

Harbours of Byzantium

The Archaeology of Coastal Infrastructures

Edited by

Alkiviadis Ginalis



ARCHAEOPRESS PUBLISHING LTD
Summertown Pavilion
18-24 Middle Way
Summertown
Oxford OX2 7LG
www.archaeopress.com

ISBN 978-1-80327-813-1
ISBN 978-1-80327-814-8 (e-Pdf)

© the individual authors and Archaeopress 2024

Cover: Southwestern harbour of Byzantine Kassandreia in Chalkidiki, Greece (A. Ginalis)

All rights reserved. No part of this book may be reproduced, or transmitted, in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the copyright owners.

This book is available direct from Archaeopress or from our website www.archaeopress.com

Contents

List of Figures	ii
Editor's Preface	vii
1. Byzantine Imperial Policy Towards Building and Maintaining of Ports in the Eastern Mediterranean in the 6th Century AD and the Technology Involved.....	1
<i>Ruthy Gertwagen</i>	
2. Was Roman Marine Concrete Used in Byzantine Harbour Construction? An Unanswered Question....	34
<i>Robert L. Hohlfelder</i>	
3. Ports, Harbours, and Landings of the Byzantine Terra d'Otranto	46
<i>Paul Arthur</i>	
4. The Late Antique and Byzantine Port of Thessalian Thebes – The Archaeology of its Coastal Infrastructures	65
<i>Alkiviadis Ginalis and Anna Gialouri</i>	
5. The Port Facilities of Thessaloniki up to the Byzantine Era	86
<i>Marina Leivadioti</i>	
6. Remarks on the Urban Transformations of the Harbours of the North Aegean Coastline during the Early Christian Era as well as on their Links with the Road Network	100
<i>Flora Karagianni</i>	
7. An Interdisciplinary Approach to the Study of the Ancient Harbour Site of 'Karon Limen' or 'Portus Caria/Carea', Bulgaria	113
<i>Preslav Peev, Alkiviadis Ginalis, Bogdan Prodanov, Grigori Simeonov</i>	
8. Bathonea (?): A Newly Discovered Ancient Port in the Hinterland of Byzantium/Constantinople	127
<i>Şengül G. Aydingün</i>	
9. A Late Antique and Byzantine Harbour in Constantinople: The Theodosian Harbour at Yenikapı. History, Archaeology, and Architecture	134
<i>Ayşe Ercan-Kydonakis</i>	
10. Between Yavneh-yam and Rhinocorura: The Byzantine Portals of the Southern Levant	149
<i>Gil Gambash</i>	
11. The Harbour Installations of Lake Mariout (Alexandria Region) in the Late Roman Empire (4th–7th Centuries AD)	158
<i>Valérie Pichot</i>	
Appendix 1. Conference Programme International Conference on 'Harbours of Byzantium' (January 11th–13th 2018).....	178
Appendix 2. Contributors in Alphabetical Order.....	179

Editor's Preface

Christianity, Roman tradition and ideology, as well as Greek cultural heritage, have been labelled as the pillars of the Byzantine Empire. In fact, the real crux and enabler of power in an empire that combined the Occident with the Orient was its control over the seas. As such, seafaring constituted the formula of success for dominance of the Mediterranean, playing a key role in communication, military activities, and, especially, economic exchange. But how does one get from land to water? The linking gates are coastal installations, i.e. ports, harbours, and other infrastructures. These function as economic hubs, cultural and social meeting points, as well as gateways for communication and connection.

Even though the study of harbour sites and port networks of the Byzantine Empire constitutes a relatively new research field, it has nevertheless received significant attention over the last few years, as we can see from the instigation of various projects and the staging of conferences. However, attention is rarely paid to analyses of physical harbour remains and their impact on the general development of Late Antique and Medieval architecture, economy, or trade networks.

As such, in 2018, an international conference on the *Harbours of Byzantium* was organised at the Institute for Advanced Study of the Hanse-Wissenschaftskolleg in Delmenhorst, Germany. This event was intended to focus particularly on the archaeology of Byzantine coastal sites, including both harbour infrastructures *per se*, as well as associated facilities and affected landscapes. Leading scholars in the field from twelve different countries presented new material and data with which to understand the development of harbour architecture and coastal activities from Late Antiquity to the Middle Ages. The papers set out to cover sites from all provinces of the Byzantine Empire, stretching from Italy in the West to the Levantine coast in the East, and the Black Sea in the North to Egypt in the South. This allowed a general overview for comparative analyses and discussions on various aspects of Byzantine harbour networks and maritime connectivity.

Accordingly, the current volume provides a series of scientific papers deriving from presentations given at the conference. Beyond general approaches to the study of Byzantine harbour archaeology, the contributions offer a representative picture of harbour activities across the historical and geographical boundaries of the Byzantine Empire. Although it is impossible to reflect a comprehensive picture of the entire sweep of coastal landscapes, this work hopefully provides a basis for future comparative research in Byzantine harbour studies – on a local, regional, and supra-regional level.

The conference programme is included in the Appendices. The differences between the conference programme and the final version of this volume are explained by the fact that some scholars who submitted abstracts were ultimately unable to attend, and some who did attend and gave their papers did not submit them for publication. Fortunately, other colleagues agreed to contribute to this volume and I am most grateful to them for so doing.

I would like to express my deepest gratitude to all participants in the Delmenhorst Conference for presenting papers that provided unique insights, not just into ongoing excavations and investigations related to harbour installations, but also into hitherto understudied aspects of coastal infrastructures. It has been a considerable challenge to assemble this volume, and I am therefore particularly indebted to all authors who contributed and enriched this publication. Bearing in mind the time-consuming work of editing and unifying the papers, etc., as well as the difficulties brought on by the COVID pandemic, I have done my best to ensure as prompt a publication as possible.

Thanks must go here to Dr Susanne Fuchs and her team from the Institute for Advanced Study of the Hanse-Wissenschaftskolleg for their support in organising the conference in Delmenhorst. I am also sincerely grateful to David Davison and Mike Schurer from Archaeopress for agreeing to publish this volume and for guiding this work through to publication, their technical help, and the quick production of the printed version.

Alkiviadis Ginalis

5. The Port Facilities of Thessaloniki up to the Byzantine Era

Marina Leivadioti

Historical Introduction

According to Strabo, the city of Thessaloniki was founded by Kassandros in 316 BC and named after his wife, the half-sister of Alexander the Great (Strabo, 7. 21). The Macedonian Kingdom urgently needed a port that would meet its expanded commercial and military needs as it gradually developed into a significant, powerful and organised state. Due to its strategic location, this role was assumed by Thessaloniki, making the city a financial and military hub connecting the sea with a considerable inland area. But the Macedonian state had not only extended greatly to the north, which was rich in raw materials – e.g. timber, highly demanded and in shortage in southern Greece – but, due to the far distant lands occupied by Alexander, it was also in need of fast and secure maritime routes for commercial and military purposes. Thessaloniki constituted the shortest access point of the entire Balkan Peninsula to the sea and thus to the great ports of the wider Mediterranean (Vacalopoulos 1983: 17-19; Vasdravellis 1959: 9).

In Roman and Byzantine times Thessaloniki continued to be a significant city, located as it was on the *Via Egnatia* that linked the Adriatic coast with the Black Sea. Combining the coastal road networks with maritime connectivity, it became an important financial crossroads and junction of the north-south and east-west trade routes. As a result, Constantine I constructed an artificial port for military purposes, which, over time, also became a major commercial harbour. In the first years of the reign of Tsar Simeon I (AD 893-927), the centre of Byzantine-Bulgarian trade shifted from Constantinople to Thessaloniki (Vasdravellis 1959: 23-24), leading to an increased trade flow and offering a significant financial boost to the city. Such a shift did not come as a surprise, as the Axios (Vardar) River, which empties into the Thermaic Gulf, connects the deep Balkan hinterlands with Thessaloniki and hence the Byzantine Aegean.

It was its strategic position as the gateway to the Balkan Peninsula that made Thessaloniki frequently contested. The city was looted by the Saracens and witnessed almost complete destruction in AD 904; soon, however, it was restored to its past glory. In AD 1185, it was sacked by the Normans, once again suffering

extensive damage, but this occupation lasted only for a short while (Vacalopoulos 1983: 107-110, 123-125). In the course of the 4th Crusade, in AD 1204, the Franks swept into the city and, by AD 1224, it eventually became the capital of Frankish rule before it was once again reverted to Byzantine control, when it witnesses yet another period of prosperity until Venetian domination (Vacalopoulos 1983: 126-134). The city was eventually captured by the Ottomans in AD 1430, and yet again enjoyed a period of prosperity until 1912. The port of Thessaloniki is closely connected to the city's fate and therefore reflects the various historical phases.

The Port during the Hellenistic and Roman periods

Unfortunately, the available information on the harbour facilities of the Hellenistic period is very poor and thus inconclusive. From the existing written sources we know that in 148/7 BC Perseus ordered Thessaloniki's naval arsenals to be burnt to prevent them falling into the hands of the Romans (Livy, XLIV. 10).

Unfortunately, the exact position of this naval base remains unidentified. Tsaras (1982: 46) and Chatziioannou (1978: 44) suggest that the naval base of the Macedonians was located in the western part of the city, where it was reconstructed by Constantine the Great after being neglected in Roman times, and thus refuting Zosimus' testimony that the Byzantine Emperor created a port in AD 322 in an area that had not previously accommodated a port of any kind (Zosimus, II. 22). Alternatively, scholars such as Odorico (2003: 135) and Bakirtzis (1975: 320-321) support the theory that the Hellenistic port and its Roman successor is to be located in the district of the White Tower, in the eastern part of the city. It is widely accepted (Vacalopoulos 1987-88: 259-260; Bakirtzis 1975: 320-321; Theocharides 1975: 387) that some sort of harbour infrastructure existed around the White Tower as early as the Hellenistic period, and that it remained in operation throughout the Roman period and until AD 620/630, when it became known as the so-called 'Ekklesiastike Skala' (Εκκλησιαστική Σκάλα). However, in absence of any archaeological data, as well as pertinent written accounts, we are unfortunately unable to determine the number and exact locations of Thessaloniki's earliest harbour phases, thus only allowing various speculations.

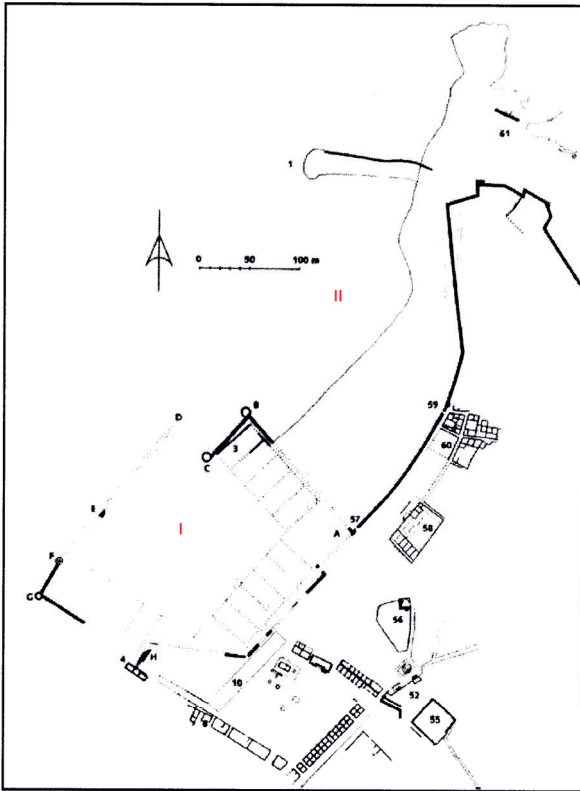


Figure 5.1: The two ports of the ancient city of Thasos (after Simosi 1995: 136).

Thessaloniki has always been a commercial crossroads, constituting the most significant maritime gateway to and from the Balkan Peninsula; hence the city potentially received a large number of merchant ships from various Mediterranean destinations. However, the fact that Thessaloniki owes its establishment mainly to the strategic location of its port, we can assume that the city, at least during the Hellenistic and Roman periods, possessed not just one, but multiple ports. Similar to other major harbour sites of the period (Fig. 5.1), i.e. Corinth's port of Lechaion, the port of Thasos, that of Mytilene, Kition (Yon 1994), and Salamina and Akko, Thessaloniki's facilities, therefore, must have included not only a commercial but also a military harbour, which acted as a naval base for the Macedonian fleet. As mentioned above, this is also attested by written accounts that refer to naval arsenals being burnt by Perseus and constructed by Philip V (Vasdravellis 1959: 14).

To secure smooth operation and uninterrupted services for both commercial and military vessels, there must have been separate commercial and military harbour zones, with the military port not being openly accessible. Unfortunately, the exact location and form of these harbour sections cannot be identified with certainty. As in Hellenistic times it was a common

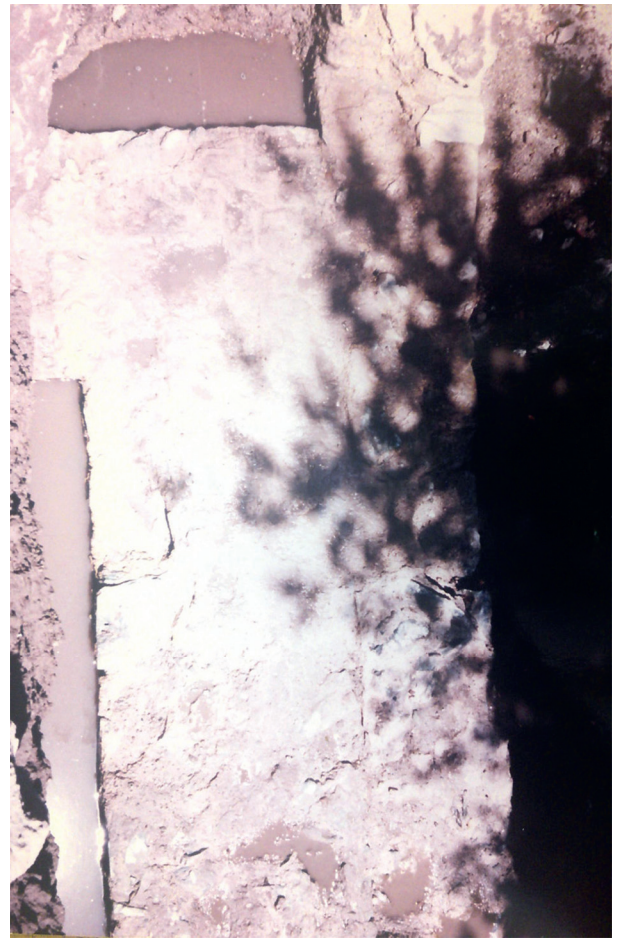


Figure 5.2: Facade of the stone construction at Aristoteles Square (A. Tzanabari, Leivadioti 2009: 142, Fig. 56).

practice to simply pull vessels ashore, and thus artificial harbour infrastructures were not mandatory, it can be assumed that the commercial harbour, at least, was not necessarily equipped with permanent infrastructures (Votruba 2017; Vittori 1990: 121).

In 1996, a construction of greenish slate, combined with white mortared plaster, came to light in the east part of Aristoteles Square, approximately at the level of Nikis Avenue (Fig. 5.2). In particular, two adjoining walls emerged, at right angles to the sea, bearing traces of an hydraulic mortar. The preserved walling, 5.60 m in length, was 1.70 m thick in places. Further west, at a distance of 4.70 m, the eastern face of another wall emerged, facing the same direction. These vertical walls seem to angle in their northern end part, with other walls facing east-west (Livadioti 2009: 40). The proximity of such structural remains to the sea, their position outside the city's sea wall, and the existence of an additional parallel wall at a distance of 4.70 m to the west, allow an assumption that they may belong to some sort of port infrastructure. The building

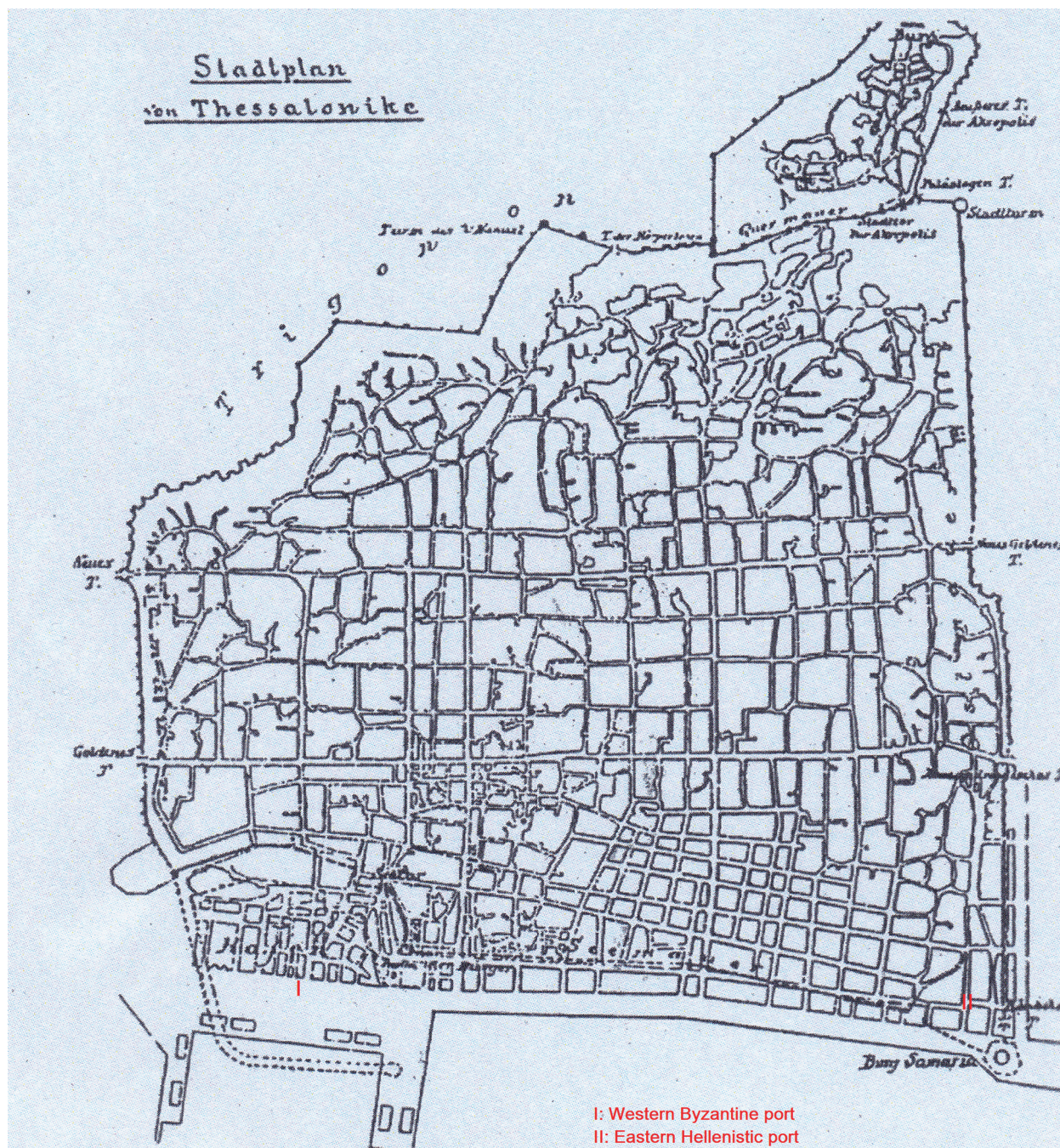


Figure 5.3: Plan of the city of Thessaloniki (after Struck 1905: 545).

material, e.g. the greenish slate, points to a rather early construction period, as similar remains have been identified in the traces of the Hellenistic fortifications of Thessaloniki. It makes sense, therefore, to relate these archaeological remains to potential Hellenistic port infrastructure, and thus locate the military port of that period, demolished on the orders of Perseus, in the wider area of Aristoteles Square. As such, it can be suggested that this facility was further to the east than the later Byzantine port (see below). By so doing, it seems we can confirm Zosimus' testimony relating to

the construction of the port by Constantine the Great in a location that was, indeed, new.

A controversial piece of information derives from a letter by François Pouqueville to Theophile Tafel, in which it is argued that the remains of a jetty near the White Tower were identified underwater in the 19th century. Perhaps these remains belonged to some Hellenistic/Roman port facility, if it is not simply a reef, which confused the French diplomat, as advocated more recently by Tsaras (1982: 54). It is also noted that a

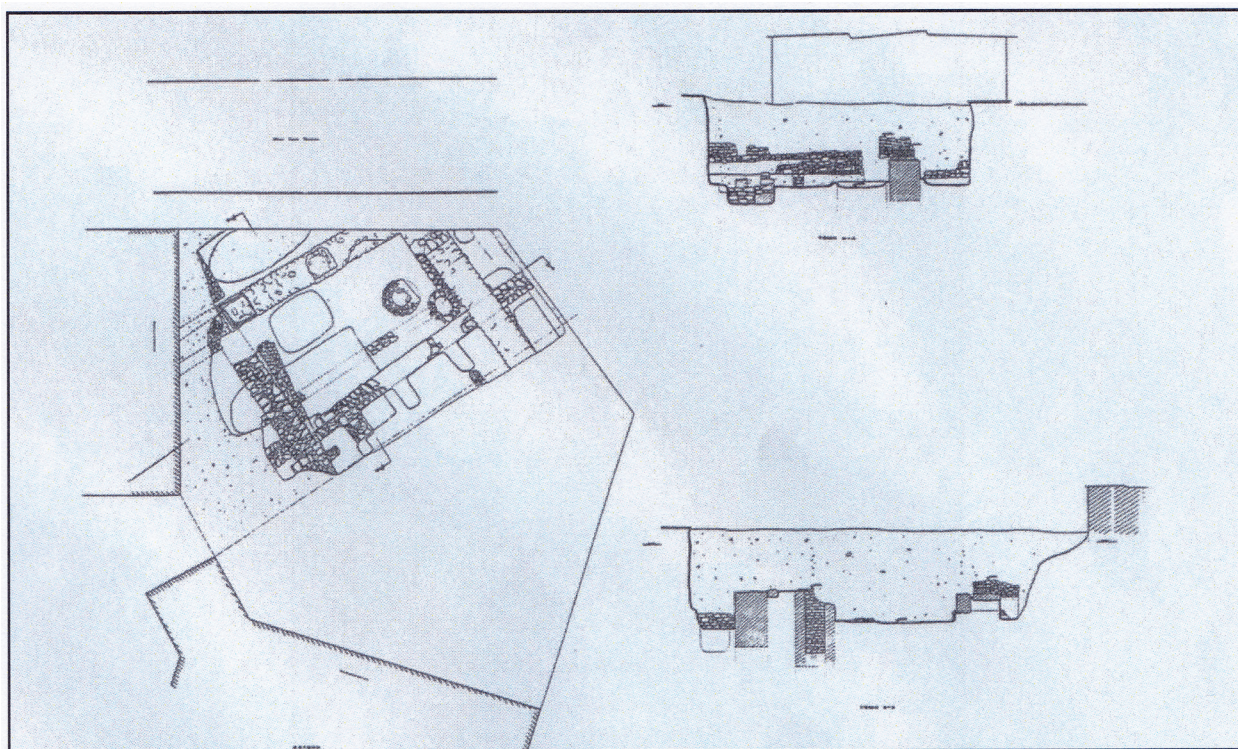


Figure 5.4: Floor plan of the ancient buildings at Gr. Palamas 16 Street (Adam and Veleni 1989: 233, Fig. 5).

port, built by a certain ‘emperor Philip’ is located in the area of so-called ‘Tannery Square’ (today’s Ladadika), to the west of the city (Tafel 1841: 10). While Tafrafi (1913: 16) identifies this Philip with Constantine the Great, a match with Philip V is more likely, to whom Vasdravellis also assigns the construction of a shipyard in the city. Thus perhaps at the time of Pouqueville and Tafel two different anachronistic traditions were confused: that of the creation of the Hellenistic military port by Philip V, and that of the construction of the later Byzantine port by Constantine I, which has indeed been located in the area that once housed the tanners of the city. Whatever the reality, in both traditions a port in the west is mentioned.

Consequently, while the military port with dry docks was situated in the western part of the city, a few meters further east of the port founded by Constantine I (Fig. 5.3 [No I]), the commercial one would probably have occupied the area between today’s streets of Demetriou Gounari, Pavlou Mela, Nikiforou Foka, and Nikis Avenue. In fact, while a calm, natural bay might have been sufficient in the early years to accommodate the commercial needs of the Hellenistic city, a more organised construction might have been installed at a later time. It should also be noted that Struck’s plan further supports the existence of a harbour basin to the east of the city (Fig. 5.3 [No II]), near the White Tower, before which another tower probably existed, protecting both the east end of the city’s fortification

wall and the commercial port. This is supported by the discovery of a colonnaded building (Fig. 5.4) in the area, which probably constituted a market place (Adam and Veleni 1989: 233-235).

During the excavations of the ‘Garden Theatre’ area, a large building complex came to light that can be identified as warehouses of the 4th to 6th centuries AD (Fig 5.5).¹ As the excavation went on, the floor of another, older building appeared, giving concrete evidence of similar usage (Tosca 1997: 420-423). The proximity of these storage rooms, as well as of the colonnaded building, to the sea attests the theory of a prior commercial port infrastructure in the area at least as early as the Hellenistic period. One can also further hypothesise that, with the foundation of Galerius’ palace, the function of the port gradually changed so as to accommodate also the needs of the Imperial palace complex (Livadioti 2009: 43).

The Byzantine Port of Constantine I

According to the Early Byzantine historian Zosimus (II. 22), Constantine I constructed a new artificial port in Thessaloniki in the course of his preparations for war against Licinius. His narrative, ‘...καὶ τριηκόντοροι μὲν εἰς διακοσίας κατασκευάσθησαν...’ (Zosimus, II. 22),

¹ For the Early Byzantine warehouses see below (Chatziioannides and Tsammissis 2013).

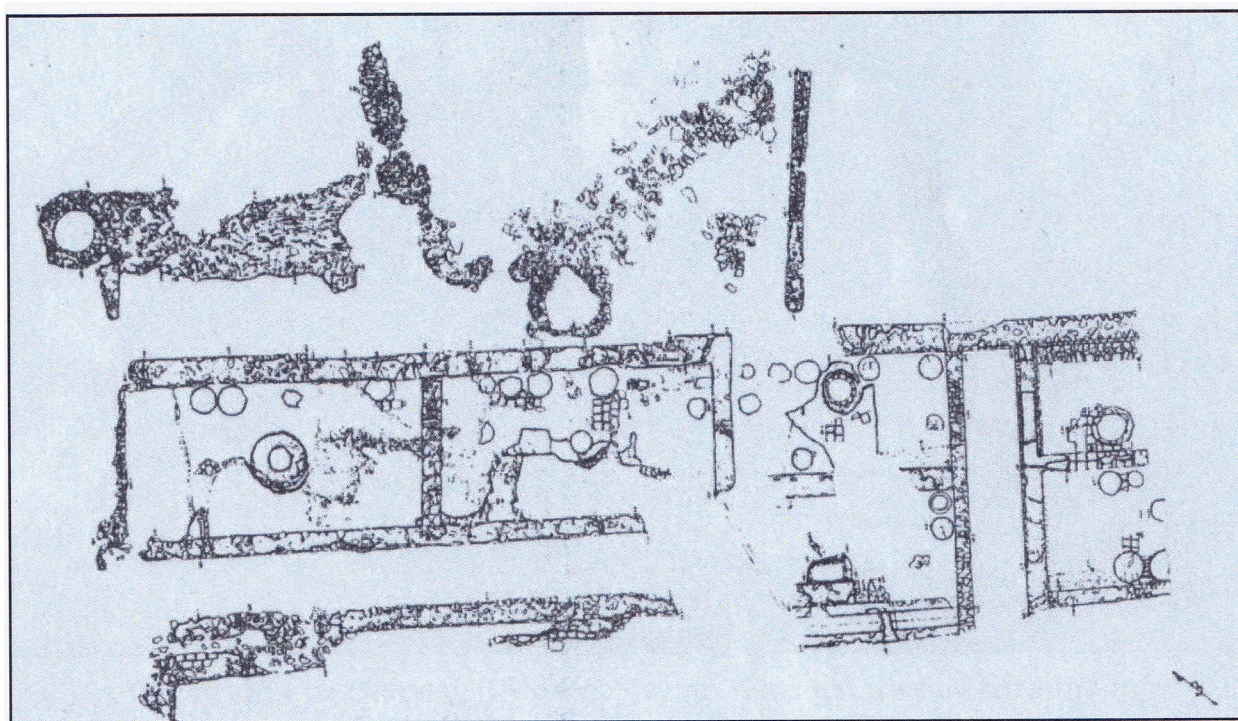


Figure 5.5: Floor plan of the excavation area of the storage complex under the 'Garden Theatre' of Thessaloniki (Tosca 1997: 421, Fig. 1).

indicates the primary aim of establishing a naval base primarily for the safe accommodation, maintenance, and construction of warships, which thus seems to rule out the re-use of the commercial port around the White Tower in the east (Fig. 5.3 [No II]). In fact, three colonnaded buildings, identified as public *Horrea* (Fig. 5.6), have recently been discovered at the western end of the city. Of its assumed initial dimensions of 180 m x 95 m, the remains are preserved only over a length of 88 m and a width of 62 m. The warehouse complex has a north-south orientation that allowed access to the Golden Gate in the north and to the port in the south, respectively. Based on archaeological finds, it has been suggested that the *Horrea* were, indeed, built c. the mid 4th century AD, just after the redevelopment of the port under the reign of Constantine I. Further construction phases and interventions can be attributed to the 5th and 6th centuries AD, with a last phase of use some time between the 10th and 11th centuries AD (Chatziioannides and Tsamissis 2013: 190–197). Accordingly, the coastal area just south of the warehouses has widely been associated with the port of Constantine I (Fig. 5.3 [No I]; Fig. 5.15).

Several scholars believe that Constantine I undertook large-scale dredging works for an artificial harbour basin exclusively for military purposes (Fotiadis 2000: 120; Bakirtzis 1975: 315; 1973: 332; Tafrali 1913: 15). However, it is hard to believe that the city did not

already have any sort of port installation at the western end by the 4th century AD. Zosimus could, in fact, easily be referring to the construction of port facilities (dry docks, dockyards, etc.) essential for a military port, rather than the creation of the harbour basin itself (Livadioti 2013: 168). Such an operation would not just have been time-consuming, but also immensely costly. Considering that war demands speedy action, these conditions would have been difficult to meet. As stated above, it is more likely, therefore, that Constantine I either used a pre-existing natural harbour not equipped with artificial infrastructures, or repaired part of the extant Hellenistic port which had not been used since its destruction previously by Perseus. Thus the development (reconstruction) of the natural bay (by simply extending the artificial, predecessor port to the west) must have permitted the erection of those facilities necessary for war, without demanding excessive time and expenditure.

Regarding the design and configuration of the port, Kaminiates argues that in the 10th century AD the port was rectangular in shape and featured some sort of breakwater to protect the harbour basin, reducing the intensity of wave action (Fig. 5.7) (Kaminiates, IV. 3 and IV. 8). Unfortunately, today only a few elusive traces can be associated with this harbour structure, i.e. the remains of a large, north-south orientated wall section (1.90 m wide), comprising marble blocks bound with lime

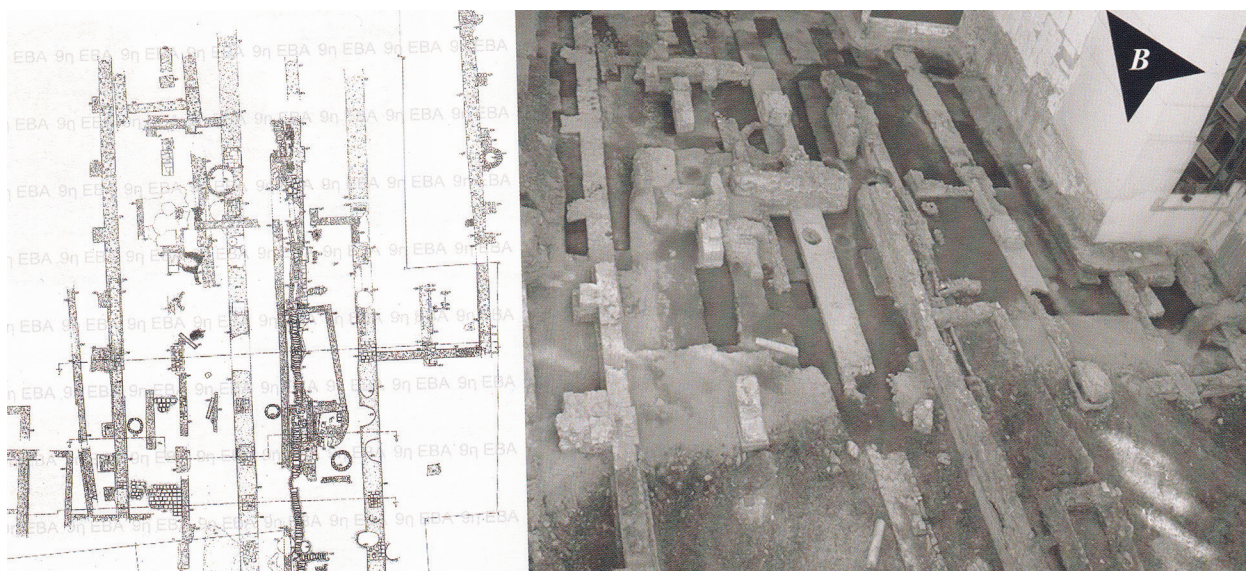


Figure 5.6: Excavation site of the warehouse complex north of the harbour (after Chatziioannides and Tsamissis 2013: 204, Fig. 3).



Figure 5.7: Proposed layout of the port of Thessaloniki in the 10th century AD (design by the architect Christos Bardas on the basis of a drawing by Vitali).

mortar commonly referred to as ‘Provolos Dourgouti’ (Πρόβολος Δουργούτη), and frequently associated with so-called ‘Tzeremboulo’ (below) – known since the 14th century AD as a mole-like structure (Figs 5.8-5.10) (Livadioti 2017: 49ff; Marke 2013: 177). Although the *Miracula Sancti Demetrii* (‘Miracles of Saint Demetrius’), a collection of homilies dated to the 7th century AD, does also refer to a mole (μώλος) (Lemerle 1979: §184), the existence and shape of such a breakwater, with a mole superstructure, still calls for further research. In the 10th century AD, Kaminiates, while narrating the city’s siege by the Saracens, mentions that the port was cut off ‘from the rest of the Sea, blocking water inflow by an intermediate wall that would also tame the stir caused by the wind to the sea’s surface’ (Kaminiates

IV. 3). Finally, the historian Anagnostes provides a further useful insight when describing the conquest of Thessaloniki by the Ottomans in the 15th century AD. In his text we come across the term ‘Tzeremboulo’ – a word not encountered in any other Byzantine account of Thessaloniki (Anagnostes: 13). The latter feature is described as an intermediate wall facing the sea, a so-called *diateichisma* (διατείχισμα), offering the Western governors an escape route onboard their triremes. Accordingly, the ‘Tzeremboulo’ has been interpreted as a breakwater or mole stretching from the so-called ‘Tower of Anaglyfo’ (Πύργος Αναγλύφου), at the southern end of the western city walls, to the south, reaching the height of the so-called ‘Tower of the Pier’ (Πύργος της Αποβάθρας), from where it

turned east and probably extended as far as another tower, situated south of the ‘Tower of the Pier’ (Fig. 5.11). However, if we accept that interpretation, and the course suggested by Vickers, the harbour basin could not have possessed the alleged rectangular shape described by Kaminiates (Livadioti 2017: 179-180). As such, based on the identification, and following the orientation of the above-mentioned ‘Provolos’, Velenis suggests a narrower course, with the structure bending towards the east and further north of the ‘Tower of the Pier’ (Fig. 5.12). However, if the archaeological remains of the supposed *diateichisma* (which correlates with the written testimony alleging a ‘Tzeremboulo’, and thus corresponds with the breakwater and its mole superstructure) did indeed follow the much narrower course, suggested by Velenis, then the available area of the harbour basin would have been drastically reduced. Whatever shape the harbour basin possessed – rectangular or not – similar to the Theodosian harbour of Constantinople (Ginalis and Ercan-Kydonakis 2021: 41, 65, Figs 39-40; Marke 2013: 176), the harbour seems to have been enclosed by one main breakwater, with a single harbour entrance at its eastern end.

While the *Miracula Sancti Demetrii* indicates that the breakwater only supported a mole (see above), with no defensive sea walls, during the Early Byzantine period (Lemerle 1979: §184), it can be assumed that after the Avar and Slavic sieges, and the earthquakes of the 7th century AD, the harbour area was equipped with defensive walls, and thus incorporated within Thessaloniki’s fortification system (Marke 2013: 176). Given the fact that the sea had retreated considerably towards the south, and that the harbour basin had silted up over time, then, sometime in the 10th or 11th centuries AD, the breakwater and its superstructures were eventually partially used as a defensive wall, incorporated within the city’s land fortifications (Livadioti 2017: 180).

The ‘Ecclesiastical Scala’ (Εκκλησιαστική Σκάλα)

Another harbour-related terminology that puzzles archaeologists regarding the topography of Thessaloniki’s coastal zone is the term ‘Εκκλησιαστική Σκάλα’ (Ecclesiastical Scala), mentioned in the *Miracula Sancti Demetrii* (Lemerle 1979: §186). This 7th-century account states that during the naval attack by the Slavs, some of the enemy headed towards a tower west of the ‘Ecclesiastical Scala’, where there was a small gate.² It is strongly disputed whether the term indicates a separate harbour area or section, or whether it specifies a particular facility, i.e. a wooden pier within the Byzantine port.³ What makes tracing its exact location

² ‘...οί μὲν εἰς τὸν πρὸς δύσιν τῆς ἐκκλησιαστικῆς σκάλας πύργον, ἔνθα καὶ παραπύλιον ὑπάρχει...’ (Lemerle 1979: §186).

³ For *scalae*, both as independent landing stages and harbour



Figure 5.8: Dourgouti Cantilever’s facade from the West (M. Leivadioti).



Figure 5.9: Dourgouti Cantilever’s facade from the South (M. Leivadioti).



Figure 5.10: Dourgouti Cantilever’s facade from the East (M. Leivadioti).

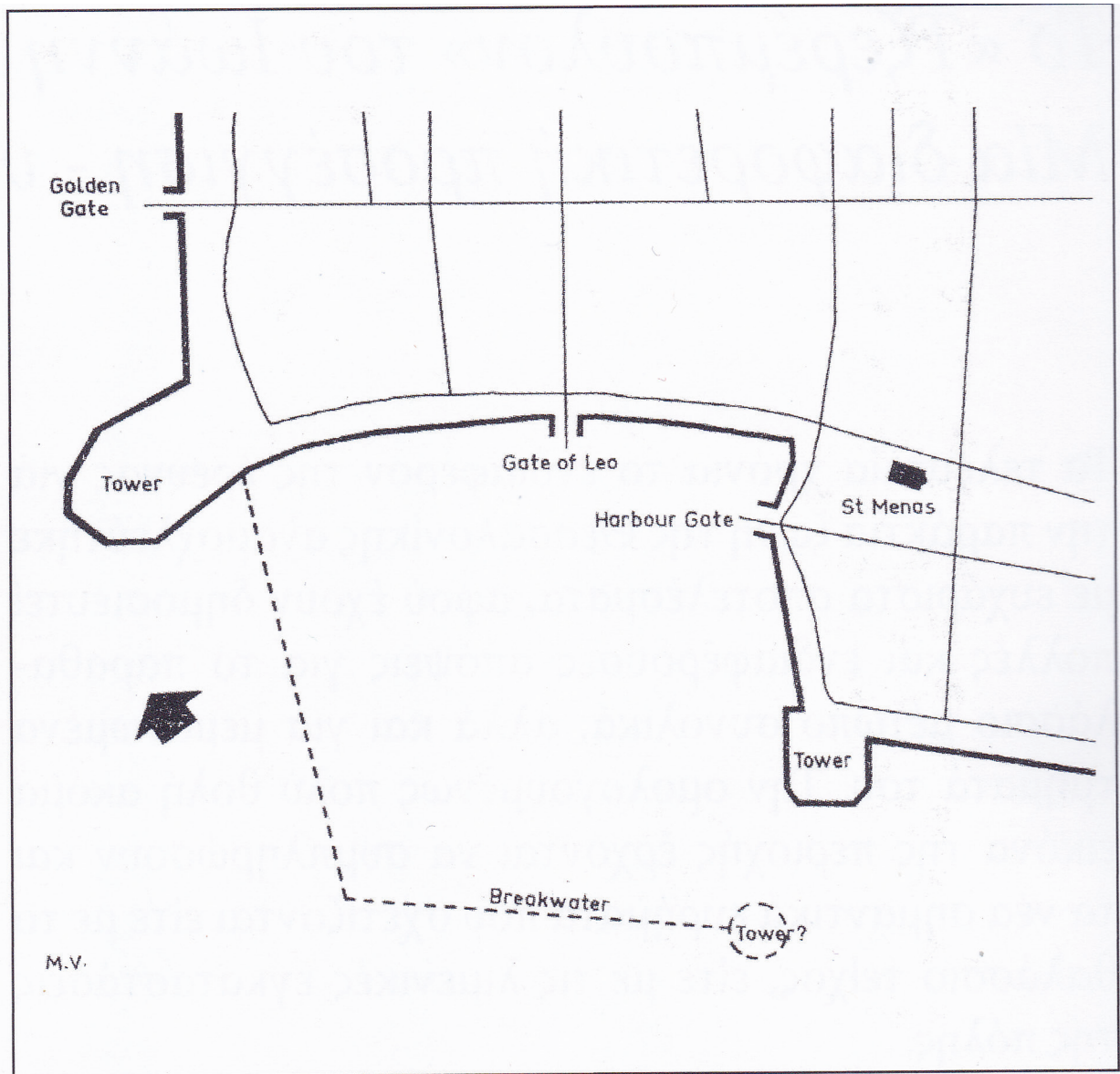
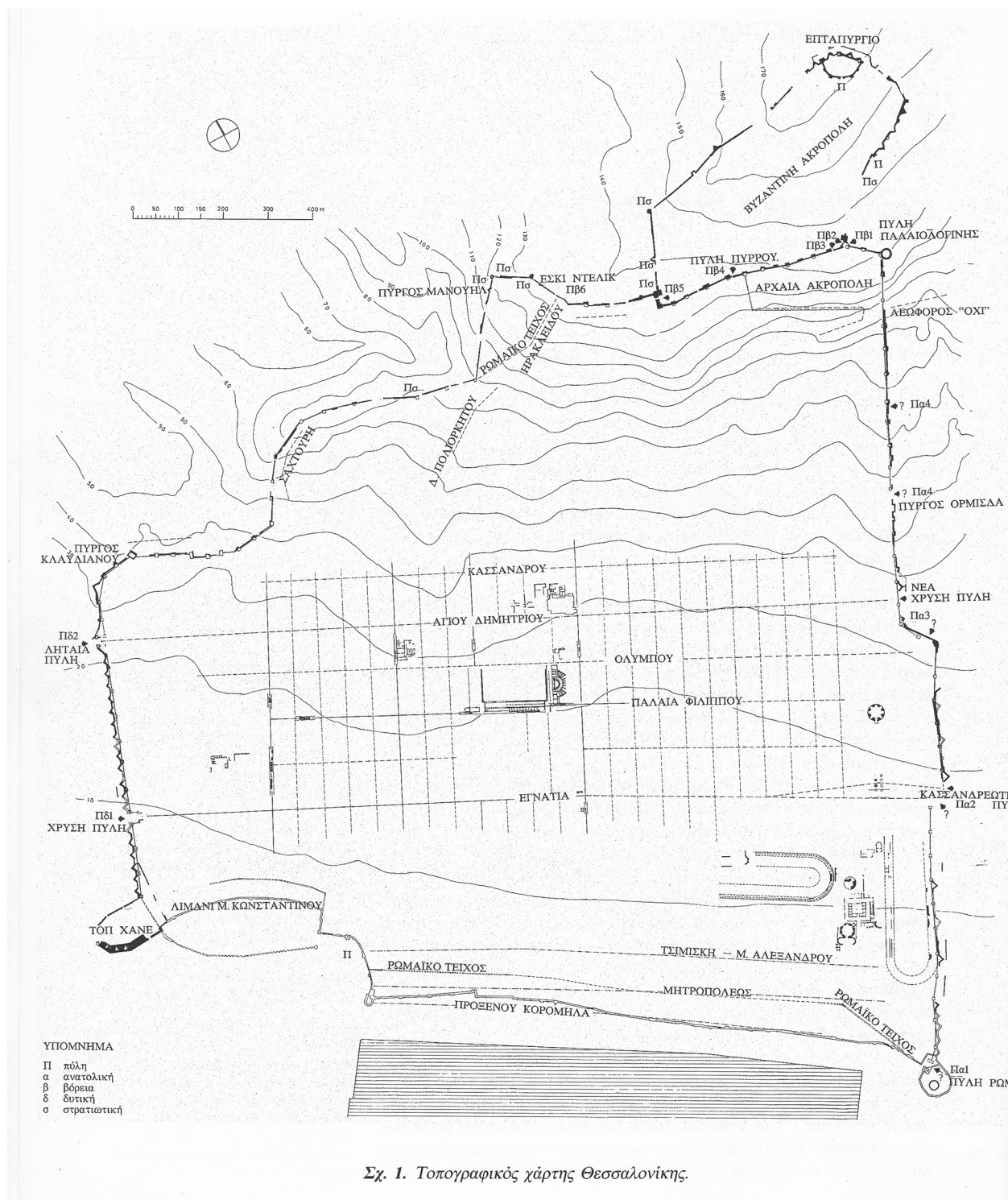


Figure 5.11: Drawing of the port of Thessaloniki by M. Vickers (Vickers 1970: 278, Fig. 4).

particularly difficult is the commonly accepted fact that the sea walls of Thessaloniki possessed only three main towers (Fig. 5.13) – two at the extremities (the ‘Tower of Anaglyfo’ in the west, and later replaced by the ‘Fortress of Vardar’ [No. 1], and the area of the White Tower in the east [No. 3]), and a third at the harbour entrance (the ‘Tower of the Pier’ [No. 2]), to which the alleged tower west of the ‘Ecclesiastical Scala’ may have corresponded. Consequently, if the toponym is not to be localised within the port of Constantine I itself, its position is basically reduced either to the area east of the ‘Tower of the Pier’ or to the White Tower (at the eastern end of the city). Accordingly, based on geological data

of the area and Struck’s architectural plan of the city, Bakritzis (1975: 320–321) and Akrivopoulou (2013: 152–153), among others, support the existence of a small, successor harbour to the Hellenistic/Roman one next to the White Tower, known during the 7th century AD as the ‘Ecclesiastical Scala’ (Fig. 5.14). Other researchers, including Tafrafi (1913: 18, 111–112), Odoricco (2003: 138), Marke (2013: 174), and Tsaras (1982: 60–61), believe that there was only one harbour in the west and therefore the *Ecclesiastical Scala* indicates a mooring facility, or platform, within the Byzantine port for loading and unloading/embarking and disembarking east of the so-called ‘Maritime Gate’ (Πύλη του Γιαλού – Porte Maritime), which served exclusively the needs of

infrastructures, and as parts of port facilities, see Ercan 2010.



Σχ. 1. Τοπογραφικός χάρτης Θεσσαλονίκης.

Figure 5.12: Topographic map of Thessaloniki by Velenis (Velenis 1998: 18, Fig. 1).

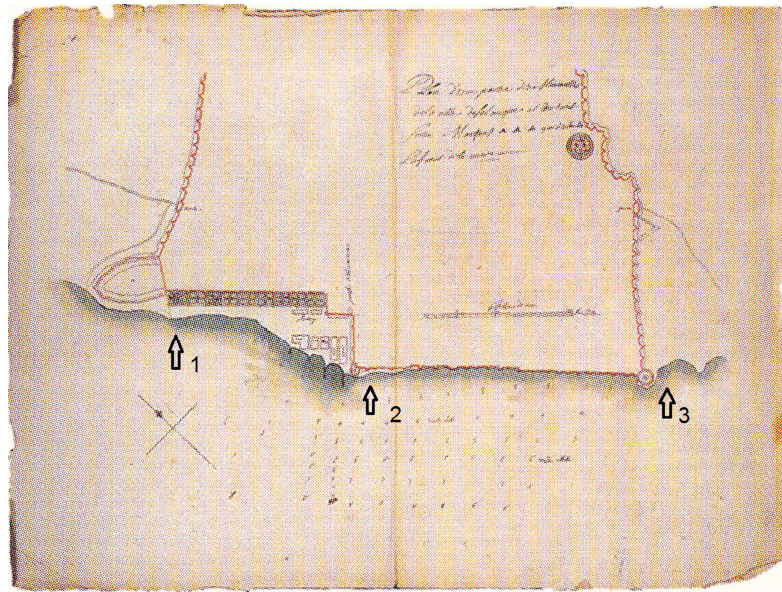


Figure 5.13: The port of Thessaloniki (M. Leivadioti after Epameinondas 2014: 67, Fig. 4, based on 1685 drawing by Gravier d’Otières).



Figure 5.14: 3D-Representation of the sea walls around the White Tower (<https://www.greecehighdefinition.com/blog/2021/1/26/3d-representation-of-the-byzantine-walls-of-thessaloniki-in-the-19th-century>; accessed 18/02/2023).

the Church – either as property or as source of income through the receipt of revenue (Fig. 5.15).⁴

The interpretation of a wooden pier-like mooring facility/platform in the harbour raises one question: if the ‘Ecclesiastical Skala’, and its nearby tower and gate, were located within the harbour basin of the

Byzantine port, how could the Slavs possibly have known of this vulnerable point in the fortifications, and its particular weakness, before their final attack? The *Miracula Sancti Demetrii* reveals that during their daily observations of the defensive walls, the besiegers remained a safe distance of two miles away (Lemerle 1979: §185). As such, taking into account that the port was enclosed by a mole, and its entrance on the eastern side closed with a chain, it would have been impossible to investigate the sea walls along the inner side of the harbour basin without fouling the chain and entering

⁴ Of course, the ‘Ecclesiastical Skala’ could also easily have been located east, outside the Byzantine port constructed by Constantine I (Fotiadis 2000: 121; Georgila 2000: 30-31).

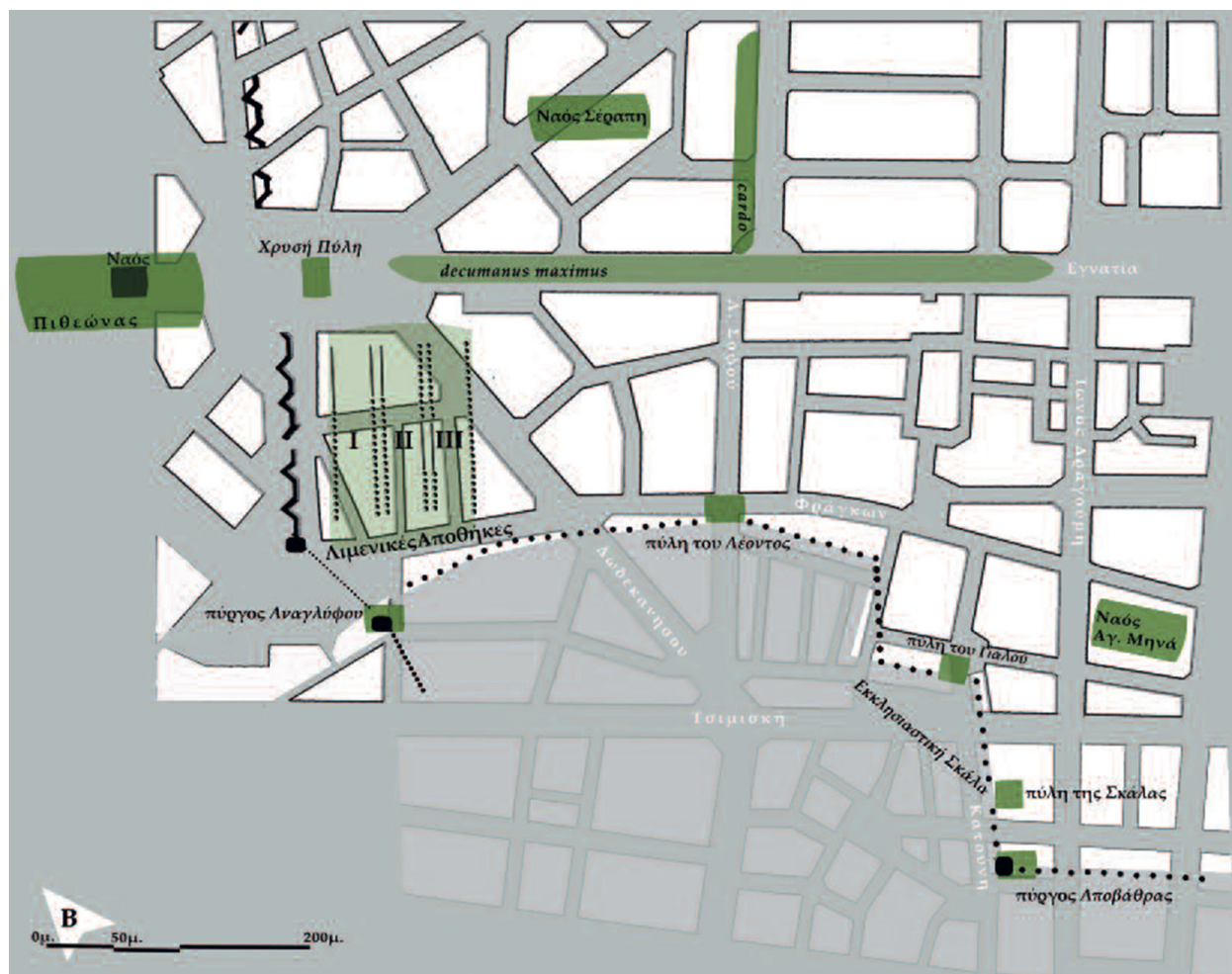


Figure 5.15: The harbour area of the Byzantine port with the Ecclesiastical Scala (Chatziioannides and Tsamisiss 2013: 203, Fig. 1).

the port; something not mentioned in the narrative of the *Miracles*.

Based on the description of the written account, in the opinion of the present author, the area around the White Tower, at the extreme eastern end of the city (Fig. 5.13 [No 3]), is likewise not to be considered as the location of the tower and gate referred to, as this would mean that the ‘Ecclesiastical Scala’ would have to be situated outside the city walls. Furthermore, a tower of such strategic importance to the Thessaloniki’s defence system would hardly have been mentioned indirectly, and certainly not with a toponym merely cited once (Akrivopoulou 2013: 152; Livadioti 2009: 58; Georgila 2000: 30). Therefore, only the area immediately east of the Byzantine port is to be considered (Fig. 5.13 [No 2]), associating the so-called ‘Tower of the Pier’ with the tower and gate mentioned in the *Miracula Sancti Demetrii*.

All three suggestions, of course, rely on the assumption that the source refers to one of the supposed three main

towers along the sea walls. However, in addition to the apparently only three existing main towers, the sea walls possessed several other smaller towers. This is not only supported by the archaeological remains of a cantilever found at Proxenu Koromila Street (Fig. 5.16) (Bakirtzis 1975: 293), but also by the plans, historical illustrations, and photographic material provided by Vitali, Stuck, Salacca, and, especially, by the brothers Abdullah (Figs 5.3, 5.17-5.19), which confirm the existence of a series of smaller towers, at least for the last phase of the sea walls (Livadioti 2009: 59). The fact that the tower and its gate are not given their own independent toponyms, but only mentioned indirectly, seems rather to point to a smaller tower and minor entrance gate. If this is the case, one could look for the facilities of the ‘Ecclesiastical Scala’ elsewhere. Consequently, it would not be inconceivable to imagine a tower west of the Hellenistic/Roman port, at the eastern end, as suggested by Bakirtzis and Akrivopoulou.

In conclusion, due to the development of the modern city of Thessaloniki, the archaeological testimony of its



Figure 5.16: The cantilever of the sea wall at 34 Proxenou L. Koromila Street (Bakirtzis 1975: 481, Fig. 2).

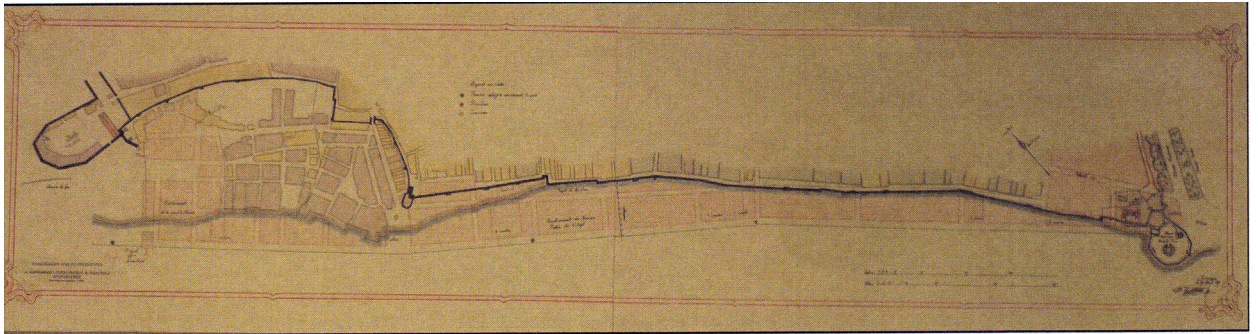


Figure 5.17: Plan of the maritime fortification of Thessaloniki by the architect-engineer P. Vitali (1871) (Epameinondas 2014: 60, 82-83).

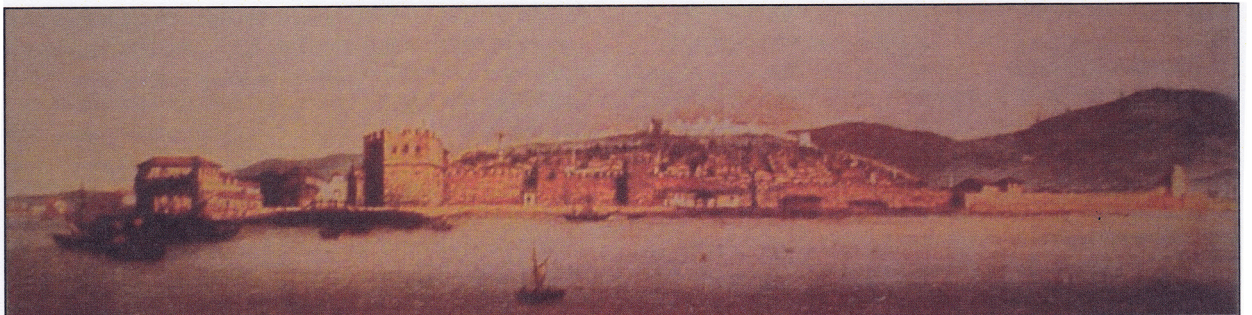


Figure 5.18: Thessaloniki from the Sea. 1865 watercolour by the Italian painter Salacca (Gala-Georgila 2008: 23, Fig. 5).



Figure 5.19: Photograph of Thessaloniki's maritime wall taken by the brothers Abdullah (Jelzet: MNL OL, Festetics család keszthelyi levéltára, Festetics család, Fényképek (P 240), 1. tétel – r/9. – No. 31).

harbour sites is very limited. Our knowledge, therefore, of the various harbour-related infrastructures is quite fragmentary. Although the area of study is of utmost importance, the available data is often inadequately documented. However, we can live in hope that, in the future, there will be an opportunity to gain a more complete picture through new archaeological discoveries from systematic excavations.

Bibliography

Primary Sources

- Bekker, I. (ed.) 1837. *Zosimus. Historia Nova. Corpus Scriptorum Historiae Byzantinae*. Bonn: Weber.
- Lemerle, P. (ed.) 1979. *Les plus anciens recueils des Miracles de Saint Démétrius*, Vol. I. Paris: Centre National de la Recherche Scientifique.
- Schlesinger, A.C. (ed.) 1951. *Titus Livius 59 a.C. - 17 d.C.* London: Harvard University Press.
- Tsolakes, E. (ed.) 2000. *Ιωάννης Καμινιάτης. Εἰς τὴν ἄλωσιν τῆς Θεσσαλονίκης*. Athens: Kanakes.

Secondary Literature

- Adam-Veleni, P. 1989. Ελληνιστικά στοιχεία από ανασκαφές στη Θεσσαλονίκη. *To Archaïologiko Ergo ste Makedonia kai Thrake* 3: 227-239.
- Akrivoroulou, S. Στο δρόμο για το λιμάνι. Πολεοδομικά και τοπογραφικά Θεσσαλονίκης, in F. Karagianni (ed.) *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. Proceedings of the International Symposium (Thessaloniki, 4-6 Dec. 2013)*: 141-162. Thessaloniki: European Centre for Byzantine and Post-Byzantine Monuments.
- Anagnostes, I. 1999. *Διήγησης περί της τελευταίας αλώσεως της Θεσσαλονίκης*. Athens: Enalios.
- Bakirtzis, Ch. 1973. Το Τζερέμπουλον της Θεσσαλονίκης. *Athens Annals of Archaeology* 6: 332-336.
- Bakirtzis, Ch. 1975. Η θαλάσσια οχύρωση της Θεσσαλονίκης. (παρατηρήσεις και προβλήματα). *Byzantina* 7: 289-334.
- Chatziioannides, A. and Ch. Tsamissis 2013. Οι λιμενικές αποθήκες της Θεσσαλονίκης. Από τα δημόσια ὠρεῖα στην αποθήκη τῶν βασιλικῶν κομμερκίων, in F. Karagianni (ed.) *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East*: 187-197. Thessaloniki: European Centre for Byzantine and Post-Byzantine Monuments.

- Chatziioannou, M. 1976. *Αστυγραφία Θεσσαλονίκης. Ήτοι Τοπογραφική περιγραφή της Θεσσαλονίκης*. Thessaloniki.
- Erameinondas, J. 2014. *Θεσσαλονίκη 1863-1873. Οι παλαιότερες φωτογραφίες, οι πρώτοι χάρτες της περιοχής σταθμού και λιμανιού*. Thessaloniki: M.I.E.T.
- Ercan, A. 2010. *Yenikari, A late antique and Byzantine harbor in Constantinople: A historical, archaeological and architectural study of the newly discovered remains*. Unpublished M.A. thesis, Κοζ University.
- Fotiades, P. 2000. Παρατηρήσεις στο Θαλάσσιο τείχος της Θεσσαλονίκης. *Makedonika* 32: 113-123.
- Gala-Georgila, E. 2008. Πλατεία Ελευθερίας στη Θεσσαλονίκη, ο χώρος, οι άνθρωποι, η ιστορία. Thessaloniki.
- Georgila, E. 2000. Πληροφορίες για τη θαλάσσια οχύρωση της Θεσσαλονίκης στην περιοχή της Πλατείας Ελευθερίας. *Thessalonikeon Polis* 1: 17-34.
- Ginalis, A. and A. Ercan-Kydonakis 2021. Some reflections on the archaeology of the Late Antique and Byzantine harbours of Constantinople, in F. Daim and E. Kisslinger (eds) *The Byzantine harbours of Constantinople*: 33-72. *Byzanz zwischen Orient und Okzident* 24. Mainz: Römisch-Germanisches Zentralmuseum.
- Livadioti, M. 2017. Το 'Τζερέμπουλον' του Ιωάννη Αναγνώστη. Μία διαφορετική προσέγγιση - υπόθεση, in A.G. Boskaki, E. Kotsou and E. Merminga (eds) *Κτίτωρ. Proceedings of the Int. Symposium in honour of Emeritus Professor George Velenis (Thessaloniki, 4th-7th Oct. 2017)*: 175-182. Thessaloniki.
- Livadioti, M. 2013. Το λιμάνι της Θεσσαλονίκης κατά την Ελληνορωμαϊκή και Παλαιοχριστιανική περίοδο, in F. Karagianni (ed.) *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. Proceedings of the International Symposium (Thessaloniki, 4th-6th Dec. 2013)*: 163-173. Thessaloniki: European Centre for Byzantine and Post-Byzantine Monuments.
- Livadioti, M. 2009. *Το λιμάνι της Θεσσαλονίκης από την ίδρυση της πόλης μέχρι την κατάληψή της από τους Τούρκους (1430)*. Unpublished M.A. thesis, Aristotle University of Thessaloniki.
- Marke, E. 2013. Το Κωνσταντίνειο λιμάνι και άλλα βυζαντινά λιμάνια της Θεσσαλονίκης, in F. Karagianni (ed.) *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. Proceedings of the International Symposium (Thessaloniki, 4th-6th Dec. 2013)*: 174-186. Thessaloniki: European Centre for Byzantine and Post-Byzantine Monuments.
- Odorico, P. 2003. Το Βυζαντινό λιμάνι της Θεσσαλονίκης. Μερικά ερωτήματα και μία υπόθεση εργασίας, in *2nd International Symposium 'Βυζαντινή Μακεδονία'* (Thessaloniki, 26th-28th Nov. 1999): 121-142. Thessaloniki.
- Simosi, A. 1995. Το αρχαίο πολεμικό λιμάνι της Θάσου. *Archaiologikon Deltion* 50.A: 133-160.
- Struck, A. 1905. Die Eroberung Thessalonikes durch die Sarazenen im Jahre 904. *Byzantinische Zeitschrift* 14: 535-562.
- Tafel, G.L.F. 1841. *De via militari romanorum egnatia, qua Illyricum, Macedonia et Thacia Iungebantur. Dissertatio geographica*. Tübingen: Laupp.
- Tafrafi, O. 1913. *Topographie de Thessalonique*. Paris: Geuthner.
- Tosca, L., V. Allamani, Ch. Michelaki and P. Fotiades 1997. Συγκρότημα αποθηκών έξω από τα ανατολικά τείχη της Θεσσαλονίκης. *Το Αρχαιολογικό Ergo ste Makedonia kai Thrake* 11: 419-428.
- Tsaras, G. 1982. Τοπογραφία της Θεσσαλονίκης II. *Makedonika* 22: 42-95.
- Vacalopoulos, A. 1983. *Ιστορία της Θεσσαλονίκης*, 316 π.Χ. Thessaloniki.
- Vacalopoulos, A. 1987-1988: Η Θεσσαλονίκη και η περιοχή Πέλλας-Γιαννιτσών στα 1828. *Makedonika* 26: 169-189.
- Vasdravellis, I. 1959. *Ο λιμίν της Θεσσαλονίκης*. Thessaloniki: Nikolaidi.
- Velenis, G. 1998. *Τα τείχη της Θεσσαλονίκης*. Thessaloniki.
- Vickers, M. 1970. The Byzantine Sea Walls of Thessaloniki. *Balkans Studies* 11: 261-280.
- Vitti, M. 1990. *Το πολεοδομικό σχέδιο της αρχαίας Θεσσαλονίκης και η εξέλιξή του*. Unpublished PhD thesis, Aristotle University of Thessaloniki.
- Votrubia, G.F. 2017. Did Vessels Beach in the Ancient Mediterranean? An assessment of the textual and visual evidence. *The Mariner's Mirror* 103/1: 7-29.
- Yon, M. 1994. *Κιτίον. Ανασκαφές στην πόλη και το λιμάνι (1976-1993)*. Nicosia.