Knowledge and preservation of ancient Rhodes. From a typological analysis of urban fabric to a practical project for urban heritage

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Knowledge and preservation of ancient Rhodes.

From a typological analysis of urban fabric to a practical project for urban heritage

Arch. Emma Maglio

Introduction

The town of Rhodes, as its whole island, shares with the Aegean lands a Mediterranean koinè, the result of the passage of some of the ancient world’s greatest civilizations like Greeks, Romans and Byzantines, but it retains its own cultural identity strictly related to its territorial and urban morphology. Archaeologists confirm that the island has been inhabited since the New Minoan age (1700-1400 BC) and that the area south of the present Rhodes has been inhabited since the Mycenaean period (1600-1200 BC), according to various obsidian and flint fragments found west of the town (sites of Ialyssos, Trianda and Asomatos) and south of it (near Koskinou). Such proofs tell that the choice of Rhodes site was not casual: the area has been civilized since the most ancient historical phases of the island, by reason of its privileged position, its bays and its natural clay soil for ceramic production.\(^1\)

In 1200 BC the Dorians settled in the island and founded the three main cities of Ialyssos, Lindos and Kamiros, establishing commercial relations with Greece, Phoenicia, Crete and thereafter Corinth, Syria, Egypt and Cyprus. The island began a strategic port of call in Mediterranean trade, basing its supremacy on ships manufacture, transportation of valuable goods (such as oil and wine) and transit trade of grain (from Greece and Asia Minor to Egypt and Magna Graecia).\(^2\) According to the tradition, the city of Rhodes was founded in 408 BC through an act of synechism among the three cities and began the new capital of the island.\(^3\)

The Greek planned city

Rhodes had five harbours protected by ramparts and fortifications consisting in a double wall (Figure 1). The oldest walls, which were high and thin, dated back to the late 5th-early 4th century BC: few remains of them are still located

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\(^3\) Hoepfner W. and Schwandner E. L. (1986). Haus und Stadt im Klassischen Griechenland. München, Deutscher Kunstverlag, 21-26. Before the end of the 5th century BC there was probably a sympolitieia among the three cities, a ‘double citizenship’ which included common rights and a system of alternation in the public offices. The sinechism probably led to a political unification and to the displacement of population to the new capital from the Ialyssia region, from Athens and the rest of Greece: Rhodes probably had over 50,000 inhabitants.
near the commercial harbour. These walls were reinforced in the Hellenistic age by thicker external walls with towers, enclosing a large urbanized area. Southward, torrent Rhodini was another element of natural defense, while several cemeteries occupied a large territory south and west walls. Excavations in 1989 in the southern part of the city revealed wall remains dating before the 3rd century BC, confirming Amedeo Maiuri’s hypothesis that in the 4th century BC Rhodes was less extended than the Hellenistic city and it did not include the southern and western neighbourhood: urban development was probably not yet accomplished in the mid-4th century BC, when the Greeks began to endow the city with the first great public buildings. 

The Greek city of Rhodes covered, it is said, an area of more than 120 hectares and had a regular urban structure inspired hippodamian consisting of a road network. The secondary roads had a section ranging from 5.30m to 6.30m, what was unusually wide if compared to other poleis of the same period. Among the main roads, that had a width from 9.00m to 16.00m, there were some more important streets, such as those leading west from the port structures up to the Acropolis (P6, P10, P14, P15 and P18 streets) and those connecting the temples in the northern part of the city with the southern urban gates (P25, P27, P29, P30, P32 and P34 streets). However there were not paramount monuments at the crossroads of the paths identifying a main urban polarity or a most important street among the others. The wider roads created a ‘grid’ with large squared blocks of about 200m x 200m: each of them was divided by the secondary road system in four blocks (in sense north-south) and a number from five to nine blocks (in sense east-west), with dimensions of 26.00m x 47.00m. Each block probably consisted of three plots that mostly housed small stores and homes of merchants. The non-residential blocks, instead, housed several urban polarities of religious and public use.

The Acropolis was located in the western area of the walled city and was structured with terraces, according to a scheme also repeated in Hellenistic Lindos and Kamiros. In the heart of the city there was to be a religious building, perhaps dedicated to Helios, near the probably site for agora at the crossroads of P27 and P13 streets. In the eastern part of the city it was said to be a great Doric peripteral temple dating from the classical age, probably a ‘market temple’: perhaps the remains of late-classical columns found nearby belonged to it. To the north of the agora, in the area of

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IV Pimouquet-Pédarros, I. 2004. Rhodes à la fin du IVe siècle : fortifications urbaines et pratiques défensives. *Studia anatolica et varia* II, 212-239. Maiuri, A. 1921. *Rodì.* Roma, Alfieri e Lacroix. The inner town walls protected the ports and the highest urbanized area and coincided with good possibility with the perimeter of medieval castrum (14th-16th century). Remains of Hellenistic wall foundations were found along the current medieval walls, on the eastern and southern sides of castrum, below the Grand Master’s Palace at its western side, along the ramparts on the northern side of the town and finally near the old bridge at torrent Rhodini. The southern walls were provided with three doors at least, a wide moat and advanced defensive systems (proteichismata). At the end of the 4th century BC at least one third of the city was still not built or unused: it is possible that the city was endowed with large public buildings only after 357 BC, when Ecatomnide dynasty used considerable resources in it.

V Hoepfner, W. 1999. Zur Gründung und zur Architektur von Rhodos. In *Ρόδος 2400 χρόνια. Η πόλη της Ρόδου από την ίδρυσή της μέχρι την κατάληψη από τους Τούρκους* (1532), A, 51-58. Αθήνα, 4η Εφορεία Βυζαντινών Αρχαιοτήτων. The planning of the city, traditionally attributed to Hippodamus of Miletus, had probably to be conceived and carried out by one of his pupils or a member of his school, as confirmed by scholars. The width of the main paths refers to the streets of Piraeus, as well as the size of some of the blocks (205m of Piraeus against 206m of Rhodes), which housed in both cases rather small plots.
medieval *castrum*, there are traces of the towing ramps of the Hellenistic arsenal; little further east of the arsenal there was a temple of Aphrodite and west, finally, a small sanctuary of Helios, which probably was on the site of subsequent Roman citadel and Byzantine *kastron*VI.

**The decline during Roman age**

When Rome began its ascent in the eastern Mediterranean, Rhodes supported it but their alliance soon became rivalry: Rome feared Rhodes maritime supremacy and engaged to weaken its power through the establishment of taxes and territorial dispossessions. In 164 BC the Rhodians were declared ‘soci atque amici imperii Romani’, a status requiring them to have the same enemies and allies than Rome. These events altered the political and economic balance: the emperor Diocletian put Rhodes at the head of *Provincia insularum* (AD 297), but the city was reduced to a provincial role that was only a shadow of its former power. Between the 2nd and the 3rd century AD Rhodes was only a secondary port of call in Mediterranean trade going east-west and north-southVII.

There is little information about the Roman town of Rhodes and studies on this subject are very few if compared to the large bibliography about the Greek city. The researches testify an appreciable impoverishment and a phase of urban contraction from the 2nd to the 3rd century AD, compounded by several earthquakes, epidemics and lootings which caused the ruin of most buildings: in particular, the looting of Mithridates (88-85 BC) caused the destruction of several monuments in the classical city and the siege of Cassius (42 BC) led to the collapse of the agora. The Romans had inherited a large built city and they widely reused houses, public buildings, the Acropolis, the necropolis and the sewage system of the previous Greek cityVIII. We know that between the end of the 2nd and the early 3rd century AD the Romans built a domed passage on pillars (*tetrapylon*) near the towing ramps of the Hellenistic arsenal (which was incorporated in a general raising of the ground level), at the crossroads of Greek P31 and P6 streets which had become

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VI Μιχαλάκη-Κόλλα, Μ. 1999. Μνημειώδες στεικό οικοδόμημα στις υπώρειες της ροδιακής ακρόπολης. Το τέμενος του Ηλίου ή δημόσιο κτίριο. In Ρόδος 2400 χρόνια. Η πόλη της Ρώδου από την ιδρυμή της μέχρι την κατάληψη από τους Τούρκους (1532), Α, 73-74. Αθήνα, 4η Εφορεία Βυζαντινών Αρχαιοτήτων. Gabrielsen, V. 1997. *The naval aristocracy of Hellenistic Rhodes*. Cambridge, Aarhus University Press. Among the arsenal buildings (*neōria*) the archaeological remains revealed that there were covered sheds (*neōsoikoi*) to hold larger vessels. These structures made up the inner part of a vast complex, so the military port was large about twice the current. West and south harbors had to be similar facilities for the storage of boats and materials, but only systematic excavations will advance a still partial knowledge about the city’s ports.


VIII Ibidem. The historiography about the Roman city mostly includes works on Rhodes in the wider landscape of antiquity: among the more recent texts that systematized the previous studies see M. Livadiotti and G. Rocco (eds.), *La presenza italiana nel Dodecaneso tra il 1911 e il 1948. La ricerca archeologica, la conservazione, le scelte progettuali*. Catania, Edizioni del Prisma.
Roman cardo and decumanus. Tetrapylon was a gate leading from the arsenal to the agora through a paved street with shops and Corinthian columns; this street had to have an important economic and symbolic role\textsuperscript{IX} (Figures 2, 3).

**The growing of the town until Middle Age**

After the division of Roman Empire, Rhodes, the Aegean islands and the eastern provinces became part of the Eastern Roman Empire. Rhodes had an organized Church with a bishopric as early as the 3rd century AD. In the late 4th century AD the island became Metropoli of Provincia insularum, head of the Cyclades eparchy, and endowed itself of numerous places of worship such as churches and basilicas. According to the sources, the ancient town was destroyed by an earthquake in AD 515 and was rebuilt, it is said, by the Emperor Anastasius I. From the 7th to the 11th century AD the island was disputed between Byzantines and Muslims and was subject to repeated invasions from the Sassanid, the Umayyad, the Seljuk, the Caliph of Baghdad and the Turkish pirates. Subsequently, from the 12th to the 14th century, the island was at the center of the confrontation between Byzantine governors, Venetians, Genoese and Turks. At last the Knights of St. John of Jerusalem seized Rhodes, they took the island after a long siege (1306-9) and controlled it until 1522, when Rhodes was conquered by the Ottomans\textsuperscript{X}.

After the reconstruction following the earthquake of AD 515, the town was reorganized with a smaller fortified perimeter and developed through successive expansions, accomplishing the current urban form in the 15th-16th century AD. Associating the study of archaeological and written sources to the typo-morphological analysis of the urban ‘organism’, according to the method introduced by the School of Architecture in Rome, five formative urban phases were depicted, identifying the growing of the walled perimeter, the urban gates and polarities, the street pattern and hierarchy\textsuperscript{XI}.

In the 4th century the early Christian town had to have a smaller perimeter, following the model of the Roman castrum structured on the old Greek P6 and P31 streets. Various remains and fragments show an unmistakable urban vitality:


\textsuperscript{XI} Maglio, E. 2011. Città e storia: il caso di Rodi. In *The Architectural Project between Education and Research – The Research*. Proceedings of the First International Congress of ReteVitruvio (Bari, Italy, May 2-May 6, 2011), 967-976. In this contribution are identified and drawn on a town map the predominant alignments in the streets and in the urban fabric (5 degrees and its orthogonal direction) and the typologies of urban paths, in a diachronic and synchronic analysis. The method of typo-morphological analysis was introduced by S. Muratori in the School of Architecture in Rome since the second half of the 20th century.
parts of apse churches and fragments of mosaics from antiquity and late antiquity were located north and west of the medieval walls; the ruins of a basilica appearing to have been brutally destroyed (perhaps after the earthquake of 515 AD) were spotted south of the ramparts; graves dating the 3rd century AD were discovered near the Hellenistic necropolis south and north-east of the town; remains of a large basilica with graves dating the mid-6th century AD (perhaps the center of a larger religious complex) were found south-west of the medieval town. The cemeteries, according to the Byzantine religious tradition, refer to extra-moenia buildings and necropolis and allow to assume an urban perimeter which excluded them. In the 7th century AD Byzantines built a rectangular kastron with a moat, double walls and four doors: in particular in the mid-southern wall, matching the old P31 street, a double door was open, according to sources, until the beginning of the Ottoman age; before the mid-4th century AD a northern door flanked by semicircular towers and overlooking the harbour was standing, in axis with the first door, before being closed when the sea level was lowered. In the 8th century also the village south of kastron had to have walls, defining an almost square (300m long) which remained the same until 1306. The enclosure could have included only a part of the ancient town, especially extra-moenia churches and basilicas: other Byzantine ruins and cemeteries remained out of it and were destroyed after 1309. At the end of the 11th century AD new fortifications were built and the previous ones were repaired and restored. At some point in the north-west corner Byzantines set the akropolis, a fortified foyer, so the town took its form divided into akropolis, kastron and merchant village. The kastron was crossed east-west by a processional street, linking the Greek cathedral and the eastern gate to the citadel and western suburban routes: this street developed as a direct path between two polarities and it really substituted its parallel P6 street, while P31 street retained its connective function between kastron and the village.

In the 13th century AD, in conjunction with a phase of prosperity, new walls were built in order to optimize the urban shape and the town perimeter was possibly also extended towards north and east. However, in the absence of archaeological remains, we still wonder if before 1306 this perimeter was ruined and weakened to the point of not preventing the attacks moved from the Turks and the Knights. After the conquest by the Hospitallers, the last urban expansion of the walled town was consolidated during the 15th century AD and then in the Ottoman period (1522-1912): new fortifications were built to enclose the existent town. Rhodes kept the tripartite Byzantine urban form with a citadel (occupied by the Grand Master Palace), a castrum and a village, and was endowed with new public and religious buildings.

**Roman contribution: a first urban hierarchization**

Such an historical and archaeological survey shows that Rhodes urban fabric keeps a rich architectural inheritance and the method of typo-morphological analysis of urban phases is a contribution to the knowledge of this heritage, allowing
to outline the importance of some ancient elements in the urban planning. If the remarkable Greek finds allowed archaeologists to bring back the original city plan with its paths and monuments, Roman traces are scanter and it is not possible to say what the extent of the town in decline was.

The new settlement overlapped the Greek urban grid, but the Romans didn’t simply reuse streets and buildings. They created a first urban hierarchy and their contribution was relevant for the subsequent urban development, remaining clear for longtime in Byzantine Rhodes before partially disappearing in medieval period: the dimensional check and the typological analysis show it very well, as I am going to explain. Moreover, the placement of *tetrapylon* at the crossroads of P31 and P6 streets had important effects on the structuring of the whole Roman town.

At first, concerning the urban plan, P31 street was located between P30 (today almost entirely disappeared in the urban fabric and partially surviving in current *odos Homerou*) and P32 streets (current *odos Apellou*). It divided the original block, which was approximately 216m wide if measured between the street axes, into two modules of 108m, each of them being about 3 Roman *actus*. The measurement on Rhodes cadastral map and on the reconstructed Greek plan confirm that the urban grid was reorganized and re-planned by the Romans, overlapping a new quadrangular grid based on land division and standing in a relation of about 1:2 with the Greek urban module \(12\) (Figure 4).

Compared to the classical city, P6 street (*decumanus*) retained its importance and was confirmed as privileged connection between the main urban polarities, that is the harbour and the Acropolis, through two places of worship belonging to the previous Greek city: the temple of Aphrodite (probably reused as a place of pagan worship) and the temple of Helios (perhaps converted in a sort of Roman citadel). The old P31 street (*cardo*), that was only one of the main streets in the Greek planned city, took a double function: a new urban axis, reaching the center of the ancient agora and a public square to its south (the Roman *forum* according to the scholars), and a *limes*, a monumental sign of boundary indicating the ending of the town, in direction of the harbour, and its beginning, towards the hinterland and the citadel on the site of the temple of Helios. As shown by architectural measure drawings and archaeological plan reconstructions, the street was re-designed and enlarged till 13m wide (that was the distance between the axes of two specular columns): the porch and the space of the shops disposed on both sides of this colonnaded street had to pass the depth of 6.50m. The paved street reached, as stated before, the heart of Roman public town, the *forum* and several monumental buildings: their surviving ruins are today located in the southern part of the walled town, in current *odos Ippodamou* (nearby St. Mary’s Tower, in the south-western corner of the walls). Significant remains of foundations of

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\[XII\] Conventi, M. 2004. *Città romane di fondazione*. Roma, L’Erma di Bretschneider. The author provides an overview of some of Roman cities in the Italian peninsula and exposes their typical characteristics: the cities had a regular urban fabric based on land division and having square or rectangular blocks (the latter with ratios between the sides from 1.4 to 1.5, in relation with the examined examples). An *actus* amounted to 120 *pedus*, which is about 35.52m and corresponded to the stretch of arable land by two oxen in a single dash. The metric comparison for Rhodes is the following: 108m/35.52m = 3.04 *actus* and helps to explain the planning intentionality of the new settlement.
the colonnaded street are located along the P31 direction in the area of medieval castrum, under the ground floor of medieval buildings of the French Tongue and of Villaragut Mansion.

In this sense, as for the architectural contribution itself, Roman tetrapylon represented an important urban gate leading from the harbour to the public center of the new town; it had to have stairs and a pitched roof supported by pillars and semi-Corinthian columns. From the point of view of urban fabric, the tetrapylon structure justified the hierarchization of P31 street among the other main Greek streets and gave a new order to Roman town. The remains of tetrapylon and of the colonnaded street were found at the beginning of the 20th century, in conjunction with the first excavations (1925-28) in the area between the Street of the Knights and the northern town walls, in order to launch drainage operations. In a residential garden archaeologists found the medieval chapel of St. Demetrius, which was built in 1499 on the foundations of a more ancient church which was built in its turn on the foundations of tetrapylon: the chapel was then literally disassembled and reassembled further west to release the area of excavation

An heritage not to be neglected

Archaeological traces of urban and architectural interventions of Roman age still exist today within the medieval walled town, but they have low visibility or, worse, they seem to be neglected. Some of these are probably in phase of study, some others consist of very few traces, insufficient to the study of the former buildings, but in both case one can observe that they are little or no enhanced. Undoubtedly an important problem concerning regions rich in historical traces such as Greece is the lack of sufficient resources, but archaeological finds are essential to understand a city and they must be considered as the center of preservation projects: a correct archaeological site management is very important, at first for the preservation of this inheritance and after to return them to the city and to the visitors. In the case of Rhodes, Roman remains are relevant to deeply understand the urban history and deserve to be taken into greater consideration. In fact the tetrapylon and the area around it are currently inaccessible as they are closed in a wide garden property of the Dodecanese Eforia (Figures 5, 6). Similarly, the ruins of Roman forum and monumental buildings in odos Ippodamou appear just fenced and reported, but unfortunately totally neglected: nothing prevents new construction works and the degradation of adjacent buildings, so the whole site is not protected (Figures 7, 8). Moreover, not a better fate hit the ruins of the Doric peripteral ‘temple of the market’, whose drums of columns lie down perfectly unknown to the observer, just next to the ruins of the twelfth-century Byzantine walls which are simply fenced but totally abandoned.

The improvement of the visibility of these underestimated remains imposes itself as a necessary step for the preservation of the ancient town of Rhodes: the policy management of these archaeological sites could be and should be revised, in order to make more accessible the patrimony of urban archaeology without impair its safety.

The Roman remains found in the southern area of the town, for example, could be easily enhanced. The entire area should be cleaned up, since today it’s a small dump occupied by vegetation. Then the ruins could be made more visible through information platforms including a plan reconstruction of the Roman town, in order to make understand its role within the settlement and what the original appearance of the buildings may have been. With greater attention to the extent of the area, the same project could be carried out around tetrapylon: the archaeological remains are in an Eforia’s property but they could be made visible by turning the area into a small open-air museum with a visit route on wooden footbridges. Information panels could explain to the visitors the importance of tetrapylon and of the colonnaded street in the urban fabric of Roman town through special graphic reconstructions, without interventions on remains and without producing superstructures using other materials: in this way it could be possible to establish a direct relationship with the remains of the street foundations below the present museum in Villaragut Mansion.

Conclusions

Today archaeological traces of Roman age are not kept in a great consideration, if compared to other monuments and ruins (of Byzantine and Hospitaller period, for example, which are often so well preserved to be closed to the public). When they are carefully protected, as the area around tetrapylon, they are completely hidden and remain unknown. It would be possible and quite easy to improve their visibility, since at moment the ruins have not the possibility to express in a ‘choral’ way their history and meaning in relation with the original extent of the town. It should be necessary to work for this purpose, with non-invasive interventions on the archaeological records and creating an intelligent organizing and visiting system: it would improve the visibility of the ruins inside the town, filling a real ‘void’ in urban and historical knowledge of the ancient town of Rhodes.

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1999. *Ρόδος 2400 χρόνια. Η πόλη της Ρόδου από την ίδρυσή της μέχρι την κατάληψη από τους Τούρκους (1532)*, 2 voll..

Αθήνα, 4η Εφορεία Βυζαντινών Αρχαιοτήτων


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Figure 1 – Reconstructed map of Hellenistic Rhodes (Hoepfner, W. 1999. Zur Gründung und zur Architektur von Rhodos. In *Ρόδος 2400 χρόνια. Η πόλη της Ρόδου από την ίδρυσή της μέχρι την κατάληψη από τους Τούρκους (1532)*, Α, 52. Αθήνα, 4η Εφορεία Βυζαντινών Αρχαιοτήτων) with indication of the main streets

Figures 2, 3 – Graphic reconstruction of Roman tetrapylon and colonnaded street (Cante, M. 1996. *Il tetrapylon*. In M. Livadiotti and G. Rocco (eds.), *La presenza italiana nel Dodecaneso tra il 1911 e il 1948. La ricerca archeologica, la conservazione, le scelte progettuali*, 29. Catania, Edizioni del Prisma)
Abstract

The Romans inherited by the Greeks a large planned city, but Rhodes went through a phase of decline and urban contraction because of new political conditions. After an earthquake it was rebuilt with a smaller perimeter and developed through successive expansions. The typo-morphological analysis of the urban ‘organism’, depicting the formative urban phases of Rhodes, shows that Roman interventions had important effects on the urban growing until Middle Age.

The Romans didn’t simply reuse streets and buildings. They created a first urban hierarchy, overlapping a new ‘grid’ structured on cardo and decumanus (Greek ancient roads). The first, that was one of the main streets in the Greek city, was re-designed as a colonnaded street and became an urban axis, also by the placement of a tetrapylon, a gate leading from the arsenal to the town center. The surviving Roman ruins of tetrapylon, the street and public buildings survive today in conditions of low visibility or abandonment. The policy management of these sites should be revised in order to make accessible this heritage and to make clear the role of these elements within the Roman settlement: the purpose is to fill a ‘void’ in historical knowledge of ancient Rhodes.

Keywords

Figures: