

Byzantine Rhodes. The Evolution of a Fortified Harbour-city in the Eastern Mediterranean (4th to 12th c.)

Rhodes is one of those ancient cities that has survived under the same name and at the same location through successive urban planning transformations¹. Continuous habitation throughout centuries² has left indelible marks on the urban fabric, still traced nowadays during a systematic documentation and study of structures of all periods (fig. 1).

The »Hippodamean« urban planning system of ancient times is a decisive feature for the development of the town³, in that it determined the urban fabric of the residential sector and the design of the medieval fortification (fig. 2). Another determining factor was the strategic location of the town, at the crossroads of the ancient maritime routes of the Mediterranean⁴. The great economic flourish of ancient times led to the rise of the cosmopolitan metropolis of the Hellenistic period, which transformed gradually after Late Antiquity into the robust fortress – military base – of the Knights of St. John in the east Mediterranean⁵.

Recent research brought to light important evidence related to the gradual shrinking of the particularly extended Hellenistic metropolis, which during the period the *Pax Romana* was imposed on the wider geographical area⁶ (fig. 3A).

At the end of the 2nd-beginning of the 1st century BC there is no solid evidence for the function of the Hellenistic fortification works of Rhodes, which appear to have been gradually abandoned at least in some sections⁷, most probably as part of the process of radical transformation both at the east mole of the great harbour and at the southern landward fortification wall (fig. 4). An attempt to repair and reinforce the ancient walls and towers is clearly attested in view of the imminent siege during the Mithridatic Wars⁸ in 88 BC, while after 46 BC there is some form of encroachment over parts of the fortifications to the east of the great harbour and in the area of the Akandia harbour⁹ (fig. 3A).

Similar evidence is attested also in the strategic area between the two central harbours, the great and the military

harbour¹⁰ (fig. 3A). The integration of a transverse wall curved at an obtuse angle signifies the existence of an ancient passage between the harbours, protected from the north by this massive wall¹¹ (fig. 5). Following the disastrous earthquake in 227 BC, the elegant amphiprostyle Temple of Aphrodite was constructed¹². The erection of the temple at this particular location disrupted the route of the ancient wall of the harbour which turned at a right angle to the east, as is documented by the excavation in progress at about 20m to the south, a fact that also corroborates the argument for the existence of an intervening passage (fig. 3A, fig. 5).

In the year 42 BC, the town of Rhodes was occupied and plundered by the Romans¹³, and the slow process of abandoning its great ancient fortifications began during the period of *Pax Romana*. However, as documented by ancient texts¹⁴, large sections of the monumental ancient fortifications, as well as massive, huge towers were preserved into Late Antiquity, as urban elements, and important landmarks of the town, causing the admiration of the citizens. It is characteristic that, in describing the earthquake of AD 155 by Ailius Aristides (AD 129-189), the city's walls received the greatest praise¹⁵. The walls seem to have been repaired, in part at least, by the Roman emperor Antoninus Pius, and it was probably at this time that the major urban modernisations in the main area of the city began¹⁶. Strong earthquakes occurred in AD 344-345 and AD 515, after which it was reported that Emperor Anastasios I made great donations to those who lived there and repaired large buildings in the city, walls and pipelines, harbours, and public baths¹⁷.

The final abandonment of the ancient fortification of Rhodes dates to the period that followed the great earthquake of the 2nd century AD, most probably in AD 142. Until that time, writers of the Roman period, and Aelius Aristides in particular, praise »the circuit of the walls and the height and beauty of the interspersed towers.« It is obvious that

1 Manoussou-Ntella, Poli.

2 Papachristodoulou, Istoría. – Karouzos, Rodos. – Konstantinopoulos, Rodos.

3 Kontis, Symvoli. – Konstantinopoulos, Rymotomiko. – Hoepfner, Poleodomía 32-34. – Manoussou-Ntella, Stoichía. – Michalaki-Kollia, Ellinistiki 76.

4 Avramea, Epikoinonies 162-167. – Belavilas, Limania. – Braudel, Mnimes.

5 Gabriel, Cité I. – Manoussou-Ntella, Poli.

6 Kollias, Antistasi.

7 Manoussou-Ntella, Diacheirisi.

8 Peyras, Siege.

9 Manoussou-Ntella, Akandia.

10 Blackman, Limenes. – Manoussou-Ntella, Paysage.

11 Manoussou-Ntella, Topografia.

12 Rocco, Afrodite 31-33.

13 Papachristodoulou, Istoría 138-139.

14 Papaioannou, Keimena 375-413.

15 Papachristodoulou, Istoría 143.

16 Loungis, Koinonia.

17 Papachristodoulou, Istoría 143-144.



Fig. 1 View of the city of Rhodes in 1486, Woodcut by Erhard Reuwich in Bernhard von Breydenbach's *Die heyligen reyßen gen Jherusalem zuo dem heiligen grab* (Mainz 1486) [fig. 7].

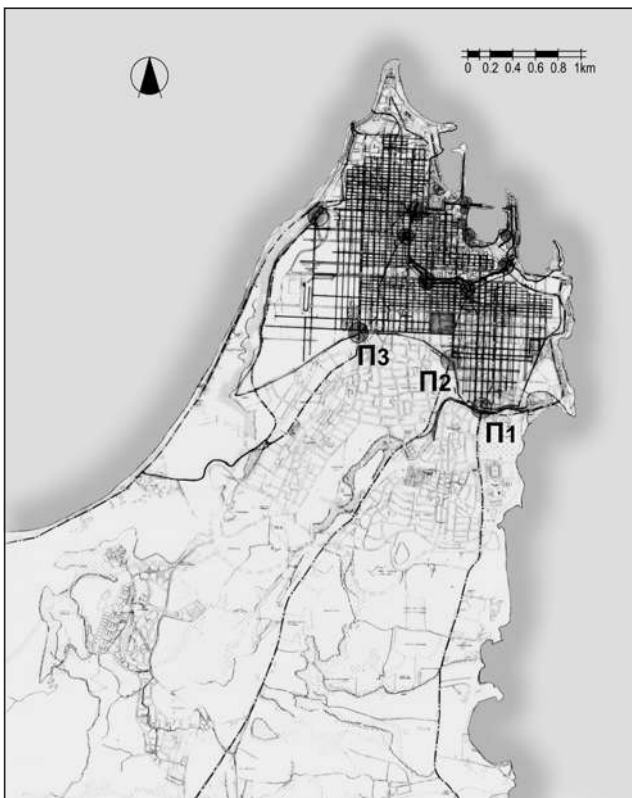


Fig. 2 The »Hippodamean« urban planning system of ancient Rhodes. – (K. Manoussou-Ntella, 2018).

the damage inflicted by the earthquake, on the walls, in particular, was significant and Aristides argued in favour of their reconstruction.

After the earthquake and the gradual abandonment of the ruinous walls, a contradictory picture emerges by the growth of the central and peripheral parts of the Hellenis-

tic metropolis. At the end of the 2nd and beginning of the 3rd century AD, the monumental tetrapylon was erected¹⁸, partly over the ancient shipyards, and the central »street of the Roman period« with colonnades and shops was laid out (figs 3A; 5). This North-South axis was set as a *cardo*¹⁹, with vertical intersecting *decumanus* and led to the ancient Agora. During that period, remains of the collapsed Colossus were visible to the numerous visitors of the town and were considered as one of the most important pilgrimages in the wider geographic area.

The integration of the tetrapylon between the two central most frequented harbours of the town, exactly at the crossroads of *cardo* with the northernmost *decumanus* (P6), most probably accentuated, in accordance with the urban planning principles of that period, the location of the holy pilgrimage to which it led²⁰. At that same time, the branch of the ancient fortification wall with the two horseshoe towers, which expanded over the *choma* between the great harbour and the Akandia harbour²¹, was covered by waste and gradually turned into a cemetery²² (fig. 3A). In my opinion, it is highly possible that the adaptation of the axes of the rationalist Roman urban plan marginalised the outer parts of the great Hellenistic metropolis with the free outline²³.

Radical socio-economic changes led to the disruption of urban structures since the prevalence of Christianity beginning at the end of the 3rd to the beginning of the 4th century AD²⁴. In this form of the town, the east mole of the great harbour, after the abolition of the monumental fortification with the two massive towers, operated exclusively as a mole²⁵ (fig. 7). The excavation testified the great commercial significance of the harbour, as indicated by the great number of coins, amphoras and vases. To facilitate the transport of goods and all kind of works at the harbour, a massive stone

18 Cante, Arco. – Cante, Tetrapylon.

19 Manoussou/Papavasileiou, Archeologiki.

20 Manoussou-Ntella, Palati.

21 Kontis, Teixi. – Filimonos-Tsopotou, Ochyrosi. – Manoussou-Ntella, Ellinistiki.

22 Psarri, Neotera.

23 Manoussou-Ntella, Poli.

24 Loungis, Poli. – Bouras, Village. – Bouras, Poleis.

25 Manoussou-Ntella, Thalassies.

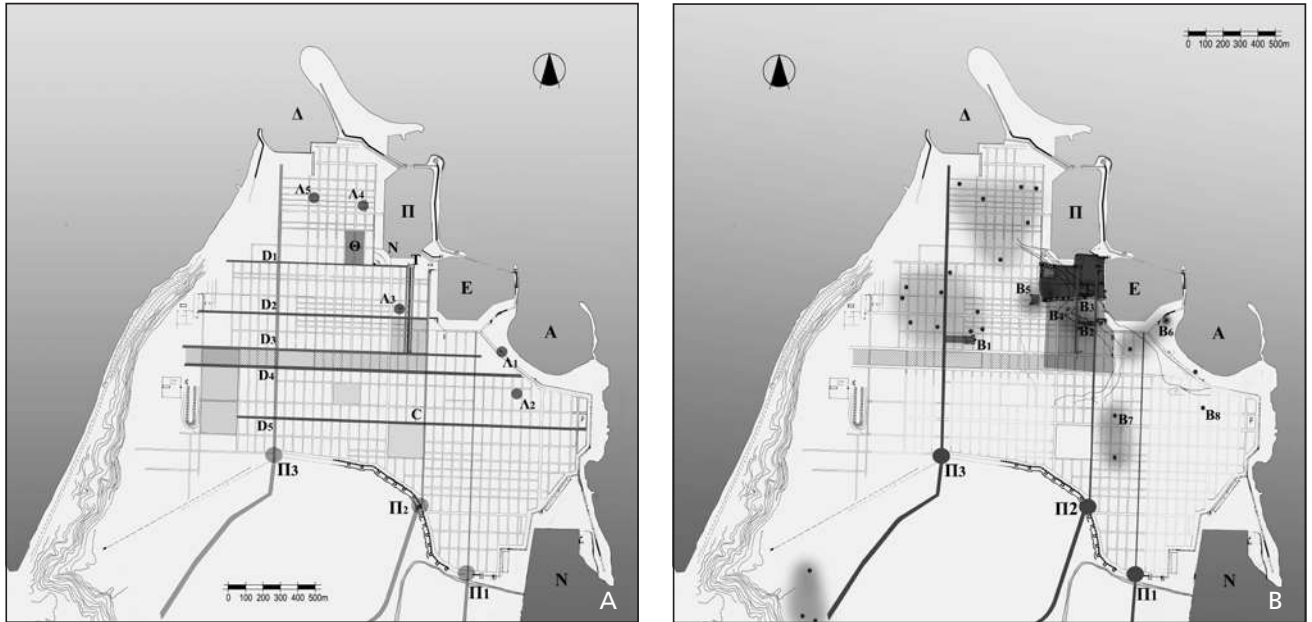
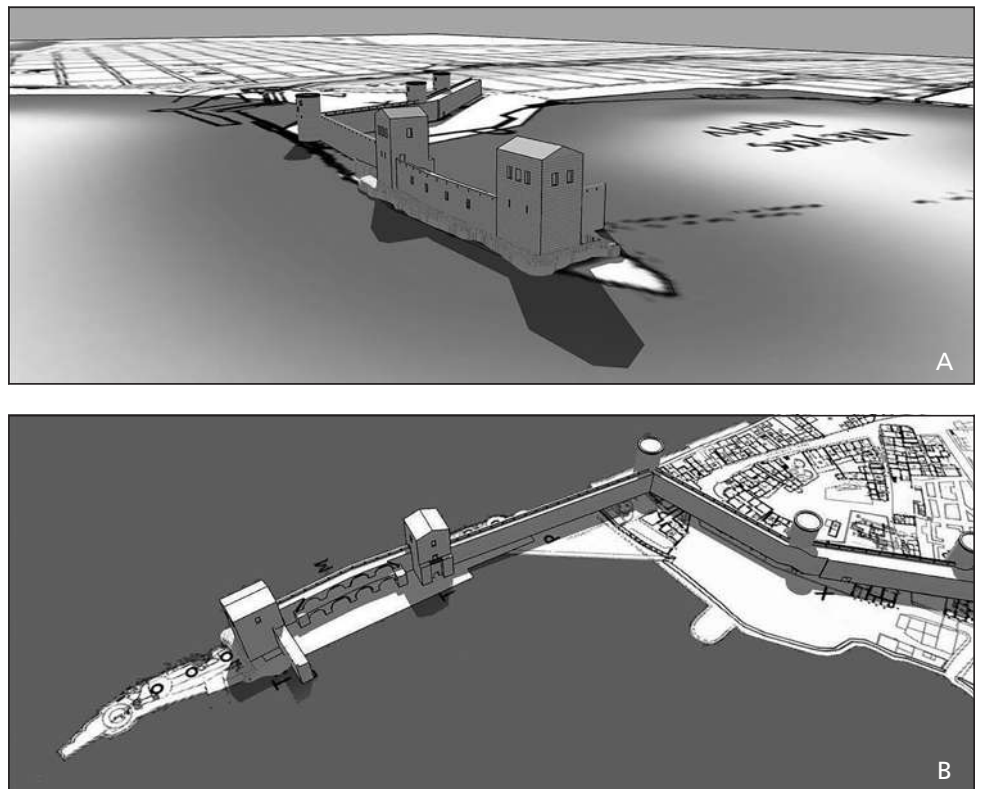


Fig. 3 **A** Modifications of the Hellenistic metropolis of Rhodes during the Roman period. – **B** Transformations from Roman to Byzantine city of Rhodes. – (K. Manoussou-Ntella, 2018).

Fig. 4 Graphic restitution of the east mole of the great harbour and the south landward fortification wall of the ancient city of Rhodes. – (K. Manoussou-Ntella, 3D presentation V. Kasseri, 2018).



dock was added²⁶, which embraced from the west and the north the ancient mole and preserves traces of the foundation of light wooden shelters. The vital area of the unfortified town during the following centuries (4th-7th c.) consists of *insulae* of residential clusters, which expand mainly in contact with the ancient harbours and the trade transaction area,

and on the foot of the ancient acropolis, surrounded by the extended ruins of a once illustrious town in decline. The reference points for these clusters are the imposing early Christian churches²⁷. The existence of at least eight early Christian basilicas is documented in the city of Rhodes, of which four have been uncovered in their largest part during systematic

26 Kollias, Chamena.

27 Lawas, Poleis. – Bouras, Cities.

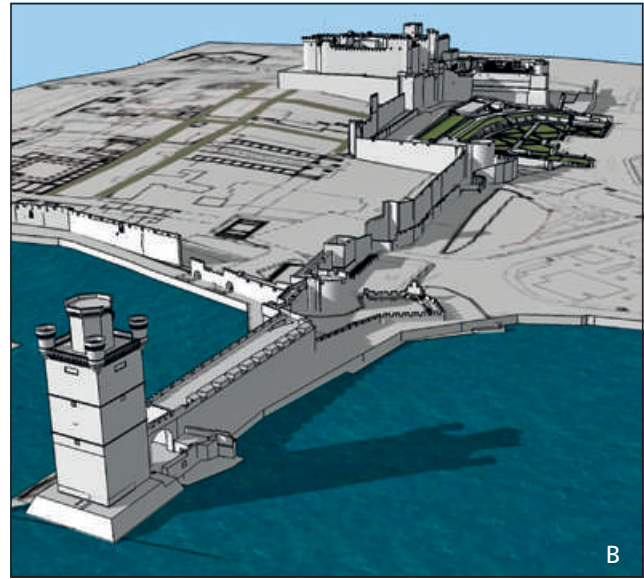
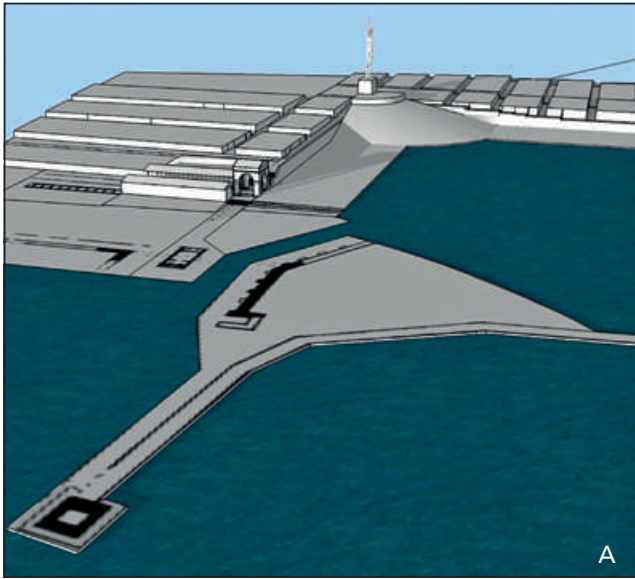


Fig. 5 Graphic restitution of the urban transformations of the area between the two central harbours of the city of Rhodes. – (K. Manoussou-Ntella, 3D presentation V. Kasseri, 2018).

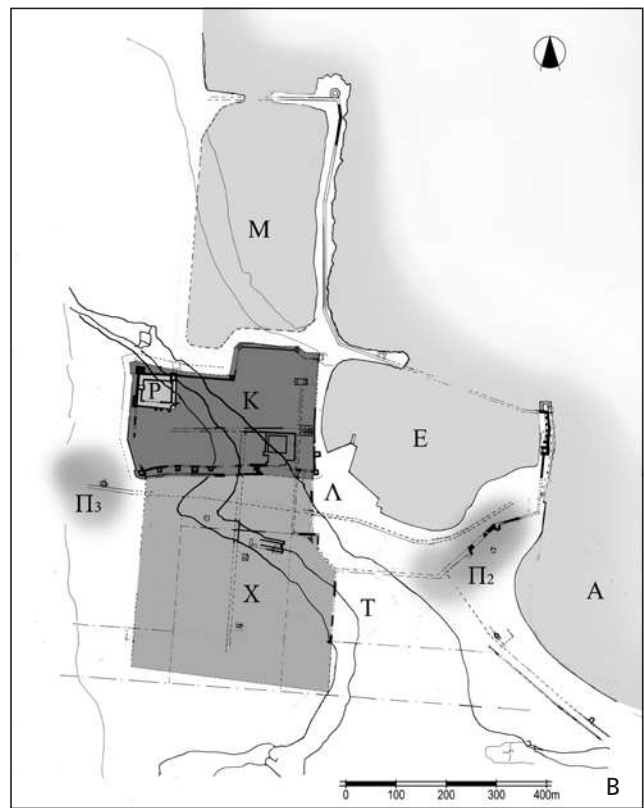
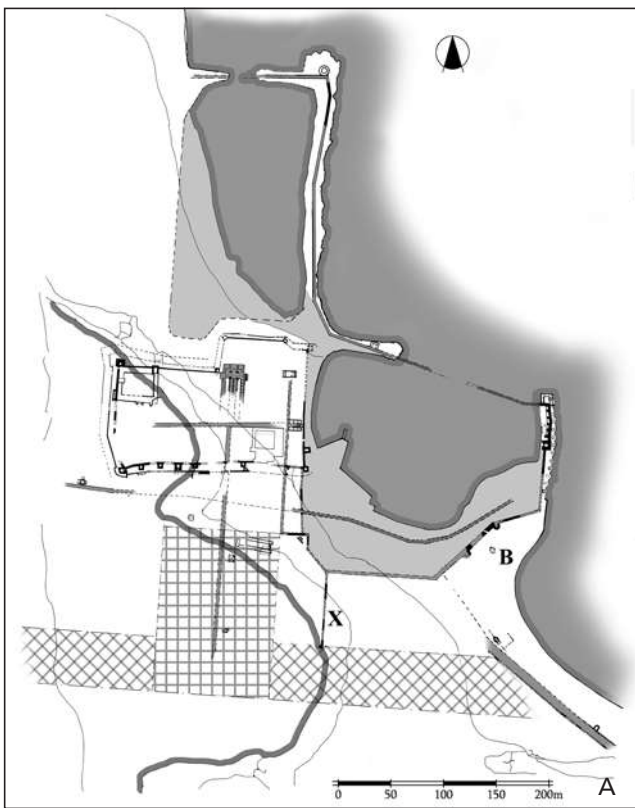


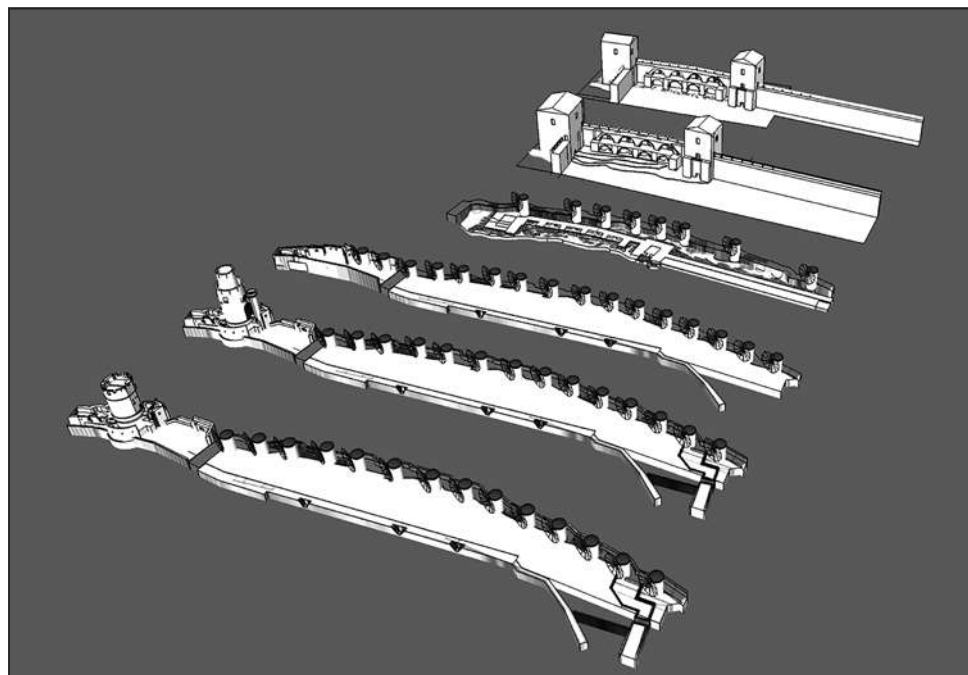
Fig. 6 A-B Development of the central area of the walled town of Rhodes from Late Antiquity to Byzantine period. – (K. Manoussou-Ntella, 2018).

archaeological excavations. For the first time, deviation from the axes of the Hippodamean urban planning system is attested in the design of those massive buildings, and even encroachment in some cases over main or secondary ancient

roads²⁸ (fig. 3B). The renowned ancient buildings, and mainly the fortification walls, literally turned into quarries for the provision of building material. The great early Christian basilicas of the city of Rhodes date from the 5th century until the

28 Manoussou-Ntella, *Stoicheia*.

Fig. 7 Transformations of the east mole of the great harbour of the city of Rhodes since antiquity. – (K. Manoussou-Ntella, 3D presentation V. Kasseri, 2018).



Justinian era, while the mid-seventh century witnesses the »end of the basilicas« in the Aegean.

During the Middle Ages, Rhodes was an important »transit town« (»Ville d'accession«)²⁹ on the route of the pilgrimage to the Holy Land. The very fact that Rhodes was forced to resist the increasing threat of the Egyptian Mamluks and the Ottomans in the 14th and 15th centuries contributed to its becoming a »military town«³⁰ par excellence. In terms of urban planning, the walled town developed in direct correspondence to the layout and expansion of the successive fortifications that surrounded the town³¹ (fig. 6A-B).

The main Byzantine nautical route in the north-south direction connects Constantinople with the eastern Mediterranean, Egypt and the coasts of North Africa³². The ships sailed alongside the islands of the Aegean – Mytilene, Chios, Samos, Kos – and then reached Rhodes, which was always a major port and a hub for the sea routes that crossed the Mediterranean. From Rhodes, the route system led west to Crete and east to Cyprus, while in the south it followed the course of the high seas to the destination of Alexandria or led east along the coasts of Syria and Palestine³³. The traffic on this nautical route was particularly intense in the centuries before the appearance of the Arabs in the 7th century AD, which led to the occupation of the southern Byzantine provinces. From the earliest Christian times, a wide network

of nautical routes connected Constantinople and the west coast of Asia Minor to the West. The flow of pilgrims and travellers from the West to the East increased from the onset of the Crusades. From the 11th century onwards, there is a strong presence of the great naval forces of the West in the Mediterranean and later in the Black Sea. It is well known that Constantinople was dependent on the Egyptian cereals for feeding its growing population up to the 6th and 7th centuries. The Byzantine State had organized the appropriate services and infrastructure to facilitate the transfer of this valuable cargo³⁴. It is natural, therefore, that the main ports on this route, Cyprus, Rhodes, Chios, Tenedos received special care and attention from the administration.

Until the mid-seventh century, all settlements on the islands of the Aegean were unfortified, and Muawiyah's army landed on Rhodes in 653-654 and conquered an unfortified town³⁵. It was then that the pilgrimage to the Colossus came to an end and the bronze of the statue was sold to a Jew from Edessa in Syria, who transported it away on 900 camels³⁶. Arab historians mention that in 60 AH, which is around AD 682, Gunada, son of Umayya, »conquered Rhodes and built the town«. It is obvious that he means that he fortified the already existing town. Again, according to Arab historical sources, it is then that »an Arab garrison and a colony of 10000 souls who took refuge in its fortress« settled in Rhodes.

29 Lavedan/Huguenev, Urbanisme. – Manoussou-Della, Zones.

30 Fara, Citta.

31 Gabriel, Cité. – Manoussou-Ntella, Poli. – Michaelidou, City 242. – It should be noticed that the »topographical map« (fig. 12), that I have already published in Manoussou-Ntella, Palati, is republished in this paper without reference to my name.

32 Antoniadis-Bibicou, Études. – Avramea, Epikoinonies. – Karagianni, Ports.

33 Makris, Ploia.

34 Moniaros, Epidromes.

35 Sawides, Rodos. – Papachristodoulou, Istoría 249. – Kasdagli, Nomismata.

36 The events of the sale of the Colossus are described in various source such as Theophanes, Constantine Porphyrogenitus and others.

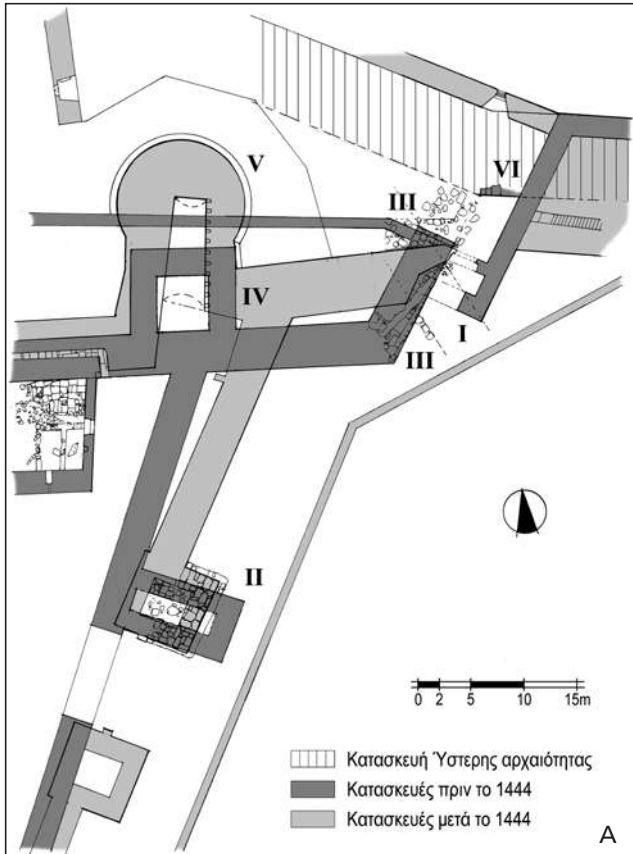


Fig. 8 A Graphic restitution of the successive building phases of the NE area of the walled city of Rhodes. – B General view of the excavations at St. Paul's Bastion. – (K. Manoussou-Ntella, 2018).

For the first time, it is mentioned that in early Byzantine years Rhodes was furnished with a fortress, obviously in the form of a fortified acropolis, where the population took refuge under threat (fig. 6A). This is the fortress that extended in the strategic location of the Roman town, between the commercial

and the military harbour, including the fortified hill on which lay the remains of the Colossus³⁷.

The integration of the northern wall of the Early Byzantine fortifications disturbed the perceptual image of the region of the ancient »small port« – Mandraki – and was a break in the city's evolution³⁸, its important functions being now turned to the commercial »great port« of antiquity. To the west, the wall is founded on the enclosure wall of the ancient shipyards, while to the east it shifted in parallel to include the central area of the Roman city's opening to the sea (fig. 6A). Its alignment was identified with the aforementioned section of an ancient wall in the straight line of the central mole of the harbours, the medieval »mole of Naillac«³⁹. In this area, the sea could penetrate at least until the end of the 15th century as it appears from the configuration of the Tarsana Knight's Gate⁴⁰. The Byzantine complex of the Arsenal, according to all indications, was included in the walled section of the town. This suggestion is reinforced by the scarce remnants of port installations revealed during the excavations in the wider region: a. in the interior of the Knight's Arsenal warehouse⁴¹, b. in the site of the northern tower of the »Tarsana gate«⁴² and c. in the area of the early gateway⁴³ connecting the two central ports, to the west of the mole of Naillac (fig. 8A-B). A common finding of these excavations is that the fortifications in this area were reconstructed in a totally transformed way during the early period of the knights after a major catastrophic event, most probably an earthquake that resulted in landslide phenomena in this geologically highly vulnerable region.

According to the findings of recent building research, the north-western corner tower, the Akropyrgos (fortress) of the early Byzantine castle, contained in its core a compact stone structure from the Hellenistic period, most probably the base of the Colossus, which thus disappeared forever⁴⁴. We would like to draw attention to the particular morphology of the Early Byzantine towers, whose sides converge slightly upwards, a feature probably due to their Arabian origin⁴⁵ (fig. 9A-B). The towers of the castle were built with ancient building material in secondary use, which abounded in the vast area where the ruins of the town of Rhodes lay. As is evident from a Hospitaller document from 1491⁴⁶, the basic principle stated in the *Strategikon* of Kekaumenos was applied, according to which there was a perimeter *pomoerium* inside the walls, towards which the entrance gates of the ground floor areas of the towers opened. The scale of the Castle was determined by the need to maintain a small garrison for protection⁴⁷, while there were certainly one or more unfortified residential clusters whose inhabitants fled to the Acropolis in times of danger. It is possible that a per-

37 Manoussou-Ntella, Poli. – Gabriel, Colosse. – Hoepfner, Hêlios.
 38 Manoussou-Ntella, Thalassies.
 39 Manoussou-Ntella, Thalassies fig. 2.
 40 Manoussou-Ntella, Thalassies fig. 3.
 41 Manoussou-Ntella, Thalassies fig. 3. – Pitilakis et al., Oplothiki.
 42 Manoussou-Ntella, Mnimeiki.

43 Manoussou-Ntella, Mnimeiki fig. 7.
 44 Manoussou-Ntella, Palati.
 45 Manoussou-Ntella, Poli. – Moutsopoulos, Poli.
 46 Roger, Regards 406-407.
 47 Evgenidou, Dokimio.

manent market was still operating along the central Roman axis (*cardo*), to which the central Byzantine gate opened, and continued further south⁴⁸. In the zone free of buildings, outside the gate and the early Byzantine walls («terra deserta»), there was space available for temporary installations for commercial transactions, later included in the walled late Byzantine »Chora« and developed in the Hospitaller town as »a great public square« («magna et communis platea»)⁴⁹. Nevertheless, it is certain that along the pre-Hospitaller street axis, known during the Hospitaller period as »via circa mare«, which connected the Byzantine »Marine Gate« with the east mole of the commercial harbour, the trade and financial centre of the 13th century operated, outside the walls of the »Chora«⁵⁰ (fig. 6A-B)

The expansion of the Byzantine town to the south is a result of the era of the Crusades when the strategic location of Rhodes was upgraded. It can be dated with certainty to the end of the 12th or the beginning of the 13th century. The late Byzantine fortification was particularly strong, with abundant use of spolia, even intact ancient walls in great height, and included the central functional zone of the town, with the hill of the ancient agora, into the walled town. It expanded, therefore, within a square measuring 400m on each side and used the boundaries of ancient streets as foundations⁵¹ (fig. 6B). Ancient buildings or statues were preserved in the Byzantine town of Rhodes, as reference points and testimonies to the illustrious past. According to written sources, the Crusaders mentioned in 1191 the preservation of the ancient relics of the town of Rhodes with enthusiasm, comparing it to Rome⁵².

Alongside the construction of the fortification wall of the Chora, it seems that during the late Byzantine period the central fortified palace⁵³ was constructed in the north-west corner of the Acropolis, which served as the administrative seat, the residence of the ruler and the ultimate resort for the civilian population in case of an attack.

Moreover, it is notable that along the seafront wall of the Castle, and also its south landward branch, interventions are evidenced from excavation research that date to the end of the 11th or during the 12th century (fig. 6A) These date the construction of the Byzantine Cathedral church of the Virgin of the Castle⁵⁴ and the »outer wall« possibly before the construction of the wall of the Chora. This fact also conveys the dynamic character of the Byzantine fortification works, which were transformed and adjusted according to specific needs and requirements of military techniques.

The living space in front of the eastern wall of byzantine Chora was in the immediate vicinity of the end of the monumental zone of the Hellenistic city towards the bay of

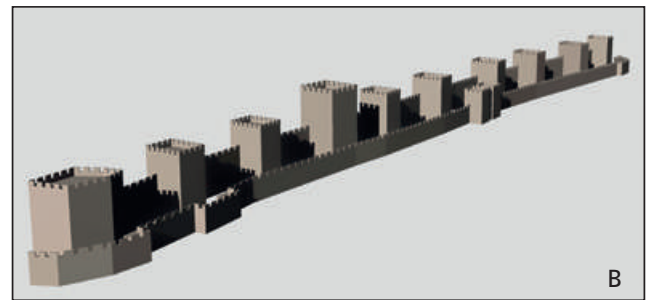
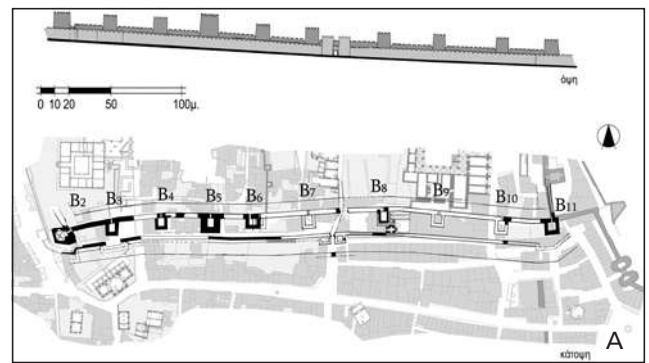


Fig. 9 A-B Plan and graphic restitution of the south section of the early Byzantine Acropolis (Collachio) of the city of Rhodes. – **C** View of the remains of the SE early Byzantine tower of the medieval harbour. – (K. Manoussou-Ntella, 3D presentation A. Ntella, 2018).

Akandia⁵⁵ and the eastern smooth coast, where the products were easily transported (fig. 3A). On the northern front of this area to the centre of the »great port«, probably outside of the ancient fortification, was possibly located the ancient »Deigma«⁵⁶, as a place of exhibition of products and all kinds of financial transactions.

In this zone probably some of the necessary installations of the Byzantine harbour had been included, suggestion

48 Manoussou/Papavassileiou, Archeologiki.

49 Kollias, Topographika.

50 Manoussou-Ntella, Zones.

51 Manoussou-Ntella, Poli.

52 Torr, Rhodes 6.

53 Manoussou-Ntella, Ochyroseis.

54 Kollias, Ippotes. – Acheimastou-Potamianou, Ekklesia.

55 Manoussou-Ntella, Akandia.

56 Konstantinopoulos, Rodos. – Konstantinopoulos, Plastiki.

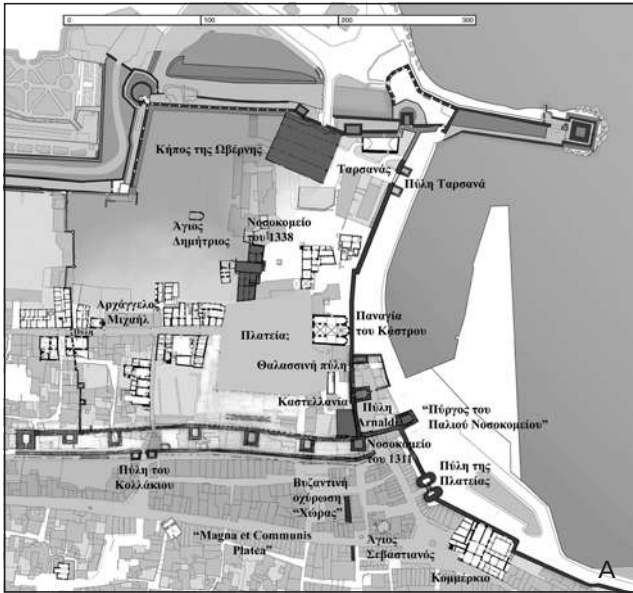


Fig. 10 A Plan of the main features of the central area of the city of Rhodes, during the period of the Knights Hospitaller. – B View of the actual situation of the *Commerchium*. – (K. Manoussou-Ntella, 2018).

which is reinforced by the integration in this area of the Knight's *Commerchium*⁵⁷ (fig. 10A-B), the construction of which clearly precedes the expansion of the Medieval Marine Wall around the harbour (fig. 6A). The extension of the, initially outside of the fortifications lying commercial axis to the Windmills pier, was attributed mainly to the period of prosperity during the 13th century⁵⁸.

In the new form of the town, the eastern pier of the great harbour, after the abandonment of the monumental ancient fortifications with the two massive towers, became exclusively a pier⁵⁹.

With reference to the function of the harbour at its east mole, its continuity is documented after the construction of a stone-built dock which surrounded the ancient fortification on the west and the north⁶⁰ (fig. 7). Wooden quays and stairs as well as wooden shelters were used for the safe anchoring and unloading of the small Byzantine ships. Even in the Byzantine period, particularly after the Crusades, the traffic in the harbour was busy and there was also a second anchorage in the inner part of the large harbour⁶¹, exactly in front of the Byzantine marine gate of the Castle, which is still in use today, known as the «Kolona harbour» (fig. 10A). The vital area that was formed at the exterior of the front of the east wall of the «Chora» possibly already included some of the necessary installations for the functions of the harbour, a fact that is also corroborated by the preservation at exactly this spot of the Hospitaller *Commerchium*. Moreover, at the end of the seafront street, which was obviously of commercial character furnished with warehouses, shops etc., is attested the existence of a monumental, pre-Hospitaller or early Hospitaller building (fig. 4). Its construction predates the wall⁶², while there is evidence for its continuity to the north and a connection to the function of the harbour through a pointed gate that led to the harbour. This is most probably the early building of the customs, the existence of which is testified in a document dating to 1332⁶³, or an important storage area related to the function of the harbour and the transport of merchandise. The immediate connection of the Byzantine harbour with the production process resulted in the construction of a series of windmills⁶⁴ as early as the mid-thirteenth century, founded on the rock configuration protecting the ancient wall, whereupon the mole has been called «mole of the windmills» (fig. 7). The circular enclosures of the windmills were connected with arched crossings and formed a strong, fortified front on the eastern, vulnerable side of the pier. An extremely reinforced, 8.00m thick wall⁶⁵ or berth ran in a westerly direction, and initially limited the entrance to the Byzantine harbour. This massive masonry from the early knight's period was «cut» in the straight line of the new west front of the pier from the mid-fourteenth century. During the period of the Grand Master Philibert de Naillac (1396-1421), the fortification of the fixed end of the chain that controlled the entrance to the harbour was integrated at this exact spot.

Finally, in November 1309, three months after the surrender of the town to the Knights of St. John, a notarial deed for the shipment of cloth to Chios was signed on the mole («apud mod'») ⁶⁶, confirming its significance and its constant function.

57 Manoussou-Della, Zones.

58 Gounaridis, Rhodes.

59 Manoussou-Ntella, Thalassies.

60 Anoiytes imeres, Anaskafi. – Platon/Stalidis, Limani.

61 Newton, Travels 149-150. – Gabriel, Cite I 5-6.

62 Manoussou-Ntella, Proimi.

63 Luttrell, Town 183-184.

64 Ntellas, Anemomyloi. – Dimitrokalis, Anemomyloi.

65 Manoussou-Ntella, Thalassies. – Kollias, Chamena.

66 Luttrell, Town.

References

- Acheimastou-Potamianou, Ekklisia: Η εκκλησία της Παναγίας: Μ. Acheimastou-Potamianou, Η εκκλησία της Παναγίας του Κάστρου της Ρόδου. *ADelt* 22, 1968, 221-263.
- Anoiktas imeres, Anaskafi: Ανοικτές Ημέρες »Η ιστορία μιας ανασκαφής: από τον αρχικό σχεδιασμό στην τελική παρουσίαση«, Υπουργείο Πολιτισμού, 4^η ΕΒΑ-ΤΔΠΕΑΕ (Rhodes 2002).
- Antoniadis-Bibicou, Études: Η. Antoniadis-Bibicou, Études d'histoire maritime de Byzance a propos du »Theme de caravisiens« (Paris 1966).
- Avramea, Epikoinonies: Α. Avramea, Χερσαίες και θαλάσσιες επικοινωνίες (4^{ος}-15^{ος} αιώνας). In: Οικονομική ιστορία του Βυζαντίου από τον 7^ο έως τον 15^ο αιώνα I (Athēna 2006) 125-167.
- Belavilas, Limania: Ν. Belavilas, Λιμάνια και οικισμοί στο Αρχιπέλαγος της περατείας 15^{ος}-19^{ος} αι. (Athēna 1997).
- Blackman, Limenes: D. J. Blackman, Οι λιμένες της αρχαίας Ρόδου. In: Ρόδος 2400 χρόνια. Η πόλη της Ρόδου από την ίδρυσή της μέχρι την κατάκτηση από τους Τούρκους (1523). Πρακτικά I (Athēna 2000) 41-50.
- Bouras, Cities: Ch. Bouras, Byzantine Cities in Greece. In: Heaven and Earth. Cities and Countryside in Byzantine Greece (Athens 2013) 44-73.
- Poleis: Ch. Bouras, Μεσοβυζαντινές και υστεροβυζαντινές πόλεις από τη σκοπιά της πολεοδομίας και της αρχιτεκτονικής. In: Οι βυζαντινές πόλεις (8^{ος}-15^{ος} αιώνας) (Rethimno 2012) 1-14.
- Village: Ch. Bouras, City and Village. Urban design and Architecture. *JÖB* 31, 1981, 611-634.
- Braudel, Mnimes: F. Braudel, Οι μνήμες της Μεσογείου. Προιστορία και αρχαιότητα (Athēna 2000).
- Cante, Arco: M. Cante, L'arco quadrifronte. *Annuario della Scuola Archeologica di Atene* 64-65, 1986-1987, 175-266.
- Tetrapylon: M. Cante, Tetrapylon. In: La presenza italiana nel Dodecaneso tra il 1912 e il 1948. La ricerca archeologica – la conservazione – le scelte progettuali (Atene 1997) 26-31.
- Ćurčić, Architektoniki: S. Ćurčić, Αρχιτεκτονική στην εποχή της ανασφάλειας. Εισαγωγή στην Κοσμική Αρχιτεκτονική στα Βαλκάνια, 1300-1500. Κοσμική μεσαιωνική αρχιτεκτονική στα Βαλκάνια και η διατήρησή της (Thessalonikē 1997).
- Gabriel, Cité I: A. Gabriel, La Cité de Rhodes (MCCCX-MDXXII): Topographie; architecture militaire (Paris 1921).
- Cité II: A. Gabriel, La Cité de Rhodes (MCCCX-MDXXII): Architecture civile et religieuse (Paris 1923).
- Colosse: A. Gabriel, La construction, l'attitude et l'emplacement du Colosse de Rhodes. *Bulletin de Correspondance Hellenique* 5-6, 1932, 331-359.
- Gounaridis, Rhodos: P. Gounaridis, Η τύχη της Ρόδου τον ΙΓ' αιώνα. *Byzantina Symmeikta* 15, 2002, 177-182.
- Dimitrokalis, Anemonyloi: G. Dimitrokalis, Οι ανεμόμυλοι των Βυζαντινών. *Parnassos* 20, 1978, 141-144.
- Evgenidou, Dokimio: D. Evgenidou, Δοκίμιο για την οχυρωτική στο Βυζάντιο (Athēna 2001).
- Fara, Citta: A. Fara, La città da guerra (Torino 1993).
- Filimonos-Tsopotou, Ochyrosi: M. Filimonos-Tsopotou, Η ελληνιστική οχύρωση της Ρόδου (Athēna 2004).
- Hoerpfner, Hēlios: W. Hoerpfner, Ρόδος και ο θεός Ηλιος. Αρχαιολογικές έρευνες και ευρήματα στα Δωδεκάνησα. Ρόδος, Ιαλυσός, Νίσυρος και Γυαλί (Weilheim 2007).
- Poleodomia: W. Hoerpfner, Η πολεοδομία της κλασικής περιόδου. *Αρχαιολογία και Τέχνες* 63, 1997, 25-48.
- Karagianni, Limania: F. Karagianni, Sailing to the medieval ports of the Euxine Pontos and Aegean. In: Olkas. Sailing from and to Byzantium. Medieval ports from Euxine Pontos to Eastern Mediterranean (Athens 2014) 23-39.
- Karouzou, Rodos: Ch. Karouzou, Ρόδος (Athēna 1973).
- Kasdagli, Nomismata: A. M. Kasdagli, Νομίσματα στα Δωδεκάνησα από τη μεταρρύθμιση του Αναστασίου (498 μ.Χ) έως το 19^ο αι.). *Οβολός* 8, 2006, 253-266.
- Kollias, Antistasi: E. Kollias, Η παλαιοχριστιανική και βυζαντινή Ρόδος. Η αντίσταση μιας ελληνιστικής πόλης. In: Ρόδος 2400 χρόνια. Η πόλη της Ρόδου από την ίδρυσή της μέχρι την κατάκτηση από τους Τούρκους (1523) II (Athēna 2000) 299-308.
- Chamena: E. Kollias, Αναζητώντας τα χαμένα μνημεία της μεσαιωνικής πόλης της Ρόδου. 15 χρόνια έργων αποκατάστασης στη μεσαιωνική πόλη της Ρόδου (Athēna 2007).
- Ippotes: E. Kollias, Οι Ιππότες της Ρόδου: το Παλάτι και η Πόλη (Athēna 1991).
- Topographika: E. Kollias, Τοπογραφικά προβλήματα της μεσαιωνικής αγοράς της Ρόδου και του νότιου τείχους του Κολλάκιου »versus civitatem«. In: Ιστορία και προβλήματα συντήρησης της μεσαιωνικής πόλης της Ρόδου (Athēna 1992) 81-108.
- Kontis, Symboli: I. Kontis, Συμβολή εις την μελέτην της ρυμοτομίας της Ρόδου (Rodos 1954).
- Teixi: I. Kontis, Τα αρχαία τείχη της Ρόδου, Α. Οι συγγραφείς. *ADelt* 18, 1963, 76-94.
- Konstantinopoulos, Plastiki: G. Konstantinopoulos, Έργα πλαστικής και επιγραφές από το Διονύσιο Τέμενος της αρχαίας Ρόδου. *ADelt* 48-49, 1994-1995, 76-82.
- Rodos: G. Konstantinopoulos, Αρχαία Ρόδος (Athēna 1986).
- Rymotomiko: G. Konstantinopoulos, Το ρυμοτομικό σύστημα της αρχαίας Ρόδου. *Αρχαιολογικά ανάλεκτα εξ Αθηνών* 3/1, 1970, 52-55.
- Lavedan/Hugueney, Urbanisme: P. Lavedan / J. Hugueney, L'urbanisme au moyen âge. *Bibliothèque de la Société Française d'Archéologie* 5 (Genève 1974).
- Lawvas, Poleis: G. Lavvas, Οι πόλεις των »Χριστιανικών Βασιλικών« Μία συμβολή στην πολεοδομία του ανατολικού Ιλλυρικού. In: Πρακτικά του 10^{ου} διεθνούς συνεδρίου Χριστιανικής Αρχαιολογίας 1 (Thessalonikē 1984) 581-630.
- Loungis, Koinonia: T. Loungis, Η κοινωνία από την αρχαιότητα στο Μεσαίωνα. In: Βυζαντινό κράτος και κοινωνία. Σύγχρονες κατευθύνσεις της έρευνας (Athēna 2003) 89-106.

- Poli: T. Loungis, Η εξέλιξη της βυζαντινής πόλης από τον τέταρτο στο δωδέκατο αιώνα. *Byzantiaka* 16, 1996, 33-67.
- Makris, Ploia: G. Makris, Πλοία. In: Οικονομική ιστορία του Βυζαντίου από τον 7^ο έως τον 15^ο αιώνα I (Athēna 2006) 169-180.
- Manoussou-Ntella, Akandia: K. Manoussou-Ntella, Η Ακαντία της Ρόδου. Από την Αρχαιότητα έως την Ιπποτοκρατία. In: Σοφία άδολος. Τιμητικός Τόμος για τον Ιωάννη Παπαχριστοδούλου (Rodos 2014) 301-332.
- Diacheirisi: K. Manoussou-Ntella, Η διαχείριση των »αρχαίων« κατά την ιστορική εξέλιξη της πόλης της Ρόδου. Αρχαιολογικά τεκμήρια και σύγχρονες πρακτικές. *Δωδεκανησιακά Χρονικά* 26, 2014, 11-32.
- Ellinistiki: K. Manoussou-Ntella, Η ελληνιστική οχύρωση του ανατολικού μώλου του μεγάλου λιμένα της πόλης της Ρόδου, Αρχιτέκτων. In: Τιμητικός τόμος για τον καθηγητή Μανόλη Κορρέ (Athēna 2016) 499-506.
- Mnimeiak: K. Manoussou-Ntella, Μνημειακή τοπογραφία του βόρειου άκρου της πόλης της Ρόδου. *DeltChrA* 33, 2012, 21-36.
- Ochyroseis: K. Manoussou-Ntella, Το παλάτι του μεγάλου μαγίστρου και οι μεσαιωνικές οχυρώσεις της πόλης της Ρόδου. In: *Rhodes et les Chevaliers de Rhodes (1310-2010). Actes du Colloque 28-29 Mai 2010 (Flavigny-sur-Ozerain 2013)* 71-100.
- Palati: K. Manoussou-Ntella, Μεσαιωνική Ρόδος. Από το βυζαντινό κάστρο στο παλάτι του μεγάλου μαγίστρου. In: Η οχυρωματική αρχιτεκτονική στο Αιγαίο και ο μεσαιωνικός οικισμός Αναβάτου Χίου (Chios 2012) 313-330.
- Paysage: K. Manoussou-Ntella, Le paysage culturel et les monuments symboles disparus de la ville de Rhodes. *Europa Nostra. Bulletin scientifique* 64, 2010, 59-74.
- Poli: K. Manoussou-Ntella, Η Πόλη της Ρόδου κατά τους Μεσαιωνικούς Χρόνους. Ο μετασχηματισμός των Οχυρώσεων από την Ύστερη Αρχαιότητα έως την Ιπποτική Οχυρωμένη Πόλη (7^{ος} αι.-1480) [Diss., Εθνικό Μετσόβιο Πολυτεχνείο, 2014].
- Proimi: K. Manoussou-Ntella, Η πρώιμη μεσαιωνική οχύρωση της πόλης της Ρόδου. In: 15 χρόνια έργων αποκατάστασης στη Μεσαιωνική Πόλη της Ρόδου. Πρακτικά του Διεθνούς Επιστημονικού Συνεδρίου (Athēna 2007) 333.
- Stoicheia: K. Manoussou-Ntella, Ρόδος. Στοιχεία πολεοδομικής ανάλυσης μιας μεσαιωνικής οχυρωμένης πόλης. *DeltChrA* 21, 2000, 27-42.
- Thalassies: K. Manoussou-Ntella, Οι θαλάσσιες οχυρώσεις και τα λιμάνια της πόλης της Ρόδου. *DeltChrA* 30, 2009, 67-80.
- Zones: K. Manoussou-Ntella, Zones and nodes of interaction. The development of the Hospitaller Town of Rhodes. In: E. Buttigieg / S. Philips (eds), *Islands and the Military Orders c. 1291-c. 1798 (Farnham 2013)* 87-97.
- Manoussou/Papavassileiou, Archeologiki: K. Manoussou / E. Papavassileiou, Η αρχαιολογική έρευνα ως βάση για το σύγχρονο αρχιτεκτονικό σχεδιασμό – διευθέτηση της πόλης. In: *Νέες πόλεις πάνω σε παλιές (Ρόδος 27-30 Σεπτεμβρίου 1993) (Athēna 1999)* 583-602.
- Michaelidou, City: M. Michaelidou, The City of Rhodes. In: *Heaven and Earth, Cities and Countryside in Byzantine Greece (Athens 2013)* 240-251.
- Michalaki-Kollia, Ellinistiki: M. Michalaki-Kollia, Η ελληνιστική Ρόδος στα όρια της μεσαιωνικής πόλης και η ερμηνευτική παρουσίαση των υπολειμμάτων της. In: 15 χρόνια έργων αποκατάστασης στη Μεσαιωνική Πόλη της Ρόδου, Πρακτικά του Διεθνούς Επιστημονικού Συνεδρίου (Athēna 2007) 76.
- Moniaros, Epidromes: Ch. Moniaros, Σλαβικές επιδρομές στο Αιγαίο στις αρχές του 7^{ου} αι. Η περίπτωση της Χίου. *Byzantiaka* 18, 1995, 285-302.
- Newton, Travels: C. T. Newton, Travels and discoveries in the Levant 1 (London 1865).
- Ntellas, Anemomyloi: G. Ntellas, Οι μεσαιωνικοί ανεμόμυλοι της Ρόδου. Αρχαιολογικά τεκμήρια βιοτεχνικών εγκαταστάσεων κατά τη βυζαντινή εποχή 5^{ος}-15^{ος} αιώνας (Athēna 2002).
- Papaioannou, Keimena: M. Papaioannou, Ρόδος και αρχαία κείμενα (Athēna, Iōannina 1995).
- Papachristodoulou, Istorica: Ch. Papachristodoulou, Ιστορία της Ρόδου από τους προϊστορικούς χρόνους έως την ενσωμάτωση της Δωδεκανήσου (1948) (Athēna 1994).
- Peyras, Siege: J. Peyras, Le siège de Rhodes par Mithridate (88 av. J.-C.). In: N. Faucherre / I. Pimouguet-Pedarrros (eds), *Les sièges de Rhodes de l'Antiquité a la période moderne (Rennes 2010)* 157-174.
- Pitilakis et al., Oplothiki: K. Pitilakis / A. Sextos / K. Manousou-Ntella / I. Galazoula, Η αποκατάσταση της ιπποτικής Οπλοθήκης De Milly στη μεσαιωνική πόλη της Ρόδου. In: 15 Χρόνια έργων αποκατάστασης στη Μεσαιωνική Πόλη της Ρόδου, Πρακτικά του Διεθνούς Επιστημονικού Συνεδρίου (Athēna 2007) 160-176.
- Platon, Limani I: E. Platon, Εμπορικό λιμάνι της Ρόδου-Μώλος των Μύλων. *ADelt, Χρονικά* 54 (Athēna 1999).
- Limani II: E. Platon, Εμπορικό λιμάνι της Ρόδου-Μώλος των Μύλων. *ADelt, Χρονικά* 55 (Athēna 2000).
- Platon/Stalidis, Limani: E. Platon / G. Stalidis, Εμπορικό λιμάνι της Ρόδου-Μώλος των Μύλων. *ADelt, Χρονικά* 56-59 (Athēna 2001-2004).
- Psarri, Neotera: P. Psarri, Νεότερα στοιχεία από την ανασκαφική έρευνα ανώνυμου βυζαντινού ναού στην οδό Θησέως στη μεσαιωνική πόλη της Ρόδου. In: 15 χρόνια έργων αποκατάστασης στη Μεσαιωνική Πόλη της Ρόδου, Πρακτικά του Διεθνούς Επιστημονικού Συνεδρίου (Athēna 2007) 467-473.
- Rocco, Aphrodite: G. Rocco, Il tempio di Afrodite. In: *La presenza italiana, nel Dodecaneso tra il 1912 e il 1948, La ricerca archeologica – la conservazione – le scelte progetuali (Atene 1997)* 31-33.
- Roger, Regards: J. M. Roger, Nouveaux regards sur les monuments des Hospitaliers à Rhodes. *Journal des Savants* 2, 2007, 406-407.
- Savvides, Dynasteia: A. Savvides, Η βυζαντινή δυναστεία των Γαβαλάδων και η ελληνοϊταλική διαμάχη για τη Ρόδο τον 13^ο αι. *Byzantina* 12, 1983, 405-428.
- Genouatiki: A. Savvides, Η γενουατική κατάληψη της Ρόδου το 1248-1250 μ.Χ. *Parnassos* 32, 1990, 183-199.
- Rodos: A. Savvides, Η βυζαντινή Ρόδος και οι Μουσουλμάνοι (Athēna 1995).
- Torr, Rhodes: C. Torr, Rhodes in Modern Times (Cambridge 1887).

Summary / Zusammenfassung

Byzantine Rhodes. The evolution of a fortified harbour-city in the Eastern Mediterranean (4th to 12th c.)
Already with the transformation of Rhodes from the centre of an independent sea power to a Roman provincial city, a significant modification of the Hellenistic urban organisation began. Although the settlement shrank and this process continued after the crisis of the Byzantine Empire in the 7th century, the port of Rhodes remained important and was also secured with appropriate fortifications. On this basis, the Knights Hospitaller were able to expand the city again from the 14th century onwards to the centre of their naval power in the Aegean. Based on new archaeological findings, the dynamics of the structures of the port of Rhodes are discussed.

Byzantinisches Rhodos. Die Entwicklung einer befestigten Hafenstadt im östlichen Mittelmeerraum (4. bis 12. Jh.)

Bereits mit der Verwandlung von Rhodos von Zentrum einer eigenständigen Seemacht zur römischen Provinzstadt begann eine signifikante Transformation des hellenistischen Stadtplans. Wiewohl die Siedlung schrumpfte und sich dieser Prozess nach der Krise des byzantinischen Reichs im 7. Jahrhundert fortsetzte, blieb der Hafen von Rhodos bedeutend und wurde auch mit entsprechenden Befestigungen gesichert. Auf dieser Grundlage konnten die Johanniter ab dem 14. Jahrhundert die Stadt erneut zum Zentrum ihrer Seemacht in der Ägäis ausbauen. Auf der Grundlage neuer archäologischer Befunde wird die Dynamik der Strukturen des Hafens von Rhodos diskutiert.

