safe proof for the Kontoskalion Harbour is once more related to maintenance work that had become necessary, this time initiated by John VIII Palaiologos (1425-1448)¹⁵¹. A eulogy refers to it:

»At a place commonly referred to as Kontoskalion, on the southern part of the wall surrounding the city, there is a harbour whose layout is circular. An opening in the wall gives a warship unhindered access to the harbour, but the circumference offers space for more than three hundred ships.

It is designed so that it does not let in any sediment when the Thracian north wind blows in stormy weather. But when a strong south wind blows up and blows against the opening, there is nothing to stop the sand or prevent it from blowing in the sand as it moves in. What happened now? When a small amount was added year in, year out, the basin absorbed much sediment. The anchorage could not be relocated elsewhere in the city, and in that case, it would not be so secure either.

The ruler therefore decided to remove the sediment and have the basin cleaned by the use of numerous workers; what had settled in the water should be removed by certain machines and by special buckets with leaky bottoms. All of them including the draft animals should not do their work free of charge and without compensation, but against payment, except for the priests and deacons elevated to the consecrated state; it was also attended by numerous monks from the city and suburban pious places. There was also the entire patriarchal clergy, and almost all laboured with the patriarch, except for a few who supervised the work; and those were those ordered by the emperor for oversight. Thus, after a short time, the basin reappeared, as it had before the accumulation of sediment«¹⁵².

The very elements that can already be traced back to the Early Byzantine construction phases of the fifth and sixth centuries are still encountered¹⁵³: it is uncertain whether the sigma-shaped portico on the edge of the harbour basin facing the city survived. Towards the sea, two semi-circular breakwaters or moles continued to provide shelter from the south winds; only a narrow passage allowed entry and

151 Cf. Makris, Studien 178. – Müller-Wiener, Häfen 27. – Stauridou-Zaphraka, Kontoskalio 1303. – Müller-Wiener, Häfen 63.

152 Panegyricus anonymus 289 (Lampros): Ἄξιον δὲ μὴδὲ τοῦτο παραδραμεῖν, ἡκιστα φέρον τὰ δευτερεῖα τῶν προὔπηργμένων. Ἔστι νεώριον ἐν τόπῳ λεγομένῳ κοινῇ διαλέκτῳ Κοντοσκαλίῳ διακείμενον κατὰ μεσημβρίαν τοῦ τείχους περιόριζοντος τοῦ ἄστεως, ἔχον δὴλα δὴ τὴν περιγραφὴν τοῦ σχήματος κυκλικήν, τοσαύτην τὴν εἴσοδον σχόντος ἐκατέρωθεν τῶν τειχῶν διηρημένω, ὥστε μίαν τριήρη τὴν ἐμβολὴν ἀπαραποδίστως πεποιηκυῖαν, τὸ γε μὴν ἐμβαδὸν χωροῦν οὐκ ἔλαττον τῶν τριακοσίων. Θρακικοῦ τοίνυν βορέου πνεόντος κατὰ χεῖμα, οὐδεμίαν ὕλην οὕτω πεφυκὸς συνεισάγειν, ἐγειρομένου δὲ νότου, σφοδροῦ κατὰ τὸ στόμιον ἀντικρὺς ἐρχομένου, τοῦ ὑπαντιάζοντος οὐδὲν ἔστι τὴν ψάμαθον ἢ τοῦ κωλύοντος ἐπίπροσθεν ἐν ταῖς τοῦ πνεύματος εἰσβολαῖς πολλὴν ταύτην ἐν μέσῳ τῶν νεωρίων συνεισβάλλοντος. Τί οὖν ἐντεῦθεν γίνεται; Κατ' ἐνιαυτὸν μικρὰ προσθήκη γεγεννημένη, πολλὴν ὁ χώρος τὴν ὕλην ἐντὸς εἰσεδέξατο. Ἐπειδὴ δ' ἄλ-

λοθὶ που τῆς πόλεως μέρει τὸν ναῦσταθμον γεγενῆσθαι οὐκ ἦν, οὐδὲ τοσαύτην τὴν ἀσφάλειαν εἶχειν, ἔδοξε τῷ κρατοῦντι ἐκφορηθῆναι ταύτην ἐκ μέσου καὶ τὸν τόπον ὡς ἦν πρότερον καθαρῆναι τῇ πολυχειρίᾳ, τὸ δὲ ὕδωρ, ὅπερ ἦν συνηγμένον, διὰ τινῶν μηχανημάτων καὶ κάδων ἀπειρεσίων τῶν εἰς αὐτὸ τεταγμένων ὡς δυνατὸν ἐξωθεῖν. Τοιγαροῦν οὐ πρόικα οὐδ' ἀμισθί, ἀλλὰ πάντας δουλεύειν μισθῷ μετὰ γε τῶν ὑποζυγίων ἄνευ τῶν τὴν ἱεράν τάξιν λαχόντων ἱερέων τε καὶ διακόνων· οὐ μὴν ἀλλὰ καὶ μοναχῶν οὐκ ὀλίγη μερὶς συνεισῆλθεν ἀπὸ τε τῶν ἐντὸς σεμνείων καὶ προαστείων. Ὅ γε μὴν ἅπας κλῆρος περὶ τὸν ποιμένα παρήν, μετὰ τοῦ ποιμένου σχεδὸν ἅπαντες εἰς τοῦργον διαπονοῦντες πλὴν ἐνίων, καὶ τούτων τοῦ πλήθους ἐπιστατούντων· οἱ δὲ ἦσαν οἱ πρόκριτοι, διατεταγμένοι πρὸς βασιλείως. Ὅθεν οὐ συχνὸς χρόνος παρήλθε, καὶ ὁ τόπος ὠρᾶτο ἤπερ ἦν πρότερον, δηλαδὴ πρὸ τῆς ὕλης. Translation modified after Makris 289-290.

153 Cf. Stauridou-Zaphraka, Kontoskalio 1323-1324. – Makris, Studien 179.

exit. The price for the high degree of protection was still the steady tendency of the harbour to silt up due to sand, which was evidently dredged with buckets having sieve-like bottoms¹⁵⁴. The fact that the harbour actually accommodated three hundred dromons seems exaggerated in any case (see above, n. 148).

The use of the Kontoskalion (more precisely, the eastern basin) in this period as a shipyard is not in doubt, especially as the description of Buondelmonti (1422) refers to the harbour as *Contoscali vel Arsenale* («naval shipyard»)¹⁵⁵. But the best days of the arsenal were already over: Pero Tafur, who was in Constantinople in 1437/1438, describes »a shipyard that must once have been magnificent«¹⁵⁶.

The first illustrations of Kontoskalion¹⁵⁷ come from the period after the Ottoman conquest of Constantinople in 1453, but similar structures are to be assumed for the Late Byzantine period¹⁵⁸. On the earliest surviving city views of Constantinople after Cristoforo Buondelmonti (for example, Paris, BNF, Nouv. Aqu. Lat., 2383, fol. 34^v, after 1457/1458), the round docks of the Kontoskalion (fig. 6) can be found to the east of a mole called »Vlanga«¹⁵⁹. The commentary in some of the manuscripts recognises this as the *receptaculum galearum amplius sinus qui dicitur Contscali*¹⁶⁰. The younger of the Buondelmonti views always refer to the harbour as *Receptaculum dictum conticali (condoscali, elsewhere*¹⁶¹) as a bay reaching far into the city, flanked by two towers of sea walls and furnished with one or two moles.

The Düsseldorf Buondelmonti manuscript (probably from between 1485 and 1490, fig. 7) offers the most detailed view of the Kontoskalion with two separate harbour areas. The western basin is shielded from the open sea by a breakwater; the eastern area is completely walled and communicates with the western part via an iron gate. Here is a shipyard area with five shipsheds. This may well correspond to the condition of the complex at the end of the fifteenth century¹⁶². The *veduta* of Vavassore (c. 1530, fig. 8), which is based on a woodcut from 1478/1479-1490, is similar, apart from the fact that here the shipsheds are transversal to the seawall and that in the western area the breakwaters are missing (see also the reconstruction by Müller-Wiener: fig. 9). The later depictions of Sebastian Münster (1550, fig. 10), Ballino (1569, fig. 11), and Braun and Hogenberg (1572-1618, fig. 12)¹⁶³ follow the rough structure, but contain only two halls running parallel to the walls on the seaward and city sides¹⁶⁴.



Fig. 8 Detail from the depiction of Constantinople by Giovanni Andrea Vavassore. Woodcut, c. 1530, after an original from 1478/1479-1490. Bamberg, Staatsbibliothek, MS IV C 44. – (Detail from Effenberger, Illustrationen fig. 5).

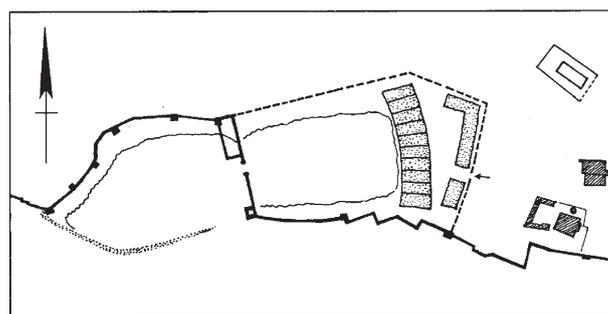


Fig. 9 The arsenal at Kumkapi according to the reconstruction by Müller-Wiener (scale 1:10 000). – (From Müller-Wiener, Häfen 37).

154 Müller-Wiener, Häfen 27. – Müller-Wiener, Bildlexikon 63. – Makris, Studien 179. – Stauridou-Zaphraka, Kontoskalio 1323-1324.

155 Cristoforo Buondelmonti, *Librum insularum* 65 (121 by Sinner): *In quibus moenibus est campus ab extra et olim portus Vlanga ... et propinqua huic Contoscali, vel Arsenale restat.* – Cf. Guillard, Ports 201

156 Pero Tafur, *Viajes 181-182: Al un canto de la çibdat está su ataraçana çerca de la mar, é muestra aver seydo magnífica cosa, é àun agora es suficiente casa de navíos*; English: Vasiliev, Pero Tafur 113. – According to Effenberger, Illustrationen 30 (probably based on Janin, Constantinople 233), the shipyard was »locked against the sea«, which cannot be read from the text.

157 Cf. Effenberger, Pictorial Sources, in this volume.

158 On the following Effenberger, Illustrationen 30. – Cf. Berger, Häfen 85.

159 See the views of Gerola, *Vedute*.

160 Gerola, *Vedute* 271-272.

161 Among the various names can be found: *Cociscali, arsana / conticali, arsana vel Contiscali, condoscali, Receptaculum dictum Conticasii, Receptaculum dictum conticali, Receptaculum fustarum dictum condoscalli, Receptaculum fustarum indictum Condorcali*: Gerola, *Vedute* 266-269.

162 Effenberger, Illustrationen 31.

163 Braun/Hogenberg, *Civitates orbis terrarum* 119.

164 Effenberger, Illustrationen 30.



Fig. 10 Detail from the depiction of the Constantinople in Sebastian Münster's *Cosmographia*. Woodcut, 1550, Bamberg, Staatsbibliothek, MS J. H. Geogr. f. 2. – (Detail from Effenberger, Illustrationen fig. 6).



Fig. 11 Detail from the view of Constantinople by Giulino Ballino. Engraving, 1567, Wolfenbüttel, Herzog August Bibl., MS 25 Bell 2o. – (Detail from Effenberger, Illustrationen fig. 7).

The End of the Harbour in the Ottoman Period

After the conquest of Constantinople, the Kontoskalion remained in use in the Ottoman period¹⁶⁵. To the Venetian traveller Giovanni Maria Angiolello (1451/1452-c. 1525), the still active harbour called *Conduschali* was well known¹⁶⁶, but it was now mostly referred to as the »Galley Harbour« (Kadirga-Liman)¹⁶⁷. Possibly the term Kadirga Liman denominated only the eastern area, i. e., the shipyard, because in 1583/1584 Johannes Löwenklau (»Leunclavius«) reported two different gates – the *Contoscalii porta* and the *Catergoli-menis porta* – the former ensures access to the western, open basin (the Ottoman Kumkapı), and the latter must have designated the gate of the arsenal (»iron gate«)¹⁶⁸. In 1496/1497, Bayezid II commanded that new ships for the Ottoman fleet should be built here¹⁶⁹. The basic structures from the Byzantine period were probably maintained. Representations in the *Nuremberg Chronicle* by Hartmann Schedel (1493, see p. 44, fig. 5) and by Matrakçı Nasuh (1537) are not accurate, but the Istanbul *vedute* in the *Hünername* (1584/1585, fig. 13) resembles the detailed Buondelmonti views. However, the harbour and shipyard appear to have become unusable. The arsenal no longer seems to have been in use when Pierre Gilles (1490-1555) visited Constantinople. The designation as a »galley harbour« he took from local reports, according to which one could still see sunken Byzantine (!) warships in the basin¹⁷⁰.

Around 1585, the shipyard area was just a swamp, whose stench is said to have caused the Grand Vezier Sokollu Mehmet Paşa to have it filled up¹⁷¹. The sultans had already moved the new, large arsenal to the Golden Horn in the early sixteenth century. Today, only the arched Kadirga Limanı Caddesi reminds us of the former north shore of the »Galley Harbour«. The western, open harbour basin at Kumkapı was probably still used until it was filled in with the excavated material from the construction of the Nuruosmaniye Camii (construction period 1718-1755)¹⁷². The most long-lived Propontis harbour of Constantinople had finally ceased to exist after centuries of maintenance, rebuilding and renaming.

165 Müller-Wiener, Häfen 27.

166 Giovan Angiolello, *Viaggio* 45 (Reinhard).

167 Magdalino, *Constantinople* 76. – Müller-Wiener, Häfen 39. – Janin, *Constantinople* 232.

168 Johannes Leunclavius, *Pandectes 876-877: Vicesima graecis Contoscali porta dicitur. In libro de urbis aedificiis locus hic Contoscalinon appellatur et causa nominis adjicitur. Etenim ipsa porta velut intra sinum quemdam abscedit versus urbem, et ab altera parte proximum sibi portum habet pro triremibus, in mare se porrigentem, et muro circumdatum [...] Vicesima prima Catergoli-menis porta nuncupatur, a portu triremium, quae vulgo sunt Graecis Κάτεργα,*

sicut et Κατεργάδες nunc appellantur classarii, vel navales socii triremium. – Cf. Effenberger, *Illustrationen* 31 and 74 tab. 3. – Janin, *Constantinople* 234.

169 Müller-Wiener, Häfen 39. – Effenberger, *Illustrationen* 30.

170 Petrus Gyllius, *De topographia* 99-100: *Dicuntur videri triremes in illum demersae, Byzantii huius aetatis vulgò appellant Caterga limena, quasi portum triremium [...].* – Cf. Janin, *Constantinople* 232. – Effenberger, *Illustrationen* 31. – Müller-Wiener, *Bildlexikon* 63. – Cf. Berger, *Häfen* 85.

171 Müller-Wiener, Häfen 27.

172 Müller-Wiener, *Bildlexikon* 63. – Effenberger, *Illustrationen* 31.

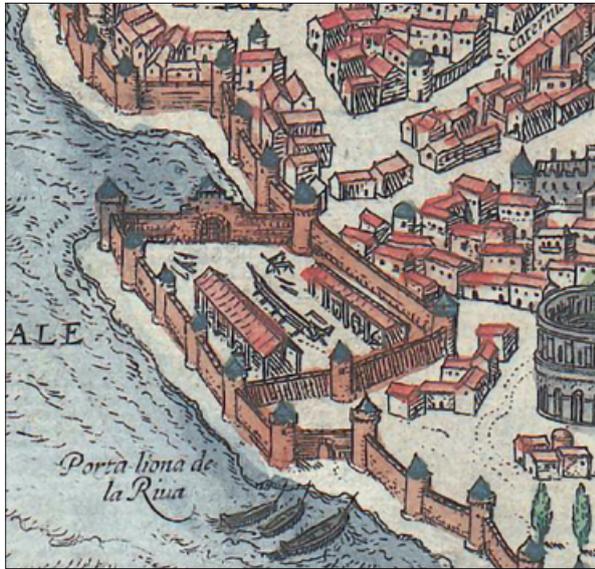


Fig. 12 Detail from the depiction of Constantinople in Braun/Hogenberg, *Civitates orbis Terrarum*. Engraving, 1572). – (From Braun/Hogenberg, *Civitates orbis terrarum* 119).



Fig. 13 Detail from the depiction of Constantinople in the Ottoman *Hünername*, 1584/1585. – (Detail from Effenberger, *Illustrationen* fig. 12).

Name	Emperor/Time	Measure	Function
Harbour of Julian	Julian (362)	Construction of harbour basin with breakwaters and enclosure by a sigma-shaped portico	civilian (grain?)
	Anastasios (509)	Cleaning of harbour basin with the help of scoop wheels, extension of breakwaters	civilian (grain?)
Harbour of Sophia	Justin II (569?)	Renovation works, decoration, extension of harbour basin toward east(?)	civilian (market for import goods) military?
Kontoskalion	Michael VIII (1270)	Renovation works, establishment of an enclosed shipyard area in the eastern part of the basin(?)	military (shipyard)
	Andronikos II (1282-1328)	Alteration works(?), alterations of Michael VIII completed(?)	military (shipyard)
	Ioannes VIII (1425-1448)	Cleaning of harbour basin with the help of buckets with perforated bottoms	military (shipyard)

Tab. 1 Sequence of the most important building and renovation phases of the Harbours of Julian, Sophia and Kontoskalion. – (D. Heher).

Summary / Zusammenfassung

Harbour of Julian – Harbour of Sophia – Kontoskalion
In 362, Emperor Julian laid the foundation stone for one of the most long-lived harbours of Constantinople. Located on the Propontis coast, the harbour named after him had a sigma-shaped portico and moles whose course, however, is unknown. Repair and excavation works under Anastasios I are documented in 509. Under Justin II, renovation work was conducted, including the possible enlargement of the harbour basin which justified a renaming of the harbour in honour of the Empress, as the »Harbour of Sophia«. The harbour seems to have had largely civilian uses in its early days (grain supply and a market for »maritime merchandise« from the sixth or seventh centuries). As a result of the improvement of the areas on the Golden Horn, the importance of the Harbour of Sophia declined. References to it in the sources are rare, but still testify to a more or less continuous use until about 1200. In 1270, the harbour was transformed into a naval dockyard under Michael VIII. In the fourteenth and fifteenth centuries, both construction activities in the shipyard and repeated repair work on the harbour are reported. Under Ottoman rule, the harbour once again changed its name (Kadırga-Liman) and remained in use, at least in part, until the late sixteenth century, before it was finally filled in.

Julianoshafen – Sophienhafen – Kontoskalion
Kaiser Julian legte im Jahre 362 den Grundstein für einen der langlebigsten Häfen Konstantinopels. An der Propontisküste gelegen, verfügte der nach ihm benannte Hafen über eine sigmaförmige Portikus sowie Molen, deren Verlauf aber unbekannt ist. 509 sind Reparatur- und Aushubarbeiten unter Anastasios I. belegt. Unter Justin II. kam es zu Renovierungsarbeiten und möglicherweise auch zu einer Vergrößerung des Hafenbeckens, die eine Umbenennung des Hafens zu Ehren der Kaiserin (»Sophienhafen«) rechtfertigten. Der Hafen scheint in der Frühzeit weitgehend zivil genutzt worden zu sein (Getreidelieferungen, Markt für »maritime Handelsware« ab dem 6./7. Jh.). Infolge der Aufwertung der Gebiete am Goldenen Horn verlor der Sophienhafen seine Bedeutung. Die Erwähnungen in den Quellen sind rar, zeugen aber dennoch von einer mehr oder minder kontinuierlichen Verwendung bis ca. 1200. 1270 wird der Hafen unter Michael VIII. zu einer Marinewerft umgestaltet. Im 14. und 15. Jahrhundert sind sowohl Bautätigkeiten in der Werft als auch wiederholte Reparaturarbeiten am Hafen belegt. Unter osmanischer Herrschaft wechselte der Hafen ein weiteres Mal seinen Namen (Kadırga-Liman) und blieb zumindest in Teilen bis ins späte 16. Jahrhundert genutzt, bevor er endgültig aufgeschüttet wurde.

The Harbour of the Bukoleon Palace

Among the harbours of Constantinople, the so-called harbour of the Bukoleon took a special position, because this landing stage of the Great Palace was not used for any economic or military purposes but for the personal use of the emperor exclusively. In contrast to other harbours in the capital, there is no doubt about the location of the palace harbour¹. From the surviving written and pictorial sources, historical photographs, architecture preserved *in situ* (or documented in other ways) and archaeological investigations, it is clear that the harbour basin was located on the southern Propontian coast of the capital, just east of the Church of the SS. Sergios and Bacchus (Küçük Ayasofya Camii). There, the sea wall bends north at almost right angles twice (fig. 1). As a result of landfills along the coast, the seawall of the former Bukoleon Harbour is now up to 160m from the current course of the shore, and runs just north of Kennedy Caddesi (see map 1 p. 236).

The relatively favourable situation regarding the sources led early on to scientific studies of the Bukoleon Harbour, which had already been studied in detail by van Millingen². Ebersolt dealt only with the buildings around the harbour³; on the enclosed map, the harbour is depicted in the open sea outside the sea walls. A milestone was the exemplary study by Mamboury and Wiegand of the imperial palaces between the Sea of Marmara and the Hippodrome⁴. All later investigations, beginning with Schneider⁵, are based on their plans, photographs and observations (figs 2-3). In addition, the study by Corbett of the western part of the sea wall at the harbour, with a series of sketches and plans, is indispensable, although the absolute dating of the construction phases differs from

the opinion of today's researchers⁶. Guiland also focused on the harbour in a number of contributions⁷, which provide a good compilation of written sources, although some results are outdated. In the overview of the topography of Constantinople by Janin, the Palace of Bukoleon and its harbour receive little attention⁸. The same applies to Müller-Wiener's treatise on the harbours of the Byzantine capital⁹. It was only at the end of the twentieth century that the southern terraces of the palace and the Harbour of Bukoleon returned to the spotlight of research, which increasingly incorporated archaeological data. Among the most important studies we should mention Mango's fundamental investigations on the topographical development of the entire complex of the Great Palace¹⁰, as well as publications by Bardill¹¹, Featherstone¹² and, most recently, Westbrook¹³. Of great importance are also the surveys conducted by Franceschini from 1992 onwards in the area of the Lower Palace¹⁴ and her studies on the terracing of the area¹⁵. A good summary of the pictorial sources and some travelogues can be found in a recent publication by Barsanti¹⁶. Recently, the author of this article has dealt with the Harbour of Bukoleon and the adjacent palace structures¹⁷. These publications are now complemented by the examination of the building techniques of the harbour by Ginalis and Ercan-Kydonakis¹⁸. Lastly, one should refer to the digital reconstruction of the façade of the Palace of Bukoleon by Öner, which is based mainly on the sketches of Mamboury and Wiegand, but excludes the harbour itself (fig. 4)¹⁹, and to an artistic reconstruction of the harbour area by the graphic artist Antoine Helbert (fig. 5)²⁰.

1 Divergent localisations only occur in older literature and are to be rejected. Cf. Guiland, *Port palatin* 191-192. 196-202. – van Millingen, *Walls* 270.

2 van Millingen, *Walls* 269-287.

3 Ebersolt, *Grand Palais* 147-150.

4 Mamboury/Wiegand, *Kaiserpaläste*.

5 Schneider, *Vorarbeiten* 27-29.

6 Corbett, *Buildings*.

7 Guiland, *Plage*. – Guiland, *Palais du Boukoléon*. – Guiland, *Port palatin*. – Guiland, *Ports*. – All four contributions also in Guiland, *Études de Topographie I* 249-293; II 80-120.

8 Janin, *Constantinople* 234 (harbour). 120-121 (palace). 297-298 (sea wall).

9 Müller-Wiener, *Häfen* 9-10.

10 Mango, *Boukoleon*. – Mango, *Spolia*.

11 Bardill, *Visualizing*.

12 Featherstone, *Der Große Palast*. – Featherstone, *The Great Palace*.

13 Westbrook, *The Great Palace* 229-237.

14 Bolognesi Recchi Franceschini, *Fourth Season* und Bolognesi Recchi Franceschini, *First Year*. – See also the following contributions from the same author: *First Season*. – *Second Season*. – *Third Season*. – *Seventh Year*. – *Seventh Survey*. – *End of Survey*. – *Eleventh Survey*. – *Monumental Itinerary*. – *Chronological Phases*. The numerous illustrations and drawings attached to the individual articles are unfortunately largely unusable due to their poor print quality.

15 Bolognesi Recchi Franceschini, *Gran Palazzo*. – Bolognesi Recchi Franceschini, *Palastareal*. – Bolognesi Recchi Franceschini, *Südaerial*.

16 Barsanti, *Disegno*.

17 Heher, *Boukoleonhafen*.

18 Ginalis/Ercan-Kydonakis, *Reflections on the Archaeology*, in this volume.

19 www.byzantium1200.com/boucoleon.html (15.9.2016). – Öner/Kostenec, *Walking thru*.

20 www.antoine-helbert.com/fr/portfolio/annexe-work/byzance-architecture.html (15.9.2016).

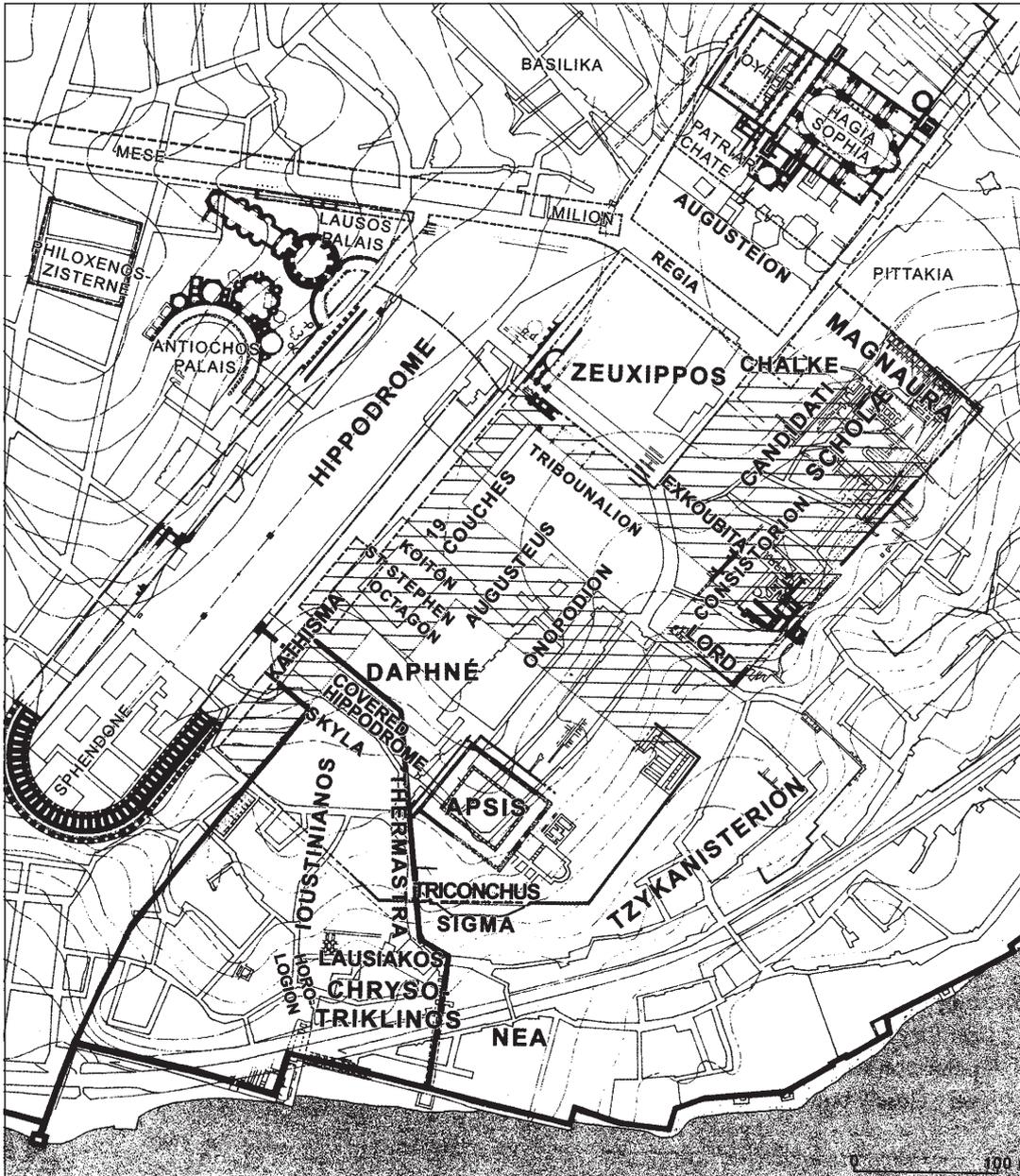


Fig. 1 The Great Palace: below left, the lower palace («Palace of Boukoleon»), enclosed under Nikephoros II. – (From Featherstone, *The Great Palace* 48).

Location and Name of the Harbour

From the ninth century, the sources usually identify the palace harbour with the name »Bukoleon«²¹, which had earlier referred to the local coastline²². The etymology of this name is unclear. The Byzantines themselves later derived it from a statue located in the harbour, which showed a fight between a bull and a lion (bous kai leon, βουῆς καὶ λεῶν)²³. Berger sees

this as a retrospective explanation. He argues that the origins of the name are instead to be sought in the verb *boukoleo* (βουκολέω, »to guard«): the name would derive from a hypothetical equivalent to the cult of Boukoleion in Athens, which was also found in ancient Byzantium²⁴. Mango, in turn, contemplates deriving the toponym from a personal name

21 Earliest reference in the *Vita Leonis* 25 (170 Alexakis): τῷ καλουμένῳ Βουκολέοντι παρέβαλον, ὀρμητηρίῳ τυγχάνοντι παρ' αὐτὰ τὰ βασιλεια. – Cf. Mango, *Boukoleon* 41.

22 Halkin, *Legendes Byzantines* 89: ἐπὶ τὸν Βουκολέοντα καὶ τὴν Σιδηρὰν διαβιβάσας.

23 Ioannes Skylitzes, *Synopsis* 11 (Thurn). – Ioannes Zonaras, *Epitome* XVI 28 (517 Pinder/Büttner-Wobst). – Anna Komnene, *Alexias* III 1, 5, VIII 2, 4 (89. 205 Reinsch/Kambylis). – See also van Millingen, *Walls* 269-271. – Janin, *Constantinople* 101. – Müller-Wiener, *Häfen* 10.

24 Berger, *Untersuchungen* 259.

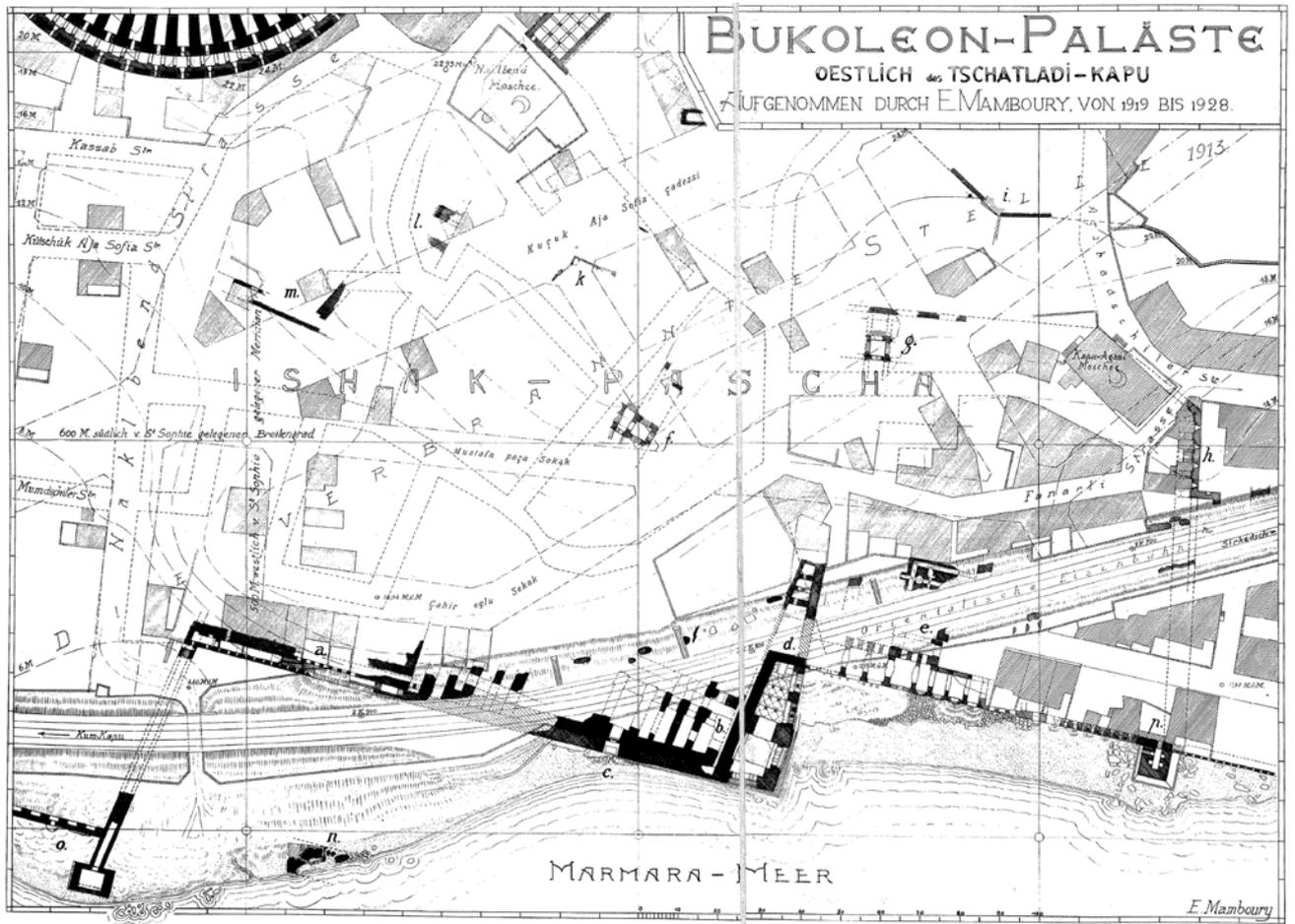


Fig. 2 Plan of the Harbour of the Bukoleon Palace according to Mamboury/Wiegand. The isolated structure »n« (bottom left) was interpreted as the foundation of the statue of fighting animals. – (From Mamboury/Wiegand, Kaiserpaläste pl. V).

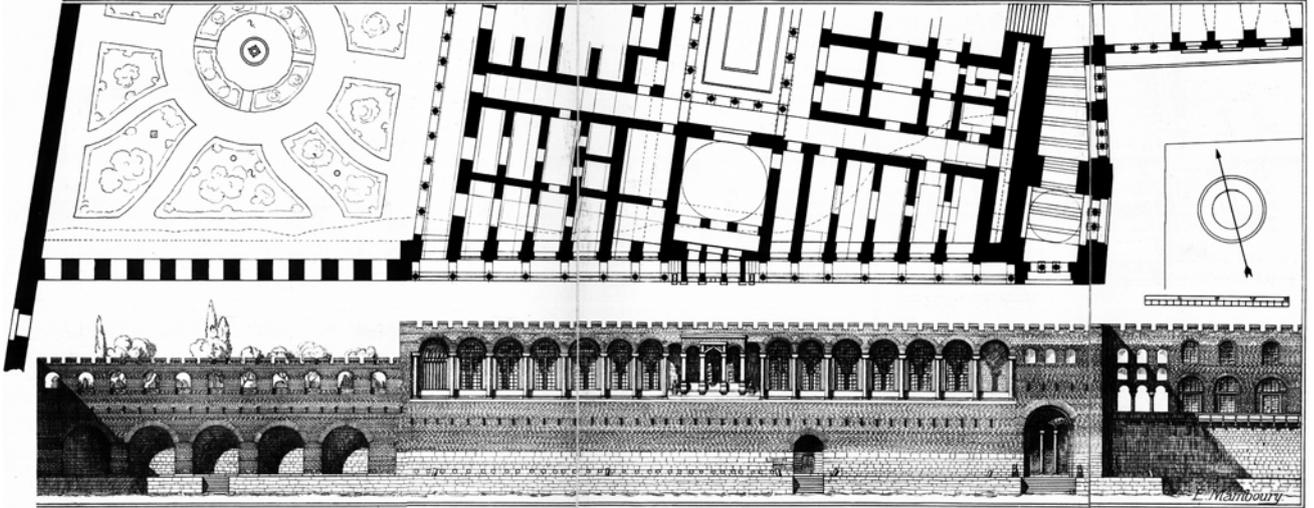


Fig. 3 Reconstruction of the Harbour of the Bukoleon Palace by Mamboury/Wiegand as an enclosed, massive building with a facade facing the sea. – (From Mamboury/Wiegand, Kaiserpaläste pl. XIII).



Fig. 4 Reconstruction of the facade of the Boukoleon Palace as it was after the 10th c. – (Byzantium 1200, T. Öner).

and cites a *sakellarios* named Bukkoleon who was involved in the treason trials against Pope Martin I in 653 and Maximos Homologetes in 655²⁵. Jenkins assumes that the harbour basin was also named Phiale («vessel», «ornamental well», but also «basin», see below). «Bukoleon» could therefore be a corruption of *baukalion* (βαυκάλιον²⁶), a synonym of Phiale²⁷.

While the explanations given above are all in the realm of possibility, the derivation from the Latin *bucca leonis*²⁸, however, which is sometimes suggested, should probably be rejected. A «lion's gate» situated in the harbour is mentioned only in Western sources from 1200 and probably corresponds

to a subsequent etymological interpretation of the Greek toponym, which was not understood by the Latins²⁹.

Building Phases

The so-called Great Palace of the Byzantine emperors consisted of a large number of individual buildings that were located on the Acropolis and the surrounding terraced area (fig. 1). The oldest parts of this conglomeration of throne and residence rooms, gardens and baths, guard barracks and

25 Mango, *Boukoleon* 49 n. 3. Magdalino, *Review* 258, supports this hypothesis. He stresses that Pope Martin was taken to the anchorage at the Arkadianai (cf. Kislinger, *Better and Worse Sites* n. 2, in this volume). For him, this is a strong hint that there was not yet an exclusive anchorage for the palace. On the *sakellarios* Boukkoleon see *PmbZ* online, 1048/corr.

26 For this term see Leroy-Molinghen, *Baukalion*.

27 Jenkins, *Commentary* 199. – *LSJ* 311, s.v. βαυκάλιον.

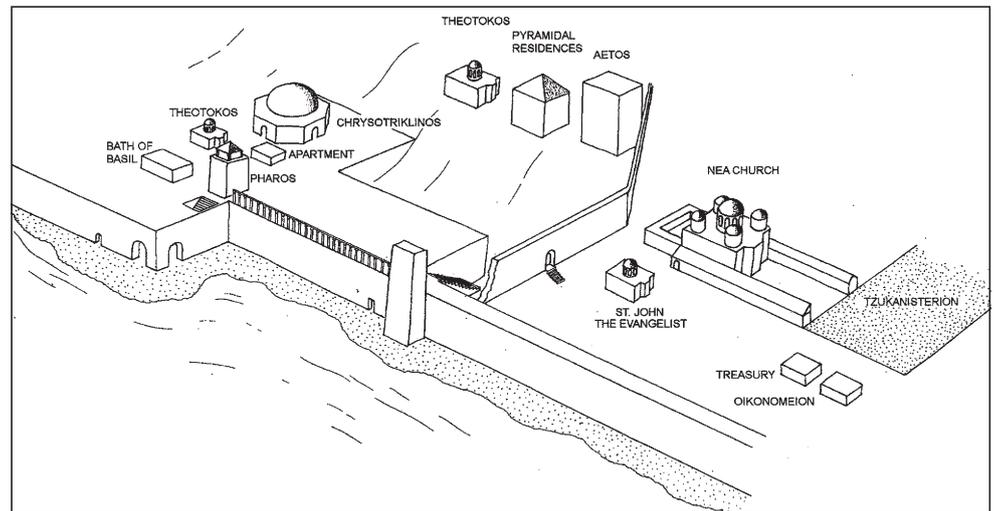
28 According to Mamboury/Wiegand, *Kaiserpaläste* 5. – Guillard *Palais du Boukoléon* 19.

29 Berger, *Untersuchungen* 260.



Fig. 5 Artist's impression of the Harbour of the Boukoleon Palace, behind the sea walls (from left to right): Porphyra, Chrysotriklinos and the Church of the Virgin of the Pharos; and the Nea Ekklesia. The course of the moles is hypothetical, as is the statue on the tall columns in the western part of the harbour basin. – (Drawing by A. Helbert).

Fig. 6 Reconstruction draft of the Pharos terrace by Bardill. The lighthouse and Church of the Virgin are located at the top of the landing steps. Bardill also located the Chrysotriklinos nearby. – (From Bardill, Visualizing 29).



churches were in the area of the Acropolis and the underlying terrace at 32 m and 26 m above sea level («Upper Palace»: Magnaura, Chalke, Konsistorion, Baths of Zeuxippos, etc.)³⁰. Nothing is known about a proper palace harbour at this early stage³¹. As early as the sixth century, however, a gradual shift of the entire complex to the southern, lower terraces (16 m and 11 m above sea level) can be observed, which extended between the Acropolis and the Propontian coast («Lower Palace»)³².

In the sixth century, at the latest, one can also assume a landing stage that belonged to the palace. Justinian's General Belisarius anchored «on the shore in front of the imperial palace» (τὴν ἀκτὴν, ἢ πρὸ τῆς βασιλείως αὐλῆς τυγχάνει οὐσα), before he went to war against the Vandals³³. In addition, a passage in the tenth-century *Book of Ceremonies*, which is likely derived from a sixth-century text, gives the instruction that, on return from a campaign, the emperor should sail directly to the Palace and be received by the court dignitaries at the adjacent landing stage (*skala*)³⁴. Since the sea walls bordering the Bukoleon Harbour have a construction phase in the sixth century (see below), and pottery from this period was found recently³⁵, it seems likely that the location of the harbour remained the same from the beginning. Whether the palace harbour equates to the Harbour of Hormisdas at

this earliest stage of its development must remain open³⁶. There is no reason to believe, however, that the harbour was remarkably representative at that time.

The tendency to move the focus of the palace complex to the coast of the Propontis continued in the following centuries. The ceremonial centre of the palace was, from the sixth century, the octagonal dome of the Chrysotriklinos and, from the eighth century, the Church of the Virgin of the Pharos. The latter became more important in the religious life of the court than the time-honoured Hagia Sophia³⁸. Although both buildings have not been located with absolute certainty, they must have been in the «Lower Palace» (figs 1, 6). Over the centuries, Justin II (565-578), Theophilos (829-842), Basil I (867-886) and Constantine VII (913-959), especially, built imperial private chambers and representative squares, as well as functional buildings (library, cloakroom, etc.)³⁹. At the same time, the old buildings of the «Upper Palace» suffered a loss of importance and were in the tenth century often used only for antiquated (or revived?) ceremonies⁴⁰.

In view of this situation, the battle-proven Emperor Nikephoros I Phokas (963-969) decided to increase the fortification of the «Lower Palace» by surrounding it with a wall (fig. 1)⁴¹. The Chalke Gate on the Augusteion thereby lost its role as the primary entrance to the palace, which

30 Bolognesi Recchi Franceschini, *Gran Palazzo* 208-228. – Bolognesi Recchi Franceschini, *Palastareal* 64. 68. – Westbrook, *The Great Palace*.

31 As early as 354, Patriarch Paulus was immediately brought to a boat after his arrest at the Baths of Zeuxippos and shipped into exile. Sozomenos, *Historia ecclesiastica* III 9, 2 (112 Bidez/Hansen). – Sokrates, *Historia ecclesiastica* II 16, 3-5 (60 Hansen). – Cf. Guillard, *Port palatin* 187. – Bolognesi Recchi Franceschini, *Gran Palazzo* 232. – Bolognesi Recchi Franceschini, *Seventh Survey* 137. However, it is unclear whether (and where) there was already a palace-owned harbour.

32 Bolognesi Recchi Franceschini, *Fourth Season* 19. – Bolognesi Recchi Franceschini, *Gran Palazzo* 229-234. – Featherstone, *The Great Palace* 23-24. – Bolognesi Recchi-Franceschini/Featherstone, *Boundaries* 44. – Bardill, *Visualizing* 6. – For more details on the terraces and buildings of the Lower Palace, see Bolognesi Recchi Franceschini, *Gran Palazzo* 229-241.

33 Prokopios, *Bella* III 12, 2 (I 365 Haury/Wirth). – Cf. Guillard, *Port palatin* 188. – Guillard, *Palais du Boukoléon* 22.

34 Konstantinos Porphyrogenetos, *De exped. C* 704-706 (138 Haldon = *De cer.* I 497 [Reiske]): εἰ δὲ πλὴν βούλῃται ὀρθοποδεῖν εἰς τὸ παλάτιν, ἴσταται

ἔμπρὸς τῆς σκάλης, καὶ ἔνθα δέχεται κατὰ τὸ ἔθος τὸν ἐπαρχὸν τῆς πόλεως καὶ τὸν ἀπομονεῖα, καὶ τοὺς στεφάνους προσφέρουσιν αὐτῷ. – Cf. Guillard, *Port palatin* 188. – Guillard, *Palais du Boukoléon* 22.

35 Özgümüş, *Bukoleon Sarayı* 66.

36 van Millingen, *Walls*. – Guillard, *Palais d'Hormisdas* 298. – More cautiously Mango, *Bukoleon* 47.

37 On the central importance of Chrysotriklinos in court ceremonial, see Featherstone, *The Great Palace*.

38 Magdalino, *L'église du Phare* (with bibliography). – See also Janin, *Siège* 241-245.

39 On this, see the recent elaborate study by Bardill, *Visualizing* 23-40. – See also Bolognesi Recchi Franceschini, *Seventh Survey* 137. – Bolognesi Recchi Franceschini, *Eleventh Survey* 114. – Featherstone, *Der Große Palast* 23-24.

40 Featherstone, *Der Große Palast* 25-26. – Featherstone, *Revival*.

41 Mango, *Bukoleon* 45-46. – Bardill, *Visualizing* 6-7. – Bolognesi Recchi Franceschini, *Palastareal* 60-61.

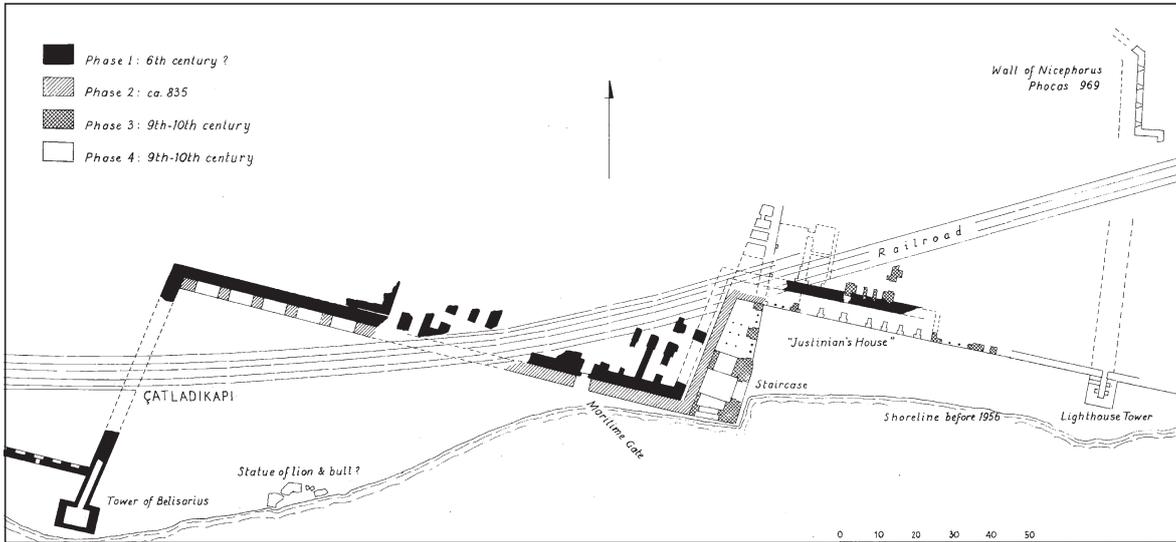


Fig. 7 Construction phases of the Palace of Bukoleon according to C. Mango. A partywall west of the staircase (approx. 700?) is not included in the sketch. – (From Mango, *Spolia* 651 fig. 3).

was henceforth mainly entered through the gate below the imperial lodge in the Hippodrome⁴². The »Lower Palace«, which has now been transformed into a compact and immured centre of power, is often encountered in the sources of the following centuries under the name »Palace of Bukoleon«⁴³.

The fact that the palace took its name from its harbour testifies to the importance attributed to the latter in the

perception of the overall complex. It is no coincidence that this appreciation has come about because the harbour itself had become an integral aesthetical part of the palace, especially in the ninth and tenth centuries. The upgrading of the harbour area took place on three levels: the extension and modification of the sea walls; the points of access; and the decoration of the harbour. All of these changes will be discussed in the following.

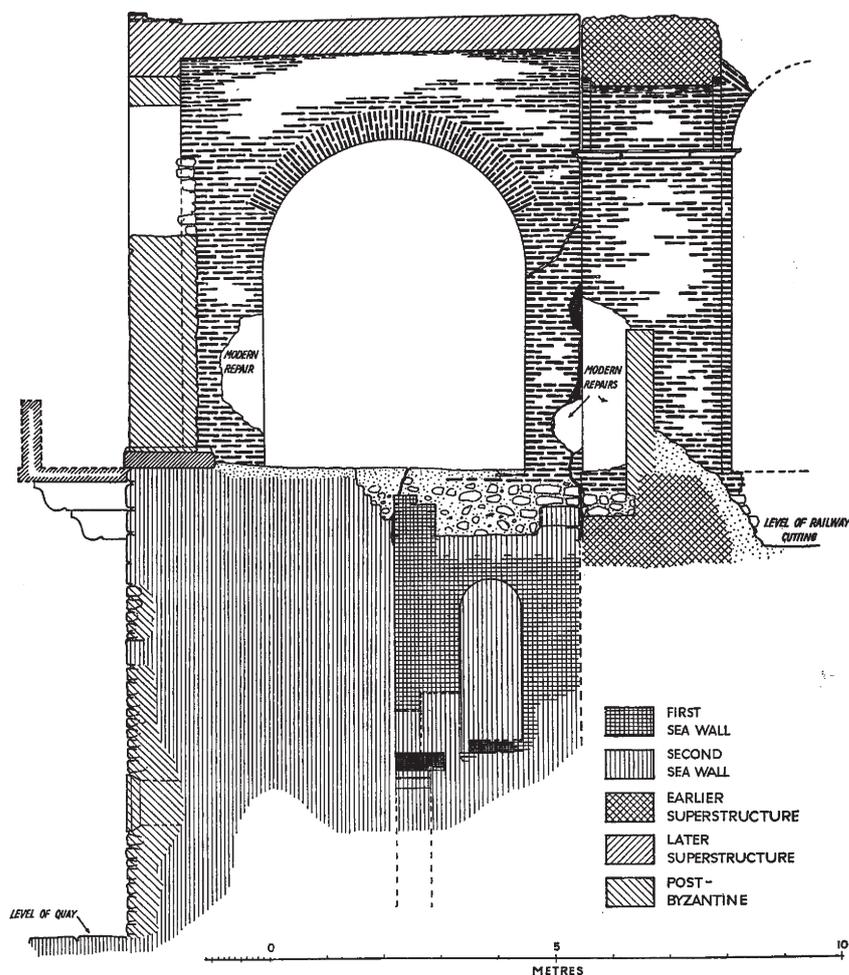
42 On the Chalke Gate, see Mango, *Brazen House*. – Girgin, *Porte monumentale*. – Denker, *Excavations*. – Westbrook, *The Great Palace 181-196*. – Brubaker, *Chalke Gate*. – Zervou-Tognazzi, *Propilei e Chalké*.

43 Mango, *Boukoleon* 42.



Fig. 8 The so-called Tower of Belisarius at the western end of the Harbour of the Bukoleon Palace in 1949. – (From Mango, *Spolia* fig. 1).

Fig. 9 Cross-section of the harbour facade in the area of the so-called House of Justinian. – (From Corbett, Buildings folder E).



Extensions of the Sea Wall

No traces have been preserved of the sea wall in the harbour area supposedly constructed under Theodosius II (408-450)⁴⁴. An ashlar wall (W 1), about 3.20m thick and originally 12 m high, still partly preserved *in situ*, is unanimously dated to the sixth century (see **fig. 7**)⁴⁵. In the westernmost area⁴⁶, a 4.60m thick brick wall (W 2) with a battlement and loopholes was built in front of W 1 probably around 700⁴⁷. The so-called Tower of Belisarius also seems to belong to this building phase (**fig. 8**)⁴⁸. In the ninth century, the old wall was finally reinforced over its entire length by a 3.20m thick wall (W 3). The construction of W 3 probably took place in the

reign of Emperor Theophilos (829-843)⁴⁹. In fact, Theophilos ordered not only intensive construction works in the »Lower Palace«⁵⁰, but also on the sea walls by »extending the seaward walls of the palace beyond its foundations, and in the terraces, where once a cistern was located in which the son of an emperor once drowned, planted gardens«⁵¹. These were evidently measures to enlarge the garden area and to beautify the harbour facade. Strengthening the sea walls had now made it possible to create a terrace directly above the eastern harbour area, flanked by narrow rooms and bounded at the back by a façade or other rooms (**fig. 9**). In a later construc-

44 Bolognesi Recchi Franceschini, Fourth Season 19. – The attribution of the sea walls to Theodosius II is based on Marcellinus Comes, Chronicon 80 (Mommsen).

45 Mango, Spolia 649. – Mango, Boukoleon 47. – The 6th c. can at least serve as *terminus post quem* by the *spolia* used in the construction. The dating also follow Bolognesi Recchi Franceschini, End of Survey 156-157 and Bardill, Visualizing 24. – Although referring to the research of Mango, Effenberger, Illustrationen 28 cites the 4th c. as the time of the construction of this wall.

46 Bolognesi Recchi Franceschini, Gran Palazzo 241 wants to connect the wall with the construction activities of Justinian II (685-695/705-711): Theophanes, Chronographia AM 6186 (367-368 de Boor): Ἰουστινιανὸς δὲ εἰς τὰ τοῦ παλατίου κτίσματα ἐπεμελείτο. Καὶ ἔκτισε τὸν Ἰουστινιανοῦ τρίκλινον λεγόμενον καὶ τὰ τοῦ παλατίου περιτειχίσματα. – However, work on the sea wall is also explicitly documented for the reign of Tiberios III (698-705): Patria Konstantinupoleos II 109 (208-209 Preger): Τὰ τεῖχη τὰ πρὸς θάλασσαν ἀνακαινίζονται ἐπὶ Τιβερίου Ἀψιμάρου.

47 Mamboury/Wiegand, Kaiserpaläste 1. – Bolognesi Recchi Franceschini, Chronological Phases 411.

48 Mango, Boukoleon 47.

49 Mango, Spolia 649. – Mango, Boukoleon 47. – Bolognesi Recchi Franceschini, End of Survey 157. – Bardill, Visualizing 24 n. 77.

50 Theophanes Continuatus, Chronographia III 43 (204-208 Featherstone/Codoñer = 144-145 Bekker). – Cf. Mango, Spolia 649. – On the buildings of Theophilos, see also Bardill, Visualizing 24-26 and fig. 7.

51 Theophanes Continuatus, Chronographia III 4 (128 Featherstone/Codoñer = 88 Bekker): τὰ πρὸς τὴν θάλασσαν τοῦ παλατίου τεῖχη τῶν ἀρχαίων θεμελίων οὕτως παρεκβαλῶν, καὶ πρὸς τὰ ἡλιακά, ἔνθα πρότερον κινστέρνης οὐσῆς συνέβη βασιλικὸν ἀποπνιγῆναι υἷόν, παραδείσιους ἐργασάμενος [...]. – Cf. Patria Konstantinupoleos II 109 (208-209 Preger): [Τὰ δὲ τεῖχη τὰ πρὸς τὴν θάλασσαν] ἐκ δευτέρου ἀνεκαινίσθησαν ἐπὶ Θεοφίλου.

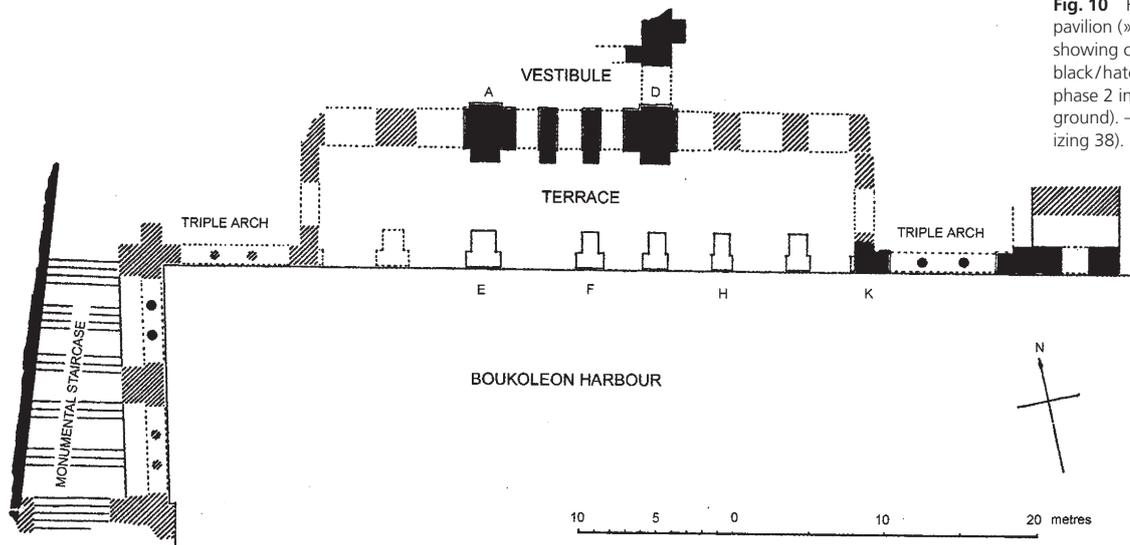


Fig. 10 Floor plan of the sea pavilion (»House of Justinian«), showing construction phase 1 in black/hatched, and construction phase 2 in white (pillar in foreground). – (From Bardill, Visualizing 38).



Fig. 11 View through the loggia at the eastern corner (»House of Justinian«) on the Sea of Marmara. – (From Mamboury/Wiegand, Kaiserpaläste tab. XXXIII).

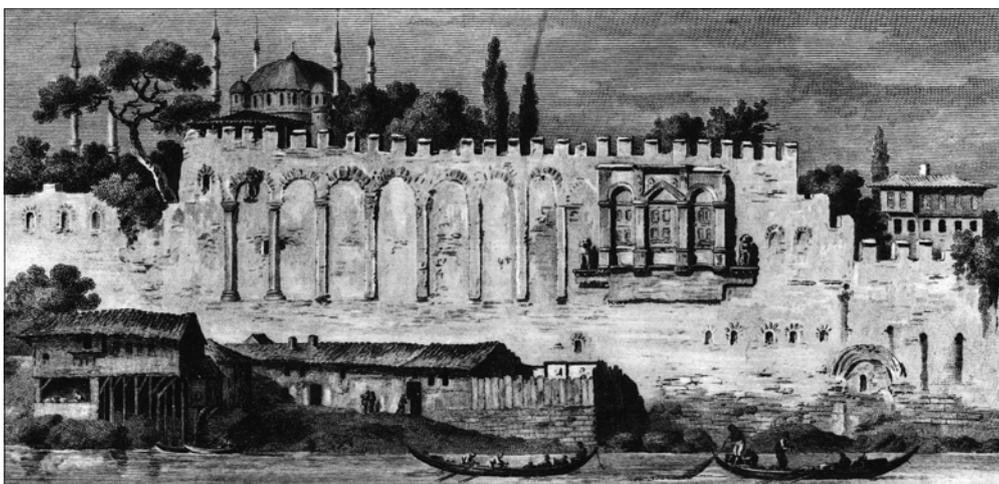


Fig. 12 The western corner with the *spolia* ensemble. Below right, the small sea gate. Drawing by Choiseul-Gouffier, c. 1780. – (From Mamboury/Wiegand, Kaiserpaläste tab. XI).

tion phase, the terrace was converted into a covered loggia (fig. 10). The ensemble, which was anachronistically named the »House of Justinian« in the research literature⁵², may be regarded as a pleasure pavilion in the sense of extending the palace gardens, which offered a panoramic view of the Propontis (fig. 11). At some point, the front was completely walled up, perhaps on the occasion of immuring the »Lower Palace« under Nikephoros II (see above)⁵³.

With the exception of this pavilion with bellevue terrace, the sea walls in the harbour area should have been free of superstructures until the tenth century. Probably under Nikephoros II, the general raising of the walls began in several phases, until their height amounted to c. 20 m⁵⁴. Nevertheless, the aesthetics of the harbour were also taken into account. The open arcades found in the common reconstructions (figs 3-5) cannot clearly be proven. Drawings from the eighteenth and nineteenth centuries (figs 12-13) suggest arches to the left and right of the *spoliae* ensemble (see below) in the western harbour area, but these would have presupposed the destruction of the battlements beyond. Bardill assumes, therefore, that the arches were not subsequently walled up, but were attached after the completion of the wall merely as blind arcades⁵⁵. Contemporary Byzantine representations are missing, with the exception of two miniatures in *Skylitzes Matritensis* (figs 14-15). These show a stylised building with arcades in the lowest area (which can be detected only in the westernmost area in the building remains) and one to two floors above, which also have arcades. For a more accurate reconstruction, the drawings are not sufficient.

The three-part window ensemble with *spolia* and small lion sculptures in the western area was described and drawn by many travellers to Constantinople. Presumably, this kind of balcony was only built after the last elevation of the walls (figs 12-13. 16-17)⁵⁶. Its function is, however, unclear. The two lateral »openings« could be false doors⁵⁷, but an attached room in the north, as suggested in the surviving pictures, argues against the overall ensemble having been a mere illusionistic architecture⁵⁸. Perhaps the structure served as a kind of balcony from which the palace communicated with the harbour (for possible ceremonial purposes, see below). Interestingly, the *Skylitzes Matritensis* also emphasises the existence of a balcony in both depictions, but its location cannot be determined (figs 14-15).

52 Mesguich, Un palais. – Corbett, Building.

53 Mango, Spolia 648-649. – Bardill, Visualizing 37. – Bolognesi Recchi Franceschini, Fourth Season 20. – Bolognesi Recchi Franceschini, Seventh Survey 137-139. – Guillard, Plage 65.

54 Bardill, Visualizing 27-28.

55 Bardill, Visualizing 28.

56 Bardill, Visualizing 28 (with bibliography). – The lions were saved during the construction of the railway line as two of the few components of the palace. They should date from the ninth c. See Mamboury/Wiegand, Kaiserpaläste 24 (no. 7-8) pl. XXXIX-L. To the well-known and often published illustration, another drawing from the Victoria and Albert Museum in London can now be added (see my fig. 13): Barsanti, Disegno.

57 Mango, Spolia 647.

58 According to Effenberger, Illustrationen 29.

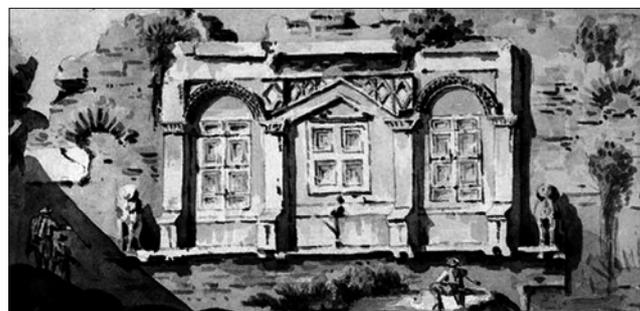


Fig. 13 Drawing by John Foster Jr., 1811. London, Victoria & Albert Museum, inv. no. SD.391. – (From Barsanti, Boukoleon 43).



Fig. 14 The Boukoleon Palace in the *Skylitzes Matritensis*, fol. 157r. Biblioteca Nacional de España, MS Gr. Vitr. 26-2, 157r. – (From Tsamakda, *Skylitzes* fig. 395).



Fig. 15 The Boukoleon Palace in the *Skylitzes Matritensis*, fol. 124r. Biblioteca Nacional de España, MS Gr. Vitr. 26-2, 124r. – (From Tsamakda, *Skylitzes* fig. 395).



Fig. 16 The *spoliae* ensemble in the western corner. Drawing by Mary Walker, 1871. – (From Mango, *Spolia* fig. 10).

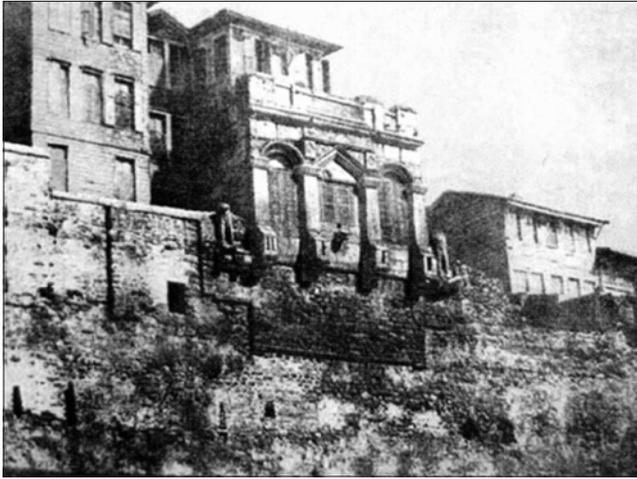


Fig. 17 Photolithography by Pierre Trémaux, c. 1850. – (From Bardill, Visualizing 27).

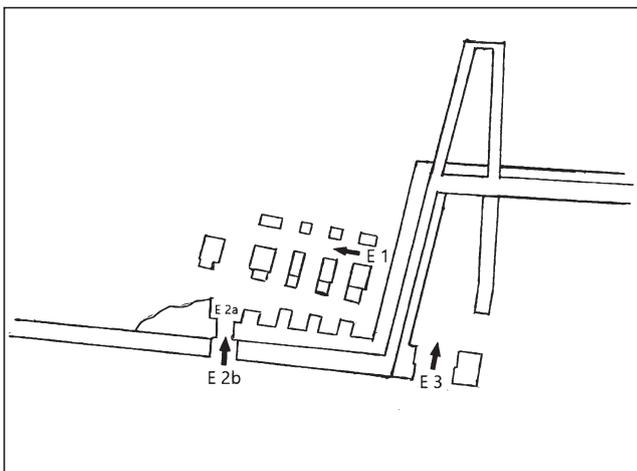


Fig. 18 Simplified sketch of the harbourside entrances to the palace. – (Sketch D. Heher, based on Bolognesi Recchi Franceschini, Fourth Year 27).

Modification of the Entrance Position

The successive expansion of the sea walls was accompanied by a multiple transformation of the communication routes between the palace terraces and the harbour. In the sixth century, access was in any case provided by a gate of marble blocks approximately 2.70 m wide (E[ntrance] 2a) (figs 7. 18-19)⁵⁹. Recently, it has been suggested that there was an additional staircase or ramp (E 1), which led from the 16 m terrace of the palace to the east directly to the corner of the sea walls (fig. 18)⁶⁰. The hypothetical access E 1 should at any rate have been removed before the construction of the outermost sea wall W 3, probably in the context of the construction of W 2 around 700, for a new entrance situation. From this time, a ramp or stairs, running south to north connected the harbour with the 11 m terrace of the palace (E 3a)⁶¹.

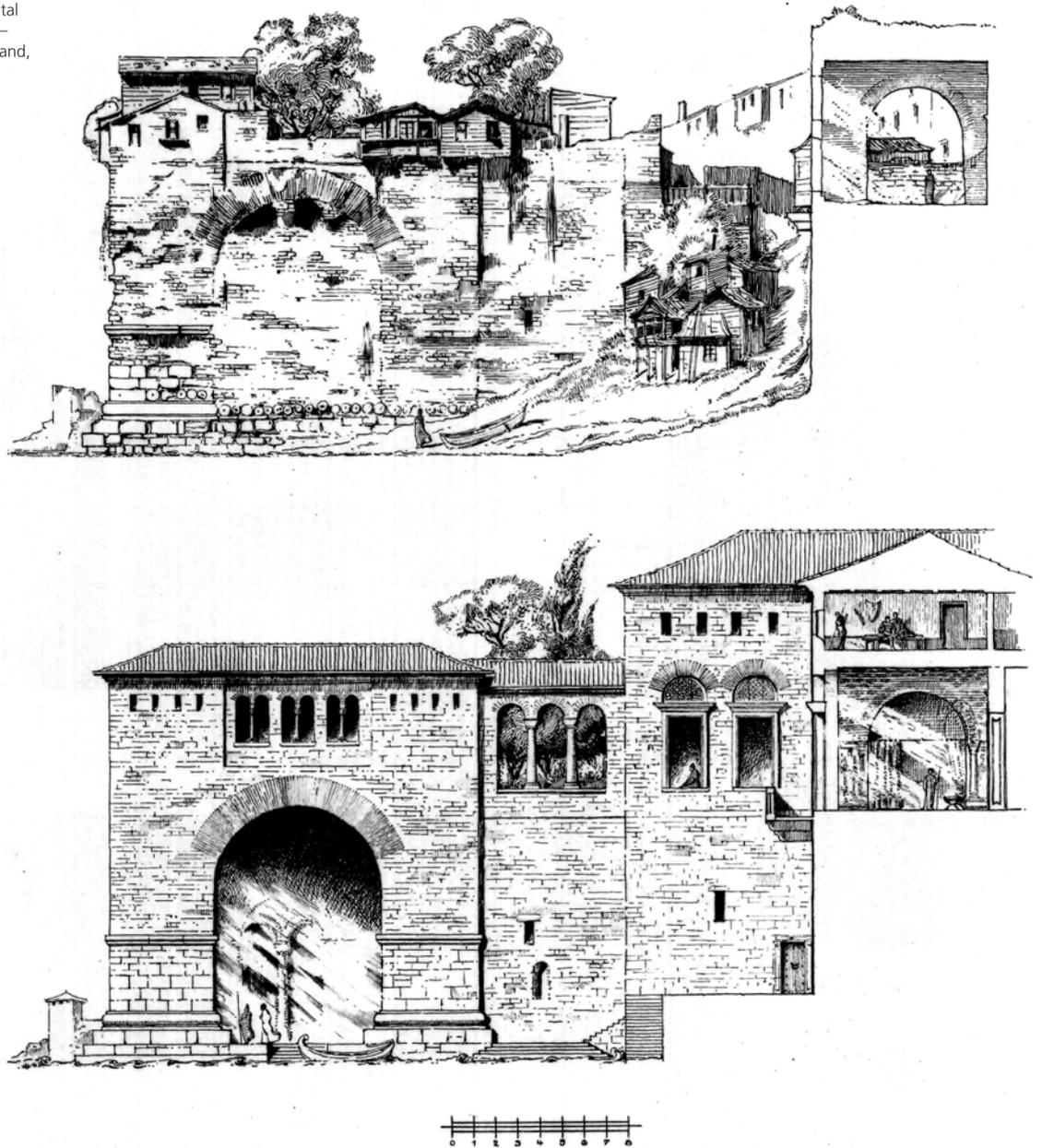
When Emperor Theophilus set about redesigning the sea walls (W 3), there was a smaller portal (E 2a) in the western area and a staircase or ramp (E 3a) in the middle of the harbour basin (if we assume that the harbour covered the whole area between the Tower of Belisarius in the west and the so-called »Lighthouse Tower« in the east). The former gate E 2a was maintained unchanged, but a wider portal (E 2b, 4 m passage width) was built in front of it (E 2b) to make it appear larger on the harbour side⁶². It must be left open

- 59 Mamboury/Wiegand, Kaiserpaläste 6-9 pl. XIV (plan), XV-XIX (photographs). – Bolognesi Recchi Franceschini, Chronological Phases 410. – Mango, Spolia 647.
- 60 Bolognesi Recchi Franceschini, Chronological Phases 412. – Bolognesi Recchi Franceschini, Gran Palazzo 235. – Bolognesi Recchi Franceschini, Monumental Itinerary 54. – Bolognesi Recchi Franceschini, Seventh Survey 137.
- 61 Bolognesi Recchi Franceschini, Seventh Year 280 figs 4-5.
- 62 Mamboury/Wiegand, Kaiserpaläste 6-9 pl. XIV (plan), XV-XIX (photographs). – Bolognesi Recchi Franceschini, Chronological Phases 410. – Mango, Spolia 647.



Fig. 19 The harbour portal Z2a/Z2b as it is today. – (Photograph G. Simonov 2016).

Fig. 20 The monumental staircase from the east. – (From Mamboury/Wiegand, *Kaiserpaläste* pl. XXIII).



how the difference between the portal and the next higher palace terrace was bridged (ramp? stairs?). It is possible that the corridor described by Ibn Yahya around 900⁶³ fulfilled this purpose. In any case, E 2b was a secondary connection between the palace and the harbour. The actual, representative entrance to the palace was created after completion of the outer seawall W 3, while the stair E 3a was expanded to a monumental staircase with marble steps (E 3b)⁶⁴. Its entrance was decorated with columns and marble lion statues

(figs 20-21). A detailed description of this grand staircase in the late twelfth century is preserved. It comes from the pen of William of Tyre, who accompanied King Amalric of Jerusalem on his visit to Constantinople:

»But in this city, above the seashore, is the Imperial Palace, which faces east, and is also called the Palace of Constantine. Its entrance is by the sea and it has a wonderful and magnificent staircase; there are marble steps leading to the sea, and – of the same material – lion statues and pillars of royal

63 Vasiliev, *Harun* 156: »As to the Sea Gate, one enters a vestibule, three hundred paces long and fifty paces wide, which is covered with red bricks. In the vestibule, to the left and right, there are seats adorned with carpets; upon them there are a group of Turks holding bows and shields in their hands«. Similar is the German translation of Marquart, *Streifzüge* 216. – See also Ostrogorsky, *Harun-ibn-Jahja*. The text could also refer to the first phase of the stairwell (E 3a) as assumed by Schreiner, *Zu Gast* 109-111 n. 33.

64 Mamboury/Wiegand, *Kaiserpaläste* 10-13 pl. XX (photograph) XXI-XXII (plans), XXIII-XXIV (reconstructed drawings). – On the dating, see Mango, *Spolia* 647. – Guillard, *Port palatin* 194. – Schneider, *Vorarbeiten* 28-29 dates the staircase to the reign of Emperor Theophilos.

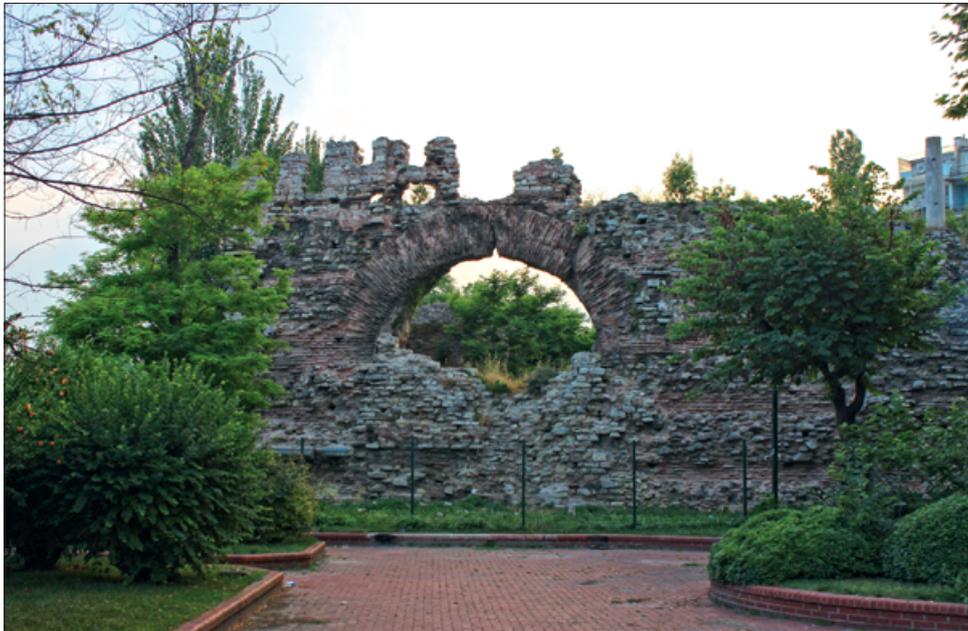


Fig. 21 The eastern access to the monumental staircase today. – (Photograph G. Simeonov 2016).

splendour. This access to the upper palace terraces is open only to the emperor, but [my] lord, the king, was allowed to enter the palace from this side, circumventing the rules, because of his special honours«⁶⁵.

In Ottoman times, the Çatladıkapi (fig. 7) offered another possibility to enter the (former) harbour basin from the west, i.e., from the city. Whether this goes back to a Byzantine predecessor, is unclear. If identified with the »Lion Gate« (*Porta Leonis*) of the Latin sources, then it would have had existed at the beginning of the Latin rule⁶⁶. However, Effenberger has convincing arguments to advocate equating the »Lion Gate« with the aforementioned small portal E 2 in the western part of the harbour⁶⁷. The lack of necessity speaks against the existence of a gate in the place of the Çatladıkapi in the Byzantine period. The palace first communicated with the city via the gate at the Chalke, later primarily via the gate below the Kathisma in the Hippodrome (fig. 1). A further opening to the city was not only unnecessary, but beyond that, it would have significantly reduced the defensive value of the palace walls.

Decoration

Animal statues adorned the harbour area from the early ninth century at least. First and foremost is the group of fighting animals that allegedly gave its name to the Bukoleon Harbour. The most detailed description of the sculpture comes from Pietro Zen, a Venetian ambassador at the court of the Sultan. He describes the statue in the context of an earthquake in 1532:

»Outside the said water-gate [Çatladıkapi], and beneath the three ancient windows which have a lion at either end (of the row); there, down beside the shore, on two columns, is a marble block upon which is a very large bull, much larger than life, attacked at the throat by a lion, which has mounted upon the back of the (bull's) neck, and thrown him down, and strikes at a horn of the bull with great force. This lion is considerably larger than life, all carved from one piece of stone of very fine quality. These animals used to stand with their heads towards Asia, but it seems that on that night (the night of the catastrophe) they turned themselves with their heads towards the city«⁶⁸.

65 Wilhelmus Tyrensis, *Chronicon* 943-944 (Huygens): *Est autem in ipsa urbe super littus maris, ad orientem prospiciens, imperiale palatium, quod Constantinianum appellatur; introitum habens ad mare, miro et magnifico tabulatu; gradus habens marmoreos, usque in idipsum mare; leones habens et columnas, fastu erectas regio, ex eadem materia. Hinc soli Augusto solet introitus patere ad superiora palatii; sed domino regi honoris intuitu praecipui, praeter communes regulas aliquid indultum est, ut ea parte ingredi permitteretur.*

66 Mamboury/Wiegand, *Kaiserpaläste* 1-3. – Mango, *Spolia* 646-647. – For the Çatladıkapi, see Guillard, *Palais du Boukoléon* 18.

67 Effenberger, *Illustrationen* 28-29.

68 English translation by van Millingen, *Walls* 271. Original text after van Millingen, *Walls* 271-271: *Fuora dila dita porta de marina, sotto quelle tre fenestre antiquissime che hanno uno lione per banda, li abasso ala marina, sopra due colone, e una lastra di marmoro sopra la qual e uno granmo tauro, maior bonamente che il vivo, acanatto de uno lione, el qual li e montato sopra la schena,*

et lo ho atterato, et da una branca ad un corno dil tauro in un grandissimo atto; e questo leone assai maior del vivo e tutto di una piera de una bona vena ouer miner. Questi animali soleano esser con le teste voltate verso Anatolia, et par che quella medema notte i se voltasseno con le teste verso Conple. – Cf. Guillard, Palais du Boukoléon 16-17. – Janin, Constantinople 101. – Cf. the similar description of Giovanni Sagredo, Memorie 318-319 (with incorrect dating to 1535): Prima che succedesse il disastro, in Costantinopoli un Leone di pietra, il quale stava fuori della Porta à Marina, che con una zanna afferrava un Toro, guardava prima verso Levante, si ritrovò, che stava rivolto à Ponente. E perche era situato sopra due colonne, precipitò unitamente col Toro, che si ruppe una coscia, e cadè con la testa nel Fiume, in cui pareva in certo modo che bevesse. The assertion of Günşenin, Harbours and Shipbuilding 416 that the sculpture had already been destroyed in the 6th c. is thus simply wrong. On the contrary, there is no reason to believe that it had already been built by that time.

Zen's account refers without doubt to the same sculpture described by several writers in the twelfth century⁶⁹. It is handed down that Emperor Constantine VII had set up various animal statues on the Bukoleon⁷⁰ and Anna Komnene described stone cattle and lions⁷¹. In the fifteenth century, a Russian pilgrim interpreted these sculptures as aurochs and bears⁷². William of Tyre noted lion statues directly at the foot of the grand staircase⁷³.

According to the treatise of the so-called Heron of Byzantium (tenth century), there was also a sundial in the area of the harbour. The details – »on a balcony facing south« (ἐν τῷ ἀξιαγάστῳ βασιλικῷ πρὸς νότον παρακυπητήριῳ) – could refer to the so-called House of Justinian in the eastern harbour area (see above), but other terraces or balconies cannot be excluded⁷⁴.

The improvements on the Bukoleon are related to general building activity in the »Lower Palace« and illustrate the growing need for a representative imperial harbour. The everyday life of the emperor demanded more and more frequent boat trips over short and medium distances. Over time, a large number of monasteries and churches had sprung up around Constantinople, which the emperor had to visit on certain occasions, and the number of palaces and hunting grounds around the Bosphorus also increased⁷⁵. The importance of these trips is also reflected in the construction of an imperial flotilla, which initially included some barges and, under Leon VI (886-912), was extended by two specially constructed imperial dromons (see below).

The Harbour Basin

While the phases of construction of the sea wall and the access to the harbour yield a reasonably clear picture of the construction phases, an exact reconstruction of the basin itself and its moles is not possible. Excavation in the direct harbour area has not yet taken place.

Relatively accurate information can be obtained from the quaysides in the eastern part of the harbour: constructions made of massive blocks of limestone, rubble and brick mortar were found *in situ* at the beginning of the twentieth century and photographically documented (fig. 22). According to Mamboury and Wiegand, the quay was erected in the course

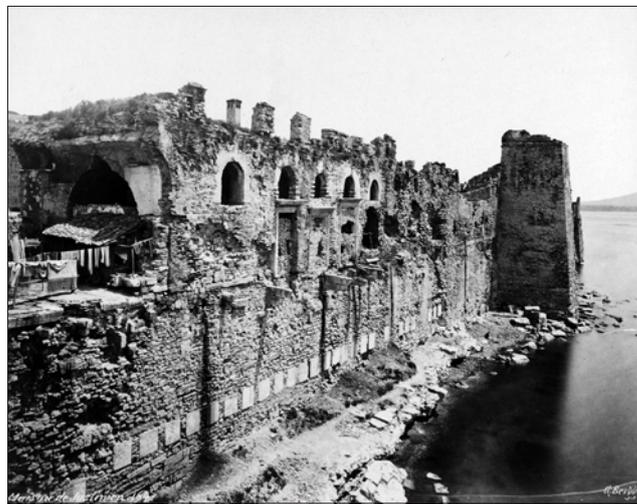


Fig. 22 View of the façade at the eastern corner of the Harbour of the Bukoleon Palace. – (From Mamboury/Wiegand, Kaiserpaläste pl. XXIX).

of the construction of the outermost sea wall W 3, i. e., in the first half of the ninth century⁷⁶. Ginalis and Ercan-Kydonakis, however, argue for an earlier date of the quay around 700 based on the building technique (see below). This fits well with the assumed construction of the monumental staircase roughly at the same time, which would be impossible to imagine without an adequate quayside. However, the dating proposed by Mamboury and Wiegand is based on the examination of the uppermost layer of the quay, which could have been renovated during a later phase. Recent core drillings carried out below the »House of Justinian« and in front of the southeast corner of the staircase have confirmed the existence of the quay, which is today about 4m below ground level. In its uppermost layer (4.00-4.80m), mainly bricks, stones and marble fragments were detected, followed by a stratum (4.80-6.90m) of clay and dark grey stones. Traces of bricks and gravel were also found in the next layer (6.90-10.00m), where the foundation of the quay is suspected⁷⁷. Examination of the photographs and the results of the core drillings led Ginalis and Ercan-Kydonakis to conclude that the quay was erected around the year 700. The building technique shows parallels to the harbours of Anthedon and Larymna. Obviously, the quay was created by applying a system with chambers filled with a type of hydraulic concrete (a

69 Anna Komnene, Alexias III 1, 5 (89 Reinsch/Kambylis): λιμὴν [...] ὅπου ὁ λιθίνος λέων ζωγρεῖ τὸν βοῦν· ἔχεται γὰρ τοῦ κέρως τοῦ βοῦς καὶ ἐξαυχενίσας αὐτὸν ἐμφύεται πῶς τῷ λαίμῳ. – Cf. Ioannes Zonaras, Epitome XVI 28 (517 Pinder/Büttnier-Wobst): Βουκολέων ὁ τόπος ὠνόμασται, ὅτι λιθίνος λέων ἐστὶν ἐν αὐτῷ βοῦς ἐπιβεβηκώς ὁμοίου καὶ τῷ εὐωνύμῳ ποδὶ κατέχοντι τὸ κέρας αὐτοῦ περιστρέφων τὸν αὐχένα τὸν τοῦ βοῦς. – Ioannes Skylitzes, Synopsis 11 (Thurn): ὁπότε οὖν ἀλώη τῷ πάθει, εἰς τὸν τόπον ἐρχομένη, ἐν ᾧ βοῦς τε καὶ λέων ἴδρυνται λιθίνου (καὶ τούτων ἔχει τὴν προσηγορίαν ὁ τόπος Βουκολέων ὀνομαζόμενος).

70 Theophanes Continuatus, Chronographia 447 (Bekker): τὸν Βουκολέοντα ζῳδίοις, ἐκ διαφόρων τόπων ἀγαγὼν, ἐκαλλώπισεν, κάκεισε ἰχθυοτροφεῖον ἐποίησεν. – Guillard, Palais du Boukoléon 25. – Berger, Untersuchungen 260.

71 Anna Komnene, Alexias VII 2 4 (205 Reinsch/Kambylis): ἡ δὲ πορφύρα [...] ἀφορῶν μὲν ὡς πρὸς θάλατταν πρὸς τὸν λιμένα, οὐπερ οἱ πέτρινοι βόες καὶ οἱ λέοντες.

72 Majeska, Russian Travelers 142-143. – Cf. Guillard, Port palatin 190

73 Wilhelmus Tyrensis, Chronicon 943-944 (Huygens).

74 Heron, Geodesia 11, l. 36-39 (146 Sullivan): Αὐταὶ δὲ αἱ γραμμαὶ ἐν τῷ ἀξιαγάστῳ βασιλικῷ πρὸς νότον παρακυπητήριῳ <ἐν> τοῖς Βουκολέοντος ὑφ' ἡμῶν ἐγχαραχθεῖσαι ἐπὶ τῶν πρασίνων ἔκκεινται κοσμηταρίων. On the problem of the terms, see *ibid* 269-271.

75 A compilation of common travel destinations in Auzepy, Déplacements 359-361. – On the palaces, see Janin, Constantinople 138-153. – Hellenkemper, Asiatische Riviera. – Hellenkemper, Politische Orte.

76 Mamboury/Wiegand, Kaiserpaläste 6 (western part). 13 (eastern part and landing stage) and pls XXVIII-XXIX.75.

77 Bolognesi Recchi Franceschini, Monumental Itinerary 55-56 and fig. 5.

mixture of mortar, rubble stones and coarse ceramics)⁷⁸. The quay was paved with marble slabs (c. 60 cm × 70 cm) slightly sloping to the sea. In the early twentieth century, it was still at least 6 m wide, about 12 m directly by the staircase⁷⁹. The original width of the quay would have amounted to c. 9.20 m⁸⁰.

If one takes the so-called lighthouse as the eastern end of the harbour⁸¹ and calculates a hypothetical place for ceremonial purposes (see below) at the western end of the harbour, this results in a total length of the basin of about 160 m. The entire harbour complex would have had a length of slightly more than 200 m, apparently reason enough for Michael Psellos to describe the structure as a »large harbour« (τῷ μεγάλῳ λιμένι)⁸². In any case, moorings for several barges (*agraria*) and dromons must have been available at the Bukoleon Harbour⁸³. It is not clear in which area the dromons were anchored (John Skylitzes: ἔνθα προσώρμουν αἱ τριήρεις)⁸⁴; it is known only that the emperor boarded his ship on the Phiale in the western area of the harbour (see below).

According to the current state of knowledge, no certain conclusion can be drawn regarding the course of the moles, which once must have protected the palace harbour. Not only the sheer necessity due to the highly exposed position, but also the literary evidence argues for their existence: Anna Komnene reported in the twelfth century that at the Bukoleon Palace »a harbour had been constructed in the old days of marble and concrete«⁸⁵, and Michael Glykas also emphasized that the harbour of the palace was artificially constructed⁸⁶. Nicetas Choniates, in his account of the escape of Andronikos Komnenos from his arrest in the palace, mentioned that he had a fishing boat waiting that »rocked between the shore and the breakwaters (τοὺς προβλήτας) that are scattered along the sea walls of the city and which dampen the waves«⁸⁷. It is unclear, however, whether this testifies to moles directly in front of the Bukoleon Harbour, or whether the wording refers to those breakwaters made of boulders, as they have been handed down for the entire coast

of the city from the Golden Gate to the Gate of St Barbara (Topkapı)⁸⁸. It is only certain that Andronikos passed the Bukoleon Harbour immediately afterwards, because he had to fool the local guards in order to be able to continue his escape to his palace in Vlanga⁸⁹. Explicit archaeological traces are not preserved. However, Mamboury and Wiegand recorded architectural remnants east of the Tower of Belisarius (»n« in fig. 2). These have either not been considered by researchers or have been interpreted as the foundation for the statue of fighting animals, which supposedly provided the name for the harbour⁹⁰. From this structure, which is no longer preserved today, we only know a photograph (although not relevant for the question) and the description of Mamboury and Wiegand as »an isolated foundation of quarry stone with brick mortar, above it four brick layers«⁹¹. On this basis, Ginalis and Ercan-Kydonakis presumed that it was a breakwater, on which the sea wall continued and which formed a mole towards the harbour basin. They further argued that it might have been an »arched mole« in the Roman tradition⁹². The only pictorial evidence is again found in the *vedute* of Constantinople created after the original by Cristoforo Buondelmonti (after 1420). The »Harbour of the former Imperial Palace« (*portus olim palatii imperatoris*) has two moles, which, depending on the manuscript, protrude semicircularly or diagonally into the sea and on which walls are visible (fig. 23)⁹³. To what extent the schematic representation reflects the real architecture has to remain open⁹⁴.

The Phiale

In connection with the Bukoleon harbour, Constantine VII mentioned a locality serving several purposes that he called Phiale. Firstly, the Emperor boarded his dromon there⁹⁵. Secondly, it was the place where the sailors of the imperial fleet lined up and applauded the Emperor for celebrating the festival of the Brumalia. On this occasion, they were traditionally

78 Ginalis/Ercan-Kydonakis, Reflections on the Archaeology, in this volume.

79 Mamboury/Wiegand, Kaiserpaläste 13.

80 Ginalis/Ercan-Kydonakis, Reflections on the Archaeology, in this volume.

81 Corbett, Buildings 169 (fig. 33) and Müller-Wiener, Häfen 10 (fig. 1) argue for a smaller facility, which was restricted to the eastern angle. This is to be rejected not only for reasons of scale: the eastern archway of the monumental stairwell would also be outside the harbour area.

82 The description does rather not refer to the neighbouring, larger Harbour of Sophia: the relevant passage describes how Michael V (1041-1042) had his disgraced uncle, the *orphanotrophos* John, brought directly to the palace by ship. Even before the ship docked, the Emperor, from a viewpoint of the palace, had it stopped by raising his hand. Another dromon drove out of the harbour, taking John on board and directly into exile: Michael Psellos, Chronographia V 14 (87 Reinsch).

83 See pp. 86-89 below.

84 Ioannes Skylitzes, Synopsis 207 (Thurn).

85 Anna Komnene, Alexias III 1, 5 (89 Reinsch/Kambylis): ἀγχοῦ τῶν τούτου τευχῶν λιμὴν δι' ἐγχορήγου καὶ μαριάρων πάλαι τῶν χρόνων ὤκοδόμητο. – Translation: Sewter, Alexiad 81.

86 Michael Glykas, Annales 573 (Bekker): πρὸς τὸν χειροποίητον κάτωθεν τοῦ παλατίου λιμένα.

87 Niketas Choniates, Historia 129 (van Diäten): διατίθησιν Ἀνδρόνικος τὰς στάλικας εἰς κλίμακας, καὶ διὰ μεσοπυργίου χαλασθεῖς ἀκάτιον εἰσεῖσιν ἐκ συνθήματος

περὶ τὰς ἀκτὰς σαλεύον καὶ τοὺς προβλήτας, οἱ τὸ παράλον τεῖχος τῆς πόλεως διελήφασιν, τὰς τῶν κυμάτων ἀποθραύοντες ἐμβολὰς.

88 Michael Glykas, Annales 464 (Bekker): Γίνωσκε δέ, ἀγαπητέ, ὅτι τῆς πόλεως ἐξιουμένην καθ' ὃν ἐκτίζετο καιρὸν λίθοι παρὰ λιθοξόων ἐτιμήθησαν, οὓς προτείχισμα διὰ τὴν τῆς θαλάσσης βίαν ἔθεντο, ἀπὸ τῆς Βαρβάρης σχεδὸν ἕως αὐτῆς τῆς χρυσῆς πόρτης ἐντὸς τὸ τεῖχος φυλάσσοντας. – Cf. Patria Konstantinuroleois III 215 (283 Preger). – Guillard, Palais du Boukoléon 25.

89 Niketas Choniates, Historia 130 (van Diäten). – On the area of Vlanga, see Guillard, Études de Topographie 88-94. 106-109. 140; Janin, Constantinople 325 and Külzer, Harbour of Theodosius, in this volume.

90 Mamboury/Wiegand, Kaiserpaläste 5: »Es wird kaum bezweifelt werden können, daß diese einstige Insel identisch ist mit jener, die in dieser Gegend die berühmte Gruppe des einen Stier packenden Löwen trug, die dem ganzen Palastteil die Bezeichnung Bukoleon gegeben hat.«

91 Mamboury/Wiegand, Kaiserpaläste 5, photographs *ibid.* pl. XXXV.

92 See Ginalis/Ercan-Kydonakis, Reflections on the Archaeology, in this volume.

93 Gerola, Vedute 255 as well as the variations of the view reproduced here.

94 Effenberger, Illustrationen 28 does not go into detail although describing the shape of the moles on the plan. – van Millingen, Walls 269 assumes a realistic interpretation.

95 Konstantinos Porphyrogenetos, De admin. imp. 51, Z. 141-142 (252 Moravcsik/Jenkins): Καὶ εἰσερχομένου τοῦ βασιλέως ἐν τῇ φιάλῃ ἐν τῷ δρομωίῳ.

thrown a purse of silver coins »from above«⁹⁶. Possibly, the Emperor took advantage of the balcony in the western corner from which he could throw the purse to a representative of the sailors standing on the quay below. The regular payment of the sailors also took place directly at the harbour⁹⁷. A third purpose of the Phiale was that the *protospatharios* of the Phiale would daily hold court there to settle disputes within the corps of imperial sailors⁹⁸. Vogt considered the Phiale to be a building, probably a *porticus* directly on the sea⁹⁹, but it was more likely to have been an open space.

The term »phiale« means a shallow bowl in classical Greek¹⁰⁰, but in Byzantine times, it had mostly come to mean a fountain or ornamental basin¹⁰¹. Zakythinos suggested that the term was to be understood metaphorically and referred to the basin of the palace harbour¹⁰². Jenkins accepted this suggestion and concluded that the name »Bukoleon« could go back to a corruption of *baukalion*, a synonym of *phiale*¹⁰³. Mango, however, argued for a square with an ornamental fountain¹⁰⁴, citing a passage in Theophanes Continuatus as proof, which indeed mentions such a square (*lithine phiale*, λιθινή φιάλη). Although this passage refers to the Phiale of the Greens, which was certainly not at the harbour¹⁰⁵, Mango's hypothesis is to be preferred, especially since there were at least three squares in the palace area called Phiale, and they had neither large pools nor access to the sea (see below)¹⁰⁶. A square of greater size was probably indispensable: if both imperial dromons were to run out at the same time, then at least 200 oarsmen and sailors were required to man the ships (see below); the number of high-ranking passengers on such trips cannot be inferred from the sources, but could certainly comprise several dozen people. In addition, a large paved area would fit with Joseph Genesisius's characterisation of the Bukoleon harbour as a »stone [paved?] place« (*lithinos choros*)¹⁰⁷, and the Phiale would have also been large enough to accommodate the apparently numerous animal statues (see above), which could hardly have all fitted on the quayside.

Relative Localisation

The relative position of the Phiale of the Bukoleon – which should not to be confused with the other three *phialai* of the palace¹⁰⁸ – can be reconstructed based on three texts dating



Fig. 23 Depiction of Constantinople according to Cristoforo Buondelmonti. The *portus ollim palatii imperatoris*, with two moles, is on the right side of the picture. – (Venice, Biblioteca Nazionale Marciana, MS. Lat. XIV.45 (=4595), fol. 123').

to the tenth century¹⁰⁹. The first one is the story of a miracle. The second phase of Iconoclasm ended in 842 with the death of Emperor Theophilos and it is said that the icon of Maria Rhomaia, who had miraculously driven across the sea to Rome some hundred years before, returned to Constantinople in the same way. In the bay of the palace, at the so-called Phiale, the icon was fished out of the water and brought to the Empress and regent Theodora¹¹⁰.

The location of the Phiale in the area of the Bukoleon is also confirmed by the *Vita Euthymii*. Patriarch Nicholas I Mysticus was deposed in 907 for his alleged involvement in the

96 Konstantinos Porphyrogenetos, De cer. II 18 (I 601 Reiske = III 155, 32-35 Dagron/Flusin/Feissel: οἱ δὲ ἐλάται τῆς περιουσίας, ἦτοι τῶν βασιλικῶν δρομονίων, κατέρχονται ἐν τῷ βουκολέοντι, καὶ ἴστανται ἐνθα τὸ βασιλικὸν δρομόνιον ἴστανται, εὐφημοῦντες καὶ αὐτοὶ καὶ ἄδοντες βασιλίκια τοῦ βρουμαλίου. ῥίπτεται δὲ αὐτοῖς ἄνωθεν ἀποκόμβιον μιλ. σ'. – Pryor/Jeffreys, Dromon 188 claim it said »dromon«.

97 Ioannes Skylitzes, Synopsis 206 (Thurn): τῆς ῥόγας ποιησάμενος τῶν πλωϊμῶν.

98 Konstantinos Porphyrogenetos, De admin. imp. 51, I. 54-60 (248 Moravcsik/Jenkins). – Vogt, Protospathaire. – Cf. Guillard, Plage 25.

99 Vogt, Protospathaire 330, n. 1.

100 LSJ 1930: »bowl«, »pan«, »sauce«, »shield«.

101 See Bouras, Phialae with pictures of *phialai*.

102 Zakythinos, Sphrantzes 661.

103 Jenkins, Commentary 199: »It is possible that a fountain stood on the harbour quay; but it seems more likely that φιάλη here stands for the round »pool« of the artificial harbour itself.«

104 Mango, Boukoleon 48.

105 Theophanes Continuatus, Chronographia V 90 (296 Ševčenko = 336 Bekker).

106 Ebersolt, Grand Palais 100-103. – Cf. also Bréhier, Institutions 114 with incorrect identification as »Phiale du Triconque, bâtie par Théophile«.

107 Joseph Genesisios, Libri regum I 9 (8 Lesmüller-Werner/Thurn): ἐν χώρῳ λιθίνῳ, ὅς βουκολέων προσαγορεύεται. – Cf. Guillard Palais du Boukoléon 24.

108 According to Mango, Boukoleon 48 and Bardill, Visualizing 31.

109 Cf. Mango, Boukoleon 48.

110 Von Dobschütz, Maria Romaia 201, Z. 30-31: ὡς δὲ καὶ πρὸς τὸν τοῦ παλατίου κόλπον ἀφίκετο, ἐν ᾧ Φιάλη ὁ τόπος ὠνόμαστα.

attempted overthrow of Andronicus Ducas¹¹¹ by Leon VI and banned without further ado, along with several members of the synod. Probably to avoid too much attention, the churchmen were led down to the Phiale to be loaded onto ships¹¹².

The fact that the Phiale was undoubtedly an integral part of the Bukoleon harbour is proven by the third text, which should be used to clarify the question of the location of the Phiale. *De administrando imperio* contains the statement that the emperor used to board his private dromon at the Phiale¹¹³.

Attempt at Absolute Localisation

From what has been said so far, only the location of the Phiale in relation to the harbour can be determined. However, based on the records of Mamboury and Wiegand and the remains of the sea wall *in situ*, a hypothetical location can still be ventured. In the most westerly section of its view, the sea wall was not enhanced with a layer of continuous masonry as part of its seaward reinforcement (W 3, see above). Rather, on its first 50m it had only five arcades with pillars of alternating stone and brick layers. The wall (layer) W 2 directly behind it remained visible until the openings of the arches were walled up in a later phase (figs 3, 7)¹¹⁴. Thus, this section is fundamentally different from the rest of the sea wall, which received another masonry layer. This clear break in the design suggests that the arcade front could have served as a decorative façade of a square, namely the Phiale (fig. 5)¹¹⁵.

The isolated structure »n« in the plans of Mamboury and Wiegand, which has already been discussed in the context of the moles¹¹⁶, can perhaps alternatively be related to this hypothetical ceremonial square (fig. 2). As it is approximately level with the last (easternmost) arcade, the structure could be considered as the south-eastern corner of the Phiale, which would have had a size of about 50m by 50m. This hypothesis can also be found on the map of the Great Palace by Miranda from 1968 (fig. 24), which was added to Guiland's collected writings (although none of the texts refer to the reconstructed square). Even if Ginalis and Ercan-Kydonakis are right in assuming that the structure »n« was part of the sea wall (see above) that enclosed the harbour basin, the existence of a square at the westernmost end cannot be ruled out. It may just have been smaller.

Another indication for locating the Phiale at the western end of the Bukoleon Harbour can be found in the *Vita Euthymii*. In the passage already mentioned above, it is said that the Patriarch was respectfully accompanied down to the Bukoleon Harbour, while the other bishops were led directly to the Phiale. Since it has been shown that the Phiale was undoubtedly a part of the harbour, the different treatment of the clerics was shown in the route taken to the ships. The Patriarch's dignity was respected insofar as he was accompanied to the harbour »with his due honour through the Bukoleon« (μετὰ τῆς πρεπούσης τιμῆς διὰ τοῦ λεγομένου Βουκολέοντος). Presumably, they led him down the staircase E 3b (fig. 19) with the marble steps. If one did not want to bestow this privilege on the other bishops, it was possible to guide them through the portal E 2b to the harbour (πρὸς τὴν πρὸς θάλασσαν καλουμένην Φιάλην). Although this exit to the west did not lead directly to the hypothetical place that was assumed to be the Phiale above, it would have been closer to it than the monumental staircase.

The Protospatharios of the Phiale

Constantine VII Porphyrogennetos mentioned the office of the *protospatharios tēs Phialēs*, whose principal task was to act as a judge in any disputes between the sailors of the private imperial flotilla each afternoon at the so-called Phiale¹¹⁸. This is at least the situation that is evidenced for the tenth century: the office is mentioned exclusively in *De administrando imperio*, and we know of seven officeholders and their careers between c. 902 and 921 (tab. 1)¹¹⁹.

The office of the *protospatharios* of the Phiale had always been awarded by imperial appointment (βασιλικὸν ὀφφίκιον), according to Constantine VII¹²⁰. Since it is not mentioned in the rankings of the ninth and tenth centuries, it seems to have been understood as a mere judge's office and not as court title. Until the reign of Romanos I Lakapenos (920-944), the *protospatharios* was in charge of the oarsmen of both the red and the black ships of the emperor, but not those of the empress's ships, for which the chief of the board (*ho tes trapezes*) was responsible¹²². Romanos, who had ascended the throne as *droungarios* of the fleet, ended this division of powers. In order to minimise the risk of coup attempts

111 Bourdara, Kathosiosis 49-54 (no. 14).

112 Vita Euthymii XIII 5 (87-89 Karlin-Hayter): Παρευθὺ τούτους οἱ ἐκείσε παριστάμενοι τῶν βασιλειῶν καταγαγόντες καὶ πρὸς τὴν πρὸς θάλασσαν καλουμένην Φιάλην καταγαγόντες, ἐν πλοίοις ἐμβαλόντες ἀπαντας ὑπερώρισαν, τὸν δὲ γέ πατριάρχην μετὰ τῆς πρεπούσης τιμῆς διὰ τοῦ λεγομένου Βουκολέοντος κατέβαντες, ἐν ἀκατίῳ ἐμβαλόντες τῇ αὐτοῦ μονῇ τῇ ἐν ταῖς Γαλακρήναις ἀποκατέστησαν.

113 Konstantinos Porphyrogennetos, De admin. imp. 51, l. 141-142 (252 Moravcsik/Jenkins).

114 Mamboury/Wiegand, Kaiserpaläste 3. – Bolognesi Recchi Franceschini, Fourth Season 17. – Bolognesi Recchi Franceschini, Chronological Phases 411. – Bolognesi Recchi Franceschini, End of Survey 156.

115 I thank Antoine Helbert for the graphical realisation of this hypothesis.

116 See above 122.

117 Ginalis/Ercan-Kydonakis, Reflections on the Archaeology, in this volume.

118 Konstantinos Porphyrogennetos, De admin. imp. 51 (248 Moravcsik/Jenkins): Ὁ οὖν προρρηθῆς πρωτοσπαθᾶριος τῆς φιάλης καθ' ἐκάστην ἡμέραν καὶ καθ' ἐκάστην δειλὴν ἀπὸ παλαιοῦ τύπου κατήρχετο καὶ ἐκαθέζετο ἐν τῇ φιάλῃ (διὰ τοῦτο γὰρ καὶ ἐλέγετο πρωτοσπαθᾶριος τῆς φιάλης), καὶ τὰς ἀναμεταξὺ δίκας τῶν ἐλατῶν τῶν τε ἀγρᾶριῶν καὶ τῶν δρομωνίων, τῶν παρ' αὐτοῦ ἐξουσιαζομένων, ἐκρινεν καὶ κατὰ τὸ δίκαιον ἐδίκασεν τε καὶ ἐδιοίκει.

119 Konstantinos Porphyrogennetos, De admin. imp. 51 (248-256 Moravcsik/Jenkins). – On the question of dating, see the elaborate commentary by Jenkins, Commentary 199-200.

120 Konstantinos Porphyrogennetos, De admin. imp. 51 (248 Moravcsik/Jenkins).

121 Jenkins, Commentary 199. – Oikonomidēs, Listes.

122 Konstantinos Porphyrogennetos, De admin. imp. 51, l. 47-51, 65-68 (248 Moravcsik/Jenkins): τοὺς ἐλάτας τῶν βασιλικῶν ἀγρᾶριῶν, ρουσιῶν τε καὶ μαύρων, ἀνευ τῶν ἀγρᾶριῶν τῆς αὐγούστης [...] τὰ γὰρ ἀγρᾶρια τῆς αὐγούστης, τὰ τε ρούσια καὶ μαῦρα, ἐπεκράτει καὶ ἐξουσιαζεν ὁ τῆς τραπέζης τῆς αὐγούστης.

Incumbent	Incumbency	Career stages handed down	PMbZ
Ioannes »Thalasson«	(?-c. 902)	πρωτοσπαθάριος τῆς Φιάλης	#22850
Podaron	(c. 902-?)	πρωτελάτης πρωτελάτης τοῦ ἀγραρίου τοῦ βασιλέως πρωτοκάραβος τοῦ (δευτέρου) δρομωνίου πρωτοσπαθάριος τῆς Φιάλης τοποτηρήτης τοῦ βασιλικοῦ πλωϊμοῦ στρατηγὸς ἐν τῷ θέματι τῶν Κιβυρραιωτῶν	#26705
Leo V the Armenian	(?-913)	πρωτελάτης πρωτελάτης τοῦ ἀγραρίου τοῦ βασιλέως πρωτοκάραβος τοῦ (δευτέρου) δρομωνίου πρωτοσπαθάριος τῆς Φιάλης τοποτηρήτης τοῦ βασιλικοῦ πλωϊμοῦ	#24390
Theophylaktos Bimbilidis	(pre-913 – pre-916)	πρωτοσπαθάριος τῆς Φιάλης	#28202
Michael »Gerōn«	(c. 916 – c. 918)	δευτεροελάτης τοῦ ἀγραρίου Βασιλείου πρωτελάτης τῷ τότε καιρῷ τοῦ δρομωνίου πρωτοκάραβος τοῦ πρώτου δρομωνίου πρωτοσπαθάριος τῆς Φιάλης	#25146
Theodotos	(c. 918-922)	πρωτελάτης πρωτοκάραβος πρωτοσπαθάριος τῆς Φιάλης	#27969
Konstantinos Lorikatos	(922-?)	πρωτοκάραβος πρωτοσπαθάριος τῆς Φιάλης	#23832

Tab. 1 The *protospatharioi tes Phiales* according to *De administrando imperio*. – (D. Heher).

by the sailors of the imperial flotilla, these were henceforth all subordinate to the protokarabos of the imperial dromon (πρωτοκάραβος τοῦ βασιλικοῦ δρομωνίου), who now *ex officio* – and no longer as before by tradition – became the *protospatharios* of the Phiale¹²³.

The Lighthouse

The main lighthouse (*pharos*) of Constantinople was inside the walls of the great palace. The earliest implicit clue to its existence can be found in the Chronicle of Theophanes, whose entry for the year of the world 6261 (AD 769) contains the first mention of the Church of the Virgin of the Pharos¹²⁴. In addition to its task as a nocturnal reference point for sailors, the Pharos is said to have functioned in the ninth century as the far end of that ominous communication system between

Constantinople and Tarsus, which is sometimes described in the research literature as a »fire telegraph«¹²⁵. Without being able to go into detail here, it should have been possible by means of this »telegraph« to communicate news of important events in Syria (war, Arab raids, etc.) on a direct route to Constantinople¹²⁶. The *Chronicle of Symeon the Logothete* names Leon, a philosopher who lived in the first half of the ninth century, as the inventor of the system. The fire telegraph was allegedly – at least partially – shut down under Michael III (842-867). The sources unanimously assume that he had been worried that the announcement of an Arab invasion could disturb the audience and distract from his athletic performance in chariot races¹²⁷. This is certainly once again a deliberate attempt to defame the Emperor at a later date¹²⁸, but after the important victory against the Arabs at Poson in 863, there may indeed have been a reduced need for rapid communication¹²⁹. It may also well be that Michael

123 Konstantinos Porphyrogenetos, *De admin. imp.* 51, l. 189-191 (254-256 Moravcsik/Jenkins): πάντας τοὺς ἐλάτας τῶν τε δρομωνίων βασιλικῶν τε καὶ αὐγουσσιατικῶν ἀγραρίων καὶ εἶναι καὶ πρωτοσπαθάριον τῆς φιάλης. – Jenkins, *Commentary* 203. – See also Theophanes Continuatus, *Chronographia* 400 (Bekker).

124 Theophanes, *Chronographia* 444 (de Boor).

125 Fundamental: Pattenden, *Warning System* (with literature also for the discussion of the localisation of the individual relay stations). – Aschoff, *Feuertelegraph* (with considerations of technical feasibility). – Aschoff, *Nachrichtentechnik* 71-89. – See also Zuckerman, *Apparatus bellicus* 361-369.

126 How exactly the information was transmitted is unclear. On the different theories, see Zuckerman, *Apparatus bellicus* 361-362. 365-367.

127 Theophanes Continuatus, *Chronographia* IV 35 (280 Featherstone/Codoñer = 197-198 Bekker) assumes the races started in the Hippodrome of the Mamas

Palace. The *Chronicle of Symeon Logothete* speaks only of the »Hippodrome«, and it is not clear from the *Book of Ceremonies* whether the races were to take place in the Mamas Palace, or after the return from a procession to the Church of St Mamas. In any case, from the Hippodrome in the city centre, one would have had a direct view of the beacon of the nearby Pharos in the south. Pattenden, *Warning System* 285-289 in his detailed analysis of the temporal horizon apparently conjectures the great Hippodrome.

128 Michael III was murdered by his favourite Basil (I), who founded the so-called Macedonian dynasty (Kislinger, *Eudokia Ingerina* 127-133). The historiography of the Macedonian Emperors was at the service of a debt relief of Basil by posthumous character assassination of his predecessor. See Kislinger, *Image*.

129 Pattenden, *Warning System* 266.

only forbade the lighting of »beacons in the vicinity of Constantinople« (τοὺς πλησιάζοντας φανούς)¹³⁰.

What information can be discovered about the Pharos? First, it is clear that it was inside the palace walls¹³¹. After being sent across Asia Minor, the fire signal finally arrived at the »Heliakos of the Pharos in the Palace« (ἐδέχεται ὁ ἐν τῷ παλατίῳ τοῦ Φάρου ἡλιακός)¹³². Several *diaitarioi*¹³³ served there on guard and would now light the fire on the Pharos¹³⁴ from where it spread to smaller relay stations¹³⁵. The *diaitarioi* were under the command of the palace master, the *papias*, who probably conveyed the message to the emperor in case of emergency¹³⁶. Incidentally, »Heliakos« can neither be regarded as an epithet of the Pharos nor can it be translated literally (»solar pharos«¹³⁸). Rather, it meant the terrace on which the Pharos was located. Precisely this is also addressed in a processional order in the Book of Ceremonies, which led through the eastern gate of Chrysotriklinos via the Heliakos of the Pharos and the Heliakos of the Nea Ekklesia and the Great Triklinos down to the Tzykanisterion¹³⁹.

In the attempt to specify the location of the Pharos, it should also be taken into account that the lighthouse must have been positioned in the immediate vicinity of the Church of the Virgin of the Pharos, which, as mentioned before, is first documented in the year 769¹⁴⁰. Although there are no architectural remains of the church, following Bardill's reconstruction from the written sources, it can be located near the top of the imperial landing stairs, thus on a terrace 11 m above sea level (fig. 6)¹⁴¹.

This is also supported by Cristoforo Buondelmonti in 1420: he had seen the ruins of a marble lighthouse of enormous size located on a raised position above the imperial har-



Fig. 25 The lighthouse with beacons in the Skylitzes Matritensis, fol. 77^v. Biblioteca Nacional de España, MS Gr. Vitr. 26-2, 77^v. – (From Tsamakda, Skylitzes fig. 189).

bour¹⁴². The phrase »the harbour below the Pharos« (κατὰ τὸν Φάρον λιμένος) in Georgios Pachymeres's case also suggests a higher position, if indeed the Bukoleon Harbour is meant¹⁴³. An anonymous Russian pilgrim also noted that a high column that rose above the coast and carried a structure on four stone columns – this can only be the Pharos – had been destroyed during Latin rule (1204-1261)¹⁴⁴. A single pictorial representation of the Pharos comes once again from the *Skylitzes Matritensis* (fig. 25), on which it is depicted as a tower-like building with four small structures on its top. That the lighthouse in its entirety seems to be on fire is probably due to a misunderstanding of the signal fire on the part of the miniature painter.

130 Theophanes Continuatus, Chronographia IV 35 (280 Featherstone/Codoñer = 198 Bekker). – See also John Skylitzes, Synopsis 108 (Thurn): προσέταξε μηκέτ' ἐνεργεῖν τοὺς τῆ βασιλίδι γειτονοῦντας φρυκτούς.

131 Pattenden, Warning System 258 incorrectly claims that the »beacon nearest to the city« signaled the invasion.

132 Konstantinos Porphyrogenetos, De exped. C 628 (134 Haldon) = De cer. II 493 (Reiske): καὶ μετ' αὐτὸν ἐδέχεται ὁ ἐν τῷ παλατίῳ τοῦ Φάρου ἡλιακός, καὶ ἦπτε καὶ αὐτός. – Cf. Pseudo-Symeon, Annales 197-198 (Bekker).

133 Konstantinos Porphyrogenetos, De exped. C 628 (134 Haldon): διαίταριοι γὰρ ἐκέισε βίγλας αἰεὶ καὶ πάντοτε κρατοῦντες.

134 Konstantinos Porphyrogenetos, De exped. C 628 (134 Haldon).

135 As soon as all the fires burned (τῶν φανῶν τούτων πάντων ἀψάντων), mobilization would have begun in the imperial stables outside Constantinople: Konstantinos Porphyrogenetos, De exped. C 631-633 (134 Haldon) = De cer. II 493 (Reiske)

136 Theophanes Continuatus IV 35 (280 Featherstone/Codoñer = 198 Bekker) ὁ ἐκ τοῦ Φάρου φανὸς διὰ τοῦ παππίου ἐδήλου τὴν τῶν ἐθνῶν ἐκδρομὴν. On the office of the *papias* and his subordinates, see ODB III, 1580.

137 According to Aschoff, Feuertelegraph 9 and Aschoff, Nachrichtentechnik 75, where the terms remained untranslated: »Als Empfangsstation wird der pharos ἡλιακός (sic) im großen Palast zu Konstantinopel genannt.« The translation of the passage by Aschoff contains many inaccuracies.

138 Konstantinos Porphyrogenetos, De exped. C 628, translation: 135 Haldon.

139 Konstantinos Porphyrogenetos, De cer. II 15 (I 586 Reiske = III 129, 400-403 Dagron/Flusin/Feissel): καὶ τοῦ χρυσοτρικλίνου ἐξέσαν τὰς ἀνατολικὰς πύλας τοῦ χρυσοτρικλίνου, καὶ διὰ τοῦ ἡλιακοῦ τοῦ Φάρου ἐξεληθόντες, κατήλθον διὰ τοῦ ἡλιακοῦ τῆς νέας καὶ τοῦ μεγάλου τρικλίνου εἰς τὸ τζυκανιστήριον. – Cf. Bardill, Visualizing 33. 36-37. 39.

140 Theophanes, Chronographia 444 (de Boor). See also Theophanes Continuatus, Chronographia I 10 (32 Featherstone/Codoñer = 19 Bekker): τὸ τοῦ θεοῦ τεμένισμα, ὁ Φάρος κατονομάζεται ἀπὸ τοῦ φῶς ἀνάπτειν πᾶσι καὶ κατὰ τὰς νύκτας χειραγωγεῖν ἐπὶ καταγωγὰς πινὰς ἀσφαλεῖς, ἀντίμιμον τοῦ κατὰ τὴν

Ἀλεξάνδρεια ὄντα τε καὶ λεγόμενον, τὴν αὐτοῦ εὐμένεια χωρεῖ ἐκκαλούμενος. – Cf. John Skylitzes, Synopsis 8 (Thurn). – On the dating, see Magdalino, L'eglise du Phare 16. – Jenkins/Mango, Homily 134-135. – Janin, Siècle 241 assumed (without evidence), as did Ebersolt, Grand Palais 104-109, a foundation under Konstantinos V (741-755).

141 Bardill, Visualizing 30-31. 35-36 and fig. 10. However, I am not sure whether from Nikolaos Mesarites, Palastrevolution 16 (33 Heisenberg), one can really conclude the relation of the Pharos to the church: κατηγηθή γοῦν μοι τοῦτο περὶ τὰ τοῦ νεῦ ἐνησχολημένω μεσημβρινά. ἀνερπύσαντες γὰρ τινες διὰ τοῦ περὶ τὸν λουτρῶνα τοῖχου, ἔπου περ ἐώραται ὁ φανός, διὰ τῶν φωτιστικῶν ἐπεχείρουν εἰσδύνα ἐπὶ τὰ ἄδυτα. – Also, Öner/Kostenec, Walking Thru 148-149, place the church (# 82) and the Pharos (# 80) at the top of the landing stairs. – Recently, Westbrook (Great Palace 232) argued against Bardill's hypothesis, but most of his arguments are based on the erroneous assumption that Bardill wants to locate the lighthouse on the terrace at 16 m above sea level (while Bardill, Visualizing 36 clearly states that he favours a location on the 11 m terrace. – Magdalino, L'eglise du Phare 16-17 is content with a rough localisation in the »nouau inférieur du Grand Palais, ce qu'on appelait le Palais Sacre ou Palais du Boukoléon«. Magdalino takes the aforementioned lighthouse on the sea wall as the Pharos, but does not comment on the distance between it and the church.

142 Cristoforo Buondelmonti, Librum insularum 65 (121 von Sinner): *Ibique* [at the »Palace of Justinian«, that is, the southern terraces of the Great Palace] *in alto et supra mare erat speculum immensurabilis magnitudinis, circumspicuum a longe nimis, et omnia eius aedificia marmorea in mare videntur prosternata, prope portulum imperatoris dicti.* – Cf. the Greek translation of this text: 65.35-39 (85 Legrand): Πλησίον δὲ τούτου ἐν ὑψηλῷ τινι τόπῳ τῆς θαλάσσης ἔγγυς, καὶ κάτοπτρον ἦν μεγέθους πινὸς ἐξαισίου λίαν πόρρωθεν ὀρώμενον. Αἱ γοῦν ἐν τῷ προλεχθέντι παλατίῳ οἰκοδομαὶ πᾶσαι ἐκ μαρμάρων ἐτύχωναν, ὡς καὶ νῦν ἐστὶν ὄραν αὐτὰ ἐν τῇ θαλάσῃ ὑπὸ χρόνου κείμενα.

143 Georgios Pachymeres, Relationes historicae V 19 (II 501 Failler).

144 Majeska, Russian Travelers 142-143. – See also the commentary 245-247.



Fig. 26 The »lighthouse« on the sea wall today. – (Photograph G. Simonov 2016).

Finally, a different attempt to locate the Pharos has to be discussed, which has persisted in the research literature. According to this view, the Pharos was the easternmost tower of the Bukoleon-Harbour, which is still preserved today at a height of 22.5 m (fig. 26)¹⁴⁵. The interpretation of this tower¹⁴⁶, with an approximately square base (front 10.4 m), as the Pharos is mainly based on the fact that there is a masonry fixture at the top of its four storeys, which apparently could have served to ignite a signal fire (fig. 27)¹⁴⁷. Without doubt, the tower was used in Ottoman times as a lighthouse¹⁴⁸, but whether the same applies to the Byzantine period has not yet been clarified¹⁴⁹. Perhaps it was a secondary lighthouse, which can also be assumed for the other harbours in the city, or the fortress took over this function after the great Pharos was destroyed in the thirteenth century. At any rate, the tower cannot be interpreted as *the* Pharos of the palace. In addition to the above statements, the architectural remains argue against this interpretation: a clear joint shows that the tower could have been built only after completion of the outermost layer of the sea wall, i.e., after the first half of the ninth century, while the Virgin's

Church already bore its name »of the lighthouse« in the eighth century¹⁵⁰.

The Emperor's Private Flotilla

The location of the Great Palace at the south-eastern end of Constantinople made it imperative that the emperor and his entourage should cover many of his routes by ship¹⁵¹. Initially, some ships of the fleet were always set aside for this purpose, while later vessels were specially constructed. This private imperial flotilla, consisting of a few ships, was usually anchored in the Bukoleon Harbour¹⁵⁶.

To be distinguished from this are the fighting units of the »imperial fleet« (*to basilikon ploimon*, τὸ βασιλικὸν πλοῖμον)¹⁵². These were the centrepiece of the imperial fleet in the tenth century and operated primarily in the Propontis and the Bosphorus. In case of war, these were reinforced by the naval divisions of the themes. For the campaign against Crete in 911, for example, the imperial fleet contributed 60 dromons, each with a crew of 300, plus 40 *pamphyloi*¹⁵³. At

145 Thus Magdalino, *L'église du Phare* 16-17. – Bolognesi Recchi Franceschini, *Gran Palazzo* 239-240. – Bolognesi Recchi Franceschini, *Monumental Itinerary* 55. – Bolognesi Recchi Franceschini, *Fourth Season* 20. – Bolognesi Recchi Franceschini, *Seventh Survey* 139. – Mango, *Boukoleon* 45. – Westbrook, *Great Palace* 232-233. – More sceptical Makris, *Studien* 187-188. – Janin, *Constantinople* 409 locates the Pharos a little east of the so-called House of Justinian (for its location, see figs 7, 10), but does not seem to refer to the tower of the sea wall. – Guillard, *Palais d'Hormisdas* 236-237 and Guillard, *Terrasse du Phare* 88-90 (both reprinted in Guillard, *Études de Topographie I* 294-333) places it in the southeast corner of the terrace named after it, not on the sea wall. – Müller-Wiener, *Häfen* 10 also sees only a smaller, additional lighthouse in the tower of the sea wall.

146 Cf. Karnapp, *Leuchtturm* 8-12. – Makris, *Studien* 187.

147 Bolognesi Recchi Franceschini, *Seventh Survey* 139 and fig. 5. – Bolognesi Recchi Franceschini, *Monumental Itinerary* 54.

148 Bardill, *Visualizing* 35.

149 Karnapp, *Leuchtturm* 12 dates the construction to the Ottoman period. – On the use as a lighthouse under the Ottomans, see Mamboury/Wiegand, *Kaiserpaläste* 14.

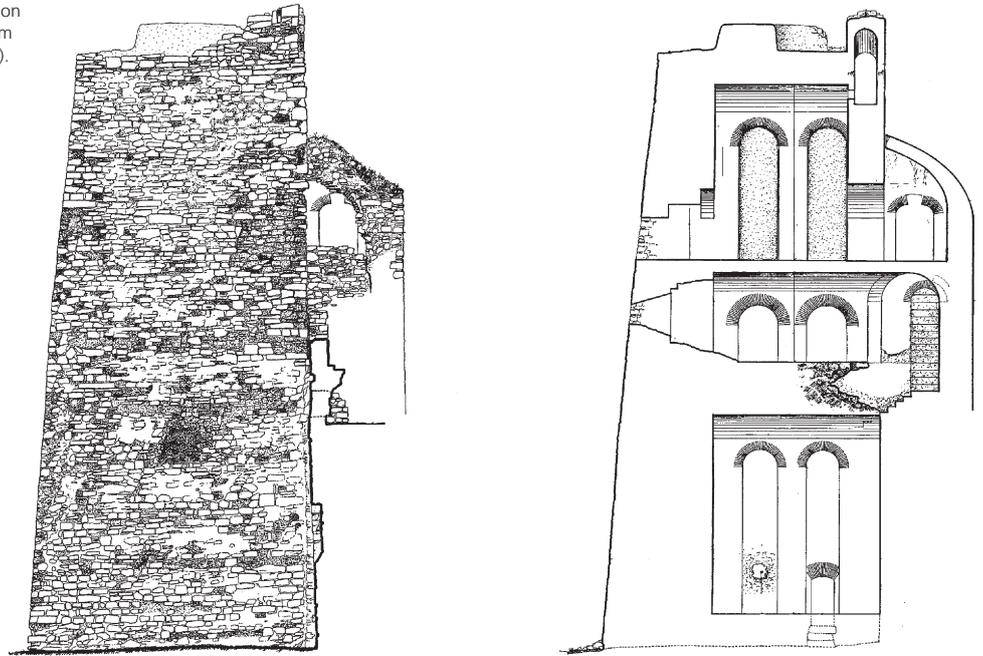
150 The tower thus falls into the same phase of construction as the so-called House of Justinian and the landing stairs and seems to have simply served as the eastern end of the harbour in this phase of redesigning the seaward palace facade. – On the questions of relative dating, see Mamboury/Wiegand, *Kaiserpaläste* 14-15. Bolognesi Recchi Franceschini, *Fourth Season* 20. – Bolognesi Recchi Franceschini, *Seventh Survey* 137-139.

151 There is not yet a comprehensive study on this special unit of the Byzantine fleet, but see Böhm, *Eskadra cesarska*.

152 Cf. Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246-256 Moravcsik/Jenkins). – Belke/Soustal, *De administrando imperio* 250-259. – Jenkins, *Commentary* 195-205. – On the development of imperial fleet, see Ahrweiler, *Byzanz et la mer* 157-158 and recently Kislinger, *Ruhm*.

153 Konstantinos Porphyrogenetos, *De cer.* II 44 (II 651 Reiske = III 297, 20-25 Dagron/Flusin/Feissel). – Haldon, *Theory and Practice* 334-335.

Fig. 27 Graphic rendering and cross-section of the »lighthouse« on the sea wall. – (From Bolognesi Recchi Franceschini, *Südareal* 86).



the time of the next expedition against Crete in 949, it comprised a total of 150 units¹⁵⁴ of 108 (or 110) oarsmen each, of which 24 units were stationed with their ships directly in the greater Constantinople area¹⁵⁵.

Reserved Warships

At least from the reign of Basil I, but possibly earlier, the Byzantine emperors covered long distances by *chelandion*¹⁵⁶, for example to Pegai, to Hebdomon, to Hiereia, Bryas or Prousa¹⁵⁷. This would have been one of the ten ships that the contingent »of the Bosphorus« (*ton Stenon*¹⁵⁸) of the navy had to provide for the use of the emperor (χελάνδια βασιλικοπλώμα) and which were stationed in the Bosphorus¹⁵⁹. On a second warship, the rest of the court could follow the emperor¹⁶⁰. The sailors of the *Stenon* (ἀπὸ τῶν Στενιτῶν πλωτῶν) served as oarsmen, and the crew of the imperial *agraria* – discussed in the next passage – were called in¹⁶¹.

Barges (*Agraria*)

The *agraria* was the alternative to deploying warships. The term originally referred to fishing boats and cargo ships¹⁶², but the imperial *agraria* was a barge used for shorter trips along the coast of Constantinople¹⁶³, probably anchored at Bukoleon Harbour. Like many other objects of exclusive imperial use, the ship was coloured red (ῥούσιον ἀργάριον). Whether this related to the hull or the sails and rigging must remain open¹⁶⁴. Overall, the imperial private flotilla included several *agraria*, as both the emperor and the empress had several barges – red and black¹⁶⁵. For the imperial *agraria* there was a separate crew whose disputes the *protospatharios* of the Phiale negotiated and which received bonuses, at least during the festival of the Brumalia¹⁶⁶.

154 Οὐσία. On the discussion of this controversial term in research, see Pryor/Jeffreys, *Dromon* 255-257. 150.

155 Konstantinos Porphyrogenetos, *De cer.* II 45 (II 664-665 Reiske = III 317-321, 44-77 Dagron/Flusin/Feissel). – Pryor/Jeffreys, *Dromon* 255-259. – Jenkins, *Commentary* 195-196.

156 Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246 Moravcsik/Jenkins). In most Byzantine texts, the terms *chelandion* and *dromon* both refer to fast warships. If a conscious distinction is made, *chelandia* seem to have rather fulfilled transport functions (cavalry). See in detail Pryor/Jeffreys, *Dromon* 166-170. 188-192 and Ahrweiler, *Byzance et la mer* 408-418.

157 On these places, see Konstantinos Porphyrogenetos, *De admin. imp.* 51 (256 Moravcsik/Jenkins), see Jenkins, *Commentary* 197. – On Hebdomon, see Simeonov, *Hebdomon*, in this volume.

158 Cf. Janin, *Constantinople* 479. – Koder, *Aigaion Pelagos* 80.

159 Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246 Moravcsik/Jenkins). – cf. Jenkins, *Commentary* 195-196. – Belke/Soustal, *De administrando imperio* 250 n. 550. – Ahrweiler, *Byzance et la mer* 403.

160 Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246 Moravcsik/Jenkins): τὸ καὶ πλείονας ἄρχοντας εἰσέρχεσθαι μετὰ τοῦ βασιλέως καὶ τοὺς ὑπολοίπους.

161 Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246 Moravcsik/Jenkins).

162 Jenkins, *Commentary* 196. – Belke/Soustal, *De administrando imperio* 250 n. 548. – Ahrweiler, *Byzance et la mer* 409-410.

163 Konstantinos Porphyrogenetos, *De admin. imp.* 51 (246 Moravcsik/Jenkins). – Ahrweiler, *Byzance et la mer* 157.

164 Jenkins, *Commentary* 196. – Vogt, *Protospathaire* 329 claims that while the emperor's ship was only red, the empress's ship was red and black in colour. Therefore, the sailors of the empress were called »the black ones«, and those of the emperor »the red ones«. This cannot be supported by any of the sources.

165 Konstantinos Porphyrogenetos, *De admin. imp.* 51, I. 47-51 (248 Moravcsik/Jenkins). – Cf. Belke/Soustal, *De administrando imperio* 253 n. 556.

166 Konstantinos Porphyrogenetos, *De cer.* II 18 (II 601 Reiske = III 155-157, 32-43 Dagron/Flusin/Feissel). – Jenkins, *Commentary* 200. – Theophanes Continuatus, *Chronographia* V 25 (96-98 Ševčenko = 208 Bekker).

Imperial Dromons

In 895 at the latest¹⁶⁷, Leon VI (886-912) apparently created a special form of the dromon with the construction of an imperial dromonion (βασιλικὸν δρομώνιον), which was equally suitable for all travel¹⁶⁸. The so-called *Oneirocriticon of Achmet*, a dreambook, which was probably written at about that time¹⁶⁹, reflects this development: in addition to the still existing imperial warships (βασιλικά πλοῖα τὰ εἰς πόλεμον), the dreambook referred to two ships (apparently the agraria), one of which belonged to the emperor and the other to the empress, and finally it mentioned the imperial dromon (τὸν βασιλικὸν δρόμωνα), which stands in dreams as a symbol for the empress. If the Emperor dreams that he would have a new dromon made, then he would part with his wife. Although the *Oneirocriticon* also implied that the emperor could build other dromons for private use (εἰ δὲ ἴδῃ, ὅτι ἔκτισε δρόμωνα ἰδίου), these only represent concubines in dreams and thus are of secondary importance¹⁷⁰.

As reason for the construction of the imperial *dromonion*, Constantine VII stated that the *agraria* was not sufficient to carry all *magistroi*, *patrikioi* and other dignitaries. The Emperor was usually only accompanied during voyages on the *agraria* by the commander of the guard (ὁ δρουγγάριος τῆς βίγλης), the admiral of the fleet (ὁ δρουγγάριος τοῦ πλωῖμου), the *logothetes tou dromou* (ὁ λογοθέτης τοῦ δρόμου), the *hetaireiarches*, the private secretary (ὁ μυστικός) and the Secretary of the Petitions (ὁ [μυστικός] τῶν δεήσεων), the *domestikos of the scholai* (ὁ δομέστικος τῶν σχολῶν), and, if he was in Constantinople, the chamberlain (ὁ παρακοιμώμενος), the *protobestiarios* (ὁ πρωτοβεστιάριος) and several *koitonitoi* (ἐκ τῶν κοιτωνιτῶν)¹⁷¹.

Although the new *dromonion* could accommodate a larger number of courtiers than the *agraria*, Leon ordered the construction of another ship of the same type, which was christened *akolouthos* (ἀκόλουθος, meaning »Pursuer« or »Companion«), in order to transport an even larger entourage¹⁷². The *agraria* also remained part of the imperial private flotilla. The empress retained her own ships, the crew of which was subordinated to the command of the *protokarabos* of the imperial dromon since the reign of Romanos I (920-944)¹⁷³.

The estimated size of a heavy dromon of the eleventh century varies from between 31.25 m × 4.50 m¹⁷⁴ and 40.20 m ×

5.90 m¹⁷⁵. The term *dromonion* could be a smaller model of such a dromon¹⁷⁶. Imperial ships are mentioned three times in *De expeditionibus*. Only once, however, are they called »dromonion«, while otherwise the term »dromon« is used. From this, Pryor and Jeffreys concluded that Constantine VII had used both terms synonymously¹⁷⁷. However, the passage in which the ships are called *dromonia* appears to be based on much younger archival material¹⁷⁸. The author may well have made the terminological distinction deliberately, but this differentiation cannot be confirmed in the other sources. In general, the explicit mention of a type of ship called *dromonion* is limited to the work of Constantine VII; later authors use the common terms for warships (dromon and *trieres*) for the imperial ship.

The imperial dromon, in the sense of a specially designed state galley, can only be documented in the sources until the late twelfth century. It should be noted that the imperial dromon was created at a time when this type of ship was at the peak of its technical development. Towards the end of the eleventh century, galleys of western design dominated the Mediterranean. This means that in the course of the twelfth century, Byzantine sources start to use the term »dromon« for transport ships, while the fast warships are encountered with the antiquated term »triremes« or generalised as »ships«¹⁷⁹. The end of dromons as a standard ship of the Byzantine navy probably also caused their removal from the imperial fleet. The last certain indication of the existence of a special imperial dromon dates back to 1147, when King Conrad III demanded of Manuel I »the imperial dromon and the usual warships reserved for the imperial majesty« for the crossing of the Bosphorus befitting his rank¹⁸⁰.

Writing a history of the imperial dromon is particularly complicated by the decreased differentiation of naval units in the sources after the tenth century. The navy was considerably reduced soon after the successful breaking of Arab supremacy at sea by the reconquest of Crete (961) and Cilicia (959-969)¹⁸¹. In military operations, the fleets of the themes appear to have been on their own as early as the first half of the eleventh century¹⁸². Around 1040, a fire destroyed a large part of the remaining Constantinopolitan central fleet, the remains of which had to be supplemented by cargo ships during the attack of the Rus' in 1043¹⁸³. As a result, military defeats and continued neglect meant that the former imperial central fleet merged with the ships of the imperial private

167 Michael Barkalas (PmbZ # 25147) after his exploits in the fight against the Bulgarians (probably 895) was promoted to δευτεροελάτης εἰς τὸ βασιλικὸν δρομώνιον: Konstantinos Porphyrogenetos, De admin. imp. 51, l. 125 (252 Moravcsik/Jenkins). – On the dating, see Jenkins, Commentary 200-201.

168 Konstantinos Porphyrogenetos, De admin. imp. 51 (246 Moravcsik/Jenkins). – Jenkins, Commentary 196.

169 Mavroudi, *Oneirocriticon* 5 with dating to the late 9th to 10th c.

170 Achmetis *Oneirokritikon* 180 (141 Drexl).

171 Konstantinos Porphyrogenetos, De admin. imp. 51, l. 27-33 (246 Moravcsik/Jenkins).

172 Konstantinos Porphyrogenetos, De admin. imp. 51 (246 Moravcsik/Jenkins).

173 Belke/Soustal, De administrando imperio 256 n. 563.

174 Pryor/Jeffreys, *Dromon* 244. 248. 292. 312. 373. 448.

175 Bockius, *Dromone*. A model based on these calculations (scale 1:10) is located in the Museum of Ancient Seafaring of the RGZM Mainz (inv. no. 42776).

176 Jenkins, Commentary 196.

177 Pryor/Jeffreys, *Dromon* 164 n. 7; 188 n. 6. – Also Ahrweiler, *Byzance et la mer* 412. 415.

178 Konstantinos Porphyrogenetos, De exped. C, l. 321. 686. 827 (114, 138, 146 Haldon).

179 Pryor/Jeffreys, *Dromon* 407-411.

180 Ioannes Kinnamos, *Epitome* II 16 (79 Meineke): δρόμωνα δὲ τὸν βασιλεῖον καὶ τὰς συνήθεις σταλῆναι οἱ πρὸς βασιλείῳ ἡξίου τρήρεις.

181 Ahrweiler, *Byzance et la mer* 117-118. – Kislinger, *Ruhm* 43-44.

182 Kislinger, *Ruhm*. 44-45.

183 Kislinger, *Ruhm* 46-50.

flotilla into a single (modest) unit at the end of the eleventh century. This is reflected in the sources insofar as most of the warships operating in the vicinity of Constantinople are now considered »imperial triremes«. Whether smaller vessels were used for the »civilian« journeys of the emperor or – as before the eleventh century – individual warships were reserved, must remain open. The increasing abandonment of the definite article in the mention of imperial ships from the late eleventh century may be considered an indication against the existence of a special state galley.

This development also corresponds to the decline of the Bukoleon Harbour. The last event to be clearly located there is the reception of King Amalric I of Jerusalem in 1171, incidentally the only document testifying to the reception of a foreign delegation at the Bukoleon¹⁸⁴. George Pachymeres's

mention of a »harbour below the lighthouse« is our last piece of evidence for the existence of a palace harbour¹⁸⁵, but apart from that, the sources are silent. The representative marble staircase that connected the harbour with the palace (see below) was walled up, except for a small passageway, around the middle of the fourteenth century¹⁸⁶. When Cristoforo Buondelmonti was in Constantinople around 1420, he still observed a »small harbour of the emperor« (*portulum imperatoris*¹⁸⁷, λιμὴν σμικρότατος τοῦ Βασιλέως¹⁸⁸). The corresponding illustrations mark this small harbour as the »harbour of the former imperial palace« (*portus olim palatii imperatoris*) (fig. 23)¹⁸⁹. By this time at the latest, the Bukoleon Harbour would have been used rudimentarily. After the conquest of Constantinople by the Ottomans in 1453, the former palace harbour served merely as an anchorage for fishing boats¹⁹⁰.

Summary / Zusammenfassung

The Harbour of the Bukoleon Palace

Probably as early as the sixth century, the Great Palace in Constantinople had its own landing stage, which joined the sea walls in the south. In the beginning, this part of the coastline went under the name of Bukoleon, but the name passed on to the harbour, at the latest in the ninth century, and finally to the »Lower Palace«. This is the area of the Great Palace on the southern terraces, sloping towards the sea, that was enclosed under Nikephoros II. Construction activities, especially in the ninth to tenth centuries, led to an enormous increase in appreciation of the »Lower Palace«. As a result of changes in the seaward facade and the entry areas to the quays, the harbour was increasingly integrated into the palace complex. The Bukoleon Harbour can rightly be considered to be the most representative of the Constantinopolitan harbours. It

is all the more astonishing that it was rarely used to receive foreign delegations. On the contrary, this seaward entrance, the most magnificent to the city, marked another privilege of the emperor and his court. Appropriately, the imperial private flotilla was stationed in the Bukoleon Harbour. This seems to have initially consisted of dromons of the war fleet that were temporarily reserved for the private flotilla, but also of smaller converted cargo ships. Later, under Leon VI (886-912) two representative imperial dromons were prepared. Against the background of the gradual diminishing of Byzantium's naval power, however, this differentiation seems to have been abandoned by 1204 at the latest. In Late Byzantine times, the emperors evidently resorted to any warships stationed in Constantinople.

184 On the reception of King Amalric of Jerusalem, see Schreiner, Zu Gast and especially Runciman, Visit. – According to Müller-Wiener, Häfen 10 n. 33 Kiliç Arslan II (1161) is said to have landed at the Boukoleon Harbour, but this presumption cannot be deduced from the sources (Ioannes Kinnamos, Epitome V 3 [204-206 Meineke]. – Niketas Choniates, Historia 118-119 [van Dieten]).
 185 Georgios Pachymeres, Relationes historicae V 19 (II 501 Failler).
 186 Bolognesi Recchi Franceschini, Fourth season 21.
 187 Cristoforo Buondelmonti, Librum insularum 65 (121 von Sinner).
 188 Cristoforo Buondelmonti, Librum insularum, version grecque 65.40-41 (85 Legrand).
 189 Gerola, Vedute 271. – Bertrandon de la Brocquière, Voyage 152 in 1432/1433 mentions a *petit havre pour mettre III ou IIII galées du costé du midi*. However,

it is unlikely that the Bukoleon Harbour was meant here. His explanation that it would be located *asses près d'une porte où il y a une montaignette des os des Crestiens* (i. e., Crusaders killed by Byzantines), seems to be based on the same narrative that Buondelmonti seems to refer to for the harbour of Vlanga: *In quo muro est campus ab extra olim portus dictus Vlanga: ubi Greci setuaginta Franchorum nobilium pane calcine frumentato dolose ex invidia vel timore occiderunt, quorum ossa innumerabilia usque in hodiernum perhibent testimonium*. – Cf. Külzer, Harbour of Theodosius, in this volume.
 190 Bolognesi Recchi Franceschini, Monumental Itinerary 55. – Guillard, Port palatin 190.

Der Palasthafen des Bukoleon

Wahrscheinlich bereits ab dem 6. Jahrhundert verfügte der Große Palast in Konstantinopel über eine eigene Anlegestelle, die südlich an die Seemauern anschloss. Zunächst begegnet dieser Küstenabschnitt unter der Bezeichnung Bukoleon, wobei der Name spätestens im 9. Jahrhundert auf den Hafen überging und schließlich auf den »Unteren Palast«, also jenen Bereich des Großen Palastes auf den südlichen, zum Meer hin abfallenden Terrassen, den Nikephoros II. ummauern ließ. Bautätigkeiten speziell im 9./10. Jahrhundert führten zu einer massiven Aufwertung des »Unteren Palastes«. Durch Veränderungen der seeseitigen Fassade und der Zugangssituationen zu den Kaianlagen wurde auch der Hafen zunehmend in den Palastbereich integriert. Der Bukoleon-Hafen darf mit Recht als der repräsentativste der konstantinopolitanischen Häfen betrachtet werden. Umso erstaunlicher ist es, dass er

kaum jemals für den Empfang ausländischer Delegationen herangezogen wurde. Im Gegenteil markierte der prachtvollste meerseitige Zugang der Stadt ein weiteres Privileg des Kaisers und seines Hofes. Im Bukoleon-Hafen war demgemäß auch die kaiserliche Privatflottille stationiert. Diese scheint zunächst aus temporär abgestellten Dromonen der Kriegsflotte sowie aus umgebauten kleineren Lastschiffen bestanden zu haben, bevor unter Leon VI. (886-912) zwei repräsentative kaiserliche Dromonen angefertigt wurden. Vor dem Hintergrund der sukzessive ermattenden byzantinischen Seemacht scheint aber auch diese Differenzierung spätestens 1204 aufgegeben worden zu sein; in spätbyzantinischer Zeit griffen die Kaiser offenbar wieder auf beliebige in Konstantinopel stationierte Kriegsschiffe zurück.

Neorion and Proosphorion: The Old Harbours on the Golden Horn

»There is a bay below the Bosphorus' tip, deeper than necessary for a harbour, that spans sixty stadia. It is safe as a harbour surrounded by mountains and hills that protect it from the winds. From its rear, it brings deep and soft mud from rivers, but at the mouth it lies under the promontory on which the town stands«. With these lines, Dionysius of Byzantium, a second-century author, begins an initial section of his *Anapulus Bospori* (»The Journey Up the Bosphorus«)¹. In this book, he first follows a western bulge of the sea road that connects the Black Sea and the Sea of Marmara, and separates Europe from Asia, a tributary, commonly known as the »Golden Horn« (Chrysokeras)². The mentioned city on the south bank, in turn, is Constantinople named after Constantine, the first Christian emperor of the Roman Empire, which – also enclosed to the east and south by the sea – became the new capital of the Empire after 330³. When Dionysius wrote his description, the much smaller predecessor settlement of Byzantium⁴ still existed at the tip of the peninsula, »completely surrounded by the sea, with the exception of the isthmus that connects it to the mainland«⁵. The hills that run through the centre of the peninsula from north-west to south-east fall towards the sea more or less steeply, but on the coast, especially on the Golden Horn, there are several alluvial plains with bays. Two to three of them already served Byzantium, which was clearly orientated towards the Bosphorus and the Golden Horn, as

landing sites and as main harbours, located on the latter. »By-passing the headland (up the Golden Horn) first leads to three harbours, the middle one being fairly deep and not obeying the other winds, but not entirely safe in the southwest wind. It is closed on both sides, because the intrusion of the sea is prevented by the walls erected there«⁶.

Cassius Dio, on the other hand, knew of only two harbours in this area in the southeast of the Golden Horn⁷ provided with tower-reinforced moles, which corresponds to an illustration in the *Notitia urbis Constantinopolitanae*⁸ depicting the city of 425 according to its fourteen regions. In regions V and VI, which are located north-west of the Acropolis at the end of the peninsula, on sloping terrain from the terraced ridge to the Golden Horn, the Proosphorion Harbour and the *horrea Troadensia*, *Valentiaca* and *Constantiaca* (which means grain storehouses) are mentioned; somewhat up the coast in region VI another harbour (including shipyard) and the landing stage for Sykai/Pera is noted⁹. The connection with the shipyard makes it clear that this is the harbour of Neorion, present in several other sources¹⁰. It should be equated with the middle, rather deep (*bathys epieikos*) harbour mentioned by Dionysius of Byzantium¹¹, which exhibited bilateral moles¹². From there, walls would have made the connection with a tower of the city wall, which was set slightly higher and apart from the shore¹³.

1 Dionysii Byzantini Anapulus, chap. 5 (3 Güngerich). – Nevskaja, Byzanz 8. 25-26 (figs 2 and 3).

2 Külzer, Ostthracien 448-450 (with older literature). See also Kislinger, Golden Horn, in this volume.

3 Dagron, Naissance 19-47.

4 Miller, Byzantium.

5 Dionysii Byzantini Anapulus, chap. 6 (3 Güngerich). – With the embayment is meant the saddle called Zeugma, formed by two later silted-up bays (Mango, Shoreline 19-21 fig. 1. – Mango, Développement 17 and plan 1) and at the same time a depression in the hilly chain. This is even today an important traffic route from the Propontis to the Golden Horn and further via the Atatürk Bridge to its northern shore.

6 Dionysii Byzantini Anapulus, chap. 11 (5 Güngerich).

7 Cassius Dio LXXV 10, 5. One of them, probably the Neorion harbour, could be closed by a chain; Feuser, Hafenstädte 245

8 Notitia urbis Constantinopolitanae 227-243. – Cf. Berger, Regionen und Straßen.

9 Notitia urbis Constantinopolitanae 233, 15; 234, 19; 234, 9-11. English translation in Matthews, Notitia 90. – Berger, Regionen und Straßen 362-365.

10 Müller Wiener, Häfen 6-7. – Schneider, Mauern und Tore 82-84. – Janin, Constantinople 235-236. – Ahrweiler, Byzance et la mer 430-432. – Dark, Eastern Harbours 152-163. – Dark, New Post Office 315-319. – Ercan, Yenikapı 13-19. – Cosentino, Naval Warfare 335-336, erroneously claims that Ahrweiler, op. et loc. cit. dates the foundation of the Neorion shipyard to the reign of Michael III (842-867); she notes on p. 432: »il existait sûrement avant cette date«.

11 This way earlier Miller, Byzantium 1121-1122. – Earlier a Byzantine Scholion (no. 16 (37 Güngerich) on Dionysii Byzantini Anapulus, chap. 5 commented that it was the still existing harbour in the Neorion. The third harbour of Dionysius should therefore be located further north-west. To think of it as primarily the ferry crossing of Perama (Schneider, Mauern und Tore 82; Olson, Last Arab Siege 431. 433, referring to a fragmentary *synaxarion*), which as such had neither moles nor towers (as Cassius Dio wrote about the two harbours of Byzantium, see n. 7 above), and also that it was not counted by him among the urban harbours. However, was it functionally necessary due to its location even before the expansion of Constantine?

12 Dionysii Byzantini Anapulus, chap. 11 (5, 13 Güngerich). – The depth of the harbour will at least have delayed its silting up, which in the historical context also speaks for the Harbour of Neorion. – Berger, Constantinople 102 n. 12, however, wants to locate the harbour with moles between Neorion and Proosphorion (see above Mango, Développement 14-15). It may have been »abandoned after the founding of Constantinople«. There is no clue to this assumption.

13 Dionysii Byzantini Anapulus, chap. 12 (5 Güngerich): »If you pass the tower in the background, which is round in shape and big in every way, connecting the wall to the mainland [...]«. The tower lies, after Berger, Constantinople 102 n. 13 (earlier Berger, Ufergegend 164) »at today's Yeni Cami (New Mosque) at the Egyptian Bazaar« (and thus not far from Balıkcıkapısı/porta piscaria: see on this Schneider, Mauern und Tore 104 (plan IV). – Asutay-Effenberger, Porta veteris rectoris 129-131).

Ergo, Neorion and Proosphorion were within the old city walls, the pre-Constantine ring of walls that Septimius Severus (reg. 193-211) had destroyed in 196 together with the city¹⁴, and which had only been rebuilt after 240¹⁵. The extension of the city to the west of the Zeugma zone¹⁶ under Constantine I (ending the walls in the coastal area of the Golden Horn at the Cibalikapi) enhanced the importance of both harbours as a result of the growing population. Population growth led to increased consumption and hence a greater flow of goods. From the harbours' designations, however, it can be assumed that their functional priorities differed, being complementary, as in modern major harbours. Neorion¹⁷ initially stands literally for a shipyard, where new construction and repair of ships took place at and around the harbour. The *Notitia urbis Constantinopolitanae* therefore refers to *neorium* and *portus* (234, 9-10 Seeck), but lists no warehouses for consumer goods here as in the case of the Proosphorion (see n. 9 above).

However, this may also be due to the proximity of the two neighbouring regions. Wood stored as the main building material (also for ships) was a potential fire hazard. In August 433, a fire broke out on the site, which grew and engulfed the warehouses (near the Proosphorion) and the Bath of Achilles south of the Strategion Square, and destroyed it¹⁸. In early September 465, a large fire broke out in a cured-meat shop near the ships' arsenals on the Bosphorus, which spread (due to alternating winds) to the south and west¹⁹, as happened later in the great fire of August 1203²⁰. Stricter protective measures²¹ should henceforth have had a preventative effect. When the stately home of someone called Andreas on the Neorion caught fire in 559, it was during the course of a riot²².

Goods handling supplemented construction and maintenance of ships in this harbour, at least in the Early Byzantine period. In the past, the maritime merchants' market would have been located there, but Justinian would have relocated it to the Harbour of Julian²³. A further reminder of mercan-

tile activity is provided by another entry, which reports on a portico on the Neorion. Its name, Keratembolin, went back to a statue with four horns on its head: »If anyone suspected that horns were being put on him, he went there and approached the statue. If it was as he supposed, the statue rotates around itself three times«²⁴. Although harbours were certainly adorned with sculptures, Keratembolin goes back to the curved shape of the colonnades, which may have appeared together with the harbour moles to be like horns²⁵. A third note from this same source reports on a bronze ox on the Neorion that would have been sunk into the water under Emperor Maurice (reg. 582-602)²⁶.

Interestingly, twice in the text the word λίμνη (*limnē*) is used instead of λιμὴν (*limēn*, »harbour«) which refers to stagnant water, no matter if interpreted as lake or swamp²⁷. Undoubtedly, the historical scope of the stories in the *Patria* spans centuries of actual events, bringing the reality of its late tenth-century coinage to life, but it fits in with the impression of a constantly silting-up harbour that led to the deepening of the Neorion in 698, when the mud excavation would have triggered a plague epidemic²⁸.

Behind the horror story hides the bad image of the residential quarter on the Golden Horn, which was overcrowded in the early sixth century, where hygiene was lacking and effluent was channelled into the Golden Horn, which posed a serious precondition for the plague epidemics of 542. The almost uncountable victims were disposed of along the banks or in the estuary itself²⁹. The depopulated area fell into disrepute and decay, the economic axis of the city shifted – as shown by the relocation of the markets (see n. 23 above, n. 51 below) – to the south along the Mese and its easier access to the Propontian harbours³⁰.

The Neorion harbour nevertheless found a new destination: the location away from busy life, and from curious observers and spies, was at the same time a protected and easily defended position within the Golden Horn and ideal for use as the main harbour of the fleet from the reign of Leon III³¹.

14 Berger, *Konstantinopel 2-3*. 107. – Bassett, *Urban Image 18-22* fig. 2. – Ivanov, *Konstantinopel 293-295*.

15 Herodian III 1, 7. – Zosimos, *Historia Nova* II 30, 3-4 (I 103 Paschoud) mentions that the wall section enclosing Neorion would have already existed before Constantine.

16 Asutay-Effenberger/Effenberger, *Eski Marmere Camii* 38-39. 44 (plan 7).

17 Müller-Wiener, *Bildlexikon* 57-59. – Günsenin, *Harbours and Shipbuilding* 415.

18 Sokrates, *Historia Ecclesiastica* VII 39, 2 (388 Hansen). – *Chronicon Paschale* 582 (Dindorf). – Schneider, *Brände* 383. – Mango, *Développement* 18 n. 30 and 19 n. 36.

19 Euagrios, *Historia Ecclesiastica* II 13 (64-65 Bidez/Parmentier). – *Chronicon Paschale* (Dindorf) 595. – Schneider, *Brände* 383-384. The distances mentioned are doubtful, five stadia are found, for example, in both sources for different areas and directions.

20 Madden, *Fires* 82-83.

21 Vettors, *Baugesetz*. – Berger, *Konstantinopel* 134-140.

22 Ioannes Malalas, *Chronographia* XVIII 135 (424 Thurn). – Referring to this, Magdalino, *Review* 258, speculates that the connection of the manor with a certain Andrew could relate to a sojourn of the Apostle Andrew during a missionary journey. If this is correct, then one could expect a church of St Andrew or a monastery named after him, but evidence is lacking, see Janin, *Constantinople* 27-33.

23 *Patria Konstantinupoleos* II 68 (188 Preger). – *Parastaseis syntomoi chronikai* § 72 (152 Cameron/Herrin).

24 *Patria Konstantinupoleos* III 179 (271 Preger). – Berger, *Untersuchungen* 693-695. – Berger, *Häfen* 81 refers the passage incorrectly to the Proosphorion.

25 Berger, *Häfen* 81. – Magdalino, *Review* 259, considers a connection with the Golden Horn (Chrysokeras). However, his alternative suggestion is not applicable due to the fact that the name was common knowledge (see, for example, the legend of Constantinople's foundation by Byzans; Berger, *Toponyms* 158-159). Thus, the derivation for one of its parts, the Neorion Colonnades, was not necessary.

26 *Patria Konstantinupoleos* II 68 (196 Preger).

27 Berger, *Untersuchungen* 429-430.

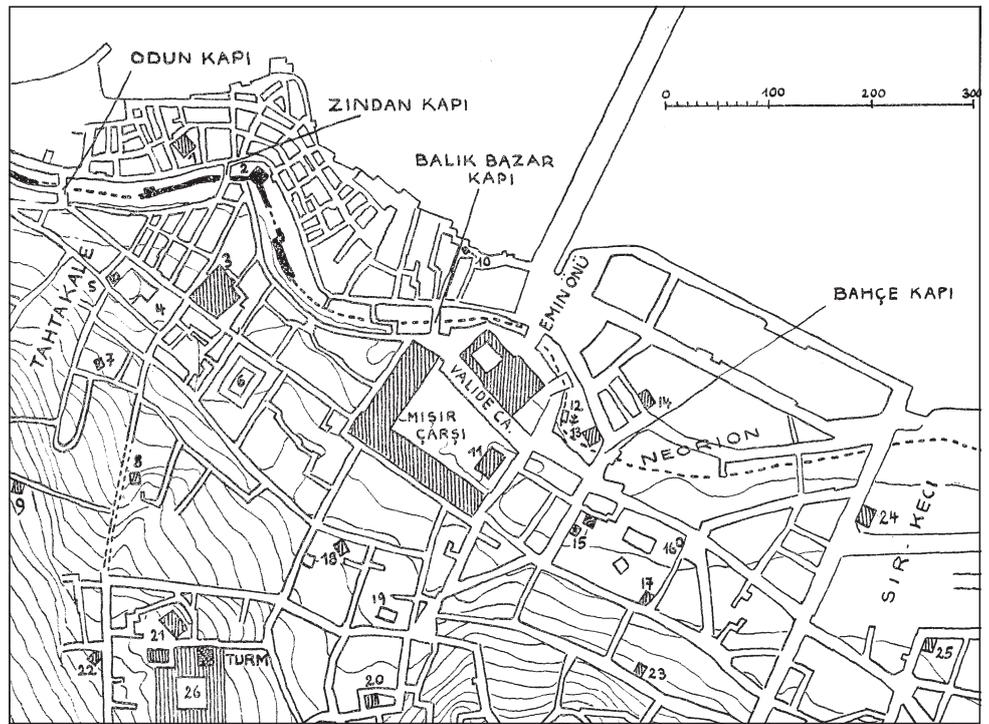
28 Theophanes, *Chronographia* 370 (de Boor). – Berger, *Häfen von Byzanz und Konstantinopel* 113 (and again, Berger, *Häfen* 80-81) agrees with this connection as claimed in the source. – Correct: Stathakopoulos, *Famine and Pestilence* 364-365 (no. 199).

29 Prokopios, *Bella* II 23, 9-11 (I 257 Haury/Wirth). – Ioannes Ephesius, *Vitae sanctorum Orientalium* 89 (Brooks).

30 For more depth on these factors and the development, see my contribution »On Better and Worse Sites«, in this volume, especially 13-14. – Cf. Magdalino, *Maritime Neighborhoods* 217-219.

31 Theophanes, *Chronographia* 386 (de Boor). – Günsenin, *Harbours and Shipbuilding* 415.

Fig. 1 The dashed line shows the probable course of the sea wall in the Neorion area. – (From Schneider, Mauern und Tore plan IV).



For understandable reasons of secrecy, one hardly knows about the further existence of this base. Under Michael III (reg. 842-867), the house and bath of a Patrikos Antonios in the area of the Neorion shipyard are attested; under Romanos I Lakepenos (reg. 917-944), the resulting church and hospice *tēs Theotokou en tō Neoriō* are no longer located at the Arsenal as they were under Michael III³². Perhaps the advancing siltation had already forced a change in the location; the (new) *exartysis* to Sykai corresponds to the *navalia* already known there in the fifth century³³. Nevertheless, information on the Neorion's role as a shipyard is tangible up to the thirteenth century (see Pachymeres V 10), suggesting that a remnant of this function persisted for a longer period³⁴ (like the Proshorion as a *naustathmos*, see below).

Over centuries, the Neorion Gate (Oryakapı, Bahçekapı, Ebraike/Jewish Gate) in the sea walls at the Golden Horn³⁵ called to mind the former harbour, which had granted access

to the then silted up harbour, located east of Balıkpazarı kapısı (Yenicami kapı, *porta piscaria*). The sea walls and gates from the Zidankapı (Meyvekapı/Fruit Gate, Perama Gate) eastward to the exit of the Golden Horn have fallen victim to the railway construction of the nineteenth century³⁶. The course and position can only be approximated using old plans and views. In a very shallow sigma-shaped course to the southeast of the Neorion Gate, Berger believes that he sees an indication of the early Byzantine coastline in the harbour area. The sharp protrusion west of the gate would result from the later laying of the (old) wall³⁷ further into the silted up Neorion area³⁸. However, if the term Keratembolin (see above with n. 24) is an expression of the topographical reality of yesteryear, then the harbour basin should have had a much greater degree of curvature (fig. 1).

The remnants of the quayside (see fig. 2), made from large blocks³⁹, which were uncovered during construction of

32 Synaxarium ecclesiae Constantinopolitanae 935-938, Synaxar. sel. Mc (Delehaye). – Magdalino, Constantinople 34. 106. – On the diakonia concept in general, see Magdalino, Church, Bath and Diakonia.
 33 Notitia urbis Constantinopolitanae 240, 13. English translation in Matthews, Notitia 95. – John Skylitzes, Synopsis 411 (Thurn). – Müller Wiener, Häfen 10-13, 39-40. – Ahrweiler, Byzance et la mer 431-433 (partly confused, conceiving the Neorion shipyard as the younger one). – Janin, Constantinople 236. – Berger, Regionen und Straßen 373, 376. – On the question of where the dromons were prepared to bring Nikephoros Phokas to the city in 963, Leon Diakonos, Historia III 7 (47 Hase) seems, however, to suggest that the shipyard area (*ta neoria*) was located on the Constantinopolitan bank.
 34 Cf. Magdalino, Review 259.
 35 The clear references extend to Acta et diplomata graeca III 19 and 21 (privilege to the Pisans 1112) and Georgios Pachymeres, Relationes historicae V 10 (II 469 Failler). – Schneider, Mauern und Tore 87, 104. – Asutay-Effenberger, Porta veteris rectoris 129, 131. – Berger, Ufergegend 160, 163.

36 Schneider, Mauern und Tore 66.
 37 A part »may have been observed« (so Dark, Eastern Harbours 154 n. 5) west of the Egyptian Bazaar near the Balkapanı Hanı at the Tahtakale sokak(?) »and would have [...] stood immediately landward of the [...] coast-line« (see n. 37 below).
 38 Berger, Untersuchungen 429. – Berger, Ufergegend 160 fig. 2; 162, 164. – The repairs to the said sea walls (Schneider, Mauern und Tore 96-100) correctly connected by Berger, Häfen 81-82 with Emperor Theophilus (829-842) (see also Rizos, Epigraphy 154-155, 157), meant, although they included course changes (Berger, Ufergegend 164 and Berger, Häfen 83), a premature end to the Neorion as an important naval harbour.
 39 Dark, Eastern Harbours 152-154 (refers to a letter from the British diplomat C. Marling to A. B. Skinner, Victoria and Albert Museum, about the find). Magdalino, Review 258 refers to the respective letter as a »third-hand-report«. A detailed excavation report would be desirable, but does not exist. Magdalino cannot offer an alternative, thus his argument is unsubstantial.

the Ottoman main post office in Sirkeçi (Yeni Posthane sokag) in 1905, between 8 and 10m below the modern level, are probably attributable to this part of the harbour⁴⁰. The bank projecting there on its eastern flank would, at the same time have revealed a clear separation from the second harbour bay of the Prosporon, bounded by a sigma-shaped wall⁴¹.

Originally the cape east of it, at the end of the peninsula, now called the seraglio tip, would have given it the name Bosporion⁴², but the second denomination prevailed: Prosporon⁴³, deriving from προσφορά, πρόσφορος (prospora, prosporos, »gift«, »aliment«; »useful«, »beneficial«), which emphasises the importance of the harbour for the (food) supply of ancient Byzantium and early Constantinople. Warehouses (*horrea*) for grain and oil were located near the banks, although it cannot be ruled out that they lay (as in the case of the reservoirs on the Propontis coast between the Harbour of Theodosius and the Harbour of Julian) between Neorion and Prosporon⁴⁴. Not far from there in the hinterland, parts of the Strategion – formerly a parade ground, then the Forum⁴⁵ – accommodated the cattle market and slaughterhouse for the animals being delivered⁴⁶. A passage in Themistios (Oratio 4, 60d [I 86 Schenkl/Downey]) about »harbours, through the gates of which the sea flows and intertwines with those in the middle of the market«, may allude to the conditions here (and also at the then new Harbour of Julian)⁴⁷.

With the relocation of the economic and harbour axis of the city to the Mese and Propontis from the late sixth / early seventh century, the decline of the Prosporon and its surroundings began – a process accompanied by demographic contraction⁴⁸. In addition, the silting seems to have been faster here than in the Neorion⁴⁹. After all, it took until the reign of Constantine V, when the population reached a low point⁵⁰, that the cattle market was relocated from the Strategion to the Forum Tauri⁵¹, because the former was too

far away from the reduced centre and the customers. A certain possibility for the landing of goods must have continued to exist, possibly in an early form of the later *skalai*. In the early tenth century, the Book of the Prefect instructed the μακελάριοι (*makelarioi*, »butchers«) to pursue their business (again) in the Strategion until the beginning of the pre-Easter Lent⁵²; hygienic considerations in an again growing city can be assumed to be behind this measure (fig. 2).

Also the only reconstructed course of the sea walls indicates a residual harbour. After a previously straight course from the west, the walls recessed south on the eastern edge of the former Bosporion harbour bay, clearing a triangular piece of land in order to integrate a gate, that of Eugenios (Yaliköşkü kapı), into the walls, a door, which had granted access to the old harbour⁵³. A continued straight course of the sea walls, which otherwise were built further out into the mostly silted up harbour basin, would have made including the gate impossible, and that was apparently not in the public interest – and would have probably devalued the traditional function of the gate.

Already in the time of Julian, it was adorned with a statue of him⁵⁴, supplemented by an inscription (recorded in Anthologia Palatina IX 689), which extolled the Emperor's services towards the safety of the city. This decoration may seem astonishing given his simultaneous efforts for another harbour, even named after him, in the south of the city⁵⁵, but the ruler wanted to orchestrate all current and future landing points to Constantinople. The then ceremonial inspections of the granaries in the vicinity of the harbour served these purposes⁵⁶; the Eugenios Gate had at best a transitory role.

Only after hundreds of years on the margins, did the harbour succeed in gaining importance from the tenth century, like the entire harbour area and economic axis along the Golden Horn. Nicephorus II Phocas (reg. 963-969) had the

40 The area of 8-10m above sea level forms a terrain that continues to the west and east, the lower ground in front of the sea is considered by Dark, Eastern Harbours 153 in Early Byzantine times as open water in the bay(s) that formed the base for Neorion and Prosporon

41 Patria Konstantinupoleos III 149 (263-264 Preger). – Berger, Untersuchungen 425: before Theophilos.

42 Patria Konstantinupoleos III 149 (263-264 Preger). – van Millingen, Walls 226. – Berger, Untersuchungen 424. – Ercan, Yenikapı 19-22. – Berger, Toponyms 157-158.

43 Müller-Wiener, Bildlexikon 57. – Günsenin, Harbours and Shipbuilding 414.

44 Notitia urbis Constantinopolitanae 233-234, 15-17. English translation in Matthews, Notitia 90. – See Küzler, Harbour of Theodosius 39 n. 44, in this volume. – Günsenin, »City« Harbours 101-102 (fig. 14.4) considers whether building remains uncovered in 2009 during rescue excavations inside the Sirkeçi train station could be linked to the Early Byzantine reservoirs. According to Dark, Eastern Harbours 153, this area would still be underwater at that time (see n. 37 above). – Magdalino, Review 258 n. 4 suggests to the reader, the author of this contribution (German version of 2016) had not consulted Günsenin, »City« Harbours, regarding the Sirkeçi excavations. This assumption is unfounded (see Daim, Häfen 94 n. 42). This also concerns the contribution by Waksman/Girgin, Production des céramiques 445-446. 451-455, which has, however, not been quoted due to the lack of detailed information on the harbour. The archaeological finds of ceramics, which had been analysed, testify to a workshop in the excavated area (today the train station) that was active in the 13th and 14th c., but a connection with the harbour was no longer verifiable.

45 Pseudo-Hesychios, Patria 39 (Preger). – Patria Konstantinupoleos II 59 (183 Preger). – Cf. Xenophon, Anabasis VII 1, 24. – The reception of the emperor returning from Asia Minor or the war with the Persians at the Strategion in the Early Byzantine period may still reflect this first function (Konstantinos Porphyrogenetos, De exped. 138). – Bauer, Stadt, Platz und Denkmal 224-227. – Mango, Triumphal Way 177-178. 187. – Westbrook, Forum of the Strategion 5-7. – Magdalino, Renaissance 58. – Berger, Toponyms 160-161.

46 Kislinger, Lebensmittel 314-315.

47 Dark, Eastern Harbours 160. – In this direction Mango, Triumphal Way 188.

48 Again, see Kislinger, Better and Worse Sites, in this volume.

49 The land formerly projecting to the Seraglio point (cf. plan sketch in Dark, Eastern Harbours 161 fig. 1, here slightly modified: fig. 2) with the 8m contour line, which roughly corresponds to the Late Antique coastline (op. cit. 153), probably promoted together with the counterflow from the Bosphorus (Dionysii Byzantium Anaplus, chap. 6 [3-4 Güngerich]) the deposition of sediments from the tributaries of the Golden Horn.

50 Mango, Développement 53-54, estimate of 40 000 inhabitants is likely to low.

51 Patria Konstantinupoleos III 149 (263-264 Preger).

52 Book of the Eparch/Eparchenbuch 15,1. 5 (122. 124 Koder). – Mundell Mango, Commercial Map 199-200.

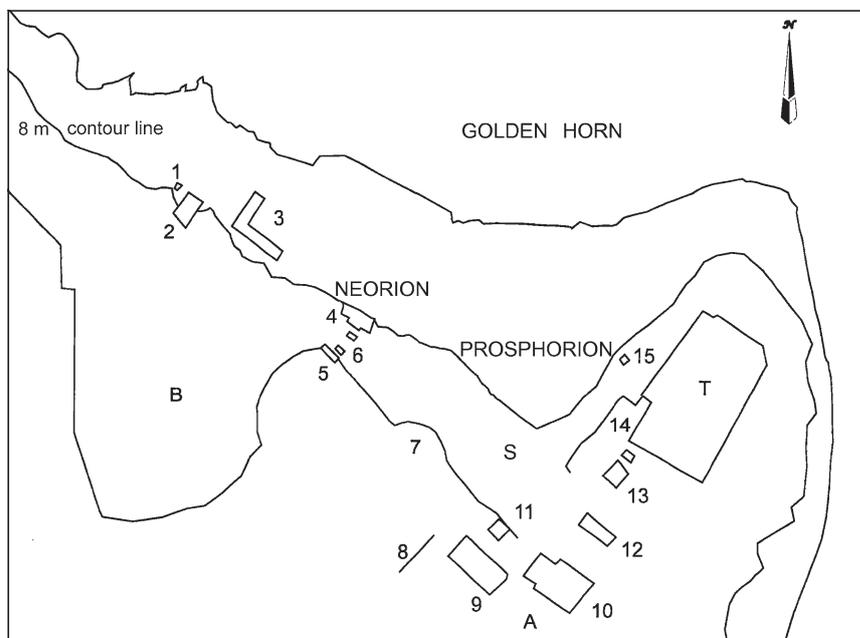
53 Berger, Ufergegend 163 fig. 2. – Berger, Häfen 81. – Schneider, Mauern und Tore 90-92.

54 Mango, Triumphal Way 178-179. 177 n. 40: a Victory found nearby could be a remnant of the statue. – Schneider, Mauern und Tore 96.

55 See Heher, Harbour of Julian, in this volume.

56 Konstantinos Porphyrogenetos, De cer. II 51 (III 394-398 Feissel [CFHB 52/3]).

Fig. 2 Sketch map showing the position of the Neorion and Prospheorion Harbours; the 8 m contour line probably corresponded with the Early Byzantine coastline. – Additional map details: **1** Hurmalı Han; **2** Balkapanı Han; **3** Ottoman spice bazaar; **4** new post office; **5** the so-called Palace of Botaneiates and substructures on Cemal Nadir Sk; **6** structures noted by Mamboury and Schneider; **7** interruption in the slope, which was artificially terraced in parts in the Byzantine period, with possibly a larger structure at the point marked; **8** colonnades at Çatalçesme Sokak; **9** Basilica; **10** Hagia Sophia, with the Byzantine atrium facing west; **11** Church of Theotokos Chalkoprataia; **12** Hagia Eirene; **13** Byzantine structures and cisterns at the Istanbul Archaeological Museum; **14** artificial terrace line; **15** Byzantine cistern, possibly from the 6th c., on the site of the Gülhane Park. – **A** Augustaion; **B** Ottoman Grand Bazaar and han; **S** Strategion; **T** Topkapı Sarayı terrace. – (From Dark, Eastern Harbours fig. 1; with modifications by E. Kislinger, implemented by J. Preiser-Kapeller).



wings of the main gates of Tarsus and Mopsuestia in Cilicia (conquered in 965) brought to Constantinople⁵⁷, which henceforth adorned the imperial gates (*basilikai pylai*) at the two ends of the capital. While the location in the west at the Golden Gate of the land wall is unequivocal⁵⁸, it remains debatable where the corresponding counterpart to the east was, that is, towards the end of the peninsula.

Two aspirations only become apparent in the twelfth century, when, in the wake of the relocation of the imperial residence at the Old Palace ([south] east of the Hagia Sophia)⁵⁹ to the Blachernae district on the north-western shore of the Golden Horn, the imperial triumphal processions through the city changed its course⁶⁰. Cynically speaking, with the decreasing frequency of victories, these processions were also shorter. In any case, the starting point of the procession had to be a landing stage or harbour from which the city was entered through a gate. Mango named the Eugenios Gate for the latter⁶¹, near the (former, because silted up) Prospheorion. From there, a broad road led via the Strategion through the valley between the first and second hills up to

the Chalkoprataia Church and the Augustaion (or Milion)⁶². The porticoed street discovered near the Çatalçesme sokak can be identified with it⁶³. Magdalino, however, sees the Gate of St Barbara (Topkapı) at the Seraglio Point⁶⁴ as the starting place of the triumphal processions of the twelfth century, which would have led across the Acropolis to the Hagia Sophia⁶⁵. At the Seraglio Point, especially, the strong current from the Bosphorus is divided⁶⁶, which does not allow easy landing there.

The Late Byzantine *naustathmos* was therefore at the Gate of Eugenios⁶⁷, from there one went from the Patriarchate by ship to the Blachernae or in the opposite direction to the Hagia Sophia⁶⁸. Although the *Scala Timasii* may be located near the Gate of St Barbara⁶⁹, the ascent to the Acropolis remained very steep. Whether the path that Patriarch Arsenios Autoreianos took from the Hagia Sophia (past the Column of the Goths) to the Monastery of St Barbara near the Seraglio point was also technically suitable for triumphal marches has to be left undecided; it would roughly correspond to Street E reconstructed by Berger⁷⁰.

57 Ioannes Skylitzes, Synopsis 270 (Thurn). – Hild/Hellenkemper, Kilikien und Isaurien 59. 437.
 58 Asutay-Effenberger, Landmauer 54-71.
 59 Müller-Wiener, Bildlexikon 229-237. 223-224.
 60 cf. Berger, Processions 83-84.
 61 Mango, Triumphal Way 178. – On the reception of emperors returning from Asia Minor at the Strategion already in Early Byzantine times, thus near the Gate of Eugenios, see n. 43 above and Westbrook, Forum of the Strategion 8-9.
 62 Mango, Triumphal Way 177-178. – Cf. Mundell Mango, Porticoed Street 30. 48 and Westbrook, Forum of the Strategion 16-26 fig. 10.
 63 Dark, Eastern Harbours 154. 156-157 n. 10. – Berger, Regionen und Straßen 390-391 (Street C, which of course runs east of the Strategion and leads into the Mese). However, the reconstruction of a network of rigidly straight-lined streets negates the topographical reality of the terrain, which would defy this. So also Westbrook, Forum of the Strategion 17. 27 n. 93.
 64 Schneider, Mauern und Tore 94.
 65 Magdalino, Columns 147-156.
 66 Dionysii Byzantii Anapulus, cap. 6 (3-4 Güngerich). – Ioannes Kantakouzenos, Historia IV 31 (III 232 Schopen). – Nikephoros Gregoras, Historia XVII 6 (II 860

Schopen). – Mango, Triumphal Way 179 n. 43. – Pryor/Wilson, Chain 375-376.
 67 Ioannes Kantakouzenos, Historia IV 31 (III 232 Schopen). – Ioannes Kantakouzenos, Historia IV 11 (III 75-76 Schopen) locates an anchorage at the Eugenios Gate, to which ships were brought from the shipyard at Kontoskalion (see IV 40 [III 290 Schopen] and Nikephoros Gregoras, Historia XVII 4 [II 854 Schopen]).
 68 Georgios Pachymeres, Relationes historicae VIII 23 (III 195 Failler). – Pseudo-Kodinos, Traité, chap. 12 (287 Verpeaux). – Silvester Syropoulos, Mémoires IV 1 (196 Laurent).
 69 The mooring is no longer documented under this name after the 5th c. (Notitia urbis Constantinopolitanae 233, 15; English translation in Matthews, Notitia 89), but it is conceivable that it continued as the skala Akropoleos (Theophanes, Chronographia 434 [de Boor]), cf. Berger, Regionen und Straßen 362. The ferry to Chalkedon localised at the Gate of St Barbara (op. cit. 392) lay recte in regio V further west.
 70 Georgios Pachymeres, Relationes historicae IV 8 (II 353 Failler). – Berger, Regionen und Straßen 390. 392. – Magdalino, Columns 152-154 here assumes (»we might speculate«) an already pagan processional path continuously used.

It is certain that there was a column ensemble (*ta Kionia*)⁷¹ at or in front of the gate where the triumphal processions began⁷². According to the rhetorically embellished description⁷³, it was a sigma-shaped portico⁷⁴ in two rows, the back row higher and the front offset, where, together with the transverse ends in front view, an overall cross-shaped impression was created. Regarding the importance of the harbour (apparent since the reign of Julian, although increasingly reduced by siltation) and the available space, the Eugenios Gate at the Proosphorion (from the Middle Byzantine period in remnants) has an advantage over the Gate of St Barbara⁷⁵ (although the second one was also an *oraia pyle*⁷⁶ due to its door-wings, probably brought from Cilicia in 965). In 1284, the bones of Patriarch Arsenios, who had been exiled to Prokonnesos and died there, were transferred to Constantinople, where they were received by

the emperor and clergy at the Gate of Eugenios (indicating a landing there) and brought in solemn procession to the Hagia Sophia⁷⁷.

In Palaeologan Byzantium, the former harbour area otherwise served as the location of the state grain market (Raybe)⁷⁸. Whether it was grain or other merchandise, when the Old Harbours were silted up, goods would have been unloaded at the typical *skalai* of the Golden Horn⁷⁹. The two most eastern Italian *skalai* were in Genoese possession, the first at the *Porta veteris rectoris* since 1170⁸⁰, the second to the east from 1192 onwards, which formerly belonged to the Manuel Monastery⁸¹. That of 1170 had two and the other three wooden jetties projecting into the sea⁸². It is possible that the eastern *skala* had some local connection with the reduced Late Byzantine Harbour of Proosphorion (*naustathmos*) at the Gate of Eugenios (see n. 67 above).

71 Niketas Choniates, *Historia* 346 (poros ton Kionion) 362-363 (van Dieten). – Magdalino, *Columns* 148-149; Magdalino, *Triumph of 1133*, 56 with n. 15. – Schneider, *Vorarbeiten* 90 (no. 1) listed »an der Sarayspitze« finds from »Basen, Säulen, Kapitellen« at the railway construction of the 19th c. The find spot in the folding map, which according to Schneider can only be given approximately, does not permit a clear assignment to one of the two gates in question (but see now below n. 73).

72 Niketas Choniates, *Historia* 18-19 (a. 1133). 157-158 (a. 1167). – See also n. 73.

73 Theodoros Prodromos, *Historische Gedichte* VI 221, 25-27 (Hörandner). Analysis of poem VI by Magdalino, *Triumph of 1133*, esp. 60-62, English translation 66-70. It seems to be of no concern for Magdalino that the Prodromos poem VI vv. 1109-1113 mentions that many spectators from the quarter watched the triumphal procession (223 Hörandner). This does not accord with the fact that the Acropolis area was not densely populated. However, this might have been a rhetorical topos.

74 Mundell Mango, *Porticoed Street* 33. 37. – A less elaborate facility of this kind was located at the Harbour of Sophia: *Notitia urbis Constantinopolitanae* 232: *Porticum semicircularum, quae ex similitudine fabricae sigma Graeco vocabulo nuncupatur*. English translation in Matthews, *Notitia* 88: »Semicircular colonnade, which from the resemblance in its construction is called by the Greek name Sigma«.

75 From the course of the streets it is also not clear to me how the Acropolis route/Street E (Berger, *Regionen und Straßen* 391) could unite with the street from the Gate of Eugenios to the Strategion and further (see n. 62), according to Magdalino, *Columns* 152. I also think it more likely that a horse transported by boat to *Ta Kionia*, that panicked and broke away, took the broad street across the Strategion to Hagia Sophia (Magdalino, *Columns* 151), where it was captured again (Niketas Choniates, *Historia* 346 [van Dieten]), rather than taking the narrower street far over the Acropolis: Kislinger, *Eugenios-Tor* 725-731 (vs. Magdalino, *Triumph of 1133* and earlier Magdalino, *Columns* [2012]). – Peschlow, Kai von Konstantinopel analysed the remnants of columns and architectural elements at the Seraglio Point (see above n. 71) and related them to the Gate of Barbara, which seems correct. He followed Magdalino in locating the new (saec. XII) triumphal way there, but was unaware of the contributions by Mango, *Triumphal Way* (2000) and Kislinger, *Eugenios-Tor* (2017). Cf. Heher/Simeonov, *Ceremonies by the Sea* 235-237. Mag-

dalino, *Columns* makes no mention of the relevant passage in Pseudo-Kodinos, *Traité* chap. 12 (286-287 Verpau, resp. 266-268 Macrides/Munitiz/Angelov, *Pseudo-Kodinos*, with English translation), which is familiar to him (Magdalino, *Constantinople* 77, n. 118 [2007]). This passage describes the reception of an imperial bride at the Eugenios Gate in the area of the Acropolis(!), testifying to the ceremonial function of this gate (denied by Magdalino, *Review* 259). At the same time, this passage demonstrates the conventional positioning of the gate.

76 Guiland, *Chaine* 102-103. 108; Peschlow, Kai von Konstantinopel and my contribution, *Golden Horn*, n. 40, in this volume.

77 Nikephoros Gregoras, *Historia* VI 2 (I 167 Schopen).

78 *Acta et diplomata graeca* III 146 (treaty with Venice, 1406). 156 (treaty 1418), 166 (treaty 1423). 179 (treaty 1431). 209 (treaty 1442). – Chrysostomides, *Venetian Commercial Privileges* 312-329 n. 130.

79 Generally on their structure (quays, landing stages, warehouses and houses with workshops), see Müller-Wiener, *Häfen* 21-22. – Jacoby, *Houses and Urban Layout* 272-274, and the contributions of Preiser-Kapeller and especially Schreiner, in this volume.

80 *Acta et diplomata graeca* III 35 (insertion in the privilege of 1192, on this the following n. 81). 53 (handover protocol of 1201, see n. 78 below). – Sanguineti/Bertolotto 367 and 366 (handover protocol, on imperial instruction [Dölger/Wirth, *Regesten* 1495] of 10 April 1170). – Dölger/Wirth, *Regesten* 1497. – Penna, *Imperial Acts* 150-151. On the gate, see Asutay-Effenberger, *Porta veteris rectoris* 129. 135 and Berger, *Ufergegend* 162. 164-165. On the location of the Genoese establishment at the former *thermae Honorianae*, see Magdalino, *Review* 258 n. 5. – Schreiner, *Western Landing Stages* 155-159 with fig. 7, in this volume.

81 *Acta et diplomata* III 27. 28. 31. – Sanguineti/Bertolotto, *Documenti* 426. 429. – Dölger/Wirth, *Regesten* 1609. – For this purpose (according to the previous written instructions of Demetrius Tornikes, *cancellarius vie* [i. e. *logothetes tou dromou*]) a handover protocol (*practicum traditionis*) was issued, only preserved in Latin, dating from April 1192: Sanguineti/Bertolotto, *Documenti* 434-444 (no. X), on the *skalai* 434. 437 f. – Penna, *Imperial Acts* 164-166. – On the Monastery of Manuel, see Schreiner, *Western Landing Stages*, in this volume.

82 Sanguineti/Bertolotto, *Documenti* 438, cf. 487.

Summary / Zusammenfassung

Neorion and Proosphorion: The Old Harbours on the Golden Horn

Byzantium, the ancient predecessor of Constantinople, already possessed harbours. Due to its smaller surface area and the urban orientation toward the Golden Horn, these were located in its southeastern part. Both the northerly located Neorion (which according to the name included a wharf), as well as the Proosphorion, were round harbours of the ancient type equipped with moles and colonnades. The new function of the city as the imperial capital resulted in a rapid increase of the population from the fourth century, whose supply required an extension of the harbour's capacity. Thus, granaries were erected next to the Proosphorion, so that the neighbouring Strategion, originally a parade ground, became a market area. Simultaneously, further harbours developed on the coast of the Sea of Marmara, the central traffic axis gradually relocated to there and they became dominant with the population decrease in the seventh to ninth centuries. The waves of plagues from 542, which ravaged the crowded quarters of the Golden Horn in particular, additionally conferred on the area a negative image as the city's backyard. The old harbours there silted up; only in the part of the Proosphorion adjacent to the Acropolis (at the Gate of Eugenius) a remaining operation may have continued into the Late Byzantine period. From the tenth/eleventh centuries, more and more quays and jetties (*skalai*) utilised the conditions of the Golden Horn as a natural harbour.

Neorion und Proosphorion – die alten Häfen am Goldenen Horn

Auch Byzantion, die antike Vorgängersiedlung von Konstantinopel wies bereits Häfen auf. Bedingt durch die geringere Fläche und die urbane Orientierung zum Goldenen Horn hin lagen sie an dessen südöstlichem Abschnitt. Beide, das nördlicher situierte Neorion (welches auch dem Namen nach eine Werft beherbergte) als auch das Proosphorion waren mit Molen und Kolonnaden versehene Rundhäfen antiken Typs. Die neue Funktion der Stadt als imperiales Zentrum ließ ab dem 4. Jahrhundert ihre Einwohnerzahl rasch ansteigen, zu deren Versorgung musste man auch die Hafenskapazitäten erweitern. So wurden Getreidespeicher beim Proosphorion errichtet, das angrenzende Strategion, ursprünglich ein Exerzierplatz wurde zum Marktgelände. Zugleich entstanden an der Marmarameer-Küste weitere Häfen, die zentrale Verkehrsachse verlagerte sich zunehmend dorthin, mit dem Bevölkerungsrückgang des 7.-9. Jahrhunderts wurde sie dominant. Die Pestwellen ab 542, welche in den überfüllten Vierteln am Goldenen Horn besonders wüteten, hatten zudem jener Gegend ein schlechtes Image als Hinterhof der Stadt eingebracht. Die alten Häfen ebendort fielen der Verlandung anheim, nur im an die Akropolis angrenzenden Teil des Proosphorion (beim Eugenios-Tor) dürfte ein Restbetrieb bis in die byzantinische Spätzeit fortbestanden haben. Die Gegebenheiten des Goldenen Hornes als Naturhafen nutzten ab dem 10./11. Jahrhundert vermehrt Kais und Landebrücken (*skalai*).

Heptaskalon and Other Selected Moorings on the Golden Horn

The »Heptaskalon«, a construction mentioned in Byzantine sources, can be translated as »Seven *Skalai*«¹. The term *σκάλα/skala*, *σκαλίον* (from lat. *scala*) denotes a ladder, stairs, a step or a terrace, but also a landing stage. Descriptions of *skalai* all-around on the shores of Constantinople are given by Michael Attaleiates in the eleventh century (see also below)². In contrast, it is more difficult to reconstruct the exact location, structure and function of the Heptaskalon, as will be explained in three parts: the first is devoted to its localisation based on written sources from the Byzantine period; the second considers the importance of the Golden Horn region, where the Heptaskalon can be presumed to have been located, as a harbour in Byzantine and Ottoman times (considering other moorings); and the third and final part deals with the Heptaskalon harbour in the fourteenth-century history of John VI Kantakouzenos (for this chapter, see **map 2** on p. 237).

The Church of St Akakios en tō Heptaskalon and Its Localisation

The first mention of the toponym can be found in connection with the renovation of the Church of St Akakios under Emperor Basil I (reg. 867-886). In the so-called *Vita Basilii* it says: »Moreover, since the holy church of the martyr Akakios, located at Heptaskalon, was on the verge of collapse and was falling into ruin, he had it restored and secured with all kinds of reinforcements«³. This church thus becomes the first link in locating the Heptaskalon. St Akakios was a »native« martyr who was executed in Byzantium in the period of Diocletian's persecution of Christians in c. 303/304. The construction of a church above his grave is attributed to Emperor Constantine I

the Great (323-337) or his successor Constantius (337-361). In 359, the corpse of Constantine I the Great was temporarily buried here. Emperor Arkadios (395-408) also paid a visit to the church⁴. The church was first renovated in the reign of Justinian I (527-565)⁵, before being renovated again under Basil I.

Where was this church? According to the Life of St Akakios, he was martyred at the Staurion and was buried there. Albrecht Berger convincingly equated the Staurion with the better-known Zeugma, which he argues served as »nodal point for traffic to and from Sykai [over the Golden Horn]«. He further argues that »it was at the bottom of the street from ta Olybriou past the Konstantianai [a palace dating from the time of Constantius with a bath complex] to the Golden Horn«⁶. The localisation at the Golden Horn is also documented in the *Notitia Urbis Constantinopolitanae* (fifth century), which locates the Church of St Akakios in the city's area of *Regio X*⁷. The most accurate location of the Church of St Akakios in the modern urban area of Istanbul (based on information in the Typikon of the Bebaia Elpis Monastery, see below) comes from Arne Effenberger, who assumes that it was »in the area of Küçük Pazar – approximately in the area between Üç Mihrâplı Mescid [...] and Kepenekçi Sinan Paşa Mescidi«, thus about 200m away as the crow flies from the (present) shore of the Golden Horn⁸ (again, see **map 2** on p. 237).

A further clue for the localisation comes from the place of another martyrdom, namely that of St Theodosia, who at the time of Iconoclasm under Leon III (717-741) was said to have been brutally put to death by the emperor in 726 or 730 after resisting the replacement of holy images. According to an anonymous encomium from the period around 1300, she »died at the aforementioned location of

1 Another interpretation, according to which the name derives from the neighbouring seventh region of the capital, was brought up by Berger, *Regionen und Straße*, for discussion. Effenberger, *Klöster 264-265* in turn agrees with the opinion already expressed by Prinzing/Speck, *Fünf Lokalitäten*, whereby the Heptaskalon was a »stairway« and not a landing stage. – See also Magdalino, *Pantokrator 34-35* (with n. 5).
 2 LBG vol. 7, 1558-1559. – See also Makris, *Studien 180-182*. – Michael Attaleiates, *Historia* 213, 31-214, 13 (Tsolakis); English translation: Kaldellis/Krallis, Michael Attaleiates 507.
 3 Theophanes Continuatus, *Chronographia (Vita Basilii)* V 82, 13-17 (translation 270-272 Ševčenko). – For this localisation, see *Synaxarium ecclesiae Constantinopolitanae* 661, ll. 25-26, 664, ll. 45-46, 730, l. 3, 834, l. 25, 868, ll. 29 und 57, 933, l. 54 (Delehay).

4 Janin, *Siège de Constantinople 13-15*. – Stauridou-Zaphraka, *Mosele* 85. – Berger, *Untersuchungen* 452. 464-468 (with sources). – Berger, *Konstantinopel* 84. – Schreiner, *Konstantinopel* 102. – Pfeilschifter, *Der Kaiser und Konstantinopel* 97 (on the visit of Arkadios, with sources).
 5 Prokopios, *De aedificiis* I, 4, 25-26 (26, 7-15 Haury/Wirth). – Berger, *Untersuchungen* 452. 464-468.
 6 *Vita Acacii Cappadocis* 240 B. – Berger, *Untersuchungen* 487. – Berger, *Konstantinopel* 84. 86. – See also the sketch based on Berger's reconstruction in Magdalino, *Oikoi* 55. – On Sykai, see also Sağlam, *Urban Palimpsest* 8-9.
 7 *Notitia urbis Constantinopolitanae* 237. – Berger, *Untersuchungen* 452. 464-468. – Magdalino, *Studies* I, 2 (map). – Berger, *Konstantinopel* 128 (German translation).
 8 Effenberger, *Klöster* 264-265.

the Leomakellon, near the well-known church of the most blessed Akakios, and the Heptaskalon»⁹. The Leomakellon, a food market, could thus provide another clue; unfortunately, the information on its location is far from clear. Albrecht Berger suggested equating the Leomakellon with another market place mentioned in the »Patria of Constantinople«, the Dimakellin, which is said to be »called by that name because Emperor Leon the Great (457-474) sold meat and his wife twisted gut strings« there¹⁰. Ewald Kislinger, on the other hand, was able to show that the Dimakellin, north or north-west of the Forum Tauri, was located much further south near the main street (Mese). Therefore, it cannot be identical with the Leomakellon located »near« the Church of St Akakios according to the Encomium on Theodosia (as Magdalino would like to equate this market with an agora mentioned by the historian Prokopios near the Church of St Akakios)¹¹.

Certainly located in the region around the Heptaskalon is the legend of the arrival of the relics of the martyr Stephanos in Constantinople, which were brought ashore at the Zeugma. The route by which the bones of Stephanos were taken from there to his church in the area of Konstantianai, was also followed by an annual procession on his feast day. At least this story proves the use of a landing stage at Zeugma¹². Thus, we can conclude from the information that the Heptaskalon was located in an area relevant for traffic (passing over the Golden Horn), of religious significance (Church of St Akakios, procession in memory of Stephanos) and of economic importance (market of Leomakellon). Magdalino, for example, elaborates: »the stretch of coast near St Akakios was known, from at least the tenth century, as the Heptaskalon, meaning »seven *skalai*«, which suggests that this was a particularly active port area«¹³.

The question of its localisation becomes even more complex because another Church of St Akakios is mentioned in the »Patria of Constantinople«. Here it says: »The brother of the Patrician Narses built Saint Akakios tes Kareas [of the walnut tree] in the time of Justin [II, 565-578] and Tiberios [I,

578-582]«¹⁴. Yet this church also seems to be located in the area of the older Church of St Akakios, as Albrecht Berger deduced on the basis of a note in a manuscript, according to which the Church tes Kareas was at a *basilikē porta*¹⁵. He associates the latter again with a *basilikē* market mentioned in an anonymous Late Byzantine Russian pilgrimage account (Magdalino proposes equating the market with the previously mentioned Leomakellon, which is doubted by Kislinger). In the English translation by George P. Majeska, the text reads: »You go east from there [meaning the Palace of Blachernai or the Monastery of Kosmas and Damian¹⁶] to St Theodosia. There is a Monastery of St Theodosia; the body of St Theodosia reposes there. [...] From there you go east to Basilike; there is a Frankish church [at] the end of the large Basilike Market«¹⁷. With the Church or the Monastery of St Theodosia we are again in the (wider) environment of the (older) Akakios Church on the Golden Horn, where the Church of St Akakios tes Kareas is to be found¹⁸.

The Patria lists another noteworthy site near the (older) Church of St Akakios: »In the Christokamaron [Arch of Christ] Christ was depicted near [the Church of] Saint Akakios, where the house of Mosele is, and this is why it received its name«¹⁹. The original owner of the »House of Mosele« was identified by Janin, Stauridou-Zaphraka and Berger as Alexios Mosele, the Droungarios of the Fleet, who was of Armenian origin. In 922, after losing a battle with the Bulgarians at Pegai (on the opposite side of the Golden Horn), he drowned while trying to reach the Byzantine fleet anchored in the Golden Horn. Romanos Mosele (presumably his son) then converted the house into a monastery; in the tenth century a school may have been housed here²⁰. As late as 1330, an abbot of the Monastery tou Mosele was mentioned in April of that year as a witness in a document of the Register of the Patriarchate of Constantinople²¹. Based on the information given in the Typikon of the Bebaia Elpis Monastery (see below), Arne Effenberger locates the Mosele-Monastery on the »main road that runs southwest through the valley, now dominated by the Atatürk Bulvarı«, and from ta Olybriou between the third

9 Kotzabassi, Dossier 273 (c. 19). – PmbZ no. 7788. – According to the earlier sources, however, Theodosia suffered her martyrdom at the Forum Bovis and was buried in the τὰ Δεξιοκράτους quarter, where she was also commemorated on 18 July, see Kotzabassi, Dossier 5-6, 27 (l. 40) and 28. – Janin, *Siège de Constantinople* 143-145. See also the explanations on the Christos Euergetes Monastery and the Church of St Theodosia below.

10 Patria Konstantinupoleos III, 104 (250, 16-18 Preger); for the English text, see Berger, Patria 186 and 316 (n. 115). – See also Berger, *Ufergegend*. – Magdalino, *Maritime Neighborhoods* 221. – Mundell Mango, *Commercial Map*.

11 Prokopios, *De aedificiis* I, 4, 26 (26, 14 Haury/Wirth). – Kislinger, *Lebensmittel* 316. – Magdalino, *Maritime Neighborhoods* 221. – See also Berger, *Ufergegend* 153. – Asutay-Effenberger/Effenberger, *Eski Imaret Camii* 23-24.

12 Berger, *Processions* 76. – See also the sketch in Magdalino, *Oikoi* 55 and 61-66 (with the sources).

13 Magdalino, *Maritime Neighborhoods* 221 (with map at the end). – Magdalino, *Studies* I, 99.

14 Patria Konstantinupoleos III, 116 (253, 19-254, 2 Preger); for the English text, see Berger, Patria 190. – Berger, *Untersuchungen* 468. – Janin, *Siège de Constantinople* 13-14. – Berger, *Konstantinopel* 169-170.

15 Berger, *Ufergegend* 154-155. – See also Effenberger, *Klöster* 265. – Asutay-Effenberger/Effenberger, *Eski Imaret Camii* 14. 33.

16 In the area of Kosmidion north-west of the Blachernai outside the city walls, see Özasan, *Cosmidion, Külzer, Ostthrakien* 471, and Simeonov, *Kosmidion*, in this volume.

17 Majeska, *Russian Travelers* 151-153. – Berger, *Untersuchungen* 468. – Müller-Wiener, *Häfen* 32. – Magdalino, *Maritime Neighborhoods* 221. – Kislinger, *Lebensmittel* 316-317. – See also Kafescioğlu, *Imperial Legacy* 41 and Mineva, *Pantokrator*.

18 See n. 9 for the localisation of the Church of St Theodosia.

19 Patria Konstantinupoleos III, 112a (253, 4-6 Preger); Berger, Patria 188-190. – See also Asutay-Effenberger/Effenberger, *Eski Imaret Camii* 27-28.

20 Stauridou-Zaphraka, *Mosele* (with sources). – Berger, *Untersuchungen* 516-517. – PmbZ no. 20241 (where the location of Mosele's house near the Myrelaion is taken from Janin without comment), 26844 and 30295 (also with information on school operations). – Janin, *Siège de Constantinople* 359. – Also wrong about the house of Mosele is Magdalino, *Maritime Neighborhoods* 214, stating that between the 8th c. and 11th c. there was only one aristocratic residence (Antonios's house near the Neorion under Emperor Michael III) near the harbour facilities on the Golden Horn. – On this, see also Kislinger, *Neorion*, in this volume.

21 Patriarchatsregister I no. 103, Z. 57. – Stauridou-Zaphraka, *Mosele* 92. – Mitsiou, *Historisch-Geographisches* 152-153.

and fourth hill led to Zeugma or the *basilikē pyle* in the sea wall²².

We cannot say anything more about the character of the Christokamaron. However, the passage in the *Patria* equated the Christokamaron with a similar-sounding monument, which served as an initial point for searching for the Heptaskalon along the Sea of Marmara and not on the Golden Horn. Because immediately before this passage, the *Patria* stated: »The Chrysokamaron – Behind the Myrelaion stood a golden statue, for which reason it was called the golden arch. It was stolen by thieves in the time of kaisar Bardas [d. 866]«²³. The famous Myrelaion complex was built under Emperor Romanos I Lakapenos (reg. 920-944) in *Regio IX* of the city not far from the coast of the Sea of Marmara. The church (and later mosque Bodrum Camii) is still preserved today²⁴.

This passage, or the equation of Chrysokamaron and Christokamaron (as Janin did), together with the confusing information of John VI Kantakouzenos in the fourteenth century (see below), motivated Müller-Wiener to postulate that »one must summarise the available information concerning the Heptaskalon harbour with that of the older Kaisarios harbour« – and, accordingly, locate it on the Sea of Marmara²⁵. Until today, therefore, various maps of Byzantine Constantinople show a Heptaskalon on the Sea of Marmara, or even two such localities, one on the Sea of Marmara and one on the Golden Horn. Müller-Wiener himself later revised his view and localised the Heptaskalon »at the Zeugma« on the Golden Horn in his book about the harbours of Constantinople²⁶.

The older localisation, however, was still used in 2001 by the English translators of the *Typikon* of the Bebaia Elpis Monastery from the fourteenth century, which provides the most extensive description of building conditions near the Church of St Akakios and the Heptaskalon. The monastery was rebuilt by the Megas Stratopedarches John Komnenos Doukas Synadenos²⁷ and his wife Theodora Komnene Palaiologina²⁸, or by their son, the Protostrator Theodoros Komnenos Doukas Synadenos²⁹ and his wife Eudokia Doukaina Komnene Palaiologina Synadene³⁰, probably between 1290 and 1300, and

extended by a daughter of Theodora Komnene Palaiologina³¹, Euphrosyne Komnene Doukaina Palaiologina³².

The boundaries of the monastery complex are presented as follows (based on the German translation of A. Effenberger, which is the most accurate one): »The enclosure begins at the large gate facing east, which is opposite the large houses of my dearly beloved sons, and passes the bakery and the whole estate of the Eunuch Panaretos³³. Then it turns west and follows the property line between the two gardens, the one of my dearly beloved son Kyr John, the Megas Konostaulos³⁴, and that of the monastery, and it continues to the public road that separates the monastery of Mosele³⁵ on the right. From here it continues to the enclosure wall [of the convent] of my Most Holy Mother Gorgoepekoos³⁶, following the same public road, goes along the garden called Gymnos³⁷, leaving the perimeter wall of the convent of Gorgoepekoos on the right. And it reaches the property boundary that separates our monastery from the convent of our mistress and beloved sister, the Protostratorissa Glabaina³⁸. And it then goes to our Kellia, which my dearly beloved son, the Protostrator³⁹, has built. Then it goes past our garden, leaving on the right the vineyard of my mistress and sister, the Protostratorissa, and reaches the public street in front of the monastery called Kyriotissa⁴⁰. Then it turns east along the same public road and gets to the other road near [the church] of St Onouphrios⁴¹, where again there is a vineyard, which we once acquired as common farmland from the above mentioned Kaligas⁴² for 400 Hyperpyra; and then it was planted by us and became the vineyard that you see now. From here, it goes north and passes the tenement houses on the boundary of the property, where the sieve makers [Greek *koskinades*] live, to the Church of St Akakios, and also includes this church without the Katechoumena. And it goes all the way to the big gate of this church. Then it ends at the great gate of our monastery, leaving on its right side the house of Aborate⁴³ and the tailor Andreas⁴⁴ and leading [from the house] of Solatos⁴⁵ to the large cloister gate where it began«⁴⁶ (see also **map 2** on p. 237).

22 Effenberger, Klöster 266 and plan on p. 288. – See also Stauridou-Zaphraka, Mosele 80-82.

23 *Patria Konstantinupoleos III*, 112 (252, 17-253, 3 Preger); English translation in Berger, *Patria* 188.

24 Striker, Myrelaion. – Restle, Konstantinopel 491-507. 513-515. – For the structural situation before the measures of Romanos Lakapenos, see Restle, Konstantinopel 417-418. – Niewöhner, Myrelaion.

25 Müller-Wiener, *Bildlexikon* 61-62. – Janin, Constantinople 229-230. 331.

26 Müller-Wiener, Häfen 11.

27 PLP no. 27125.

28 PLP no. 21381. – Effenberger, Klöster 260 (n. 21).

29 PLP no. 27120.

30 PLP no. 27096.

31 PLP no. 21373.

32 Effenberger, Klöster. – Kidonopoulos, Bauten 69-74. – For the older history of the monastery, see also Janin, *Siège de Constantinople* 158-160 (but with localisation at the Sea of Marmara).

33 By Effenberger, Klöster 263 (n. 28) with Berger, *Roman, Byzantine, and Latin Period* 14, interpreted as a proper name.

34 PLP no. 21486.

35 On the Monastery of Mosele, see above.

36 Kidonopoulos, Bauten 70 and 74-76 on the Monastery of Theotokos Gorgoepekoos and its presumed location (see also map II, 289). – Effenberger, Klöster 267. – Mitsiou, *Historisch-Geographisches* 148-149.

37 Effenberger, Klöster 267, on the location of this garden.

38 PLP no. 4202. – Kidonopoulos, Bauten 41-42, on this monastery and to the identification of this Glabaina with the Protostratorissa Maria/Martha Komnene Branaina Palaiologina Doukaina Tarchaneiotissa Glabaina. – See also PLP no. 27511.

39 Theodoros Komnenos Doukas Synadenos, see above.

40 Kidonopoulos, Bauten 79-80, on the Theotokos Kyriotissa Monastery (probably the Kalenderhane Camii) and its location (see also map II, 289). – Effenberger, Klöster 268.

41 Kidonopoulos, Bauten 71 and 115, on the Church of Hagios Onouphrios and its location (see also map III, 291). – Effenberger, Klöster 269.

42 PLP no. 10329.

43 PLP no. 40.

44 PLP no. 927.

45 PLP no. 26285.

46 Effenberger, Klöster 262-264, translated after the Greek text in Delehay, *Deux typica* 95,1-96,3. – A somewhat different English translation is given by Thomas/Hero, *Byzantine Monastic Foundation Documents 1563-1564* (no. 57, translated by Alice-Mary Talbot). – A partial German translation can also be found in Kidonopoulos, Bauten 70-71.

Most recently, A. Effenberger convincingly equated the Church of the Bebaia Elpis Monastery with the Vefa Kilise Camii (converted into a mosque after 1453), which gives us, for the first time, an architectural benchmark for the localisation of the Heptaskalon. In his study, Effenberger also attempts to locate as accurately as possible all the other buildings mentioned in the *Typikon*, which yields the best reconstruction of this urban area so far⁴⁷. The multitude of aristocratic possessions of relatives of the founder, as well as other monasteries listed in the *Typikon*, but also the mention of the *koskinades*, which according to the *Lexikon zur Byzantinischen Gräzität* could be translated as »winnowers« or »sieve maker«. In any case, as a professional group related to the cereals trade, (which also fits later Ottoman information on the function of the area, see below), they indicate the heightened importance of the areas on the Golden Horn for the life and economy of Constantinople⁴⁸.

The Golden Horn and Its Moorings in (Late) Byzantine and Ottoman Times

The Golden Horn has served the city since its founding as a »natural« harbour: 600 to 700m wide and up to 45m deep in the middle, it offered sufficient space and depth for medieval and early modern shipping⁴⁹. After the harbours facing the Sea of Marmara had formed the focus of shipping between the sixth and tenth centuries, the Golden Horn returned to a position of dominance from the eleventh to twelfth centuries⁵⁰. For the later part of the eleventh century, Michael Attaleiates describes the ownership of the landing stages (*skalai*) along the coasts of the capital: »Along the shores that gird the Queen of Cities [Constantinople], wooden docks constructed in years long past appear to entangle themselves in the sea that comes right up to them, or to enfold it, or push back against its waves. These enabled the merchant ships sailing in and those trading in the produce of the land to moor and conduct their transactions, and they are known in common parlance as *skalai* and had different owners. Pri-

marily, however, their owners tended to be the poorhouses, hospitals, other charitable institutions, and monasteries, not only in Reigning City [Constantinople] but also in some of its neighbouring port towns. The entire coast was generally owned by those on the land according to our ancestral laws and the imperial decrees, which grant to gateways to the sea to those who own the land neighbouring the shore«⁵¹.

According to the information of Attaleiates, Emperor Michael VII Doukas (1071-1078) dispossessed the owners of these installations; however, Nikephoros III Botaneiates restored the previous ownership shortly after his proclamation as Emperor in March 1078⁵². According to the description of Attaleiates, some of the churches and monasteries in the area of the Heptaskalon may also have held ownership rights for *skalai*.

Emperor Alexios I Komnenos' (1081-1118) transfer of the imperial residence to the Palace of Blachernai also contributed to a shift in the main routes of communication (and imperial ceremony) towards the Golden Horn. Even before the time of the Komnenos dynasty, the emperor and other faithful had chosen the sea route over the Golden Horn from the centre of the city to the Church of Blachernai (or also to the sanctuary of Kosmas and Damian in Kosmidion). Now the emperors used a ship to get from the Palace of Blachernai to one of the landing sites on the eastern Golden Horn and from there to the Hagia Sophia, for instance⁵³. For this purpose, the Palace of Blachernai had at least a landing stage or even a developed harbour, but its exact location and therefore its shape and scope remain unclear. Müller-Wiener refers to the description of Peter Gyllius from the period around 1544/1550, who mentions »150 steps west of the Kynegion Gate (Balat Kapi) three openings in the sea wall«. These were still visible in the nineteenth century and could have belonged to the Harbour of Blachernai. Perhaps, according to Müller-Wiener, there was also a relation to the building, which likewise was »no longer existing, sometimes referred to as Porticus Carienne in Ayvansaray [...], which in terms of type and size can be considered to be a boatshed and could have been used during trips of the emperor to the local church as a landing place«.

47 Effenberger, Klöster, particularly the plan on p. 288. – See also Berger, Untersuchungen 516-517. – Kidonopoulos, Bauten 72-73 and 288-289 (map 2).

48 LBG vol. 4, 866. – See also Matschke, Urban Economy 471 (translated as »sieve maker«) and Effenberger, Klöster 276 (also »sieve maker«).

49 Meriç/Görmüş/Avşar, Golden Horn. – Müller-Wiener, Häfen 37. – Kafescioğlu, Constantinopolis/Istanbul 30-31. – Magdalino, Maritime Neighborhoods 211. – Mundell Mango, Commercial Map 205. – Schreiner, Konstantinopel 90. – Berger, Häfen 77-79. – Russel, Byzantium and the Bosphorus 23-29. – See also Kisliger, Better and Worse Sites, and Kisliger, Golden Horn, in this volume.

50 Magdalino, Maritime Neighborhoods. See also Heher, Harbour of Julian; Kisliger, Better and Worse Sites; Kisliger, Golden Horn, and Külzer, Harbour of Theodosius, in this volume.

51 Michael Attaleiates, Historia 213, 31-214, 13 (Tsolakis); for the English translation, see Kaldellis/Krallis, Michael Attaleiates 507-509. – Dagron, Urban Economy 429. 451. 458. – Magdalino, Medieval Constantinople 532.

52 Dölger/Wirth, Regesten no. 1010 and no. 1027. – Michael Attaleiates, Historia 214, 13-215, 17 (Tsolakis); English version in Kaldellis/Krallis, Michael Attaleiates 507-509.

53 Makris, Studien 180-181. – Restle, Konstantinopel 565-568. – Müller-Wiener, Häfen 11-12. – Magdalino, Maritime Neighborhoods 212. 219-220. – Kidonopoulos, Bauten 150-153. – Berger, Processions 81-85 (with sources for shipping traffic between Blachernai and the areas on the southeastern Golden Horn). – Asutay-Effenberger, Landmauer 118-127 (for construction activity in the area of the Blachernai in the Komnenian period). – Matschke, Das spätybyzantinische Konstantinopel 32-42. – Asutay-Effenberger, Blachernai. – Stanković/Berger, The Komnenoi and Constantinople 19-20. – Dark/Özgümüş, Constantinople 31. 67-68. 71-73 (also on the harbour of the Palace of Blachernai and its possible location). – Macrides, Citadel 289-290 and Macrides/Munitiz/Angelov, Pseudo-Kodinos 267-269. 436-437 (on places of imperial ceremonies on the Golden Horn in the Late Byzantine period) and 367-377 (on the Palace of Blachernai). – See also Kisliger, Neorion, in this volume, on the possible landing stages of the emperor and his entourage in the eastern part of the Golden Horn and Heher, Harbour of the Bukoleon, also in this volume, on the Bukoleon Harbour in general and the »Imperial Private Flotilla«. Later the Ottoman sultans also used the sea route over the Golden Horn to visit the tomb of Eyüb el Ensari in the former Kosmidion district, see Boyar/Fleet, Ottoman Istanbul 53. – Kafescioğlu, Constantinopolis/Istanbul 45-51 (with details from the view of Melchior Lorichs).

Dark and Özgümüş in their archaeological study of 2013 do not establish more than a hypothetical location of the harbour in the north of the Blachernai area on the Golden Horn⁵⁴. Georgios Pachymeres even reports a »neorion« found »in the Blachernai«, a shipyard whose position Emperor Michael VIII Palaiologos considered to be strategically unfavourable after the reconquest of Constantinople in 1261. The remains of such a facility remain as unidentified as those of a harbour. However, Héléne Ahrweiler wanted to equate this *neorion* with the shipbuilding facilities in the area of Kosmidion near Blachernai, but located outside the city walls, which Emperor John VI Kantakouzenos used (again) in the 1340s (see below). The Greek preposition *en* used by Pachymeres would therefore have to be translated as »by« and not »in« the Blachernai⁵⁵.

Pachymeres further reports that Michael VIII not only deemed this *neorion* unfit, »but he was equally dissatisfied with the old neorion – I do not call old neorion that which the Latins used very recently, [that] near the Euergetes Christos Monastery, but that near the Gate of the Neorion from which the gate’s name derives«⁵⁶. At the time of the Byzantine reconquest, there were three *neoria* on the Golden Horn: the one at Blachernai; the »old« *neorion* near the eastern end of the Golden Horn⁵⁷; and one »near the Euergetes-Christos Monastery«, which, before 1261, had been used by the Latins (probably the Venetians who controlled this area of Constantinople in accordance with the partition treaty of 1204⁵⁸).

The Christos Euergetes Monastery can be found in the *ta Dexiokratous* district on the Golden Horn, about halfway between the Blachernai and the Zeugma, in the area of the Ayakapı Gate⁵⁹. As Arne Effenberger most convincingly stated, this (male) monastery became the centre of the cult of St Theodosia before a separate Church of St Theodosia was built close-by in the twelfth century, presumably with a convent belonging to it. The two monasteries, however, remained closely connected and probably formed a structural unit. Furthermore, Effenberger states: »the Ayakapı (»Holy Gate«) [...] was called the Gate of St Theodosia in Late Byzantine times. It was one of the few gates and posterns of the city

walls of Constantinople, which were named after a neighbouring church. Behind [the gate] is the Ayakapı ruin, which for good reasons is associated with the Christos Euergetis Monastery or Theodosia Church«⁶⁰. As Ahrweiler pointed out, the »neorion« »near the Euergetes-Christos Monastery« can also be connected with an *exartysis* (in the sense of an installation for the construction or equipping of ships) »near Saint Theodosia«, which is already mentioned in the Synaxar of Constantinople in connection with the cult of St Sozon⁶¹. Müller-Wiener notes that after the Ottoman conquest in 1453, the church of the Christos Euergetes Monastery (or the underlying vault, as the conjecture of Müller-Wiener) was used as a »ship’s arsenal« before being converted into a mosque in 1490⁶². In particular, based on Effenberger’s recent attempts at localising the Christos-Euergetes/Theodosia complex, further considerations on the location and extent of these facilities could provide new insights in the context of the existing remains.

More information exists on the landing stages at the eastern exit of the Golden Horn. Since the eleventh/twelfth centuries, the quarters and piers of the representatives of the Italian maritime cities, which became increasingly important for commerce in Constantinople, were located there. In various imperial privilege charters, Venetians (1082), Pisans (1111) and Genoese (1155, or actually 1169/1170) were granted landing facilities and houses for use in the north-eastern area of Constantinople at the Golden Horn⁶³. In this context, Müller-Wiener vividly describes the conditions at the Golden Horn:

»Finally, landing stages (*scalae*) necessary for harbour operations belonged to each quarter – ultimately, Venice had four, Pisa three and Genoa two – which were precisely defined in the respective charters in terms of their dimensions and their location, but today can no longer be represented in plans since the fixed points at that time (wall towers and gates, churches and monasteries) are unknown; in view of the lengths of individual *scalae* given as 31-60 cubits (*cubiti*), it would be possible to calculate such a landing stage to be about 15-30m long. They were more or less well-fortified

54 Byrd, Gilles 194-195. – Müller-Wiener, Häfen 7-8 n. 12 (with source quotes). – Schneider, Mauern und Tore 67-69 (who also assumes the existence of an older harbour near the Kynegeion Gate, which was already silted up in Byzantine times). – Kidonopoulos, Bauten 152. – Dark/Özgümüş, Constantinople 69-71 (with fig. 61 giving a hypothetical localisation of the harbour area in the north in the area of Ayvansaraykapı). – Asutay-Effenberger, Blachernai, does not comment on the location of the harbour. But see Asutay-Effenberger, Kynegeion District, in this volume for considerations on the moorings in the Kynegeion district.

55 Georgios Pachymeres, *Relationes historicae* V, 10 (469, 17-20 Failler). – Ahrweiler, *Byzance et la mer* 431-433. – Makris, *Studien* 288 (German translation). – For the shipbuilding facilities in Kosmidion, see Simeonov, Kosmidion, in this volume. – On this passage, see also Heher, Harbour of Julian, in this volume.

56 Georgios Pachymeres, *Relationes historicae* V, 10 (469, 17-20 Failler). – Ahrweiler, *Byzance et la mer* 431-433. – Makris, *Studien* 288 (German translation, with modifications by the author of this article). – Müller-Wiener, Häfen 33. 39 (on the »old Arsenal« west of Galata-Pera). – See also Heher, Harbour of Julian, in this volume.

57 See Kislinger, Neorion, in this volume.

58 See Jacoby, Urban Evolution, and Jacoby, Venetian Government, on the expansion of Venetian possessions between 1204 and 1261.

59 Janin, Constantinople 340-341 and map no. 1. – Schneider, Mauern und Tore 73-74. – Restle, Istanbul 134-137. – Kidonopoulos, Bauten 26-28. – Asutay, Christos-Euergetis-Kloster. – Magdalino, *Studies* I, 2 (map). – Asutay-Effenberger/Effenberger, *Eski İmaret Camii* 13-14.

60 Effenberger, Theodosia 125. 127-134. – See also Kidonopoulos, Bauten 26-28. – Asutay-Effenberger/Effenberger, *Eski İmaret Camii* 37-38. – Asutay-Effenberger, *Porta veteris rectoris* 7.

61 *Synaxarium ecclesiae Constantinopolitanae* 21, Z. 54-55 (Delehayé): Τελεῖται δὲ ἡ μνήμη αὐτοῦ ἐν τῷ ναῷ αὐτοῦ τῷ ὄντι πέραν ἔνδον τῆς Ἐξαρτήσεως καὶ πλησίον τῆς ἁγίας Θεοδοσίας. – Ahrweiler, *Byzance et la mer* 431-433.

62 Janin, *Siège de Constantinople* 510. – Müller-Wiener, *Bildlexikon* 140-141 (with sources). – Schneider, Mauern und Tore 76. – Kidonopoulos, Bauten 25-28 esp. 27.

63 Oikonomidès, *Hommes d’affaires*, esp. 105 (map). – Schneider, Mauern und Tore 80-82. 91-94. – Lilie, *Handel und Politik*, esp. 222-242. – Magdalino, *Grain Supply* 45-47. – Magdalino, *Maritime Neighborhoods* 219-223. – Külzer, *Ostthrakien* 129-138. 228. – Jacoby, *Houses and Urban Layout* 271-272. – Jacoby, *Venetian Commercial Expansion*. – Asutay-Effenberger, *Porta veteris rectoris*. – Schreiner, *Konstantinopel* 94-97. – Berger, *Häfen* 83-84. – Sağlam, *Urban Palimpsest* 11-12. – In particular, see also Kislinger, Neorion, and Schreiner, *Western Landing Stages*, in this volume.

sections of the shoreline lying in front of the walls with wooden bridges occasionally leading out into the water; here the ships docked so that they were moored to the shore with bow or stern (not the broadside). [...] As the shores of the Golden Horn drop quite steeply in most places, even large ships, which at that time had barely more than 2 m draught, could dock directly on these simple quay structures; anyway, there were no difficulties for the small ships of local and regional traffic«⁶⁴.

Paul Magdalino also elaborates: »A skala comprised not only a quayside, formed of an earth embankment fronted by a wall of wooden piles, but also a fenced rectangular terrain built over with houses, workshops, and the booths of money-changers«⁶⁵. Magdalino also points out that when negotiating with Emperor Manuel I Komnenos in 1155, the Genoese originally requested (but did not receive) moorings in the area west of the Venetians, probably in the vicinity of the Heptaskalon⁶⁶. This could be an indication of the economic attractiveness of this area. However, we have little concrete information on the overall economic activity in the area of the Heptaskalon in the Byzantine period⁶⁷.

The prominence of the area on the Zeugma was further enhanced by the foundation of the Pantokrator Monastery (today Zeyrek Camii) on a hill above the site towards the banks of the Golden Horn by Emperor John II Komnenos (1118-1143) and his wife Eirene. Between 1204 and 1261, the Pantokrator complex even served as the headquarters of the Venetian administration in Constantinople, to which were subordinate these areas of the capital according to the partition treaty with the Crusaders. After 1261, it again became a monastery⁶⁸. As mentioned above, the ecclesiastical institutions, aristocratic properties, private houses and workshops mentioned in the Typikon of the Bebaia Elpis Monastery also offer some clues for the social and economic relevance of the area. About a century later, in the invective written by Johannes Argyropoulos against the civil servant and scholar Demetrios Katablatas Katadokeinos in the 1430s, an inn-

keeper known for his Cretan wine by the name Goudeles is mentioned, whose tavern was located on the Golden Horn near the Plateia gate, i. e., in the area around the Heptaskalon. Oikonomides even spoke of a »concentration of taverns« in this area⁶⁹.

We have specific indications of the importance of this region at the Golden Horn (Turkish: Haliç) from the Ottoman period, when the area at the Zeugma was called in Turkish Unkapanı (and the gate in the sea wall Unkapanıkapı)⁷⁰. Kafescioğlu, for example, states: »The part of the Golden Horn between the Ottoman Unkapanı and the Orya Kapı (Neorion Gate) along the sea walls, was the city's densest commercial area«⁷¹. Additionally, Müller-Wiener explains in his description of the landing stages at the Haliç: »From the next landing stage Unkapanı Iskelesi, formerly often referred to as Kapan-ı Dakik Iskelesi (»Wharf of the Flour Scales«), an area was developed in which for a long time the most important granaries of the city were located – in a large lead-covered warehouse in the seventeenth century – a few mills and the city scales for the wholesale trade of flour, hence the name Unkapanı (flour scale); in view of the large quantities of grain required to supply the city, there was always an extremely lively traffic of ships, which often had to wait in three or four rows behind each other for unloading«⁷². The *koskinades* mentioned in the Typikon of the Bebaia Elpis Monastery already indicate a connection with grain trading and grain processing (see above). A continuity from the (Late) Byzantine to the Ottoman period is also suggested by the name *Porta de la farina* (»Gate of Flour«) used for the gate in question at Zeugma by Giovanni Andrea Vavassore in his view of *Byzantium sive Constantineopolis*, which dates from around 1479-1481 (printed in Venice c. 1520-1530)⁷³. In a Venetian document dated 26 October 1369, which was drawn up as part of a dispute with the Byzantine emperor about the places of (duty-free) grain trade by the Venetians, there is not direct reference to this area, but it does at least refer to its surroundings⁷⁴. The majority of the grain supply for Constantinople in

64 Müller-Wiener, Häfen 21-22. – See also Maltéizou, Quartiere veneziano 32-37 (on the individual skalai of the Venetians). – Makris, Studien 181-182. – Magdalino, Maritime Neighborhoods 224. – Jacoby, Houses and Urban Layout. – Kafescioğlu, Constantinopolis/Istanbul 30-31. – Schreiner, Western Landing Stages, in this volume.

65 Magdalino, Maritime Neighborhoods 224. – See also Jacoby, Houses and Urban Layout 272.

66 Sanguineti/Bertolotto, Documenti 346. – Magdalino, Maritime Neighborhoods 221-222. – Magdalino, Studies I, 99-100. – Lilie, Handel und Politik 84-85. – Schreiner, Konstantinopel 94. – See Effenberger, Klöster 270, and Asutay-Effenberger, Porta veteris rectoris, on the location of the Venetian quarter.

67 On urban development at this time, see Kidonopoulos, Bauten. – Jacoby, Urban Evolution. – Matschke, Das spätbyzantinische Konstantinopel.

68 Restle, Istanbul 283-291. – Magdalino, Pantokrator. – Kotzabassi, Pantokrator. – Jacoby, Urban Evolution 290-292. – Jacoby, Venetian Government 36-38. 43 (on the extent of Venetian possessions at that time).

69 Canivet/Oikonomides, Katablattas 66-69. – PLP no. 1267 (Ioannes Argyropoulos). 91695 (Gudeles). 92341 (Demetrios Katablatas Katadokeinos). – Oikonomides, Hommes d'affaires 95 (n. 170) and 105 (map). – Necipoğlu, Byzantium 210. – On the identification of the Plateia Gate, see also Asutay-Effenberger/Effenberger, Eski İmaret Camii 33-34.

70 See also Schneider, Mauern und Tore 77. – Berger, Ufergegend 154-155. – Effenberger, Klöster 265. – Asutay-Effenberger, Porta veteris rectoris.

71 Kafescioğlu, Ottoman Capital 50, see also 57-61 on the landing stages on the Golden Horn, and 310 on the population distribution within the city during the time of Sultan Mehmed II.

72 Müller-Wiener, Häfen 127 (map) and 132. – See also Kafescioğlu, Constantinopolis/Istanbul 31. 184-186.

73 Bamberg, Staatsbibliothek, shelfmark IV C44. – See Berger, Vavassore. – Kafescioğlu, Constantinopolis/Istanbul xxvi-xxvii (map 5). – Asutay-Effenberger, Porta veteris rectoris 7. – Necipoğlu, Visual Cosmopolitanism 13. – Berger, Häfen 85. – Effenberger, Pictorial Sources, in this volume. – In the veduta of Buondelmonti, the gate is listed as *porta del mezzo*, see Effenberger, Illustrationen 38 [19], pl. III (no. 8). – Asutay-Effenberger/Effenberger, Eski İmaret Camii 33. – Drakoulis, Buondelmonti.

74 Chrysostomides, Venetian Commercial Privileges 322-324 (with n. 130 on assumptions about the location of the places mentioned) and 342-343 (document no. 11: edition of the text): according to this, there were two traditional places of grain trading in Constantinople, one in the area of *Porta Parva usque ad Portam Sancti Petri* and one *locus secundus [...] ad Portam del Piges*. – Janin, Constantinople 97, would like to identify one of the grain markets mentioned in the negotiations between Byzantines and Venetians with the area »à Unkapan«, but gives no further evidence for this. The *Portam del Piges* could be identified with the gate *eis Pegas* (Ispigas, Cibalikapı) in the sea wall to the Golden Horn between the Ayakapı and the Unkapanı Gate. The *Porta Sancti Petri* could be connected with the Petriion Castle (Phanarion) north-west of

Fig. 1 View of the Unkapani area (at the right side in the picture) on the Golden Horn from Galata, by Melchior Lorck, 1558/1561. – (Universitaire Bibliotheken Leiden 1758, BPL 1758 / 11).



the Late Byzantine and Ottoman period came from locations around the Black Sea, meaning that sites along the Golden Horn coast would naturally provide the first harbours⁷⁵. The landing stages at Unkapani also served as an important transit point for the transport of building materials, especially stones, for the Süleymaniye Mosque, built under Sultan Süleyman the Magnificent (1520-1566)⁷⁶. The view from Galata by Melchior Lorichs (fig. 1) from around 1558 to 1561 offers a clear picture, not only of the Unkapani area (on pp. 11-12, here also with the designation *porta de la farina* or *mul Thor*), but also of the entire shipping traffic and the moorings on the Golden Horn⁷⁷. It illustrates the use of the Golden Horn as a harbour in its entirety. Müller-Wiener also lists no fewer than 21 landing stages (Turkish *iskele*) from the Ottoman era on the Golden Horn along the sea walls from the entrance of the Golden Horn to the Blachernai (Ayvansaray) and another 26 to the west outside of the city walls or on the opposite banks to the west, in and east of Galata⁷⁸. We may presume multiple continuities from the Byzantine period, not only

for the *skalai* in the quarters of the Pisans, Genoese and Venetians on the southeastern bank of the Golden Horn, but also for the facilities at the Zeugma (Heptaskalon), at the Christos Euergetes Monastery and in the Blachernai. The intensive ferry traffic from Constantinople to Pera (Galata), described by travellers such as Ibn Battuta and others for the Late Byzantine period, or fisheries probably used the banks of the Golden Horn in many places in a comparable way. The aforementioned city view by Giovanni Andrea Vavassore (c. 1479-1481), which shows the Golden Horn full of rowing boats, also offers clues⁷⁹. The importance of the Byzantine Zeugma for the crossing over the Golden Horn continued into modern times. In a map of the water supply system of the Ottoman capital from 1812/1813, the jetties and scales for the flour on or near the bank as well as the »flour gate« in the sea wall are clearly shown (fig. 2). In addition, »Unkapani [...] played an important role as the bridgehead of the first pontoon bridge spanning the Haliç, since 1836, in addition to its importance as a grain staple place«⁸⁰.

the Ayakapi, see Chrysostomides, Venetian Commercial Privileges 323 (n. 130) and Asutay-Effenberger/Effenberger, Eski İmaret Camii 15 (with fig. 7). Both fourteenth-century grain markets would be located at the Golden Horn, one of them at least near the later Unkapani.

- 75 Chrysostomides, Venetian Commercial Privileges 312-327 (esp. on the role of the Venetians in the grain trade of Late Byzantine Constantinople). – Magdalino, Grain Supply. – Jacoby, Mediterranean Food and Wine. – İnalçık, Ottoman Empire 179-187. – Faroqhi/McGowan/Quataert/Pamuk, Ottoman Empire 447-448. 493-499. 719-721. – Boyar/Fleet, Ottoman Istanbul 160-163. – White, Climate of Rebellion 28-39.
- 76 Kolay/Çelik, Ottoman Stone Acquisition, particularly also the map (256) for the places of origin of building materials distributed over the entire Ottoman Empire.

- 77 Fischer, Lorck. – Westbrook/Dark/van Meeuwen, Lorichs. – Müller-Wiener, Häfen 38. – Kafescioğlu, Constantinople/Istanbul 199 (fig. 127). – Asutay-Effenberger, Porta veteris rectoris 7.
- 78 Müller-Wiener, Häfen 125-137 with map on pp. 126-127. – See also Kafescioğlu, Constantinople/Istanbul 30-35.
- 79 Ibn Battuta 345. – Makris, Studien 99. 255 n. 39. – Majeska, Russian Travelers 140. 353-354. – Müller-Wiener, Häfen 60. – Mundell Mango, Commercial Map 205-206. – On Vavassore, see Bamberg, Staatsbibliothek, shelfmark IV C44. – See Necipoğlu, Visual Cosmopolitanism 13. – Effenberger, Pictorial Sources, in this volume.
- 80 Kafescioğlu, Constantinople/Istanbul 33 (fig. 17). – Müller-Wiener, Häfen 132. – A »space syntax« analysis of the axes of accessibility and mobility in the area of the southern Golden Horn, which also includes Unkapani, is offered by Önder/Gigi, Urban Spaces, based on the current course of the road.



Fig. 2 Detail from the map of the water supply system of Istanbul, 1812-1813, with the area around Unkapanı on the right in the picture (11 landing stages, 12 weighing system, 13 Unkapanı gate). – (After Kafescioğlu, Constantinopolis/Istanbul 33 fig. 17).

The Neorion of Heptaskalon in the Reign of John VI Kantakouzenos

Despite all the references to the significance of the Heptaskalon's maritime traffic in Byzantine and post-Byzantine times, an explicit mention of a harbour facility of this name could not be found. A harbour of this name appears only in the historical work of Emperor John VI Kantakouzenos (1341/1347-1354)⁸¹. After his victory in the civil war against the party for the regency of John V Palaiologos and his entry into Constantinople, John VI Kantakouzenos came into conflict with the Genoese in Galata in 1348/1349. In the face of the maritime superiority of the enemy, he tried to (re-)build a Byzantine war fleet. As he explained: »But since the sea was ruled by the Galatians and it was impossible to bring the timber for shipbuilding to water, he [Emperor John VI Kantakouzenos] ordered to bring it with carriages and mules from the mountains of Sergentzion⁸². And it was very laborious and arduous, and triremes were built in the shipyard (neorion) in the Heptaskalon [or the so-called Kontoskalion]. [...] He made the protostrator Phakeolatos [Phakiolatos, also Faccioliati Andreas]⁸³ commander of the three warships on the [River] Pissa [near Kosmidion on the Golden Horn]⁸⁴, and Tzamlakon [Tzamlakon Asomatianos]⁸⁵, the megas doux⁸⁶, of those built in the Heptaskalon [or Kontoskalion]«⁸⁷.

The variations in the manuscripts recorded by the editor (»in the Heptaskalon«, »in the so-called Kontoskalion«) already indicate that an identification of the »neorion« named by Kantakouzenos with the Heptaskalon in the Golden Horn is not possible offhand⁸⁸. Further references to this site make it rather more likely that it would have been located at the Sea of Marmara (beyond the immediate access of the Genoese in Galata at the Golden Horn) and that it should be identified with the Kontoskalion already mentioned in part of the manuscript tradition⁸⁹. As we read: »The day before the warships were to be brought out of the neorion [arsenal, shipyard], a cargo ship was sighted that came from Genoa and was said to carry great wealth. When the winds stopped and conditions prevented the ship from sailing, it anchored near the Princes' Island. At night, two imperial warships set sail with the same number of ships with one row of oars. [...] They boarded the cargo ship and killed not a few of the defenders and were soon masters of the situation. But when the unclear rumour reached the ships that the Latin warships were sailing from Galata, they turned to flee, leaving a little less than 50 of their men on the cargo ship. This rumour was completely wrong. When the Romans, who had been left on the ship, discovered that their warships had sailed away and that they were without help, they came to an agreement with the Latins, whom they had already overpowered [...]«⁹⁰.

81 On this see Fatouros/Krischer, Johannes Cantacuzenus I-III (with introductions). – The published volumes of the German translation by Georgios Fatouros and Tilman Krischer so far only cover the events up to 1347. The translations of the passages discussed in this section are from the author.

82 See Külzer, Ostthrakien 644-645.

83 PLP no. 29559.

84 Külzer, Ostthrakien 595.

85 PLP no. 27753. – See also Estangüi Gómez, Tzamlakônes 293-295.

86 The commander in chief of the Byzantine navy, see Macrides/Munitiz/Angelov, Pseudo-Kodinos 71-73.

87 Ioannes Kantakouzenos, *Historia IV*, 11 (72 and 74 Schopen). – Stauridou-Zaphraka, *Kontoskalio 1313*. – Makris, *Studien 163-164*. – See also Heher, *Harbour of Julian*, in this volume.

88 A modern critical edition of Johannes Kantakouzenos' historical work could provide further information here, see www.cct.uni-bonn.de/aktivitaeten-projekte/kantakouzenos.

89 Heher, *Harbour of Julian*, in this volume, as well as Brzozowska, *Itinerarium Stefana*.

90 Ioannes Kantakouzenos, *Historia IV*, 11 (74-75 Schopen).

This unsuccessful attack on an enemy ship approaching from the south – without knowledge of the Genoese controlling the entrance to the Golden Horn – was probably only possible from a base at the Sea of Marmara. This also applies to the description of the next confrontation of naval forces of both sides in the Golden Horn in March 1349: »As soon as all the imperial ships had been thoroughly prepared, they set off from the shipyard (*neorion*), adequately equipped and not inferior to any of the fleets that the Romans had built in many years. [...] The Latins, amazed at the size of the fleet, considered anything but to engage in a naval battle with the imperial ships. They waited at anchor in front of the fortress with their own ships as if they were about to ram the imperial ships [...]. After the imperial ships sailed out of the shipyard, they spent the night somewhere nearby, because the commanders intended to attack the Galatians at sea the next day, once they had joined the three ships of Phakeolatos. Phakeolatos himself had armed his ships and prepared to leave harbour the next day. [...] At the break of dawn, the ships that had left the shipyard were already at the Eugenios Gate⁹¹, while those (under command) of the protostrator Phakeolatos had left the river [Pissa] and hurried to the others to be at the same place«⁹².

It becomes clear that the flotilla stationed on the Pissa River in the Golden Horn under the command of Phakeolatos sailed from a different direction to attack the Genoese fleet waiting before Galata than the larger one coming from the *Neorion*, which probably pushed forward from the south of the Sea of Marmara. If their harbour had also been in the Golden Horn, the two Byzantine fleets could have united before the attack. In any case, this naval battle ended in a Byzantine defeat.

Nevertheless, Emperor John VI Kantakouzenos continued his efforts to increase the imperial maritime capacities. For the year 1351, we learn: »He cleaned the *neorion* at the Heptaskalon this year, since it had been muddy for many years and could not comfortably accommodate a cargo ship with a full load; this was a great work that was extremely useful to the city, which he could only finish with a lot of work and costs«⁹³. Here, too, one should rather think of a facility located on the shore of the Sea of Marmara, although har-

bours on the Golden Horn also had the problem of silting up. However, for the landing stages (*skalai*, described in the previous section), as we assume also made up the Heptaskalon, there was no built harbour basin that would have required such dredging⁹⁴.

This imperial initiative definitely showed its value in the following year, 1352, when conflict resurfaced with Galata: »In view of the approaching (enemy) fleet, the emperor ordered all cargo ships and the warships equipped for the siege of Galata to be steered into the *neorion* in the Heptaskalon, which [...] had been cleaned by him and was able to accommodate not only the existing (ships), but even more than them«⁹⁵. As a result, a joint operation was planned with an allied Venetian-Catalan fleet coming from the Princes' Islands from the south, which was to unite in the Heptaskalon with the Byzantine fleet to fight the Genoese. This again only seems reasonable for an installation on the Sea of Marmara beyond the direct reach of the Genoese of Galata. However, the plan of the Venetians and Catalans failed due to the shallows, stormy seas and Genoese subterfuge⁹⁶.

A final mention of the »*neorion*« of Heptaskalon is made in the work of Kantakouzenos when describing the surprise attack by his rival John V Palaiologos on 21/22 November 1354, which marked the end of his reign: »Coming from Tenedos, he [John V Palaiologos] sailed to Byzantium [Constantinople] without anyone knowing, and came to the *neorion* in the Heptaskalon at night«⁹⁷. From there, John V Palaiologos seized the capital, while John VI abdicated and entered a monastery.

On the basis of reading these passages, one will agree with the verdict of Jan Louis van Dieten, who, also based on the parallel record of the events by Nikephoros Gregoras⁹⁸, stated that there is »no doubt that the harbour named [by Kantakouzenos] en to Heptaskalo lay facing the Sea of Marmara. [...] There are some indications that the Harbour of Kontoskalion and the Harbour of Heptaskalon at Kantakouzenos are identical, and that Kantakouzenos used two different terms, one of which was preserved only in one manuscript«⁹⁹. The information in Kantakouzenos is therefore unsuitable for a description of the structure and development of the Heptaskalon on the Golden Horn.

91 On the Eugenios Gate, see Kislinger, *Neorion*, in this volume (with further literature).

92 Ioannes Kantakouzenos, *Historia IV*, 11 (75-76 Schopen). – Stauridou-Zaphraka, *Kontoskalio* 1314.

93 Ioannes Kantakouzenos, *Historia IV*, 22 (165 Schopen). – Stauridou-Zaphraka, *Kontoskalio* 1315.

94 Makris, *Studien* 180. – Mango, *Shoreline*. – Magdalino, *Maritime Neighbourhoods* 215. 218 (about siltation processes in the Golden Horn). – Matschke, *Urban Economy* 486. – Berger, *Häfen* 80-81. – See also Heher, *Harbour of Julian*, in this volume, for the multiple dredging of the Kontoskalion Harbour at the Sea of Marmara in the 13th-15th c. Many thanks to Ewald Kislinger for discussing this passage.

95 Ioannes Kantakouzenos, *Historia IV*, 28 (212 Schopen). – Stauridou-Zaphraka, *Kontoskalio* 1316.

96 Ioannes Kantakouzenos, *Historia IV*, 30 (220-222 Schopen).

97 Ioannes Kantakouzenos, *Historia IV*, 39 (284 Schopen). – Stauridou-Zaphraka, *Kontoskalio* 1317.

98 The corresponding passages in Nikephoros Gregoras are also summarised in Stauridou-Zaphraka, *Kontoskalio* 1318-1319, who comes to different conclusions.

99 van Dieten, Nikephoros Gregoras 249-255. – Makris, *Studien* 176-179. – Makris, *Ships* 98.

Conclusion

The Church of St Akakios »in [or at] the Heptaskalon« (given this attribute since the ninth/tenth centuries) can almost certainly be located at the Zeugma, where traffic conditions and a concentration of economically and religiously significant places would have made the existence of a larger landing stage sensible. However, a harbour facility is not explicitly mentioned under this name. In Ottoman times, the Unkapanı Iskelesi (»Wharf of the Flour Scales«), along with numerous other moorings within the Golden Horn, as the »main harbour« of the city, played an important role as a central transit point for grain (and other goods). Indications here and in several other cases (see above) prove continuity, at least since Late Byzantine times. The passages by John VI Kantakouzenos (fourteenth century) used as the main sources for

the existence of a Heptaskalon Harbour or *neorion*, however, do not provide any clear reference to the landing stage (or stages) at the Zeugma on the Golden Horn. They can rather be equated with the Harbour of Kontoskalion on the Sea of Marmara. Statements on the structural design of the landing stages of the Heptaskalon are therefore only possible based on general descriptions of such *skalai per analogiam*. Melchior Lorichs offers an actual visual representation of the harbour situation in the Golden Horn for the Ottoman period (1558/1561). Further archaeological findings are hardly to be expected in view of the current constructional situation of that area in Istanbul and »drastic« earlier construction measures at Unkapanı (Ataturk Köprüsü 1940 and the preceding bridge constructions since 1836¹⁰⁰).

Summary / Zusammenfassung

The Heptaskalon and Other Selected Moorings on the Golden Horn

The first evidence of the toponym »Heptaskalon« (»Seven *Skalai*«, from »*skala/scala*«, probably in the sense of »landing place«) is in connection with the renovation of the Church of St Akakios by Emperor Basil I (reg. 867-886). Thereafter, this church and other localities are mentioned repeatedly in connection with this area to be located on the Golden Horn, but without explicit mention of a landing stage there. Such a landing stage is only testified for the Ottoman period, in which the area under the name Unkapanı (»Flour Scales«) was of particular importance for the landing of grain, among other things. Nevertheless, various references make the existence of a landing stage in Byzantine times probable. References to a »neorion of Heptaskalon« for the reign of Emperor John VI Kantakouzenos (reg. 1341/1347-1354) are not evidence of this, which clearly refer to a shipyard and landing stage on the Sea of Marmara (also known as the »Kontoskalion«). The Golden Horn again became the centre of maritime activities in Constantinople due to the increasing activity of Italian traders from the eleventh or twelfth centuries and further moorings can be proven, for example, at the Imperial Palace of Blachernai or at the Christos Euergetes Monastery.

Heptaskalon und weitere Anlegestellen am Goldenen Horn

Der erste Beleg des Toponyms »Heptaskalon« (»sieben *skalai*«, von »*skala/scala*« wohl im Sinne von »Anlegestelle«) erfolgt im Zusammenhang mit der Renovierung der Kirche des Hl. Akakios durch Kaiser Basileios I. (reg. 867-886). Danach werden diese Kirche und andere Lokalitäten immer wieder im Zusammenhang mit dieser am Goldenen Horn zu verortenden Gegend genannt, allerdings ohne explizite Erwähnung einer dortigen Anlegestelle. Eine solche wird erst für die osmanische Zeit beschrieben, in der dem Gebiet unter dem Namen Unkapanı (dt. »Mehlwaage«) eine besondere Bedeutung u. a. für die Anlandung von Getreide zukam. Dennoch machen verschiedene Hinweise die Existenz einer Anlegestelle bereits in byzantinischer Zeit wahrscheinlich; nicht als Belege dafür taugen aber die Erwähnungen eines »neorion von Heptaskalon« für die Herrschaftszeit von Kaiser Johannes VI. Kantakouzenos (reg. 1341/1347-1354), die eindeutig auf eine Werft- und Anlegestelle am Marmarameer (auch bekannt als »Kontoskalion«) bezogen werden müssen. Eindeutiger nachzuweisen sind weitere Anlegestellen am Goldenen Horn, das ab dem 11./12. Jahrhundert, auch aufgrund der steigenden Aktivität italienischer Händler, (wieder) zum Zentrum maritimer Aktivitäten in Konstantinopel wurde, so etwa am kaiserlichen Blachernenpalast oder beim Christos Euergetes-Kloster.

100 Müller-Wiener, Häfen 138-141.

The Western Landing Stages (σκάλαι) in the Golden Horn: Some Remarks Relating to the Eleventh and Twelfth Centuries

Since Antiquity, the Golden Horn as a whole was the best harbour of Constantinople¹. The Neorion and Proshporion harbours located there developed separately, as scattered archaeological and textual pieces of evidence attest². At the time of the emperor Alexios I (1081-1118), contact with the West intensified, in particular with Venice, Pisa and Genoa, which, for their part, were interested in gaining economic footholds in Constantinople³. This and imperial concessions granting transfers of territory led to changes in the topographical and social structure of the city that also affected the coastal regions of the Golden Horn along the sea wall.

These changes are recorded in a large number of Greek and Latin documents. They have been preserved in Western archives, exclusively, mainly in Pisa and Genoa, and provide a relatively precise and reliable impression of the harbour areas and their topography. Although these documents have been available in editions of a satisfactory quality since the nineteenth century⁴, they have hardly been used until now in the context of the study of topography and material culture (*Realienkunde*).

The right to settle and transfer property within the city walls implied access to the Golden Horn and its harbours. In this chapter, I would like to focus on inshore property, i. e., the harbours, which contemporary evidence refers to as σκάλα (*scala*). Although this term was generally meant to refer to a »ladder« or »jetty«, it could also relate to »landing stages« in the broader sense and thus to a particular area. The evidence does not contain an equivalent for the term »harbour«. The landing stage (σκάλα) and the harbour (λιμνήν) blended into one another. The different pieces of evidence, which will be analysed in the present study provide also an impression of the harbour of the Golden Horn as a whole in the time since around the end of the eleventh century.

Researching the Landing Stages

The present paper will not be able to provide a comprehensive description of the appearance and functionality of the landing stages of Constantinople. Such an endeavour would require a critical edition of the Greek and Latin texts and their annotated translation⁵. Instead, reference will be made to the »old« editions. The landing stages, which as a whole constituted the harbour, represented commercial areas subject to the standards of land surveying (περιορισμός). While the land surveyor, an imperial official, and his assistants could see the site with their own eyes, today's reader of the sources lacks most of the once available measuring points, which are no longer available due to later changes, and thus is solely dependent on textual analysis. In the present case, fortunately, some constants facilitate the reconstruction. The main points of departure are always the sea wall on the Golden Horn and the »public road« (δημοσία ὁδός) which was excluded from the concession. The long side of the harbour is described in the sources as a straight line starting from the sea wall and running east to west (although not always in a straight line), whereas the broad side included the section from the sea wall up to the water adjacent to the Golden Horn (usually termed »sea«). In almost all cases, we can assume that the areas were calculated in rectangles. The broad side towards the sea generally remains unmentioned and, where the sources refer to it, it is measured at around 50 m.

A particular difficulty that has hitherto prevented researchers from using numerical data in this context are the designation of dimensions and their conversion into modern measuring units. The descriptions (περιορισμοί) define the boundaries of the different landing stages throughoutly using the unit of πήχυς (*pēchys*, »ell«), the Latin translations use their equivalent, the *cubitus*. The unit that was generally used in Byzantium to measure plots was the ὀργυία (*orgyia*), a designation mainly found in the monastic documents of Athos, which measured 2.16 m and was meant to relate to the distance

1 See Kislinger, Golden Horn, in this volume.

2 See Kislinger, Neorion, in this volume.

3 For more details, see Lilie, Handel und Politik.

4 Acta et diplomata graeca III. – Sanguinetti/Bertolotti, Documenti. Both editions are not critical-diplomatic editions according to today's understanding, and the

texts must be compared with the originals. The difficulty of using them lies primarily in understanding the material culture (*Realienkunde*).

5 A study on this, including the concessions within the walls, is being prepared by the author.

between the outstretched arms⁶. In the Classical period there were two types of cubit: the standard cubit of 1.5 ft (46 cm) and the »large« cubit of 2 ft (c. 62 cm)⁷. As the areas would have been much too small even if this larger version of the classical cubit had been used to measure the landing stages or the floor areas of property in the Latin quarters within the city walls⁸, there is no doubt that the term πῆχυς used in our texts must relate to the Byzantine ὀργυία of 2.16 m, which was common in land surveying. This empirical and verifiable assessment is confirmed by a few further examples that also point to the interchangeability of πῆχυς and ὀργυία⁹. This definition of the measurements is to provide a concrete idea of the appearance and size of the landing stages and with these of the overall topography along the sea wall (including the plots in the city, which are left aside here).

Description of the Landing Stages in Chronological Order of the Concessions Granted

The Amalfians

As early as the first half of the eleventh century, Latin literary sources mention a quarter of the Amalfians¹⁰, which (according to Pisan documents from the end of the twelfth century) was located north of the (later) quarters of the Pisans (at a more elevated location, but which may have been originally on the Golden Horn). The Amalfians also had a landing stage that was located to the east of the mooring area which the Pisans had received in 1192 (see PISA IV below) and which is known only from the Pisan document¹¹. We do not have a description of its size or appearance.

The Landing Stages of the Venetians

In the *chryso bull* of the year 1082, the Venetians were granted the right to settle on both sides of the *embolos*, the commercial street, which is today's Hasirular Caddesi. The street extended from the Porta Hebraica (east of Balık Pazarı Kapi) to the Porta Viglas (Odun Kapi). In this area, the Venetians (1082) were given three landing stages along the corresponding sea wall (*maritimas III scalas*)¹². However, neither in 1082 nor later were there any documents providing information on the size of these landing stages¹³. One of these three *scalae* is referred to in private documents from the years 1090, 1184, 1206 and 1208 as *scala maior*, another is characterised as *scala Hebraica*¹⁴. An additional example, the *scala S. Nicolai*, is mentioned in a document from 1185, which contains the important information that it was built of stone (*petrinea*)¹⁵. Another document attests that there were twelve houses on this quay, comparable to the Pisan and Genoese landing stages¹⁶. The expansion by the *chryso bull* of 1148 notes that the Venetians at that time received the *scala S. Marciani*, including the houses and workshops located there, so that this section must have resembled the properties of the other sea states described later¹⁷. During the twelfth century, the Venetians received a fifth *scala*, which is mentioned in Latin documents under several similar names (*scala Cacegalla*, *Cuzugaia*, *Cuzogala*) and must have been near the *scala Hebraica*¹⁸. Among these five *scalae* were probably the two that had belonged to the *Alemanni* and the *Francigenae*, which were handed over to the Venetians in 1189¹⁹.

6 Schilbach, *Metrologie* 20-25, *Géométries*, index. The many passages on πῆχυς in the *Thesaurus Linguae Graecae* have not been used for this article.

7 Schilbach, *Metrologie* 21

8 The presumption of Schilbach, *Metrologie* 21 is not tenable, that »with some probability, in all texts that mention an unspecified ell, with which property is measured, the large ell can be assumed«.

9 In *Maßtraktat* 322, l.1 (Lefort et alii. in *Géométries* 208) it says: Ἡ ὀργυία ἦγον ἢ πῆχη. In one version of the epic of Digenis Acritis the hero's chest is ὀργυιάν τὸ πλάτος (Digenes Akrites v. 1485, p. 171). Here only the πῆχυς of 2 ft (62.46 cm) can be meant. In *Fragment 1b* by the Greek historian Ctesias, is a Byzantine gloss about an altitude in ὀργυία: ὡς δὲ ἔνιοι τῶν νεωτέρων ἔγραψαν πῆχων (Ktesias 668, frag. 1b, lin. 237). According to the critical apparatus, this gloss comes from John Tzetzes (12th c.), who wanted to record that in his time (when the measurements were also made for the contracts) πῆχυς instead of ὀργυία was used.

10 Hofmeister, *Übersetzer* 225-284. 493-508, see also Falkenhausen, *Il commercio di Amalfi con Costantinopoli* 19-38; Skinner, *Medieval Amalfi* 214-223.

11 *Acta et diplomata graeca* III 22, l. 12. The assertion of Magdalino, *Études* 86, that the landing place of the Amalfians was given to the Pisans is not supported by the wording of the text and is not correct.

12 *Pacta Veneta* 992-1198, 28-48, with the quoted passage on 39. On the contract, see Dölger/Wirth, *Regesten*, regest 1081 and Penna, *Imperial acts* 26-34.

13 See the studies by Maltezou, *Quartiere* 30-61, and Jacoby, *Houses and Urban Layout* 269-282, and Jacoby, *Venetian Quarter*.

14 Maltezou, *Quartiere* 34 and regest 1, p. 42 and 36-37. Anna Comnena also mentions the granting of landing stages, without providing a specific number, in her summary of the *chryso bull*: καὶ τὰς ἐντὸς τοῦ διαστήματος τούτου ἐπερχομένης σκάλας. Anna Komnene, *Alexias* V 7 (179, 34 Reinsch/Kambylis).

15 Maltezou, *Quartiere* 34 and regest 10 (p. 44-45).

16 Lombardo/Morozzo della Rocca, *Nuovi documenti* 39-40 (no. 35).

17 *Pacta Veneta* 992-1198, 74. Maltezou, *Quartiere* 34-35, Jacoby, *Houses and Urban Layout* 272. – Dölger/Wirth, *Regesten*, regest 1373; Penna, *Imperial Acts* 40-45.

18 Maltezou, *Quartiere* 37-39.

19 *Pacta Veneta* 992-1198, 107 (= *Tafel-Thomas*, *Urkunden* 208). These two *scalae* are connected with rights of establishment, but we are not informed about how they were granted and they were never considered in the literature. The mention of the *Francigenae* could refer to agreements in connection with the marriage between Alexius II and Anna, daughter of Louis VII of France (1179/1180), while privileges for the *Alemanni* might be related to the various negotiations between Emperor Manuel II and King Conrad III. It is less likely that they dated back to Alexius I and the time of the First Crusade. In the *Treaty of 1189* (*Pacta Veneta* 108) it is expressly stated that the two nations almost never made use of their rights and that the *scalae* were therefore revoked. See also Penna, *Imperial Acts* 58 n. 314.

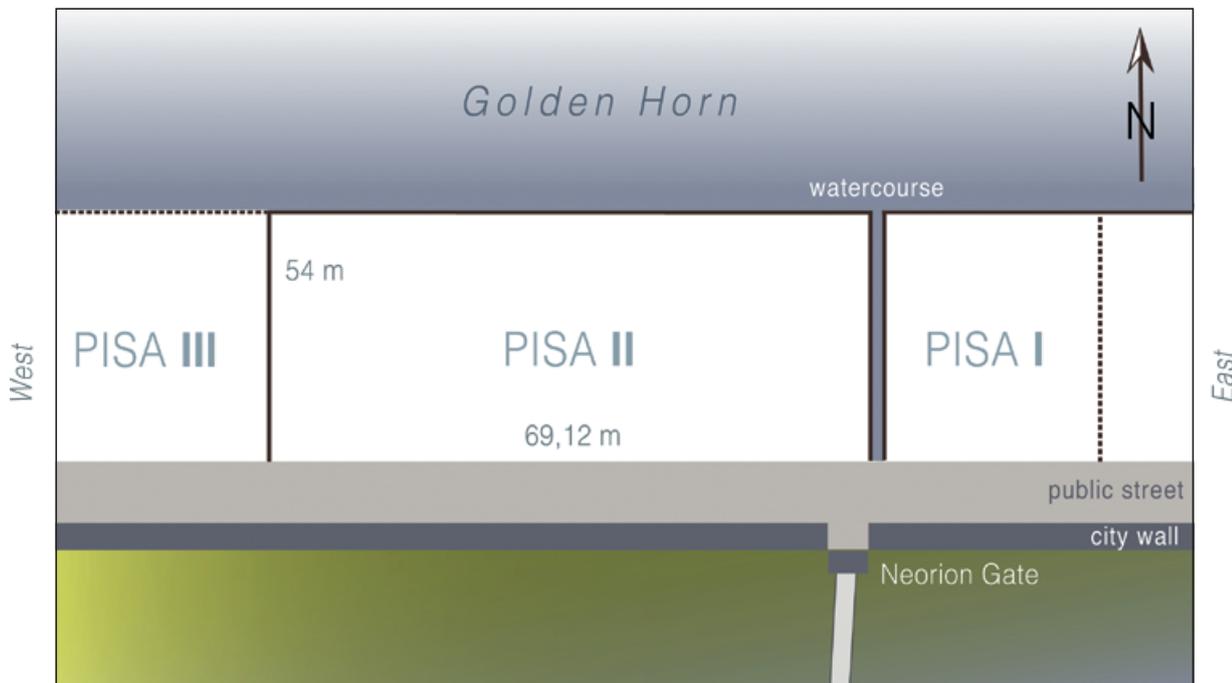


Fig. 1 Map with PISA I/II, 1170 and 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

The Landing Stages of the Pisans²⁰ (figs 1-3)

Landing Stage I (PISA I), before 1192 (fig. 1)

The *chrysobull* of the year 1111 attests that the Pisans received a *scala* »at which your ships can dock and their cargo can be unloaded«²¹. There is, unfortunately, no information about its size or location. As the contents of the *chrysobull*, which must have been issued around 1136 by the emperor John II Comnenus and to the benefit of the Pisans, is unknown, it does not allow drawing any conclusions regarding this particular landing stage and the quarter²². The same is true for the *chrysobull* of Emperor Manuel I from July 1170²³.

The earliest relevant information is contained in a *chrysobull* of 1192 that mentions for the first time »a mooring that persists since ancient times outside²⁴ the Neorion Gate and opposite the Monastery of the former Logothetes (Μονή τοῦ ἀπὸ τῶν λογοθετῶν)²⁵. It was located to the east of the landing stages allocated in 1192 and to the west of the mooring area of the former Logothetes Monastery, from which it was separated by a »canal« (fig. 7)²⁶. It is impossible to tell whether this landing stage was identical to the *scala* mentioned in the year 1111. Since it be-

longed to the group of pre-existing buildings (which were described in earlier, now lost documents), the evidence lacks measurements, although there is mention of a διπλή σκάλα (»double *scala*«, which may have merged with an earlier *scala*, or, which appears more likely, provided two landing stages – like GENOA I – which would also explain its designation). On this site, there have been two ground-floor buildings with monopitch roofs and a money changer's table (καταλλακτικὸν τραπέζιον).

Following a brief description of the existing buildings, the *chrysobull* gives a general overview of new concessions provided outside the walls before it describes them individually²⁷: there are three landing stages (PISA II, III, IV) between the one mentioned above (PISA I) and the landing stage of the Monastery of St Anthony. They were fenced off by palisades and separated by »canals« whose function, however, is not clearly described here and sometimes contradicts the individual descriptions. In 1192, the nine houses along the wall were transferred to Pisan ownership.

20 All information about the possessions of the Pisans can be found as fully inserted texts in the *chrysobull* of Emperor Isaac II Angelos of February 1192, edited as Acta et diplomata graeca III 3-23 (Greek text) and Müller, Documenti sulle reazioni delle città toscane 40-58 (with Latin *Authenticum*), cf. also Dölger/Wirth, Regesten, regest 1107 and Penna, Imperials acts 119-130.

21 Acta et diplomata graeca III 11, ll. 26-27, Dölger/Wirth, Regesten, regest 1255; Penna Imperial acts 115-118.

22 Dölger/Wirth, Regesten, regest 1310a.

23 Dölger/Wirth, Regesten, regest 1499; Penna, Imperial Acts 115-118.

24 Greek ἔξωθεν here means »east of«. The Golden Horn is topographically described from »outside« (east), the confluence of the Bosphorus and the Sea of Marmara, inwards (west). Therefore, in this context, ἔξωθεν means the eastern direction as seen from a certain object (here the Neorion Gate). See also n. 46 below.

25 Acta et diplomata graeca III 21, ll. 6-20.

26 For κἀναλός (here and in other places), which means »watercourse«, not »navigation channel«, see below 158.

27 Acta et diplomata graeca III 21, ll. 20-33.

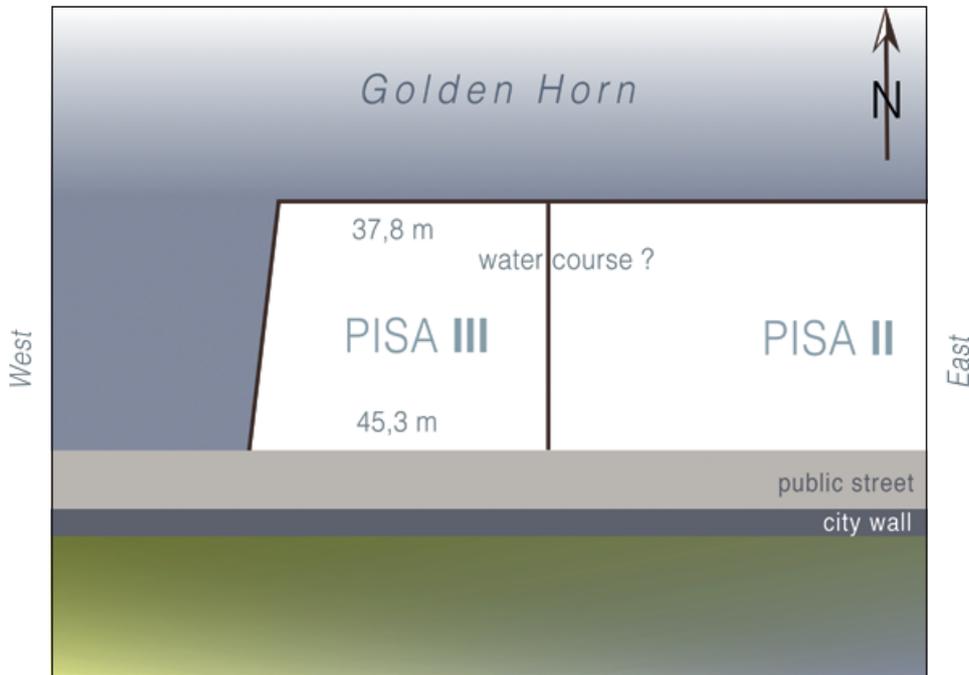


Fig. 2 Map with landing stage PISA III, 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

Landing Stage II (PISA II)²⁸ (fig. 1)

Situation: west of landing stage I (PISA I).

Dimensions: 32 cubits (69.1 m), running parallel to the city wall (from east to west), and 25 cubits (54 m) from the city wall to the sea; area 3731 m².

Development: no buildings mentioned, one money changer's table (stated in PISA V).

Landing Stage III (PISA III)²⁹ (fig. 2)

Situation: west of PISA II, it was located in the west on a »canal«, although it remains unclear whether there was another canal to the east (to PISA II) or merely a fence.

Dimensions: 21 cubits (45.3 m) running parallel to the city wall and 17.5 cubits (37.8 m) on the waterside. The width from the city wall to the water is not mentioned, but is probably comparable to PISA II (54 m). The property was not rectangular³⁰, but assuming the same width as PISA II, the area would have covered 2108 m².

Development: there was an undisclosed number of houses along the sea wall; PISA V shows that there was also a money changer's table.

Landing Stage IV (PISA IV)³¹ (fig. 3)

Situation: between landing stages III and IV is the Amalfian *scala*, which was probably not separated from IV by a canal,

but only by a board fence; the western side of IV was only separated from the *scala* of the Monastery of St Anthony by a board fence.

Dimensions: 20 cubits (43 m) of length, parallel to the sea wall, but 23 cubits (50 m) in the middle, allowing only an approximate estimation of its area to around 2446 m².

Development: it was probably undeveloped given that houses are only mentioned on the western side of the *scala* of the Monastery of St Anthony; however, there is a money changer's table mentioned for PISA V.

Landing Stage V (PISA V)³² (fig. 3)

Situation: to the west of PISA IV was the *scala* of the Monastery of St Anthony³³, which (as the text expressly states) remained the property of this monastery; to its western side, and separated from it by a »canal«, was the *scala* of the Monastery of the Forty Martyrs³⁴, which was given to the Pisans.

Dimensions: this is another lot with different dimensions, measuring on the side of the wall 22.5 cubits (48.6 m) and on the sea side 29 cubits (62.6 m); no measurement is provided for the width from the wall to the sea. Since the Hikanatissa Gate is specifically mentioned (the position of which is known), the *scala* must have been in this area.

Development: there was an unknown number of houses on the side facing the wall.

28 Acta et diplomata graeca III 21, ll. 33 – 22, l. 5.

29 Acta et diplomata graeca III 22, ll. 5-10.

30 Unequal plots are often encountered in the land survey, see Schilbach, Quellen 61. 63. 76. 89. 95, and Géométries, nos 116. 118. 125. 138. 140. 175.

31 Acta et diplomata graeca III 22, ll. 10-24.

32 Acta et diplomata graeca III 22, ll. 24-23, l. 14.

33 On the monastery, see Janin, Siège de Constantinople 39-41.

34 This is probably the *scala* of the Church of the Forty Martyrs on the (Golden) Horn (τοῦ κέρατος), see Janin, Siège de Constantinople 483 (with typographically unclear references).

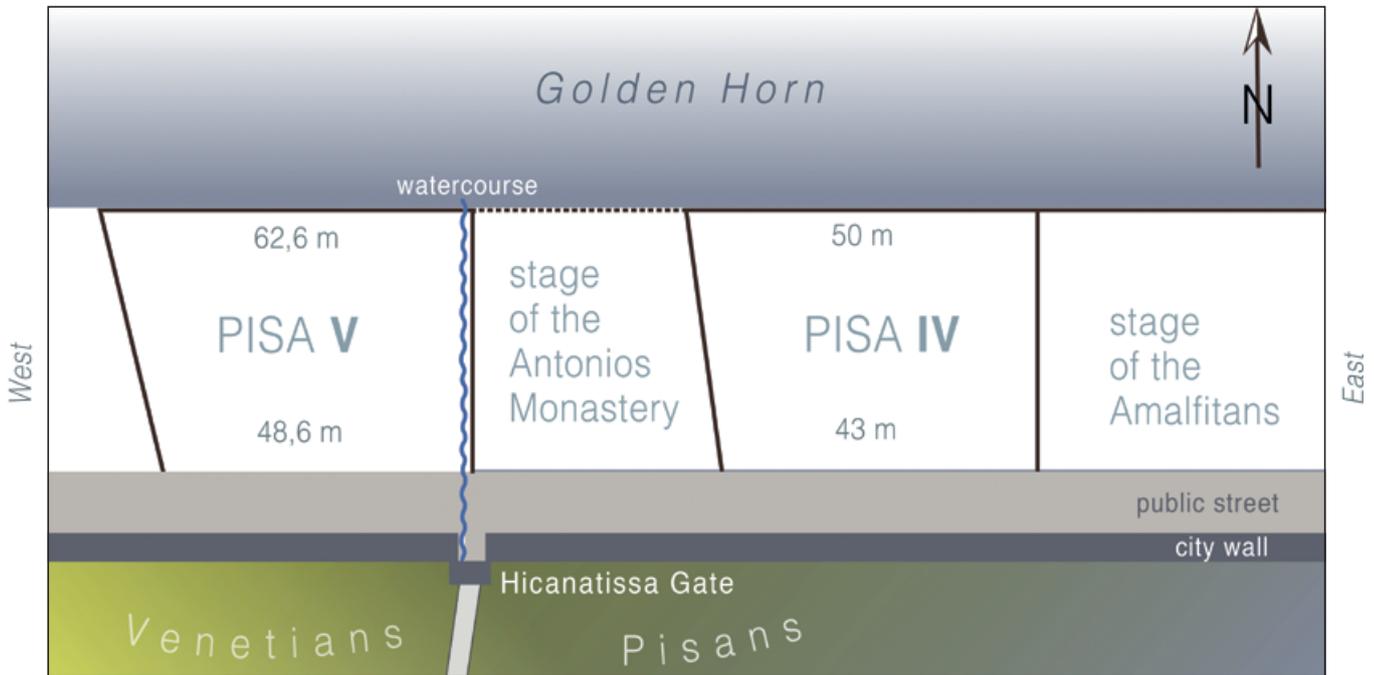


Fig. 3 Map with landing stage PISA IV/V, 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

The Landing Stages of the Genoese (figs 4-6)

Landing Stage I (GENOA I) (fig. 4)

As a result of long negotiations with Emperor Manuel I, various treaties were concluded with Genoa in 1169 and 1170³⁵. One of those is the protocol of 10 April 1170 (only preserved in Latin), which contains a description of the first landing stage at the time around 1170³⁶.

a) Data for the year 1170³⁷

Situation: the landing stage was divided by a watercourse (*aquae cursus*) that emerged from the city wall at the *porta Bonu* and belonged to the Monastery of Manuel until it was granted to the Genoese³⁸. A topographical determination is difficult given that the *porta Bonu* is only mentioned in this particular document³⁹ and there is no conclusive evidence proving that the Monastery of Manuel had any possessions on the Golden Horn⁴⁰.

Dimensions: 31.5 cubits (68 m) along the sea wall (east-west) and 22 cubits (47.5 m) from the wall to the sea.

Development: eleven houses with a single floor; two houses with two storeys and workshops, to which two small canals (or watercourses) led; ten more houses with monopitch roofs in the area of the public road along the city wall.

b) Data for the year 1192⁴¹

Situation: some new elements have been added compared to the description of 1170 (above). The landing site was delimited to the east by a «canal», east of which was another *scala* (ἑτέρα σκάλα) of the Monastery of Manuel; the *porta Bonu* is not mentioned by name, but a «Gate of the Old Raiktor» (πόρτα τοῦ παλαιοῦ ραϊκτορος) is noted, which may be identical to the former⁴².

Dimensions: 33 cubits (71.28m⁴³) in length on the side of the sea wall; no measurements provided for the width, but it is described as ranging »from the wall to the sandy beach«.

Development: the type and number of buildings changed considerably between 1170 and 1192, viz., four single-storey houses with monopitch roofs and sales booths on the public road (along the sea wall); two workshops with monopitch

35 Lilie, *Handel und Politik* 87-100; Penna, *Imperial acts* 133-156.

36 *Codice diplomatico* 117-121 (no. 52), cf. Dölger/Wirth, *Regesten*, regest 1495.

37 *Codice diplomatico* II, 120, ll. 28-121, l. 8.

38 On the Monastery of Manuel, see Janin, *Siège de Constantinople* 320-322.

39 The possessions of the patrician Bonus (7th c.) were in a completely different part of the city (Berger, *Untersuchungen* 613-614).

40 Janin, *Le siège de Constantinople* 320 assumes possessions of the monastery in this area, but the Genoese documents provide no information. Kislinger, *Better and Worse Sites* with n. 87, in this volume, conjectures that the three *scalae* would have been below a palace of (emperor) Romanos I, but find no support in the passage cited there (Theophanes Continuatus, *Chronographia* VI 433, ch. 50). However, *scalae* are always associated with nearby or easily accessible

property. The topography of the *scala* of the Monastery of Manuel that has now been established must lead to new considerations about its location or properties on the Golden Horn.

41 *Acta et diplomata graeca* III 53, l. 28-54, l. 12. Latin translation I libri Iurium I 2, 196, no. 354. The Greek *prostagma* is inserted into the *prostagma* of Alexius III Angelos from October 1201 (Dölger/Wirth, *Regesten*, regest 1661a); Penna, *Imperial acts* 195-197.

42 See n. 50 below.

43 The length differs slightly from the information in the Latin translation from 1170 (above) and is probably based on a new survey, in which the «Gate of the Old Raiktor» was added. Perhaps, this is only one of the inaccuracies known in such surveys, cf. *Géometries* 263-265.

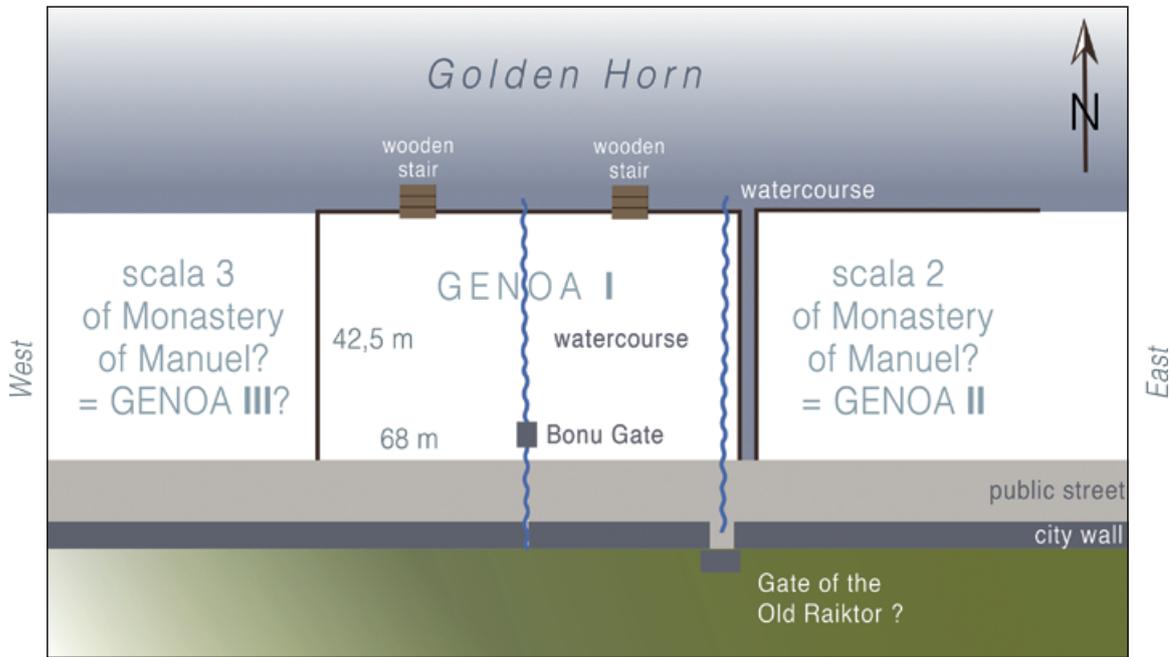


Fig. 4 Map with landing stage GENOA I, 1170 and 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

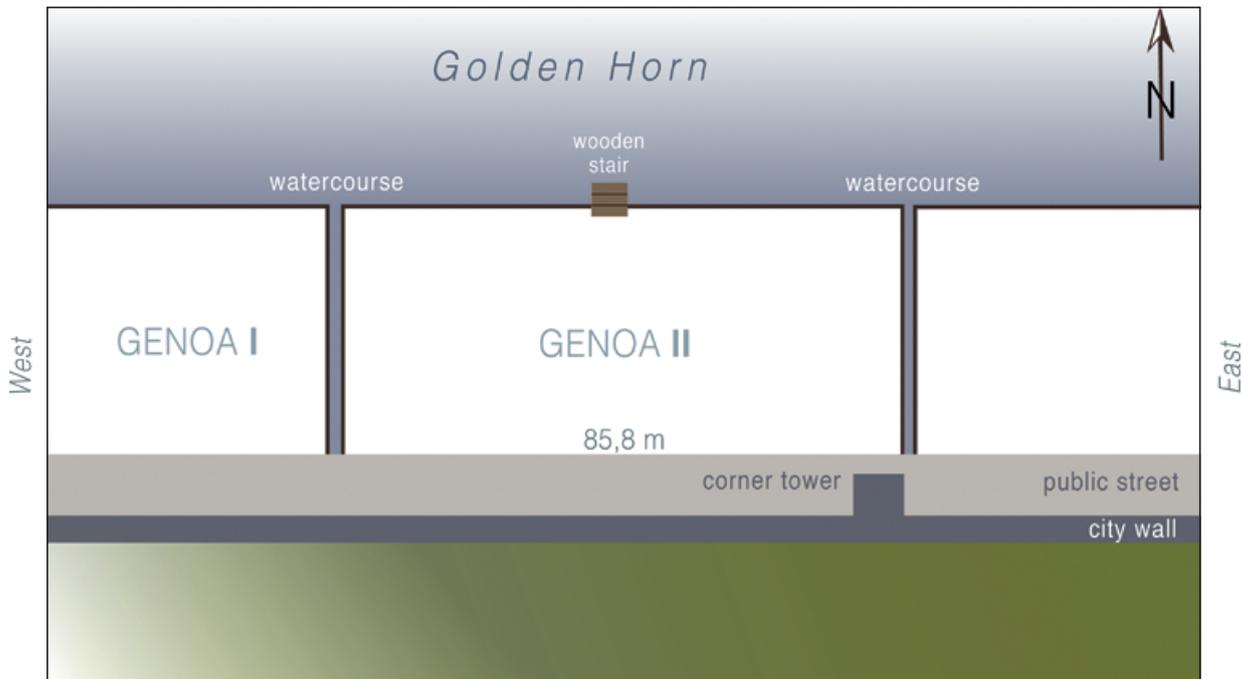


Fig. 5 Map with landing stage GENOA II, 1192 (not scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

roofs; one single-storey house with a monopitch roof; one single-storey house with *syrtaria* (i. e., interior fittings for storing small, valuable items); three single-storey houses; one one-storey house with a gable roof; one single-storey house with a living room including a sales booth; one money changer's table east of the canal issuing from the »Gate of the Old Raiktor«; two jetties on the seaward side.

Landing Stage II from the year 1192 (GENOA II)⁴⁴ (fig. 5)

Situation: east of landing stage I, according to the description of GENOA I (1170), owned by the Monastery of Manuel until 1192; bordering another »canal« in the east.

44 Acta et diplomata graeca III, 54, l. 12-25; Latin translation I Libri Iurium I 2, 197.

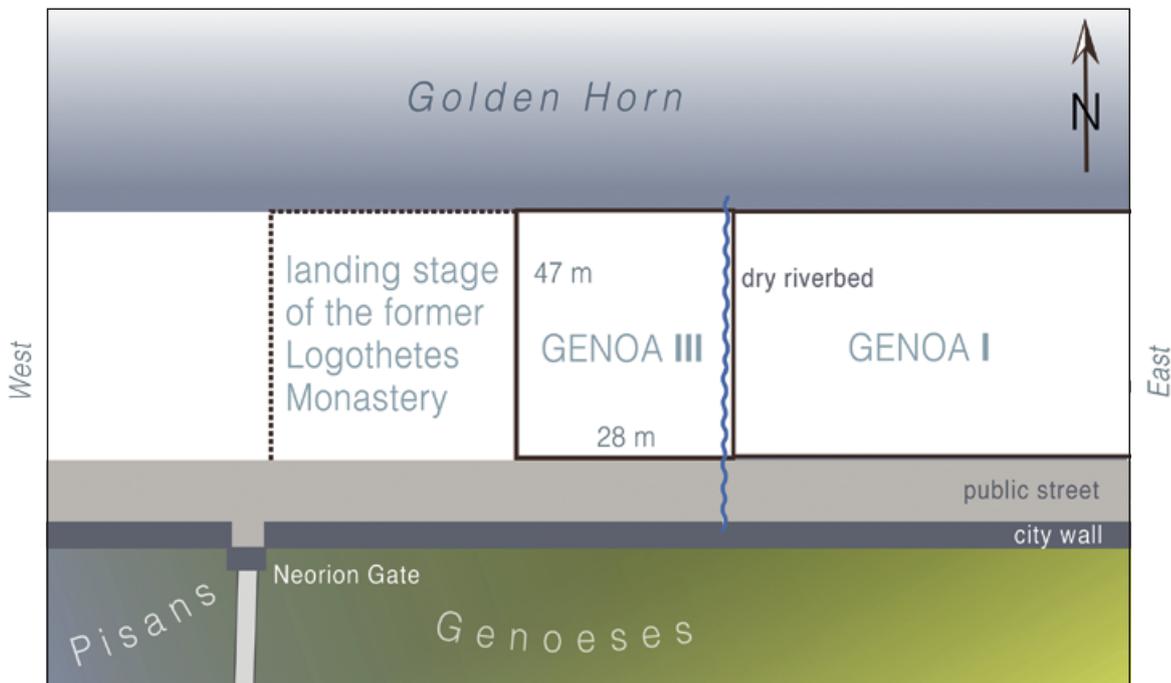


Fig. 6 Map with landing stage GENOA III, 1201 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

Dimensions: 39.75 cubits (85.8 m) in length on the side of the wall; no measurement mentioned to define the width from the wall to the »surf«, although it may be analogous to GENOA I with 22 cubits (47.5 m); 3350 m² in area.

Development: two single-story houses with gable roofs and a sales booth; a sales booth with a monopitch roof (remaining in the possession of the porter Theophylactus); three two-storey houses with terraces facing the sea; one storage building with protective grille in a niche in the tower on the wall.

Landing Stage III from the year 1201 (GENOA III)⁴⁵ (fig. 6)

Situation: according to the description, it is located »west« of the »previously mentioned« (τῆς προειρημένης), which should refer to landing stage I⁴⁶; the mooring area previously belonged to the Monastery of Manuel.

Dimensions: 13 cubits (28 m)⁴⁷ along the sea wall; the distance from the wall to the water (width) is not specified although, on the basis of GENOA I, it would be 47.5 m; however, the resulting area of 1330 m² seems a little small in view of the dense development.

Development: two single-storey houses with workshops; one two-storey house with workshop; one two-storey building with a bar on the ground floor; four single-storey houses with workshops.

Topographical Classification of the Landing Stages in the Golden Horn (fig. 7)

The plot descriptions for the Pisan quarter (which could not be presented here) allow a relatively precise assessment of the delimitations on the side of the city wall towards the Golden Horn. The quarters ranged from the Neorion Gate in the east to the Hikanatissa Gate in the west. The analysis of the imperial documents provided for the Genoese quarter shows that this followed the concessions for the Pisans in the east, even if the scope and delimitation cannot be determined as clearly as for the Pisans. In any case, the Neorion Gate in the city wall delimited the area of the Pisans and the Genoese. In the west, starting from the fixed point of the Hikanatissa Gate where the Venetian possessions were located on both

45 Acta et diplomata graeca III, 54, lin. 25-55, l. 7; Latin translation I Libri Iurium I 2, 197.

46 However, it cannot be ruled out that the landing stage was indeed east of GENOA II and that the direction of the compass (πρὸς δύσιν instead of πρὸς ἀνατολάς) is confused in the text.

47 However, the text says διάμετρος (diameter), but according to topographical understanding, only the route along the city wall can be meant.



Fig. 7 Map of the landing stages in the Golden Horn (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

sides of the *embolos* reaching as far as the Vigla Gate. The available Venetian deeds of ownership do not provide any measurements⁴⁸.

Thanks to the close arrangement of the quarters (on the seaward side), we have a solid basis for the reconstruction of the sequence of the landing stages. The description may be followed using **figure 7**. PISA I, the so-called »old landing stage«, went back to a time when the Pisan possessions were not yet extensive. They were situated »outside« (ἐξωθεν)⁴⁹ the Neorion Gate and »opposite« the Monastery of the former Logothetes, which was located in the Genoese quarter within the walls, and is also mentioned several times in reference to the Genoese quarter⁵⁰.

To the west (with an unknown gap between them and PISA I), the landing stages PISA II and III followed, which were located to the west of the Neorion Gate and »within«

the Pisan possessions. West of PISA II was the landing stage of the Amalfians, whose dimensions are unknown, followed by PISA IV and PISA V, both of which were interrupted by the landing stage of the Monastery of St Anthony. According to the evidence, which is not always topographically clear, PISA V lay opposite the Hicanatissa Gate, where (within the walls) the Pisan possessions ended and the Genoese began. The Pisan part of the sea wall, which is still walkable and measurable today, is approximately 250m. The total length of the PISA II-V landing stages adds up to 195m, to which the landing stages (of unknown dimensions) of the Amalfians and the Monastery of St Anthony must be added, and, of course, the area of the so-called canals located between some of the mooring areas. As a result, almost the entire coastline from the Neorion to the Hicanatissa Gate must have been filled with landing stages (including four of the Pisans).

48 In any case, the Venetian quarter (at the end of the 12th c.) was considerably larger than those of the Pisans and Genoese, although the political restrictions of the Byzantine emperors limited Venetian trade activities from 1171 to 1204 and strengthened those of Genoa and Pisa.

49 For the topographical meaning of this information, see n. 24 above.

50 Janin, *Siège de Constantinople* 41. – Jacoby, *Venetian Quarter 1560* wrongly locates the monastery »outside the Neorion Gate«.

The topographical placement of the Genoese landing stages is less certain. They are connected to unknown positions on the sea wall, i.e., the *porta Bonu* in GENOA I from 1170 and the πόρτα τοῦ παλαιοῦ ραίκτορος, also in GENOA I, from 1192. This landing stage, according to GENOA I from 1192, was located outside (ἔξωθεν) of the »Gate of the Old Raiktor« and thus, analogous to the information related to the first mooring area of the Pisans, east of this gate⁵¹. GENOA II was located to the east of GENOA I and thus also outside the »Gate of the Old Raiktor«, although the text is not *expressis verbis* on this point. GENOA III was a concession from the year 1201 and was probably located west of GENOA I, provided that there is no error made in referring to the direction of the compass, which would mean that the *scala* would have been situated east of GENOA I/II. In any case, the *scala* of the former Logothetes Monastery must have separated the Genoese landing stages from the Pisan mooring areas. The length of the Genoese landing stages (parallel to the city wall) is measured at around 180 m, without the »canals«, which is only slightly less than that of the Pisans⁵².

The exact sequence of the *Venetian* landing stages has to remain largely open, since the mentioned Venetian private documents relating to property within the walls do not contain any specific topographical information related to the *scalae*.

The External Aspects of the Landing Stages

The documents related to the imperial donations to the Pisans and Genoese are the only descriptions of landing stages available from the Byzantine Empire⁵³. These descriptions cannot be generalised in every case since they represent a very specific image of the »harbour« in these particular areas of Constantinople. In spite of their Graeco-Latin name *scala*, the landing stages were not only jetties, but lots outside the sea wall, on a shelf or on alluvial land, which along the wall were connected by a »public road« (δημοσία ὁδός). They were separated from each other either by wooden fences or watercourses (κάναλος, κανάλιον; or even dry ditches like GENOA III) pouring into the sea from the heights of the city. There is no mention of special shipping channels on the broad sides of the landing stages. Although the sources do not always mention the dimensions of the broad side of the respective mooring areas (from the wall to the sea), it appears that they all roughly measured around 50 m, so that it is also possible to have an idea of the diameter of the land plinths at these points⁵⁴. In some cases, the previous owners of the

landing stages are mentioned: the hospice of the Church of the Forty Martyrs (PISA V) and the Monastery of Manuel, which owned all three Genoese landing stages until they had been withdrawn between 1170 and 1201.

A special characteristic of these landing stages is their extensive development, with the exception of PISA II and IV, especially on the side of the sea wall where the road was located. Dimensions for these buildings are not provided by the sources. Most of them were single storied, but always with a monopitch or gable roof, which, in view of the mild climate in Constantinople, points to stability and durability, as well as their material value⁵⁵. They occasionally served as workshops and GENOA III also contained a bar. Sometimes these houses were also connected to booths for the sale of goods (προβολαί). In general, these houses were probably of simple construction and there is rarely mention of a *triclinium* (living room). In the Genoese harbour area (GENOA II), however, there were also more luxurious houses with vault-like ceilings (ζυγώματα) and sea-facing terraces.

Money changer's tables (καταλλακτικά τραπέζια) could be found at almost all of the landing stages. These were covered and constituted small banking premises. Overall, the description of these buildings gives the impression that they were occupied only during the daytime and that the workers went home to their dwellings located behind the city walls in the evening.

There are no references to facilities for shipbuilding or large warehouses. Thus, it appears that goods were stored there only temporarily and that they were later brought to locations within the quarters. There is evidence for workshops producing materials required in shipping. However, the documents do not mention technical equipment for mooring ships or special masonry on the seaside, but it is likely that such details did not belong in a land survey. The reference in GENOA I that the property extended to the »sandy beach« (μέχρι τοῦ ψάμμου) suggests that ships were pulled onto land for unloading. The floor generally consisted of compacted earth (or gravel), the mentioned Venetian landing stage being the only documented stone *scala*⁵⁶.

The documents for GENOA I/II describe wooden walkways (ξυλόσκαλα) on the seaward side. It has been shown that the broad sides of the landing stages did not provide any or only insufficient space to be accessed from the sea. This is why only the sea sides of the landing stages, of different lengths, were available for access by the ships: PISA II 69 m, PISA III 37.8 m, PISA IV 50 m PISA V 62.6 m, GENOA I 68 m (or 71 m), GENOA II 85 m, and GENOA III 28 m. It is likely that the five

51 See n. 24. – Asutay-Effenberger, *Porta veteris rectoris* 129-142 does not clarify the topographical question. – Berger, *Ufergegend* 160 fig. 2 suspects the *porta* at the end of the Genoese quarter, but this cannot be true from the description in GENOA I. The gate in the Genoese part of the sea wall cannot be determined with the data known so far.

52 The calculations by Balard, *Romanie génoise* 180 are based on unreliable figures derived solely from the Latin translation and the Genoese ell.

53 *Scalae* are also mentioned in monastery documents, especially on the Holy Mountain Athos, without further description.

54 The research of Mango, *Shoreline* refers to a different epoch and a different topographical area.

55 Schreiner, *Haus* 277-320. – The documents on the quarters in Constantinople were not fully evaluated.

56 See, n. 15 above.

scalae of the Venetians had similar lengths of around 60 m, especially since their share of the seafront was much larger with around 500 m (on the side of the wall). The shipwrecks from Yenikapı (Harbour of Theodosius⁵⁷) attest that, in our period, the average length for medium ships was 10-12 m and for large transport ships 17-19 m⁵⁸. This means that up to five ships could be unloaded at the *scalae* at the same time. The available surface in the »harbour« in 1201 amounted to approximately 10 600 m² for the Pisans, 7 800 m² for the Genoese, and an estimated 10 000 m² or more for the Venetians.

The treaty that was concluded in 1201 with Genoa was apparently the last negotiated with a Western state that involved territorial and commercial concessions before the Latin conquest of Constantinople in 1204, a situation from which entirely new conditions emerged⁵⁹. As it seems, the quarter and *scalae* of the Pisans remained largely intact⁶⁰. The rights of the Genoese, however, expired⁶¹, although we do not know whether the Venetians had *de facto* taken over their landing stages, given that the Genoese quarter had remained outside the Venetian part of the city of Constantinople⁶².

Summary / Zusammenfassung

The Western Landing Stages (σκάλαι) in the Golden Horn: Some Remarks Relating to the Eleventh and Twelfth Centuries

Thanks to a large number of Greek and Latin documents in the archives of Genoa and Pisa, we have relatively detailed information about the development, number and appearance of the landing stages (*scalae*) of the city states of Venice, Pisa and Genoa on the Golden Horn since the eleventh century. Documents of this kind have not survived from Venice, thus we can only arrive at generalised assumptions about the Venetian landing stages.

The information in the documents is always related to the granting of trading quarters in the city: Amalfi since the beginning of the eleventh century; Venice since 1082; Pisa since 1111; and Genoa since 1170. Based on the surviving descriptions of the terrain – concrete, but not always exact – we can calculate an approximate conversion to modern measurements. »Landing stages« are always plots of land outside the city walls on the Golden Horn, from the Porta Viglas (Odun kapi) in the west to the present-day Sirkeci quarter in the east. They are connected to the respective quarters inside the walls and are several times interspersed with landing stages of third parties. The buildings comprise warehouses for the temporary storage of goods, smaller workshops and houses with exchange tables (»banks«). For unloading cargo, the ships docked on the seaward side of the plots lying on the Golden Horn, the actual *scala*.

Die westlichen Landeplätze (σκάλαι) am Goldenen Horn: Einige Bemerkungen zum 11. und 12. Jahrhundert

Dank einer größeren Anzahl griechischer und lateinischer Urkunden in den Archiven von Genua und Pisa sind wir über Entwicklung, Anzahl und Aussehen der Landeplätze (*scalae*) der Stadtstaaten Venedig, Pisa und Genua im Goldenen Horn seit dem 11. Jahrhundert verhältnismäßig detailliert informiert. Da Urkunden dieser Art aus Venedig nicht erhalten sind, sind zu den venezianischen Landeplätzen nur verallgemeinernde Angaben möglich.

Die Nachrichten stehen immer in Zusammenhang mit der Vergabe von Handelsquartieren in der Stadt (Amalfi seit Anfang des 11. Jahrhunderts, Venedig seit 1082, Pisa seit 1111 und Genua seit 1170). Es liegen konkrete, wenn auch nicht immer leicht verständliche Beschreibungen des Geländes vor, die eine angenäherte Umrechnung in heutige Maße erlauben. »Angelegstellen« sind immer Grundstücke außerhalb der Mauern am Goldenen Horn, von der Porta Viglas (Odun kapi) im Westen bis zum heutigen Viertel Sirkeci im Osten, die mit den jeweiligen Quartieren innerhalb der Mauern in Verbindung stehen und mehrfach von Anlegeplätzen Dritter in ihrer Abfolge unterbrochen werden. Auf ihnen sind Bauten zur vorübergehenden Aufbewahrung von Waren, kleinere Werkstätten und Häuser für Wechslertische (»Banken«) errichtet, während die Schiffe (zum Löschen der Ladung) an der am Goldenen Horn liegenden Seeseite der Grundstücke, der eigentlichen *scala* anlegten.

57 Cf. Külzer, Harbour of Theodosius, in this volume.

58 Kocabaş, Old Ships 102. The dimensions given for Venetian ships by Martin, Art 207-209 (appendix 3) are few in number and are inconsistent (15-17 m).

59 Another agreement with Genoa dated May 1203, preserved as a regest, which I had pointed out a long time ago (Schreiner, Genoa), probably refers to the treaty of 1201 (cf. Dölger/Wirth, Regesten, regest 1663c).

60 Jacoby, Venetian Quarter 160-161.

61 Balard, Romanie génoise I 39. – The role of Genoa in the city of Constantinople itself between 1204 and 1261 has not been studied in detail.

62 Jacoby, Venetian Quarter 154 (location map).

The Kynegion District and Its Harbour in Late Byzantine and Ottoman Times

Late Byzantine sources mention a district on the Golden Horn called Kynegion or Kynegoi («Hunters»), which was associated with the living quarters of the imperial hunters¹. In addition, there were properties² belonging to the Lips Monastery, the estates of wealthy citizens, markets³, as well as a harbour or landing stage here. A city gate on the Keras side led into this quarter, whose exact extent is unknown. However, the approximate location of the gate and the landing stage are mentioned in some reports, which will be briefly presented below⁴. Georgios Pachymeres informs us about a disastrous inferno in September 1305: the fire spread ἀπὸ τῆς πύλης τῶν Κυνηγῶν λεγομένης μέχρι καὶ τοῦ Ὠπαινῆς ἱεροῦ, arising between the fifth and sixth hills, and destroying numerous buildings⁵. The fire did not, as A. M. Schneider assumed⁶, hit the Monastery of St John Prodromos tes Petras. This was only attacked by the fire of 1291, which broke out in a market at a βασιλικὴ πύλη⁷. But in both cases, the facilities between the fifth and sixth hills were affected⁸, it is therefore conceivable that either two neighbouring gates are mentioned here or that the same gate has been given two different names⁹. The monastery and the Kynegion Gate or harbour are also recorded in the report by the Spanish envoy Ruy Gonzáles de Clavijo. Coming from Pera in 1403/1404, Clavijo landed at the Kynegion Gate («Quinico») and went with courtiers to the Church of Blachernae and the Monastery of Johannes Prodromos tes Petras¹⁰. The Prodromos Monastery was north of the Aetios Cistern, where the Kasım Ağa Camii stands today, and was accessible through the valley between

the fifth and sixth hills¹¹. Clavijo presumably used the street marked on some Buondelmonti *vedute* (e. g., Venice, **fig. 1**¹², Rome¹³), that runs from a city gate of the Golden Horn Walls towards the church building labelled *S. Io[annes] de petra*.

The landing site in the Kynegion was also utilised by Emperor John VIII Palaiologos (1425-1448) in 1438 when he started his journey to Venice. In this regard, Sylvester Syropoulos wrote¹⁴: Τῆ δ' ἐφεξῆς πάλιν προσωρμίσθησαν τὰ κάτεργα εἰς τὸν Κυνηγόν, καὶ περὶ τετάρτην ὥραν εἰσῆλθε καὶ ὁ βασιλεὺς εἰς τὸ ἴδιον κάτεργον («The next day the boats were brought to anchor again at Kynegos, and at around the fourth hour the emperor embarked on his own boat») ¹⁵. As already discussed elsewhere, Tekfur Sarayı served as the Imperial Palace from the second half of the fourteenth century onward, at the latest, if only temporarily¹⁶. The connection between the above-mentioned gate and Tekfur Sarayı can also be clearly seen on the Venetian Buondelmonti *veduta* (**fig. 1**). Two streets start from the gate: one going straight to Prodromos Monastery, the other to Tekfur Sarayı; another branches off the straight road just before the Prodromos Monastery, which in turn extends to Tekfur Sarayı. The emperor must have used one of these routes when he went to the Kynegion harbour.

The area and the harbour are particularly mentioned in the reports regarding the events of 1453. According to Nicolò Barbaro, the Venetian captain Alvise Diedo sailed with his galleys several times to the Kynegion to assist Emperor Constantine XI Palaiologos Dragazes (1449-1453) with the

1 van Millingen, Walls 204-205. – Schneider, Mauern und Tore 69. – Janin, Constantinople 377 (on the eponymous Kynegion on the Seraglio Point 376).

2 Delehay, Deux typica 131, 26-28: τὰ τοῦ Βατραχωνίτου δηλαδὴ περὶ τὴν τοποθεσίαν τῶν Κυνηγῶν σὺν τοῖς τοῦ Γαβρᾶ, τὸ πλησίον τῆς πύλης τῶν Κυνηγῶν ἐργαστήριον. English translation in Talbot, Τυπικόν § 45, 1279: »In addition, the buildings inside Constantinople which I acquired by purchase, that is, the houses of Batrachonites and Gabras in the Kynegoi quarter, the workshop near the gate of Kynegoi [...]«.

3 Kidonopoulos, Bauten 45-46. 48. 179-181. 192. 204. 208. 220. 232 deals with the relevant sources.

4 Only the sources relevant to my argument are considered.

5 Georgios Pachymeres, Relationes historicae XIII 10 (IV 637, 30-639, 19 Failler). – Failler, Incendie 160. 166-167.

6 Schneider, Brände 388 (also with date 1308).

7 Georgios Pachymeres, Relationes historicae VIII 25 (III 198, 9-12 Failler). – The text variants of XIII, 10, in which the Prodromos Monastery is mentioned, see Failler, Incendie 158. – Kidonopoulos, Bauten 45.

8 Kidonopoulos, Bauten 45-49.

9 As in the case of Mevlevihanekapi on the Theodosian Land Walls, which was also called »Rhesion«, »Myriandriion« or »Polyandriion« and »Koiliandriion« during the Byzantine era, see Asutay-Effenberger, Landmauer 110.

10 Clavijo, Embajada 133-135: »E por quanto era ya la noche cerca, quedó que otro día, miércoles, que los dichos embajadores pasasen en Costantinopla, a

la puerta que es llamada Quinico, e que alli fallarian al dicho micer Ilario e a los otros de la casa del Emperador que con ellos andavan, e cavallos en que cavalgasen, e que irían más ver de la ciudad«. For an English translation, see Markham, Court of Timour 29-30.

11 Most recently, Asutay-Effenberger, Kloster. – Schneider, Mauern und Tore 69 talks of a Church of St John on the bank. – Kidonopoulos, Bauten 180 n. 362 corrected that.

12 For the revised map, see Asutay-Effenberger, Landmauer fig. 28 (my **fig. 1**).

13 On the Buondelmonti *vedute* in Rome (Asutay-Effenberger, Landmauer fig. 44) the gate from which the road leads towards Tekfur Sarayı is entered as the second entrance (seen from the west). The area of today's Balat is no doubt meant here. On the Buondelmonti view in Venice (**fig. 1**) there is only one gate in the same place is visible, which is mistakenly labeled as *porta vlacherna*. However, its location further east of the Blachernae Church and west of the Pantepoptes Monastery (for its identification see Effenberger, Pictorial Sources 22, in this volume) suggests that Balat is also meant here; for the condition around 1815-1817 cf. n. 90.

14 Sylvester Syropoulos, Mémoires 196 (197 French translation).

15 English translation in Kondyli, Sylvester Syropoulos 186.

16 See Asutay-Effenberger, Landmauer 134-142. – Philippides/Hanak, Siege and Fall 281 contradicts my thesis without concrete arguments. For a critical review of this book, see Angold, URL: www.history.ac.uk/reviews/review/1101.



Fig. 1 The Venetian *veduta* of Buondelmonti, edited to highlight the street network. – (From Asutay-Effenberger, Landmauer fig. 28).

planned trench work around the fortification of Blachernae¹⁷. Another chronicler from 1453, Ubertino Puscolo, placed the Kynegion Gate, defended by Gabriel Trevisan, between *Xylini Porta* and *Porta del Faro*¹⁸, between today's Ayvansaray and Fener¹⁹, districts, i.e., in the environment

of modern Balat district (figs 2-3). Similar statements were made by Leonard of Chios, among others, who witnessed the events²⁰. The Kynegion Gate and the landing stage or harbour are looked for by modern scholars²¹ mainly in the Balat area, in the immediate vicinity of the later Balatkapi²²

17 These passages cannot be found at Pertusi, *Caduta di Costantinopoli* because the entire source is not reproduced, see Nicolò Barbaro, *Diario* 10 and 13. I used the Internet resource here URL: badwila.net/costantinopoli/giornale.pdf.

18 Pertusi, *Caduta di Costantinopoli* I, 208, 181-183.

19 For a list of gates on the Golden Horn based on written sources, see Effenberger, *Illustrationen* 76 pl. III.

20 Pertusi, *Caduta di Costantinopoli* I, 151 § 25.

21 See van Millingen, *Walls* 120. – Schneider, *Mauern und Tore* 67. – Vgl. Janin, *Constantinople* 288.

22 Balatkapi was located between the districts of Fener and Ayvansaray and was destroyed by a huge earthquake in 1894. The remnants were removed in 1930 due to the expansion of the road, see Akin, *Balat*. – On the location of the gates, see Schneider, *Mauern und Tore* plan I (my fig. 2). – Dirimtekin, *Haliç Surları*, 2. Kroki (drawing).

(fig. 2)²³. Without doubt, this place was the main target of Ottoman attacks, not only because it is located on one of the narrowest points of the Golden Horn, but also due to its harbour, gate and the associated streets leading to the city and especially to the imperial palace²⁴.

The Expansion of the Kynegion District

As mentioned above, the extent of the Kynegion district is unknown. Only Niccolò Barbaro, in connection with the positioning of the Ottoman army in 1453, reported: *A di 7 pur de questo, el signor si se redusse cun gran parte de quela zente, zerca uno quarto de mio luntan pur delle ditte mure, e steva el campo a la fila quanto che durava la faza de la mura de tera, che jera mià che sun de la Cresca per fina al Chinigo*²⁵ («On the seventh of this month [April] the lord reduced a large part of these people and let his army move a quarter of a mile to the walls mentioned. And the army stretched about 6 miles from Crescea to the Kynegion»). In his report, Barbaro placed the Kynegion Gate on the Golden Horn²⁷. However, he apparently does not speak of the gate in the passage quoted, but of an area that must have extended further to the southwest. His starting point is the »Porta Cresca«, i. e., the Golden Gate or its surroundings. As discussed earlier in another place, his mile is approximately 680 m²⁸. The length of the whole fortification at the west of the city, including the Blachernae Wall, is approximately 6.5 km²⁹. Thus, Barbaro located the Kynegion district, at least its southwestern border, roughly in the vicinity of Tekfur Sarayı where the Blachernae Wall begins (fig. 3). As far as I know, there is no other Byzantine source from the time before the Ottoman conquest that provides direct or indirect information about the expansion of the Kynegion, which is why Ottoman evidence must be considered here.

In the area of Balat or Tekfur Sarayı, several neighborhoods (*Mahalle*) were established soon after the conquest³⁰. The names of two *Mahalle* in particular immediately recall the

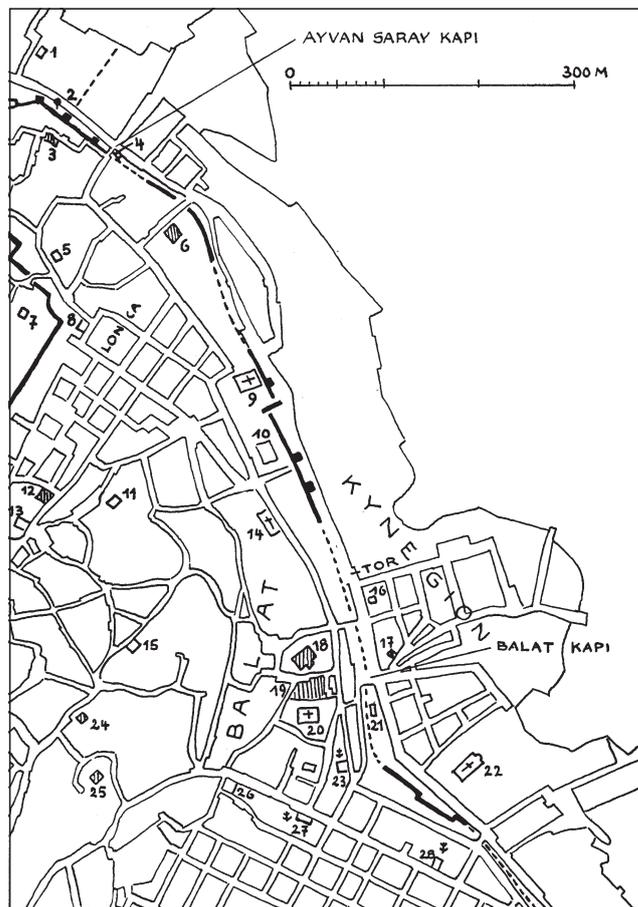


Fig. 2 Balatkapı, area map. – (From Schneider, Mauern und Tore plan I).

word Kynegion. The first was called »Küngöz Mahallesi«³¹ near Balatkapı³². »Küngöz« is a corruption of the Greek term Kynegion³³. Like the Byzantine sources, the Ottoman accounts place accommodations, shops, a market (*Çarşı* or *Suk*) and a city gate (*Kapı*) here. Schneider located the Ottoman Küngöz outside the wall and only referred to the urban area behind the entrance as Balat (fig. 2)³⁴. However, we

23 Niketas Choniates, *Historia* 545,36-37 (van Dieten) mentions a clash between Byzantines and Latins on 17 July 1203, which occurred in the vicinity of an imperial landing stage (ἀποβάθρα βασιλικῆς) on the Golden Horn. German translation: Grabler, *Kreuzfahrer* 119. However, the exact position of this site is not clear from the report. – Mordtmann, *Esquisse* 40 connected this statement with Konstantinos VII Porphyrogenetos, *De cerim.* II 9 (542,8-11 Reiske) and placed this landing stage on Balatkapı. – van Millingen, *Walls* 195-196, quoted a passage from Geoffroy de Villehardouin (§ 171. 126 Dufornet), who talks about an earlier outer wall. According to van Millingen, this can only mean the outer wall of Leon, which is why he accepts it: »But Balat Kapisi and the Wall of Leo are too far apart for the former to indicate the site of the latter. On the other hand, the Wall of Leo and Aivan Serai Iskelessi are very near each other«. – See also Janin, *Constantinople* 287. – Schneider, *Mauern und Tore* 92-93. – Georgios Pachymeres, *Relationes historicae* V 10 (I, 469,15 Failler) talks of τὸ ἐν Βλαχέρναις νεώριον. The placement of this harbour finds no consensus in research. While van Millingen, *Walls* 196, Schneider, *Mauern und Tore* 68 and Schneider, *Blachernen* 92-93 looked for it in Ayvansaray, Müller-Wiener, *Häfen* 7 expresses his doubts: »It is questionable whether another complex on the Golden Horn in the vicinity of the Blachernae Palace, which was built much later, can be expected in the early days, which Pachymeres called to *en Blachernais neōrion*« (translation of the German original). According to him, this could also be associated with Balat.

24 On a movable Ottoman bridge, see Nicolò Barbaro, *Diario* 26-27: URL: badwila.net/costantinopoli/giornale.pdf.

25 van Millingen, *Walls* 202: »The Quarter of Kynegion thus comprised the modern quarters of Balata and Aivan Serai«. – Janin, *Constantinople* 288: »En tout cas les Kynégioi était un quartier voisin des Blachernes«.

26 Pertusi, *Caduta di Costantinopoli* I, 14, 183-187.

27 See n. 22. – Barbaro placed the Kynegion Gate in the vicinity of today's Eğri-kapı, see Pertusi I, 23. 488-489. – Discussion in Asutay-Effenberger, *Landmauer* 214 n. 614.

28 Asutay-Effenberger, *Landmauer* 214 n. 810.

29 Asutay-Effenberger, *Landmauer* 1.

30 Siehe Ayverdi, *Istanbul Mahalleleri* 13 no. 13; 14 no. 19; 21 no. 53; 22 no. 58-59; 28 no. 83; 38 no. 118; 49 no. 166.

31 Also written »Kingöz«, »Kinkoz« or »Künfoz«, see n. 32, 35 and 37.

32 Barkan/Ayverdi, *Istanbul Vakıfları Tahrir Defteri* 304 no. 1788: »Mahalle-i Kingöz be nezd-i Bâb-ı Balat« (»The Quarter Kingöz by Balatkapı«). – See also Canatar, *Istanbul Vakıfları Tahrir Defteri* 477 no. 2124.

33 Öz, *Zwei Stiftungsurkunden* XI.

34 Schneider, *Mauern und Tore* plan I.

learn from Ottoman sources that, among others, there were some shops for horse accessories in Küngöz³⁵, for which two fixed points are mentioned: the market of Balat (Çarşû-yı Balat or Suk-u Balat) and the Ferruh Kethüdâ Camii³⁶, whose location is known (fig. 2 no. 18, fig. 3). The sources also reveal that several facilities in Küngöz were adjacent to Molla Aşkî³⁷. Molla Aşkî Mescidi³⁸ (fig. 2, no. 15) is situated not far from Ferruh Kethüdâ Camii³⁹ and Balat Hamamı⁴⁰ (fig. 2 no. 19, fig. 3). The Küngöz quarter must have been, therefore, clearly within the walls and cannot be distinguished from Balat⁴¹.

The second location is the »Avcı Bey Mahallesi«, translated as »Quarter of the Hunter Bey« or »Quarter of the Master Hunter«⁴². According to Ottoman tradition, this *Mahalle* goes back to the master hunter of Sultan Mehmed II (1444-1445 and 1451-1481), Avcı Mehmed Bey. The Eğrikapı Mescidi donated by him, which was between Tekfur Sarayı and Eğrikapı according to the Hadikat ül Cevâmi of Ayvansarâyî Hüseyin Efendi⁴³, formed the core of the *Mahalle* (fig. 3)⁴⁴. Although the mosque has now disappeared from the cityscape, the tomb of Avcı Mehmed Bey has been preserved. It is located on former Şişehane Caddesi (now renamed Şişhane Caddesi) – from Tekfur Sarayı on the right side of the street – in a small garden enclosed by a railing (fig. 4). Ayvansarâyî Hüseyin Efendi in his other work, Mecmuâ-i Tevârih, also included Hançerli Sultan Sarayı from the beginning of the sixteenth century, which is in the neighbourhood of the Church of Blachernae, in the Avcı Bey district⁴⁵. While we cannot say more about the person of Avcı Mehmet Bey, it cannot be a coincidence that this hunter of the time of Mehmed II lived, donated and was buried in an area, which (at least part of it) was designated as *kyneqion* by Nicolò Barbaro. The name of this Ottoman *Mahalle* confirms the connection, still described as »probablement« by R. Janin⁴⁶, between the quarters and the hunters who lived here in the Byzantine period and indicates continuity. The area extended from Tekfur Sarayı or Eğrikapı⁴⁷ via Blachernae to Balat and included the streets leading to the palace, the palace itself and the imperial harbour (fig. 3).



Fig. 4 The Tomb of Avcı Mehmet Bey. – (Photograph Arman Maşoğlu).

The Ostensible Harbour Entrance and the Gates

We still do not know where the harbour was in Balat, neither what it looked like, nor which entrance of the Golden Horn Walls was actually called the Kyneqion Gate. There is no archaeological trace left of the shore around Balat (fig. 2), which is why arguments of the scholars are based solely on written accounts that were compiled after the conquest. Around the middle of the sixteenth century, Petrus Gyllius observed three openings west of the former Balatkapı, which he interpreted as a harbour entrance: *Est porta Palatina, sive Cyneqion appellata, vbi Platani extra porta. Prope portam extant intra murum tres arcus magni, nunc substructi, olim patentes, per quos ingrediebantur triremes in portum manufactum intra muros clasum ad commoditatem proponqui Palatij, nunc obrutum, & conuersum in horti culturam. Cyneqion celebre est scriptis recetium, vt etiam Suydas non alienum*⁴⁸ (»On the east-facing fence of the sixth hill is Porta Palatina or the gate called the Cyneqion. There are plane trees outside the

35 Barkan/Ayverdi, İstanbul Vakıfları Tahrir Defteri 422 no. 2467 (of May/June 1483): »Mahalle-i Kinkoz [Küngöz] [...] der mukâbile-i dekâkin-i Sarâcin« (»The Quarter Kinkoz [...] opposite the horse accessories shops«). – See also Canatar, İstanbul Vakıfları Tahrir Defteri 692 no. 3167.

36 Canatar, İstanbul Vakıfları Tahrir Defteri 678 no. 3105: »Dükkân-ı na'lbend der çârşû-yı Balat [...] Halen Ferruh Kethüdâ'nun câmi'i kurbında bir demürçi dükkânına tebdil olunmuş« (»A horseshoe shop at the Balat market, which has been converted into a blacksmith shop near the Ferruh Kethüda Camii«).

37 Ergin, Fatih İmareti Vakfiyesi 223 § 145 »üç büyü-tü suflıye ... yine mahalle-i mezburde, Kümföz Kapısı kurbündedir. Fahrül'ulema Mevlâna Aşkî milkine mutasıldır« (»Also three low houses in the named neighborhood, near the Kümföz gate next to the property of the great scholar Mevlana Aşkî«).

38 On the Molla Aşkî Mescidi, see Naza, Molla Aşkî Mescidi.

39 On the mosque, see Tanman, Ferruh Kethüda Camii.

40 On the Hamam, see Eyce, Balat Hamamı.

41 Already in the 16th c., Balat was no longer a *Mahalle* (neighborhood), but a *semte* (city district) with several neighborhoods. The centre of the district is where the Ferruh Ketküda Camii was situated. If Balat is referred to as *Mahalle* in some foundation deeds, it is to be understood that it is the core of the district around

Ferruh Ketküda Camii or Balatkapı. – See Barkan/Ayverdi, İstanbul Vakıfları Tahrir Defteri 383 n. 2.

42 Schneider, Blachernen 119 mentions this *Mahalle* without comment. As far as I know, this name has not received attention in topographical investigations.

43 Hadikatü'l Cevâmi' 78 (Eğrikapı Mescidi).

44 Ayverdi, İstanbul Mahalleleri 13 no. 13.

45 Ayvansarâyî, Mecmuâ-i Tevârih 357. The palace no longer exists, only the associated *hamam* – used as a bread factory – still stands on the substructures of the Blachernae Palace behind the Blachernae Church in Mahkeme Külhanı Sokak. According to sources, this area must have belonged to the İyulahirna neighborhood (certainly Aya Valcherna) in Ottoman times, even though Ayverdi, İstanbul Mahalleleri 28 İyulahirna is located near the Tekfur Sarayı.

46 Janin, Constantinople 377.

47 Eğrikapı most likely corresponds to the Kaligaria Gate (Shoemaker Gate) mentioned in Western accounts regarding the events of 1453, see Asutay-Effenberger, Landmauer 142-143. Cf. n. 24 and 27.

48 Petrus Gyllius, De Topographia IV 4, 202, French translation in Gréolis, Gilles 429. In the following lines, Gyllius mistakenly linked the »Kyneqion« to the execution site, see n. 1 (Janin).

gate. There are three large arches in the wall, which are now bricked up and previously open, through which the galleys lead into an artificially created harbour, which was enclosed in the wall for the convenience of the high palace but is now abandoned and used as a garden»⁴⁹. In *De Bosphoro Thracio*, Gyllius adds that these three arches stand 120 *passus* (approximately 75 m) west of the Porta Palatina⁵⁰. For him, the Porta Palatina (Balatkapı) is identical to the Kynegion Gate and the supposed harbour was further west behind the wall, but the distance is not given⁵¹. The relationship of the three blocked arches to each other and their weights are also not noted. His statement regarding the vegetable garden is confirmed by an Ottoman foundation deed from 1531 indicating that a garden lay on the city side of the wall⁵².

Shortly afterwards, the two Germans, Stephan Gerlach⁵³ and Johannes Löwenklau⁵⁴, who lived in Istanbul for a while, mentioned a single entrance between Fener and Ayvansaray and called it *kynegion*, although according to their descriptions, they must have meant Balatkapı. Both are silent about further arches. Joseph de Tournefort wrote in his travel account in the seventeenth century, without giving a gate name, that the Balat quarter is called »park« or »hunter« in popular Greek – he did not refer to arches⁵⁵. In 1665, Paul Tafferner mentioned the same section of the wall: »On the hillside against an arm of the past-flowing Euxini, we saw a wide walled gate before our eyes, it is said that it was the entrance to the court of the Emperor Constantine, on the right side of the gate stands, out of beautiful white marble hewn, an angel like a man in size, to the left the statue of the Most Holy Virgin, in same proportion to the angel, how they welcome with English greetings, is a strange, and because of certain antiquity very useful memorial to refute the saint-defilers, which was preserved even in the very terrible persecution of the true faith, before the downfall«⁵⁶. In contrast to Gyllius, Tafferner must have seen only one opening here, which he called a gate. Since this was bricked-up, Balatkapı cannot have been meant. Tafferner also gives no dimensions for the arch and only claims that it was once the entrance to the imperial palace and was adorned with two reliefs, which he considered to be a representation of the Annunciation. The

image on the right side of the opening, as is suggested in the literature, is the Nike relief, which is kept in the Istanbul Archaeological Museums since 1894⁵⁷.

In the eighteenth century, the Istanbul-Armenian scholar P. Ğugas Inciciyan wrote solely that the ancient name of the Balatkapı was Kynegion Gate, without mentioning the arches, the supposed harbour entrance or the two reliefs⁵⁸. Since then and until the end of the nineteenth century, there is no information – as far as I know the literature – about the assumed harbour, the three openings and the two reliefs. It was not until 1890 that the teacher Edwin Augustus Grosvenor, who lived in Istanbul, mentioned a »Hunter's Gate« (surely Kynegion) and said that it was »the largest and most imposing of those the Golden Horn«: »it consists of a single spacious arch, which was solidly walled-up immediately after the Conquest. On the left side, in bas-relief, is the colossal figure of the Archangel Michael holding a palm-leaf; on the right a Jewish house, which has been built close against the wall, completely conceals a corresponding bas-relief of Holy Virgin«⁵⁹. Here, too, there is only information about a single blocked arch, and one also learns that it was »the largest«⁶⁰. Two years later, Andreas Mordtmann also noted a walled-up arch here, which he called »la porta Cynagon«⁶¹.

On the other hand, Alexander van Millingen saw three bricked-up arches again at the end of the nineteenth century and wrote in his book published in 1899: »Soon after leaving the Church of St Demetrios, and before reaching the gate now styled Balat Kapoussi, the city wall was pierced by three large archways, 45 to 55 paces apart, and alternating with three towers. Balat Kapoussi being only 55 paces [c. 82 m] beyond the easternmost archway, here stood four entrances into the city, in most unusual proximity to one another. The first, or westernmost archway was, at one time, adorned with a bas-relief on either side«⁶². It is important that van Millingen has entered all three arches on his drawing each on a curtain wall fortified with towers (fig. 5)⁶³. For him, too, the most western arch is identical to the Kynegion Gate⁶⁴. Some later, in 1902/1903, Ahmet Muhtar Paşa observed only one blocked arch west of Balatkapı, which he considered as Kynegion Gate⁶⁵.

49 Translation: Müller-Wiener, Häfen 8 n. 12.

50 Petrus Gyllius, *De Bosphoro Thracio* II 2, 57: *Ultra portam Palatinam progressus circiter centum viginti passus, animaduerti tres magnos arcus astructos vrbis muro.* – Grélois, Gilles 105. However, Gyllius, *De Topographia* I 18, 51 himself warns the reader with regard to his steps, since these would be influenced by different circumstances and do not necessarily correspond to the Roman passage: *vt intelligere oportet in omnibus ante scriptis passibus, quos in passus Romanos redigere ausus non sum ob flexiones viarum, & varietatem passuum, qui inter se differunt in ascensu & descensu infatigato, atq; integro, adde interpellatos insolentis nationis occursu proteruiori taurorum incursu.* – Grélois, Gilles 303. – Schneider, Blachernen 90 wrote in error that Gyllius counted 150 steps, which was repeated by Müller-Wiener, Häfen 7.

51 Discussion in van Millingen, Walls 199.

52 Canatar, *Istanbul Vakıfları Tahrir Defteri* 288 no. 1256: *Bağçe der Nezdi.....und Bâb-ı Balat mahdûd sûr-ı kal 'a ve Kosta Mülkü ve tarîk-ı 'âm ile* (»Garden near Balatkapı, delimited by the city wall, Kosta's house and the public street«).

53 Gerlach, *Tagebuch* 454.

54 Johannes Leunclavius, *Annales* 411 no. 10 places the gate at Fener.

55 Tournefort, *Relation* 202 (Lettre XI): »Nous traversâmes ensuite le quartier de Balat pour descendre au port qui est une des merveilles de la ville. Les Empe-reurs Grecs se divertissoient autrefois à chasser à Balat. C'est pour cela qu'on l'appelle encore en Grec vulgaire *le Parc* ou *le Chasseur*«. URL: <http://digi.ub.uni-heidelberg.de/diglit/tournefort1717bd2>.

56 Tafferner, *Keiserliche Botschafft* 140-141.

57 For a recent examination of the reliefs, see Effenberger, *Viktorien* 168-169.

58 Inciciyan, 18. *Asırda İstanbul* 14.

59 Grosvenor, *Constantinople* 581-582.

60 In contrast to Tafferner, Grosvenor claims to have seen the alleged angel »on the left side«.

61 Mordtmann, *Esquisse* 39-40.

62 van Millingen, *Walls* 198. – The relevant map section in Müller-Wiener, *Bildlexikon* 302 fig. 344.

63 van Millingen, *Walls* between 18 and 19.

64 van Millingen, *Walls* 204.

65 Ahmet Muhtar Paşa, *Feth-i Cefil-i Kostantiniyye* 98.

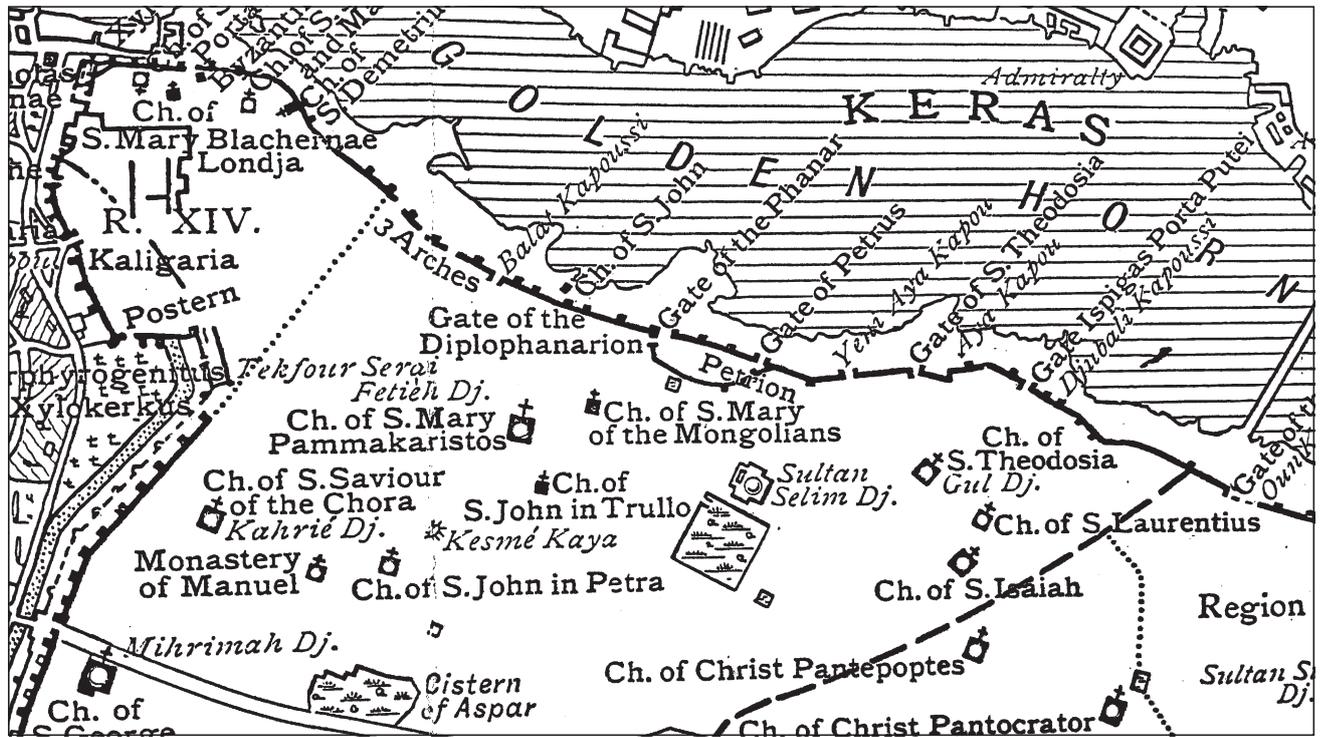


Fig. 5 Location of the three arches north of Balatkapi. – (From van Millingen, Walls, sheet between p. 18 and 19).

What is striking about these reports is that from the middle of the sixteenth to the end of the nineteenth centuries either only one or three bricked-up arches were registered. The visual evidence, such as that of Matrakçı Nasuh⁶⁶ or Melchior Lorichs⁶⁷, does not add any openings here and shows that the coastline in this area was already densely built up in the sixteenth century. This fact is also confirmed by the Ottoman written sources, according to which several warehouses were erected here⁶⁸ and private individuals, including several Jewish families, had houses built against the wall, as can be seen from the lines of Grosvenor. There were also numerous facilities established between the wall and the bank⁷⁰. However, due to the recurring fire disasters⁷¹, sections of the wall must have been temporarily cleared of buildings in front of it, which would explain the different reports regarding the number of arches.

Due to building density, Petrus Gyllius must only have seen the bricked-up arches from the city side, where there was a vegetable garden. This explains why he did not notice the two reliefs. He only registered a continuous curtain wall with three blocked openings that were spaced apart in a certain

rhythm⁷². The three arches and the vegetable garden probably gave him the idea that it had to be a harbour entrance⁷³. He may have been influenced by the Harbour of Theodosius integrated into the Marmara Sea Walls, which in his time served as a vegetable garden (Langa Bostani). The towers of the Sea Walls are around 15m high, which means that the height of the curtain walls is less than 15m. No matter how wide the arches may have been, their height must have been well below 15m. This is out of the question for the passage of larger ships. According to the contour lines, there was no space for a larger pool behind the three arches anyway, because the terrain massively increases here. It is crucial, however, that the seaside area in front of Balatkapi and the three openings already protruded a little into the Golden Horn in Byzantine times, and the Pul Yasan Synagogue mentioned in 1480 (fig. 2, no. 16), which goes back to the Byzantine period, stands directly on the flight of the first arch⁷⁴. It can, therefore, be assumed that the three arches were only posterns or secondary openings.

The question whether one of the three arches was called Kynegion Gate must be asked again. Although all travellers

66 Yurdaydın, Matrakçı Nasuh, fol. 8b.

67 See n. 70. – Oberhummer, Konstantinopel 15 pl. XVI.

68 A decree (*hüküm*) from 1748 regulates the storage of goods in these areas and clearly says that the coal should be stored directly in the depots located at the jetties, see İstanbul Ahkâm Defterleri 44-47.

69 See also Kömürçüyan, İstanbul Tarihi 19.

70 See Barkan/Ayverdi, İstanbul Vakıfları Tahrir Defteri 416 no. 2434 (foundation deed from April/May 1512). – See also n. 82.

71 Balat was affected by fires in the years 1510, 1639, 1692, 1721, 1729, 1746, 1782, 1812, 1825, 1866, 1867, 1874, 1877, 1890, 1892, 1896, 1911 and 1912. For a detailed list, see Deleon, Balat ve Çevresi 62-64.

72 According to van Millingen, Walls, the three arches were between towers. We do not know whether Gyllius saw tower entrances between the arches on the city side.

73 Schneider, Mauern und Tore 67, with approval: »Gyllius rightly sees this as an old harbour entrance«.

74 Galante, Documents 166. – On the location, see Schneider, Mauern und Tore plan I.



Fig. 6 Postern east of the Church of St Demetrios. – (Photograph Neslihan Asutay-Effenberger).

considered the Kynegion Gate to be the same as Balatkapı until the nineteenth century, some modern topographers tended to associate the Kynegion Gate with one of the openings mentioned by Gyllius. In the research literature, the Turkish Balatkapı is linked to the Byzantine βασιλική πύλη or the Gate of St John Prodromos⁷⁵. Schneider identified the westernmost of the openings mentioned by Gyllius or van Millingen with the Kynegion Gate, whereby he based his suggestion primarily on a foundation deed of Mehmed II issued by Tahsin Öz⁷⁶. Here are mentioned a Balatkapı (i. e., βασιλική πύλη) and a Küngözkapı (Kynegion Gate) indeed, giving the impression that these were two different entrances⁷⁷. However, it should not be overlooked that the Ottomans occasionally and sometimes in the same document, used two different names for the same location⁷⁸. Apart from that, they normally did not give a name to a bricked-up and therefore no longer used gate, as far as I know⁷⁹.

Another foundation deed from 1472 helps to clarify the problem. Information is given regarding the location of some endowed institutions: *Yirmi yedi hânûd, bitişik ve karşılıklı, kal'anın içinde Balât Pazarı denilen Küngöz Kapısı yakınında*⁸⁰ («Twenty-seven shops, side by side and opposite each other,

within the wall near the Küngözkapı, which is called the Balat market»). While it was already pointed out from the above-mentioned sources⁸¹ that Balat and Küngöz are not easy to tell apart, this source clearly shows that Küngözkapı was directly connected to the core of Balat, that is, to its market. But the crucial statement is: *On dört beyit, bitişik, ayrı ayrı ve karşılıklı, kal'anın dışında, Darü'l Feht Kostantiniyye'nin kapılarından, Küngöz veya Balat kapısı denilen kapının yakınında*⁸² («Fourteen houses, side by side, separated or facing each other, are located near a gate of Kostantiniyye, which is called Küngözkapı or Balatkapı»). It is clear from this that the names Balatkapı and Küngözkapı actually denote the same entrance, at least in the Ottoman period, and there is no solid argument to suggest that they were two different gates in the Byzantine period. In Byzantine times, Balatkapı was most likely called Kynegion Gate in addition to βασιλική πύλη and the Gate of St John Prodromos. Here once stood the harbour or the main landing stage on Balatkapı, where Balat İskele Camii was built as early as the fifteenth century (fig. 2, no. 17)⁸³.

In addition, during the Byzantine period there could have been other small moorings on this section of the wall, which

75 For a compilation of the relevant literature, see Kidonopoulos, Bauten 48 n. 561; 192 n. 479.

76 Schneider, Mauern und Tore 68-69.

77 Quoted by Schneider, Mauern und Tore 69. – See Öz, Zwei Stiftungsurkunden 61,4 and 23,7, where Küngözkapı and Balatkapı are mentioned as two separate gates. I thank Dr Feray Coşkun for her help in dealing with the source. – For a designation as Avcılar Kapısı («Hunter's Gate»), see Ayverdi, İstanbul Mahalleleri 21 no. 53.

78 Ahmet Refik 109 no. 13: Meyve İskelesi and Yemiş İskelesi for the landing stage at Zindankapı.

79 For a long time it was accepted that Belgrad Kapı was bricked up in the Ottoman period without taking into account the Ottoman bridge built before it. However, my investigation has shown that Belgrad Kapı was open a long time

after the conquest, which is why it received a Turkish name. See Asutay-Effenberger, Kitâb-ı Bahriye Berlin 213-226. – See also Asutay-Effenberger, Landmauer 216-223. – On the other hand, the Romanos Gate, which was closed after the conquest, remained without a Turkish designation, see Asutay-Effenberger, Landmauer 87-94.

80 Vakfiyye 1472, 176, 166-168 (Ottoman text 113).

81 See n. 35-37.

82 Vakfiyye 1472, 175, 155-157 (Ottoman text 112).

83 The Ottomans built a mosque at almost every large jetty. Schneider, Mauern und Tore 71 no. 17 dates the mosque to 1766, but the predecessor of this building dates from the time of Mehmed II. Its founder, Yusuf Şücauddin, was a scholar at the court of Mehmed. – On the mosque, see Dişören, Yusuf Şücauddin Camii.



Fig. 7 Balatkapi, area map, detail. – (After Çeçen, *Halkalı Suları*, Harita no. 7).

corresponded to the posterns of the wall⁸⁴. The Armenian scholar Eremya Çelebi Kömürçüyan (1637-1695) mentioned a large jetty in Balat⁸⁵. Sarkis Sarraf Hovhannesyan (1740-1805) added⁸⁶: »At the Balat Gate there is a large jetty where the ships with wine, wood, coal, onions and other goods are anchored. At this location there are still three small moorings, one of which is aligned with Tersane Bahçesi or Aynalıkavak Kasrı«. The location of Aynalıkavak Kasrı on the opposite side of the Golden Horn is known. Accordingly, in Ottoman times there were three smaller landing stages somewhat west of Balatkapi. These could have been the successors of Byzantine jetties, even if the posterns had long

been walled up. Indeed, archaeological evidence confirms that the three arches were not the only posterns in this portion of the wall west of Balatkapi. This section in particular is very heavily overgrown. Recent cleaning in this area revealed the brick arch of an opening (fig. 6)⁸⁷. The width of the arch is 2.50m and thus corresponds to the dimensions of several posterns both on the Marmara Sea Wall and on the Sea Walls of the Golden Horn⁸⁸. Including Balatkapi, the three no longer existing arches and this opening show that the line between Balatkapi and the Church of St Demetrios was an area rich in posterns and jetties. In front of Balatkapi or the Kynegion Gate was the Kynegion harbour, which laid in

84 Almost all gates on the Golden Horn possessed landing stages for the loading of goods as well as for passenger transport in the Ottoman period. Even tax matters were regulated here by imperial decrees, see a decree of 1588 in Ahmet Refik 75-76 no. 15. – See also Orhonlu, *Kayıklık*.

85 Kömürçüyan, *İstanbul Tarihi* 9.

86 Hovhannesyan, *İstanbul* 24.

87 Also on the plan of Müller-Wiener, *Bildlexikon* 302 fig. 344 (my fig. 3) an opening is entered here. Dirimtekin, *Haliç* 33 locates a tower (tower no. 13) in this section of the walls due to a remnant of an arch, which he interpreted as a tower entrance. However, on the wall segment, where our arch stands, there are no traces of a former tower. I am not sure if he speaks about the same arch.

88 For a postern on the sea wall, see Asutay-Effenberger, *Landmauer* fig. 184.

a protected bay until the second half of the nineteenth century. Akın noted this: »The open sewers of Balat flowed into this harbour until 1890. At the time the sewage system was covered, piles were rammed into the harbour and earth was deposited in it. Immediately after the earthquake of 1894,

the rubble of the destroyed buildings was also deposited here, after which the bank of the Balat completely deviated from its former appearance«⁸⁹. A water supply plan from around 1815/1817 shows the state of the harbour before this change (fig. 7)⁹⁰.

Summary / Zusammenfassung

The Kynegion Quarter and Its Harbour in the Late Byzantine and Ottoman Periods

The Late Byzantine sources inform us about a quarter called Kynegion (»Hunter«) on the Golden Horn, in which there was a gate and a harbour of the same name. Neither the precise extent of the quarter nor the exact location of the gate and harbour are known. Only based on a note from Petrus Gyllius it is assumed that the harbour was placed somewhat west of Balatkapı behind the sea wall and should have been accessible through three arches. Later travellers also mentioned the western arch and the relief decoration. All three arches were last seen by Alexander van Millingen. Research has often associated the western arch with the gate known as the Kynegion Gate in Byzantine sources and the Küngözkapı in Ottoman accounts. Ottoman sources indicate that the name of the district of Kynegion or Küngöz can be traced back to the hunters' quarters in both the Byzantine and Ottoman periods. The quarter may have stretched from Ottoman Balatkapı to Tekfur Sarayı. The height of the curtain walls, geographical characteristic of the site and the synagogue, already built in the Byzantine era on the projecting bank, argue against the three arches mentioned by Gyllius having been an entrance to the harbour. The Ottoman reports clearly indicate that Küngözkapı and Balatkapı were the same entrance, and that Balatkapı was also called the Kynegion Gate in the Byzantine period. The three arches were posterns that may have been connected to landing stages. An exposed opening east of the Church of St Demetrios shows that this section of the wall was provided with several posterns and piers. The Kynegion Harbour was in front of Balatkapı and had completely lost its appearance in the second half of the nineteenth century.

Zum Stadtteil Kynegion und seinem Hafen in spätbyzantinischer und osmanischer Zeit

Die spätbyzantinischen Quellen informieren uns über ein Viertel mit Namen Kynegion (»Jäger«) am Goldenen Horn, in dem sich ein gleichnamiges Tor und ein Hafen befanden. Weder die exakte Ausdehnung des Quartiers noch die genauere Lage des Tores und des Hafens sind bekannt. Nur aufgrund einer Mitteilung von Petrus Gyllius wird angenommen, dass der Hafen sich etwas westlich von Balatkapı hinter der Seemauer befunden habe und durch drei Bögen zugänglich gewesen sein soll. Den westlichen Bogen und die Reliefdecoration registrierten auch spätere Reisende. Alle drei Bögen wurden zum letzten Mal von Alexander van Millingen wahrgenommen. Der westliche Bogen wurde in der Forschung öfter mit dem in byzantinischen Quellen als Kynegion-Tor und in osmanischen Quellen als Küngözkapı bezeichneten Tor in Verbindung gebracht. Osmanische Quellen erlauben die Feststellung, dass der Name des Stadtteils Kynegion bzw. Küngöz sowohl in byzantinischer als auch in osmanischer Zeit auf die hier befindlichen Wohnungen der Jäger zurückgeführt werden kann. Das Viertel erstreckte sich möglicherweise vom osmanischen Balatkapı bis Tekfur Sarayı. Die Höhe der Kurtine, geographische Eigenschaften des Areals und die bereits in byzantinischer Zeit auf der vorgeschobenen Uferzone errichtete Synagoge sprechen dagegen, dass die drei von Gyllius erwähnten Bögen eine Hafendurchfahrt gewesen sein können. Die osmanischen Berichte weisen eindeutig darauf hin, dass Küngözkapı und Balatkapı dasselbe Tor war und Balatkapı in der byzantinischen Zeit u. a. auch Kynegion-Tor hieß. Die drei Bögen waren Poternen, die möglicherweise mit Landungsstegen in Verbindung standen. Ein freigelegter Durchgang östlich der Demetrios-Kirche zeigt, dass dieser Abschnitt der Mauer mit mehreren Poternen und Stegen versehen war. Der Kynegion-Hafen lag vor Balatkapı und hatte sein Aussehen in der zweiten Hälfte des 19. Jahrhunderts völlig verloren.

89 Akın, Balat.

90 Çeçen, Halkalı Suları, Harita (map) no. 7. The area between Balatkapı and Tekfur Sarayı is also clearly visible here.

The Golden Horn: Constantinople's Superharbour (*Überhafen*) and its Chain

The Golden Horn (Greek Χρυσόκερας, *Chrysokeras*) has played a crucial role in the development of the settlements west and north-west of Seraglio Point, from the foundation of ancient Byzantium to Constantinople (from 330) and today's megacity of Istanbul. This estuary (known in Turkish as *Haliç*, »mouth«, but also *Altın Boynuz*) is formed of the confluence of two rivers, Barbyzes (Turkish *Kağıthane su*) and Cydaris (Turkish *Alibey su*), as they flow from the European side into the southern reach of the Bosphorus strait, creating the northern boundary of the spit of land on which Byzantium/Constantinople lay¹. The banks of the lower Golden Horn were ideal as landing sites for ships, and the city's first two ancient harbours, Proshporion and Neorion, were built in two bays at its south-eastern end².

From the thirteenth century, Constantinople faced competition for its harbours with the development of the Genoese Pera on the northern bank of the Chrysokeras or Golden Horn³. At the time, the historian Georgios Pachymeres bitterly noted that the Golden Horn must now be shared with the ships of the enemy⁴, meaning, above all, the Italian naval powers of Venice and Genoa⁵. His text reveals a network of individual harbours (see n. 2 and 3), *skalai*⁶ and landing stages⁷ that all successfully existed together and interacted with the city. Such a view of the Golden Horn as a single large natural harbour (fig. 1) can already be found in the sixth century with Procopius:

»Besides the city's other blessings the sea is set most beautiful all about it, forming curving bays, contracting into

narrow straits and spreading into a great open sea, and thus it makes the city exceptionally beautiful, and offers the quiet shelter of harbours to navigators, thereby abundantly providing the city with the necessities of life [...]. That third strait, which branches off from the first (scil. the Bosphorus) towards the right commencing at Sycae (i. e., Galata, Pera), as it is called, extends for a very long distance along the side of the city which faces the north, and terminates in the bay which forms its end. Thus the sea forms a garland around the city [...]. The bay is always calm, being so fashioned by nature that it is never rolled, just as if limits were set there for the turbulent waters and the billows were excluded from that area so as to do honour to the city. And in winter, even should violent winds chance to fall upon the open space of the sea and upon the strait, as soon as ships reach the entrance to the bay, they proceed for the rest of the way without a pilot and are anchored without precautions. For the circuit of the bay extends to a distance of more than forty stades, and furnishes anchorage throughout its whole extent«⁸.

The prosperity of the Golden Horn as the »superharbour« (German *Überhafen*) of Constantinople was also subject to limits, firstly of a technical nature. The narrowness of the Haliç in its upper reaches made bridge building possible⁹, but this consequently prevented the passage of larger vessels. The shallower water there was a further impediment¹⁰. The sediment washed out from the inland was also deposited in the harbour bays, which was counteracted by dredging¹¹. Never-

1 Külzer, Ostthrakien 64-65. 279-281 (Barbyzes). 448-450 (Keras). 484 (Kydaros), with the map »Sonderkarte Bosphoros/Goldenes Horn«. – Oberhammer, Chrysokeras and Oberhammer, Keras. – Dionysii Byzantini, Anaplus, ch. 5 (3 Güngerich).

2 See E. Kislinger, Neorion, in this volume.

3 Since this volume deals with the Byzantine harbours of Constantinople and its surroundings, it does not deal with Pera (part of Byzantine Galata, for which see Külzer, Ostthrakien 361-367), the name of which is conceptually derived from the Greek πέρα, meaning »over there«, »beyond«, scil. the Golden Horn, from the point of view of Constantinople (Külzer, Ostthrakien 576-577; Schneider/Nomidis, Galata 1-3). Reference is only made here to Balard, La Romanie génoise and Origone, Bisanzio e Genova 197-211 for its economic relevance and Runciman, Fall of Constantinople 86-87. 94. 98. 104-105. 162-163 for the role of this colony in the events of 1453. It is significant that, according to Nikephoros Gregoras, Historia XVII 1 (II 841-842 Schopen), Pera received 200 000 gold pieces a year from taxes on merchant shipping, while Constantinople hardly received 30 000. – Makris, Studien 180-181.

4 On the confrontations between the two, also in the waters off Constantinople see, for example, Ioannes Kantakouzenos, Historia IV 30 (III 218-223 Schopen); Nikephoros Gregoras, Historia XXVI 18-23 (III 84-90 Bekker); Kleinchroniken, Chronik 8/56 (I 87 Schreiner). – Balard, Bataille du Bosphore and in general Dotson, Venice, Genoa and Control of the Seas 119-135.

5 Georgios Pachymeres, Relationes Historicae V 10 (II 469 Failler). – Ahrweiler, Byzance et la mer 433-434.

6 See the contributions of J. Preiser-Kapeller and P. Schreiner, both in this volume.

7 See G. Simeonov, Kosmidion and N. Asutay-Effenberger, Kyneqion District, both in this volume. In 1446, the imperial government signed a treaty with Venice, which provided for the construction of a new mole on the southern bank of the Golden Horn. Byzantium was supposed to deliver 2000 stakes, with Venice bearing the other costs: Maltezou, Thesmos 190-192. – Makris, Studien 180. 182.

8 Procopius, De aedificiis I 5, 2, 9-13 (IV 27, 28-29 Haury/Wirth); English translation by Dewing, Buildings of Procopius 58-61. – Cf. later Geoffroy de Villehardouin, Conquete VI 159 (I 158 Faral). Still Laonikos Chalkokondyles VIII 5 (II 150 Darkó) calls the Golden Horn Βυζαντιου λιμένα, harbour of Byzantium (Kaldellis, Chalkokondyles II 175).

9 Effenberger, Brücken. – Hurbanič, St. Callinicus Bridge. – Hurbanič, Topography 134. – Hurbanič, Neglected Note 211-212. – Schreiner, Brautgedicht 98-99. – Simeonov, Kosmidion 214-219, in this volume.

10 Chronicon Paschale 720, 15-21 (Dindorf); Wilhelmus Tyrensis, Chronicon II 7 (171 Huygens). – Hurbanič, Conscious Stratagem 84. 88. – Simeonov, Kosmidion 220, in this volume.

11 Documented for the year 698: Theophanes, Chronographia 370 (I De Boor). Similar measures were also necessary in the Harbour of Julian/Kontoskalion, where strong south winds blew earth and sand into the harbour basin. For the cleaning work required in the 6th, 14th and 15th c. as a result, see Marcellinus comes ad annum 509 (97 Mommsen); Patria Konstantinopoleos III 37 (II 230 Preger); Panegyricus anonymus 289 (Lampros); Heher, Harbour of Julian 102, in this volume. – Müller-Wiener, Häfen 27; Makris, Studies 289-290. – Cf. n. 36.



Fig. 1 The Golden Horn, looking from upstream to downstream, i.e., from the north-west towards its confluence with the Bosphorus, in the background on the right the Sea of Marmara. – (Istanbul Helikopteraufnahme Halic © 2010 by Selda Yildiz and Erol Gülsen, licensed under CC BY SA 3.0).

theless, Neorion and Prosporon finally silted up¹², as also happened at the Harbour of Theodosios due to sedimentation from the River Lykos¹³. The many *skalai* along the Golden Horn provided an alternative by reaching out into deeper water¹⁴. In order to reach them from the Sea of Marmara, ships first had to contend with the strong southward current of the Bosphorus (often accompanied by a north wind) by going in a wide arc¹⁵ via Chalcedon¹⁶ from the north(east) into the Golden Horn.

The second major limiting factor regarding the prosperity of the Golden Horn as the »superharbour« of Constantinople was the demographic development which also indirectly diminished the value of the harbour landscape around the Golden Horn. The Byzantine capital experienced a persistent increase in population from the fourth century to the middle of the sixth century, until it had a little less than half a million inhabitants¹⁷. Through urban planning¹⁸, as in every

metropolis, an upper-class district developed south of the Mese and towards the Propontis. This district was close to the power triangle of the Imperial Palace, Hagia Sophia and the Hippodrome. On the opposite slope and the plain towards the Golden Horn, overpopulated quarters expanded¹⁹, with serious hygiene problems. This encouraged the spread of the so-called Justinian plague, which struck Constantinople in several waves from 542 to 748²⁰ and reduced its population to an estimated 60 000 to 80 000 people²¹, i.e., about an eighth to one sixth of its highest pre-plague level. The areas along the Golden Horn became deserted, degenerating into the backyard of the city, as it were, offering the opportunity to set up noisome business operations (such as tanneries) and those that posed a fire hazard (such as glass-blowing)²².

The harbours on the Golden Horn largely lost their trade and storage functions due to the sharply reduced demand²³, and

12 Kislinger, Neorion 135-136, in this volume.

13 Külzer, Harbour of Theodosios, in this volume. – Berger, Langa Bostanı. – Günsenin, »City« Harbours 104, with some wrong assertions.

14 Michael Attaleiates, *Historia* 199 (Perez-Martin). – Schreiner, Western Landing Stages, in this volume. – Müller-Wiener, Häfen 14. 22.

15 Berger, Häfen 77; note in particular the description of how the ships of the Crusaders approached the Golden Horn in 1203: Pryor/Wilson, *Chain* 373-375 with fig. 2 (map) on 375. – Kalmring/Lukas, Häfen 1-2 include good accessibility (with regard to water depth, fairway, current conditions – specifically for the southern Bosphorus, Pryor/Wilson, *Chain* 374. 376 – and the prevailing wind direction) primary requirements of a harbour. The Golden Horn was not ideal in this regard and the harbours on the Propontis had an advantage. Accessibility from the land, integration into the road network and the availability of building materials and supplies all spoke in favour of Constantinople as a harbour site. Cf. E. Kislinger, Better and Worse Sites, in this volume, esp. nn. 9. 22.

16 Belke, Bithynien und Hellespont 486-487. 492, generally 295-296. 298. – Belke, Gates, in this volume.

17 This estimate is slightly higher than Koder, *Lebensraum* 117-118 (about 400 000 inhabitants, certainly less than 500 000) and Schreiner, *Constantinopoli*

83 (375 000 inhabitants), but under Durliat, *Ville antique* 232-275, n. 210 with 600 000. – Criticism of the frequently encountered connection between bread distribution and population in Kislinger, *Pane* 279. 289-293.

18 Magdalino, *Renaissances* 58-59.

19 Kislinger, Better and Worse Sites 13-15, in this volume. – Bauer, *Stadtverkehr in Konstantinopel* 197-201 with fig. 9.

20 Stathakopoulos, *Famine and Pestilence* 110-154. 286-288. 304-306. 315-316. 319-320. 331-332. 342-344. 364-365. 369-372. 348-385. – Kislinger/Stathakopoulos, *Pest und Perserkriege* 89-93. – Meier, *The »Justinianic Plague«*. – Bergdolt, *Der Schwarze Tod* 14-20.

21 Mango, *Développement* 53-54 calculated only 40 000 inhabitants as the lowest point.

22 Kislinger, Better and Worse Sites 14, in this volume. – Dark, *Houses* 87-89. – Mundell-Mango, *Commercial Map* 202-203, n. 119. – Magdalino, *Constantinople* 99. – For pollution in antique harbours cf. Feuser, *Hafenstädte* 319-321.

23 Magdalino, *Neighborhoods* 211-213. – Kislinger, *Lebensmittel* 307. 314-315. – Berger, *Häfen* 83.

the navy (*basilikon ploimon*)²⁴ took over in the early seventh/eighth century. Shipyards existed far from curious and spying eyes in the Neorion, already in Late Antiquity on the other northern bank, probably near Pegai or Kanopos, in the area of today's Kasımpaşa²⁵. During the Comnenian period, and again for a short time in the Palaeologan period, another shipyard existed at the Kosmidion²⁶, where it was separate from and yet close to the city that it was primarily intended to defend.

However, the three shipyards on the urban bank of the Golden Horn mentioned by Pachymeres (see n. 25) seem to contradict the picture of isolation and secrecy just drawn. But with Pachymeres we are in the thirteenth century, when the Byzantine navy was no longer of relevance as a power factor, instead the »superharbour« at the Golden Horn was determined by mercantile interests, especially those of the Italian trade networks. This also included shipyard capacities for the production and repair of ships. It is not by chance that the shipyard near the Monastery of Christos Euergetes was in the area of the Venetian settlement (cf. Jacoby, Venetian Government), which expanded from 1204 onwards.

Earlier, from the tenth century onwards, the political and territorial recovery of the Byzantine Empire and the resulting economic recovery and population increase had also led to a reversal of the downward trend in the Golden Horn and its surroundings, without, however, much improving its negative image. Monasteries in this area were given available land²⁷,

and Muslim Arabs, then Amalfian and Venetian merchants, attracted by the profitable trade in Constantinople, were allowed to settle²⁸.

One of the leading experts on the urban and socio-economic development of Constantinople, Paul Magdalino, nevertheless interpreted this local development incorrectly. Venice was unable to claim an autonomous settlement on the Golden Horn in 1082²⁹, but was granted this by the Byzantine Emperor³⁰ (because of his military predicament against the Normans³¹), as was the case with the Pisans and Genoese afterwards³². The intention behind this was to keep the *exotikoi*³³, the foreigners, among themselves and on the sidelines at a distance from the Byzantine markets at the Mese and on the forums of the capital³⁴.

From centuries of mercantile experience, which also included the effective use of good harbours, the Republic of St Mark soon turned the intended disadvantage into an advantage. From then on, to cite just one example from the *Ptochoprodromika*, the Venetians were sought out because they could offer cheaper goods due to reduced taxes³⁵. In the wake of the upheaval of 1204³⁶, the commercial centre of the city shifted completely to the Golden Horn, where it remained under the Ottomans.

It was the late Byzantines who, to put it bluntly, became outsiders in the Golden Horn and its harbour facilities. As a result, they often had to resort to the remaining harbour

- 24 As early as 626 during the Avar siege of Constantinople, when the Slavs attacked in their monoxyla from the Golden Horn (Chronicon Paschale 724 [I Dindorf]), the Byzantine naval units must have had bases there (Hurbanič, St. Callinicus Bridge; Hurbanič, Neglected Note). During the first Arab siege of Constantinople in 667-669 (for the date see Jankowiak, First Arab Siege; Belke, Bithynien and Hellespont 142-144) the Byzantine fleet, however, gathered in the Harbour of Theodosius: Theophanes, Chronographia 353 (I De Boor). Regarding 695, see Heher, Harbour of Julian 98, in this volume. During the second Arab siege of the city in 717/18, the dromons were clearly based in the Golden Horn, which was secured by a chain across the exit: Theophanes, Chronographia 386. 395-399 (I De Boor), Nikephoros Patriarches, Breviarium, ch. 54 and 56 (122. 124 Mango). – Christides, Second Arab Siege; Külzer, Ostthrakien 101-102; Pryor/Jeffreys, Dromon 31-32; Olson, Last Arab Siege 428. 431; Eickhoff, Seekrieg und Seepolitik 31-34.
- 25 Concerning a landing stage at Pegai in the early 10th century see Symeon Magistros, Chronikon 136, 49 (328, 383-386 Wahlgreen); Vučetić, Repräsentative Aspekte von Häfen 142.
- 26 Müller-Wiener, Häfen 6. 12-13; Heher, Harbour of Julian 98, in this volume. – On Pegai, where there was a landing stage, and Kanopos, see Külzer, Ostthrakien 572-573 and 435; Müller-Wiener, Häfen 10-11. Already the *Notitia urbis Constantinopolitane* XIV 13 (240 Seeck) mentioned *navalia* in regio XIII (Sycal). English translation and commentary in Matthews, Notitia 95. 110; Ahrweiler, Byzance et la mer 430. 432; Cosentino, Naval Warfare 335. Alexios I. Komnenos visited an *exartysis* there by ship (Anna Komnene, Alexias XI 10, 2 [350 Reinsch/Kambylis]). The Ottoman arsenal Tersâne i Âmirie was located in this area. – Georgios Pachymeres, Relationes historicae V 10 (II 469, 15-22 Failler) leads on the urban bank in addition to the shipyard in the old Neorion port (19-22) (Ahrweiler, Byzance et la mer 430. 432), another at Christos -Euergetes monastery (for its location in today's Fener area, see Effenberger, Theodosia 126-127 and Preiser-Kapeller, Heptaskalon, in this volume), this was mainly used during the Latin period (469, 18-19); a third, τὸ ἐν Βλαχέρναις νέωριον (469, 15), is likely to have corresponded to that in the 14th c. with Kosmidion. Ahrweiler, Byzance et la mer 434-435. Nikephoros Gregoras, Historia XVII 2 (II 847-848 Schopen); Ioannes Kantakuzenos, Historia IV 11 (III 70 Schopen). Makris, Studies 163-164. In the Palaeologan period there was a decoupling between the shipyard and the harbour, as is often found in modern times. Simeonov, 220-221, in this volume; Külzer, Ostthrakien 471-473. – For harbours and shipbuilding in antiquity cf. Feuser, Hafenstädte 291-293.
- 27 Magdalino, Constantinople 92-93.

- 28 Reinert, Muslim Presence in Constantinople 125-150. – Falkenhausen, Commercio di Amalfi con Costantinopoli 19-38. – Magdalino, Constantinople 96-98. – Jacoby, Venetian Commercial Expansion 376-380. 387-388.
- 29 Magdalino, Maritime neighborhoods 220; Magdalino, Constantinople 88.
- 30 Pacta veneta 992-1198, 27-45. – Lilie, Handel und Politik 8-16. – Kislinger, Better and Worse Sites 16, in this volume. – Jacoby, Venetian Quarter 154-156. – Maltezou, Quartiere veneziano. – Other dates of the privilege, 1084 or even 1092, are refuted by Madden, Chrysobull of Alexius I Comnenus 27-40. Basically in agreement, but with palaeographic corrections Jacoby, Chrysobull of Alexius I Comnenus 199-204. – Frankopan, Byzantine Trade Privileges to Venice 136-160 again argued for 1092, without making any convincing new arguments. The author even contradicts himself (156-157) when he regards the Chrysobull of 1092 as a »re-confirmation of a grant which Alexios had given in the past«, thus admitting the existence of a previous privilege on his part. To assume that the Venetians in such a Chrysobull (from 1082) would have contented themselves with a few properties and titles for their extensive naval aid is not very realistic.
- 31 On the chronology of the fighting, see Kislinger, Vertauschte Notizen. – Frankopan, Turning Latin into Greek 80-99. – Theotokis, Norman Campaigns 137-184 (the latter without knowledge of the above-cited article by Kislinger).
- 32 Schreiner, Western Landing Stages, in this volume. – Lilie, Handel und Politik 69-76. 87-100. – Origone, Commerci genovesi a Costantinopoli. – Berger, Ufergegend 160-163.
- 33 Book of the Eparch/Eparchenbuch 156, s. v. – Magdalino, Outside World did not discuss Koder, Sigillion von 992, 40-44. – Kislinger, Reisen 364-366.
- 34 Eustathios Thessalonikes, Expugnatio 34 (Kyriakides) writes of the Latins who have their separate place on the coast of the Horn of Byzantium, according to old custom. In this sense, correctly Magdalino, Constantinople 99: »[...] they were just plain foreigners, and the Golden Horn was their rightful place: next door to the Muslims, and just down the road from the Jews«.
- 35 Ptochoprodromika IV vv. 120-121 (Eideneier).
- 36 Selected contributions: Angold, Fourth Crusade; Laiou-Thomadake, Urbs capta; Ortalli/Ravegnani/Schreiner, Quarta crociata. – Philipps, Fourth Crusade; Piatti, Fourth Crusade.
- 37 Georgios Pachymeres, Relationes historicae V 10 (II 469-471 Failler), but cf. XII 26 (IV 579-583 Failler); Patria Konstantinupoleos III 37 (II 230 Preger); Nikephoros Gregoras, Historia VIII 6 (I 317-318 Schopen); Ioannes Kantakuzenos, Historia IV 11 (III 72. 74 Schopen). – Makris, Studien 82-83. 176-179. 289-290; Müller-Wiener, Häfen 26-27; Magdalino, Constantinople 76. – Heher, Harbour of Julian 101-102, in this volume.



Fig. 2 Depiction of Constantinople. Two chains, each attached to one side, are shown. – (Hartmann Schedel, *Liber Chronicarum* [Nürnberg 1493], fol. CXXX, detail).

facilities on the Propontis, where what remained of the imperial fleet also took new quarters³⁷. From then on, the Golden Horn could only be sealed off against external forces in extreme cases. The competition was already within the gates.

The Chain Across the Golden Horn

In the year 717/718, when Arab forces besieged Constantinople for the last time and tried to take it, we learn for the first time about an (iron) barrier chain designed to prevent

enemy ships from entering the Golden Horn. It is mentioned in passing that Emperor Leon III (717-741) in October ordered that the chain (ἄλυσιν, *halysin*) at Galata to be opened at night³⁸; one does not get the impression that the chain was a novelty. A passage in the *Patria Konstantinoupoleos* offers an indirect confirmation. There we read that (Emperor) Tiberios (578-582), father-in-law of (Emperor) Maurikios (582-602), built the *kastellion* (fortress) at Galata (later on Pera) and confined (or protected) in this way (by the help of a chain?) the ships inside (scil. the Golden Horn)³⁹. In 718, ships armed with Greek fire that had already attacked from the area of the Acropolis⁴⁰ suggest that the other end of the chain was fixed there (see more detailed n. 40, 45 and 66).

Around a hundred years later, the rebellious Thomas »the Slav« succeeded in getting past the chain in the battle against Emperor Michael II⁴¹, when he attacked Constantinople from land and sea in 821⁴². His fleet, composed of units from the provincial themes⁴³, was probably not equipped with the ὑγρὸν πῦρ (*hygron pyr*, »Greek fire«)⁴⁴ and thus at a disadvantage to the main imperial fleet. Thus, it is all the more surprising that Thomas's fleet was able to penetrate the Golden Horn despite the chain. Of course, such a barrier, like a city wall, is only effective if it is guarded, which appears not have been the case or only inadequately. When the imperial fleet actively intervened in the spring of 822, Thomas's forces within the Golden Horn suffered a heavy defeat⁴⁵.

Fearing that the Rus' would attack Constantinople by sea, Emperor Nikephoros II Phokas had the chain attached in 969 as a preventative measure⁴⁶. Leon Diakonos⁴⁷ described the process, saying that Nikephoros »also secured to the tower that is usually called Kentenarion a very heavy chain made of iron, attached it to enormous logs, attached it to the Bosphoros (*sic*) and fastened it to a tower of the Kastellion on the other side«⁴⁸ (fig. 2). The specification of the usual endpoints of the chain shows that »Bosphoros« / Bosphorus is a *lapsus*

38 Theophanes, *Chronographia* 396, 18-19 (I De Boor). – Guillard, *Chaine* 88-89.

39 *Patria Konstantinoupoleos* 157 (II 265 Preger). – Berger, *Untersuchungen* 689-691. – Schreiner, *Johannes von Biclar* 835-836 (thanks for information on this to P. Schreiner, Munich).

40 Theophanes, *Chronographia* 396, 8-9 (I De Boor). – Guillard, *Chaine* 89.

41 On the conflict in general: Lemerle, *Thomas le Slave*; Köpstein, *Zur Erhebung des Thomas* 61-87 and Köpstein, *Thomas*.

42 Michaelis et Theophili epistola 477 (Werminghoff). – Ioannes Skylitzes, *Synopsis* 33 (Thurn). – Joseph Genesis, *Libri Regum* II 5 (27, 19-20 Lesmüller-Werner/Thurn) confirms the two end points of the chain: τὴν σιδηρὰν αἰχμὴν ἀπ' ἀκροπόλεως μέχρι τοῦ Πέραθεν φρουρίου (the iron chain from the Acropolis to the fortress of Pera). Guillard, *Chaine* 96-97. – On the Acropolis side, the Kentenarion tower was most likely used for anchoring, see Guillard, *Chaine* 90 with reference to *Patria Konstantinoupoleos* III 150 (II 164 Preger). Guillard, *op. cit.* incorrectly quotes ἀπὸ τοῦ πύργου τῆς Ἀκροπόλεως, *recte* ἀπὸ τοῦ τείχους τῆς Ἀκροπόλεως; on the ancient wall, see *Patria Konstantinoupoleos* I 52 (II 141 Preger). – Berger, *Untersuchungen* 676 especially 203-204; English source-translation in Berger, *Patria* 205 n. 150 and Berger, *Patria* 31 n. 52. – Unlike Berger, *Untersuchungen* 743, I am not of the opinion that the Kentenarion Tower is the same as the Eugenios Tower, but the former should correspond to a tower near the Gate of St Barbara (the Topkapı Gate in Ottoman times) at the Seraglio Point, as explained by Guillard, *Chaine* 102-103. 108-109. He correctly differentiated (106) the Eugenios Gate from the eastern Golden Gate (equated with the Porta Oraia (πόλη ὠραία), so called probably because of its beautiful design). Dukas, *Historia* XXXVIII 7 (335, 13-17 Grecu) stated that the Turkish fleet was outside the Golden Gate and wanted to prevent ships with supplies for the city from entering the harbour (i. e., the Golden

Horn), which specifies the location of the anchorage of the chain. Guillard, *op. cit.* 100-101; van Millingen, *Walls* 223; Magdalino, *Triumph of 1113*, 56. Guillard, *Chaine* 106. 109, is wrong when he denies equating the πόλη ὠραία with the Gate of St Barbara = βασιλικὴ πύλη, basilike pyle. – On the remains of the building there, cf. recently Peschlow, Kai von Konstantinopel and earlier Schneider, *Vorarbeiten* 90. – When Perama was the Constantinopolitan end point of the chain, so a short *synaxarion* (ed. Lampros, *Meletemata* 282-284 and recently Olster, *Last Arabic siege* 427-430, esp. 428) it would not have protected the entire Golden Horn.

43 Joseph Genesis, *Libri Regum* II 5 (26, 86-88 Lesmüller-Werner/Thurn).

44 Haldon, »Greek Fire« revisited. – Korres, *Hygron Pyr*.

45 Theophanes *Continuatus*, *Chronographia* II 15 (90 Featherstone/Signes-Codoñer); Ioannes Skylitzes, *Synopsis* 35, 12-18 (Thurn). – Simeonov, *Kosmidion* 215, in this volume.

46 Guillard, *Chaine* 90. On the earlier attacks, which mostly only served to plunder the environs: Ellis-Davidson, *Viking Road* 117-136; Vasiliiev, *Russian Attack*; Vasiliiev, *Second Russian Attack*; Schreiner, *Constantinopoli* 35; Külzer, *Ostthrakien* 112, n. 300, 114. – On the person of the emperor, see Personnaz, *Empereur Nicéphore*; PmbZ II no. 25535 (657-677).

47 Leon Diakonos, *Historia* V 2 (78-79 Hase). – About the author, see Hunger, *Hochsprachliche profane Literatur* I 367-371; Hunger's basic manual is ignored by Neville, *Byzantine Historical Writing* 124-127.

48 Talbot, *Leo the Deacon* 129-130. – Berger, *Untersuchungen* 689-691, English source translation in Berger, *Patria* 207, no. 157. – Schneider/Nomidis, *Galata* 1. – For the location of the Kentenarion Tower, see Guillard, *Chaine* 98. 100. 107 and above n. 40.

calami. Whether the chain was also used in the final attack by the Rus' in 1042 is conceivable, but not proven. The smaller ships, if not boats, of the attackers were again no match for the Byzantine fleet, even though it was already in decline⁴⁹.

During the Fourth Crusade, the current of the Bosphorus flowing from the north (see in general above n. 15) again proved to be an important factor when the Crusaders attacked by ship in 1203⁵⁰, just as it had in 1042. The experience of Venetian seafarers, which had grown over centuries when entering the Golden Horn, enabled the crews to land on the shore of Pera⁵¹. On 6-7 July 1203, the Crusaders stormed the fort with the tower where the chain was fixed and were able to free it⁵². After it fell, the Byzantine ships and barges that had kept watch on the chain withdrew⁵³. It was not ramming that broke the chain, as has been repeatedly claimed⁵⁴. The port side current would have been much too strong⁵⁵ to achieve the necessary speed and power for this. Instead, the chain either sank under its own weight, despite the pontoon supports, or drifted away because it was then only fixed on one side (probably on the Kentenarion Tower)⁵⁶. Now the way into the Golden Horn was clear for the Crusaders' ships: facing them were only about twenty ships of the imperial fleet rotting at anchor⁵⁷, which were unable to offer any serious resistance. The fall of the city and the empire was inevitable.

It can be seen as an irony of history that the chain was carried to Acre in the Holy Land as a symbol of victory for the Fourth Crusade⁵⁸, whilst the intended relief of the oppressed Christian states in Palestine and Northern Syria came to nothing. Due to the »Latin« states that emerged in the wake of 1204 in Romania⁵⁹, the Western influx of forces into distant Outremer was reduced even more from then on.

When the Byzantines, coming from the Empire of Nicaea, had again taken their old centre of Constantinople in 1261⁶⁰ the task of protecting the city from enemy attacks was immediately undertaken, which also included sea defence; events in 1203/1204 should have made this necessity clear enough. However, from the reign of Michael VIII (1259-1282), as with the empire in general⁶¹, the fleet continued to decline and was even temporarily disbanded⁶². Attempts at a revival towards the middle of the fourteenth century also failed⁶³. In 1349, Ioannes VI Kantakouzenos had already recognised the impossibility of operating a shipyard in the upper Golden Horn near Kosmidion, and relocated such activities to the harbour of Kontoskalion, which was protected from enemy attacks⁶⁴. Suitable wood for shipbuilding was difficult to obtain⁶⁵ and there was a lack of suitable skilled workers, who instead migrated to the West and later to the Ottoman Empire because of better career prospects⁶⁶.

Stretching a chain across the Golden Horn became more complicated over time: its production required – increasingly scarce – financial resources; and the Byzantine side became dependent on the co-operation of Genoese Pera on the opposite bank. If we ignore a dubious note in a small chronicle⁶⁷ from 1448, this only happened once, and for the last time, during the final siege of Constantinople by the Ottomans under Sultan Mehmed II (1451-1481) at the beginning of spring, 1453⁶⁸. Again, from 2 April 1453, that is two to three days before the main force of the Ottoman army arrived in front of the city⁶⁹, τὸν μέγαν λιμένα καὶ τὸ Κέρας ἅπαν (»the large harbour and the whole [Golden] Horn«) were closed with an iron chain. According to Nicolò Barbaro, this chain rested on large pieces of wood (*tal cadena si iera de legnami grossissimi e redondi, e innarpexadi uno cun l'altro cun ferri grossi*) and

49 Kislinger, *Ruhm* 46-49. – Only mentioned cursorily in Pryor/Jeffreys, *Dromon* 86.

50 Pryor/Wilson, *Chain* 369-370.

51 Hugonis comitis Sancti Pauli epistola de expugnata per Latinos urbe Constantinopoli, in: Tafel-Thomas, *Urkunden* 306 resp. Hugonis Sancti Pauli, *Epistola* 813: *Inde perereximus ad quondam turrim fortissimam, que Galata nuncupatur, in qua firmatur maxima catena ferrea grossa nimis, que posite supra ligna transversa mare transnabat, attingens a turri usque ad muros civitatis*; Niketas Choniates, *Historia* 542-543 (van Dieten). – Pryor/Wilson, *Chain* 371-372; Pokorny, *Zwei unedierte Briefe* 205.

52 Guillard, *Chaine* 91-92 with quotations from the relevant sources. – Genç, *The Golden Horn Chain* 61 with fig. 30.

53 Robert de Clary, *Conquest* § 44 (Dufournet). – Pryor/Wilson, *Chain* 372-373.

54 The basis for this is *Historia ducum Veneticorum* 93 (Simonsfeld). – Queller/Madden, *Fourth Crusade* 117-118; Angold, *Fourth Crusade* 93; Philipps, *Fourth Crusade* 169. – Rightly rejecting Pryor/Wilson 369. 374; Harris, *Byzantium* 167. – Guillard, *Chaine* 91. – The ship involved, the Venetian *Aquila*, may have sailed over the already sunken chain, which was still visible from a certain angle. – Harald Hadrada, later King of Norway (11th c.), managed to leap over the chain using a combination of speed and shifting weight, when he escaped from the Byzantine emperor's service: Snorri Sturluson, *Heimskringla*, vol. 3, 52.

55 Pryor/Wilson, *Chain* 374-376.

56 See n. 40, 46 and 68. – Pryor/Wilson, *Chain* mentioned (371) Guillard, *Chaine*, at the beginning, but did not afterwards consult the article, possibly for linguistic reasons (cf. Schaller, *Review* 305). As a result, they miss Guillard's useful ideas about the position of the tower on which the chain was fixed on the Acropolis side.

57 Niketas Choniates, *Historia* 504 (Van Dieten). – Lilie, *Handel und Politik* 633. – The use of these ships in guarding the chain, according to Niketas Choniates, *Historia* 542-543 (van Dieten), is doubtful, as is Pryor/Wilson, *Chain* 384.

58 Receipts in Pryor/Wilson, *Chain* 379 n. 32 and 33. – Kedar, *Chains* 28.

59 Van Tricht, *Latin Renovatio*. – Burkhardt, *Mediterranes Kaisertum*. – Pokorny, *Königreich von Thessalonike*. – Chrissis, *Crusading*. – Lock, *Franks*. – Tsougarakis/Lock, *Latin Greece*.

60 Georgios Pachymeres, *Relationes historicae* II 27 (I 140-149 Failler). – Nicol, *Last Centuries* 37-41.

61 Nicol, *Last Centuries*. – Laiou, *Constantinople and the Latins*. – Oikonomides, *Hommes d'affaires*. – PLP no. 21436 (Palaiologos Andronikos II). – Recently, Külzer/Kislinger, *Byzantium 1204-1453* offered a brief outline of the development.

62 Georgios Pachymeres, *Relationes historicae* VII 26 (III 81-83 Faillier). – Ahrweiler, *Byzance et la mer* 374-388. – Matschke, *Schlacht bei Ankara* 107-125.

63 Kleinchroniken, *Chronik* 7, 12 (I 65 Schreiner), *Chronik* 8, 51b (I 86 Schreiner). – Nicol, *Last Centuries* 226-233. – Matschke, *Flotte*. – PLP no. 1180 (Apokaukos Alexios), no. 10973 (Kantakouzenos Ioannes VI).

64 Ioannes Kantakouzenos, *Historia* IV 11 (III 70 Schopen); Nikephoros Gregoras, *Historia* XVII 2 (II 847 Schopen). – Simeonov, *Kosmidion* 220-221, in this volume.

65 Ioannes Kantakouzenos, *Historia* IV 11 (III 72. 74 Schopen). – Makris, *Studien* 162-164.

66 Makris, *Studien* 118-127; Bondioli/Penzo, *L'influsso greco nelle costruzioni navale veneziane* – Matschke, *Schlacht bei Ankara* 89-107.

67 Kleinchroniken, *Chronik* 9, 50 (I 99 Schreiner, commentary II 469-471). – Pryor/Wilson, *Chain* do not know the source and its analysis, probably due to a lack of knowledge of German.

68 In general, see Runciman, *Fall of Constantinople*; Philippides/Hanak, *Siege and Fall*; Pertusi, *Caduta di Costantinopoli*. – Genç, *Golden Horn Chain* 234-237.

69 Kleinchroniken, *Chronik* 34, 20 (I 270-271 Schreiner, commentary II 481). – Georgios Sphrantzes, *Chronicon* XXXV 6 (133 Maisano).



Fig. 3 Transport of Turkish ships in spring 1453 overland into the Golden Horn. Painting by Fausto Zonaro (1854-1929), court painter to Sultan Abdul Hamid II. Istanbul 1908, oil on canvas. TBMM National Palaces Collection. – (Fausto Zonaro: Fatih Sultan Mehmet, Ordusuyla İstanbul’u fethe giderken. inv. no. 11/1493, © Millî Saraylar İdaresi Başkanlığı, İstanbul).

reached from Galata (Pera) – as only Kritobulos wrote – to the Gate of Eugenius⁷⁰ in Constantinople. Cargo ships and »triremes« again secured the taut chain⁷¹ and an attack by the Turkish fleet on 21 April was repulsed⁷².

However, Mehmed II managed to better position his long-range cannons, firing over Genoese Galata to score hits in the Golden Horn⁷³. When the attackers succeeded in hauling ships north of Pera overland into the Golden Horn⁷⁴ (fig. 3), the large natural harbour was lost by the defenders. Crews from ships that were not necessary for guarding the chain were sent to support the men defending the walls against increasing attack⁷⁵. The end was near.

When the Turks finally invaded the city on 29 May, those who could, fled by ship. A wooden support (or several) of the chain was chopped down by axe⁷⁶, it partly sank and the ships sailed over it. It is not certain whether the victors actually recovered parts of the chain, especially those attached to the bank. Chain links⁷⁷ (fig. 4) scattered across four Istanbul museums today may come from the Golden Horn, as is officially claimed, but a provenance from Rhodes, which was conquered by the Ottomans in 1522, is also conceivable⁷⁸.

70 Kritobulos, *Historia A* 18,8 (37 Reinsch), is not applicable, as also Guiland, *Chaine* 109-110. The plural τῶν Εὐγενίου Πυλῶν (*tōn Eugenion pylōn*) indicates that there was a main gate and side gate; cf. Ioannes Kantakuzenos, *Historia IV* 28 (III 213-214 Schopen) ἐκ τῶν Εὐγενίου πυλῶν and IV 31 (III 232 Schopen) ἐπὶ τὰς Εὐγενίου πύλας. – However, right at the end of the chain Dukas, *Historia XXXVIII* 6 (333 Grecu) ἀλύσει ἀπὸ τοῦ μέρους τῆς πύλης τῆς Πόλεως τῆς καλουμένης Ὀρραίας. See n. 40. – On the dating, see Pertusi, *Caduta di Costantinopoli* 13 (report of Nicolò Barbaro); Guiland, *Chaine* 93. 94-95 on the various opinions of researchers on the Constantinopolitan end of the chain. – Pryor/Wilson, *Chain* 378.

71 Kritobulos, *Historia A* 24, 2, 28, 2 and 37, 1 (40. 43. 50 Reinsch).

72 Kritobulos, *Historia A* 37, 3-5 (50-51 Reinsch). Further attacks took place on 16, 17 and 21 May, see Pertusi, *Caduta di Costantinopoli LXXXII-LXXXIII*; Philippides/Hanak, *Siege and Fall* 576-577.

73 Runciman, *Fall of Constantinople* 116. – Pertusi, *Caduta di Costantinopoli* 22. 24 (report of Nicolò Barbaro).

74 Dukas, *Historia XXXVIII* 8 (337-338 Grecu); Pertusi, *Caduta di Costantinopoli* 138 (report of Leonardo di Chio, chapter 11). – Runciman, *Fall of Constantinople* 104-106. – Philippides/Hanak, *Siege and Fall* 438-447.

75 Philippides/Hanak, *Siege and Fall* 582-583. – There is no source for the argument proposed by Runciman, *Fall of Constantinople* 117, that unmanned ships in the harbour of Proshporion (by the Eugenios Gate) were tied together.

76 Pertusi, *Caduta di Costantinopoli* 35-36 (report of Nicolò Barbaro). – Pryor/Wilson, *Chain* 378. – Philippides/Hanak, *Siege and Fall* 464-465. 467-469. – Hasluck, *Constantinopolitana* 165-167 about three ships from Crete involved. – The chain was opened for a short time on 20 April to enable ships with supplies to enter the Golden Horn: Runciman, *Fall of Constantinople* 142. – Makris, *Studien* 183.

77 These are the Turkish Military Museum (Askeri Müze), the Turkish Naval Museum, the Istanbul Archaeological Museum and the Rumeli Hisarı Museum. Pryor/Wilson, *Chain* 379-381 with photograph on 378 (after van Millingen, *Walls, facing* 228). – The chain parts in the four museums were studied and measured by Genç, *Golden Horn Chain* 68-230 (with numerous illustrations). He concludes that the three parts in the Navy Museum and the Rumeli Hisarı Museum, and the one in the Archaeological Museum all come from the Military Museum (illustrations of the parts still kept there, see Genç, *Golden Horn Chain* 68-69). These parts have originally come from the depot, then museum in or at the Hagia Eirene. A total of 185-190m are preserved (Genç, *Golden Horn Chain* 242). – Kedar, *Chains* 7 (chain elements in the Turkish Naval Museum) and 28-30 (*The Broken Chain as Trophy*). – Kedar, *Chains* (2012) does not seem to know Genç, *Golden Horn Chain* (2010), who also covers other chains of the Mediterranean. – Kastenellos, *Byzantium*, in his essay *The Chain across the Golden Horn*, 89-103 offers several images of chain links in Istanbul museums (probably based on Genç, *Golden Horn Chain*).

78 Pryor/Wilson, *Chain* 379 n. 34. – Also sceptical were Guiland, *Chaine* 91 n.1 and Philippides/Hanak, *Siege and Fall* 432 n. 9. cf. already Schneider / Nomidis, *Galata* 2 n. 3 with reference to Hasluck, *Constantinopolitana* 163-165. According to Hasluck (1923) these chain-elements were brought to Constantinople from Rhodes between 1843 and 1854. Their oval form with compressed sides (»figure of eight«-shape) corresponds with former descriptions at Rhodes, but not with that of Evliyâ Çelebi from the 17th century regarding other chain-elements at Constantinople, said to be elliptical in shape and more than a metre long (Hasluck, *Constantinopolitana* 164-165). – However, dismissive is Genç, *Golden Horn Chain* 25. 236.

Fig. 4 Iron links (allegedly) of the chain over the Golden Horn, (before) 1899 kept next to a porphyry sarcophagus in the area of Hagia Eirene. Original photograph from 1891 (cf. Genç, Golden Horn Chain 65-66. 231-233. 241); Pryor/Wilson, Chain falsely attributed this photograph to van Millingen). With passepartout by the court photographers Abdullah Frères, part of the Abdul Hamid II Collection, now kept in the Library of Congress, Washington, D.C., with permission for download (excerpt also in van Millingen, Walls, facing 228); adaptation by F. Siegmeth).



For the technical data of the chain, the preserved links in the Istanbul Museums are nevertheless a suitable starting point, even if only in comparison. The surviving material⁷⁹ does not coincide at all with the required length of the chain of approximately 750m, which would cover only the part lying in the water⁸⁰, plus the length for attaching the chain on both sides. This would make an additional 30-40m minimum, which would result in a chain of 810-830m in total. However, the chain would have to run over an unknown number of floating pontoons in order not to sink into the water due to its weight. Thus, it would even have to be longer than the calculated 810-830m⁸¹. An alternatively extremely tight clamping over water between the two end-points would also have meant considerable tensile forces on both sides of the anchorage, which were greatly reduced when lying on floats plus shallow immersion in the water.

For the water part alone, assuming a straight line, Pryor/Wilson calculated on the (weak, if not dubious) basis

of a single chain link a total weight of c. 30t. According to Genç, an estimate of »only« c. 18-19t would be more convincing⁸². An additional weight would have to be calculated if a Constantinopolitan end point of the chain is presumed that would have been anchored beyond (southeast) the Seraglio Point (Sarayburnu)⁸³. Based again on Genç's calculations, this would have meant a plus of approximately 7.5t at 300m⁸⁴. The chain⁸⁵, which initially ran on the land (along the wall), would have reduced the tensile force of the chain at the (western) suspension point, but at the same time had the result that the chain ran quite flat into the water. This, in turn, would impede lifting them to rafts or pontoons⁸⁶.

Only experimental archaeology may provide more clarity on the matter in future. Further investigation will also have to include the question how the chain was moved when it was lowered to allow ships to enter the harbour, as is documented by the sources⁸⁷. The proposal of a hydraulic

79 According to Genç, Golden Horn Chain 242 it is 185-190m.

80 Pryor/Wilson, Chain 371. – Genç, Golden Horn Chain 234 assumes only 500-600m chain length on the water, but this does not correspond to the local conditions.

81 Pryor/Wilson, Chain 381 calculate on the basis of c. 1500 chain links (each 55cm long) a total length of 825m. – Takeno/Takeno, Mystery of the Defence Chain 201 assume a length of 1000m, but in my opinion this is calculated too long. They calculate (op. cit. 201-203) a float every 2.64m along the length of the chain lying in the water.

82 According to Pryor/Wilson, Chain 381-382 this means a chain weight of 40kg/m. – Takeno/Takeno, Mystery of the Defence Chain 201: 40t. – The indepth analysis of all chain parts in all four museums (see n. 75) in Genç,

Golden Horn Chain 83-216 resulted in calculating for each chain link a length of 45-60cm (average of 52-54cm) and a weight of 11.6-15kg (average of 12.35-13kg). The estimated weight of 20kg per chain link in Pryor/Wilson is thus too high by more than 7kg/m or over a third of the total weight.

83 Takeno/Takeno, Mystery of the Defence Chain 204.

84 Takeno/Takeno, Mystery of the Defence Chain 208.

85 Takeno/Takeno, Mystery of the Defence Chain fig. 5 on 205f. – For the discussion of the version I wish to thank Arne Effenberger, Berlin, contributor to this volume.

86 Pryor/Wilson, Chain 381-383. – Takeno/Takeno, Mystery of the Defence Chain 201-203.

87 Runciman, Fall of Constantinople 142.

mechanism (waterwheel and gear train) for this purpose⁸⁸ is worth considering.

The decisive breakthrough was achieved by the Turkish besiegers in 1453 on the landward approach⁸⁹, but it was once again evident that mastery of the maritime zone was decisive for the fate of Constantinople. The Byzantine coastal defences had proven themselves against the Avars and Slavs in 626, the Arab attacks of 667-669 and 717/18, as well as against the raids of the Bulgarians and Rus' from 860 to 1042, but this was no longer the case in 1203/1204 and again in 1453, each with a negative outcome for the defenders. The

chain across the Golden Horn had always been an element of the whole defences, but advancements in technology (e. g., longer range cannons as early as 1453) made this means of protecting the region increasingly obsolete⁹⁰. Heavy gun batteries towards the sea (and from the twentieth century also against air attack) and extensive protection of the hinterland became increasingly important in modern times for the military defence of the central harbours. Only the danger of submarine attack on vessels anchored in port in the last century led again to the use of physical barriers to entry, this time underwater, to protect naval bases⁹¹.

Summary / Zusammenfassung

The Golden Horn: Constantinople's Superharbour (Überhafen) and its Chain

Even the Byzantines themselves saw the various harbours, landing stages, *skalai* and shipyards along the Golden Horn as a unit; the inlet as a whole was the city's harbour. Its prosperity was somewhat impaired by a difficult entrance due to the current, silting from sediment deposits in the harbour bays, and a negative image of the shore areas following the plague waves of the sixth to eighth centuries. Nevertheless, from the tenth century onwards, the Golden Horn rose again to become the commercial centre of Constantinople, in which the trading states, especially the Venetians and Genoese, played an important role. An iron barrier chain was used to protect against enemy attacks, which was stretched from the Acropolis area to the fort of Galata (Pera). Wooden pontoons prevented it sinking from under its own weight. The use of the chain is documented several times from 717/718 to 1453 and was not always successful.

Das Goldene Horn: Der Überhafen von Konstantinopel und seine Sperrkette

Schon die Byzantiner selbst haben die diversen Häfen, Anlegestellen, *Skalai* und Werften entlang des Goldenen Hornes als Einheit gesehen, der Meeresarm insgesamt war der Hafen der Stadt. Etwas beeinträchtigt wurde seine Prosperität durch eine strömungsbedingt schwierige Einfahrt, Sedimentablagerungen in den Hafenbuchten, was zu Verlandungen führte, und ein schlechtes Image der Uferzonen im Gefolge der Pestwellen des 6.-8. Jahrhunderts. Dennoch stieg das Goldene Horn vom 10. Jahrhundert an wieder zum kommerziellen Zentrum Konstantinopels auf, woran die Handelsniederlassungen vor allem der Venezianer und Genuesen gewichtigen Anteil hatten. Dem Schutz vor feindlichen Angriffen diente eine eiserne Sperrkette, die vom Akropolis-Bereich zum Kastell von Galata/Pera gespannt wurde. Ein Absinken infolge ihres hohen Gewichts verhinderten hölzerne Pontons. Der Einsatz der Kette ist mehrfach von 717/718 bis 1453 belegt, war nicht immer erfolgreich.

88 Takeno/Takeno, *Mystery of the Defence Chain* 208-210. – Similarly, but technically far more demanding is the concept of a suspension tower with a large wheel inside (diameter 7 m) and a large counterweight (supported by an attached water tower), combined with eight pontoons with slip wheels. See G. Anapnotis in his (still unpublished) text »The Truth About the Great Chain of the Golden Horn«, available under the entry of Nikolaos Uzunoglou (National Technical University of Athens) on researchgate.net (accessed 21 Sept 2021). Anapnotis is aware of the difficulty Byzantium would have had to build such a complex construction in the later period. Thus, he assumes a construction in the 7th c. that continued until 1453 (which is unsophisticated). – Genç, *Golden*

Horn Chain 61, however, thinks that a mere horizontal capstan, operated by human or animal power (comparable to the principle of a horse mill / »Göpel Mill«), would have been sufficient to move the chain (which I doubt).

89 Philippides/Hanak, *Siege and Fall* 505-546. 619-623. – Asutay-Effenberger, *Landmauer* 87-94.

90 Zorić, *Catena portuale*. – Kedar, *Chains* 30-31.

91 Those harbours include the Austro-Hungarian naval base of Pola (today Pula in Croatia), see H. H. Sokol, *Österreich-Ungarns Seekrieg 1914-18, I-II* (Wien 1933, reprint Graz 1979) I 135-139.

Harbours and Moorings of Constantinople's Outskirts

The Harbour and Landing Stages of Hebdomon

»It was a rainy and cold day in October 1918. In the afternoon, we had geography lessons with our dear teacher Charalampos Photiades. Our classmate Basileios Kerasoglou drew the map of some country on the blackboard. The fourth class was on the top floor of the school. Next to the school was the house of Doctor Aperges. Our classmate glanced out of the window as the class continued. I will never forget the loud cry he uttered when he saw the Greek flag hoisted at Aperges's window. »Teacher, a Greek flag!« He cried. »Truly, Teacher, a Greek flag, right here by the window!« The teacher gets up, approaches the window and, to his surprise, sees a huge Greek flag. In the meantime, riot had broken out in the school with a babble of voices and great noise! Our school principal Konstantinos Papadopoulos immediately comes to the class and tells us: »Children, everybody get ready to go to the beach! You will see that the whole sea is full of warships, Greek, English, French, Italian«. We were at Thermogiannes in a few minutes. And [really], that is how it was. Warships crossed the Sea of Marmara, which would later anchor in Haydarpaşa and Chalcedon. The legendary Averoff¹ with the huge Greek flag passed by and landed in front of Dolmabahçe Palace«².

When the Greek pupils of the village of Makrochorion (today Bakırköy, Istanbul) watched the ships of the Entente heading towards the city on the Bosphorus towards the end of the First World War, none of them probably suspected where they were: they stood on a spot that had, since Byzantine times, witnessed the passage of at least three other fleets that significantly shaped the history of the Byzantine Empire and its capital³. Thermogiannes's casino (later renamed »Vienna«) was right on the shore of the Sea of Marmara and even had a terrace that was built on Byzantine remains (fig. 1)⁴. These were the only remains of one of the buildings that, according to Jean-Baptiste Thibaut, belonged to the »Versailles of the Byzantine Emperors« in Late Antiquity⁵. This palace complex was built at the seventh milestone that marked the distance to Constantinople. The distance was counted from the Milion,



Fig. 1 The Casino of Thermogiannes in Makrochorion, today's Bakırköy. – (Photograph www.eskiistanbul.net).

the central milestone close to the Hagia Sophia, which is why the area was known as Hebdomon or Septimo (Greek/Latin for »seventh«) (fig. 2). Although the comparison with the French Versailles is not entirely wrong, the suburb of the Byzantine capital had one significant difference. Hebdomon was not only on the main land route to the west, the Via Egnatia, but also on the coast of the Sea of Marmara. Thus, the entire area at the seventh milestone had a strong connection to the sea, which significantly shaped its history from the late fourth to the early eighth centuries⁶.

State of Research

Among all the European districts of Constantinople, Hebdomon has been of particular interest to researchers⁷. One reason is the symbolic meaning of this place and its monuments, which saw the proclamation of at least ten Byzantine emperors⁸, another is the scholarly debate about its exact location. At the end of the nineteenth century, Friedrich Wilhelm Unger, Alexander van Millingen and Dmitrij Beljaev

1 An armoured cruiser from the first half of the 20th c. used as the flagship of the Greek Navy.

2 Tziras, Ebdomon 227-228 (Memories of Thanases Chatzeparaskeuas [Berk]).

3 It concerns the ships of Heraclius in 610, the Arab fleet in 717 and the Venetian fleet in 1203. See also p. 183 and n. 31, as well as pp. 196-197.

4 Tziras, Ebdomon 91-92 and 234 (with fig.). – Makrides, Hebdomon 168-171. The photograph shows the casino of Thermogiannes and not that of Miltiades as Tuna, Hebdomon'dan Bakırköy'e 144-147 claimed.

5 Thibaut, Hebdomon 32.

6 See Alexander, Strength 342 and n. 10.

7 On Hebdomon in general, see Janin, Constantinople 446-449. – Külzer, Ostthrakien 391-395. – van Millingen, Walls 316-341. – Glück, Hebdomon. – Makrides, Hebdomon. – Tziras, Ebdomon.

8 See p. 183.

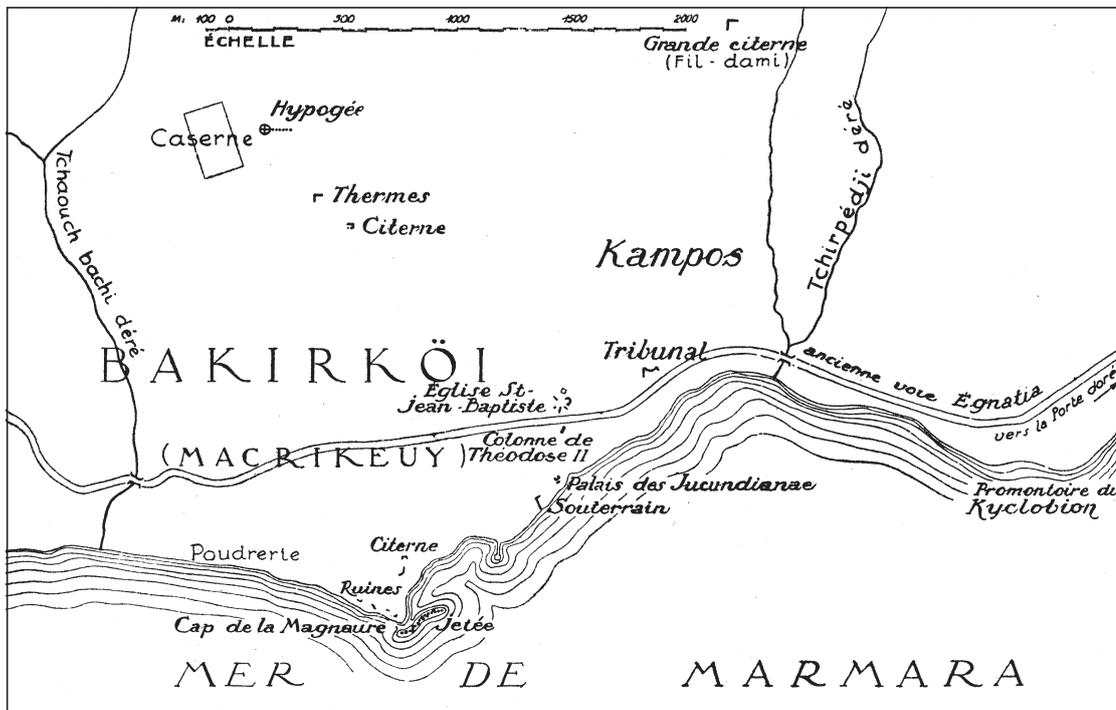


Fig. 2 Map of Hebdomon. – (From Demangel, Hebdomon 6 fig. 1).

rejected the old location at the Blachernae that had been widely accepted since the time of Charles du Cange in the seventeenth century. Instead, they suggested locating Hebdomon on the north coast of the Sea of Marmara and initiated the first systematic investigations of the southwestern area of Constantinople⁹.

The first monograph on the suburb at the seventh milestone was published in Vienna in 1920 and is the result of research by the art historian Heinrich Glück. When he stayed in Istanbul from 1916 to 1917, he examined the area in front of the Golden Gate and found the remains of an old mole¹⁰. Despite its significance, Glück's work should be used with caution because of his interpretation of the sources. Systematic archaeological investigations in what was then the village of Makrochorion began during the French occupation of Istanbul from 1920 to 1923, which were led by Theodoros Makrides (Makridi Bey), an employee of the Istanbul Archaeological Museum. The excavations unearthed numerous Byzantine monuments, including the Late Antique Tribunal and an octagonal sacred building, which was interpreted as the Church of John the Baptist, restored under Justinian. Another discovery was the column of the Emperor Theodosius II (408-450)¹¹.

The results of these excavations were only published in 1945 under the editorship of Robert Demangel. To this day, they are an indispensable tool for dealing with the history and

topography of Hebdomon¹². A few years before these excavation reports appeared, Theodoros Makrides also published two important articles in the Greek journal *Thrakika*, in which he treated the southwestern area of Constantinople¹³. The last two authors are among the last researchers to register the remains of a Byzantine mole and record them through photographs. They have since disappeared due to earth deposits during the construction of the road along the coast and other changes of this area over the past fifty years. Due to the rapid settlement development of Bakirköy, further large-scale archaeological studies in the region under discussion are hardly to be expected. The present-day Bakirköy district developed from the former Greek village of Makrochorion (or *Makrochori*), which aroused historical interest in the region through Greek and Turkish non-academic researchers. Publications of old photographs provide an insight into the pre-industrial history and topography of the southwestern districts of the metropolis of Istanbul¹⁴.

The Late Antique Beginnings of Hebdomon

Constantinople was officially made the imperial capital on 11 May 330 and, since its foundation, was considered the New Rome. Since Constantine the Great (324-337), the emperors have ensured that the city on the Bosphorus was not inferior

9 Unger, Quellen 113-117. 238-239. 266. – van Millingen, Walls 316-341. – van Millingen, Aléthēs thesis. – Běljaev, Bogomol'nye vychody 57-92.

10 Glück, Hebdomon 3 and n. 1.

11 Overview of the excavations in Demangel, Hebdomon 1-4. – See Diehl, Fouilles 197-199.

12 Demangel, Hebdomon.

13 Makrides, Hebdomon.

14 To be mentioned in the first place Tzirias, Ebdomon, and Tuna, Hebdomon'dan Bakirköy'e.

to the metropolis in the west¹⁵. This affected construction activities in the centre, where forums with (triumphal) columns, palaces and a senate building were built, but also the immediate vicinity of the city. A military training area was set up at Hebdomon that was modelled after the Campus Martius and given the graecised name Kampos. It was situated in the area of today's Veliefendi Hipodromu¹⁶. Due to the increasing militarisation of the empire, the area soon developed into a place where the army could stage its political power¹⁷. At the same time, Hebdomon was to play an important role in Byzantine ceremonies over the next few centuries.

The first reliable evidence of imperial construction measures at Hebdomon date back to the reign of Valens (364-378)¹⁸. According to a laudatory speech by Themistius, the emperor had a foundation (*krepis*) and a stage (*bema*) built and statues erected at Hebdomon¹⁹. The reason for this activity is obvious: here, on 28 March 364, Valens was appointed co-emperor by his older brother Valentinian I and took control of the eastern half of the Roman Empire (fig. 3)²⁰. The buildings are considered part of the Tribunal, where the army, Senate and people of Constantinople acclaimed the new emperor, accompanied by a military parade (fig. 4)²¹. Thus, Valens was the first of at least ten Byzantine rulers²², who were proclaimed emperor at the Kampos outside Constantinople²³. Valens was followed by Arcadius (395-408)²⁴, Honorius (395-423)²⁵, Theodosius II (408-450)²⁶, Marcian (450-457)²⁷, Leo I (457-474)²⁸, Basiliscus (475-476)²⁹, Maurice (582-602)³⁰, Phocas (602-610)³¹ and Leo V (813-820)³². Today, the last traces of the Roman Tribu-



Fig. 3 Solidus of Emperor Valens, with the brothers Valentinian I and Valens on the reverse (scale 2:1). – (Photograph R. Müller, RGZM).

nal of Hebdomon consist only of one wall, which is still visible in the carpark southwest of Veliefendi Hipodromu³³.

Fortifications and Palaces on the Hebdomon Seafront

The presence of the emperor and the army at the seventh milestone from Constantinople also required fortifications. The best-known and most important fortification in the southwest outskirts of the capital was the so-called Round Castle (Kyklobion or Strongylon)³⁴. Based on Theophanes's topographical reports on the two Arab sieges of Constantinople, this defensive system can be located in the eastern part of the bay of Hebdomon. This is today the area where Istanbul's district of Zeytinburnu adjoins Bakırköy³⁵. There may have been a landing stage at the Round Castle³⁶. The

15 In general, see Dagron, Naissance 13-294. – Mango, Développement 23-36. – Bauer, Stadt, Platz und Denkmal. – Bauer, Stadtverkehr in Konstantinopel. – Bauer, Urban Space.

16 Demangel, Hebdomon 6-7. – Makrides, Hebdomon 151-154. – Taddei, Topographical Remarks 63. – On the Roman prototype, see Jacobs/Conlin, Campus Martius. – On the symbolic role of Hebdomon, see Dagron, Naissance 100-102. – Diefenbach, Liturgie und *civilitas* 26-27.

17 Beck, Senat und Volk 3-9. – Treitinger, Kaiser- und Reichsidee 7-8. – Bauer, Stadtverkehr in Konstantinopel 200-203. – Bauer, Urban Space 40-44.

18 According to the Patria Konstantinupoleos III 144 (260, 11-13 Preger), Constantine the Great had the Church of St John the Theologian built at Hebdomon, which Berger, Untersuchungen 682-683 doubted because of the legendary character of the collection.

19 Themistios, Orationes 6 (I 123, 10-14 Schenk/Downey). – See Demangel, Hebdomon 11. – Glück, Hebdomon 24-27. – Makrides, Hebdomon 154-157. – McCormack, Art and Ceremony 197-202. – Glück, Hebdomon 54 n. 1 translates *krepis* as mole, but an interpretation of the term as part of the Tribunal seems more plausible.

20 Ammianus Marcellinus, Res Gestae XXVI 4, 3 (IV 18, 28-20, 2 Seyfarth). – Chronicon Paschale 556, 6-8 (Dindorf). – Consularia Constantinopolitana 364, 3 (44, 10-12 Becker/Groß). – See Christophilopulu, Ekloge 8.

21 Demangel, Hebdomon 5-16. – Demangel, Tribunal. – Demangel, À propos du Tribunal. – On the proclamation of Valens as emperor, see Beck, Senat und Volk 8-10.

22 Glück, Hebdomon 14-16 added Zenon (474-491), Leo III (717-741) and Nikephoros II Phokas (963-969) to this list, which Makrides, Hebdomon 144-147 and Janin, Constantinople 447 included in their work. The inclusion of Leo III is based on a confusion with Leo V; Zenon, on the other hand, was appointed emperor by his father-in-law in the Hippodrome, for both cases, see Chrysos, Krönung 172-173 n. 24. – For the proclamation of Nikephoros Phokas 963, see Christophilopulu, Ekloge 106-108 as well as Simeonov, Topographie, and the contribution by Simeonov, Brachialion, in this volume.

23 On the acclamations at the Campus, see Christophilopulu, Ekloge, as well as Dagron, Naissance 101 and n. 2-3.

24 Chronicon Paschale 562, 19-563, 2 (Dindorf). – Marcellinus Comes, Chronicon 11th indiction/383 (3 Mommsen).

25 Marcellinus Comes, Chronicon 6th indiction/393 (5 Mommsen). – Consularia Italica 521 (298 Mommsen).

26 Chronicon Paschale 568, 5-8 (Dindorf).

27 Chronicon Paschale 590, 8-10 (Dindorf). – Theodoros Anagnostes, Historia Ecclesiastica I 354 (100, 11-13 Hansen). – Nikephoros Xanthopoulos, Historia Ecclesiastica XIV 58 (PG 146, 1273 A-B).

28 Konstantinos Porphyrogenetos, De cer. I 100 (II 407, 1-6 Dagron/Flusin/Fessel). – Sode, Kaiser 796-822.

29 Theodoros Anagnostes, Historia Ecclesiastica III 402 (112, 19-22 Hansen). – Theophanes, Chronographia AM 5967 (121, 1-2 de Boor). – Georgios Kedrenos, Chronicon 384, 2 (II 600, 13-14 Tartaglia). – Ioannes Zonaras, Epitome XIV 2, 6 (III 128, 16-18 Büttner-Wobst).

30 Concerning Maurice, research offers different views due to the two tribunals that appear in the sources. One of them is located at Hebdomon, the other in the city centre. Thanks to Chrysos, Krönung 172 n. 21, this problem can be considered resolved in favour of the structure on the Campus.

31 Theophylaktos Simokattes, Historia VIII 10, 1 and 5-6 (302, 20-23 and 303, 6-14 de Boor/Wirth). – Chronicon Paschale 693, 16-23 (Dindorf). – Gregorii Magni Registrum epistularum, Appendix VIII (II 1101, 2-7 Norberg). – Theophanes, Chronographia AM 6094 (289, 8-25 de Boor). – Georgios Kedrenos, Chronicon 433, 1 (II 677, 52-61 Tartaglia). – Ioannes Zonaras, Epitome XIV 14, 1-2 (III 196, 8-11 Büttner-Wobst). – Michael Glykas, Annales 510, 1-4 (Bekker). – Nikephoros Xanthopoulos, Historia Ecclesiastica XVIII 40 (PG 147, 408 B-C). – Also the end of his reign was supposed to have begun there: on 7 October 610, Phocas watched from the coast at Hebdomon as the ships of the pretender to the throne Heraclius appeared at the Round Castle and anchored there. The emperor had no choice but to ride to Constantinople in the evening, since his opponent had cut off the sea route to the capital, see Chronicon Paschale 699, 19-700, 4 (Dindorf).

32 Theophanes, Chronographia AM 6305 (502, 19-26 de Boor). – Symeon Logothetes, Chronicon 127, 3 (209, 14-17 Wahlgren).

33 The parts of the Tribunal found during the 1921-1923 excavations were still preserved until the 1960s, see Tziras, Ebdomon 77 (with photograph).

34 Prokopios, De aedificiis IV 8, 4-7 (134, 8-17 Haury/Wirth).

35 Theophanes, Chronographia AM 6165 and AM 6209 (353, 25-354, 2 and 448, 12-21 de Boor). – Külzer, Ostthracien 484-485. – Makrides, Hebdomon 174-175. – Janin, Constantinople 139. 451. – Taddei, Topographical Remarks 64. For the sieges, see below, p. 196.

36 Below, p. 197.

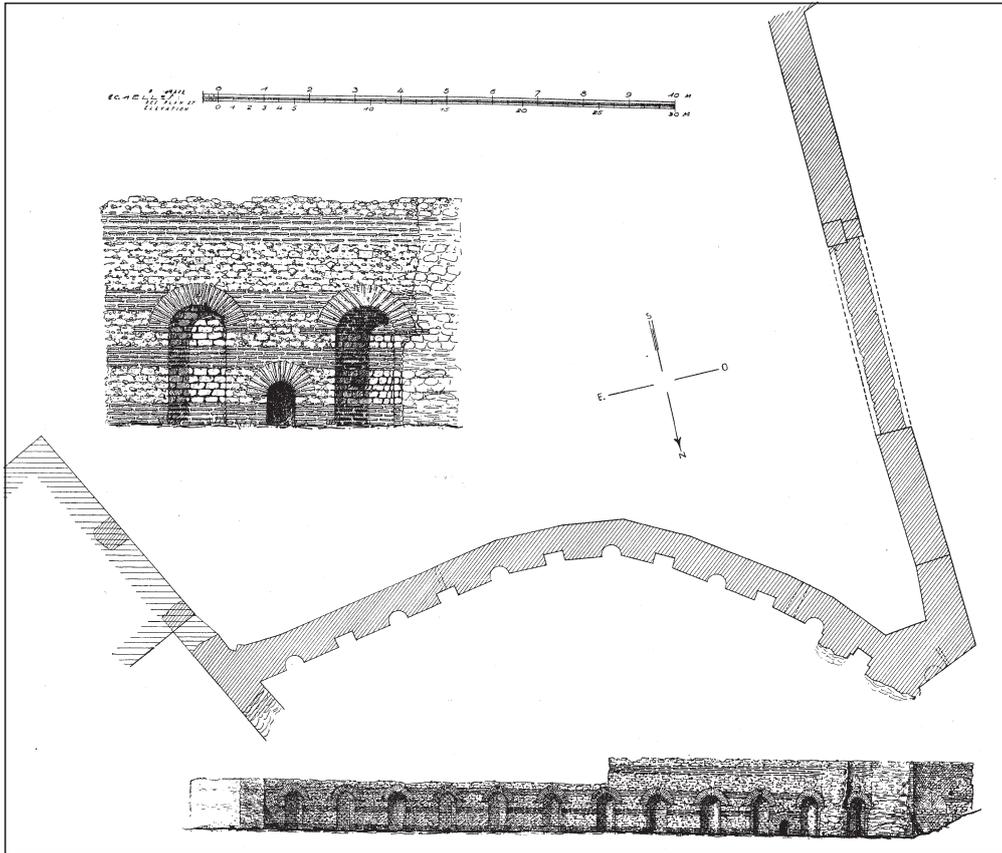


Fig. 4 The Tribunal at Hebdomon. – (From Demangel, Hebdomon pl. 1).

fortification played an important role in the official reception of ambassadors on their way to the capital, as recorded in the *Liber Pontificalis* on the occasion of the embassies of the Popes Hormisdas 519 and Hadrian II (869/870)³⁷.

An unresolved question is whether the Theodosian fort that was only mentioned once in the sources can be counted among the fortifications at Hebdomon. According to Theophanes, the executed Makrobios was displayed here in 608/609³⁸. Alessandro Taddei did not rule out the possibility that this building is identical to the Round Castle, whereby the designation »the Theodosians« referred to the troops quartered there³⁹. In this case, however, the chronicler called the fortification Round Castle in the context of other events from the seventh and eighth centuries. Thus, it has to be clarified why he used a different name in the case of Makrobios. Regarding the arrival of the fleet of Heraclius one year after the execution of Makrobios, the *Chronicon Paschale* only mentioned the *strongyloun kastellin*, i. e., Round Castle⁴⁰. For this reason, it seems plausible to assume that the Theodosian fort was a second defensive system at Hebdomon⁴¹, but it cannot be precisely located.

Glück and Makrides took a different view, relying on the *Patria Konstantinoupoleos* in their attempt to locate the Theodosian castle. These testify to a fort built by Emperor Tiberius II (578-582):

»Tiberios [...] the father-in-law of Maurikios, built the Kastellin, because Chaganos, the ruler of Bulgaria, came and torched and burned all the regions of Thrace up to the gates. He fortified the wall and enclosed the ships within, and so it received this name«⁴².

Glück and Makrides located this defensive work on the western bank of the bay of Hebdomon. Makrides identified it as the ruins under the former Greek casino of Thermoiannes⁴³, which can be seen in numerous old photographs⁴⁴. In the opinion of the two scholars, the emperor would have offered the ships in the bay better protection with the second Hebdomon castle. However, such a view is contrary to the fact that all other places mentioned in the same section of this source are either on the northern bank of the Golden Horn or on the Thracian bank of the Bosphorus⁴⁵. Furthermore, the reliability of the report is disputed. The

37 *Liber Pontificalis* LIII 5 (Hormisdas) and CVIII 36 (Hadrian II) (I 270, 9-12 and II 180, 13-15 Duchesne). – Heher/Simeonov, *Ceremonies by the Sea* 231.

38 Theophanes, *Chronographia* AM 6101 (297, 12-16 de Boor).

39 Taddei, *Topographical Remarks* 64 and n. 42.

40 *Chronicon Paschale* 699, 19-21 (Dindorf).

41 van Millingen, *Walls* 327-328.

42 English translation by Berger, *Accounts* 207. – *Patria Konstantinoupoleos* III 157 (265, 13-17 Preger).

43 Tuna, *Hebdomon'dan Bakırköy'e* 144-147.

44 Makrides, *Hebdomon* 174-175. – Glück, *Hebdomon* 62 and fig. 1 above.

45 On this, see the remarks of Berger, *Untersuchungen* 688-709.

Fig. 5 The coast of Makrochorion in the early 1920s. – (From Demangel, *Hebdomon* 42 fig. 26).



Chagan mentioned in the *Patria* was, according to Berger, the Avar ruler, under whose command the Avars raided Thrace in the first years of Maurice's reign⁴⁶. In addition, the *Patria* probably confused Tiberius II (578-582) with Tiberius III (698-705)⁴⁷. For this reason, the Castle of the *Patria* cannot be located at Hebdomon, but at the entrance to the Golden Horn, and must therefore be linked with the fort to which the iron chain was attached⁴⁸.

The exile of the Emperor's sister Pulcheria to Hebdomon in the first half of the fifth century may presuppose the existence of a palace complex in the southwestern area of Constantinople⁴⁹. A palace near the coast, where Daniel Stylites talked to the guardsmen of the Emperor Basiliscus (475-476), is documented in the saint's *Vita*⁵⁰. Emperor Marcian (450-457) was present at Hebdomon on the occasion of a procession and sent a dromon to bring another saint, the monk Auxentios, to him⁵¹. However, it cannot be determined whether the procession's destination was to a palace or one of the sanctuaries located at Hebdomon⁵².

Theophanes and the author of the account of the miracles of St Artemios later mentioned a place called Magnaura, which is located on the promontory west of the bay of Hebdomon⁵³. The name is derived from the Latin *Magna aula* («large hall») and explains why the building is associated with a palace. Topographical evidence for this palace points to a location near the remains of the ancient mole now lying in the basin of today's Bakirköy harbour. At the beginning of the twentieth century, numerous pieces of capitals, columns and reliefs were to be found on the banks of Makrochorion (fig. 5)⁵⁴. Furthermore, Byzantine *spolia* in the gardens of Turkish houses can be seen in old photographs from the middle of the last century⁵⁵. However, these remains are said to come from the area northeast of the Hebdomon headland and its mole⁵⁶. In the absence of other sources and inadequate archaeological research, it is no longer possible to determine whether the Magnaura at Hebdomon was an independent palace complex or merely part of the large complex of Ioukoundianai⁵⁷, which, because of its harbour, will be in the focus of the next paragraph⁵⁸.

46 Berger, *Untersuchungen* 690-691.

47 Berger, *Accounts* 320, n. 162.

48 See Kislinger, *Golden Horn*, in this volume.

49 Theophanes, *Chronographia* AM 5940 (99, 12-18 de Boor). – Nikephoros Xanthopoulos, *Historia Ecclesiastica* XIV 47 and 49 (PG 146, 1224 B and 1233 A). – Ioannes Zonaras, *Epitome* XIII 23, 15-18 (III 109, 1-12 Büttner-Wöbst). – Ephraem, *Historia Chronica* 782-790 (33 Lampsides). – Cf. Holum, *Theodosian Emperors* 130-131 and 192-196.

50 *Vita Danielis Stylitae* 74-76 (71, 17-74, 18 Delehaye).

51 *Vita Auxentii* 38 (46, 1-3 Varalda).

52 On religious processions at Hebdomon, see Janin, *Processions religieuses* 72-81. – Bauer, *Stadtverkehr in Konstantinopel* 207-209. – Brubaker, *Topography* 35-36. 41-42.

53 *Miracula Artemii* 5 (84, 24-26 Papadopoulos-Kerameus). – According to Theophanes, *Chronographia* AM 6209 (395, 21-26 de Boor) in 717, the Arab fleet was anchored from Magnaura to the Round Castle. – See Makrides, *Hebdomon* 164-167.

54 Makrides, *Hebdomon* 11 fig. 5. – Demangel, *Hebdomon* 42 fig. 26.

55 Tuna, *Hebdomon'dan Bakirköy'e* 42. – Glück, *Hebdomon* pl. IV-V. – Demangel, *Hebdomon* 41 fig. 25.

56 Glück, *Hebdomon* 6-13 pl. I.

57 Taddei, *Palace of the Ioukoundianai* 82. – Taddei, *Topographical Remarks* 68.

58 Taddei, *Palace of the Ioukoundianai*. – Taddei, *Topographical Remarks* 65-69. – Hellenkemper, *Sommerpaläste* 245-247. – For a discussion of whether the report of Procopius relates to a place and harbour in Thrace or Bithynia, see p. 192 n. 110.

The Palace of loukoundianai

In his work on the buildings of Emperor Justinian I (527-565), Procopius described a magnificent palace complex called loukoundianai:

»But I could never adequately describe in fitting words either their magnificence and their exquisitely detailed workmanship or their massive bulk. It will be sufficient to say simply that they are regal and that they were built under the personal supervision of the Emperor and with the help of his skill, while nothing was disregarded, excepting only money. The sum of this indeed was so great that it cannot be computed by any reckoning. [...] In that place also he erected holy shrines, as I have already recounted, and stoas and markets and public baths, and practically all the other types of buildings, so that this quarter is in no way inferior to the Palace-quarter within the city.«⁵⁹

The difficulties in locating the complex lie in the structure of the first book of *De aedificiis* in which Procopius dealt with the building activities of Justinian within and around Constantinople. However, his information about the buildings at Hebdomon (the churches of Saints Theodote, John the Theologian, John the Baptist, Menas and Menaïos) is not a unit, but distributed across different chapters⁶⁰. He described loukoundianai after the buildings on the Golden Horn and the Bosphorus as well as in the eastern part of the capital. The report showed that the palace complex was in Europe and that its harbour was exposed to the strong south winds in winter, from which it offered protection. The historian further noted that he had already spoken about the sacred places there⁶¹. Since this information applies to both a location at Hebdomon and on the European shore of the Bosphorus, other sources have to be consulted to solve the question of the situation of loukoundianai and its harbour.

Byzantine chronicles and hagiography provide the first evidence for loukoundianai in the southwestern area of Constantinople. For the World Year 6050 (December 557), Theophanes reported a powerful earthquake that shook the

European outskirts of the capital. The churches beyond Hebdomon were affected the worst, of which he mentions a concrete example, the sanctuary of the Prophet Samuel⁶². In connection with this, the chronicler also reports the fall of a porphyry column and its statue in front of the loukoundianai Palace⁶³. Theophanes based his report on information provided by John Malalas, who wrote of a pillar in the Sekoundianai though⁶⁴. Malalas's designation of the palace as Sekoundianai is not a misinterpretation of »loukoundianai«. The corpus of letters of Pope Gregory I, who lived in Constantinople for a while, also mentions a *palatio qui dicitur Secundianas* at the seventh milestone of Constantinople, where the usurper Phocas was proclaimed emperor in 602⁶⁵.

Both names, loukoundianai and Sekoundianai, thus referred to the same palace complex at Hebdomon⁶⁶, but only hypotheses can be expressed about their etymology. Janin derives the name loukoundianai from a certain *Jucundus* without being able to document it⁶⁷. The derivation from the Latin *iucundus* (»pleasant«, »desired« or »amiable«)⁶⁸, which fits well with the name of a coastal area, cannot be ruled out⁶⁹. A derivation from *secundus* or *secundinus* is conceivable for Sekoundianai. This brings into consideration Secundinus, the brother-in-law of the Emperor Anastasius I, who became Eparch of Constantinople in 492. His task was to calm the rebelling troops in Constantinople and to renovate the buildings they had destroyed in the capital⁷⁰.

Theophanes also adopted other information from Malalas referring to the cleaning and dredging of the harbour near the Sekoundianai Palace in 551/552. With one minor change, however: according to Theophanes, the harbour of Hebdomon had been cleaned⁷¹. How can this be explained, considering that Theophanes rarely rewrote or interpreted the information in his sources⁷²? A comparison of the reports by Malalas and Theophanes about the earthquake in December 557 showed that the text of the later Byzantine chronicler is more extensive. Thus, it can be assumed that Theophanes used an additional source, where the palace in question was described under the name of loukoundianai and was said to have been located in the region between the Golden Gate

59 English translation by Dewing, Buildings of Procopius 93-95. – Prokopios, *De aedificiis* I 11, 16-18 and 21 (43, 24-44, 6 and 21-25 Haury/Wirth). – Overview of the maritime buildings of Emperor Justinian I in Missiou, *Maritime Buildings*.
60 Prokopios, *De aedificiis* I 4, 28 (Theodote). I 8, 15-16 (John the Theologian and John the Baptist). I 9, 16 (Menas and Menaïos) (26, 24-25. 35, 6-11. 37, 27-38, 1 Haury/Wirth).
61 The Byzantine historian treats two places together. The description of loukoundianai is followed by Hieron. According to Prokopios, *De aedificiis* I 11, 22 (44, 25 and 45, 1-4 Haury/Wirth) Hieron was on the opposite continent, i. e., Asia, which indicates a localisation of loukoundianai in Europe.
62 Theophanes, *Chronographia* AM 6050 (231, 13-22 de Boor).
63 Theophanes, *Chronographia* AM 6050 (231, 24-27 de Boor). – According to the report by Ioannes Lydos, *De magistratibus* III 35 (188, 9-15 Bandy) = III 35, 6-7 (II 87, 14-21 Schamp), who owed his professional advancement to Justinian I, a column was brought from the Plakoton (Forum of Constantine) to the square (*agora*) of Hebdomon, after the silver statue on top had been removed. At the new location, it bore a statue of »our best emperor«, that is, Justinian. It is said to be this pillar (made of porphyry?) that overturned during the earthquake in 557 together with the statue, according to Theophanes. See Taddei, *Palace of the loukoundianai* 81-82. – Taddei, *Topographical Remarks* 66-67.

64 Ioannes Malalas, *Chronographia* XVIII 124 (419, 55-60 Thurn).

65 Gregorii Magni *Registrum epistularum*, Appendix VIII (II 1101, 2-5 Norberg): *Per indictionem sextam die vicesima tertia mensis Novembrii temporibus domni et beatissimi papae Gregorii coronatus est Focas et Leontia Augusta in Septimo in palatio qui dicitur Secundianas*.

66 Thibaut, *Hebdomon* 36. – Makrides, *Hebdomon* 156. – Janin, *Constantinople* 454. – Külzer, *Ostthrakien* 418 and 634.

67 Janin, *Constantinople* 450. – Taddei (*Topographical Remarks* 65 n. 47. – *Palace of the loukoundianai* 78) agrees with this interpretation.

68 Menge, *Großwörterbuch Lateinisch* 413.

69 Demangel, *Hebdomon* 5. 44. – van Millingen, *Walls* 335.

70 Ioannes Antiochenus, *Fragmenta* 239, 2 (446, 19 – 448, 1 Mariev) = 308 (528-530, 16-20 Roberto). – PLRE II 986, # Secundinus 5. – Janin, *Constantinople* 454 and Külzer, *Ostthrakien* 634 called the Eparch Secundus.

71 Compare Theophanes, *Chronographia* AM 6044 (228, 13-14 de Boor) with Ioannes Malalas, *Chronographia* XVIII 114 (415, 1-2 Thurn).

72 See his own words in the preface to his *Chronographia* (4, 8-15 de Boor), as well as Howard-Johnston, *Witnesses* 268-269 and 308-309 and Jankowiak/Montinaro, *Studies in Theophanes*.

Fig. 6 Remnants of the mole near the cape of Hebdomon in the 1920s. – (From Demangel, Hebdomon 46 fig. 31).



and Rhegion (today's Küçükçekmece) that was damaged by the earthquake.

A further important issue is the proximity of loukoundianai Palace to the Sanctuary of Samuel, attested to by Theophanes. This corresponds to the report of the *Chronicon Paschale* on the *translatio* of the saint's relics to Constantinople, more precisely from Chalcedon to the Great Church of the capital⁷³. In 411, they were transferred to the Sanctuary of the Prophet near the Church of St John in loukoundianai⁷⁴. The *translatio* of the relics is also reported in the *Patria Konstantinoupoleos*, Symeon the Logothete and Nikephoros Xanthopoulos, all of which attest to the deposition of Samuel's relics to a church at or near Hebdomon⁷⁵.

The area at the seventh milestone was also the place where Daniel Stylites was said to have performed miracles. He had moved there with a crowd during the reign of the Emperor Basiliscus (475-476). After the saint had supposedly healed a leper in the sea near the Sanctuary of Samuel, he addressed the guards of the Hebdomon Palace, who refused to let him in⁷⁶.

The report of Procopius on the geographical location of the palace complex provides further information on the location of loukoundianai in the area of the seventh milestone. According to Procopius, the harbour of loukoundianai was at a headland (*akte*) and offered the ships protection from the strong winter winds⁷⁷. According to the study by Ulyyott and

Ilgaz on the wind conditions in the Bosphorus, a south wind predominates in the greater Istanbul area in winter⁷⁸. In the southwestern part of Hebdomon at the Cape of Magnaura, the remains of a mole were still visible in the first half of the twentieth century, according to the studies by Glück and Demangel (figs 6-7)⁷⁹.

The building activity of Emperor Justinian I at Hebdomon is also attested to in the legislation of this ruler. According to the *Codex Iustinianus*, he issued two laws from the new *consistorium* of the Justinian palace at the seventh milestone in 529⁸⁰. Procopius's *De aedificiis* only attested to the construction of two palaces by Justinian: one in Hiereia in Bithynia and the other in loukoundianai. However, the location of the latter is not specified, but taking into account that Procopius mentions only two palaces, the loukoundianai can certainly be located at Hebdomon. It is also difficult to imagine that the construction activity of Justinian I, as documented in the *Codex Iustinianus*, might have escaped Procopius's attention, who wrote *De aedificiis* in praise of the ruler (fig. 8).

According to Demangel, the location of the loukoundianai Palace can be identified precisely on the basis of the find spot of the Column of Theodosius: according to Turgay Tuna, the find spot was the courtyard of a residential building in today's Cevizliyalı Sokak 3⁸¹, i.e., in the northeastern area of the Byzantine Hebdomon.

73 *Chronicon Paschale* 569, 12-18 (Dindorf).

74 *Chronicon Paschale* 570, 26-571, 2 (Dindorf). – For source criticism of the Easter Chronicle, whose sources are largely based on official documents, see Howard-Johnston, *Witnesses* 37-59.

75 *Patria Konstantinoupoleos* IIa 2 (211, 5-9 Preger). – Symeon Logothetes, *Chronicon* 96, 2 (123, 12-14 Wahlgren). – Nikephoros Xanthopoulos, *Historia Ecclesiastica* XIV 10 (PG 146, 1089 D).

76 *Vita Danielis Stylitae* 73-77 (71, 17-74, 19 Delehaye). – Külzer, *Ostthrakien* 246.

77 Prokopios, *De aedificiis* I 11, 18 and 20 (44, 7-9 and 18-21 Haury/Wirth).

78 Ulyyott/Ilgaz, *Hydrography* 54. Two references are quoted here about the role of the south wind in winter in Constantinople: one concerns the unsuccessful sea attack on the wall on the Golden Horn by the fleet of Thomas the Slav

in December 821 (see Theophanes Continuatus, *Chronographia* II 14 [88-90, 13-28 Featherstone/Signes-Codoñer]. – Ioseph Genesios, *Liber regum* II 5 [28, 49-57 Lesmüller-Werner/Thurn]. – Ioannes Skylitzes, *Synopsis* 34,87-35,4 [Thurn]); the other relates to the Byzantine attempt to destroy the Crusader fleet anchored in Sykai by fire ships at the beginning of 1204 (see Geoffroy de Villehardouin, *Conquête* VII 217-218 [II 16-18 Faral]. – Robert de Clari, *Conquête* 60 [138, 11-23 Dufourmet]).

79 Glück, Hebdomon 3 and n. 1. – Demangel, Hebdomon 46-47 and figs 31-32.

80 *Codex Iustinianus* I 2, 22 and VI 42, 30 (16 and 273 Krüger): *Recitata septimo miliario huius inclitae civitatis in novo consistorio palatii Iustiniani*. – See Thibaut, Hebdomon 36 and n. 4.

81 Tuna, Hebdomon'dan Bakırköy'e 43.



Fig. 7 Remnants of the mole near the cape of Hebdomon in the 1920s. – (From Demangel, Hebdomon 47 fig. 32).

Harbour Facilities on the Coast of Hebdomon

The Pre-Justinian Landing Stage

The *Campus Martius* in Rome included a sanctuary of the pagan god of war Mars⁸², but this was inconceivable in the new capital on the Bosphorus. Instead of pagan places of worship, numerous Christian sanctuaries were erected in Hebdomon. The most important were the Church of St John the Baptist and the Church of St John the Theologian⁸³. The former was built on the occasion of the *translatio* of the relic of John the Baptist's head from Chalcedon to Hebdomon⁸⁴. At least that was the wish of Emperor Valens, but miraculously the wagon that carried the relic could no longer be moved and so the relic was kept in the village of Kosilaos in Bithynia. It was only Emperor Theodosius I (379-395) who succeeded in having the head of St John transferred to Hebdomon, where it was deposited on 18 February 391 in a church dedicated to the saint⁸⁵. The remains of the church were preserved until spring 1965, when they were removed due to the construction of a hospital in İstanbul Caddesi (fig. 9)⁸⁶.

The disputes between Theophilus, the Patriarch of Alexandria, and John Chrysostom, the Archbishop of Constantinople, around the turn of the fifth century soon required the intervention of an arbitrator. Epiphanius, the Bishop of Salamis, was chosen because of his high reputation among Christians. In 402, the ship departed from Cyprus with the 80-year-old clergyman on board and set a course for Constantinople. According to the church historians Socrates and Sozomen, Epiphanius landed at Hebdomon and immediately went to the Church of St John the Theologian, where he celebrated the service and ordained a deacon⁸⁷. The exact location of the church is unknown today. However, from the information about the visit of Epiphanius it can be concluded that it was not far from the sea coast. According to Theophanes Continuatus, the Church of St John the Theologian was close to the Church of St John the Baptist, which is why Alessandro Taddei argues that the two sanctuaries were close to one another⁸⁸.

Several factors presuppose the presence of a landing stage, if not a larger harbour at Hebdomon⁸⁹: the transport of troops to and from Thrace, the presence of the emperors at

82 Jacobs/Conlin, *Campus Martius* 30.

83 On the others, see Makrides, Hebdomon 191-198.

84 On the Church of Prodomos, see Janin, *Églises du Précurseur* 313-319. – Janin, *Siège de Constantinople* 413-415. – Makrides, Hebdomon 180-191. – Kleiss, *Kirche Johannis des Täufers*. – Demangel, Hebdomon 17-32. – Mathews, *Early Churches* 55-61. – Mathews, *Byzantine Churches* 140-142. – Berger, *Untersuchungen* 683-684. – On the role of the Byzantine ceremonial, see Sode, *Kaiser* 806-810.

85 Sozomenos, *Historia Ecclesiastica* VII 21, 1-5 (333, 7-334, 5 Bidez). – Theodoros Anagnostes, *Historia Ecclesiastica* I 268 (83, 14-24 Hansen). – *Chronicon Paschale* 564, 13-19 (Dindorf). – Georgios Monachos, *Chronicon* II 582, 15-583, 4 (de Boor/Wirth). – Nikephoros Xanthopoulos, *Historia Ecclesiastica* XII 49 (PG 146, 916 D-917 A-B). – *Analecta Hymnica Graeca*, 27 January, Canon 37 (V 488, 215-220 Schirò/Proiou). – According to the *Patria Konstantinupoleos* III 145 (260, 14-21 Preger), the head was first kept in the Church of St John the Theologian. This contradicts the *Chronicon Paschale* and Theodoros Anagnostes, which are considered to be far more reliable sources than the later *Patria*. For dating the *translatio*, see Whitby/Whitby, *Chronicon Paschale* 54. – On the ideological motives for the transfer of relics to Constantinople, see Baldwin,

Urban Character 213-219 and 233-239. – Maraval, *Lieux saints* 48-50 and 92-100.

86 Kleiss, *Kirche Johannis des Täufers* 207.

87 Sokrates, *Historia Ecclesiastica* VI 12, 2 (333, 18-20 Hansen): προσορμίσας οὖν τῷ ἐπὶ Ἰωάννη μαρτυρίῳ (ἀπέχει δὲ τοῦτο ἐπὶ σημεῖα τῆς πόλεως) καὶ ἐξεληθὼν τῆς νεώς, συναξίν τε ἐπιτέλεσας καὶ διάκονον χειροτονήσας αὐθις εἰς τὴν πόλιν εἰσέρχεται. – Sozomenos, *Historia Ecclesiastica* VIII 14, 6 (368, 6-9 Bidez): οὐκ εἰς μακρὰν δὲ πρῶτος Ἐπιφάνιος ἐκπλεύσας ἐκ Κύπρου κατήρην εἰς τὸ πρὸ τῆς Κωνσταντινουπόλεως καλούμενον Ἑβδομον. εὐξάμενος δὲ ἐν τῇ ἐνθάδε ἐκκλησίᾳ ἦκεν εἰς τὴν πόλιν.

88 Theophanes Continuatus, *Chronographia* V 94 (304, 3-7 Ševčenko). – Taddei, *Palace of the Ioukoundianai* 78 and fig. 2, writes that the report of the Liber Pontificalis CVIII 36 (II 180, 13-15 Duchesne) on the reception of the envoys of Pope Hadrian II in the Round Castle and a church dedicated to John the Theologian there shows the incomplete knowledge of the western author about the topography of Hebdomon.

89 Finding a proper translation for the German »Anlegestelle« is difficult, especially when considering the maritime topography of the Byzantine capital using mainly written sources and old photographs without the benefit of modern



Fig. 8 Marble column from Hebdomon with a monogram of Emperor Justinian I. Archaeological Museum Istanbul. – (Photograph G. Simeonov).



Fig. 9 Marble frieze from Hebdomon, Istanbul Archaeological Museum. – (Photograph G. Simeonov).

ceremonial processions outside the Theodosian land wall and the construction of a palace right on the seashore. Two hagiographic works document the shipping traffic in the south western area of Constantinople before the reign of Justinian I. Because of the religious controversy that split Christianity in the fifth century, it was intended to call a council in 451. For this reason, Emperor Marcian wanted to speak to the monk Auxentios at Hebdomon and sent a dromon from this suburb to bring the saint to him⁹⁰. However, the relationship between the Byzantine emperors and the Orthodox saints was not always so frictionless. After a dispute with Daniel Stylites, Emperor Basiliscus had to leave the capital, whence he went to Hebdomon by ship⁹¹. While the ruler was in the palace

there, the saint took the opportunity to demonstrate his alleged healing power to the crowd who had left the capital with him and healed a leper in the nearby sea⁹².

It remains doubtful whether there was more than a simple landing stage, such as a harbour with moles, at Hebdomon before the reign of Justinian I. The written sources are silent regarding this issue. The excavations in the early 1920s in turn concentrated on the monuments on the mainland, thus ignoring the remains of the mole on the Hebdomon headland⁹³. The already mentioned embankment on the Bakırköy coast with its modern design makes further investigations almost impossible. Only a scene on the triumphal column of Emperor Arcadius, which once stood in his forum in Xerolophos, can

(underwater) archaeological research. Since the infrastructure on the southern shore of Constantinople and its Thracian suburbs presupposes the existence of more solid constructions, even if made of wood, the term »landing stage« will be used here for maritime facilities at Hebdomon and Brachialion. As for Kosmidion, which was situated on the inner end of the natural harbour of the Golden Horn, the term »mooring« seems to be a proper one for designating a smaller and simpler construction. On the relation between German and English harbour terminology, see the contribution of the SPP 1630 »Harbours from the

Roman Iron Age until the Middle Ages« of the German Research Foundation (DFG) http://haefen.i3mainz.hs-mainz.de/resources/vendor/HARE_Terminology%20for%20Harbour%20Data%20entry.pdf, which is of relevance to this volume.

90 Vita Auxentii 38 (46, 1-13 Varalda).

91 Vita Danielis Stylitae 74-75 (71, 17 and 73, 1-2 Delehayé).

92 Vita Danielis Stylitae 74 (71, 20-72, 19 Delehayé).

93 Glück, Hebdomon 3 and n. 1. – Demangel, Hebdomon 46-47 and figs 31-32.

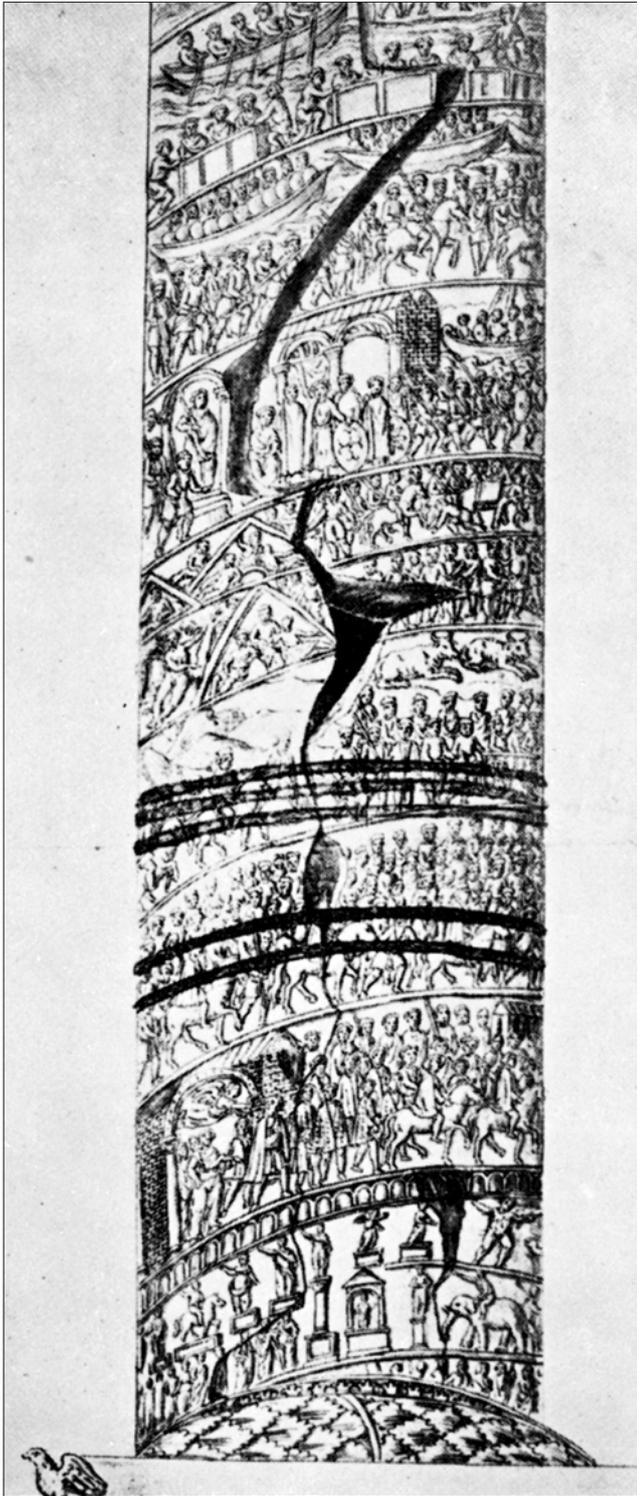


Fig. 10 The Column of Arcadius, south view of the lower part. – (From Becatti, *Colonna coclide* pl. 75b).

94 The most important study on the scenes on the column remains Becatti, *Colonna coclide* 151-264. – See Giglioli, *Colonna di Arcadio*. – Kollwitz, *Oströmische Plastik* 17-62. – Freshfield, *Notes*. – Bauer, *Stadt, Platz und Denkmal* 179-180 and 209. – McCormack, *Art and Ceremony* 57-60. – Sodini, *Images sculptées* 56-64. – Mayer, *Rom ist dort* 143-159. – For the preserved part of the monument and its history, see Konrad, *Arkadiossäule*. – Taddei, *Colonna di Arcadio*.

95 Overview in Becatti, *Colonna coclide* 160-161.

offer an indication of its appearances⁹⁴. The column was demolished at the beginning of the eighteenth century as a result of fire and earthquake damage, but several drawings by Western envoys at the Sultan's court in the sixteenth and seventeenth centuries are preserved⁹⁵. The most important of these is the drawing by an anonymous artist who accompanied David Ungnad von Weissenwolff, Freiherr zu Sonnegg and Emissary of Emperor Maximilian I, during one of his missions to Istanbul in 1572 and 1574-1578. His album is today in the Trinity College Library in Cambridge and is known as the *Freshfield Album*. It contains a drawing of the base of the Obelisk of Theodosius in the Hippodrome, which reproduces the preserved original exactly. This also suggests the reliability of the drawing of the Column of Arcadius⁹⁶. Furthermore, the depictions in the album of the imperial envoy show parallels to the depiction of the same column in the collection of Roger de Gaignières (*Bibliothèque Nationale, Paris*)⁹⁷.

After a failed attempt to seize Constantinople, the Gothic leader Gainas sought to leave the capital in July 400 with his followers. However, the attempt to lead the Goths from Thrace to Asia Minor also failed because the Byzantine fleet defeated them in the Dardanelles⁹⁸. A triumphal column was intended to immortalise the victory of Emperor Arcadius, who had saved Constantinople from the barbarians⁹⁹. The first three rows of the spiralling frieze of reliefs that decorate the column represent the flight of the Goths¹⁰⁰, whose main group was located 40 *stadia* away from Constantinople according to Zosimus¹⁰¹. The sixth row, viewed from the south, shows a scene that includes two figures that have been interpreted as the imperial couple Arcadius and Eudoxia¹⁰². They

96 Becatti, *Colonna coclide* 160-161. See the drawing on pls 75-76.

97 Kollwitz, *Oströmische Plastik* 20-22. – The drawings of Menestrier have led to various interpretations. The opinion of Glück, *Hebdomon* 19-21, that it represented a triumphal procession of the brothers Valens and Valentinian on the Campus, which was to be shown on their triumphal column, was rejected. More convincing is the argument of Becatti, *Colonna coclide* 111-150, according to which the engravings show the triumphal procession of Theodosius I. – See Demangel, *Hebdomon* 12-16. – Sodini, *Images sculptées* 52-53. – Taddei, *Colonna di Arcadio* 75-76. – A different view in Bauer, *Stadt, Platz und Denkmal* 197-198, who considers the engravings to be a misunderstood reproduction of a section of the Column of Arcadius.

98 Philostorgios, *Historia Ecclesiastica* XI 8, 6-10 (I 420-422, 174-194 Bleckmann/Stein). – Marcellinus Comes, *Chronicon* 12th-13th indiction 399-400 (7-8 Mommsen). – Sokrates, *Historia Ecclesiastica* VI 6, 21-34 (320, 2-321, 11 Hansen). – Sozomenos, *Historia Ecclesiastica* VIII 4, 14-16 (356, 2-11 Bidez). – Ioannes Antiochenus, *Fragmenta* 216, 4 (394, 16-24 Mariev) = 284 (480-482, 53-60 Roberto). – Nikephoros Xanthopoulos, *Historia Ecclesiastica* XIII 6 (PG 146, 948 C-D-949, A-B). – Cf. Albert, *Goten* 128-139. – Wolfram, *Goten* 156-157.

99 Liebeschuetz, *The Gainas Crisis*. – Liebeschuetz, *Barbarians and Bishops* 273-278. – Cf. also Mayer, *Rom* 152-159, who relates the scenes to the victory against Gainas but considers the Goths being depicted as Roman soldiers, thus pleading for presenting the triumph as a »victory of the legitimate emperors over an internal rival«.

100 Zosimos, *Historia Nova* V 19, 2 (III/1 28, 24-29 Paschoud). 40 *stadia* corresponds to five miles, which means that the Goths' camp must have been near Rhegion (see Schilbach, *Metrologie* 33). – Gainas' request to pray in the Church of St John the Theologian at Hebdomon was just an excuse to be let out of Constantinople by the Byzantine guards, see Sokrates, *Historia Ecclesiastica* VI 6, 23 (320, 9-10 Hansen). – Ioannes Antiochenus, *Fragmenta* 216, 3 (394, 4-5 Mariev) = 284 (480, 41-42 Roberto). – Sozomenos, *Historia Ecclesiastica* VIII 4, 14 (356, 4-7 Bidez).

101 Becatti, *Colonna coclide* 187. 198-207 pl. 75. – Sodini, *Images sculptées* 63.

102 Becatti, *Colonna coclide* 232.

stand in front of a building, next to which marching soldiers and a departing ship with armed crew can be seen (fig. 10). Becatti, an Italian art historian, argued for a palace within Constantinople, but another interpretation is also possible: before the forthcoming campaign in Italy in 393, Arcadius's father, Theodosius I, went to the Church of St John the Baptist in Hebdomon, where he prayed for a victory against his opponents and the help of the saint¹⁰³. Two years later, on 27 November 395, Rufinus, the Praetorian Prefect of the East, fell victim to a conspiracy in which Gainas also participated¹⁰⁴. The murder of the Prefect was committed during a military parade in the presence of Arcadius at Hebdomon, and precisely at the Tribunal¹⁰⁵. Therefore, the Campus with the neighbouring bay of Hebdomon can be considered as a possible place of departure for the imperial land and sea forces in the year 400. The drawing of the scene with the departure of the imperial fleet, however, shows no details about the appearance of the landing stage.

The tenth row, on the other hand, shows the landing of the army, where traces of harbour facilities can be determined¹⁰⁶. One can see two divisions of troops leaving a ship: one goes over a landing stage, the other marches over a stone arch or vault with two towers towards a reception committee in official dress (fig. 11). This is to the left of a box: the two people under its arch can be most likely identified with the Emperors Arcadius and Honorius (fig. 12).

Becatti interpreted the complex as the Harbour at Boukoleon, since this was the closest to the imperial palace, and was also equipped with a staircase¹⁰⁷. However, recent findings about the function of the Boukoleon Harbour question such an interpretation: it was reserved only for the emperor and not used for military logistical purposes, and, most of all, there is no evidence for its existence in the fourth century¹⁰⁸.

The Campus, on the other hand, was the last large plain before the capital, which was available for the army's encampment. Here, soldiers, senators and citizens acclaimed the emperor at the Tribunal, thus the landing site on the coast, as seen on the drawing of the column, could be conceived of as being at Hebdomon¹⁰⁹. Unfortunately, no archaeological research has so far been carried out on site to support or refute such an interpretation. The stylised character of the depiction and its documentation, based only on drawings of the original, make it difficult to interpret the maritime scenes on the triumphal column of Arcadius. Purely hypothetically, based on the presentations, the existence of a stone quay should not be assumed for the Hebdomon headland, but at the coast near the Tribunal.

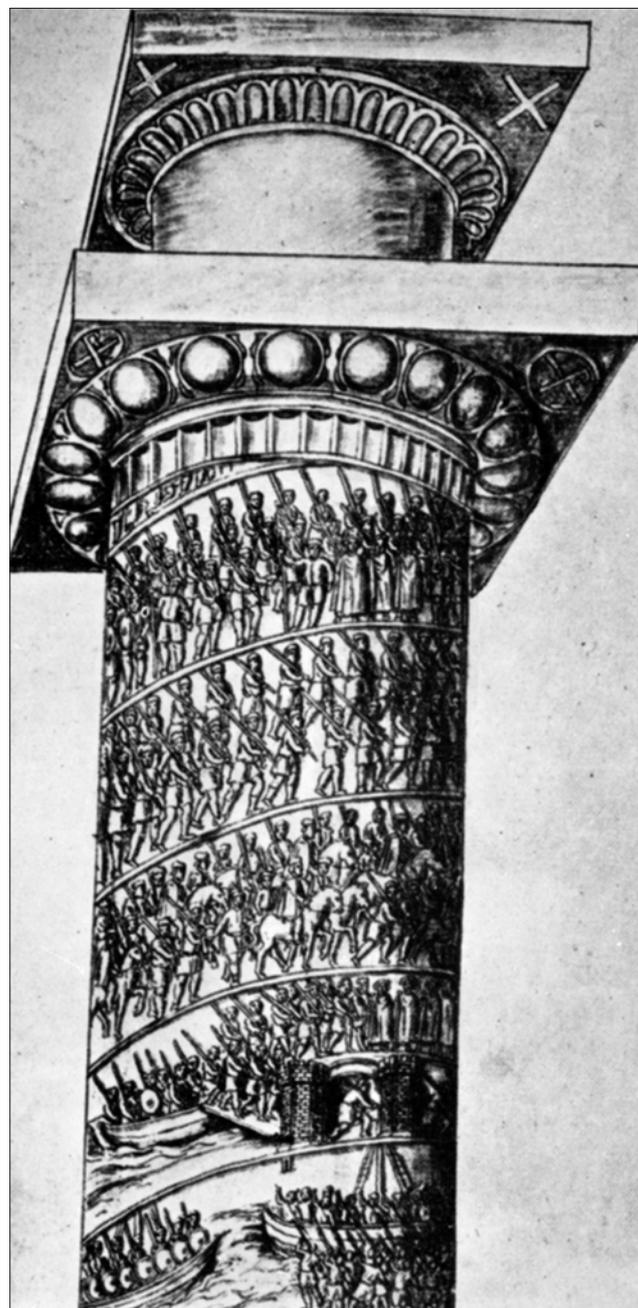


Fig. 11 The Column of Arcadius, west view of the upper part. – (From Becatti, *Colonna coelide* pl. 76b).

103 Sozomenos, *Historia Ecclesiastica* VII 24, 1-2 (337, 10-19 Bidez). – Nikephoros Xanthopoulos, *Historia Ecclesiastica* XII 39 (PG 146, 881 C).

104 Albert, *Goten* 107 and n. 99. – Wolfram, *Goten* 147-148.

105 Philostorgios, *Historia Ecclesiastica* XI 3, 1-3 (I 414, 51-64 Bleckmann/Stein). – *Chronicon Paschale* 566, 4-5 (Dindorf). – Zosimos, *Historia Nova* V 7, 4-6 (III/1 14, 8-29 Paschoud). – Ioannes Antiochenus, *Fragmenta* 215, 2 (388, 24-390, 9 Mariev) = 282 (474, 13-476, 22 Roberto).

106 Becatti, *Colonna coelide* 237-239 pl. 76.

107 Becatti, *Colonna coelide* 238.

108 See Heher, *Harbour of the Bukoleon*, in this volume.

109 Liebeschuetz, *The Gainas Crisis* 280 assumes that bands 10-12 of the Column of Arcadius describe the final campaign against the Goths that took place in the Northern Balkans, and sees no connection with Constantinople's topography. According to him, the emperors Arcadius and Honorius »are shown in state, isolated from the events but inspiring their subordinates from a distance«.

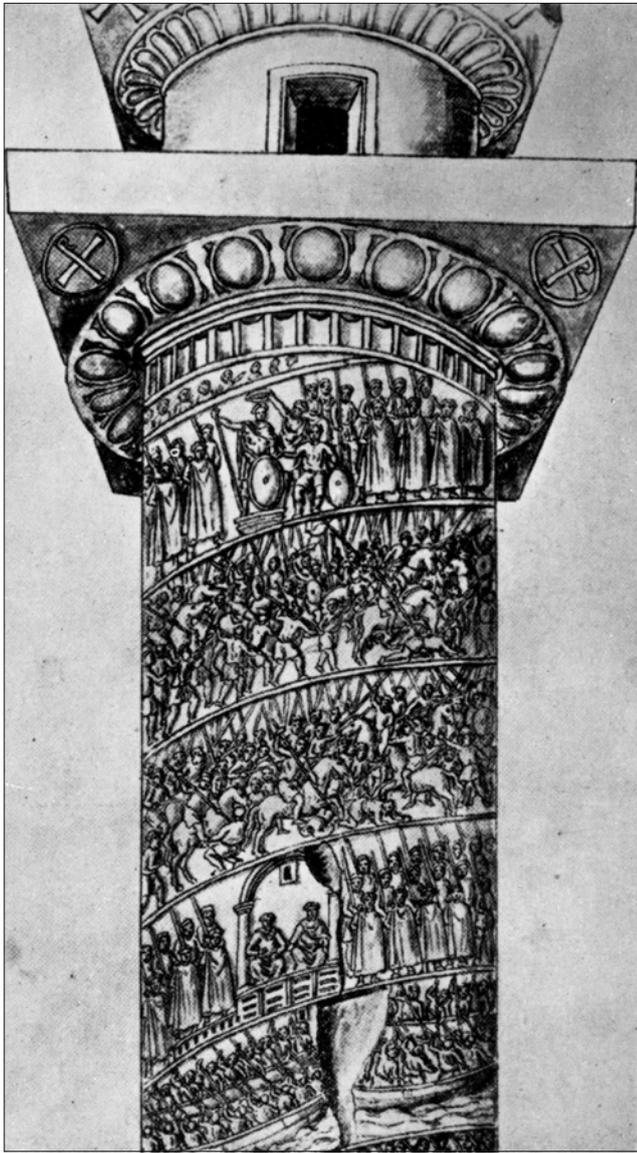


Fig. 12 The Column of Arcadius, south view of the upper part. – (From Becatti, *Colonna coclide* pl. 76c).

The Harbour of Ioukoundianai

In addition to the palace building of Ioukoundianai, Procopius reported on the associated harbour in *De aedificiis*¹¹⁰:

»There too he skilfully contrived a sheltered harbour which had not existed before. Finding a shore which lay open to the winds from two directions and to the beating of the waves, he converted it into a refuge for voyagers in the following way. He prepared great numbers of what are called ›chests‹ or cribs, of huge size, and threw them out for a great distance from the shore along oblique lines on either side of the harbour, and by constantly setting a layer of other chests in regular courses upon those underneath he erected two very long walls, which lay at an angle to each other on the opposite sides of the harbour, rising from their foundations deep in the water up to the surface on which the ships float. Then upon these walls he threw rough-cut stones, which are pounded by the surf and beat back the force of the waves; and even when a severe storm comes down in the winter, the whole space between the walls remains calm, a single entrance being left between the breakwaters for the ships to enter the harbour«¹¹¹.

Oleson and Hohlfelder assumed the use of (wooden) boxes filled with Pozzolan concrete or stones in the construction of the moles¹¹² described by Procopius, which had a base of rubble or quarry stone¹¹³.

As can be seen from the report, the Harbour of Ioukoundianai should protect the ships from the strong south wind. This was sometimes characterised by such power that, according to Theophylact Simocatta, the wind could pick up the stones from the seabed at Hebdomon¹¹⁴. Moreover, the entire bay, including the associated harbour facility, was the last stop before the Byzantine capital for anchoring watercraft when there was no wind. For example, the *Miracles of St Artemios* in the late seventh century told of the interruption of a ship's journey that could not leave for Chios(?) due to the prevailing south wind. At Hebdomon, the sailors had

110 The passage (Greek text at n. 111) is interpreted differently in research due to the syntax. While Janin (*Constantinople* 239), Roques (*Procopée de Césarée* 144 n. 195, 200) and Hohlfelder (*Harbours* 367-380. – *Procopius* 55-60) localise the described harbour facility at Hieria in Bithynia, Glück (*Hebdomon* 54), Hellenkemper (*Sommerpaläste* 245-247) and Taddei (*Topographical Remarks* 65) interpret the passage in connection with Ioukoundianai. Klaus Belke, who deals with the harbour of Hieria in this volume, believes that the location of the harbour at Bithynia described by Procopius is »not assured, but still a possibility« (see p. 229). It may be that the report actually shows the construction of two harbour facilities (λιμένων σκέπας ἀποτετόρνενται), one at Ioukoundianai, the other in Hieria. – Cf. Taddei, *Palace of the Ioukoundianai* 79. – There are two arguments in favour of interpreting Procopius as referring to Hebdomon: on the one hand, the location *ta Eutropiou* was on the opposite continent (ἐν τῇ ἀντιπέρας ἡπείρῳ), which indicates the location of the palace described above and its harbour in Europe; on the other hand, the harbour facility described by Procopius was intended to protect vessels from the south wind. This information fits Ioukoundianai in Hebdomon rather than Hieria in Bithynia, whose moles were *north facing*, cf. Janin, *Constantinople*, map 12. – On the interpretation of Procopius as meaning »mainland on the opposite site« and therefore as a reference to Hieria, see Belke, *Gates*, in this volume.

111 English translation by Dewing, *Buildings of Procopius* 95. – Prokopios, *De aedificiis* I 11, 18-20 (44, 6-21 Haury/Wirth): ἐνταῦθα δὲ καὶ λιμένων σκέπας ἀποτετόρνενται οὐ πρότερον ὄν. ἀκτὴν γὰρ εὐρῶν ἐκατέρωθι τοῖς τε ἀνέμοις καὶ ταραχῇ τοῦ ῥοθίου ἀποκειμένην, σωτήριον εἶναι τοῖς πλέουσι κατεστήσατο ὤδε. τὰς κιβωτοὺς καλουμένας ἀναρίθμους τε καὶ πεποιημένους, ἀμφοτέρωθεν τε αὐτὰς τῆς ἡϊόνος ἐπὶ πλείστον ἐγκαρσίας ἀπορριψάμενος, αἰεὶ τε τῶν προτέρων καθύπερθεν ἑτέρων ἐν τάξει ἐπιβολὴν ἐντιθέμενος, τοίχους πλαγίους ἀπ' ἐναντίας ἀλλήλων ἀνέστησε δύο ἐκ τῶν τῆς ἀβύσσου κρητῶν μέχρι ἐς τὸ ὕδωρ, ᾧ δὴ αἱ νέες ἐναπεριδόμεναι πλέουσι. πέτρας τε τὸ λοιπὸν ἀποτόμους ταύτη ἐμβέβληται. ὧν δὴ πρὸς τοῦ ῥοθίου ἀρασσομένων, ἀποκρουομένων τε τὴν τοῦ κλυδωνίου ἐπιθεσιν, καὶ ἀνέμου χειμῶνος ὥρα καταβάντος σκληροῦ, διαμένει τὰ ἐντὸς ἡσυχῇ ἅπαντα τῶν τοίχων, μεταξὺ μίαν ἀπολειμμένην ἐπὶ τὸν λιμένα τοῖς πλοίοις εἰσόδου.

112 Oleson, *Literary Sources* 35. – Hohlfelder, *Harbours* 369-374. – Hohlfelder, *Procopius* 56-60. – See also the contribution by Ginalis/Ercan-Kydonakis in this volume.

113 Hohlfelder, *Harbours* 369-371.

114 Theophylaktos Simocattes, *Historia* V 16, 5 (218, 27-219, 3 de Boor/Wirth): Ἐβδομον δὲ ἄρα τοῦτο τοῖς Βυζαντιοῖς ὀνόμασται... ἐπεγένοντο δὲ καὶ ἐξαισίων πνευμάτων φυσήματα, νότος τε βίαιος, ὡς μονονουχὶ καὶ τὴν ἐπιβύθιον ψηφίδα ἀναρρίπτει τῷ θόλῳ τοῦ σάλου.

to wait for a favourable wind to set sail¹¹⁵. Conversely, the north wind blowing in the area of Constantinople in summer was another challenge for ships that came from the south and wanted to continue sailing to the capital or nearby areas on the Bosphorus. The Arab fleet led by Sulayman, which comprised of cargo and warships, was to anchor in the waters between the Magnaura and the Round Castle in early September 717. The Arabs had to wait two days until the south wind blew again before they could set sail from Hebdomon and head for the harbours at the entrance to the Bosphorus¹¹⁶.

The south wind was not only a challenge for maritime navigation in the area of Constantinople. It also posed a constant threat to the maintenance of harbour facilities on the northern coast of the Sea of Marmara. For example, a few decades after its construction, in 551/552 the Harbour of loukoundianai or Sekoundianai had to be dredged (*exantlein*) and cleaned (*katharizein*) due to silting up¹¹⁷. The chronicler Malalas did not go into detail about the technology used, but based on the information provided by Marcellinus Comes about the dredging of the Harbour of Julian in 509, when scoop wheels were used, a similar approach can also be assumed at the Harbour of loukoundianai¹¹⁸.

Ceremonies on the Shores of the Sea of Marmara

It was surely no coincidence that the imperial crown was lost at Hebdomon during the reign of Justinian I¹¹⁹: the palace complexes there were not only one of the resorts of the Byzantine rulers, they also offered a good opportunity to perform court ceremonies. A treatise of Constantine VII describes the practices that used to be followed in the sixth century when the emperor returned to the capital¹²⁰. Hebdomon offered itself as one of the stations for an official reception, where the senators received the ruler at the Church of the Innocents (*ton Nepion*) when he reached Constantinople by land¹²¹, but he could also come by sea. In this case, the ceremonial stipulates the following:

»If the emperor arrives by ship, they [the senators] stand by the shore, and when the emperor disembarks from the warship, the praesental tribune (and others) pay homage, as in Constantinople, and he receives them verbally; then they accompany him in procession as far as the [Golden] Gate, and there, along with the other officials, they withdraw«¹²².

However, it was not just the emperor who was officially welcomed at Hebdomon. Pope Constantine undertook the last trip of a pontifex to medieval Constantinople in 710/711. After making several stops in Greece, the Pope's ship reached the coast of Hebdomon, where Constantine went ashore. Tiberios, the Co-emperor and son of Justinian II, the Patriarch Kyros with the clergy and the entire senate, as well as many city dwellers, were waiting for him there. With the papal *camelaucum* on his head, Pope Constantine, as well as his companions, mounted the imperial horses offered to them and rode to the Byzantine capital¹²³.

After a period of looting and besieging Constantinople by Byzantium's enemies, when the continued existence of the empire itself was under threat, Hebdomon was to experience its second, albeit brief, heyday during the reign of Emperor Basil I (867-886)¹²⁴. For visiting the outskirts of Constantinople, such as the newly built palaces in Pegai on the northern bank of the Golden Horn, Bithynian Hiereia or Hebdomon, Basil I used a red barque (*rhousion agrarion*)¹²⁵, which was replaced by a dromon during the reign of his son, Leo VI¹²⁶.

Two triumphal processions of Basil I also began in the southwestern area of Constantinople. On the occasion of the capture of Samosata and Zapetra by the Byzantines in 873, the emperor organised a ceremonial entry into Constantinople. Basil landed at Hebdomon and began the triumphal procession from there, according to John Skylitzes¹²⁷. The historian's report is based on the information of Theophanes Continuatus, who only noted that the Emperor entered through the Golden Gate¹²⁸. The harbour of Hebdomon would, indeed, be one of the landing sites in the immediate vicinity of the Golden Gate, but not the only one: at the point where the land wall met the southern sea wall, there was a stone quay, which was used by the emperor when he visited the Church of the Mother of God of the Life-Giving Spring at

115 *Miracula Artemii* 5 (84, 24-26 and 86, 19-21 Papadopoulos-Kerameus): κατὰ δὲ θεῖαν πρόνοιαν ἀνέμου ἐναντίου πνεύσαντος, ὥρμισεν τὸ εἰρημένον πλοῖον εἰς τὸ Ἐβδόμον, εἰς τὴν καλουμένην Μαγναύραν. The saint performed the miracle on a merchant from Chios. – For the main sea routes, see Kislinger, Verkehrsrouen. – For the wind conditions in the area of the Bosphorus, see Ulyyott/Ilgaz, Hydrography 54 and Di Iorio/Yüce, Observations 3091.
116 Theophanes, *Chronographia* AM 6209 (395, 21-396, 3 de Boor). – See p. 196 and Belke, Gates, in this volume.
117 Ioannes Malalas, *Chronographia* XVIII 114 (415, 1-2 Thurn): Καὶ τῷ αὐτῷ χρόνῳ ἐξηντλήθη καὶ ἐκαθαρίσθη ὁ λιμὴν ὁ πλησίον τοῦ παλατίου Σεκουνδιανῶν. – Theophanes, *Chronographia* AM 6044 (228, 13-14 de Boor): τῷ δ' αὐτῷ ἔτει ἐκαθαρίσθη ὁ λιμὴν τοῦ Ἐβδόμου.
118 See Heher, Harbour of Julian 94, in this volume.
119 Ioannes Malalas, *Chronographia* XVIII 114 (410, +1-+5 Thurn). – Theophanes, *Chronographia* AM 6041 (226, 19-22 de Boor). – Georgios Kedrenos, *Chronicon* 409, 3 (II 636, 11-13 Tartaglia).
120 See Bury, Ceremonial Book 439, n. 57. – Cameron, Book of Ceremonies.
121 Konstantinos Porphyrogennetos, *De exped.*, C 680-684 (136 Haldon).

122 English translation by Haldon, *Three Treatises* 139. – Konstantinos Porphyrogennetos, *De exped.*, C 685-688 (138 Haldon).
123 *Liber Pontificalis* XC 5 (I 390, 9-16 Duchesne): *Unde egressi partes Graeciae, coniungentes in insula quae dicitur Caeta... A quo loco navigantes venerunt a septimo miliario Constantinopolim. Ubi egressus Tiberius imperator, filius Iustiniani Augusti, cum patriciis et omni sinclito et Cyrus patriarcha cum clero et populi multitudine, omnes letantes et diem festum agentes, pontifex et eius primates cum sellares imperiales, sellas et frenos inauratos simul et mappulos, ingressi sunt civitatem; apostolicus pontifex cum camelauco, ut solitus est Roma procedere, a palatio egressus in Placidias usque, ubi placitus erat, properavit.* On the landing, see Todt, *Papstreise* 40-42. – Taddei, *Topographical Remarks* 58-69.
124 Alexander, *Strength* 349-351. – Demangel, *Hebdomon* 30.
125 Konstantinos Porphyrogennetos, *De admin. imp.* 51 (246, 14-17 Moravcsik/Jenkins).
126 See Heher, Harbour of the Bukoleon, in this volume.
127 Ioannes Skylitzes, *Synopsis* 137, 55-60 (Thurn). – See the comments of McCormick, *Eternal Victory* 154-155 and n. 86 in reference to Hebdomon.
128 Theophanes Continuatus, *Chronographia* V 40 (146, 46-54 Ševčenko).



Fig. 13 View of the Golden Gate, Brachialion and Mermerkule (Marble Tower). – (Photograph G. Simeonov).

Pege¹²⁹. It is therefore not certain whether Skylitzes's report referred to an additional source or is simply a later conclusion by analogy.

However, there is certain information about the use of the harbour of Hebdomon by Basil I regarding the starting point of his next triumphal procession. A treatise of Emperor Constantine VII recorded the preparation and the course of a triumphal procession of his grandfather after the campaign against Germanikeia and the Byzantine conquest of Tephrike in 878¹³⁰:

»When the emperor returned victorious from the war against Tephrikē and Germanikeia, he passed via Hierieia to Hebdomon, where citizens of every age met him, with crowns prepared from flowers and roses. Likewise the whole senate then in the City received him there also, and the emperor greeted them verbally. And when he had entered and prayed in the Church of the Baptist in the Hebdomon, and lit candles, he went out; and donning a triple-bordered *skaramangion*¹³¹, and riding together with his son Constantine, they came to the Church of the All-Holy Virgin of the Abramites, with the whole senate going ahead with the people of the City, and with processional banners. Dis-

mounting from their horses, they entered the Church of the Virgin; and having prayed and lit candles, they sat for a short time¹³²« (fig. 13)

The Hebdomon area was not just a place for solemn activities: two Byzantine rulers spent their last hours there. After Emperor Tiberius II married the general Maurice to his daughter Constantina on 13 August 582 at Hebdomon and raised him to the rank of emperor, the old ruler died on the following day¹³³. His body was loaded onto a ship and brought to Constantinople, where he was entombed in the Church of the Holy Apostles¹³⁴. In August 775, Emperor Constantine V began his last campaign against Bulgaria. While still in Thrace, he had to return to Constantinople due to illness. His servants carried the emperor on a stretcher (*krabbatin*) from Arkadiopolis to Selymbria, where Constantine was transferred to a ship. The Byzantine ruler would never see the capital again: when the vessel reached the Round Castle at Hebdomon, he died on board the *chelandion*¹³⁵.

Shortly before his death in December 1025, Emperor Basil II announced his wish to be buried in the Church of

129 See Simeonov, Brachialion, in this volume.

130 McCormick, *Eternal Victory* 155-157. – Haldon, *Three Treatises* 268-269. – On the triumph, see Theophanes Continuatus, *Chronographia* V 49 (176, 26-28 Ševčenko). – For the campaign in the east, see Tobias, *Basil I* 230-251.

131 A tunic slit at the front and back that was suitable for riding, see Parani, *Reality of Images* 61 n. 38 and Hendy, *Catalogue* 158.

132 English translation by Haldon, *Three Treatises* 141. – Konstantinos Porphyrogenetos, *De exped.*, C 726-736 (140 Haldon): Τοῦ βασιλέως ἐπανελθόντος μετὰ νίκης ἀπὸ τοῦ πολέμου Τεφρικήσ καὶ Γερμανικείας, διεπέρασεν ἐπὶ τὴν Ἱερείαν ἐν τῷ Ἐβδόμῳ, ὑπαντησάσης αὐτῷ ἐκεῖσε ἀπάσης ἡλικίας τῶν τῆς πόλεως μετὰ στεφάνων τῶν ἐξ ἀνθέων καὶ ῥόδων κατεσκευασμένων. ὡσαύτως καὶ ἡ σύγκλητος πᾶσα ἢ ἐν τῇ πόλει ἐκεῖσε αὐτὸν ἐδέξατο, καὶ ὁ βασιλεὺς ἀπὸ στόματος αὐτοῦ ἐδέξατο. εἰσελθὼν δὲ καὶ εὐξάμενος ἐν τῷ Ἐβδόμῳ, ἄψας

κηρούς ἐξῆλθεν· καὶ βαλὼν σκαραμάγγιον τριβλάττιν ἅμα υἱῷ Κωνσταντίνῳ τῷ νέῳ ἵππεύσαντες ἦλθον ἐν τῷ ναῷ τῆς ὑπεραγίας Θεοτόκου τῶν Ἀβραμιτῶν, προηγουμένης πάσης τῆς συγκλήτου καὶ τοῦ λαοῦ τῆς πόλεως ἅμα καὶ φλαμούλων τινῶν λιτῶν, καὶ καταβάντες τῶν ἵππων εἰσήλθον εἰς τὸν ναὸν τῆς Θεοτόκου. εὐξάμενοι καὶ ἄψαντες κηρούς, ἐκαθέσθησαν μικρὸν. – Cf. Βέλγιαεν, *Bogomol'nye vychody* 66.

133 For the circumstances see n. 30 above.

134 *Chronicon Paschale* 690, 12-16 (Dindorf). – Ioannes Zonaras, *Epitome* XIV 11, 24-26 (III 182, 10-18 Büttner-Wobst).

135 Theophanes, *Chronographia* AM 6267 (448, 12-21 de Boor). – Symeon Logothetes, *Chronicon* 122, 18 (194, 168-173 Wahlgren). At this time, the word *chelandion* meant a warship, cf. Pryor/Jeffreys, *Dromon* 166-168. – Eickhoff, *Seekrieg und Seepolitik* 136-137.

St John the Theologian at Hebdomon¹³⁶. While Michael VIII Palaiologos besieged the fortifications of Galata in 1260, some of his relatives moved to Hebdomon. There, in the dilapidated Church of St John the Theologian, they came across the bones of a person whose epitaph identified him as the Byzantine emperor who had died about 250 years earlier¹³⁷. After learning of this, Michael VIII sent hymn singers, guardsmen and dignitaries, together with textiles made of silk and gold, to transfer the remains of Basil II from Hebdomon to Galata¹³⁸. From there they were transported to Selymbria, where they were buried in the Monastery *tu Soteris*.

Perhaps for the last time in Byzantine history, the Propon-tis suburbs of Constantinople seem to have played a role in imperial ceremonies just some decades before the fall of the capital to the Turks. Silvester Syropoulos describes in his *Mémoires* the arrival of the Byzantine delegation from the Council of Florence on 31 January 1440. According to him, the ship sailed by (*paraplein*) the suburb of Theologos, where the eparch Paul Asan met Emperor John VIII Palaiologos. Then the ship arrived at the Golden Gate and cast anchor in the *Exartysis* (shipyard)¹³⁹.

Although Constantinople had two Golden Gates – the western Golden Gate and the eastern one in the area of the Acropolis – and shipyards are attested on various locations in the Golden Horn as well as on the Marmaran shore¹⁴⁰, two aspects point to a reception in the Thracian suburbs. As we already mentioned, there was a church at Hebdomon dedicated to St John the Theologian. Thus, the first station of the delegation, where Paul Asan welcomed the emperor, should have been a landing stage at Hebdomon. Thereby under Golden Gate the author probably means the section of the Theodosian Walls with the Brachialion. Yet the strongest argument in favour of a reception in the European suburbs seems to be the *Exartysis*. Since the reign of Michael VIII, a preferable site for the shipyard of Constantinople was the Kontoskalion Harbour, which, moreover, was cleaned by command of John VIII, who led the Byzantine mission to the West in 1438-1439¹⁴¹.

The topography of Sigurd I Magnusson's arrival in Constantinople around 1111 is difficult to interpret. According to Snorri Sturluson's *Heimskringla*, Emperor Alexios I Komnenos prepared a ceremonial reception of the Norwegian King in the Byzantine capital. The saga says that Sigurd entered Constantinople through the Golden Gate and rode to *lak-tiarna* or *loktiar*, which Dawkins interpreted as the Blachernae Palace¹⁴². The question that this account raises here is which was the Golden Gate – the western one at the Theodosian land walls, or the eastern one close to the Acropolis¹⁴³. If we follow the *Heimskringla* – which is highly disputable due to its legendary character – that Sigurd wanted to put the splendid sails of his ship to display to the Constantinopolitan citizens, all of whom had gathered to see him, it seems plausible to accept a triumphal entry through the eastern Golden Gate where the Norwegian King landed with his entourage.

Hebdomon owed its establishment to the increasing importance of the army in the political life of the Empire. The army not only participated in the acclamation of the emperor from the fourth century onwards, but often chose the new ruler. This seems to have left a significant mark on the topography of the Byzantine capital itself. Cyril Mango observed that the Golden Gate in the fifth-century Theodosian walls was moved to the southernmost part of the new landward fortifications¹⁴⁴. For our purposes, the problem surrounding the commissioner of the complex – be it Theodosius I or his grandson of the same name – is irrelevant¹⁴⁵. Much more important is instead the question why this imposing gate, through which the victorious emperor entered the capital, was constructed so close to the sea shore during the Theodosian period. The answer can be found outside the city. One reason was the new stretch of the Via Egnatia laid down in the fourth century that led along the sea coast in Constantinople and thus shaped the topography of the new capital¹⁴⁶. Another reason was the establishment of that district at the seventh milestone on the shores of the Sea of Marmara where the army was quartered and the campaigns of the Byzantine emperors had their starting or ending point¹⁴⁷.

136 Ioannes Skylitzes, *Synopsis* 369, 17-19 (Thurn). – Michael Glykas, *Annales* 579, 9-13 (Bekker). – Ioel, *Chronographia* 118, 1446-1449 (*ladevaia*).

137 Georgios Pachymeres, *Relationes historicae* II 21 (I 175, 12-26 Failler). – On the epitaph *Anthologia Palatina*, *Epigram* 740 (III 216, 1-10 Cougny). – On the sources and the siege of Galata, see Geanakoplos, *Michael Palaeologus* 75-79. – On the reason why Hebdomon was chosen to be the place where one of the greatest generals among Byzantine emperors was to rest in peace, see Stephenson, *The Legend* 49-51 and 95 with further bibliography.

138 Georgios Pachymeres, *Relationes historicae* II 21 (I 175, 26-177, 3 Failler). – Makrides, *Hebdomon* 55 n. 1 sees in this Galata a location on the Thracian coast of the Sea of Marmara (*Galataria*, heute *Şenlikköy*), which was about 10 km west of Hebdomon, and argues for a transfer of the remains of Basil II by land to Selymbria. Tziras, *Ebdomon* 71 agrees with him. However, since Pachymeres described the siege of the Galata Fort immediately before this episode, a transfer to the north bank of the Golden Horn, where Michael VIII stayed, seems more plausible.

139 Silvester Syropoulos, *Mémoires* XI 23 (544, 11-14 Laurent): "Ἐκοττε οὖν δευτεραῖοι πρὸς ἐσπέραν παρεπλόμεν τὸ προάστειο τῆς Πόλεως τὸν Θεολόγον, ἔνθα ἡ κεφαλὴ τῆς Πόλεως ὁ Ἀσάν κύρ Παῦλος μετ' ὀλίγων πᾶνυ ἐλθὼν προσεκύνησε τὸν βασιλέα, καὶ περὶ δευτέραν ὥραν τῆς νυκτὸς κατελάβομεν τὴν Χρυσείαν Πύλιν καὶ ἔστημεν εἰς τὴν λεγομένην Ἐξάρτησιν, οὗ ἦλθον πολλοὶ τῶν ἀρχόντων καὶ προσεκύνησαν τὸν βασιλέα."

140 On the eastern Golden Gate (Barbara Gate) and the eastern triumphal way, which, however, probably started at the Eugenios Gate, see Mango, *Triumphal Way* 178-179. – Kislinger, *Eugenios-Tor* 725-729. – On the contrary, Magdalino, *Acropolis-Gate* 155. – Heher/Simeonov, *Ceremonies by the Sea* 235-237.

141 See Heher, *Harbour of Julian* esp. 104, in this volume. – On the reign of John VIII and his mission to the West, see Kolditz, *Johannes VIII. Palaiologos*.

142 Van der Vin, *Travellers to Greece* II 514-515. – Cf. Dawkins, *The Visit* 58. – Vučićić, *Zusammenkünfte* 102*-103*.

143 Cf. Mango, *Triumphal Way* 178-179. – Kislinger, *Eugenios-Tor* 725-729. – Magdalino, *Acropolis-Gate* 155. – Heher/Simeonov, *Ceremonies by the Sea* 235-237.

144 Mango, *Triumphal Way* 179: »I do not know why the Golden Gate was placed so close to the seashore instead of being more or less in line with the old one«.

145 Bardill, *Golden Gate*, advocates the construction of the complex as the triumphal arch of Theodosius I, which would later be built into the wall of his grandson. – Asutay-Effenberger, *Landmauer* 54-71 is of the opinion that the Golden Gate was built as the triumphal gate of Theodosius II.

146 Mango, *Triumphal Way* 174-175. – See the *Itinerarium Antonini* 323, 5-8 and 332, 6-9 (48 and 50 Cuntz) and the *Itinerarium Burdigalense* 570, 2-8 (90-91 Cuntz).

147 Mango, *Développement* 33. – Bardill, *Golden Gate* 692. – Dagron, *Naissance* 110.

A change in the history of Hebdomon can already be seen towards the end of the fifth century. As the emperor often resided in the capital and no longer personally led military campaigns, the role of the two other »constitutional elements« (*Verfassungselemente*) in the proclamation of the emperor increased: the Senate and the people of Constantinople. This led to a shift in the places where these elements manifested their political significance, from the Byzantine Field of Mars outside the city walls to the centre of the capital, be it at the Hippodrome or in the Grand Palace¹⁴⁸.

Hebdomon as an Arab Stronghold

Marek Jankowiak dealt with many aspects of the first siege of Constantinople by the Arabs, which he dated to 668¹⁴⁹. As part of his study, he questioned the chronicler Theophanes' account of the maritime character of the Arab attack on Constantinople, which research was based on for a long time¹⁵⁰. Instead, he is of the opinion that the author of the common source for the reports of Theophanes and Patriarch Nikephoros regarding the Arab fleet based at Hebdomon projected his memories of the second siege back to the first¹⁵¹. Jankowiak therefore spoke in favour of the possibility that the Arabs had ended their campaign by attacking the land walls of Constantinople¹⁵². While taking into account the overall character of the undertaking, the goal of which was the capture of the Byzantine capital by a force transported by sea, an attack by land does not preclude the use of harbour facilities in the surrounding area of Constantinople by the Caliph's army. The *Synaxarion* of the Constantinopolitan Church also referred to battles on land and at sea¹⁵³. Both for the hostilities at sea, of which Theophanes wrote, and for an attack on the land walls, the Arabs needed a landing stage in the immediate European vicinity of Constantinople: this was an essential prerequisite for the landing and supply of their troops¹⁵⁴. The starting point of the Arab sea attacks can be determined more precisely thanks to the information of Theophanes and Patriarch Nikephoros: according to them, the Arab forces anchored in the bay of Hebdomon, from the Magnaura in the west to

the Round Castle in the east. From there they launched their attack against the city¹⁵⁵.

We are better informed about the logistical importance of the bay of Hebdomon during the second Arab siege¹⁵⁶. In 717, the Arab forces led by Maslama ibn Abd al-Malik crossed into Europe near Abydos and marched against the Byzantine capital¹⁵⁷. On 15 August 717, the army reached Constantinople and set up camp west of the Golden Gate, with the Arabs cutting the city off from the countryside with a trench and palisade¹⁵⁸. On 1 September, the Arab fleet also appeared under the direction of Sulayman and, according to Theophanes, anchored in the waters of Magnaura up to the Round Castle¹⁵⁹. According to the chronicler, the fleet comprised 1800 vessels and consisted of round-hulled ships, troop carriers (*polemikai katenai*) and dromons. However, the reports by Byzantine and Oriental historians present different pictures of the maritime events on the Thracian coast. According to Theophanes, the Arab fleet's stay south-west of Constantinople lasted only two days, awaiting favourable wind conditions. With the advent of the south wind, the transport ships could continue sailing and set course for Bithynia and the European coast of the Bosphorus¹⁶⁰. The statements of Michael the Syrian and the *Chronicle of 1234* tell of a longer stay of the Arab fleet in the Hebdomon vicinity. Because the camp had direct access to the sea via the bay there, Maslama had a part of the Arab army quartered on board the ships and, in addition, his Egyptian sailors could surveil the actions of the Byzantine navy¹⁶¹. The decisive naval battles of the second Arab siege took place far away from Hebdomon, but it can be assumed that its coastal area remained as a base until the end of the conflict in the summer of 718.

Conclusions: Landing Stages and Harbour in the Area of Hebdomon

The lack of (underwater) archaeological research in the bay of Hebdomon limits research on the landing stages in the area. Hypotheses based on the analysis of written sources and visual representations must therefore suffice. From the promontory of the coast at Hebdomon in the west to the

148 See Beck, *Senat und Volk* 10-29. – Treitinger, *Kaiser- und Reichsidee* 17-29. – Pfeilschifter, *Der Kaiser und Konstantinopel*. – Trampedach, *Kaiserwechsel und Krönungsritual* 280-290. – Bauer, *Stadt, Platz und Denkmal* 247-254. – MacCormack, *Art and Ceremony* 248-250. – Heucke, *Circus und Hippodrom* 217-235. – Cameron, *Book of Ceremonies* 131.

149 Jankowiak, *First Arab Siege*.

150 Stratos, *Siège ou blocus*. – Tsangadas, *Fortifications* 107-133.

151 Jankowiak, *First Arab Siege* 252-254 and 302-303.

152 Jankowiak, *First Arab Siege* 302-303.

153 *Synaxarion ecclesiae Constantinopolitanae*, 25 June 2 (772, 8-16 Delehayé). – See *Le typicon de la Grande Église*, 25 June (I 320, 1-6 Mateos).

154 On the role of Hebdomon in the first Arab siege, see Stratos, *Siège ou blocus* 106. – Tsangadas, *Fortifications* 114-119, but the latter's conclusions regarding Hebdomon's »excellent, well-sheltered, large harbour« are exaggerated.

155 Theophanes, *Chronographia* AM 6165 (353, 25-354, 2 de Boor). – Nikephoros Patriarches, *Breviarium* 34 (84, 1-9 Mango). – See Georgios Monachos, *Chronicon* II 727, 16-20 (de Boor/Wirth).

156 On the second Arab siege, see Christides, *Second Arab Siege*. – Guillard, *Expédition*. – Eickhoff, *Seekrieg und Seepolitik* 31-36. – Bannikov/Morozov, *Istorija* 398-399.

157 Theophanes, *Chronographia* AM 6209 (395, 13-18 de Boor). – Nikephoros Patriarches, *Breviarium* 54 (122, 3-7 Mango). – *Chronica Michaelis Syriaci* XI 18 (II 485, 7-10 Chabot).

158 Theophanes, *Chronographia* AM 6209 (395, 18-21 de Boor). – *Chronica Michaelis Syriaci* XI 18 (II 485, 10-14 Chabot). – *Chronicon anonymum ad annum Christi 1234*, 159 (I 237, 15-19 Chabot).

159 Theophanes, *Chronographia* AM 6209 (395, 21-25 de Boor).

160 Theophanes, *Chronographia* AM 6209 (395, 26-396, 3 de Boor). – Guillard, *Expédition* 119. – On the harbours on the European and Asian shore of the Bosphorus, see the corresponding *lemmata* in Külzer, *Ostthrakien*, and Belke, *Bithynien und Hellespont*.

161 *Chronica Michaelis Syriaci* XI 18 (II 485, 14-16 Chabot). – *Chronicon anonymum ad annum Christi 1234*, 159 (I 237, 19-22 Chabot).

Round Castle in the east, there would have been two landing stages and a harbour.

The remains of a mole (or breakwater) at the very end of the headland belong to the harbour complex, which was noted by Glück during the First World War and later by French archaeologists in the early 1920s. The state of research at that time did not allow the scholars to go beyond photographic documentation of the monument. However, the remains in the sea were not examined in later years either and they have since disappeared into the basin during the construction of the new port.

Based on photographs and a sketch created by the French researchers, the following conclusions can be drawn about the harbour at the Hebdomon promontory: the mole was built from stone blocks and was at a 45° angle to the promontory in order to alleviate the force of the wind and waves, but was not directly exposed to it¹⁶². Thanks to this design, the mole provided ships with protection from the south wind, which blows in the area around Constantinople in winter. The ships were further protected from the strong current, which arises in the upper part of the Bosphorus as a result of the inflow of water with lower salinity from the Black Sea and thus affects maritime traffic in the straits and the Sea of Marmara¹⁶³. In the western area of Hebdomon it comes almost head-on from the northeast and meets the coast. Identification with one of the moles of the harbour near the Ioukoundianai Palace that Procopius described seems possible, but the researchers noted only *one* mole at the beginning of the twentieth century. During his tour of the site in the 1890s, the Russian historian Beljaev visited the coast of what was then Makrochorion and explored some monuments on the shore *in situ*¹⁶⁴. Unfortunately, his report did not contain any precise information that could topographically determine the Byzantine ruins. It can only be concluded from his information that the monuments he saw on the coast were located along the central or inner part of the bay and could therefore have belonged to the palace complex.

Another landing stage that may have been in the eastern part of the bay is indicated by the sources: the report in the *Chronicon Paschale* about the appearance of the group of ships of Heraclius at the Round Castle in 610 and the information of Theophanes about the death of Emperor Constantine V, who died on a ship at this defensive system¹⁶⁵. The natural conditions themselves also speak for this, since the promontory at today's Zeytinburnu could serve as a natural breakwater against the current from the Bosphorus. The

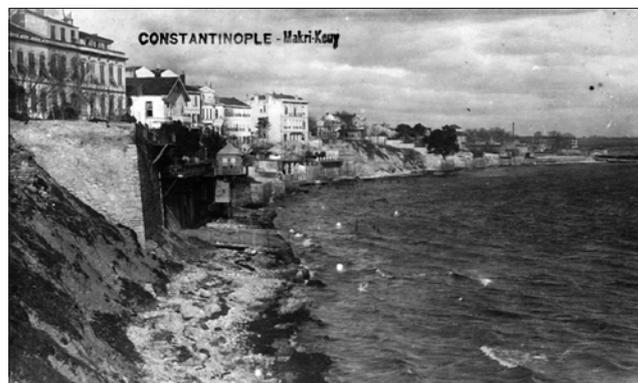


Fig. 14 The inner part of the bay at Hebdomon, first half of the 20th c. – (Photograph www.eskiistanbul.net).

sources are completely silent about the construction of artificial protective structures, and the archaeological investigation of the early 1920s did not reveal any monuments in the eastern part of the bay either.

The establishment of Hebdomon as a place that was closely connected to the army shaped his settlement history. The core, at least in the first 100 years of its development, was the Tribunal and the associated Campus, where some of the imperial troops were quartered. It is therefore only natural that the oldest landing stage would have been located in the innermost part of the bay, exactly where the cliff turns into a flat beach and where the distance between the shore on the one hand and the Tribunal and Campus on the other is the shortest (fig. 14). Whether it had a stone quay, as the analysis of the scenes on the Column of Arcadius indicates – assuming that this assignment is correct – has to be left open because of the schematisation and simplification of the drawings.

With regard to larger units of ships, such as the fleets of the Arabs in 668 and 717-718 or the transports of Thomas the Slav in 822¹⁶⁶ and the Venetian fleet in 1203, the choice of the appropriate landing place was determined by war-related reasons. The Arabs needed a place that gave their land and sea forces easy access to the fortifications of Constantinople, so their ships anchored in the waters of Hebdomon in both 668 and 717-718. The Venetians, on the other hand, were much more careful with their undertakings at the beginning of the thirteenth century, which is why they approached the bay of San Stefano (today Yeşilköy), which is also larger than that at Hebdomon, and planned the attack on Constantinople there¹⁶⁷.

162 Hohlfelder, Harbours 372-373. – See the similar design of the southern breakwater of Alexandria Troas on the south coast of the Dardanelles in Feuser, Roman Harbor 262 and the breakwater in Graviscae on the Tyrrhenian coast in Daum, Hafenbau 16.

163 Ulyyott/Ilgaz, Hydrography 44.

164 Beljaev, Bogomol'nye vychody 87-88.

165 Taddei, Topographical Remarks 64-65 and 69.

166 Theophanes Continuatus, Chronographia II 16 (94, 20-32 Featherstone/Signes-Codoñer). – Ioseph Genesios, Liber regum II 6 (29, 74-86 Lesmüller-Werner/Thurn). – Ioannes Skylitzes, Synopsis 36, 50-37, 63 (Thurn).

167 Geoffroy de Villehardouin, Conquête V 127-132 (I 128-134 Faral). – Robert de Clari, Conquête 40 (106, 1-11 Dufournet). – This also applies to the naval forces of Thomas the Slav from the Hellas *thema*, which had to pay attention to the presence of the imperial navy.

Summary / Zusammenfassung

The Harbour and Landing Stages of Hebdomon

Hebdomon, a suburb at the seventh milestone outside Constantinople, held a special position in the ceremonies of the Early Byzantine period. The imperial presence in the area was manifested in the construction of representative buildings such as palace complexes, fortifications and the Tribunal, where the ruler was proclaimed emperor and held military parades. The construction of the entire complex along the coast of the Sea of Marmara not only influenced traffic in the southwestern area of the capital, but also offered a good opportunity to give the ceremonial a maritime character. During investigations in Makrochorion (today Bakırköy) in the first half of the twentieth century, the remains of a mole were found at the headland of Hebdomon, whose identification with the harbour of the Ioukoundianai Palace seems possible. From the written records and pictorial evidence, it is evident that there were at least two other landing stages in the bay of Hebdomon. One can be linked to the Tribunal and thus should be located in the inner part of the bay. The other is said to have been located near the so-called Round Castle, which guarded access to Constantinople. The capacity of the harbour facilities in the area of Hebdomon appears to be limited to smaller numbers of ship. Larger fleets would have used the bays of Hebdomon or Hagios Stephanos (today Yeşilköy).

Der Hafen und die Anlegestellen des Hebdomon

Das Hebdomon, ein Vorort am siebten Meilenstein vor Konstantinopel, hatte im Zeremoniell der frühbyzantinischen Zeit eine besondere Stellung inne. Die kaiserliche Präsenz in der Gegend manifestierte sich im Bau von repräsentativen Bauwerken wie Palastanlagen, Befestigungen und dem Tribunal, wo der Herrscher zum Kaiser ausgerufen wurde und darüber hinaus Heerschau hielt. Die Errichtung des gesamten Komplexes entlang der Küste des Marmarameeres beeinflusste nicht nur den Verkehr in der südwestlichen Umgebung der Hauptstadt, sondern sie bot die gute Möglichkeit, dem Zeremoniell eine maritime Ausprägung zu verleihen. Die Untersuchungen in Makrochorion (heute Bakırköy) in der ersten Hälfte des 20. Jahrhunderts stellten die Reste einer Mole beim Kap des Hebdomon fest, deren Identifikation mit dem Hafen des Ioukoundianai-Palastes möglich scheint. Aus der schriftlichen Überlieferung und den bildlichen Zeugnissen geht hervor, dass es in der Bucht des Hebdomon mindestens zwei weitere Anlegestellen gab. Die eine lässt sich mit dem Tribunal in Verbindung bringen und ist damit in dem inneren Teil der Bucht zu lokalisieren. Die andere soll in der Nähe des sogenannten Runden Kastells gelegen haben, das den Zugang zu Konstantinopel überwachte. Die Aufnahmekapazität der Hafenanlagen in der Gegend des Hebdomon scheint auf kleinere Schiffsverbände beschränkt zu sein; was größere Flotten betrifft, sollten sie die Buchten des Hebdomon oder von Hagios Stephanos (heute Yeşilköy) anlaufen.

The Landing Stage at Brachialion

On the shores of the Sea of Marmara, where the Theodosian wall once met the sea walls of Constantinople, a section of a wall is still preserved. This wall was supposed to prevent attackers from gaining access to the lower fortifications along the coast (figs 1-2)¹. It was called *brachialion*², and just west of it a stone quay protruded into the sea in Byzantine times, which is attested to in old photographs (figs 3-4)³. A reconstruction of the quay at Brachialion by Walther Karnapp was included in the German survey of the walls of Constantinople in 1938⁴. It shows a quay system made of stone blocks, provided with wooden posts for mooring the vessels (fig. 5). The stone construction served as a breakwater and offered protection from the current of the Bosphorus⁵. However, the vessels had to approach the landing stage from the west and had to moor in such a way that their broad side was against the quay.

Today, its remnants lie under the International Peace Garden (Uluslararası Barış Parkı) and the adjoining Kennedy Caddesi, and to my knowledge they have not been the subject of archaeological research. Thus, various questions concerning the date, construction and function of the landing stage at Brachialion still await a definitive answer. Despite that, using old photographs that show huge stone blocks ranging deep into the Sea of Marmara, we can deduce that this structure must have played a significant role in the maritime topography of Constantinople. Keeping this in mind, it seems plausible to identify what is shown in the old Istanbul photographs with the landing stage that is known from Greek written sources since the ninth century onwards, one that performed a major function both in connection with the shrine of the Mother of God of the Live-Giving Spring at Pege and in imperial ceremonies.

One of the most important sanctuaries in the immediate vicinity of the Byzantine capital was the Pege Church in front of the Theodosian wall (today Balıklı Meryem Ana Rum Manastırı in the Istanbul district of Zeytinburnu) (fig. 6)⁶. A church was built in the fifth or sixth century at the local spring⁷, which was famous for its healing properties far beyond Constantinople⁸. In the vicinity of the church, a palace was built. Compared to other *miracula* of healing saints, Pege's collection of miracles, which attributes the power of the spring to Mary, shows a significant difference: many of its visitors were from the upper classes of the empire and even members of the ruling family frequented the spring⁹. It is therefore no coincidence that the emperor paid a solemn visit to the Church of Pege on Ascension Day:

»All the archons go along to the Palace while it is still dark in *skaramangia*. If the emperor commands that they go away by boat, according to custom, he straight away boards the *chelandion* with whomever he commands, and goes away as far as the harbour of the Golden Gate. When he has disembarked there from his *chelandion*, at a command, an audience is indicated to the archons there through the *praipositos*. Moving away a little, the archons of the *kouboukleion*, wearing true-purple *sagia*, stand in the form of a circle and the emperor goes into the middle of them and is crowned by the *praipositos*, so as not, as previously mentioned, in any circumstances to be crowned in front of non-eunuchs. For this reason, the archons of the *kouboukleion* previously mentioned stand forming a circle. Then the emperor rides from there in a *skaramangion* with gold *clavi*, and goes through the field which is there and the area beside the wall, and goes away as far as the gate which leads out opposite the spring«¹⁰.

1 Chronicon Paschale 719, 14-16 (Dindorf). – On the interpretation of the Brachialia of the Easter Chronicle, see Tsangadas, Fortifications 91-93. 251 n. 82. – Tsangadas, Brachialia, and the plausible critique by Speck, Bellum Avaricum 99-100 n. 148. – According to Müller-Wiener, Bildlexikon 289, the structure was a supporting pillar.

2 Theophanes, Chronographia AM 6165 (353, 28-30 de Boor). – LBG I 295. – Menge, Großwörterbuch Lateinisch 94.

3 Diez/Glück, Altkonstantinopel fig. 21. – Meyer-Plath/Schneider, Landmauer pl. 25. – Cf. van Millingen, Walls 300-301. – Müller-Wiener, Bildlexikon 60. 289.

4 Krischen, Landmauer pl. 18.

5 Ullyott/Ilgaz, Hydrography. – See also Simeonov, Hebdomon n. 89 in this volume. – However, old photographs such as the one in fig. 4 show a T-shaped landing stage near Brachialion and Mermerkule. The section that runs parallel to the seashore and thus encloses a harbour basin right before Mermerkule may have served as a protection from the south winds during winter. Whether the whole facility was built simultaneously or some of its parts were of a later date, should remain open.

6 Külzer, Ostthrakien 573-575.

7 On the history of the church and its surroundings, see Gedeon, Zoodochos pege 23-85, who, however, confuses the locations of Pege and Pegai (on the north bank of the Golden Horn). – Nomides, Zoodochos Pege 73-163. – Külzer, Ostthrakien 573-575. – Kimmelfield, Pege. – Janin, Siège de Constantinople 223-228. – Eftymiades, Monastère de la Source 284-288. – Benay, Monastère de la Source.

8 Miracula Deiparae ad Fontem 12. 30 (228-232. 270-274 Talbot).

9 Miracula Deiparae ad Fontem 3. 5. 7-9. 20-21. 26-28 (210-224. 256-258. 266-268 Talbot). – On the collection, see Talbot, Anonymous *Miracula*. – Talbot, Pilgrimage.

10 English translation by Moffatt/Tall, The Book of Ceremonies I 108-109. – Konstantinos Porphyrogenetos, De cer. I 27 (I 201, 3-16 Dagron/Flusin/Feissel): Προέρχονται πάντες οἱ ἄρχοντες ἐνύχιον ἐν τῷ Παλατίῳ ἀπὸ σκαραμαγγίων, καὶ εἰ κελεύει ὁ βασιλεὺς ἀπελθεῖν διὰ τοῦ πλοῦς, κατὰ συνήθειαν, εἰσέρχεται τάχιον εἰς τὸ χελάνδιον μεθ' ὧν ἂν κελεύει, καὶ ἀπέρχεται μέχρι τοῦ βραχιαλίου τῆς Χρυσῆς Πόρτης. Κάκεισε ἐξελθὼν ἀπὸ τοῦ χελανδίου αὐτοῦ, δίδοται σελέντιον διὰ τοῦ



Fig. 1 Tower 1 of the Theodosian land wall with Brachialion. – (Photograph G. Simeonov).



Fig. 2 Brachialion. – (Photograph G. Simeonov).

The procession ended in front of the Church of Pege, where the service was celebrated. This was followed by a festive meal, in which the emperor, the patriarch, high dignitaries and friends of the ruler took part¹¹.

In 831 (or 837), Emperor Theophilos returned to Constantinople after a victorious campaign in Cilicia against the

Arabs¹². He spent a week in Hiereia on the Asian shore of the Bosphorus, crossed over to Hagios Mamas and stayed there for another three days¹³. Theophilos sailed from Hagios Mamas to the Blachernae district, where he went ashore and began his triumphal procession¹⁴. The emperor rode to the grasslands in front of the Golden Gate and went to a

πραπιστού από κελεύσεως τοῖς ἐκεῖσε ἄρχουσι, καὶ ὑπεξελθόντες μικρόν, ἴστανται οἱ ἄρχοντες τοῦ κουβουκλείου, φοροῦντες σαγία ἀληθινά, κυκλικῶ τῷ σχήματι. Καὶ εἰσέρχεται ὁ βασιλεὺς μέσον αὐτῶν καὶ στέφεται ὑπὸ τοῦ πραπιστοῦ διὰ τὸ ὄλω, ὡς ἀνωτέρω εἴρηται, ἐμπροσθε βαρβάτων μὴ στέφεσθαι· ἔνεκα γὰρ ταύτης τῆς αἰτίας τὴν κυκλικὴν στάσιν ἐκτελοῦσιν οἱ προρρηθέντες ἄρχοντες τοῦ κουβουκλείου. Καὶ εἰθούτως ἰππεύει ἀπὸ τῶν ἐκεῖσε ἀπὸ σκαραμαγγίου χρυσοκλάβου καὶ διέρχεται διὰ τοῦ ἐκεῖσε ὄντος λειμῶνος καὶ τοῦ παρατειχίου καὶ ἀπέρχεται μέχρι τῆς ἐξαγωγῆς πόρτης ἀπέναντι τῆς Πηγῆς. – Cf. Janin, *Processions religieuses* 82. – Berger, *Processions* 76. 82-83. – Nomides, *Zoodochos Pege* 144-148. On the *chelandion*, see Pryor/Jeffreys, *Dromon* 166-169 and 188-191. – On the

skaramangion (a tunic slit at the front and back, which was suitable for riding), see Parani, *Reality of Images* 61 n. 38. – Henny, *Catalogue* 158.

11 Cletorologium Philothei 213, 1-10 (Oikonomidēs). – Vita Euthymii III (19, 3-22 Karlin-Hayter).

12 On the dating, see McCormick, *Eternal Victory* 146 n. 51. – Haldon, *Three Treatises* 285 n. on C 808sq. – On the triumphal procession, see McCormick, *Eternal Victory* 146-149.

13 On Hiereia and its harbour, see Belke, *Gates*, in this volume. – On Hagios Mamas, see Külzer, *Ostthrakien* 512-513.

14 Konstantinos Porphyrogennetos, *De exped.*, C 812-827 (146 Haldon).

Fig. 3 Remains of the quay of Brachialion. – (Photograph Sébah & Joaillier, www.eskiistanbul.net).



Fig. 4 Remains of the quay of Brachialion. – (Photograph www.eskiistanbul.net).



tent (*korte*) erected on the occasion of a triumph¹⁵. In this tent, Theophilos waited for the Arab prisoners of war to be brought from Chrysopolis in Asia Minor the same day. According to the source, the vessels landed at the place where the emperor sojourned¹⁶. Thus, it can be assumed that the landing site was the quay of Brachialion, from which access was easily provided to the area in front of the Golden Gate.

A similar procedure can be seen in the triumphal procession of Basil I in 878¹⁷. The emperor landed at Hebdomon¹⁸

and together with the heir to the throne Constantine visited the Church of St Mary of the Abramites Monastery near the city, where they prayed and lit candles¹⁹. The distinguished among the Arab prisoners of war were brought together with the military standards (*phlamoula*) and the captured weapons on ships from Hierieia to the area in front of the Golden Gate²⁰. From here, they participated in the procession through the city (fig. 7). Logically, their landing (like that of 831 or 837) would have taken place at Brachialion.

15 Konstantinos Porphyrogennetos, *De exped.*, C 827-829 (146 Haldon). – See Heher, *Zelt*.

16 Konstantinos Porphyrogennetos, *De exped.*, C 829-832 (146 Haldon): Ἐφθάσαν δὲ τῇ αὐτῇ ἡμέρᾳ καὶ οἱ τοὺς δεσμίους φέροντες ἐν Χρυσοπόλει καὶ βάλλοντες αὐτοὺς εἰς πλοῖα διεπέρασαν αὐτοὺς, ἐνθα καὶ ὁ βασιλεὺς παρῆν.

17 On the triumphal procession, see McCormick, *Eternal Victory* 155-157, who dates it to 879.

18 On this, see Simeonov, *Hebdomon*, in this volume.

19 On the church of the Monastery of the Abramites, see Janin, *Siège de Constantinople* 4-6. – Berger, *Untersuchungen* 679-681.

20 Konstantinos Porphyrogennetos, *De exped.*, C 742-747 (140-142 Haldon): Ἐν τῷ λιβαδίῳ τῷ ἔξω τῆς Χρυσῆς Πόρτης ἐπίγησαν τένται, καὶ διεπέρασαν ἀπὸ Ἱερειᾶς ἐκεῖσε τοὺς εὐγενεῖς καὶ ἐμφανεῖς τῶν αἰχμαλώτων Ἀγαρηνῶν καὶ τὰ ἐξαιρετὰ τῶν λαφύρων τοῦ πολέμου, φλαμούλων τε καὶ ἀρμάτων, καὶ ἐν ταῖς τέντεσιν ἔνδον ἀποτεθέντα διηρέθησαν, καὶ διήλθον ἐν τῇ Μέσῃ θριαμβευόμενα ἀπὸ τῆς Χρυσῆς Πόρτης ἕως τῆς Χαλκῆς τοῦ παλατίου, ἀνοίσεως τότε τῆς μέσης καὶ μεγάλης Χρυσῆς Πόρτης. – On Hierieia, see Belke, *Gates* 229-231, in this volume.

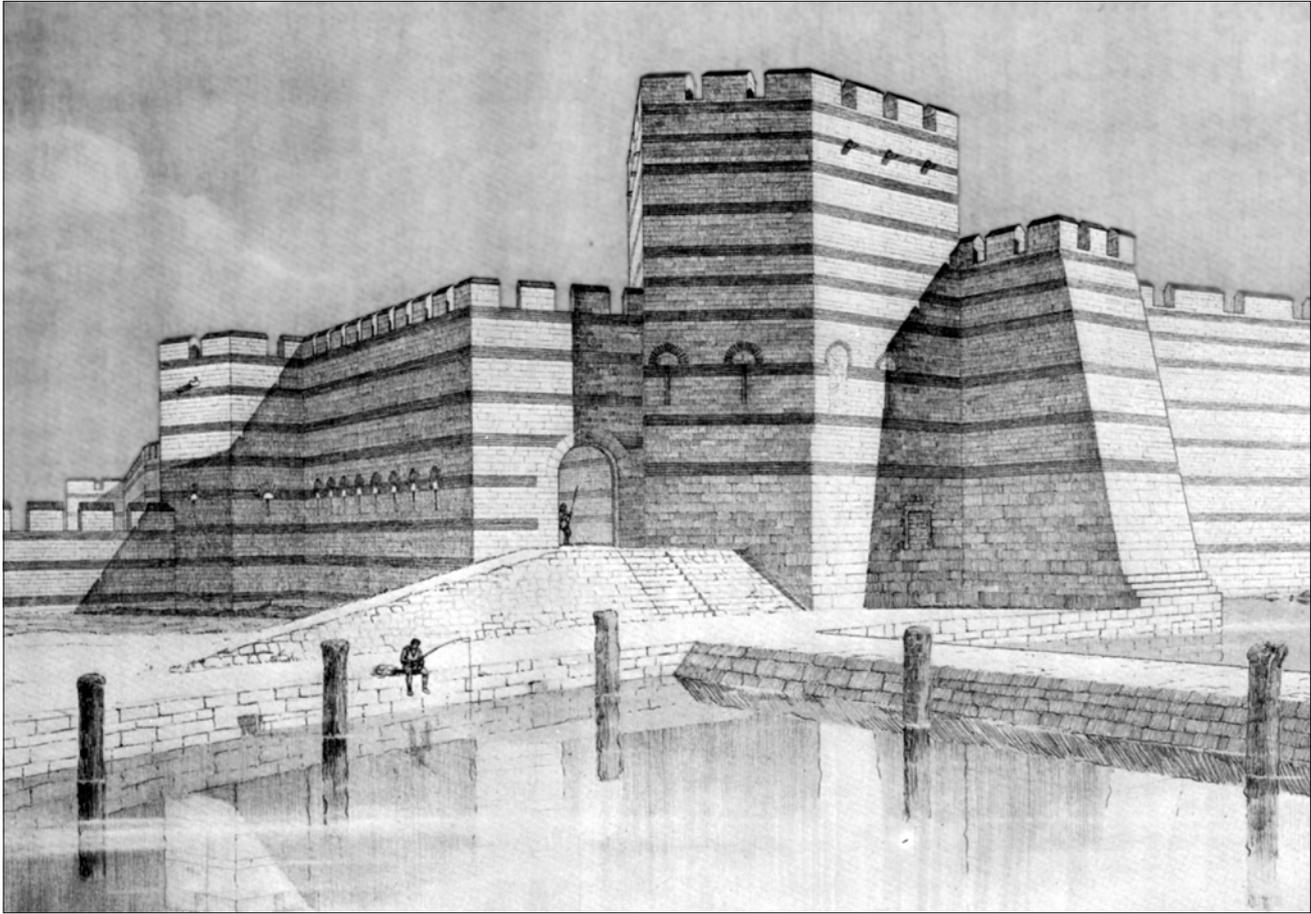


Fig. 5 Reconstruction of the quay of Brachialion by W. Karnapp. – (From Krischen, Landmauer, pl. 18).

The next evidence for the use of the Brachialion quay may be connected with the solemn entry of the Mandyllion of Edessa, one of the most venerated Christian relics, in Constantinople in August 944. On 15 August, it arrived by ship at Blachernae, where the emperors celebrated the feast of the Dormition, and was then brought to the Great Palace. A *narratio* written on occasion of gaining back this most holy relic and bringing it to Constantinople describes the further route of its translation:

»On the following day, the sixteenth of the month, they again kissed and worshipped it with the due respect, and then the priests and the young emperors (the elder emperor had stayed at home as he was ill) picked it up with psalms, hymns and bright lights. They took it down the road to the sea and once again placed it in the royal ship, rowing around the city so that it might in some way preserve the city by its sea circuit.

They moored outside the city's western wall, where they disembarked. The emperors, all the members of the senatorial council, the patriarch and the whole body of the clergy went on foot with a fitting escort. They went with the box holding the precious and sacred objects as if it were another Ark of the Covenant or something even greater. They proceeded outside of the walls up to the Golden Gate and then went into the city, forming a procession with lofty psalms, hymns and spiritual chants and the light of countless torches as they made their way through the centre of the city, believing that in this way the city would be made holier and stronger, and would be kept unharmed and unassailable for all time«²¹.

As we saw from the account of the Book of Ceremonies, which is contemporary to the *Narratio de imagine Edessena*, an important route for tenth-century Byzantine ceremonies

21 English translation by Guscini on p. 57 of the critical edition. – *Narratio de imagine Edessena* 28 (56, 8-25 Guscini): Τῆ δὲ ἰκνουμένη τῶν ἡμερῶν, ἥτις ἐξκαιδεκάτῃ τοῦ μηνὸς ἦν, μετ' αἰδοῦς καὶ εὐλαβείας πάλιν τὸν ἀσπασμόν καὶ τὴν προσκύνησιν ποιησάμενοι καὶ λαβόντες αὐτὴν ἐκείθεν οἱ τε ἱερεῖς καὶ οἱ νεάζοντες βασιλεῖς, ὁ γὰρ γέροντος οἰκουρὸς δι' ἀσθένειαν κατελείπετο, μετὰ ψαλμῶν καὶ ὕμνων καὶ δαυιλοῦς τοῦ φωτὸς διὰ τῆς πρὸς θάλασσαν καθόδου εἰς τὴν βασιλείον τριήρην αὐθις ἐνθέμενοι, τῆς πόλεως ἐν χρῶ σχεδὸν τὴν εἰρεσίαν ποιούμενοι, ἵνα τρόπον τινὰ διαζώσῃ τὸ ἄστυ διὰ τῆς ἐν θαλάσῃ πορείας αὐτῆς, ἐκτὸς τοῦ πρὸς δύσιν τείχους τῆς πόλεως προσωρμίσθησαν, ἔνθα τῆς νεῶς ἐκβάντες, πεζοποροῦντες

οἱ τε βασιλεῖς καὶ πάντες οἱ τῆς γερούσιας βουλῆς καὶ ὁ τῶν ἱερῶν κατάρχων μετὰ παντὸς τοῦ τῆς ἐκκλησίας πληρώματος, τῆ προσηκούσῃ δορυφορία, ὡς ἄλλην κιβωτὸν μάλλον δὲ καὶ ὑπὲρ ταύτην, τὸ τῶν ἁγιωτάτων καὶ τιμίων φρουρὸν σκεῦος παρέπεμπον. Καὶ τὰ ἐκτὸς τοῦ τείχους μέχρι τῆς Χρυσῆς διελθόντες πύλην, εἶτα ἐκείθεν ἐντὸς γεγονότες τοῦ ἄστεος μετὰ μετέωρων ψαλμῶν καὶ ὕμνων καὶ ὕδων πνευματικῶν καὶ ἀπείρου λαμπάδων φωτὸς τὴν πάνδημον συγκροτοῦντες παραπομπὴν διὰ μέσης τῆς πόλεως τὴν πορείαν διήνουν, ἁγιασμοῦ μεταλαβεῖν καὶ κρείττονος σθένους τὴν πόλιν διὰ τοῦτο πιστεύοντες καὶ ἀβλαβῆ καὶ ἀπόρητον εἰς τὸν αἰῶνα συντηρηθῆσεσθαι. – Cf. Auzéry, *Déplacements* 362.

began at the Brachialion quay in the southwest corner of Constantinople's land defences and went further to the Golden Gate²². Its next use is attested when Nikephoros II Phokas arrived in Constantinople on 16 August 963²³. After the *parakoimomenos* Basil broke Joseph Bringas's resistance and exercised control over the city, General Nikephoros's way to the imperial throne was open. In the shipyard, warships armed with Greek Fire were prepared and sent to Hiereia on the Asian bank of the Bosphorus, where the pretender to the throne sojourned²⁴. On the morning of 16 August, Nikephoros boarded the imperial dromon and accompanied the warships to the European shore. According to the *Book of Ceremonies*, he landed at the Golden Gate, where the whole population received him solemnly. Nikephoros disembarked and rode on horseback to the Abramites Monastery, which was located between Hebdomon and the Golden Gate. After a short stay to change clothes, Nikephoros Phokas was able to enter the city²⁵. The exact location of the landing is indicated in the *Book of Ceremonies*, which is more detailed than Leo the Deacon's historical work²⁶. After landing, Nikephoros

22 Heher/Simeonov, *Ceremonies by the Sea*.

23 According to McCormick, *Analyzing Imperial Ceremonies* 12, the date was not chosen at random. On 16 August 963, the 245th anniversary of the victory against the Arabs was celebrated, who in 718 had lifted the second siege of Constantinople.

24 Leon Diakonos, *Historia* III 7 (47, 5-8 Hase). – Ioannes Skylitzes, *Synopsis* 258, 54-56 (Thurn). – Konstantinos Porphyrogennetos, *De cer.* I 105 (II 453, 82-89 Dagron/Flusin/Feissel). – For a critical overview of the sources of Skylitzes and Leo the Deacon, see Sjuzumov, *Istočniki*.

25 Konstantinos Porphyrogennetos, *De cer.* I 105 (II 453, 87-92 Dagron/Flusin/Feissel): ἐμβὰς εἰς τὸ βασιλικὸν δρομόνιον προσέβαλεν ἐν τῇ Χρυσῇ Πόρτῃ κάκεϊ προσυπήντησεν αὐτῷ πᾶσα ἡ πόλις, μακροὶ τε καὶ μεγάλοι, μετὰ λαμπάδων καὶ θυμιαμάτων. Κατελθὼν δὲ ἀπὸ τοῦ δρόμονος καὶ ἵππεύσας διήλθεν διὰ τοῦ ἔξω παρατειχίου, καὶ διὰ τῆς πλακωτῆς στραφεῖς εἰσῆλθεν εἰς τὴν μονὴν τῶν Ἀβραμιτῶν τὴν λεγομένην Ἀχειροποίητον τῆς Θεοτόκου.

26 Leon Diakonos, *Historia* III 7 (47, 9-11 Hase).

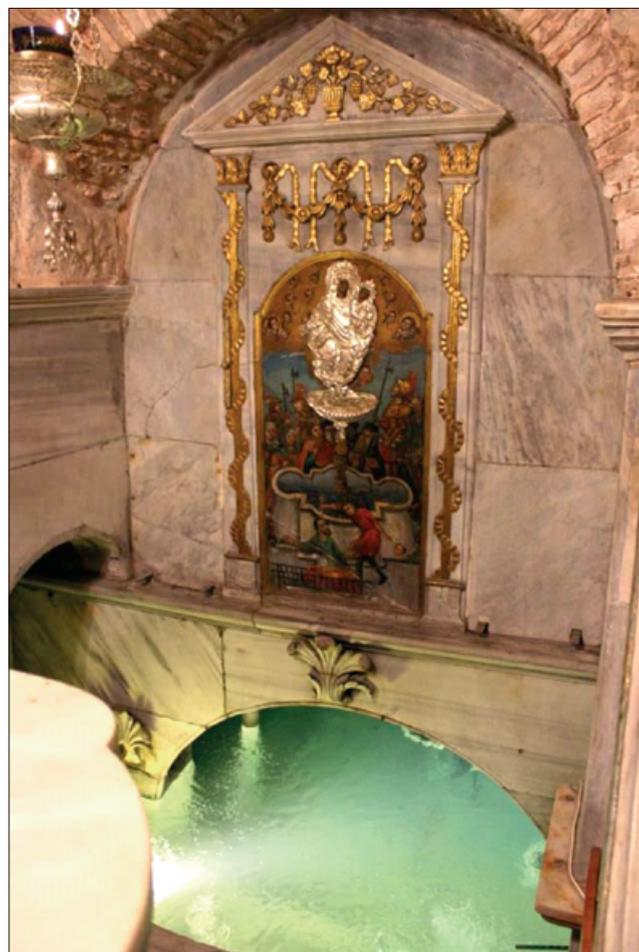


Fig. 6 The fountain of the Church of the Virgin at Pege. – (Photograph G. Simeonov).

Fig. 7 View of the Golden Gate, Brachialion and Mermerkule (Marble Tower). – (Photograph G. Simeonov).



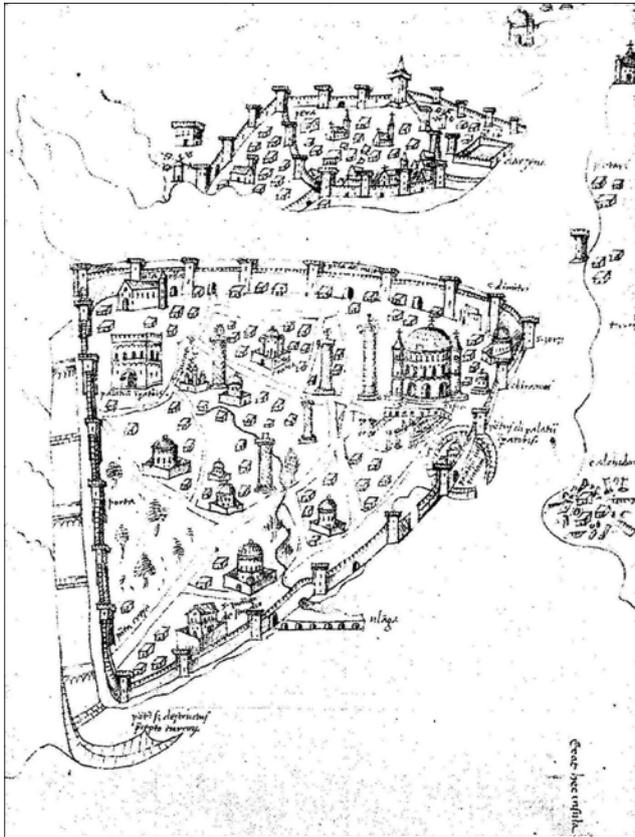


Fig. 10 View of Constantinople by Cristoforo Buondelmonti, Rome, Biblioteca Vaticana, Fond Rossiano, X, 82-702. – (From Gerola, Vedute).

some copies of Cristoforo Buondelmonti's view of Constantinople show a harbour in the area of the southwest wall of the city. They can be assigned to two groups. The first is the drawing from Ravenna and the one in Codex Rossiano 702 in the Biblioteca Vaticana in Rome³². Both show an arch-like harbour structure (mole or quay?) that consists of two rows of stone blocks (fig. 10). The layout on the illustration from Ravenna is accompanied by the inscription *portus destructus ex preceptu turchorum*³³, the drawing from Rome comments similarly *portus sed destructus preceptu turcorum*³⁴. This destruction was linked by Asutay-Effenberger to the events of 1391 when Sultan Bayezid I instructed the Byzantine Emperor John V to tear down the Polichnion fortifications in the southwest corner of the city³⁵.

Yet, the *portus* in the illustrations is not located between the main wall and the moat, but rather begins in front of the outer side of the moat and protrudes into the Sea of Marmara. This may speak against equating the system in the drawings with the quay of Brachialion already discussed.

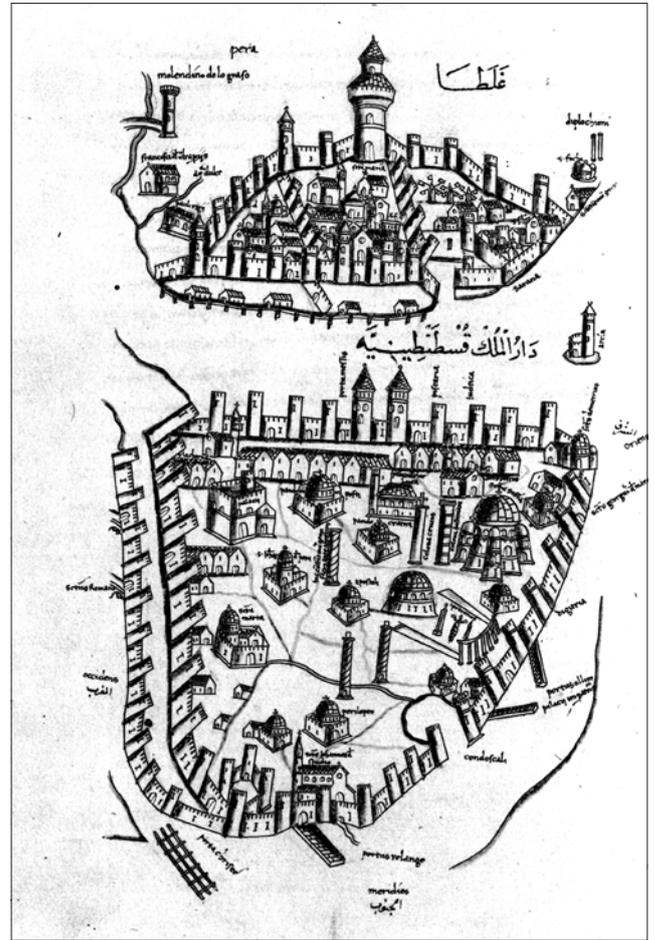


Fig. 11 View of Constantinople by Cristoforo Buondelmonti, Paris, Bibliothèque nationale de France. – (From Effenberger, Illustrations fig. 1).

However, this difference may also be explained by the schematic style of the representations.

As far as the second group of copies of the Constantinople *veduta* by Buondelmonti is concerned, they are less precise with regard to a harbour west of the city: they either show a headland (Rome, Florence, Paris) or a grid lying freely in the sea (Paris)³⁶. The latter is most likely a misinterpretation of the landing stage in other *vedute* (fig. 11). The embankment on the coast that was created during the construction of the Kennedy Caddesi does not clarify whether there was another landing stage between the quay of Brachialion and the bay of Hebdomon in the Late Byzantine period.

The topography of the area of Mermerkule (Marble Tower) must also be taken into account with regard to the Polichnion landing stage³⁷. The Brachialion quay is only one of several

32 Gerola, Vedute 250-251 and the illustrations on pp. 248 (Rome) and 253 (Ravenna).

33 Gerola, Vedute 251. 268.

34 Gerola, Vedute 248 and 268. On the vedute, see Effenberger, Pictorial Sources, in this volume.

35 Asutay-Effenberger, Landmauer 111-112 and 115-117. – Cf. Dukas, Historia XIII 4 (77, 4-12 Grecu). – Kleinchroniken 7, 23 (l 69, 1-6 Schreiner).

36 Effenberger, Illustrationen fig. 1. – Gerola, Vedute.

37 On the Polichnion, see Asutay-Effenberger, Landmauer 110-117. – Peschlow, Mermerkule. – Peschlow, Residenz. – Effenberger, Polichnion 7-8.



Fig. 12 Remains of a structure east of the Marble Tower. – (Gülmez Frères. Mermer-Kalé, Aux Sept Tours, Neg. No. 55, Undated. GRI Special Collections).

options. Old photographs of Istanbul testify to the existence of a stone quay (or mole?) east of Mermerkule (fig. 12)³⁸. Written evidence also locates the landing stage of the Stoudiou Monastery in the same area, which was used by the emperor during his visit³⁹. In her analysis of Buondelmonti's drawings, Asutay-Effenberger connected the *portus* in the *vedute* of Constantinople with the port of Polichnion, the location of which »clearly points to the neighbourhood of Mermerkule«⁴⁰.

Which of the two harbour structures that are today buried under the embankment can be interpreted as the harbour of the Polichnion? Taking into account the construction concept of this fortification, which Emperor John V Palaiologos had built during the conflicts with his grandson John in 1389, it would make sense, not to locate these harbour facilities outside the Theodosian wall, but to the east of Mermerkule⁴¹. Concerning the term »Harbour of the Golden Gate« – meaning the gate in the western part of the city – in

Late Byzantine times, a clear identification with the quay of Brachialion or with the landing stage east of Mermerkule is unfortunately no longer possible due to insufficient source documentation.

The Brachialion landing stage is mostly mentioned in the written sources in connection with Byzantine ceremonies. In older literature, this landing site was equated with the *apobathra ton Pegon*, i. e., from Pegai⁴². However, one has to be careful due to the confusion of the two almost homonymous locations: Pege in the western area of Constantinople and Pegai on the northern bank of the Golden Horn⁴³. It is difficult to say whether the pilgrims and monks who came to the Sanctuary of Pege before the Theodosian wall from different areas of the empire – such as from Chaldia⁴⁴, Thessaly⁴⁵, the Peloponnese⁴⁶, Serres⁴⁷ or the Meander Valley⁴⁸ – arrived directly at the landing stage of Brachialion, or, more plausibly, that they first landed at one of the major harbours in the capital and went to Pege from there⁴⁹.

38 Müller-Wiener, *Bildlexikon* 319 and fig. 367 considers this mole east of Mermerkule to be possible remnants of the »Chrysis Harbour« mentioned in Doukas's historical work.

39 Konstantinos Porphyrogennetos, *De cer.* II 13 (III 89-91, 104-135 Dagron/Flusin/Feissel). – van Millingen, *Walls* 264-265. – See the *Vita Euthymii VIII* (51, 20-23 Karlin-Hayter), according to which Saint Euthymios went to his monastery in Psamatheia near Stoudiou by ship after a meeting with the emperor.

40 Asutay-Effenberger, *Landmauer* 115.

41 Byzantine and Slavonic sources speak in favour of such a hypothesis. From the account of *Kleinchroniken* 7, 21-22 (68, 1-69, 13 Schreiner) we learn that Manuel, second son of John V Palaiologos, left the besieged Polichnion in 1390 onboard a ship and sailed to Rhodes in order to find help against the usurper John VII. Manuel came back with a small fleet and, coming out of Polichnion, he drove his rebellious nephew out of Constantinople. Bearing in mind that Polichnion was under siege both when Manuel left and came back, it makes sense to search for its harbour to the east of Mermerkule rather than to identify

it with the quay that lied to the west of Brachialion and was thus vulnerable to enemy attacks. Furthermore, talking about John VII's insurrection, Ignatius of Smolensk makes an interesting remark that supports the identification of Polichnion's harbour with a landing stage to the east of Mermerkule. According to him, Manuel »penetrated the limen, that is to say, the harbour, and entered the castle where his father was. (A stone wall with high towers extended to the water's edge so that the enemy was unable to reach him [the old emperor] either by sea or by land)«, cf. Majeska, *Russian Travelers* 102 and 103.

42 Gedeon, *Zoodochos pege* 84. – Nomides, *Zoodochos Pege* 158-163.

43 Cf. Külzer, *Ostthrakien* 572-575, especially 575.

44 *Miracula Deiparae ad Fontem* 30 (270-274 Talbot).

45 *Miracula Deiparae ad Fontem* 12 (228-232 Talbot). – Nikephoros Xanthopoulos, *Thaumata* 9 (24-26 Pamperis).

46 Nikephoros Xanthopoulos, *Thaumata* 49 (67-68 Pamperis).

47 Nikephoros Xanthopoulos, *Thaumata* 63 (89 Pamperis).

48 Nikephoros Xanthopoulos, *Thaumata* 62 (87 Pamperis).

49 Cf. Simeonov, *Crossing the Straits* 43-45 and 50-54.

Summary / Zusammenfassung

The Landing Stage at Brachialion

At the point where the Theodosian land wall once met the sea wall, there was an impressive quay, the remains of which were preserved until the twentieth century. The so-called Quay of Brachialion is mainly documented in sources from the Middle Byzantine period, describing its role in Byzantine ceremonies. The facility was used for processions outside the capital, for example, the visit to the Church of St Mary at Pege, as well as during the solemn ceremonial entries of the Byzantine emperors into Constantinople. The question of an identification of the quay with the Late Byzantine harbour of the Polichnion is unresolved.

Die Brachialion-Anlegestelle

An der Stelle, an der einst die theodosianische Landmauer auf die Seemauer traf, befand sich eine prächtige Kaianlage, deren Reste bis in das 20. Jahrhundert erhalten waren. Der sogenannte Kai des Brachialion ist vor allem in Quellen der mittelbyzantinischen Zeit belegt, die seine Rolle im byzantinischen Zeremoniell überliefern. Die Anlage wurde sowohl bei Prozessionen außerhalb der Hauptstadt angelaufen, so dem Besuch in der Marienkirche in Pege, als auch während feierlicher Einzüge der byzantinischen Kaiser in Konstantinopel. Die Frage nach einer Identifizierung des Kais mit dem spätbyzantinischen Hafen des Polichnion hat offen zu bleiben.

The Moorings at Kosmidion

A Healing Centre on the Shores of the Golden Horn

According to Dionysios Byzantios and Pseudo-Hesychios, an altar to the nymph Semystra was located where the rivers Barbyzes (today Kâğithane Deresi) and Kydaros (today Alibey Deresi) flow »into the sea«, meaning the upper end of the Golden Horn¹. Pseudo-Hesychios further reports the construction of a temple of the Dioscuri Castor and Pollux at this altar at the mouth of both rivers, where people experienced

relief from their suffering². These passages are worth mentioning for two reasons. Firstly, they describe a perception that deviates from today's topography, because both rivers flow into the Golden Horn, in the area of Silahtarağa, to be precise. In antiquity, the northernmost part of the estuary, where still fresh water is found, was apparently seen as a separate transition zone, *potamothalassa*, i.e., »river sea«³. Secondly, the location of the Temple of the Dioscuri in Eyüp provides another indication of the location of the later Kosmidion Monastery in the same area (fig. 1)⁴.

- 1 Dionysii Byzantii Anaplus 24 (12, 1-6 Güngerich). – Pseudo-Hesychios, Patria 3 (2, 1-10 Preger). – On the two rivers, see Külzer, Ostthrakien 279-281. 484-485.
- 2 Pseudo-Hesychios, Patria 15 (7, 3-6 Preger): τέμενος [...] ἀνήγειρεν [...] τῶν δὲ Διοσκούρων, Κάστορος τέ φημι καὶ τοῦ Πολυδεύκου, ἐν τῷ τῆς Σεμέστρης βωμῷ καὶ τῇ τῶν ποταμῶν μίξει, ἐν ᾧ καὶ λύσις τῶν παθῶν τοῖς ἀνθρώποις ἐγίνετο.
- 3 On *potamothalassa*, see Ioannes Kinnamos, Eritome II 14 (75, 10-14 Meineke). – See Berger, Untersuchungen 535. – Schneider, Blachernen 83-86. – Hurbanič, St. Callinicus Bridge 18. – Külzer, Ostthrakien 628 (Sapra Thalassa). – The author of the Synaxar of the Akathistos Hymn, which describes the decisive sea battle in the Golden Horn during the Avar siege in 626, also sees the area north of the Blachernae district as the end of the estuary, see Synaxar of the Akathistos 1352 B (PG 92): παρὰ τὸ χεῖλος τῆς θαλάσσης τὸ ἐν Βλαχέρναις ἐξέβρασεν. – This understanding is also confirmed by the comparison of the reports by Joseph Gen-

- esios and Theophanes Continuatus on the siege of Constantinople by Thomas the Slav in 821. According to Genesisios, the land and sea forces of the pretender to the throne united at the mouth of the Barbyzes, which Theophanes Continuatus locates at Blachernae, see Ioseph Genesisios, Libri regum II 5 (27, 28-29 Lesmüller-Werner/Thurn): συνελθόντες ἀλλήλοις ἀπὸ τε γῆς καὶ θαλάττης κατὰ τὰς Βαρβύσου τοῦ ποταμοῦ ἐκβόλας. – Theophanes Continuatus, Chronographia II 14 (86, 22-23 Featherstone/Signes-Codoñer): γενομένου δὲ τούτου καὶ κατὰ ταῦτον ἀναφανέντων τῶν τε ναυτικῶν καὶ πεζικῶν δυνάμεων ἐν τῷ πρὸς Βλαχέρναις κόλπῳ. – Ioannes Skylitzes, Synopsis 33, 60-61 (Thurn).
- 4 Janin, Constantinople 461-462. – Janin, Sièges de Constantinople 289. – Külzer, Ostthrakien 471-473. – Majeska, Russian Travelers 332-333. – Here it is necessary to clarify the use of the name »Kosmidion« in this chapter. To my knowledge, only a church dedicated to the Holy Unmercenarys in the northwest suburbs of

Fig. 1 View of Constantinople and the Golden Horn from the Pierre Loti Tepesi. – (Photograph G. Simeonov).





Fig. 2 Pierre Loti Tepesi in Eyüp, Istanbul. – (Photograph G. Simeonov).

Nuray Özaslan has collected further arguments in favour of localisation on the Pierre Loti Tepesi (fig. 2)⁵. The Düsseldorf view of Constantinople by Cristoforo Buondelmonti also points to a correspondence regarding the location of the former Byzantine monastery and the Eyüp Sultan Mosque. The *veduta* depicts a mosque outside the Blachernae wall, which is situated on a bay and is labelled with the inscription *cesmidi*, i. e., Kosmidion (fig. 3)⁶. According to Nikephoros Gregoras, the camp of the young Andronikos III in Kosmidion in 1321/1322 was 30 *stadia* from the Palace of Blachernae⁷. A greater distance between the monastery and the city was also indicated by the report of William of Tyre concerning the camp of Godfrey of Bouillon, which the crusaders had established to the north-west of Constantinople in early 1097⁸.

Based on the information about the existence of a *loutron* or *pribaton* (bath) in the shrine of the Anargyroi, Cyril Mango argued for a location near the Church of the Theotokos in Blachernae, which, in his opinion, shared a common bath with the sanctuary of Cosmas and Damian. Accordingly, he located the monastery on the hill in front of the Blachernae

walls, where the southern end of the Haliç Bridge is today⁹. Mango's reasoning is questionable in this case, especially since the *miracula* of the Saints Cosmas and Damian indicate a greater distance between their sanctuary and the Church of the Theotokos¹⁰.

Recently, however, Halûk Çetinkaya proposed a third location for the Kosmidion Monastery. Based on archaeological research in an area west of Zal Mahmud Paşa Camii, he identified the Byzantine remains there as the shrine of the Holy Unmercenary¹¹. Thus, the question about the site of the Kosmidion Monastery still remains open.

In Late Antiquity, the Church viewed physician saints as a powerful means of suppressing the cult of the pagan Dioscuri and establishing the worship of the Anargyroi in their place. If one considers that the church of another pair of Anargyroi – Cyrus and John – was built on the site of the pagan temple of Isis in Menouthis¹², it can be assumed that the Church of Saints Cosmas and Damian in Kosmidion was meant to replace the cult site of the Dioscuri¹³. The Christian shrine on the banks of the upper Golden Horn that was dedicated to the Holy

Constantinople is mentioned in Byzantine sources until the 9th c. A monastery by the name of Kosmidion emerged around this church, probably after the end of the Iconoclasm. According to the accounts of Symeon Logothetes, *Chronicon* 131, 22 (242, 199-201 Wahlgren) and Ioannes Kantakuzenos, *Historia* IV 11 (III 70, 14-17 Schopen), we can deduce that the region where the monastery was situated was named after the foundation. In this chapter, therefore, the name of Kosmidion will be used to identify the suburban area between the land wall of Blachernae and Pierre Loti Tepesi. – Cf. Taddei, Kosmidion, who gives new insights into the emergence of the name »Kosmidion« relating to Constantinople's suburb, based on the spread of the same toponym in Italy. In his view, the Italian »replicas« of Kosmidion occurred due to migration of monks from Constantinople – from the Monastery of the Anargyroi alike – to the West in the 7th-8th c.. However, the lack of such a toponym in the so-called *Scriptor Incertus*, whose detailed account on the meeting between Krum and the Byzantine delegation in 813 on the shore of the Golden Horn refers to the area simply as »outside the Blachernae« and as »the site/place of the Saint Unmercenary« (see below pp. 215-216) makes me somehow sceptical whether the name of »Kosmidion« was used by the Byzantines to identify the north-west suburb of Constantinople before the middle of the 9th c..

5 Özaslan, Kosmidion 385-388.

6 Effenberger, *Illustrationen* 40 and fig. 32.

7 Nikephoros Gregoras, *Historia* VIII 11, 3 (I 353, 7-9 Schopen/Bekker). – Ioannes Kantakuzenos, *Historia* I 27 (I 134, 2-18 Schopen). – 30 *stadia* are about 5 km see Schilbach, *Metrologie* 33-34.

8 Willelmus Tyrensis, *Chronicon* II 8 (172, 24-30 Huygens): *rursus ante urbem in locis liberis et late patentibus constiterunt, ubi habito conflictu inter ecclesiam sanctorum martyrum Cosme et Damiani, que hodie vulgari appellatione dicitur Castellum Boamundi, et palatium novum quod dicitur Blaquernas, quod in angulo civitatis iuxta portum situm est.*

9 Mango, *Cosmas and Damian* 189-191. – The location suggested by Mango is also accepted by Booth, *Cosmas and Damian* 116 n. 8, and, to a certain degree, by Taddei, *Kosmidion* 21-23.

10 *Miracula Cosmae et Damiani* 18 (145, 34-38 Deubner).

11 Çetinkaya, *Kosmidion* 133-137.

12 Montserrat, *Pilgrimage* 258-278.

13 The *Miracula Cosmae et Damiani* 9 (114-116, 7-22, 36-45 and 63-71 Deubner) testify to the old belief – against the Christian point of view – that the pagan pair Castor and Pollux gave healing at Kosmidion.

Fig. 3 View of Constantinople, Pera and the upper Bosphorus by Cristoforo Buondelmonti, *Liber insularum archipelagi*. – (Düsseldorf, University and State Library, Ms. G 13, fol. 54r, c. 1485-1490; the manuscript is on loan from the city Düsseldorf).



Unmercenaries, dates back to a distinguished family of Syrian or Isaurian descent and is dated to the second half of the fifth century, according to Mango¹⁴. Already during the reign of Emperor Justinian I (527-565), the sanctuary had become a local pilgrimage site, demonstrated by Procopius's report of the miracles of the Anargyroi. Procopius also reported on the type of journey to the Church of Saints Cosmas and Damian:

»So when any persons find themselves assailed by illnesses which are beyond the control of physicians, in despair of human assistance they take refuge in the one hope left to them, and getting on flat-boats they are carried up the bay to this very church. And as they enter its mouth they straightway see the shrine as on an acropolis, priding

¹⁴ Mango, Cosmas and Damian 190-191. – On the founding of the monastery, see *Patria Konstantinupoleos III* 146 (261, 1-5 Preger). – Berger, *Untersuchungen* 670-671.

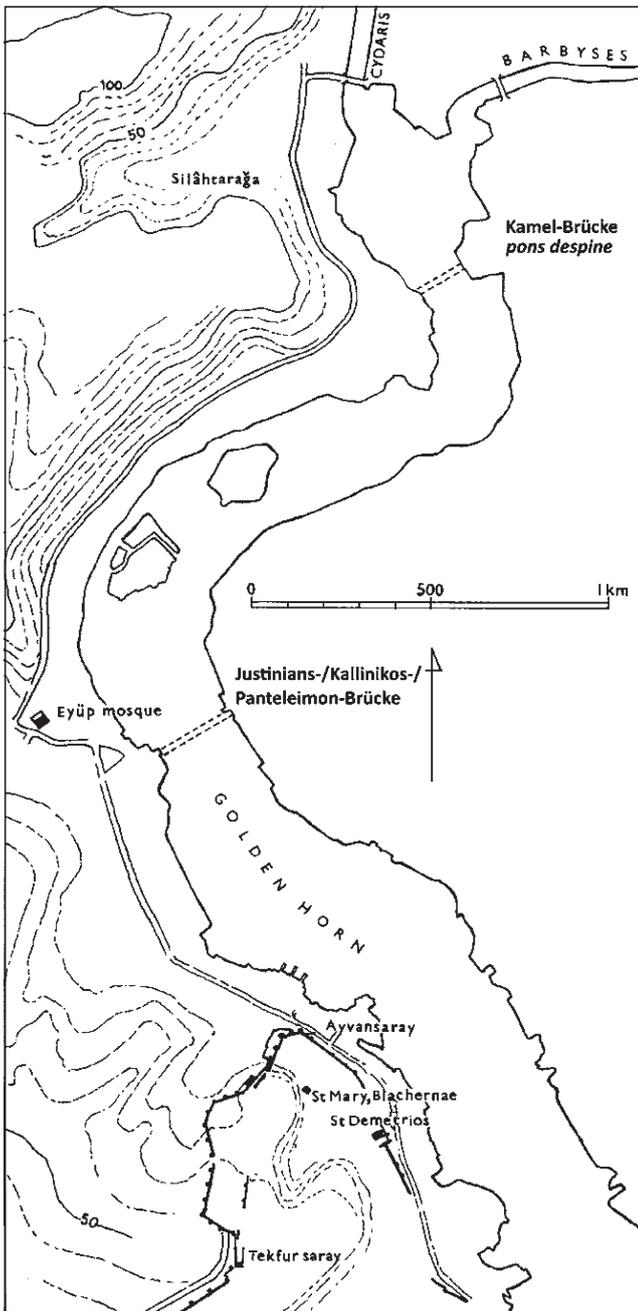


Fig. 4 Map of the upper region of the Golden Horn (by C. Mango, modified by A. Effenberger; from Effenberger, *Brücken* 174)

itself in the gratitude of the Emperor and permitting them to enjoy the hope which the shrine affords»¹⁵.

A person suffering from dropsy visited the church by boat¹⁶. In the two variants of the miracle of his healing, different terms for the vessel that the old man used are given: *akation*, *karabos* or *karabion*, *plouarion* and *skaphos*¹⁷. Apart from *karabos*, these mean rather small vessels. The silting up with sand and mud brought in by the Barbyzes and Kydaros rivers made it impossible for larger vessels to enter the uppermost part of the Golden Horn¹⁸. The Kallinikos Bridge, a stone bridge erected by Justinian, made this even more difficult. According to Leo the Deacon, the entire Golden Horn to the Kallinikos Bridge was open to cargo ships¹⁹. The question of its location can be considered solved thanks to the research of Hurbanič. It was located in the area in front of the land walls of Blachernae and was later denominated as the Panteleimonos Bridge²⁰. Due to the river deposits, visitors to the sanctuary needed smaller means of transport, i.e., the flat-bottomed boats (*baris*) mentioned by Procopius. This type is characterised by its lower draught and is suitable for navigating in shallow waters. If the sick or needy came from a distance²¹, it can be assumed that they first landed at one of the large harbours of Constantinople²². From there, or one of the moorings on the Golden Horn, they reached their desired destination – the church (and the later monastery) of the physician saints – on shallow-draught barges. There were also sick people who went to Kosmidion on horseback (fig. 4)²³.

In the eleventh century, Emperor Michael IV (1034-1041) suffered from dropsy and sought the help of the Anargyroi. He had the monastery on the Golden Horn thoroughly renovated and furnished with magnificent mosaics and masterpieces of Byzantine wall painting²⁴. However, this did not have the effect he had hoped for, since the Emperor soon died from his condition. His remains were buried in the monastery of the saints. In this connection, the sources document a return trip of the Empress Dowager Zoe from Kosmidion, where her spouse Michael IV was buried, to the Grand Palace in the south of the capital (fig. 5)²⁵.

15 English translation by Dewing, *Buildings of Procopius* 63. – Prokopios, *De aedificiis* I 6, 7-8 (30, 15-23 Haury/Wirth): ἐπειδὴν τέ τινες ἀρρωστήμασιν ὀμιλήσαιεν ἰατρῶν κρείττοσιν, οἶδε τὴν ἀνθρωπιαν ἀπογόντες ἐπικουρίαν ἐπὶ τὴν μόνην αὐτοῖς ὑπολειμμένην ἐλπίδα χωροῦσι, καὶ γενομένοι ἐν ταῖς βάρεσι πλέουσι διὰ τοῦ κόλπου ἐπὶ τοῦτον δὴ τὸν νεῶν. ἀρχόμενοι τε τοῦ εἰσπλοῦ εὐθὺς ὄρωσιν ὡσπερ ἐν ἀκροπόλει τὸ τέμενος τοῦτο ἀποσεμνυμένον τε τῆ τοῦ βασιλέως εὐγνωμοσύνη καὶ παρεχόμενον τῆς ἐντεῦθεν ἐλπίδος αὐτοῖς ἀπολαύειν. LSJ 307 translates *baris* as »flat-bottomed boat«, which fits the context well in the case discussed.

16 *Miracula Cosmae et Damiani* 1 (98, 13-19 Deubner). – *Miracula Cosmae et Damiani* 5 (18, 4-10 Rupprecht). – On the therapeutic process, see Heinemann, *Ärztetheiligen* 269-270. – Toul, *lamata* 262 and 265. – López Salvá, *Actividad asistencial*. – Magoulias, *Lives*.

17 *Miracula Cosmae et Damiani* 1 (98, 16-19 Deubner). – *Miracula Cosmae et Damiani* 5 (18, 4-10 Rupprecht). – Festugière, *Côme et Damien* 98 translates all terms as »barque«, i.e., boat, without going into more detail on the subject.

18 See pp. 214 and 220-221 in this essay.

19 Leon Diakonos, *Historia* VIII 1 (129, 8-14 Hase).

20 Hurbanič, *Posledná vojna* 196-200. – Hurbanič, *Avar Siege* 192-195. – For a detailed account, see Hurbanič, *St. Callinicus Bridge* 15-24. – However, Effenberger, *Brücken*, pleads for the existence of two bridges on the upper Golden Horn – the old one, built by Justinian I close to the Blachernae and known as the Kallinikos or Panteleimonos Bridge, and a structure from the Palaiologan time in modern Silâhtarğa known as the Camel Bridge or *pons despine*.

21 *Miracula Cosmae et Damiani* 12, 13 and 18 (128-129, 10-16; 132-134, 1-60; 144-147, 1-113 Deubner). – *Miracula Cosmae et Damiani* 18 (45, 6-22 Rupprecht). – See Simeonov, *Crossing the Straits*.

22 See Heher, *Harbour of Julian*, Külzer, *Harbour of Theodosius*, and Kislinger, *Neorion*, in this volume.

23 *Miracula Cosmae et Damiani* 42 (200, 14-16 Deubner). – *Vita Theodori Syceotis* 154 (125, 51-56 Festugière). – See also Efthymiadis, *Sea as Topos*. – Külzer, *Pilgerwege und Kultorte* 198-199.

24 Michael Psellos, *Chronographia* IV 31-32 (I 67, 4-19 and 1-5 Reinsch).

25 Michael Attaleiates, *Historia* IV (9, 1-3 Pérez Martín) = Michael Attaleiates, *Historia* 8, 22-26 (Tsolakes).



Fig. 5 Lead seal of the Monastery of the Anargyroi at Kosmidion, 11th c. – (Dumbarton Oaks Online Catalogue of Byzantine Seals, <https://www.doaks.org/resources/seals/byzantine-seals/BZS.1951.31.5.281/>, 20.9.2021). – Scale 1:1,5.

Kosmidion and the Avar Siege of 626

In 623, the Church of the Anargyroi was looted by Avar warriors²⁶. Three years later, the area of Kosmidion was even to become a theatre of war, where an important battle in Byzantine history took place²⁷. In the absence of Emperor Heraclius (610-641) and the main force of the Byzantine army, who were fighting the Persians in eastern Asia Minor, the vanguard of the Avar forces reached Constantinople on 29 June 626. In the course of the following month, the entire army of the Avar Khagan, consisting of Avars, Slavs, Bulgars and Gepids, gathered in front of the city walls²⁸. According to George of Pisidia, this army comprised 80 000 men²⁹.

According to Theophanes, the Avars had transported masses of men from the Danube region on hollowed-out

watercraft (*skaphe glypta*) and filled the Golden Horn with them³⁰. At first glance, this contradicts the information from other sources, according to which the Slavic dugouts were brought in overland³¹. On the basis of the *Logos enkomias-tikos* of the Patriarch Germanos to the Mother of God, the editor of the text Grumel also argued for the land route³². However, some researchers take the opposite opinion, according to which the Slavic fleet took the sea route³³. It is clear that due to the presence of the Byzantine navy in the waters around Constantinople, the Slavic fleet could not have penetrated the Golden Horn through its mouth³⁴. This is confirmed by the *Easter Chronicle*, which recorded the presence of *monoxyla* in the area of Kosmidion: the Avar Khagan launched his fleet at the Kallinikos Bridge on the fourth day of the siege (Friday, 1 August 626)³⁵. It follows that the dugouts reached Constantinople overland.

However, does this inevitably apply to the entire route from the border of the Byzantine Empire to the north-western suburbs of the capital, or does this statement only affect the last section? The *Homily of Theodore Synkellos* sheds more light on this problem. He describes the beginning of the preparations of the enemy force that the Avar ruler had gathered for his campaign against Byzantium and notes: »There was a concentration of seaworthy watercraft (*xylla*) on the sea shore to secure the crossing of the barbarians«³⁶. From this, it can be deduced that the fleet travelled the greater distance across the Black Sea and then had to find an alternative route to the Khagan's camp due to the presence of the Byzantine navy in the Bosphorus. For this purpose, the transfer of the Slavic dugouts overland would offer itself. Hurbanič proposed the city of Derkos on the Black Sea as the starting point³⁷.

26 Chronicon Paschale 713, 5-14 (Dindorf). – See Theophanes, Chronographia AM 6110 (302, 1-4 de Boor) and Nikephoros Patriarches, Breviarium 10 (52, 30-37 Mango). – On the dating, see Pohl, Awaren 245-248. – Pohl, Avars 291-292. – Howard-Johnston, Witnesses 282.

27 On the Avar siege, see Hurbanič, Avar Siege. – Hurbanič, Posledná vojna. – Hurbanič, Konstantinopol 626. – Hurbanič, História a mýtus. – Barišič, Siège. – Stratos, Avars' Attack. – Stratos, Byzantium I 173-196. – Tsangadas, Fortifications 88-102. – Howard-Johnston, Siege. – Pohl, Avars 294-305. – Pohl, Awaren 248-255. – Kaegi, Heraclius 134-141.

28 Georgios Pisides, Bellum Avaricum 197-203 and 409-412 (185 and 194-195 Pertusi). – Chronicon Paschale 719, 10-14 and 724, 9-18 (Dindorf). – Theodoros Synkellos, Analecta 11, 11-14 and 15, 7-12 (Sternbach). – Theophanes, Chronographia AM 6117 (315, 7-12 de Boor). – Nikephoros Patriarches, Breviarium 13 (58, 15-20 Mango). – Georgios Kedrenos, Chronicon 440, 1 (II 695, 5-8 Tartaglia). – Logos enkomiasitikos 16 (195, 21-26 Grumel). – Konstantinos Manasses, Breviarium chronicon 3696 (201 Lampsidis). – See Hurbanič, Posledná vojna 139-145. – Hurbanič, Avar Siege 123-129.

29 Georgios Pisides, Bellum Avaricum 219 (186 Pertusi). – On the number of besiegers, see Pohl, Awaren 250, 427 n. 19. – Pohl, Avars 503 n. 99. – Stratos, Byzantium I 184. – Hurbanič, Posledná vojna 145-146. – Hurbanič, Avar Siege 135-136. – According to Theodoros Skutariotes, Chronica II 199, 4 (122, 8-10 Tocchi) *Rhosika monoxyla* (Russian dugouts) took part in the siege. This can be explained as a misinterpretation of older reports by the author, who lived in the 13th c.

30 Theophanes, Chronographia AM 6117 (316, 19-21 de Boor): καὶ εἰς σκάφη γλυπτὰ ἐκ τοῦ Ἰστρου πλῆθος ἄπειρον καὶ ἀριθμοῦ κρείττον ἐνέγκαντες τὸν κόλπον τοῦ Κέρατος ἐπλήρωσαν. – Georgios Kedrenos, Chronicon 440, 2 (II 696, 33-35 Tartaglia).

31 Chronicon Paschale 720, 15-16 (Dindorf): ἡγωνία δὲ χαλάσαι εἰς θάλασσαν τὰ μονόξυλα, ἅπερ ἤγαγεν μεθ' ἑαυτοῦ. – Logos enkomiasitikos 16 (195, 25-26 Grumel): ἔτι γε μὴν πλῆθος αὐτογλύφων νηῶν ἐπαγομένων, καὶ τοῦτο συμμάχων σκλάβων πληρώσαντος καὶ τῶ γείτονι κόλπῳ οὕτω λεγομένῳ τοῦ κέρατος ἐγκαθελκύσαντος.

32 Grumel, Homélie 189. – In agreement with this is Whitby/Whitby, Chronicon Paschale 175 n. 467. – According to Stratos, Byzantium I 185 the Khagan transported the *monoxyla* by carriage.

33 For an overview of the state of research, see Barišič, Siège 376 n. 2. – Hurbanič, Posledná vojna 315 n. 120. – Hurbanič, Avar Siege 140 n. 95.

34 Zuckerman, Learning 113 doubts that Byzantine warships were used against the Slavic dugouts and instead suggests that cargo ships were used. This research question shall be dealt with in more detail in a further publication.

35 Chronicon Paschale 720, 17-19 (Dindorf). On the *monoxyla*, see Strässle, To monoxylon. – Havliková, Slavic Ships. – Oračev, Bojno majstorstvo. – Rogers, Czech Logboats. – Rogers, Logboats. – Hurbanič, Konstantinopol 626 fig. 38.

36 My italics. – Theodoros Synkellos, Analecta 6, 22-23 (Sternbach): καὶ τῶν διὰ θαλάσσης ὑπηρετούντων ξύλων πρὸς τὸν διέκπλου τοῖς ἔθνεσιν συγκομιδαὶ πρὸς τὴν θάλασσαν. – See also *ibid.* 6, 25-27. – The passage is to be supplemented by ἐγένοντο or another finite verb. I would like to thank Rudolf Stefec/Vienna for his help in interpreting this passage. As for the historical background of this passage, it is clear from the rest of the text (*ibid.* pp. 5, 13-8, 17) that this reference to the Khagan's navy relates to the *preparation* of the entire military force on land and sea in the lands of the Avars (*barbaros ge*), and not to the beginning of the siege in the suburbs of Constantinople, as suggested by Hurbanič, Avar Siege 133 and 140 n. 97.

37 Hurbanič, Posledná vojna 152. However, Hurbanič seems to have meanwhile changed his mind. In the recent English version of his study (*Avar Siege* 133-134), he tends to argue for a transport of the Slavic dugouts only on the land route and gives up his earlier considerations concerning a journey along the Black Sea coast and a transfer of the *monoxyla* only on the land road between Derkos and the Golden Horn. Keeping in mind the various accounts on Slavic seafaring in Southeastern Europe (see n. 35) and the information of Theodore Synkellos mentioned above, that the *monoxyla* sailed from the Danube to the Black Sea shore of Eastern Thrace in 626 seems to me to be the better alternative. – On the transport over land of *monoxyla* by the Varangians in the 10th c., see Konstantinos Porphyrogenetos, De admin. imp. 9 (60, 53-57 Moravcsik/Jenkins). – Belke/Soustal, De administrando imperio 82.



Fig. 6 The land wall of the Blachernae Quarter. – (Photograph G. Simeonov).

After the Avars' first attack on the land wall on 31 July, the fight continued the following day. This time the besiegers' plan envisaged supporting the land troops with the Slavic *monoxylo*. On the orders of the Khagan, they were placed in the headwaters of the Golden Horn, where the Church of the Anargyroi was located, because the shallows offered them good protection from the Byzantine ships (*skaphokaraboi*)³⁸. That led to a standoff. The Byzantines were denied access to the shore of Kosmidion due to the greater draught of their ships and probably because of the Kallinikos Bridge. Conversely, in the deep water, the small *monoxylo* were inferior to the robust and high-sided vessels of the defenders.

The decisive battle between the Avars and Byzantines took place on Thursday, 7 August 626. Tied together³⁹, the dugouts manned by Slavs and Bulgars left the waters near the sanctuary of the Anargyroi and sailed towards the Blachernae. There, however, they were ambushed by the Byzantines and slaughtered. Some of them reached the shore north of the Blachernae, where they were killed by the Armenians waiting for them⁴⁰. The Khagan, who was watching the battle from

a hill, showed no pity for his allies⁴¹. At his command, many Slavs who tried to save themselves by swimming, hiding under the upturned *monoxylo*, or by pretending to be dead were killed⁴². The rest of his sailors fled to the nearby mountains⁴³. After the siege ended, the Byzantines collected the dugouts left behind and burned them⁴⁴.

Thomas the Slav

It was not just foreign forces that recognised the logistical advantages of the area around the Kosmidion monastery. Around 200 years after the siege of the Avars, another army appeared in front of the walls of Constantinople in 821 and set up camp on the bank of the Golden Horn north-west of the Blachernae district. This time their leader was a Byzantine and aspired to the imperial crown. In the Anatolikon theme in 820, the senior military commander Thomas, to whom researchers attribute a Slavic origin, had risen up against the new Emperor Michael II (820-829)⁴⁵.

38 Chronicon Paschale 720, 15-21 (Dindorf): ἡγωνία δὲ χαλάσαι εἰς θάλασσαν τὰ μονόξυλα, ἅπερ ἤγαγεν μεθ' ἑαυτοῦ, καὶ οὐ συνεχωρεῖτο ἐκ τῶν σκαφοκαράβων. καὶ ταῦτα λοιπὸν παρεσκεύασεν χαλασθῆναι κατὰ τὴν γέφυραν τοῦ ἁγίου Καλλινίκου μετὰ τρίτην ἡμέραν τοῦ πολέμου. διὰ τοῦτο δὲ παρεσκεύασεν ἐκεῖσε χαλασθῆναι τὰ μονόξυλα, ὡς τῶν τόπων ἐπιβράχων ὄντων, καὶ μὴ δυναμένων ἐκεῖσε τῶν σκαφοκαράβων παρεσελεθῆναι. According to the *Thesaurus Linguae Graecae*, the Easter Chronicle is the only source that documents the *skaphokaraboi*. The term can be translated as a »cargo ship«, see Zuckerman, Learning 113. – Sophocles, Lexicon 992. – Strässle, To monoxylon 95. – Hurbanič, Neglected Note. – Hurbanič, Posledná vojna 180 and 201. – Hurbanič, Avar Siege 162-163. – Whitby/Whitby, Chronicon Paschale 174. – Cf. Howard-Johnston, Siege 135 and n. 15.

39 Georgios Pisides, Bellum Avaricum 446-447 (196 Pertusi): ἐκεῖ γὰρ ὡσπερ ἐν θαλάττῃ δίκτυον τὰ γλυπτὰ συζεύξαντες ἤπλωσαν σκάφη. Konstantinos Manasses, Breviarium chronicum 3706-3710 (202 Lampsidis): καὶ γὰρ τοὶ συμπηξάμενοι θαλαττοπόρα σκάφη

Ταυροσκυθῶν οἱ φύλαρχοι τῶν ἀγριοκαρδίων καὶ πλῆθος ἀπειράριθμον τοῖς σκάφεσιν ἐνθέντες ἐπῆσαν καλύπτοντες τὰ νῶτα τῆς θαλάσσης τοῖς λεμβαδίοις τοῖς πυκνοῖς, τοῖς αὐτοξύλοις πλοίοις. In 677, the Macedonian Slavs sailed on *zeukta ploia* into the Sea of Marmara, see *Miracula Sancti Demetrii* II 4, 277 (I 220, 5-11 Lemerle). – On the dating, see Jankowiak, First Arab Siege 286-288.

40 Chronicon Paschale 724, 11-15 (Dindorf). – Nikephoros Patriarches, Breviarium 13 (60, 34-36 Mango) related that among the Slavs taking part in the siege were female sailors.

41 Theodoros Synkellos, *Analecta* 16, 1-5 (Sternbach).

42 Georgios Pisides, *Bellum Avaricum* 466-474 (197 Pertusi).

43 Chronicon Paschale 724, 15-18 (Dindorf). – Pernice, *Eraclio* 146.

44 Theodoros Synkellos, *Analecta* 16, 5-7 (Sternbach). – Symeon Logothetes, *Chronicon* 109, 7 (160, 63-66 Wahlgren).

45 On Thomas and the course of the uprising, see Lemerle, *Thomas le Slave*. – Köpstein, *Zur Erhebung des Thomas*. – Köpstein, *Thomas*.

For the rebel's fleet, which consisted of dromons and cargo ships for horses and grain⁴⁶, the barrier chain stretched across the entrance to the Golden Horn was no obstacle and it entered the inlet in December 821⁴⁷. Land and sea forces united at the mouth of the river Barbyzes in the area of the Anargyroi sanctuary, where Thomas camped on the shores⁴⁸. The Crusader chronicler William of Tyre showed that a fleet of larger vessels could be anchored in the upper part of the Golden Horn during the winter. According to him, the upper part of the estuary – which he defined as a river – was shallow (*modicus*) at the Kallinikos Bridge in summer, but in winter it had a higher water level as a result of the rains⁴⁹.

The next spring, Thomas again attacked the city from the Golden Horn. With his army and fleet, he tried to capture the land and sea walls of Blachernae, which were fired upon by catapults placed on the ships (fig. 6)⁵⁰. This time Emperor Michael II was better prepared for the attack. His troops stormed out of the Blachernae district and defeated the usurper's land army. At the same time, Michael II's »Triremes« attacked the enemy fleet, whose sailors turned to flee after a short struggle. They steered the ships onto the bank between Blachernae and Kosmidion; some of them ran over to the emperor, the others fled to the camp, where they refused to be of further military use⁵¹.

The Imperial Presence at Kosmidion

The Pilgrimage to Kosmidion

One of the places to which the emperor travelled by ship was the Church of Saints Cosmas and Damian in the vicinity of the capital⁵². The two saints had two days of commemoration – 1 July and 1 November – which were celebrated in two different churches⁵³. The first holiday is relevant for the present study. According to the *Book of Ceremonies* from

the tenth century, the emperor went on horseback or by ship (*ploi*) to Kosmidion. During this pilgrimage he wore the *skaramangion* – a tunic slit at the front and back that was suitable for riding⁵⁴ – and attended the service in the sanctuary. After the emperor bowed to the relics of Cosmas and Damian, he left the church on horseback. There were two options for his return to the Palace of Blachernae: he could either ride to the capital or sail⁵⁵.

Meetings Between Byzantine Emperors and Foreign Rulers in the Area of Kosmidion

After the defeats of the Byzantines in the Balkan Mountains in the summer of 811 and at Bersinikia in June 813, Bulgarian pillaging raids ventured up to the ramparts of Constantinople⁵⁶. On 17 July 813, Khan Krum personally appeared in front of the Byzantine capital and marched with his entire army from Blachernae to the Golden Gate to demonstrate his force to the people of Constantinople⁵⁷. He made pagan offerings in front of the Golden Gate and set up camp around the city. After a few days, he sent the new emperor Leo V (813-820) his peace conditions⁵⁸. Leo V accepted the offer to negotiate and determined the location of the meeting. Krum was to go to the Kosmidion coast with a few unarmed companions, where Leo V intended to travel by ship. However, the emperor had ulterior motives and intended to have the Bulgarian Khan killed at the meeting. For this purpose, he ordered three Byzantine soldiers to hide in houses outside the Blachernae Gate the night before the negotiations; after the start of the meeting they should kill Krum upon an agreed sign⁵⁹.

The next day, the coastal area of the Anargyroi sanctuary saw the first rulers' meeting in its history. The Khan came to the banks of the Golden Horn on horseback, along with his companions: a *logothetes* (probably the Bulgar Kavkhan), the defector Constantine Patzikos, his son and three other people. The Byzantine delegation's *chelandon* soon appeared

46 Theophanes Continuatus, Chronographia II 13 (84, 6-9 Featherstone/Signes-Codoñer): ναῦς τε ἐξαρτῶν διήρεις καὶ ἑτέρας στοργγύλας σιταγωγούς ἐπομένας αὐτῷ καὶ ἰπταγωγούς, ἐντεῦθεν καὶ τοῦ θεματικοῦ στόλου γίνεται ἐγκρατής, καὶ πρὸς τὴν Λέσβον ἅπαν τὸ ναυτικὸν ἀθροίζεσθαι ἐγκελεύεται. – Ioseph Genesios, Libri regum II 5 (26, 85-90 Lesmüller-Werner/Thurn): ἦδη τὸ ναυτικὸν ἅπαν τὸ ὑπὸ Ῥωμαίους ὄν, πλὴν τοῦ βασιλικοῦ κληθέντος, ὑποποιεῖται, καὶ ναῦς πλείστας ναυπηγήσας ἑτέρας σίτου τε παραπομπούς καὶ ἵππων, τὰς δὲ πολεμιστηρίους, ταῦτας κατὰ Λέσβον κελεύει μένειν αὐτόν. – Ioannes Skylitzes, Synopsis 32, 20-23 (Thurn). – Michaelis et Theophili epistola 477, 2-6 (Werminghoff): *Quibus casibus nos impediti, ille hac occasione accepta sollicitando sibi plurimos sociavit et ex classibus nostris et dromoniis collectis potestatem habuit veniendi ex partibus Thraciae et Macedoniae et sic festinus veniens civitatem nostrum obsedit et navali exercitu circumdedit eam in mense Decembrio, XV. indictione.*
47 Michaelis et Theophili epistola 477, 5-6 (Werminghoff).
48 Theophanes Continuatus, Chronographia II 14 (86, 22-25 and 88, 35-38 Featherstone/Signes-Codoñer). – Ioseph Genesios, Libri regum II 5 (27, 25-32 and 28, 38-40 Lesmüller-Werner/Thurn). – Ioannes Skylitzes, Synopsis 33-34, 58-64 and 71-74 (Thurn). – Ioannes Zonaras, Epitome XV 23, 5-6 (III 342, 15-343, 3 Büttner-Wobst). – Michael Glykas, Annales IV (535, 12-14 Bekker). – Theodoros Skutariotes, Chronica II 261, 2 (146, 2-3 Tocci).
49 Willelmus Tyrensis, Chronicon II 7 (171, 51-54 Huygens).

50 Theophanes Continuatus, Chronographia II 15 (90, 1-7 Featherstone/Signes-Codoñer). – Ioseph Genesios, Libri regum II 6 (28, 58-62 Lesmüller-Werner/Thurn). – Ioannes Skylitzes, Synopsis 35, 12-18 (Thurn).
51 Theophanes Continuatus, Chronographia II 15 (92, 19-26 Featherstone/Signes-Codoñer). – Ioseph Genesios, Libri regum II 6 (28, 66-69 Lesmüller-Werner/Thurn). – Ioannes Skylitzes, Synopsis 36, 30-36 (Thurn). – Georgios Monachos, Chronicon II 795, 9-21 (de Boor/Wirth).
52 On the topic in general, see Heher, Harbour of the Bukoleon, in this volume.
53 Synaxarium ecclesiae Constantinopolitanae, 1 November and 1 Juli (185, 17-18, 791, 27-28 Delehaye). – Cf. Janin, Processions religieuses 81-82.
54 On the *skaramangion*, see Parani, Reality of Images 61 n. 38. – Hendy, Catalogue 158.
55 Konstantinos Porphyrogenetos, De cer. II 13 (III 85-87, 51-60 Dagron/Flusin/Feissel).
56 Sophoulis, Byzantium and Bulgaria 192-251. – Ziemann, Wandervolk 264-266.
57 Theophanes, Chronographia AM 6305 (503, 5-14 de Boor). – On the dating, see Sophoulis, Byzantium and Bulgaria 251 n. 210.
58 Scriptor Incertus III (40, 42-57 Iadevaia). – Symeon Logothetes, Chronicon 128, 2 (210, 4-13 Wahlgren). – Annales regni Francorum ad a. 813 (139, 20-24 Kurze).
59 Scriptor Incertus III (40-41, 58-70 Iadevaia).



Fig. 7 Tsar Simeon I the Great before Constantinople, painting by Dimitar Gyudzhenov. – (Collector's photograph, privately owned).

and the imperial envoys went ashore⁶⁰. During the negotiations, one of the Byzantines suddenly bared his head⁶¹ and gave the hidden assassins the pre-arranged sign⁶². The Emperor's plan nevertheless failed because the Khan became aware of it and jumped on a horse with the help of his companions. Bombarded by Byzantine arrows, with the inhabitants of Constantinople shouting »The cross has won!« after him, Krum fled and escaped to his camp⁶³.

A century later, relations between Byzantium and its northern neighbour became dramatically worse during the reign of Tsar Simeon. The clashes from 913-924 showed the strength of the Bulgarian land force, but the Tsar did not have a fleet with which to seize Constantinople. This forced him to negotiate with the Byzantine emperor Romanos I Lakapenos (920-944). In September 924 (or 923, see n. 67), Simeon and his army went against the empire and looted Thrace. He reached the walls of Blachernae and asked for a personal interview with the Emperor⁶⁴. This time Romanos I acted far more sensibly than Leo V:

Fig. 8 Miniature from the Radziwiłł Chronicle (15th c.) depicting negotiations between Romanos I Lakapenos and Tsar Simeon of Bulgaria. Radziwiłł Chronicle, fol. 21^r, detail. – (Radzivilovskaja lëtapis' 21).



»He had a very well-fixed jetty built on the beach of Kosmidion in the sea, so that the disembarking imperial trireme could dock on it. He had it fenced in everywhere and ordered that there should be a fortified place in the middle where the two could talk to each other«⁶⁵.

In contrast to the meeting between Leo V and Krum, the Bulgarians took precautions for the safety of their ruler in 923/924. Even though both sides exchanged hostages, the Bulgarians also thoroughly searched the jetty for possible assassins⁶⁶.

Before the meeting on 9 November 924 (or 19 November 923), the Emperor and Patriarch Nicholas Mystikos visited the Church of the Theotokos in the Blachernae district, where Romanos Lakapenos put on one of the most important relics of Constantinople – the veil (*omophorion*) of the Mother of God – as an impenetrable armour⁶⁷. The Byzantine ruler came to the shore of Kosmidion by ship and landed at the newly built jetty. He was followed by the Bulgarian Tsar, who rode there and entered the landing stage. The Emperor received him, then the two rulers greeted each other and began negotiations (fig. 7)⁶⁸. Romanos I succeeded in convincing Simeon

- 60 Scriptor Incertus III (41, 71-83 Iadevaia): Καὶ τῆ ἐπαύριον ὄντων τῶν Βουλγάρων ἐπὶ τὸ μέρος τῶν ἁγίων Αναργύρων ἐξωθεν τῆς πόλεως, κατῆλθεν ὁ Κρούμος ἐπὶ τὴν θάλασσαν κατὰ τὴν συνταγὴν μετὰ ἄλλων τριῶν... Λοιπὸν δὲ καὶ οἱ ἐκ τῆς πόλεως ἐξήλθον μετὰ χελανδίου βουλόμενοι συλλαλῆσαι μετὰ τοῦ Κρούμου, καὶ λαβόντες λόγον, ἐξήλθον τοῦ καραβίου. – *Chelandon* was the name given to a battleship, and the term was synonymous with *dromon* in the 9th c., see Pryor/Jeffreys, *Dromon* 166-168. – Eickhoff, *Seekrieg und Seepolitik* 136-137.
- 61 It is not clear from the text whether the emperor himself participated in the negotiations. Although Leo V promised the Khan to negotiate peace terms with him, the source does not mention Leo's presence at the meeting at Kosmidion. – See Scriptor Incertus III (40-41, 58-64 and 80-89 Iadevaia).
- 62 It seems that Janin, *Constantinople 458* misunderstood the passage ἐποίησεν ὁ εἰς τῶν ἐκ τῆς πόλεως τὸ σήμεριον. According to him, a man on the land wall gave the signal to the assassins. The Byzantine historian hereby simply designates the members of the imperial delegation, see Scriptor Incertus III (41, 80-82 and 86-88 Iadevaia).
- 63 Scriptor Incertus III (41-42, 71-99 Iadevaia). – Theophanes, *Chronographia* AM 6305 (503, 17-21 de Boor). – Symeon Logothetes, *Chronicon* 128, 14-16 Wahlgren). – *Annales regni Francorum* ad a. 813 (139, 24-27 Kurze). – Vučetić, *Zusammenkünfte* 35*-36*. – Zlatarski, *Istorija* 1/1, 349-354. – Angelov, *Diplomacija* 207-208. – Nikolov, *Balgarskata ideja* 88-89.
- 64 Grünbart, *Treffen* 145-147. – Vučetić, *Zusammenkünfte* 41*-42*. – Runciman, *Romanus Lecapenus* 90-92. – Howard-Johnston, *Narrative History*. – Zlatarski, *Istorija* 1/2, 455-456. – Angelov, *Diplomacija* 210-211 and 252. – Nikolov, *Balgarskata ideja* 94-95.
- 65 Theophanes Continuatus, *Chronographia* VI 4, 15 (406, 11-15 Bekker): ἀποστείλας οὖν ἐν τῷ τοῦ Κοσμιδίου αἰγιαλῷ κατεσκευάσασεν ἐν τῇ θαλάσῃ ὀχυρωτάτην ἀπόβασιν, ὥστε τὴν βασιλικὴν τριήρην διεκπλέουσαν ἐν αὐτῇ προσορμίζεσθαι. περιφράξας οὖν αὐτὴν πάντοθεν διατείχισμα μέσον γενέσθαι προσέταξεν, ἐνθα ἀλλήλοις ἐμμελλον ὁμιλεῖν. Translation modified after Grünbart, *Treffen* 147, who translates the almost identical text by Ioannes Skylitzes, *Synopsis* 219, 24-28 (Thurn). – The structure of the landing stage is also described by Symeon Logothetes, *Chronicon* 136, 31 (321, 235-239 Wahlgren).
- 66 Theophanes Continuatus, *Chronographia* VI 4, 15 (408, 2-4 Bekker). – Ioannes Skylitzes, *Synopsis* 220, 43-45 (Thurn). – Symeon Logothetes, *Chronicon* 136, 34 (323, 266-269 Wahlgren).
- 67 Theophanes Continuatus, *Chronographia* VI 4, 15 (406, 19-407, 9 Bekker). – Ioannes Skylitzes, *Synopsis* 219, 31-35 (Thurn). – Symeon Logothetes, *Chronicon* 136, 32-33 (322, 242-254 Wahlgren). – See also Grünbart, *Treffen* 146-147. – On the question concerning the date, see Runciman, *Romanus Lecapenus* 246-248, who, however, favours 9 September 924, and Howard-Johnston, *Narrative History* 347-348, who argues for 19 November 923.
- 68 Theophanes Continuatus, *Chronographia* VI 4, 15 (408, 1-6 Bekker). – Ioannes Skylitzes, *Synopsis* 220, 42-47 (Thurn). – Symeon Logothetes, *Chronicon* 136, 34 (323, 266-271 Wahlgren). – Ioannes Zonaras, *Epitome* XVI 18, 11-12 (III 471, 13-472, 3 Büttner-Wobst).

to conclude a peace treaty. The »duration« of the imperial journey should be emphasised: the Church of the Theotokos in Blachernae is located on the outskirts in the immediate vicinity of the ringwall. The meeting place of Romanos Lakapenos and Simeon was on the other side of Blachernae's landward wall, which suggests a journey of only five to ten minutes. Nevertheless, the Emperor came by ship, the red dromon, to demonstrate the (invincible) naval power of the empire and the imperial dignity of Romanos I (fig. 8).

The strength of the imperial fleet and the political situation in Byzantium, which again asserted itself as a world power in the ninth and tenth centuries, made Constantinople an impregnable city. At the third summit at Kosmidion, however, the signs had changed dramatically. In July 1203, the Venetian fleet appeared before Constantinople, carrying the pretender to the throne, Alexios (son of the emperor Isaac II Angelos [1185-1195, 1203-1204], who had been deposed and blinded by his brother), but above all also carried an army of Crusaders. With their help, the young Alexios ascended his father's throne. The Western army initially camped at Kosmidion, then the Crusaders settled in Sykai on the north bank of the Golden Horn, where they spent the winter of 1204 waiting for the promises made by Alexios IV (1203-1204) to be fulfilled⁶⁹. However, their stay on the outskirts of Constantinople was not entirely smooth. The Byzantines looked on the Latins on the opposite bank with increasing suspicion. In fact, the idea of an attack on the city became more and more concrete. Relations between Byzantium and the Crusaders reached their lowest point in the winter of 1204 when the Byzantines overthrew Alexios IV and placed Alexios V Mourtzouphlos on the throne. Although the two sides were preparing to fight, their leaders tried to negotiate a peaceful settlement.

On 7 February 1204, a meeting with Alexios Mourtzouphlos took place on the initiative of the Venetian Doge⁷⁰. The most detailed account of this is given in the history of Niketas Choniates: »Because the Dux of Venetia Erikos Dandoulos [Enrico Dandolo] wished to speak to the Emperor about a contract. He boarded a trireme and sailed up to the coast at Kosmidion. The emperor also came there by horse. They talked to each other about peace without giving



Fig. 9 Mourzoufle [Alexios V] parleying with Enrico Dandolo by Gustave Doré. Engraving. – (From Boyd, *Story of the Crusades* 287 pl. LIV).

thought to anything else»⁷¹. The Doge negotiated from the stronger position and made difficult demands of the Byzantines if they wanted a restoration of peace: payment of 50 *kentenaria* gold, the restoration of Alexios IV to the throne, recognition of papal sovereignty by Byzantium and assistance in the campaign in the Holy Land (fig. 9)⁷². This was not the only humiliation that Alexios Mourtzouphlos suffered while meeting Dandolo. Latin horsemen unexpectedly rode down from a nearby hill and tried to capture Alexios, but he managed to escape them⁷³. In contrast to the episode with the Bulgarian Khan Krum in 813 (see above), this time it was the Byzantine emperor who was almost the victim of an ambush in the area of Kosmidion⁷⁴.

69 See p. 218.

70 The date is given in a letter from Baldwin of Flanders to Pope Innocent III, written shortly after his coronation on 16 May 1204. According to him the meeting took place one day before the assassination of Alexios IV on 8 February, see Die Register Innozenz' III, VII 152 (VII 256, 30-257, 17 Hageneder et al.) and Queller/Madden, *Fourth Crusade* 167-168, 279 n. 138. – Hendrickx/Matzukis, Alexios V 123 and n. 2 date the meeting to 8 February and assume an initiative by Alexios V.

71 A modified English translation after Grabler, *Kreuzfahrer* 143. – Niketas Choniates, *Historia* 567, 58-62 (van Dieten): ὁ γὰρ δοῦξ Βενετίας Ἐρίκος Δάνδουλος ὁμιλήσαι περὶ σπονδῶν ἐλόμενος βασιλεῖ, νῆα εἰσιὼν τριήρη περὶ ταῖς ἀκταῖς προσέσχει τοῦ Κοσμιδίου. ὡς δ' ἔφιππος ἐκείσε καὶ βασιλεὺς ἀφίκετο, ἀντεκοινοῦντο μὲν ἀλλήλοις τὰ πρὸς εἰρήνην ῥήματα μηδενὶ τῶν ἄλλων τὴν σπουδὴν χαρίζομενοι. – Robert de Clari, *Conquête* 59 (136, 10-24 Dufournet) narrates a conversation between Alexios IV and the Venetian Doge on the banks of the Golden Horn that shows striking parallels to the meeting of Alexios Mourtzouphlos with Dandolo in the historical work of Niketas Choniates. It appears that the Crusader chronicler swapped the two emperors of the same name, transferring the participation of Alexios IV to a meeting of Alexios Mourtzouphlos. Suspicion

increases when one considers that at the time of the meeting on the bank of Kosmidion, the overthrown Alexios IV was still alive and was strangled in prison the next night. – See Vučetić, *Zusammenkünfte* 145*-146*.

72 Niketas Choniates, *Historia* 567-568, 63-70 (van Dieten) mentions only the payment of money and says the other demands »were probably hard and difficult to accept by men who had tasted the sweetness of freedom and were used to giving orders but not receiving orders. However, for men who were in danger of losing their freedom and who were bitterly aware of the terrible fate of going under with their people sooner or later, they were not entirely unacceptable and not the most oppressive« (English translation based on Grabler, *Kreuzfahrer* 143-144; the English translation of Choniates' work by Magoulias, *O City of Byzantium*, is notoriously deficient). The other demands are conveyed by the letter of Baldwin I to the Pope, already mentioned, see Die Register Innozenz' III, VII 152 (VII 256, 31-257, 12 Hageneder et al.).

73 Niketas Choniates, *Historia* 568, 70-73 (van Dieten).

74 About the meeting in general, see Queller/Madden, *Fourth Crusade* 167-169. – Hendrickx/Matzukis, Alexios V 121-124. – Madden, *Dandolo* 166. – Angold, *Fourth Crusade* 97-98. – Vučetić, *Zusammenkünfte* 145*-146*. – Grünbart, *Treffen* 149-150.

The Crusader Camp at Kosmidion

From the First Crusade onwards, Kosmidion was a popular campsite for the Western armies. Odo of Deuil, chronicler of the Second Crusade in 1147, gave some information about the Kosmidion coast and its role in the food supply of the Western knights. According to him, the French camp in front of the Palace of Blachernae was at the so-called *Philopatation*, where the Byzantines supplied the Crusaders with food, not by land, but by water. In this case, watercraft (*navigium*) were to land on the shore of Kosmidion, the goods were sold in the storage area or directly in the tents of the Crusaders⁷⁵. Based on the report that the entire Crusader camp was supplied with the food transported on the *navigium*, it makes sense to interpret it as a vessel with a large capacity.

The Byzantine emperors succeeded in transferring the armies of the first three Crusades to Asia Minor despite some clashes. The Fourth Crusade mentioned earlier was completely different⁷⁶. After a short stay of the Crusaders' ships in Chalcedon (Kadiköy) and Skoutarion (Üsküdar) on the Asian bank of the Bosphorus, the fleet set course for the entrance of the Golden Horn⁷⁷. The Byzantines could not withstand the attack and were driven back. After the Western knights conquered the Galata Fort, the iron chain attached to it was no longer an obstacle and the Venetian fleet was able to sail into the Golden Horn⁷⁸. The land and sea forces met on 10 July in the area of the Kosmidion Monastery⁷⁹. The Crusaders set up camp in the area between the Anargyroi monastery and the landward wall of Blachernae, and the fleet anchored in the nearby waters⁸⁰. On the banks of Kosmidion, the Crusaders began their preparations for the attack on the Byzantine capital⁸¹.

Kosmidion in the Late Byzantine Period

The Kosmidion coast was closely linked to what happened before the Latin conquest of Constantinople. The Byzantine emperor's ceremonial entry also began on the shore near the monastery of the healing saints after the town was recaptured in 1261. During a campaign in Asia Minor, Emperor Michael VIII Palaiologos (1259-1282) received news that Alexios Strategopoulos had taken the former Byzantine capital without a fight. On 14 August 1261, Michael VIII sailed from Chalcedon on the Asian bank of the Bosphorus to the coast in front of the landward walls of Blachernae and spent the night in the Anargyroi Monastery⁸². The Emperor had a reason to delay his ceremonial entry into Constantinople by one day: he wanted it to take place on the following day, the Feast of the Assumption. The next day, the procession of Michael VIII started from the monastery of the healing saints to the capital. Accompanied by the Metropolitan Bishop of Kyzikos and another hundred people, as well as the Theotokos icon from the Hodegon Monastery, the Emperor walked along the Theodosian landward wall to the Golden Gate, where he entered the city⁸³.

The proximity to the Palace of Blachernae was decisive for the choice of location for the reception of Rita, sister of the Armenian King Hethum II and bride of the newly crowned son of the Emperor, Michael IX. After a sea voyage from Cilicia via Rhodes, the Byzantine legation led by Theodore Metochites and John Glykys arrived in Constantinople⁸⁴. The delegation, together with the imperial bride, travelled to the end of the Golden Horn, where Rita and the envoys went ashore at the monastery of the healing saints before January 1296⁸⁵. George Pachymeres divided the journey from Rhodes into two parts. Initially, the route from Rhodes to Constantinople, which was followed by the journey to the end of the Golden Horn at Kosmidion⁸⁶. This may mean that the em-

75 Odo de Deuil, *De profectione Ludovici IV* (66, 19-21 Berry): *Forum igitur satis abundanter nobis afferebat navigium, et ante palatium vel etiam in tentoris habebamus congruum*. On the location, see Heher, *Philopatation* (with older literature).

76 According to Niketas Choniates, *Historia* 539, 93-1 (van Dieten) within three years the Venetians built 110 dromons for the transportation of horses (*ussarii*), 60 longships (galleys) and over 70 round ships, a total of 240 watercraft: *Ναυπηγηθέντων οὖν εἰς Βενετίαν δι' ὄλων τριῶν λυκαβάντων δρομώνων μὲν ἱππαγωγῶν ἑκατὸν δέκα, νηῶν δὲ μακρῶν ἐξήκοντα, ἔτι δὲ πλοίων συναθροισθέντων στοργγύλων μεγίστων ὑπὲρ τὰ ἔβδομήκοντα*. – The *Devastatio Constantinopolitana* 132, 24 (Andrea) documented 40 ships (*naves*), 72 galleys (*galiae*) and 100 cargo ships (*oxirii*); thus, a number that corresponds to the information given by Hugonis Comitis Sancti Pauli *epistola* 813, 5-7 (Pertz) concerning over 200 ships (minus barges and boats). However, not all of these ships went to Constantinople. – See Queller/Madden, *Fourth Crusade* 17 and 68-69. – Pryor, *Venetian Fleet* 115 n. 61. – On the transport ships, see Pryor, *Naval Architecture*.

77 Niketas Choniates, *Historia* 542, 59-63 (van Dieten). – Geoffroy de Villehardouin, *Conquête V* 136-137 (I 136-138 Faral). – Robert de Clari, *Conquête* 40 (106, 14-18 Dufourmet). – Hugonis Comitis Sancti Pauli *epistola* 812, 39-42 (Pertz). – Angold, *Fourth Crusade* 93.

78 Niketas Choniates, *Historia* 542-543, 72-89 (van Dieten). – Geoffroy de Villehardouin, *Conquête VI* 156-162 (I 154-162 Faral). – Robert de Clari, *Conquête* 43 (110-112, 24-31 Dufourmet). – Hugonis Comitis Sancti Pauli *epistola* 813, 2-30 (Pertz). – Queller/Madden, *Fourth Crusade* 101-118. – McNeal/Wolff, *Fourth Crusade* 178-179. – Pryor, *Chain*. – Kislinger, *Golden Horn* 176-180, in this volume.

79 Niketas Choniates, *Historia* 543, 90-94 (van Dieten). – Geoffroy de Villehardouin, *Conquête VI* 163-164 (I 162-164 Faral). – Robert de Clari, *Conquête* 44 (112, 1-21 Dufourmet). – Ephraem, *Historia Chronica* 6818-6827 (242 Lampsides). – Sollbach, *Chroniken* 55-56 and 99-100. – Hugonis Comitis Sancti Pauli *epistola* 813, 30-39 (Pertz). – On the bridge, see Hurbanič, *St. Callinicus Bridge* 21-22. – The *Historia ducum Veneticorum* 93, 46-47 (Simonsfeld) erroneously places the bridge at the Galata Fort at the entrance to the Golden Horn.

80 Geoffroy de Villehardouin, *Conquête VI* 166 (I 168 Faral).

81 See Meško, *Kremastes gephyres*.

82 Manuel Holobolos, *Orationes II* (71, 20-35 Treu): *βραχὺ τοιγαροῦν τοῖς ἐν μέσῳ καὶ περὶ πού τὴν Χαλκηδὸνα σκηνοῖς, τὸ Ἀστακηνὸν ὄθεν διευρύνεται πέλαιος· εἶτα διανοήσω καὶ πρὸς τὴν ἀντιπέραν διαπλωίσασθαι... οὕτω δὲ καὶ παρὰ τὴν ἡπειρον παραγίνῃ, τὸ χερσαῖον ὄπου τεῖχος ἢ Κωνσταντίνου προβάλλεται... ἔνθα δὲ καὶ ταῖς σκηναῖς ταῖς βασιλείοις ἀναπαυσάμενος*. – Georgios Akropolites, *Historia* 88 (186, 29-187, 6 Heisenberg).

83 Georgios Akropolites, *Historia* 88 (187, 6-29 Heisenberg). – Manuel Holobolos, *Orationes II* (72, 1-34 Treu). – Georgios Pachymeres, *Relationes historicae II* 31 (I 217, 1-20 Failler). – Macrides, *George Akropolites* 383-385.

84 On the legation, see Beck, *Theodoros Metochites* 5-6.

85 Georgios Pachymeres, *Relationes historicae IX* 5 (III 233, 2-4 Failler). – Georgios Pachymeres, *Version brève IX* 5 (II 52, 19-21 Failler).

86 Georgios Pachymeres, *Relationes historicae IX* 5 (III 233, 2-4 Failler): *ἀπάραντες Ῥόδου, τῆ Κωνσταντίνου προσίσχουσι. Καὶ παρὰ τῷ τοῦ Κέρατος τέλει πρὸς τῷ Κοσμιδίῳ προσσχόντων*.

bassy did not sail directly to Kosmidion, but first went to one of the city's major harbours. There, one would perhaps have changed from the seven longships that had sailed to Cilicia⁸⁷, and travelled in a smaller vessel to a suitable site in Kosmidion. The arrival of the Armenian princess in Constantinople corresponds to the regulations of Pseudo-Kodinos about the arrival of imperial brides to the Byzantine capital: if they arrive by ship (μετὰ κατέργων), according to the Late Byzantine court ceremonial, they should land at a suitable jetty on the shore in front of the Blachernae district⁸⁸.

At the invitation of the Emperor, the Catalan nobleman Berenguer d'Entença came from Kallipolis to Constantinople with two ships in 1304⁸⁹. His ceremonial promotion to *megas doux* («grand duke») took place in the Palace of Blachernae at Christmas. Here, in the presence of the Senate, d'Entença was elevated to high office, receiving the ducal staff and putting on the *skaramangion*. During his stay in Constantinople, d'Entença was concerned about his safety and delayed both the landing and reception by Andronikos II by a few days⁹⁰. This was also the reason why he boarded his ship immediately after being granted the dignity of *megas doux* and sailed for Kosmidion⁹¹. There, outside the city, d'Entença and his companions felt safer.

Recently, Arne Effenberger and Peter Schreiner have thoroughly analysed a *Begrüßungsgedicht* («welcome poem») to a Western princess who arrived in Constantinople. The text is preserved in the *Vaticanus Graecus* 1851 and is accompanied by miniatures. Schreiner's historical and prosopographical analysis convincingly argues in favour of a reception of the Hungarian princess Anna, thereby dating the ceremony to 1272. According to him, the emperor's bride disembarked at the landing stage of the Blachernae Palace, whereas the bridge depicted on one of the miniatures relates to the Kallinikos Bridge⁹².

However, examining the work of Pseudo-Kodinos (see the reference above) quoted by Schreiner shows that a foreign bride was expected to land, not in the Blachernae, but *outside* the land walls (*exo tes poleos*). The text of the poem itself speaks about the bride waiting outside (*exothern*) the capital's ramparts to meet her sister-in-law⁹³. Thus, Effenberger's suggestion of a landing and reception in the northwest suburbs of Constantinople sounds more convincing. Yet his attempt to locate the landing of the Western princess and the following meeting between her and the Byzantine delegation (Vat. Gr. 1851, fol. 3^v), not in the area close to the land walls, but in modern Silah tarağa to the north of ancient Kosmidion

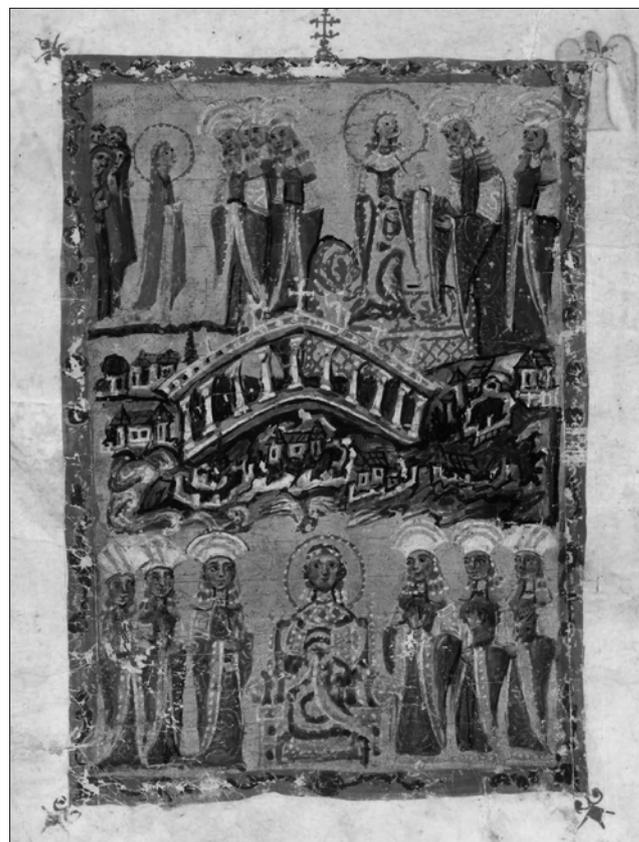


Fig. 10 Codex Vat. gr. 1851, fol. 3^v (probably from the Early Palaiologan era) depicting the solemn reception of a foreign princess in the suburbs of Constantinople. Biblioteca Apostolica Vaticana. – (From C. J. Hilsdale, *Constructing a Byzantine »Augusta«: A Greek Book for a French Bride*. *The Art Bulletin* 87, 2005, 458-483, here 469 fig. 9).

seems to be called into question by our knowledge of the topography of Byzantine ceremonies, as well as the landscape of the area of the upper Golden Horn⁹⁴. As already mentioned for 1261 and 1296, the ceremonial entry started at Kosmidion after a landing on the shore of the Golden Horn, just as Pseudo-Kodinos said. Moreover, the accounts of ancient and medieval authors on the shallow waters beyond Kosmidion indicate that the area of modern Silah tarağa would have been a difficult place to reach by ship. As for the bridge – regardless of whether it was the old Kallinikos Bridge or the new Camel Bridge – its presence in the miniature can be explained by its significance as a topographical landmark within a broader region and not implicitly as a site of the Western princess's arrival (fig. 10).

87 Theodoros Metochites, *Carmen* I 446-452 (21 Polemis).

88 Pseudo-Kodinos, *Traité* XII (286, 11-16 Verpeaux): Καὶ εἰ μὲν διὰ ξηρᾶς ἐρχεται, περὶ αὐτὴν εἰθιστὰ περὶ τὴν Πηγὴν, εἰ δὲ μετὰ κατέργων, πλησίον τοῦ ναοῦ τῶν Βλαχερνῶν ἔξω τῆς πόλεως, ὅπου ἂν τῶν τοίχων εἶναι ἐπιτήδειον. – There was also the possibility of landing at the Gate of Eugenios at the entrance to the Golden Horn, see Pseudo-Kodinos, *Traité* XII (287, 1-7 Verpeaux). – Magdalino, *Pseudo Kodinos' Constantinople* 11-13. – On the interpretation of *katargon* as »ship« LBG I 808.

89 Georgios Pachymeres, *Relationes historicae* XII 11 (IV 543, 19-31 Failler).

90 Georgios Pachymeres, *Relationes historicae* XII 11 (IV 545, 1-14 Failler). – Laiou, *Constantinople and the Latins* 140-141.

91 Georgios Pachymeres, *Relationes historicae* XII 11 (IV 543, 26-27 Failler). – Ramon Muntaner, *Crònica* 211 (II 81 Gustà). – Hughes, *Catalan Expedition* 67.

92 Schreiner, *Brautgedicht* 82-100, esp. 98. – Cf. also Iacobi, *L'epitalamio* 367-368 and 383 n. 64.

93 Schreiner, *Brautgedicht* 103-104, 77-85:

Πλησίον τοῦ τείχους ἔξωθεν τῆς πόλεως τῆς μεγάλης, τοῦ κάστρου τοῦ περιφανοῦς τῆς χώρας τῶν Ῥωμαίων ἢ μᾶλλον τῶν ὑπ' οὐρανὸν ἀπάντων τοῦ καλλίου τοῦ μὴ μετὰ τινος ποσῶς συγκρινομένου κάστρου κατὰ εἶ τι ἂν εἴπῃς ἔπιον, κατὰ εἶ τι ἂν εἴπῃς πράγμα, εἰς ὃ μετὰ τὴν αὔριον τῷ βασιλεῖ Ῥωμαίων τὸν μέγαν αὐτοκράτορα καὶ πενθερόν σου, αὐγοῦστα, μετὰ πολλῆς λαμπρότητος νὰ ἰδῆς κατεσκευάσθη.

94 Effenberger, *Brücken* 168-175 with further references to older research.

The Kosmidion Monastery as a Place of Custody

The proximity of the Imperial Palace in Blachernae to the Anargyroi Monastery linked the latter to Late Byzantine church history. Around the end of January or beginning of February 1285, the exiled Patriarch John Bekkos sailed from Prousa to Kosmidion, where he went ashore. At first, he was not allowed to enter the capital and had to stay in the monastery of the healing saints⁹⁵. Then, however, the former Patriarch was admitted and was heavily involved in discussions about the origin of the Holy Spirit. With the support of the Emperor, the opponents of the Union gained the upper hand. John Bekkos was convicted and briefly imprisoned in the Kosmidion Monastery together with Theodore Meliteniotes and George Metochites. On the orders of Andronikos II, they were to board a ship on the shore of Kosmidion and sail to the Gulf of Nicomedia, where the three champions of the Union were incarcerated in the Fortress of St Gregory⁹⁶.

John Bekkos was not the last patriarch of Constantinople to be detained in the Kosmidion Monastery. During the night of 15-16 October 1293, Athanasios I of Constantinople was escorted from the patriarchate to the northern seashore of the capital. At *ta Eugeniou* at the entrance to the Golden Horn, he boarded a barque and set sail. The Patriarch travelled to the north-west outskirts of Constantinople, where he landed on the Kosmidion coast and went to the Anargyroi monastery⁹⁷. The next day, 16 October, he sent a letter from the monastery to the Emperor announcing his resignation⁹⁸.

The Shipyard of Kosmidion

It is certain that a shipyard existed in the region of Kosmidion around the middle of the fourteenth century. According to the history of John Kantakouzenos, five »triremes« were built there⁹⁹. The choice of location for the construction of this shipyard can easily be explained in view of the emerging confrontation with the Pera-Genoese: the necessary vessels

needed a shipyard away from the Genoese colony. At the same time, however, easy access was required to the city's most important craft and trade centres, which were then on the southern bank of the Golden Horn. The activities were not hidden from the enemy: in August 1348, eight »triremes« and many *monera* left Pera and attacked. The wood stacked on the shore became as much a victim of the flames as the houses outside the sea wall¹⁰⁰. The Genoese set fire to all merchant ships, boats, and barges in the Golden Horn, but according to Nikephoros Gregoras:

»Above all, the triremes, which had just been built by order of the emperor; these were only rigged up and had not yet been pulled into the water. Of the five largest that were newly equipped, three with numerous other *monera*, since they were already completely finished, had been pulled into the water at night by the captains, who suspected the arson was being committed. They had sailed to the mouth of the river at the end of the strait. As a result of the confluence of the river and the gulf, a lot of sand and mud collects there, causing the mouth to silt up and leaving a narrow and difficult to access channel, just as wide as the river necessarily opens when it flows down. The entire width on both sides is not only inaccessible for large triremes. Rather, I think even for ships that have only two rows of oars and are empty, it is mostly difficult to pass there because of the depth of the water«¹⁰¹.

From the sources, it can be seen that the shipyard itself was accessible to the enemy ships that set fire to two of the new »triremes« and older vessels there for overhaul¹⁰². From this one can conclude that the shipyard should be located on that section of the Kosmidion coast that was closest to the city wall. From there, the Byzantine sailors had brought the three undamaged »triremes« into the muddy and shallow waters to the north and northeast to save them from the Genoese. The battle for the three ships continued over the next few days. This time the Genoese attempted a land raid, but were repulsed by the Byzantine defenders¹⁰³. As far as the shipyard is concerned, a facility that is constantly threatened by the

95 Georgios Pachymeres, *Relationes historicae* VII 34 (III 103, 5-9 Failler). – Georgios Pachymeres, *Version brève* VII 34 (II 20, 13-16 Failler). – Georgios Metochites, *Historiae dogmaticae* I 90 (123, 17-20 Cozza-Luzi). – Konstantinos Meliteniotes, *Logoi* I (129, 9-15 Orphanos). – Riebe, Johannes XI. Bekkos 118-119.

96 Georgios Pachymeres, *Relationes historicae* VII 35 (III 117, 9-25 Failler). – Georgios Pachymeres, *Version brève* VII 35 (II 25, 1-7 Failler). – Georgios Metochites, *Historiae dogmaticae* I 118 (168, 10-13 Cozza-Luzi).

97 Georgios Pachymeres, *Relationes historicae* VIII 23 (III 195, 8-15 Failler). – Georgios Pachymeres, *Version brève* VIII 23 (II 43, 5-11 Failler). – Boojamra, Church Reform 50-51. – On the Patriarch Athanasios, see Talbot, Patriarch Athanasius.

98 Failler, *Première démission* 138-139.

99 Ioannes Kantakouzenos, *Historia* IV 11 (III 70, 14-17 Schopen): κατέκαυσαν δὲ καὶ τὰς κατασκευαζομένας ἀπάσας τριήρεις πλὴν τριῶν, ἃς, ἐπεὶ τὸ κακὸν πάντα ἐπενέμετο, ἄραντες ἐξ οὗ κατασκευάζοντο τοῦ τοῦ Κοσμιδίου προσαγορευομένου. – On John VI Kantakouzenos, see Nicol, Reluctant Emperor. – The term »triremes« is antiquated, see Pryor/Jeffreys, Dromon 410.

100 Alexios Makrembolites, *Logos historikos* 4 (147, 1-29 Papadopoulos-Kerameus).

101 Improved translation after van Dieten, Nikephoros Gregoras 207. – Nikephoros Gregoras XVII 2, 1-2 (II 847, 7-23 Schopen/Bekker): καὶ πρό γε τοῦτων

ἄσα τῶν τριήρων κελεύσει τοῦ βασιλέως ἄρτι ἐναυπηγοῦντο. κατασκευάζοντο μὲν γὰρ οὕτω δ' εἰς θάλασσαν ἐφθησαν καθελκυσθεῖσαι. Πέντε δὲ τῶν μεγίστων οὐσῶν, ἄσα καινὰ συγκατασκευάζονται, αἱ μὲν τρεῖς σὺν ἑτέροις μονήρεσιν οὐκ ὀλίγαις, ἐπεὶ ἀπηρτισμένα ἐς τὸ ἀνευδὲς ἔτυχον οὐσαι, νύκτωρ καθελκυσθεῖσαι πρὸς τῶν ναυάρχων διὰ τὴν τοῦ πολέμου πυρὸς ἔνοιαν ἀνήχθησαν περὶ τὰς τοῦ ποταμοῦ ἐκβολὰς, ἔνθα καὶ τοῦ πορθμοῦ τὸ πέρας ἔστιν. ἐκεῖ γὰρ ἐξ ἀντιπεριστάσεως τῶν δύο περάτων τοῦ τε ποταμοῦ καὶ τοῦ θαλαττίου κόλπου πολλὴ συσσωρευομένη ψάμμος τε καὶ ἱλὺς ἐκατέρωθεν καὶ ἀποθινοῦσα τὸ στόμα, καὶ μόλις στενὴν τινα καὶ δυσέμβολον ἀφείσα διέχειαν βάθους, ὅσην δὴ καταρρέων ὁ ποταμὸς ἐξ ἀνάγκης ῥήγνυσιν, ἐκατέρωθεν τὸ πᾶν εὖρος ἄβατον οὐ μόνον μεγάλας καταλείπει τριήρεσιν, ἀλλὰ καὶ ὅσα δίκροτ' ἂν εἴη καὶ κενὰ τῶν πλοίων, διὰ τὴν τοῦ ἐπιπολάζοντος ὕδατος βραχύτητα, καὶ ταῦτα δυσπρόρευτον οἶμαι ἂν τὴν διόδον ἔχοι ὡς τὰ πολλὰ. – See Ioannes Kantakouzenos, *Historia* IV 11 (III 70, 14-20 Schopen). – Külzer, Ostthracien 280.

102 Nikephoros Gregoras, *Historia* XVII 2, 1-2 (II 847, 7-848, 2 Schopen/Bekker). – Ioannes Kantakouzenos, *Historia* IV 11 (III 70, 14-20 Schopen).

103 Nikephoros Gregoras, *Historia* XVII 2, 5 (II 848, 21-849, 2 Schopen/Bekker). – According to Makris, *Studien* 163 the Genoese captured the three units crossing a river, which contradicts the source reports. – Generally on the Galata war, see Kyriis, John Kantakouzenos. – Nicol, *Last Centuries* 228-234.

Fig. 11 Aerial view of the Golden Horn (Photograph courtesy of Serhat Engül <https://istanbulclues.com/wp-content/uploads/2016s/03/Golden-Horn-Istanbul.jpg> 15.10.2021)



enemy could no longer continue to exist in a meaningful way: on the orders of Kantakouzenos, operations were moved to Kontoskalion¹⁰⁴.

Conclusions

The length of the coast from today's Eyüp to the landward wall of Blachernae is about 1 km, which must be taken into account when considering the maritime history of the area. That the area offered several sites for disembarking is something we can deduce from medieval accounts such as the treatise of Pseudo-Kodinos. The author says that a foreign imperial bride could come »ashore near the church of the Blachernai, outside the city, *wherever it might be suitable* (italics G.S.)«¹⁰⁵. In this way, at least two locations can be determined where episodes in the history of Constantinople took place. One was the Anargyroi Sanctuary itself, which was located in the north of the coastal section to be treated here. The barges went there with those seeking healing and Patriarch Athanasios was also taken there after his resignation¹⁰⁶. This requires a jetty for smaller vessels with a shallower draft, which was most likely made of wood.

It is unclear where the emperor landed when he visited for the feast of Saints Cosmas and Damian on 1 July¹⁰⁷. Regarding the rulers' meetings in the Kosmidion area and the ceremonial entrance of foreign princesses, they must have taken place on the coast close to the city due to the presence

of a larger ship, be it a *chelandon* or a dromon. From the accounts about the negotiations between Romanos Lakapenos and Simeon of Bulgaria, we know that a large and more solid construction was built in order to suite the emperor's ship for this occasion. Moreover, a simple jetty may not have matched the ceremonial functions that a landing stage could fulfil. In the same area close to the capital, one can also search for the location of the shipyard built during the reign of John VI Kantakouzenos.

In contrast to Hebdomon, none of the sources for the area northwest of Blachernae use the term *limen*, i. e., harbour, the only ones that mention a harbour are the crusade chroniclers Geoffroy de Villehardouin and Robert de Clari, but that is how they describe the entire Golden Horn, which was a natural harbour¹⁰⁸ (fig. 11). The inlet, which led deep inland, made moles or breakwaters unnecessary, which were indispensable for the harbour facilities on the Propontic coast inside and outside the ringwall¹⁰⁹. The only threat to shipping in the upper part of the Golden Horn was silting up caused by the Barbyzes and Kydaros rivers.

A change in the history of the Kosmidion area has been evident since the Komnenian period. The Anargyroi Monastery retained its importance as a place of pilgrimage for city dwellers and guests, but, above all, other developments contributed to the revival of the northwestern suburban area of Constantinople. One of these factors was the relocation of the imperial palace to the Blachernae district. Already in the time of the Macedonian dynasty, there was a landing stage

104 Makris, Studien 163 (wrongly equated with the Heptaskalon) and 179. – It is also hard to agree with Ahrweiler, Byzance et la mer 434-435 that the shipyard of Kosmidion is identical with that in the Blachernae abandoned by Michael VIII – On the shipyard in the Kontoskalion Harbour, see Heher, Harbour of Julian 101-107, in this volume.

105 Pseudo-Kodinos, Traité XII (286, 16 Verpeaux): ὅπου ἂν τύχοι εἶναι ἐπιτήθειον. – English translation by Macrides/Munitiz/Angelov, Pseudo-Kodinos 267.

106 Georgios Pachymeres, Relationes historicae VIII 23 (III 195, 8-15 Failler). – Georgios Pachymeres, Version brève VIII 23 (II 43, 5-11 Failler).

107 Konstantinos Porphyrogenetos, De cer. II 13 (III 85-87, 51-63 Dagron/Flusin/Feissel).

108 Geoffroy de Villehardouin, Conquête VI 159 (I 158 Faral). – Robert de Clari, Conquête 43 (110-112, 24-31 Dufournet). – Cf. Kislinger, Golden Horn, Preiser-Kapeller, Heptaskalon, and Schreiner, Western Landing Stages, in this volume.

109 See Simeonov, Hebdomon n. 89 in this volume.

where the emperor landed when he visited the Church of the Theotokos¹¹⁰. The Blachernae district only became an imperial residence in the late eleventh to twelfth centuries. The second factor was the shift in the focus of trade in Constantinople to the banks of the Golden Horn from the eleventh century¹¹¹. The Kosmidion Monastery itself was involved in maritime trade, according to accounts of the Anargyroi miracles from the Palaeologan period¹¹².

Traffic, not only between the European and Asian parts of today's Istanbul, but also between the two banks of the

Golden Horn, is made possible by the existence of bridges. The Byzantines, on the other hand, had to use larger or smaller watercraft to transport people and goods as needed. An exception was the traffic over the upper course of the estuary, since a stone bridge called Kallinikos Bridge had already been built there during the reign of Emperor Justinian I¹¹³, later also documented as the Panteleimonos Bridge. It undoubtedly restricted the further northwest route to small boats¹¹⁴ and also offered an alternative to maritime transport in this region.

Summary / Zusammenfassung

The Moorings at Kosmidion

A church of the physician Saints Cosmas and Damian was built in the north-western area of Constantinople in the fifth century. Later, a monastery called Kosmidion was built around this church. The sanctuary was one of the most famous pilgrimage sites in the Byzantine capital and was mainly visited by sick people, who, due to the shallows, used flat boats for their journey. The section of the coast near the Blachernae wall, however, was deeper and thus suitable for ships to moor there. For this reason, the Byzantine emperors decided upon the area of Kosmidion as the location for their meetings with foreign rulers, to whom they could present the Byzantine naval power by boat. The relocation of the imperial palace to the Blachernae district in the eleventh century made the shore area south of the Kosmidion Monastery an important reception point in the court ceremonial of the Palaeologan period. Almost simultaneously, the focus of trade activities in Constantinople was moved to the banks of the Golden Horn, which contributed to the revival of the northwestern area of the capital, where the shipyard of the Byzantine navy can be located around the middle of the fourteenth century.

Die Anlegestellen beim Kosmidion

In der nordwestlichen Umgebung Konstantinopels errichtete man im 5. Jahrhundert eine Kirche der Ärzteheiligen Kosmas und Damian, um die in späterer Zeit ein Kloster namens Kosmidion entstand. Das Heiligtum war einer der bekanntesten Pilgerorte der byzantinischen Hauptstadt und wurde vor allem von Kranken aufgesucht, die für ihre Fahrt dorthin wegen der Untiefen Flachboote benützten. Der Küstenabschnitt in der Nähe der Blachernen-Mauer zeichnete sich allerdings durch größere Tiefe aus und eignete sich zum Anlaufen durch Schiffe. Aus diesem Grund bestimmten die byzantinischen Kaiser die Gegend des Kosmidion als Ort ihrer Treffen mit fremden Herrschern, denen sie mittels der Hinfahrt per Schiff die byzantinische Seemacht vor Augen führen konnten. Die Verlegung des kaiserlichen Palastes in den Blachernen-Viertel im 11. Jahrhundert machte aus dem Uferbereich südlich des Kosmidion-Klosters eine wichtige Empfangsstation im Hofzeremoniell der Palaiologen-Zeit. Der sich fast gleichzeitig verlagernde Schwerpunkt der Handelsaktivitäten zu Konstantinopel an das Ufer des Goldenen Hornes trug weiter zur Belebung der nordwestlichen Umgebung der Hauptstadt bei, wo sich die Werft der byzantinischen Marine um die Mitte des 14. Jahrhunderts lokalisieren lässt.

110 Konstantinos Porphyrogenetos, *De cer. II* 12 (III 75, 4-9 and 81, 109-112 Dagron/Flusin/Feissel). – *Vita Euthymii IV* (27, 8-14 Karlin-Hayter). – The Blachernae Gate, as documented in the *Book of Ceremonies*, would have been a gate on the sea wall, see Asutay-Effenberger's contribution in this volume.

111 See Kislinger, *Better and Worse Sites*, in this volume.

112 *Miracula Cosmae et Damiani* 44-46 (202-205 Deubner). – On the Late Byzantine collection of the Anargyroi miracles, see Talbot, *Metaphrasis*.

113 *Chronicon Paschale* 618, 18-19 (Dindorf). – Hurbanič, *St. Callinicus Bridge*. – Effenberger, *Brücken*. – Effenberger, *Illustrationen* 57-58.

114 Leon Diakonos, *Historia VIII* 1 (129, 8-14 Hase).

Gates to Asia Minor: The Harbours of Chalcedon, Chrysopolis, Hiereia and Eutropiu Limen Opposite Constantinople

Preliminary Geographical and Historical Remarks

A glance at a map or a city plan of today's İstanbul shows that, not only the entire area, but also the densely populated area of the »İstanbul Büyükşehir Belediyesi« (metropolitan municipality of İstanbul), both in area and in population (about 15 million inhabitants), many times surpasses the »Stambul« of the Ottoman period, which corresponded to the Byzantine Constantinople. For many years, the Asian parts of this metropolitan area with about 5 million inhabitants have been more than merely suburbs of İstanbul, as they were regarded at the turn of the nineteenth century. With industries, offices and administrative centres whose skyline is in no way different from that of other major cities, an international airport and dense residential areas, they are a genuine counterpart to the districts on the European side. In 1973, with the opening of the first road bridge over the Bosphorus, the Boğaziçi Köprüsü, a »land connection« was created between the European and Asian districts. In the meantime, the second Bosphorus bridge, the Fatih Sultan Mehmet Köprüsü, has been in existence since 1988; a third Bosphorus bridge, the Yavuz Sultan Selim Köprüsü crossing the northern part of the Bosphorus between Garipçe and Poyraz, was opened to traffic on 26 August 2016¹. In 2013, the first section of Marmaray, the suburban railway line under the Bosphorus, began operation. In the first years, it connected only the old centre of İstanbul with the Asian districts of Üsküdar (the old Chrysopolis) and Kadıköy (the old Chalcedon), but it has now been extended to the nearby European and Asian hinterland. Recently this suburban line is also being used for long-distance travel and freight transport between Europe and Asia².

Apart from two pontoon bridges over the Bosphorus attested during Antiquity, and in both cases only designed for single use³, every journey between Byzantium/Constantino-

ple/İstanbul and the shore of Asia Minor had to be by ship until 1973. The significance of the traffic between Europe and Asia over the Bosphorus, important throughout Antiquity, naturally increased with the foundation of Constantinople on the site of the ancient city of Byzantium as the capital and centre of the Roman and Byzantine Empires respectively. Everyone, whether private person, merchant, clergyman, administrative or military personnel, who travelled from Constantinople to the eastern provinces of the Empire (and vice versa) and any commodity brought from Constantinople to Asia Minor or from there to the capital, was reliant on the ship connections between Europe and Asia Minor, and in particular the harbours lying directly opposite Constantinople. Shipping traffic can be assumed to have been lively, which is also abundantly documented in the sources.

The aim of this chapter is to provide a brief overview of the harbours that were located in the suburbs of the capital on the coast of Asia Minor, and, as it were, still belonged to Constantinople. This study deals with the harbours in the order of their importance, deduced from the written sources: Chalcedon/Kadıköy, Chrysopolis/Üsküdar, Hiereia/Fenerbahçe and the »Harbour of Eutropios« (Eutropiu Limen, east of Chalcedon in the present-day area of Kalamış). After giving an account of their geographical peculiarities and the archaeological remains, their actual and, as will be shown, quite different uses are described on the basis of selected sources. The other harbours along the Bosphorus and the east coast of the Sea of Marmara, which were more important for regional traffic, are not taken into account here. In addition, I will not discuss the commercial harbours of Nicomedia/İzmit at the eastern end of the Gulf of the same name, and Kios/Gemlik at the eastern end of the next bay to the south, the Kianos Kolpos/Gemlik Körfezi; not the harbours on the south bank of the Gulf of Nicomedia, especially Pylai/Yalova and Helenopolis/Hersek, which were often used to shorten the land route to Central Asia Minor⁴.

1 On the third Bosphorus bridge, see, for example: https://en.wikipedia.org/wiki/Yavuz_Sultan_Selim_Bridge (accessed 9 June 2020).

2 On the Marmaray project, see, for example: <https://en.wikipedia.org/wiki/Marmaray> (accessed 9 June 2020).

3 The first pontoon bridge over the Bosphorus was installed in 513 BC by the Persian King Darius in connection with his campaign against the Scythians, presumably between Anadolu Hisarı and Rumeli Hisarı (Herodotus IV 85. 87. – Merkelbach, Kalchedon 92. – Müller, Bildkommentar 792-799. 850-852). The

second pontoon bridge over the Bosphorus is said to have been built in AD 641 for Emperor Heraclius, who was physically and mentally broken after being defeated by the Arabs in 636. He is said to have suffered from an insurmountable fear of water (Nikephoros Patriarches, Breviarium 72 [Mango]. – Suda II 1931 [s. v. Herakleios]). The information is not considered necessarily trustworthy today. – See Kaegi, Heraclius 287 f.

4 For traffic between these harbours and Constantinople, see Lefort, Communications 210-215.

The part of the coast studied here has, or had, three natural harbours that offered more or less good protection against winds and waves: Chrysopolis/Üsküdar and the two harbours of Chalcedon/Kadıköy. They are all located at the mouths of rivers and, like many Mediterranean harbours located at estuaries, are subject to the problem of siltation⁵. This process is most advanced at the northernmost of these harbours, that of Chrysopolis, whose harbour has now completely disappeared. The harbour of Hierieia/Fenerbahçe could use a smaller bay, which had to be expanded into a fully-fledged harbour by the construction of large perimeter walls. The Eutropios harbour was entirely artificially created.

The Two Harbours of Chalcedon

Chalcedon/Kadıköy was located on a hilly peninsula that protruded south into the Sea of Marmara, approximately corresponding to the present-day district of Moda (fig. 1). This peninsula was bordered to the north-west and to the east by the two estuaries of the River Himeros/Ayrılıksu and of the river of the same name as the town, Chalcedon/Kurbağalidere. It thus had two harbours, which were separated only by a 500m long isthmus, which roughly marked the northern boundary of the actual urban area. However, these two harbours are distinguished only in the *Anapulus* of Dionysius of Byzantium (second century AD)⁶. No other ancient or Byzantine source deals with this geographical peculiarity. Both harbours are now largely silted up by the deposits of these rivers. The wide bay, which today opens south of the Haydarpaşa train station, is all that remains of the western or more precisely the north-western harbour. It is now mainly used for the still heavy ferry service from and to İstanbul and to the Princes' Islands. Research publications trace the course of the ancient (and Byzantine) coastline slightly differently. It is agreed that the bay in the estuary of the Himeros river formed a now completely disappeared inlet to the northeast and that it was also considerably reduced in the east and south by sedimentation⁷. The location of the actual harbour

is disputed. The inlet at the Himeros estuary would certainly have offered the best protection against northern winds, and Merkelbach marks an »ancient harbour« here without explanation in the text⁸. The serious disadvantage of a harbour at the old mouth of the Himeros river is the distance of about 500 m to the walled urban area. The old harbour is thus much more probably to be located on the southern shore of the bay, which is directly adjacent to the urban area, following Janin and Asgari/Fıratlı. The relatively open position certainly required protection by elaborate moles. In fact, as Petrus Gyllius reports, their last remains were removed in the long silted-up harbour area around the middle of the sixteenth century. His description also points to this area⁹. Due to the location directly facing Constantinople, it can be assumed that this western harbour was the main harbour of Chalcedon¹⁰.

Even less has remained of the eastern natural harbour around the mouth of the river Chalcedon. Today, only the broad and quiet river Kurbağalidere that flows through the recent alluvial soil (the old harbour bay), now called Kuş Dili (»bird tongue«), serves as a harbour for small fishing boats¹¹. Due to the infilling of the two bays, the old isthmus has disappeared and the peninsula character of the urban area of Chalcedon has been lost. Also on the eastern side of the peninsula of Chalcedon, Petrus Gyllius saw the ruins of an old harbour mole, which he mistakenly considered to be the remains of the Eutropios Harbours (see below), but which were probably a part of the eastern harbour of Chalcedon¹².

What do the sources say about the harbour or harbours of Chalcedon and their significance? The town was considered the usual starting point of the road diagonally crossing Asia Minor, important since the later part of the Roman imperial period, the so-called »Pilgrim's Road«, which led to Cilicia, Syria and the Holy Land¹³. At various points on this Pilgrim's Road many routes branched off that led to the northeast and east of Asia Minor, e.g., to the Euphrates¹⁴, which of course increased the importance of the harbour at its outset. Two reports from the Early Byzantine period underline the value of Chalcedon as a ferry harbour. Emperor Justinian I (527-565) discontinued the so-called *cursus publicus* on the

5 On siltation as a general problem of Mediterranean harbours in estuaries, see, e.g., Veikou, *Mediterranean Byzantine Ports 41-43 et passim*.

6 Dionysii Byzantii *Anapulus* 34. – Petrus Gyllius, *De Bosporo Thracio* 246. 250f.; French translation: Grémois, Gilles 244. 247 f. At this point, a comment is due on the relationship between the three works, which are often cited below. Petrus Gyllius (Pierre Gilles) translated, partly paraphrasing, the Greek text of Dionysius of Byzantium into Latin and after each section added extremely valuable comments and observations of his own. Jean-Pierre Grémois translated the Latin text of Pierre Gilles into French with numerous footnotes. The original Greek text (in Dionysii Byzantii *Anapulus*), still read completely by Gyllius, is partially lost today so that the content of the lost passages is known only from Gyllius' translation.

7 Compare the hypothetical course of the old coastlines on the maps at Janin, *Grands Centres* 30 and *Asgari/Fıratlı, Nekropole* 5. The coastline on the map in the historically still valuable article: Janin, *Banlieue I-II*, 353, is obsolete due in part to the more recent observations of Janin himself.

8 Map at Merkelbach, *Chalcedon* 142, which takes up the coastline from *Asgari/Fıratlı, Nekropole*.

9 Maps at Janin, *Grands Centres*, and *Asgari/Fıratlı, Nekropole*. – Cf. Janin, *Banlieue I-II*, 373f. and Petrus Gyllius, *De Bosporo Thracio* 252; French translation: Grémois, Gilles 248.

10 Lehmann-Hartleben, *Hafenanlagen* 251. – Not entirely explainable in this respect is the note in Dionysii Byzantii *Anapulus* 34 that one natural harbour looks west, the other artificial, to the east and Byzantium. Significantly, Petrus Gyllius, *De Bosporo Thracio* 244, in his paraphrase, omits these last words.

11 Also for the area of the old eastern harbour, the approximate old coastlines can be seen on the maps in Janin, *Grands Centres* 30 and *Asgari/Fıratlı, Nekropole* 5.

12 Petrus Gyllius, *De Bosporo Thracio* 253; French translation: Grémois, Gilles 250.

13 *Itinerarium Antonini* 139, 1-2: *Calcedonia, traiectus in Bithinia*. – *Itinerarium Burdigalense* 515, 9-10: *A Constantinopoli transis Pontum, venis Calcedoniam, ambulas provinciam Bithyniam*. – *Tabula Peutingeriana* VIII 1-2: *Calcedonia* is marked as the starting point of the road through Asia Minor; Chrysopolis (see below) is marked on the map as north of *Calcedonia*, but without a road connection indicated.

14 For the most important branches, see Belke, *Paphlagonien und Honorias* 117 f. (from Nicomedia via Paphlagonia to Pontos). – Belke, *Galatien und Lykaonien* 104f.; Hild, *Straßensystem* 104-107 (from Ankyra via Tabia to Sebasteia and Melitene). – Hild, *Straßensystem* 77 (from Ankyra via Kaisareia to Melitene or Germanikeia).

road between Chalcedon and Dakibyza/Gebze. *Cursus publicus* denotes the Roman-Byzantine overland »postal service«, which served exclusively for the transmission of messages and the transport of certain persons and goods strictly in the interest of the state. This service was replaced by a maritime connection from Constantinople to Helenopolis/Hersek on the south bank of the Gulf of Nicomedia that was not safe, especially in winter, and this economic measure was immediately heavily criticised and did not last¹⁵. The second report to be cited here shows how inconsistently the above-mentioned discontinuation of the *cursus publicus* was carried out. From the paradigmatic description of one of the diplomatic missions of the Persian great envoy Isdekos (Isdigusnas Zich, mid-sixth century), it can be deduced that Chalcedon was the terminus of the journey before the ceremonial entry into Constantinople. The envoy and his entourage were led across Asia Minor to Helenopolis, and here he had the choice to cross the Gulf of Nicomedia to Dakibyza by boat and from there by land to Chalcedon (for ceremonial reasons he could not go by sea directly to Constantinople), or take the road around the whole Gulf of Nicomedia to get to Chalcedon¹⁶.

The following compilation of a selection of crossings testified to in the sources proves that Chalcedon was the most important ferry harbour to and from Asia Minor especially during the early and the Middle Byzantine period, both for local traffic and long-distance transport¹⁷. From the Comnenian period onwards, Chrysopolis (and the Cape Damalis, which is located within Chrysopolis) are mentioned more frequently than Chalcedon as a crossing place¹⁸. Details of the types of vessels used are rarely given – the harbour itself, its facilities, warehouses, accommodation, barracks, etc., are mentioned even less or not at all. However, they are to be presumed as a prerequisite for the function of the harbour.

According to the focus of the reports in the Byzantine sources, especially the historiographical ones, journeys of the emperors with their imperial household, their officials and occasionally their armies are mentioned particularly frequently. This group is, therefore, placed at the beginning. Between 400 and 803 alone, at least ten journeys of Byzantine emperors between Constantinople and Chalcedon are explicitly and unquestionably attested (only a small part of the known crossings actually mention the destination or departure harbour). Emperor Arcadius personally went to Chalcedon to negotiate with the Goth Gainas for the extradition of his main political opponents¹⁹. On the occasion of

the intrigue of the eunuch Chrysaphios, we are informed *en passant* that Emperor Theodosius and also the synod (*synodos endemusa*) tarried at Chalcedon (perhaps already in the imperial palace?) in 446²⁰. In the year 475, Emperor Zenon fled from Constantinople via Chalcedon to Isauria²¹. In 518, Emperor Justin I and the *magister militum* Vitalianus met in the Euphemia Church in Chalcedon to agree on the new Chalcedonian church policy. Together they made their entry into Constantinople²². Emperor Constantine III (Herakleios Neos Konstantinos) spent much of his short reign (February to May 641) in Chalcedon, where he had a palace built²³. It is clear that the mere existence of an imperial palace brought about an active traffic of the emperor, his family, his imperial household and his officials. His successor Heraklonas (May to September 641) was forced to negotiate a peaceful solution in Chalcedon with the general Valentinus, who, with his troops, acted as the protector of the children of Constantine III²⁴. Constantine V, however, did not return from Chalcedon directly to Constantinople, but first went to Thrace in order to besiege the rebel Artabados in Constantinople. He had the required troops from Western Asia Minor (theme of Thrakesion) ferried over the Dardanelles near Abydos (not far north of Çanakkale)²⁵. In 803, Emperor Nikephoros I sustained a riding accident in a *proasteion* (suburb, house in a suburb, or country estate) in Chalcedon²⁶. Whether the *proasteion* is the one built by Constantine III or another imperial palace must remain open. At any rate, this note, handed down without any context, shows how frequent the journeys of the emperors between Constantinople and Chalcedon must have been, and it is precisely for this reason that they are not mentioned in the sources. Byzantine everyday life was usually not reported.

Hundreds of officials and military personnel must have travelled constantly between the capital and the eastern provinces of the empire. Chalcedon would also have been the most important harbour for this group of people. A commission met on behalf of Emperor Julian in 361 in Chalcedon to purge the imperial household of followers of Constantius II²⁷. Illos, the general and rebel of Isaurian origin, must have often crossed the waterway between Constantinople and Asia Minor during his long career. In 478, he was recalled from Isauria and solemnly received by Emperor Zenon before reaching Chalcedon. However, he only dared to enter the capital after his opponent, the former Empress Verina, was arrested and then banished to Dalisandos in Isauria²⁸. In the following year,

15 Prokopios, *Anecdota* 30, 8f. (182 Haury/Wirth). – Belke, *Pflasterstraße* 271 f.

16 Konstantinos Porphyrogenetos, *De cer.* I 89 (400-403 Reiske) or I 98 (II 393 [Dagron et al.] and D. Feissel, *Commentaire* IV,1 532-537). – PLRE IIIA 722 f. – Dimitroukas, *Reisen* I 237-240.

17 These compilations are based on the corresponding lemmata in Belke, *Bithynien and Hellespont*.

18 Magdalino, *Review* 260, correctly underlines this fact.

19 Zosimos, *Historia Nova* V 18, 6f. (III/1 27 Paschoud). – Albert, *Goten* 69f. 126 et passim.

20 Theophanes, *Chronographia* 98 (de Boor). – Euagrius, *Historia Ecclesiastica* II 2 (39 Bidez/Parmentier). – Runciman, *Palaces* 220. – Janin, *Constantinople* 147.

21 *Chronicon Paschale* 600 (Dindorf). – Ioannes Malalas, *Chronographia* 301 (Thurn). – Stein, *Geschichte* 537.

22 Zacharias Rhetor, *Historia Ecclesiastica* II 43. – Schwartz, *Schisma* 259. – Schneider, *Sankt Euphemia* 299.

23 Nikephoros Patriarches, *Breviarium* 78 (Mango).

24 Nikephoros Patriarches, *Breviarium* 80-82. 192 (Mango). – Kaegi, *Unrest* 156f.

25 Theophanes, *Chronographia* 419 (de Boor). – Mango/Scott, *Theophanes* 582 n. 10.

26 Theophanes, *Chronographia* 479 (de Boor).

27 Ammianus Marcellinus, *Res gestae* XXII 3. – Borries, *Iulianos* 46f.

28 Ioannes Antiochenus, *Fragmenta* 512-514 (Roberto). – Stein, *Histoire* 13. – PLRE II 587 f.

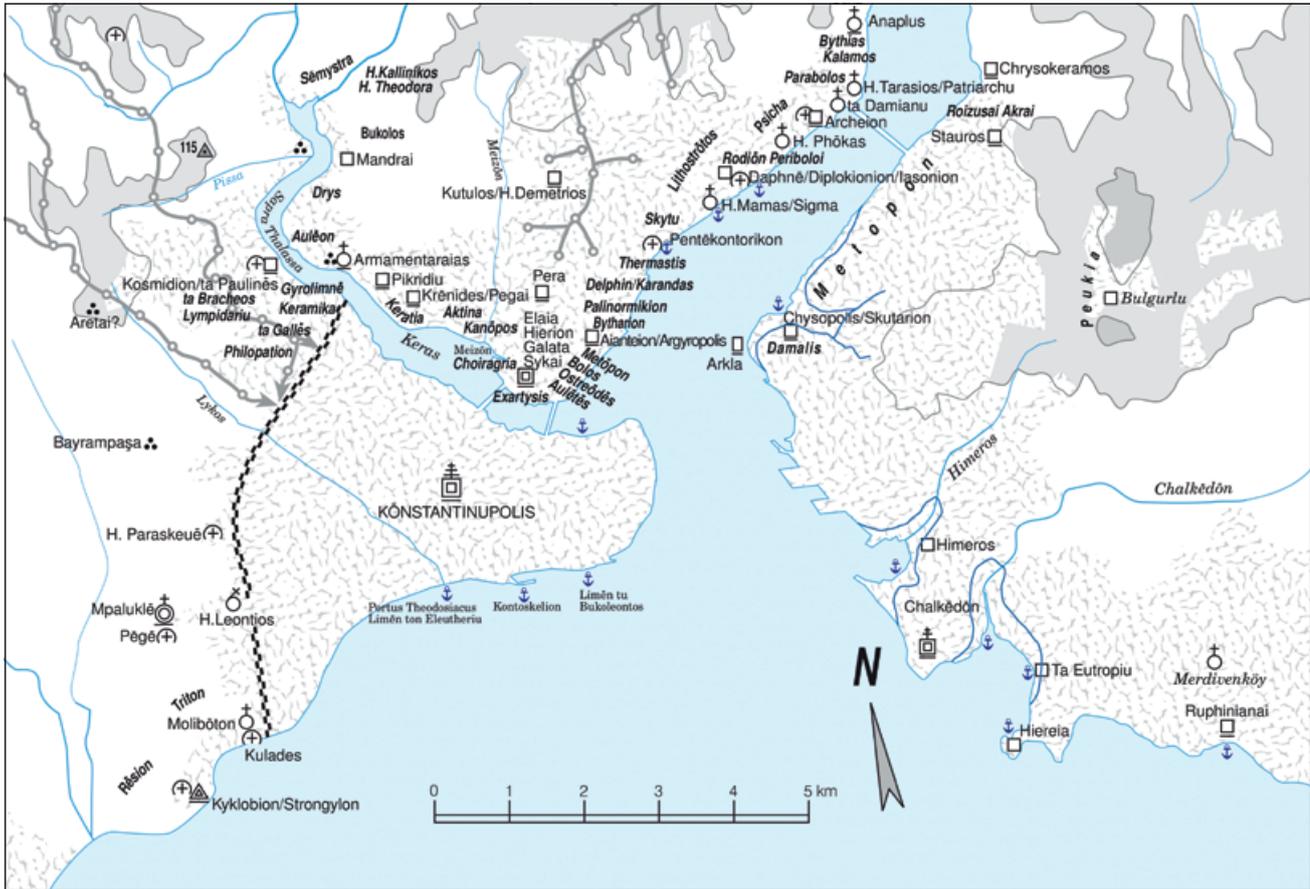


Fig. 1 Map of the harbours opposite Constantinople. – (Map E. Beer 2016; captions A. Külzer/K. Belke).

Illos had Isaurian troops ferried from Chalcedon to Constantinople to fight the revolt of Marcian²⁹. In 1072, Andronikos Dukas travelled on behalf of Emperor Michael VII from Constantinople to Chalcedon, where, within six days, he procured equipment for his campaign against Emperor Romanos IV Diogenes. Later, he gathered the troops in Asia Minor³⁰.

The movement of troops from Constantinople to Asia Minor and vice versa was part of everyday military life. The movements of officers and troops, which are here presented only as examples, are intended, above all, to prove the frequency of such ship transports. As already indicated, this presupposes a sufficient size of the harbour and corresponding depots for food and accommodation, and at least space for tented encampments. As can be seen, the specific harbour of destination or disembarkation is rarely mentioned. In addition to Chrysopolis (see below), Chalcedon was most likely to be used. When the later Ostrogoth King Theoderic was sent to

Isauria against the rebel Illos in 484, he also took with him Gothic troops from Thrace, which he brought back after the campaign³¹. For his (failed) campaign against the Bulgarians in 681, Emperor Constantine IV had troops (all »themes«) ferried to Thrace³². For his famous campaign against the Bulgarians and Slavs in 687/688, which led him to Thessalonica, Emperor Justinian II moved cavalry units (probably those of the Opsikion Theme, especially) to Thrace. In view of the expansion of the area of the Opsikion, ferry harbours further south as far as Abydos at the Dardanelles were also suitable for this crossing. This was the harbour on the Asian side, to which the emperor shipped most of the Slavs whom he had then re-settled in the Opsikion Theme³³. Probably in 741, the usurper Artabasdos moved into the capital as emperor with troops of the Opsikion, whose *komes* he had been³⁴. In 782, Empress Eirene sent the *tagmata* stationed in the capital under the *domestikos* Antonios against the Arabs,

29 Ioannes Antiochenus, Fragmenta 514 (Roberto). – Stein, Histoire 15f. – PLRE II 588.

30 Nikephoros Bryennios, Hyle Historias 133 (Gautier).

31 Ioannes Antiochenus, Fragmenta 520 (Roberto). According to this report, he had already been summoned back near Nicomedia. – Euagrius, Historia Ecclesiastica III 27 (124 Bidez/Parmentier). – Theophanes, Chronographia 131 (de Boor). – Mango/Scott, Theophanes 202 n. 6. – PLRE II 1081.

32 Theophanes, Chronographia 358 (de Boor); here, it is plausible to assume that the troops from western Asia Minor crossed the Dardanelles at Abydos, those of northern Asia Minor, among other places, at Chalcedon.

33 Theophanes, Chronographia 364 (de Boor). – Nikephoros Patriarches, Breviarium 92 (Mango). – Ditten, Verschiebungen 217-221.

34 Theophanes, Chronographia 414f. (de Boor). – Nikephoros Patriarches, Breviarium 132-134 (Mango). – On the chronology, cf. Mango/Scott, Theophanes 576 n. 1.

who had reached Chrysopolis (or Chalcedon, respectively) under the general and later caliph Hārūn ar-Rašīd³⁵. When units in Constantinople (*tagmata* and *scholai*) following the iconoclastic cause disturbed the holding of a council to restore the veneration of images in 786, Irene ordered them to advance to Asia Minor (more precisely to Malagina) under the pretext of a campaign against the Arabs, but then had them disarmed there. The Council was held the following year in Nicaea³⁶. This enumeration, which could be continued for quite some time, will end here with three troop transports, for which the harbour of Chalcedon is again explicitly attested. In 1097, two units of the armies of the First Crusade (Godfrey of Bouillon and Tancred with the army of Bohemond) made camp near Chalcedon after crossing the Bosphorus³⁷. King Conrad III also took the ferry to Chalcedon with the German army of the Second Crusade in 1147³⁸.

There are many pilgrims and clerics to be found among the travellers, individually or in small groups, who used the crossing between Constantinople and Chalcedon, according to the sources, which focus on these groups. The cult of St Euphemia, who had suffered martyrdom in Chalcedon, attracted numerous pilgrims, especially at her annual festival³⁹. St Aetheria (or Egeria, end of fourth century) visited the *famosissimum martyrium sanctae Eufimiae* during the return journey from her pilgrimage to the Holy Land before the ferry crossing to Constantinople. So did St Melania in 436⁴⁰. We can only point out here the journeys of bishops and their companions to the councils and synods, which usually took place in Constantinople or in the coastal towns in Asia Minor: Nicaea 325, Ephesus 431 (less important for crossings to the harbours opposite Constantinople), Chalcedon 451, Nicaea 787.

After the synod of Constantinople in 381, the body of St Paul the Confessor, the former bishop of the city, was brought from Kucusos in Cappadocia and solemnly transferred from Chalcedon to Constantinople⁴¹. At the last stage of the translation of the relics of St John Chrysostomos in 438 from Chalcedon (according to one source from Hieria, see below) to Constantinople, the procession was met by »the whole of Constantinople«. The harbour – exceptionally mentioned here – was that of Chalcedon, and it was full of lamps and ships⁴². In 511, the deposed Patriarch of Constantinople

Macedonius II travelled via Chalcedon on his way into exile in Euchaita in Pontos⁴³.

Chrysopolis

The old harbour of Chrysopolis has now disappeared entirely under a wide alluvial plain in the central part of today's Üsküdar⁴⁴. Only selective rescue excavations and geological surveys carried out in connection with the construction of the underground station for the aforementioned Marmaray suburban railway line brought some clarification regarding the development of the harbour from the Archaic to the Ottoman period. Ceramic finds, especially fragments of amphorae, testify to the continuous and intensive use of the harbour⁴⁵. The former harbour bay had a c. 400m wide opening to the north-west and extended in full width over about 400-500m inland in a southeastern direction⁴⁶. Two rivers fed into this bay, the Bülbül Deresi in the northeast coming from the east and the Çavuş Deresi coming from the southeast. The alluvial deposits of these rivers gradually led to a progressive siltation of the bay, a process that presumably occurred via the intermediate stages of a lagoon lake and a bog and probably began already in Antiquity⁴⁷. A breakwater or a pier and sea walls in front of today's Mihrimah Camii mark the northern border of the harbour in Roman times⁴⁸. Extensive remains of wooden jetties were found c. 100m south of the Roman breakwater. Originally thought to be Byzantine, it has now become clear that they belong to the Roman imperial period⁴⁹. During the Byzantine period and beyond, the expanse of water of the bay was still sufficient for continued operation of the harbour. At the same time, parts of the (former) bay were already populated. The most important proof of this is provided by the largely excavated foundations of a building orientated roughly south-west to north-east and dated to the twelfth to thirteenth centuries on the basis of its building technique (»recessed-brick technique«). This building comprised an apse and was interpreted as part of a larger monastery complex (probably the Trapeza). A plausible counter-proposal sees in this ruin the remains of the Skutarion Palace in Chrysopolis (see the following paragraph), which would fit the dating

35 Theophanes, Chronographia 456 (de Boor).

36 Theophanes, Chronographia 462 (de Boor). – Mango/Scott, Theophanes 636 n. 4-5.

37 Benedictus de Accoltis, Historia Gotefridi 555. – Wilhelmus Tyrensis, Chronicon 175-177. 181 (Huygens). – According to Anna Komnene, Alexias X 9, 11, however, Bohemond and the other leaders of the First Crusade crossed the Bosphorus from Constantinople to Damalis (in Chrysopolis). After that, she only knew of the camp at Pelekanon (on the north shore of the Gulf of Nicomedia); a camp near Chalcedon does of course not exclude a passage via Damalis/Chrysopolis. The main sources of the First Crusade, such as Albert of Aachen 90-94 or the Gesta Francorum 13f., do not mention any names at all. – Cf. Hagenmeyer, Chronologie 271-272. 281. – Runciman, Crusades 1, 152-154. 159.

38 Here, too, the name of the landing harbour can only be found in Wilhelmus Tyrensis, Chronicon 742 (Huygens).

39 Halkin, Euphémie 5f.

40 Itinerarium Egeriae XXIII 7f. (67 Franceschini/Weber). – Vita Melaniae 228 (Gorce). – Schneider, Sankt Euphemia 299.

41 Bios Pauli 238. – Vita Pauli (PG 116) 896 A.

42 Thus the various *vitae* and reports on the translation of John Chrysostom in Halkin, Chrysostome 40. 492. 517. 530.

43 Theophanes, Chronographia 155 (de Boor).

44 Karagöz, Khrysopolis Liman 404f.

45 Karagöz Khrysopolis 33-39. – Karagöz, Excavations 89-105. – Karagöz Khrysopolis Liman 403-406. 411.

46 The harbour bay is mentioned only once in a source (Dionysii Byzantii Anaplus 33: »After which an excellent harbor, both large and calm. A deep, soft beach surrounds it« (translated by B. Kiesling for ToposText: <https://topostext.org/work/619>, accessed 16 October 2020). – See the map in Karagöz, Khrysopolis Liman 405, resim 5, where the presumed coastline in the Archaic period is shown.

47 Karagöz, Khrysopolis Liman 404f.

48 Karagöz, Chrysopolis 46f. – Karagöz, Khrysopolis Liman 410f. – Ginalis/Ercan Kydonakis, Reflections on the Archaeology 45f., in this volume.

49 Karagöz, Yapı 421-423. – Karagöz, Excavations 101-105. – Karagöz, Khrysopolis Liman 408-410. – Ginalis/Ercan Kydonakis, Reflections on the Archaeology 45f., in this volume.

and location. The walls were built over an older necropolis (simple earth burials, some stone cist graves). Early Byzantine architectural fragments were partly re-used in the walls of the building with the apse, partly found in the surrounding area; they were more likely displaced as *spolia* than testifying to an Early Byzantine settlement in the area⁵⁰. Last remnants of the harbour were filled in during the sixteenth century for the construction of the Mihrimah Sultan Camii⁵¹.

Although the recent archaeological investigations have shown that Chrysopolis had a functioning harbour well into the Middle Ages – despite the beginning of siltation – the number of crossings testified by sources until the Comnenian period is not overly large, in any case much smaller than the numbers for Chalcedon further south. This is astonishing, since it was already known in Antiquity that, due to the currents of the Bosphorus, direct crossing from Chalcedon to Byzantium was hardly possible. Instead, one had to sail along the coast to the area of Chrysopolis first in order to get to Byzantium⁵². This circumstance is explicitly attested again in the sixteenth century⁵³. As the following, by no means complete list shows, Chrysopolis and the appendant Cape Damalis are mentioned particularly frequently in connection with troop transports, compared to other crossings. According to rough estimates, their number is the same as for Chalcedon. Appropriate facilities must also be presumed in this case. Perhaps there were barracks in Chrysopolis for the Early Byzantine *scutarii* belonging to the *scholae palatinae*⁵⁴ or to the Middle Byzantine *skutarioi*, which are mentioned as a part of the *bigla* created by the Empress Eirene⁵⁵. The name of an imperial palace in Chrysopolis, Skutarion, might testify to this, which is attested since the later Comnenian period (see below). The historian Nikephoros Patriarches twice provides information on Chrysopolis without any direct connection to a crossing. On the occasion of a possibly legendary foray of a small group of Arabs in 708, he reports that they had advanced as far as Chrysopolis, »a village-like settlement by the sea, east opposite of Byzantium«, had slaughtered the inhabitants and burned the ferries (*tas porthmidas naus*)⁵⁶. Later, he characterises Chrysopolis as a harbour (*epineion*) opposite Byzantium on the Asian shore⁵⁷.

In 715, rebels comprising troops from the theme of Opsikion and the so-called Gotthograikoi, who deposed Emperor Artemius (Anastasius II) and elevated Theodosius III to

the throne, made Chrysopolis the basis for the conquest of Constantinople. The imperial fleet, stationed in the harbour of Hagios Mamas (in the area of today's Beşiktaş)⁵⁸ and that of the insurgents fought daily battles with each other for half a year, which also required an infrastructure for supply in Chrysopolis besides the harbour itself. Finally, Theodosius took advantage of a relocation of the imperial fleet to the Neorion Harbour (on the south side of the mouth of the Golden Horn) to cross over to Thrace and take the capital⁵⁹. Some of the soldiers who had mutinied in Thrace in 809 were sent to Chrysopolis for punishment⁶⁰. The Arab prisoners of war, who were to be presented in the triumphal procession after the success of Emperor Theophilos in 831 in Constantinople, were shipped from Chrysopolis to Constantinople⁶¹. In 1029, the Jacobite Patriarch of Antioch, John VIII bar Abdoun, who had been called to the patriarchal court, was held, with his entourage, in Chrysopolis for twelve days before he was allowed to travel on to Constantinople⁶². Emperor Constantine IX Monomachos in 1047 called the troops of the *tagmata*, operating in eastern Asia Minor, to Europe because of the uprising of Leon Tornikios. On imperial orders, they were ferried over the Dardanelles near Abydos and over the Bosphorus near Chrysopolis⁶³. The following year, the emperor had a Pecheneg force cross the Bosphorus near Chrysopolis to use it against the Seljuks who had invaded the east of Asia Minor⁶⁴. In 1050, the *tagmata* of the east again ferried to Europe at Abydos and Chrysopolis, to fight the Pechenegs⁶⁵. In 1057, Emperor Michael VI moved troops of the west against the usurper Isaac Komnenos to Asia Minor at Chrysopolis⁶⁶. From the Comnenian period onwards, Chrysopolis (and Cape Damalis) replaced Chalcedon as the main ferry harbour. For example, Emperor Alexios I crossed the Bosphorus to Cape Damalis in 1113 and 1116 in order to fight the Turks, and in 1116 he returned to Constantinople by the same way⁶⁷. After the death of Emperor John II Komnenos in Cilicia in 1143, the new emperor, Manuel I, marched to Constantinople by land. He ferried across from Chrysopolis to the Bukoleon harbour with the whole army⁶⁸. In 1147, he crossed the *Damaleos porthmos* (the channel of Damalis)⁶⁹. In 1082, Emperor Andronikos I went from Damalis to Constantinople⁷⁰.

Shortly before his death, Emperor Manuel I sought recreation in a palace that is mentioned here for the first time and even named: Skutarion. It was located near Damalis, the cape

50 Karagöz, Marmaray Projesi 149-153. – Karagöz, Chrysopolis 40-46. – Karagöz, Yapı 415-421. – Karagöz, Excavations 98-101. – Ginalis/Ercan Kydonakis, Reflections on the Archaeology 46f., in this volume. – On the interpretation as a palace, see Hellenkemper, Politische Orte 251 f.

51 Petrus Gyllius, De Bosporo Thracio 237f.; French translation: Grélois, Gilles 237f. – Karagöz, Khrysopolis Liman 402. – According to the wording of Gyllius, parts of the harbour were actually filled in to make room for the mosque and adjacent buildings, not, as Karagöz believes, remnants of old harbour buildings that had been demolished.

52 Polybios IV 44, 3f. (II 56f. Büttner-Wobst).

53 Petrus Gyllius, De Bosporo Thracio 239; French translation: Grélois, Gilles 239.

54 Seeck, Scholae palatinae 621f. – Cf. Haldon, Praetorians 131f. 402f.

55 Haldon, Praetorians 241. 509.

56 Nikephoros Patriarches, Breviarium 106. 202 (Mango).

57 Nikephoros Patriarches, Breviarium 134 (Mango).

58 Külzer, Ostthrakien 512.

59 Theophanes, Chronographia 385f. (de Boor). – See Kislinger, Better and Worse Sites 11, in this volume.

60 Theophanes, Chronographia 486 (de Boor).

61 Konstantinos Porphyrogennetos, De exped. 146. 287 (Haldon).

62 Chronica Michaelis Syriaci III 141.

63 Ioannes Skylitzes, Synopsis 439. 441 (Thurn).

64 Ioannes Skylitzes, Synopsis 460 (Thurn).

65 Ioannes Skylitzes, Synopsis 467 (Thurn).

66 Ioannes Skylitzes, Synopsis 493 (Thurn).

67 Anna Komnene, Alexias XIV 4, 1. 5, 1; XV 1, 3. 7, 2 (Reinsch/Kambylis).

68 Kleinchroniken 58 (Schreiner).

69 Ioannes Kinnamos, Epitome 294 (Meineke).

70 Niketas Choniates, Historia 254 (van Dieten).

directly opposite the island of Kız Kulesi, i. e., near the sea in Chrysopolis proper. Its remnants might be identified with the recently excavated building with an apse (see above). For a theological dispute with the emperor, described by Niketas Choniates on this occasion, representatives of the clergy and other scholars arrived from Constantinople by ship, which is expressively emphasised. For once, we learn concretely how an imperial palace on the other side of the Bosphorus leads to an increase in shipping traffic⁷¹. Emperor Alexios III Angelos (1195-1203) also repeatedly sojourned in Chrysopolis⁷². In 1202, a eulogy to the Emperor was read out by Nikephoros Chrysoberges in the »Palace of Skutarion«⁷³. At this palace (variously Skutarion, Scutaire, Escutaire) a part of the fleet of the Fourth Crusade anchored, and, before the conquest of the Byzantine capital in 1204, the leaders of the Fourth Crusade stayed here⁷⁴. The name of the palace, Skutarion, eventually replaced the name of the town, Chrysopolis; the linguistic development led from Skutari(on) to today's Üsküdar. It is only according to a later source that Alexios III, in 1203, fled to Asia Minor via Skutarion⁷⁵. For the last time, a Byzantine army crossed the Bosphorus near Chrysopolis in 1329. Under the personal command of Emperor Andronikos III, it was to fight against the Turks of Orhan in the plain of Pelekanos (on the north bank of the entrance to the Gulf of Nicomedia). The Emperor returned directly to his capital after being slightly wounded. The defeated army again debouched via Chrysopolis⁷⁶. Even when the whole peninsula of Bithynia fell into the hands of the Ottomans a little later, the significance of Chrysopolis/Skutari remained unbroken, as is to be illustrated here only by a few examples. Empress Anna, the wife of Andronikos III and regent for her minor son (the later Emperor John V), was at civil war with John VI Cantacuzenus. In 1344/1345 she offered Orhan for military support, among other things, that he could take Rhomaic prisoners of war (subjects of John VI) to Asia Minor via Skutarion, if he did not want to sell them immediately⁷⁷. In 1347, John VI met Orhan, now his father-in-law and ally, in Skutarion⁷⁸. In 1421, Emperor Manuel II accompanied Sultan Mehmed I from Diplokionion (at today's Beşiktaş) to »Skutaris, the former Chrysopolis« by ship⁷⁹. The importance of the ferry traffic between Constantinople, as well as Galata, and Skutari is also evident from the fact that this place served as a market for trade between Turks on the one side and Byzantines and Genoese on the other in the fifteenth century⁸⁰.

Hiereia

A preliminary remark is due on the evidence presented in this section. The following account is based on Procopius, who wrote of two palaces: one in Heraion, which is »now« called Hieron and whose identification with Hiereia is undisputed; and a second one in lukundianai, whose location at Hebdomon (Bakırköy) on the European coast of the Sea of Marmara about 4 km west of the land walls of Constantinople is also assured. The wording of the passages of Procopius' *De aedificiis*, which were used to determine the location of the additional buildings (harbour, churches, etc.) in relation to one of these palaces, is not very clearly formulated. Thus, opinion is divided among modern researchers as to whether they relate to lukundianai or Hiereia. In his contribution to this volume, G. Simeonov takes a clear position for the European coast based on convincing arguments⁸¹. According to my opinion, the reference to the Asian coast is not assured, but still a possibility⁸². Two arguments in favour of the European side⁸³ are not really conclusive. Protection from winter storms is also required on the north side of the flat and narrow cape of Fenerbahçe, especially when wind and waves come from the southwest or even west-north-west. More serious is Procopius' proposition that Emperor Justinian built another harbour, the Eutropios harbour (see below) *en te antiperas epeiro*, »not far from Heraion« (namely, Hieron, Hiereia). If the previous description of the harbour refers to lukundianai, the Eutropios harbour is indeed »on the opposite continent«. However, if Procopius uses *epeiros* in its original meaning »mainland«, then this could indicate the contrast to the peninsula of Fenerbahçe. Finally, Procopius twice mentioned the harbour/harbours at the palace/palaces in the plural, so that he perhaps assigns each of the palaces its own harbour and the other facilities⁸⁴. In this sense, I am referring the passage of Procopius (also) to Hiereia, without taking up again the discussion of locations.

The harbour of Hiereia/Fenerbahçe is located on a peninsula, only 1.5 km as the crow flies south-east of Chalcedon and about 6 km south-east of the tip of Saray in Constantinople. It is, therefore, the furthest away from the imperial city among the harbours examined here, but, as will be shown immediately, has a special significance for the imperial court. Hiereia was one of the Empress Theodora's favourite places. Emperor Justinian not only built a palace for her, but also a

71 Niketas Choniates, *Historia* 215 (van Dieten). – Hellenkemper, *Politische Orte* 251 f.

72 So in 1200 or 1201 (Niketas Choniates, *Historia* 525 [van Dieten]. – Brand, *Byzantium* 121).

73 Nikephoros Chrysoberges, *Orationes* 13. 39. 45 f. (Treu).

74 Niketas Choniates, *Historia* 542 (van Dieten). – Geoffroy de Villehardouin, *Conquête I* 136-138. 142 f. (Faral). – Brand, *Byzantium* 235.

75 *La crónica de Morea* 28, vv. 551-553 (Egea).

76 Ioannes Kantakuzenos, *Historia I* 342. 363 (Schopen).

77 Dukas, *Historia* 55 (Grecu).

78 Ioannes Kantakuzenos, *Historia III* 28 (Schopen).

79 Georgios Sphrantzes, *Chronicon* 16 (Maisano). – Barker, *Manuel II*, 251 f.

80 Majeska, *Russian Travelers* 190.

81 See Simeonov, *Hebdomon*, in this volume, especially p. 192 with n. 110-111. A parallel representation can, therefore, be dispensed with at this point. I would like to thank Dr Simeonov warmly for his references to the passages in modern literature advocating the location on the European coast and for the detailed discussion of the problem.

82 Text and translation in Simeonov, *Hebdomon* 192 with n. 111, in this volume.

83 Cited in Simeonov, *Hebdomon* 192 n. 110, in this volume.

84 Prokopios, *De aedificiis I* 11, 18 (44, 6f. Haury/Wirth): ἐν ταῦθα δὲ καὶ λιμένων σκέπας ἀποτετόρνευται οὐ πρότερον ὄν. – I 11 22 (45, 4 Haury/Wirth): κατὰ ταῦτα εἰργασμένον τοῖς ἄλλοις, ὧν περ ἐπεμνήσθη ἄρτίως. The possibility of two harbours is also considered by Simeonov, *Hebdomon* 92, n. 110, in this volume.

Church of the Theotokos, as well as other churches, columned halls, markets, public baths, etc., »so that it [this palace] was in no way inferior to the palaces in the city [Constantinople]«⁸⁵. The harbour, which the emperor established *ex nihilo* especially for this palace, took advantage of the angle between the southern end of Kalamış Bay and the north-facing tip of the peninsula of Fenerbahçe. In the sixteenth century, this tip was still called *acra Ioannis Calamoti* (on this name see below in connection with the Eutropios Harbour).

Large harbour walls or moles were also required to protect it. Particularly interesting, though not entirely clear to interpret, is Procopius' detailed, but incomplete, description of how the moles were technically built. Justinian had many large »(wooden) boxes« (Greek *kibotos*) made, which he had sunk in the sea, in order to build the perimeter walls of the harbour by means of many rows (of these boxes) placed on each other from the foundations to the water surface. Large undressed stones were laid on top of this construction against the power of the surging waves⁸⁶. Among other details of the construction, Procopius especially does not tell us what the boxes were filled with. One possibility could be heaps of stones (which could certainly be easier to sink in the sea) another one hydraulic mortar (mixed with puzzolans), the use of which (with a somewhat different technology) is described by Vitruvius particularly regarding the construction of harbours⁸⁷. It is especially the laying technique, which seems to underlie Procopius' description, according to which the box constructions were brought to the correct position and then (previously filled or only sunk by the filling), that Vitruvius omits. And yet, in the course of recent research, this very technique, which allows for different variants, was archaeologically verified in various places in the Mediterranean region, especially in the harbour walls built by King Herod (reg. 37-4 BC) at Caesarea Maritima, capital of the province of Palaestina in the Roman imperial period⁸⁸.

At the *acra Ioannis Calamoti*, Peter Gyllius saw remains of old moles and harbour walls, which still offered the ships a certain possibility to anchor⁸⁹. The last remnants were still present in the first half of the twentieth century. A mole projected from the top of the already mentioned northern foothills of the Fenerbahçe peninsula, which was built with Byzantine *spolia* and is attributed to Sultan Süleyman I the Magnificent (reg. 1520-1566). A mole of black stones continued in a northerly direction. It resembled the mole of the Eutropios Harbour (see below) and therefore probably dates

back to Emperor Justinian⁹⁰. The construction of the modern marina of Fenerbahçe has destroyed all the remains of the old moles.

If we now review the crossings between Hierieia and Constantinople, it immediately becomes clear that this completely new harbour had a very different task to perform than the harbours of Chalcedon or Chrysopolis. The harbour of Hierieia was, as said before, built on the occasion of the construction of an imperial palace by Justinian⁹¹. With few exceptions, only the emperor, his family, his entourage and his officials used the palace and thus the harbour, which was not mentioned again. Since the Empress Theodora wanted to visit the palace of Hierieia frequently and at any time of the year (the place was originally called Herion and similar), her entourage had to make the sometimes – especially in winter – perilous passage by ship⁹². Emperor Heraclius I stayed in Hierieia quite often. His daughter Epiphania was born here in 611⁹³. Ceremonial receptions by the people of Constantinople, by officials and clergy with the patriarch at the front, often took place in Hierieia. An instruction handed down in an appendix to the *Book of Ceremonies* of Emperor Constantine VII Porphyrogennetos, which dates back to Early Byzantine times, demands that the prefect of the city receive the emperor on his return from Asia Minor in one of the four coastal suburbs, namely Satyros/Küçükalyı, Poleatikon/Bostancı, Ruphinianai/Caddebostanı or the very Hierieia⁹⁴. Such a reception in Hierieia is concretely attested for the first time on the occasion of the victorious return of Emperor Heraclius from his Persian campaigns in 628 or 629. Here, however, not the prefect of the city paid homage to the emperor, but instead the patriarch, Heraclius' son and Co-emperor Heraclius (Herakleios Neos Konstantinos = Constantine III) and many people from Constantinople approached him with olive branches and lamps⁹⁵. After the lost battles against the Arabs in Syria, Heraclius did not immediately return to Constantinople, but managed affairs of state from Hierieia for several years before the pontoon bridge over the Bosphorus mentioned at the beginning supposedly was built for him⁹⁶.

The next known major event, which requires a busy shipping traffic between the capital and Hierieia, is the iconoclastic council that Emperor Constantine V held from February to August 754 in the palace of Hierieia⁹⁷. In 769, the bride of Emperor Leon IV, the future Empress Eirene, was solemnly led to Constantinople from Hierieia with a decorated convey of dromons (large, predominantly rowed warships) and

85 Prokopios, *De aedificiis* I 3, 10 (21 Haury/Wirth). I 11, 16, 18-21 (44-45 Haury/Wirth). – Prokopios, *Anecdota* XV 36-38 (99 Haury/Wirth). – Runciman, *Palaces* 221.

86 Prokopios, *De aedificiis* I 11, 18-21 (44 Haury/Wirth); Greek text, English translation and short commentary in Oleson, *Concrete Technology* 35. – Cf. Hohlfelder, *Procopius* 54-59. – Hohlfelder, *Harbours* 367, *passim*.

87 Vitruvius, *De architectura* V 12, 1-6; Latin text with English translation in Oleson, *Concrete Technology* 20-22.

88 Hohlfelder, *Procopius* 57-59. – Hohlfelder, *Harbours* 370-371. 374-379. – Brandon, *Roman Formwork* 211-221.

89 Petrus Gyllius, *De Bosporo Thracio* 255; French translation: Grémois, Gilles 251.

90 Janin, *Banlieue III-XIV* 58. – Janin, *Constantinople* 239. 498f.

91 On the palace and its history, see Janin, *Constantinople* 148-150. – Hellenkemper, *Politische Orte* 247-249.

92 Prokopios, *Anecdota* 15, 36-38 (99 Haury/Wirth).

93 *Chronicon Paschale* 702 (Dindorf). – Janin, *Constantinople* 149.

94 Konstantinos Porphyrogennetos, *De exped.* 57. 138. 263f. (Haldon).

95 Theophanes, *Chronographia* 328 (de Boor). – Mango/Scott, *Theophanes* 458 n. 3.

96 See above n. 3

97 Theophanes, *Chronographia* 427f. (de Boor).

chelandia (slightly smaller warships)⁹⁸. Emperor Theophilus had the Augusta, the city prefect and other dignitaries receive him in Hiereia and lead him to the city, probably in 837 after the return from his Cilicia campaign, in keeping with the instructions handed down in the *Book of Ceremonies*⁹⁹. Basil I returned via Hiereia in 878 from his campaign in eastern Asia Minor against Tephrike/Divriği and Germanikeia/Maraş, but the actual homage by the population and the senate did not take place until he arrived in Hebdomon on the European side¹⁰⁰. The same emperor enjoyed sojourning in the different imperial palaces in the surroundings of Constantinople. For shorter distances, for example to Hiereia, he did not use dromons, but a so-called *agrarion* (a smaller, sailing boat type, also used in fishing)¹⁰¹. In addition to other structural measures in Hiereia, Basil I had a chapel of the prophet Elijah set up in the palace¹⁰². His grandson, Emperor Constantine VII Porphyrogennetos, enjoyed the fresh air of Hiereia. He restored the palace and added new buildings¹⁰³. Nikephoros II Phokas who had been proclaimed emperor, was received by selected dignitaries in Hiereia in 963. From here, he entered the city¹⁰⁴. The last proven user of the palace was Emperor Romanos IV Diogenes. He spent the Easter days of 1069 in the »imperial house« *ton Erion* (of Hiereia) before setting out to fight against the Turks and the rebel Krispinos¹⁰⁵. In 1071, the emperor crossed the *Chalkedonios porthmos* (the waterway of Chalcedon) for the »Day of Orthodoxy« in order to reach the palace of *ton Erion* »as usual«. From there he went by ship directly to Helenopolis/Hersek on the south bank of the Gulf of Nicomedia, where he began the campaign that led to defeat at the hands of the Turks at Mantzikert¹⁰⁶.

The elaborately built harbour of Hiereia thus served almost exclusively for the use of the imperial family, the imperial household and the dignitaries, civil servants and clerics necessary for the ceremonial appearances and the current state affairs. The few exceptions handed down in the sources concern patriarchs who were deposed and exiled to Hiereia, or who were sent into exile via Hiereia. Patriarch Constantine II was banished in 766 first to Hiereia, then to the island of Prinkipos¹⁰⁷. Patriarch Ignatios was locked in a goat pen in Hiereia in 858 on his way into exile in Mytilene¹⁰⁸. Patriarch Photius was banished to Hiereia after his second, forced

abdication¹⁰⁹. Finally, Patriarch Nikolaos I Mystikos, after his deposition in the winter of 907, was taken on a small ship to Hiereia, from where he could reach his nearby monastery Galakrenai (in the Suadiye Mahallesi of the former village of Erenköy) only with difficulty due to the snow¹¹⁰.

Eutropiu Limen

The site *ta Eutropiu* was located on a rather straight section of the coast, characterised only by a gentle, west-facing embayment of the coastline, between the eastern harbour of Chalcedon and the harbour of Hiereia. It was only 800m away from Hiereia, i.e., on the eastern shore of the bay today called Kalamış Koyu (in the sixteenth century *sinus Calamotus*), which extends between the (former) peninsula of Chalcedon and Hiereia/Fenerbahçe on the opposite side to the south-east. The area was certainly not named after the famous eunuch of the fourth century¹¹¹, and probably not after a *protospatharios* and *koiaistor* of the same name¹¹², but after an otherwise unknown man whose metric grave inscription was found in the garden of the nearby church of St John Chrysostom, which no longer exists today¹¹³. According to the report of Procopius, Justinian I had in this place (*en tois Eutropiu eponymois*), in contrast to the harbours described so far, built an entirely artificial harbour with enormous moles. For constructing them, he used the same technique Procopius had described a little earlier for the neighbouring harbour of Hiereia¹¹⁴. The Eutropios harbour was therefore probably the smallest harbour on this stretch of coast. Peter Gyllius obviously had not seen any remnants of the actual harbour of Eutropios, as he incorrectly located it on the west bank of the bay. He placed it either halfway between the Moda Burnu and the mouth of the Chalcedon River (here he found an old mole, formerly called mole or harbour of Eirene) or even equated it with the eastern harbour of Chalcedon¹¹⁵. In fact, the Eutropios Harbour is the third harbour in the area of Chalcedon, which, as mentioned before, was located on the east bank of the Kalamış Bay, close to the church of St John Chrysostom, which was mentioned by Gyllius and destroyed in the first half of the twentieth century. Here, too,

98 Theophanes, Chronographia 444 (de Boor).

99 Konstantinos Porphyrogennetos, De exped. 146. 285 (Haldon).

100 Konstantinos Porphyrogennetos, De exped. 140. 268 f. (Haldon). – On Hebdomon (near the current district of Bakırköy), see Külzer, Ostthrakien 391-395.

101 Konstantinos Porphyrogennetos, De admin. imp., cap. 51 (246 Moravcsik/Jenkins).

102 Theophanes Continuatus, Chronographia V 92 (300-303 Ševčenko).

103 Theophanes Continuatus, Chronographia VI, De Constantino Porphyrogenneto 26 f. (451 f. Bekker).

104 Konstantinos Porphyrogennetos, De cer. I 96 (438 Reiske) or I 105 (II 453 [Dagron et al.] and D. Feissel, Commentaire IV, 1, 628-632).

105 Michael Attaleiates, Historia 92 f. (Pérez Martin).

106 Michael Attaleiates, Historia 107 f. (Pérez Martin).

107 Theophanes, Chronographia 439 (de Boor).

108 Vita Ignatii 40 (Smithies).

109 Vita Euthymii 11, 163 (Karlin-Hayter).

110 Theophanes Continuatus, Chronographia VI, De Leone Basilii F. 24 (371 Bekker).

111 PLRE II 440-444 (see by Eutropius I).

112 Patria Konstantinupoleos 267 (Preger). – Pseudo-Kodinos, De aedificiis 597C. – Berger, Untersuchungen 716-718. This Eutropios is said to have built a harbour here; however, the title protospatharios is not attested until the 8th c.

113 Most recently published by Merkelbach, Chalcedon 66 (no. 77).

114 Prokopios, De aedificiis I 11, 22 (44-45 Haury/Wirth).

115 Petrus Gyllius, De Bosporo Thracio 244 (he is here paraphrasing and abbreviating the text of Dionysii Byzantii Anaplus 34, which mentions the two harbours of Chalcedon); 250 (*vter horum* [sc. of the two harbours cited by Dionysios] *postea appellatus fuerit Eutropij portus*); 252-255. – Grélois, Gilles 250 n. 1359, seems to believe that Gyllius had meant today's Moda İskelesi (landing stage of Moda), which, however, is only 250m away from Moda Burnu. Although Gyllius speaks of the »middle of this coast«, he seems to have meant the eastern harbour of Chalcedon or to locate it here. – Lehmann-Hartleben, Hafenanlagen 251 also follows this view.

the remains of an old mole made of black stones were found, similar to those of the harbour of Hiereia (see above), which belong to this harbour¹¹⁶. Due to the large extension of the adjacent marinas of Kalamış and Fenerbahçe at the latest, all old remains have disappeared.

Not much is known about the concrete use of the harbour of Eutropios, which was located not far north of Hiereia. Emperor Phokas had his predecessor Maurice and most of his sons executed here in 602, as well as the female members of his family in 605 or 607¹¹⁷. At the beginning of the second siege of Constantinople in September 717, the Arab fleet (allegedly 1800 warships and supply ships) spread to various harbours or landing places on the European and Asian coasts. On the Asian coast, Arabs landed in *ta Eutropiu* and *ta Anthemiu* (on the central part of the Bosphorus). Remarkably, the harbours are not named in the sources, only the areas¹¹⁸. Finally, the name is found in connection with Saint Luke the Stylite, who climbed on a column on the land of Eutropios (*en tois Eutropiu ktemasin*) in 935 and lived here until his death in 975¹¹⁹. On the news of his death, the author of the Vita of the Stylite immediately went from Constantinople to the column. After a stormy crossing, he landed directly in a harbour artificially built of large stones (*hormon tina cheiropoieton ek megalon kateskeuasmemon petron*), which must have meant the Eutropios Harbour¹²⁰. Luke's anonymous successor drowned in 989, when, according to the description in the source, the column was torn away, probably by a storm surge, rather than after an earthquake or a tsunami caused by it¹²¹.

Conclusion

A final comparison of the four harbours based on the sources reveals both similarities and differences in their function. All four harbours served on a large scale for local traffic. This was to be expected, as these were suburbs (*proasteia* in the ancient sense) of the capital with their palaces, villas and monasteries, which were built and used or donated mainly by the aristocracy all the way up to the imperial family. The only harbours for long-distance traffic to and from Asia Minor were Chalcedon and Chrysopolis, with Chalcedon being mentioned most frequently by far for all groups of travellers until the Comnenian period. Apart from the imperial palace, particularly important in later times, which alone required numerous crossings, Chrysopolis seems to have been especially suitable for troop transports. These are as frequently attested for Chalcedon, but they only form part of the traffic of this harbour. The importance of the harbour of Hiereia is based almost exclusively on the imperial palace, which seems to have been used longer and more frequently than the other palaces in the area. It was therefore more involved in court ceremonial, which required further regular crossings. The Eutropios Harbour lags far behind. Although, according to Procopius, it was built with an effort similar to the harbour of Hiereia, it is rarely mentioned. Its actual purpose is not clear from the sources. It may have been considered the third harbour of Chalcedon¹²² and perhaps some ships originally destined for Chalcedon landed there when the capacity of Chalcedon's harbours was exhausted. The construction of this harbour at the same time as Hiereia and in its immediate vicinity could – perhaps more likely – indicate that, like Hiereia itself, it directly or indirectly served the needs of the palace, in the sense that the lower-ranking staff landed and lived there in simpler quarters and/or that the supply of the palace was handled via the Eutropios Harbour.

116 Janin, *Banlieue I-II* 374 considers that Gilles saw the true remnants of the Eutropios Harbour, which were no longer present at his time. – Janin, *Constantinople* 238f. 297 and map XII (Janin, *Grands Centres*, map p. 30) had noticed by now that there were indeed remnants of a mole.

117 Theophylaktos Simokattes, *Historia* 305-307 (de Boor/Wirth). – *Chronicon Paschale* 694. 696f. (Dindorf). – Theophanes, *Chronographia* 289f. 295 (de Boor). – Whitby, *Maurice* 26f. – *PLRE III* 1, 338.

118 Theophanes, *Chronographia* 395f. (de Boor). – On the chronology, see Mango/Scott, *Theophanes* 548 n. 16-17.

119 Delehaye, *Stylites XCVI-XCIX. CIII-CV*. 206. 222. 235.

120 Delehaye, *Stylites* 234-236.

121 Only Leon Diakonos, *Historia* 175f. (Hase) mentions the collapse of the column. After describing the devastating earthquake that also caused the partial collapse of Hagia Sophia in Constantinople, he speaks of the consequences: hunger, epidemics, droughts, floods and the appearance of exceptionally strong winds; »at that time, the column *en tois Eutropiu* was also brought down by the force of the waves«. – See Delehaye, *Stylites XCVII* (who takes over the date 986 handed down by Georgios Kedrenos, *Chronicon II* 438 [Bekker]). – Guidoboni, *Earthquakes* 404f. – Ambraseys *Earthquakes* 256f. with other sources for the earthquake.

122 According to Ioannes Zonaras (*Epitome III* 196f.), the Emperor Maurice was brought to his execution *eis ton en Chalkedoni tu Eutropiu limena*.

Summary / Zusammenfassung

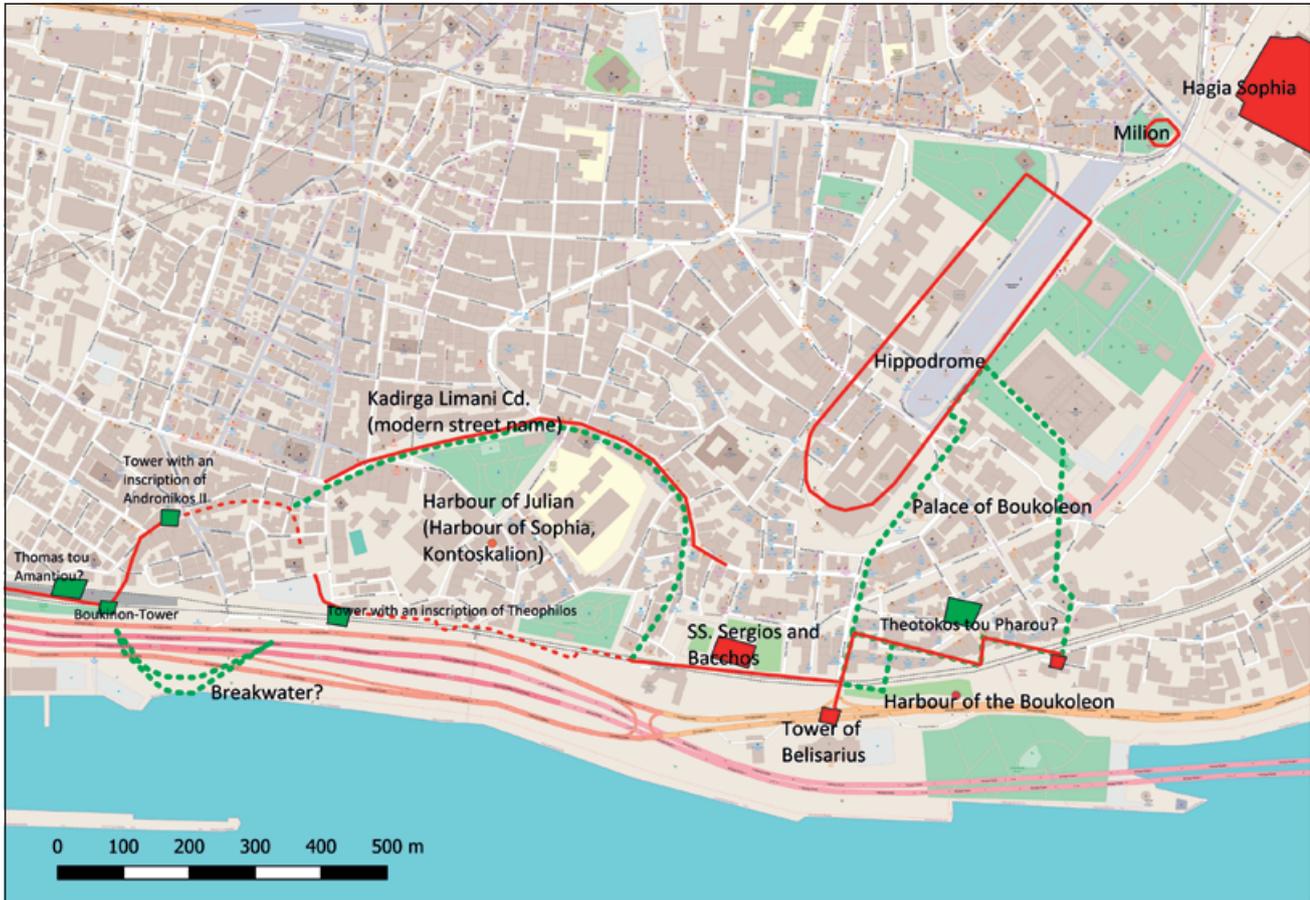
Gates to Asia Minor: The Harbours of Chalcedon, Chrysopolis, Hiereia and Eutropiu Limen Opposite Constantinople

This chapter examines the archaeological findings and the function of five harbours, which are situated directly opposite the capital of the Byzantine Empire, Constantinople, on the Asia Minor bank of the Bosphorus and the Sea of Marmara, and belong to its suburban area. Three of these harbours (the two harbours of Chalcedon/Kadıköy and Chrysopolis/Üsküdar) could use natural harbour bays, which are now partially or completely silted up. For Hiereia/Fenerbahçe (probably) and especially for the so-called Eutropios Harbour, the installation of large moles built into the sea was necessary. A study of the sources relating to the harbours shows that Chalcedon and Chrysopolis were used as starting points of the major roads through Asia Minor for all kinds of traffic of passengers and goods (administration, troops, crossings to suburban palaces and villas, trade, supply of the capital). Hiereia, on the other hand, was the most important imperial palace on the Asia Minor side and the one used for the longest period; it served exclusively for crossings of the emperors and their families, their courtiers and high dignitaries, who participated in the court's many and rich ceremonies. The function of the Eutropios Harbour, located just north of Hiereia, is not so clear. Perhaps it was used as the third harbour of Chalcedon, perhaps it was mainly used to supply the imperial Palace.

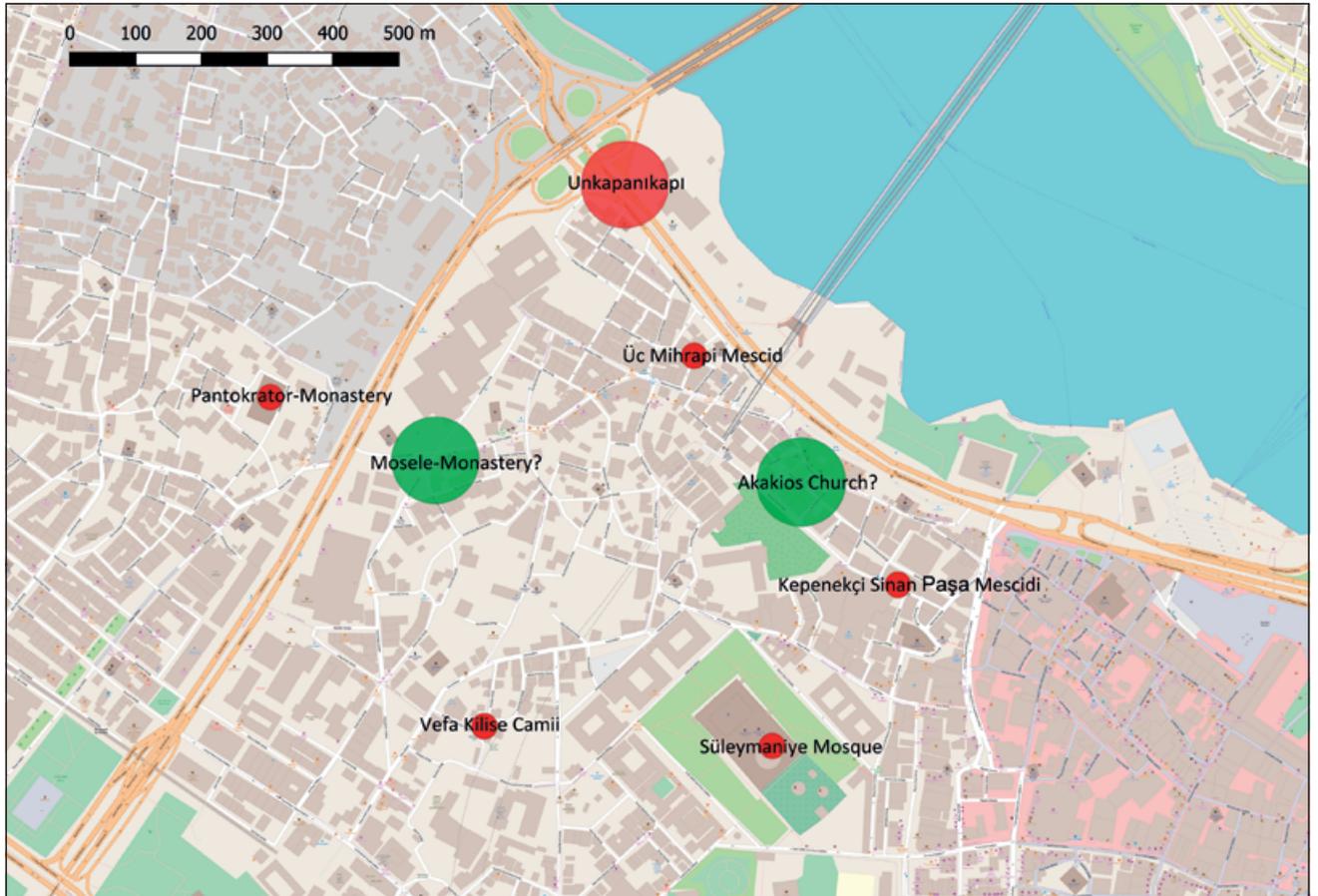
Tore nach Kleinasien: die Konstantinopel gegenüberliegenden Häfen Chalkedon, Chrysopolis, Hiereia und Eutropiu Limen

Der vorliegende Beitrag untersucht den archäologischen Befund und die Funktion von fünf Häfen, die auf dem kleinasiatischen Ufer des Bosphorus und des Marmarameeres der Hauptstadt des Byzantinischen Reiches, Konstantinopel, unmittelbar gegenüberliegen und zu dessen Vorstadtgebiet zählen. Drei dieser Häfen (die beiden Häfen von Chalcedon/Kadıköy und Chrysopolis/Üsküdar) konnten natürliche Hafengebiete nutzen, die heute teilweise bzw. völlig verlandet sind. Für Hiereia/Fenerbahçe (wahrscheinlich) und vor allem für den sog. Eutropios-Hafen war die Anlage großer, in das Meer gebauter Molen notwendig. Eine Untersuchung der auf die Häfen bezogenen Quellen zeigt, dass Chalkedon und Chrysopolis als Ausgangspunkte der großen Straßen durch Kleinasien für alle Arten von Personen- und Warenverkehr (Verwaltung, Truppen, Überfahrten zu Vorstadtpalästen und -villen, Handel, Versorgung der Hauptstadt) genutzt wurden, während Hiereia wegen seines hier errichteten Kaiserpalastes, des wichtigsten und am längsten genutzten auf der kleinasiatischen Seite überhaupt, ausschließlich für Überfahrten der Kaiser und ihrer Familien, ihres Stabes und hoher Würdenträger (zeremoniell) diente. Die Funktion des nur unweit nördlich von Hiereia gelegenen Eutropios-Hafens ist nicht so klar. Vielleicht wurde er als dritter Hafen von Chalkedon genutzt, vielleicht wurde über ihn vor allem die Versorgung des Kaiserpalastes abgewickelt.

Maps of Constantinople



Map 1 Harbour of Julian and the Harbour of the Palace of Bukoleon, including selected buildings in their surroundings (preserved *in situ* or archaeologically proven in red; hypothetical in green) on a modern map of Istanbul. – (Open Street Map; edited by J. Preiser-Kapeller).



Map 2 Selected locations in the area of the Heptaskalon/Unkapanıkapı (located with certainty in red; area of possible location in green) on a modern map of Istanbul. – (Open Street Map; edited by J. Preiser-Kapeller).

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Sigles Used

AA	Archäologischer Anzeiger	JbAC	Jahrbuch für Antike und Christentum
ACO	Acta Conciliorum Oecumenicorum (Berlin, Boston)	JÖB	Jahrbuch der Österreichischen Byzantinistik
AD	Archaologikon Deltion	LBG	Lexikon zur Byzantinischen Gräzität (Wien/Vienna)
AJA	American Journal of Archaeology	LSJ	Liddell-Scott-Jones, A Greek-English Lexikon
AnBoll	Analecta Bollandiana	Mansi	J. D. Mansi, Sacrorum conciliorum nova et amplissima collectio (Paris / Leipzig 1901-1927)
BAR	British Archaeological Reports	MGH	Monumenta Germaniae Historica
BBA	Berliner Byzantinistische Arbeiten	ÖAW	Österreichische Akademie der Wissenschaften (Wien/Vienna)
BCH	Bulletin de la Correspondance Hellénique	OCA	Orientalia christiana analecta
BF	Byzantinische Forschungen	OCP	Orientalia Christiana Periodica
BMGS	Byzantine and Modern Greek Studies	ODB	The Oxford Dictionary of Byzantium
BOO	Byzanz zwischen Orient und Okzident. Veröffentlichungen des Leibniz-WissenschaftsCampus Mainz/Frankfurt	OJA	Oxford Journal of Archaeology
ByzA	Byzantinisches Archiv	PG	Patrologiae cursus completus, Series graeca, hrsg. v. J.-P. Migne (Paris 1857-1866)
Byzslav	Byzantinoslavica	PLRE	Prosopography of the Later Roman Empire
BZ	Byzantinische Zeitschrift	PmbZ	Prosopographie der mittelbyzantinischen Zeit I-II (Berlin, Boston)
CahArch	Cahiers archéologiques	PLP	Prosopographisches Lexikon der Palaiologenzeit (Wien/Vienna)
CCSG	Corpus christianorum, Series Graeca	RbK	Reallexikon zur byzantinischen Kunst
CCSL	Corpus christianorum, Series Latina	RE	Paulys Realencyclopädie der classischen Altertumswissenschaft
CFHB	Corpus Fontium Historiae Byzantinae	REB	Revue des Études byzantines
CSCO	Corpus Scriptorum Christianorum Orientalium	RGZM	Römisch-Germanisches Zentralmuseum, Mainz
CSHB	Corpus Scriptorum Historiae Byzantinae	RHC	Recueil des historiens des croisades
DAI	Deutsches Archäologisches Institut	ROL	Revue de l'Orient Latin
DeltChrA	Deltion tes Christianikes Archaologikes Etaireias	SubsHag	Subsidia Hagiographica
DOP	Dumbarton Oaks Papers	TIB	Tabula Imperii Byzantini
DOS	Dumbarton Oaks Studies	TM	Travaux et mémoires
EEBS	Epeteris Etaireias Byzantinon Spoudon	WBS	Wiener Byzantinistische Studien
EO	Échos d'Orient		
IJNA	International Journal of Nautical Archaeology		
IstMitt	Istanbuler Mitteilungen		

The fortunes of Byzantine Constantinople have always been inextricably linked to the sea. The topographical, demographic and economic development of the city and its networks are reflected in the history of its harbours. This volume offers an exhaustive study of Constantinople's Byzantine harbours on the Sea of Marmara and the Golden Horn, as well as nearby European and Asian landing stages. The fifteen chapters by eleven contributors here present a broad synthesis of the current state of research using written, pictorial and archaeological sources.

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Die Reihe Byzanz zwischen Orient und Okzident wird vom Vorstand des gleichnamigen Leibniz-WissenschaftsCampus, einer Kooperation des Römisch-Germanischen Zentralmuseums, der Johannes Gutenberg-Universität Mainz, der Goethe-Universität Frankfurt und des Leibniz-Instituts für Europäische Geschichte in Mainz, herausgegeben.

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