



THIASOS

RIVISTA DI ARCHEOLOGIA E ARCHITETTURA ANTICA

2018, n. 7.2

K. HÖGHAMMAR, M. LIVADIOTTI (edited by),
Sacred and civic spaces in the Greek poleis world,
Uppsala seminars, 15-16 February 2017

«THIASOS» Rivista di archeologia e architettura antica
Direttori: Enzo Lippolis, Giorgio Rocco
Redazione: Luigi Maria Calì, Monica Livadiotti
Redazione sito web: Antonello Fino, Chiara Giatti, Valeria Parisi, Rita Sassu
Anno di fondazione: 2011

Giorgio Rocco, *Sacred architecture in Hellenistic Rhodes*

Il contenuto risponde alle norme della legislazione italiana in materia di proprietà intellettuale ed è di proprietà esclusiva dell'Editore ed è soggetta a copyright.

Le opere che figurano nel sito possono essere consultate e riprodotte su supporto cartaceo o elettronico con la riserva che l'uso sia strettamente personale, sia scientifico che didattico, escludendo qualsiasi uso di tipo commerciale.

La riproduzione e la citazione dovranno obbligatoriamente menzionare l'editore, il nome della rivista, l'autore e il riferimento al documento. Qualsiasi altro tipo di riproduzione è vietato, salvo accordi preliminari con l'Editore.

Edizioni Quasar di Severino Tognon s.r.l., via Ajaccio 41-43, 00198 Roma (Italia)
<http://www.edizioniquasar.it/>

ISSN 2279-7297

Tutti i diritti riservati

Come citare l'articolo:

G. ROCCO, *Sacred architecture in Hellenistic Rhodes*,
in K. HÖGHAMMAR, M. LIVADIOTTI (edited by), *Sacred and civic spaces in the Greek poleis world, Uppsala seminars, 15-16 February 2017*, Thiasos 7.2, 2018, pp. 7-37

Gli articoli pubblicati nella Rivista sono sottoposti a referee nel sistema a doppio cieco.



SACRED ARCHITECTURE IN HELLENISTIC RHODES

Giorgio Rocco*

Key words: Rhodes, Hellenistic architecture, sanctuary, temple, altar, natural landscape.

Parole chiave: Rodi, architettura ellenistica, santuario, tempio, altare, paesaggio naturale.

Abstract:

The sacred architecture of Rhodes during the late Classical and Hellenistic periods commonly favoured small buildings, preferably with a prostyle or in antis front, as attested by the temples at Lindos, Ialiso, Kameiros, Theologos and Rhodes town. In addition, as widely attested throughout the period considered, there was a tendency to mix features of the Doric, Ionic and Corinthian orders and to enrich the design of inner rooms while exterior façades were comparatively sober. The temple of Athana Polias in Ialiso is, in this respect, quite interesting: the temple was studied some years ago by the Italian Archaeological School in Athens, and a new interpretation of the structures was proposed. Recent research has also resulted in a new configuration being put forward for the temple of Aphrodite in Rhodes town; this temple was excavated during the Italian occupation of the Dodecanese and never published in full. Its amphiprostyle scheme is suited to its position, looking towards the plateia to the acropolis and also towards the eastern and military harbours. Besides the well-known Rhodian sensitivity to scenic effects, evident in the arrangement of town's buildings, this temple also uses different architectural orders for the inner room and the outer façade, as is the case on the Ialiso temple. Another interesting characteristic of Hellenistic architecture in Rhodes is the preference for unfinished or bossed surfaces; these created a sort of 'naturalistic' aspect, as is evident in the nymphaea and grottoes of Rodini or in the sacred buildings on the acropolis. A side effect of this phenomenon is an architecture with simplified profiles, visible, for instance, on the altar of Zeus Atabyrios in Rhodes. The altar was a 'court altar' of Ionic type, with a large ramp and dates to approximately the 3rd century B.C. Its architecture can be compared to rural buildings in Rhodes, and to Carian buildings on the opposite coast, thereby constituting a clear link between these two areas. This architecture stands in contrast to the Rhodian architecture, with its similarities with Alexandria, which are evident in more monumental edifices.

L'architettura sacra di Rodi nel periodo tardo classico ed ellenistico attesta una considerevole predilezione per edifici di non grandi dimensioni, preferibilmente prostili o in antis. Inoltre, come attestano esempi a Lindo, Ialiso, Camiro, Theologos e a Rodi città, l'uso degli ordini rivela la tendenza alla commistione di dettagli morfologici derivanti dal Dorico, dallo Ionico e dal corinzio e la parallela tendenza a monumentalizzare gli interni in contrasto con le fronti esterne, più sobrie. L'esempio del tempio di Athana Polias a Ialiso è a questo riguardo interessante: l'edificio è stato studiato anni fa dalla Scuola Archeologica Italiana, proponendo una nuova interpretazione delle strutture. Recenti ricerche hanno inoltre proposto una nuova configurazione anche per il tempio di Afrodite a Rodi città, pure scavato durante l'occupazione italiana del Dodecaneso e mai pubblicato nel dettaglio. Il suo schema anfiprostilo è adatto alla sua posizione, affacciato su una delle plateiai che conducono all'acropoli e allo stesso tempo dominante il porto orientale e quello militare. Oltre quindi alla nota sensibilità rodia per gli effetti scenografici nella disposizione degli edifici, l'edificio mostra la stessa tendenza già evidenziata per il tempio di Ialiso ad impiegare diversi ordini architettonici per l'interno e la fronte esterna. Un altro interessante carattere dell'architettura rodia risiede nella preferenza per il 'non finito', visibile nel bugnato rustico di molte superfici, lasciate così per creare una sorta di aspetto 'naturalistico', visibile ad esempio nei ninfei e nelle grotte di Rodini o negli edifici sacri dell'acropoli. Un effetto collaterale del fenomeno è da riconoscere nelle architetture con profili semplificati. Il fenomeno è riscontrabile, ad esempio, nell'altare di Zeus Atabyrios a Rodi, altare ionico del tipo 'a corte', accessibile tramite una larga rampa, datato a circa il III secolo a.C. I suoi caratteri architettonici trovano confronto in architetture rurali dell'isola e in edifici della costa caria, definendo un legame tra queste due diverse aree, diverso da quello con l'architettura di Alessandria che sembra invece improntare gli edifici maggiori.

*Dipartimento di Scienze dell'Ingegneria Civile e dell'Architettura – Politecnico di Bari; giorgio.rocco@poliba.it

I would like express gratitude to Kerstin Hoghammar for the stimulating discussion offered by the Seminar she organized in Uppsala. I would like to warmly thank Ioannis Papachristodoulou,

Melina Filimonos, Vasso Patsiada, Maria Michalaki Kollia, Kalliopi Bairami, Pavlos Triantaphyllidis, Enzo Lippolis, Luigi Calì, for interesting insights on the theme of Rhodes architecture. A special thanks goes to my wife, Monica Livadiotti, for letting me anticipate here some considerations derived from our research in Rhodes.



Fig. 1. Map of Rhodes in 1920: the temple of Aphrodite had not yet been discovered, and the area (indicated by the red arrow) was an open space inside the Medieval fortification (from MAIURI 1920).

Another point worth stressing is that no stone monumental architecture which has yet been found in Rhodes dates to before the beginning of the 4th century; in other words, to date, no fragments of monumental stone edifices with architectural orders datable to the Archaic and Classical periods have been discovered. This is also true for Kos, and we must presume that the monumental architecture of the islands, including sacred architecture, was not stone prior to the late Classical and Hellenistic periods. It seems that, for Rhodes and Kos, a canonical architectural language appears only during the 4th century⁶. The second characteristic is that Rhodian sacred architecture, from this period onwards, preferred rather small buildings, preferably with a prostyle or an *in antis* front. In fact, currently in Rhodes we know of only one peripteral temple, that of Apollo on the acropolis⁷, but there are numerous examples of prostyle or amphiprostyle temples. A third characteristic is that the use of the architectural orders reveals the then-widespread tendency to combine elements of Doric, Ionic and Corinthian styles and a predisposition for enriching the design of inner rooms while exterior *façades* were comparatively more sober.

The sacred architecture of Rhodes during the late Classical and Hellenistic periods has some peculiar characteristics, which I will illustrate in this paper by drawing on new research on the temple of Aphrodite in Rhodes town, the temple of Athana in Ialisos and the altar of Zeus on Mount Atavyros. I will contextualise these buildings within a general overview of the sacred landscape and provide a synthesis of the main architectural tendencies of the period, making use of previous studies.

The first peculiar characteristic concerns the overall appearance of Rhodian sacred architecture. On Rhodes, the building material, which is a soft local limestone¹, is easy to work but requires a thick coating of stucco in order to protect it and to refine mouldings and profiles. After this coating was applied, the stucco surface was often painted with brilliant colours. Thus, the overall appearance of Rhodian architecture is very different from the architecture of, for instance, Kos, where the presence of local travertine and marble renders the stucco coating almost unnecessary². Rhodian architecture bears greater resemblance to Alexandrian architecture³, and, as we shall see, it is also possible to note morphological analogies with the capital of the Ptolemaic Kingdom, which had a close relationship with Rhodes. The active presence of a Ptolemaic architect, Amphilochos, son of Lagos, in Rhodes at the end of the 3rd century B.C.⁴, is meaningful if we consider that the city at that time was in the process of being rebuilt after the terrible earthquake of 227-226 B.C.⁵.

¹ On limestone deposits in Rhodes, see, in general, KOKKOROU-ALEVRA *et alii* 2014, pp. 37-67, with further bibliography. On the physical characteristics of this stone material, which was often used in ancient Greek architecture because it was easy to carve, see KOUZELI *et alii* 2004.

² In the architecture of Kos, colour effects are mostly obtained using different stone materials that are skilfully placed to create a chromatic contrast; a similar situation is evident in Knidos. On this topic, see LIVADIOTTI 2010, pp. 25-28; ROCCO 2013, pp. 59-60, 62.

³ On the architecture of Alexandria, which is known more from scattered elements than from monuments, see ADRIANI 1966;

PENSABENE 1993; MCKENZIE 2007. On the baroque character of Alexandrian architecture, see LYTTTELTON 1974, pp. 40-60.

⁴ Henceforth, all dates are B.C. unless otherwise specified.

⁵ The inscription IG XII, 1, 144 is now lost; on this topic, see also CALIÒ 2008.

⁶ The same phenomenon has been pointed out for the sacred architecture on Crete, where, apart from sporadic examples of votive monuments, architectural orders appear only during the Hellenistic period (G. Rocco, in LIPPOLIS, LIVADIOTTI, ROCCO 2007, pp. 160-161; ROCCO forthcoming 1).

⁷ On the temple of Apollo, see *infra* and footnote 51.

The temple of Aphrodite in Rhodes town

The temple of Aphrodite in Rhodes town was discovered in 1922 by Amedeo Maiuri, who was, at that time, director of the Italian Archaeological Mission of Rhodes⁸, in Arsenal Square (now Plateia Simi), below the ruins of a Christian cult building that had been demolished⁹. This site lies in the northern part of the walled city – the old Collachium district – in a garden inside the medieval fortification. A map of Rhodes from 1920 indicates the zone before the discovery of the temple (fig. 1).

After 1923, Giulio Iacopi continued the excavation, completed in 1926. Then, in a general definition of the urban layout by the Italian architect Florestano Di Fausto, the archaeological area was enclosed within a garden and by a retaining wall and a metal fence¹⁰ (fig. 2).

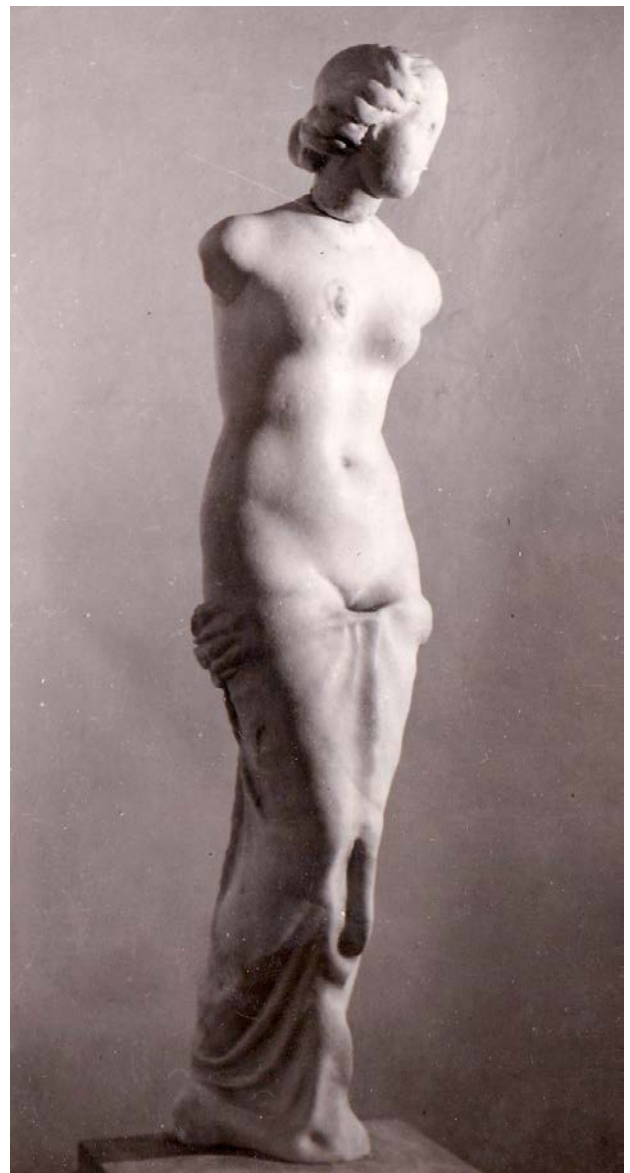
Based on the objects found in a votive deposit discovered by Maiuri during the excavation, which included many clay female figurines dated to the 3rd and 2nd centuries, it was determined that the temple was dedicated to Aphrodite. In addition, the archives of the Italian Archaeological School of Athens contains a letter, dated January 1927, sent by Iacopi to Director Alessandro Della Seta, in which he announced the discovery during the temple excavation of a *labrum* edge with the inscription *Samios Aphrod* (ΣΑΜΙΟΣ ΑΦΡΟΔ), thus confirming the dedication¹¹.

In March 1929, the statue known as Aphrodite *Thalassias* or Venus *Pudica*, which is dated to the third quarter of the 2nd century B.C. and is now in the Archaeological Museum of Rhodes, was found in the sea off 'Punta della Sabbia' (fig. 4a). Iacopi, who dated the sculpture to the 4th century B.C., suggested it could be the cult statue of the temple in Arsenal Square¹² (fig. 3). It is also worthwhile in this context to cite an epigraphic document referring to a *koinon* of Aphrodite that was found some years later during the



Fig. 2. In 1926, the excavation of the temple of Aphrodite was completed and, in a general survey of the urban layout by the Italian architect Florestano Di Fausto, the archaeological area was inserted inside a garden and enclosed by a retaining wall and a metal fence (postcard).

Fig. 3. The statue known as Aphrodite *Thalassias* or Venus *Pudica*, now in the Archaeological Museum of Rhodes, inv. no. 13634 (from IACOPI 1931).



⁸ From 1914 onwards, Amedeo Maiuri was head of the Italian Archaeological Mission, and, in 1923, after the Treaty of Lausanne, which confirmed that the islands belonged to Italy, he became the Director of the recently instituted Superintendence to Monuments and Excavations in Rhodes (M. Livadiotti, in LIVADIOTTI, ROCCO 1996, pp. 7-12).

⁹ G. Rocco, in LIVADIOTTI, ROCCO 1996, pp. 31-34, with bibliography.

¹⁰ With regard to the contribution of Italian architects to the archaeological site enhancement in the Dodecanese, see LIVADIOTTI, ROCCO 2012.

¹¹ See footnote 9.

¹² IACOPI 1931. Later, A. Di Vita assigned the statue to a more recent period, the 2nd century B.C. (DI VITA 1955). See also BAIRAMI 2017, Cat. 002 and pp. 66-68. For another hypothesis regarding the cult statue of the temple see BAIRAMI 2017, Cat. 001, pp. 58-66, in particular p. 66.

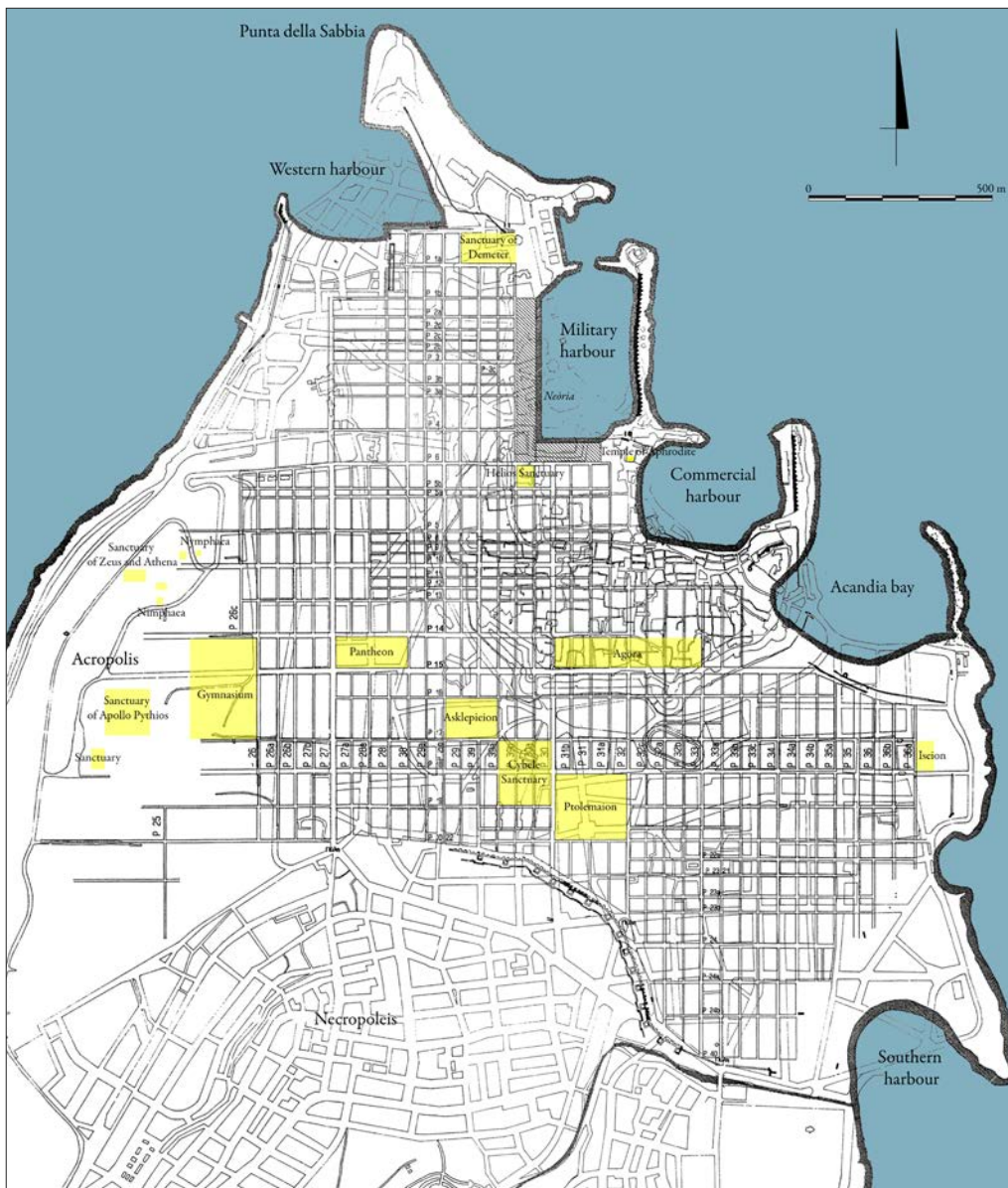


Fig. 4a,b. Rhodes during the Hellenistic period: a. plan (elaboration by the A. from FILIMONOS 2004 and FILIMONOS, PATSIADA forthcoming); b. reconstruction (from HOEPFNER, SCHWANDNER 1994).

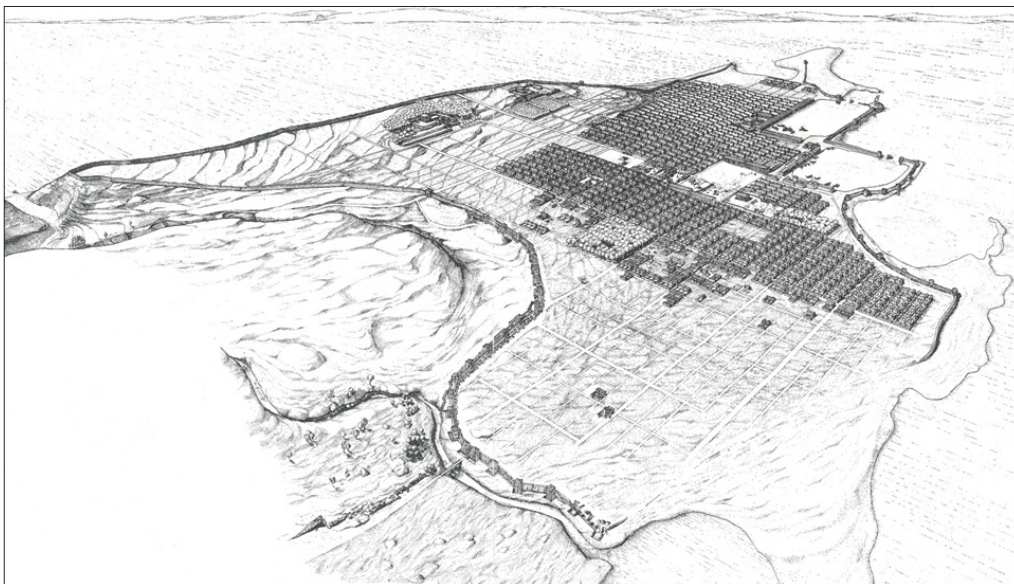
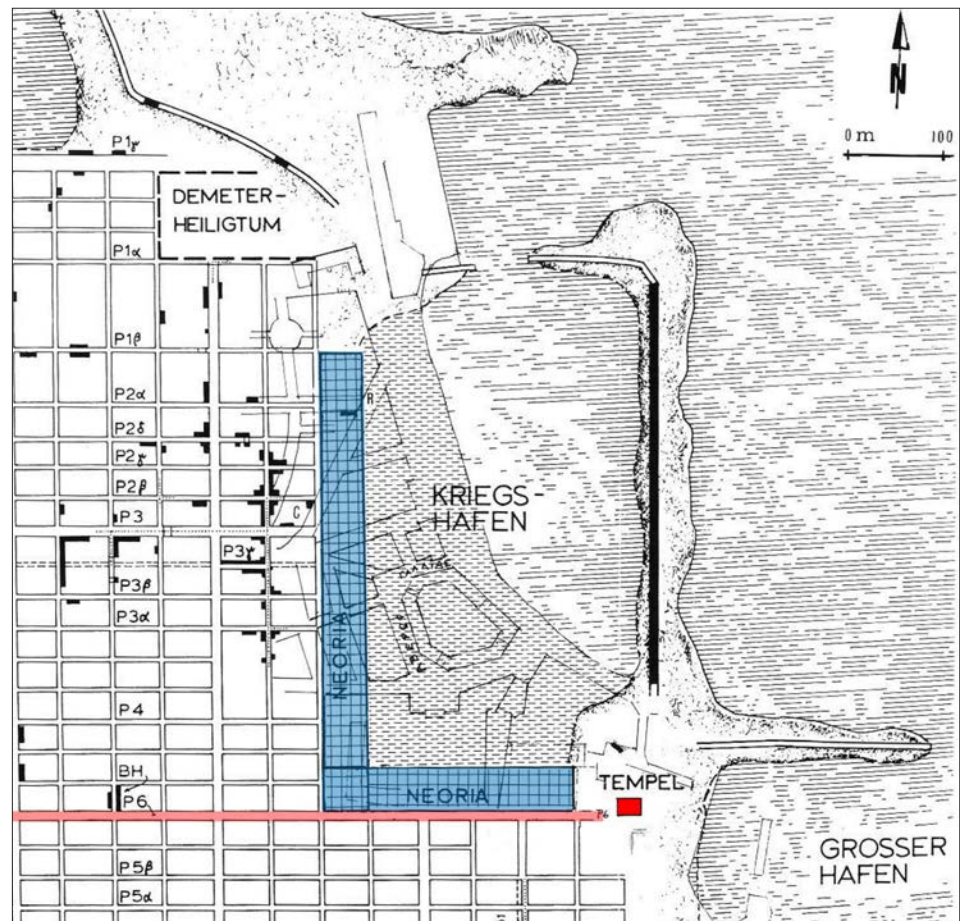


Fig. 5. Rhodes, northern sector of the town: a. the military port; in light blue, the dockyards for military ships (*neoria*); in red, the temple; in light red, the *plateia* P6 to the acropolis (elaboration by the A. from BLACKMAN, KNOBLAUCH, GIANNIKOURI 1996).



excavation of the nearby *tetrapylon* (fig. 6b, D)– a monumental arch built during the Imperial period using materials from dismantled buildings¹³.

Moreover, we must stress that a temple of Aphrodite, who was the protectress of seafarers, located near the harbour¹⁴ recalls the temple of Aphrodite *Pontia* by the closed port of Kos¹⁵ and also that of Aphrodite *Euploia* in Knidos¹⁶. In the Hellenistic period the sanctuary of Aphrodite was situated between the Eastern harbor, which had a commercial vocation, and a military port, the *mikròs limèn* (fig. 4). At several points along the quays of the latter, dockyards for military ships (*neoria*) were identified; their positions indicate that the coastal line during this period was much farther inland than today (fig. 5). The shipsheds, which were excavated during the Italian period and later by Iannis Kondis, have been studied by David Blackman, who notes as a *terminus ante quem* the earthquake at the end of the 3rd century¹⁷. The Rhodians took advantage from the situation to improve the port: in fact, Polybios¹⁸ lists the generous gifts from the dynasts of the major kingdoms of the period, such as Ptolemaeus III *Euergetes*, Antigonos III *Doson* and Seleukos II *Kallinikos*, which included timbers to rebuild ships and shipsheds¹⁹. It is possible that the temple also needed repairs after the catastrophe and, according to Maiuri and Iacopi, the building should be dated to the 3rd century, although there are traces of later renovations²⁰.

The foundations of the temple, which, judging from the surviving fragments must have been Ionic, are fairly well preserved (fig. 6a). In 1939, the Italian architect Mario Paolini conducted a survey and formulated some observations about the configuration of the building, opting for a double distyle *in antis* front²¹ (fig. 6b). Recently, a

¹³ The document was published by G. PUGLIESE CARRATELLI, in *Epigrafi dal Tetrapilo di Rodi*, in CANTE 1986-1987, pp. 267-293.

¹⁴ ECKERT 2016; for Kos in particular, see PARKER 2002.

¹⁵ ROCCO 2004; ROCCO 2009 with bibliography; ROCCO, CALIÒ 2016; ROCCO forthcoming 2.

¹⁶ For the excavation, see LOVE 1972; LOVE 1973. The present *tholos*, dated to the 2nd century B.C., is possibly dedicated to Athena (BANKEL 1997), and so the location of the temple of Aphrodite *Euploia* at Knidos is still not known. See also WINTER 2006, p. 32 and EHRHARDT 2009 for a general overview of the sacred area. For

the famous statue work of Praxiteles, see CORSO 2004, HAVELOCK 2007.

¹⁷ See BLACKMAN, KNOBLAUCH, GIANNIKOURI 1996; BLACKMAN, RANKOV 2014, pp. 200-201.

¹⁸ Polybios, V.88-89.

¹⁹ MIGEOTTE 2009, pp. 111-112.

²⁰ MAIURI 1923, pp. 238-239; MAIURI 1928b, p. 46; IACOPI 1927-1928, p. 518.

²¹ See footnote 9.

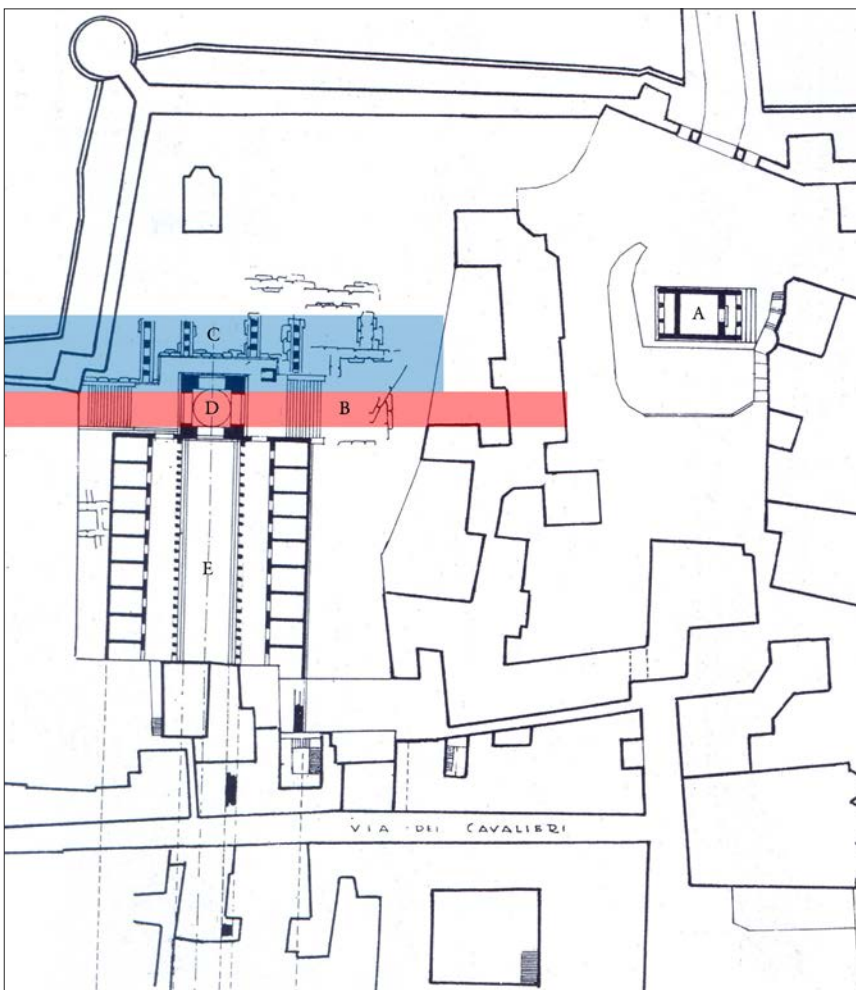


Fig. 6a,b. Rhodes. a. the temple of Aphrodite, from the north-east (photo by the A.); b. the topographical position of the temple (A), to the east of the dockyards (C) and along the *plateia* to the acropolis (B). On the dockyards, during the Imperial period a *tetrapylon* was built (D) at the end of a colonnaded street (E). Note the configuration of the temple with a double *in antis* front as hypothesised by the Italian archaeologists (drawing by M. Paolini 1940; elaboration by the A. from LIVADIOTTI, ROCCO 1996).

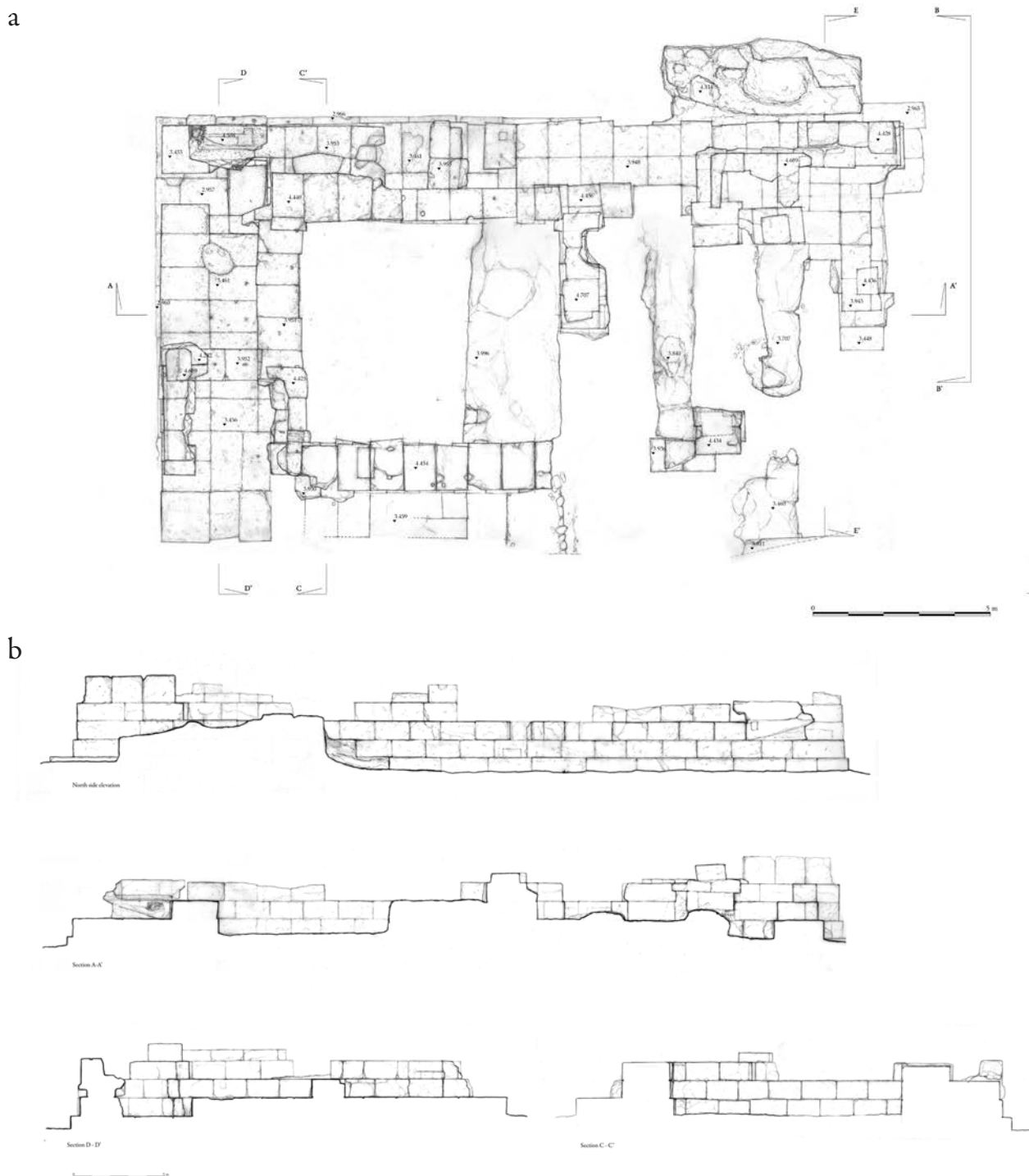


Fig. 7a,b. Rhodes, temple of Aphrodite. The new survey (scale 1:50): a. plan; b. sections and elevations (survey by A. Fino, F. Giannella, V. Santoro, C. Lamanna, F. Gotta and T. Demauero, Polytechnic University of Bari, 2014-2015).

new survey (fig. 7a,b) suggested reconstructing a hexastyle amphiprostyle plan, with a *pronaos* tetrastyle *in antis* (fig. 8). The interior of the *cella* was decorated with a Π -shaped colonnade on two levels, with a transversal connection consisting of semi-columns placed against the rear wall²² (fig. 8).

The location of the temple in the topography of the city explains the choice of the amphiprostyle scheme: the two colonnaded *façades* of the temple are in fact suited to its position, looking towards the important *plateia* P6 to the acropolis and, in the other direction, towards the eastern harbour (cf. figs. 4, 6b).

The *Hieron* of Samothrace (fig. 9), whose prostyle *façade* was built during a general renovation of the building around 200²³, constitutes an interesting parallel for the peculiar configuration of the front of the temple of Aphrodite.

²² This configuration was previously illustrated in LIVADIOTTI, Rocco 1999.

²³ LEHMANN 1959.

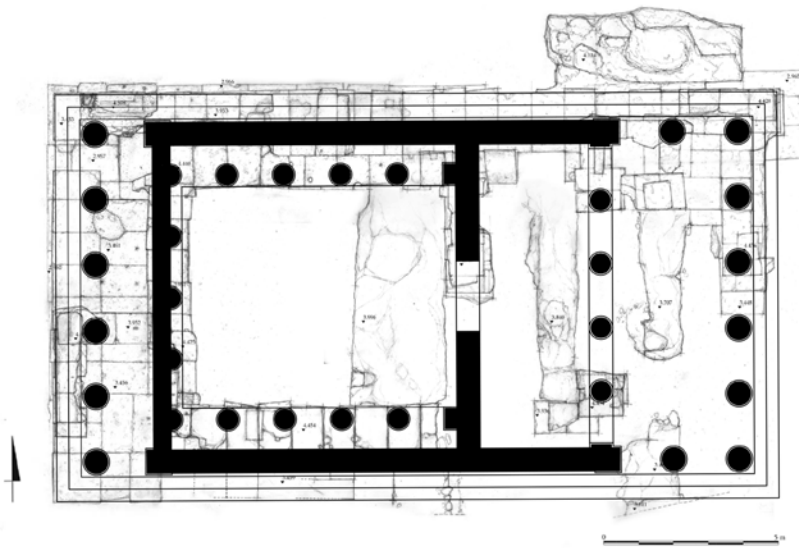


Fig. 8. Rhodes, temple of Aphrodite. Restored plan (drawing by the A.).

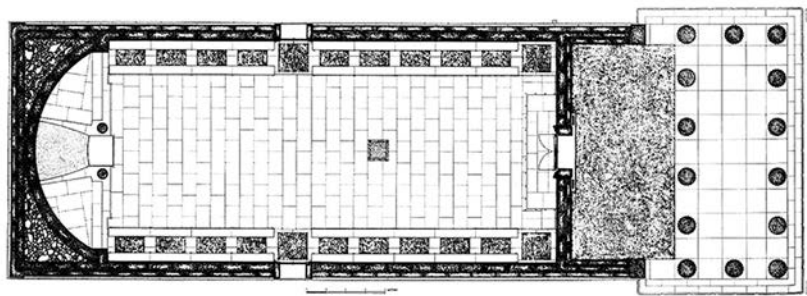


Fig. 9. Samothrace, restored plan of the *Hieron* (from LEHMANN, LEHMANN 1959).

In fact, even though a rich monumental double colonnade is not a very common solution, there are further examples in Rhodes, as we shall see later.

Despite the fact that only very few fragments of the temple elevation have survived, as the lower parts of the columns are still *in situ* it is possible to restore an Ionic hexastyle *façade* and an Ionic tetrastyle *in antis pronaos*, which, except for their sizes, are quite similar to each other. No capitals remain, but we have identified an epistyle of the entablature and a fragment of a raking console-*geison*. Thus, we can infer an Ionic entablature with a three-*fasciae* epistyle, a low-profiled frieze and a cornice with dentils and Rhodian console-*geison*. The dentils also decorated the raking *geison*, with a particularly rich combination of decorative elements (fig. 10a,b). The solution now delineated is not uncommon in Rhodes during the period, as testified by numerous architectural fragments brought to light during the excavations carried out inside the town (fig. 11). These fragments mostly belong to funerary *naiskoi*, but their forms were clearly inspired by those of major architecture²⁴.

The interior of the *cella*, as is common from throughout the late Classical and Hellenistic periods, had a Π-shaped colonnade on two tiers: the lower fluted columns were probably of the Corinthian order (fig. 12a) whereas the upper ones, which were smaller and had smooth shafts, were Ionic (fig. 12b). The stucco covering allowed the decorative richness peculiar to Rhodian Hellenistic architecture to be displayed. Some profiles, such as the base cornice of the external toichobates (fig. 12c), which were formed by a scotia and a superimposed torus, have close parallels in late Classical Peloponnesian architecture²⁵.

The excavations have not provided secure indications about the presence of a *temenos*, but some architectural fragments, relevant to the capping of a fence wall, with a sort of simplified *geison*, are still preserved in the area and may indicate an enclosure. The relationship between the temple and the urban fortification wall²⁶ is still not clear, but this is the result of the absence of information about the walls, which were altered during the Middle Ages.

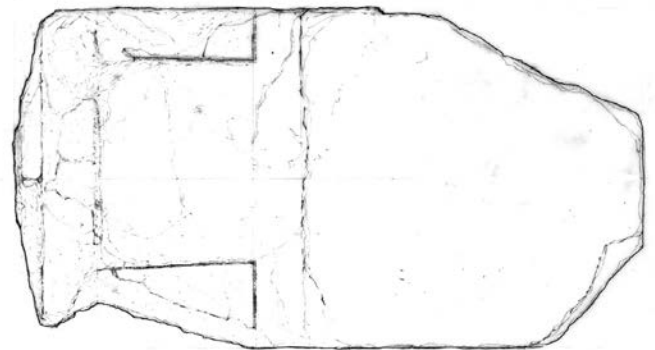
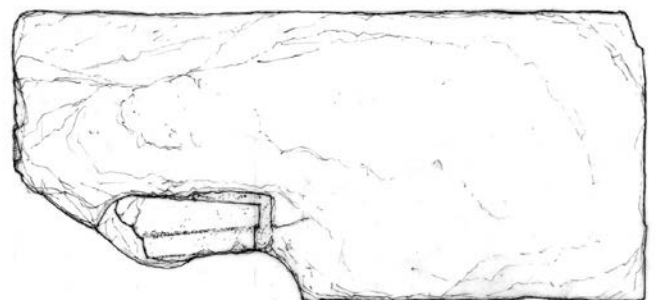
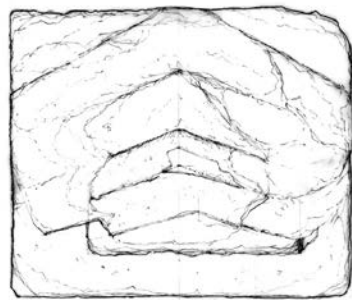
²⁴ On this topic, see PATSIADA 2013b.

²⁵ On the so-called Peloponnesian *base libre* see ROUX 1961, pp. 336-338; ROCCO 2003, pp. 137-138; ROCCO 2005.

²⁶ The excavation carried on in 2003 by K. Bairami immediately south of the temple, where a section of the urban walls and a tower

have been found, can give new information about its relationship with the urban fortification (see BAIRAMI 2001-2004). On the Rhodian Hellenistic defensive system, see, in general, FILIMONOS 2004 (on this area: p. 134).

Fig. 10a,b. Rhodes, temple of Aphrodite. The raking *geison* of the temple with Rhodian consoles: a. fragment corresponding to the top of the pediment (photo by the A.), b. front, side, bottom (drawing by A. Fino, Polytechnic University of Bari, 2014-2015).



0 50 cm



Fig. 11. Rhodes, Archaeological Museum. Upper part of a Hellenistic *naiskos* (from PATSIADA 2013, Cat. nr. 115).



Fig. 12a-c. Rhodes, temple of Aphrodite: a. a fluted column from the lower inner colonnade of the *cella*; b. an Ionic semi-capital on a smooth shaft from the inner upper colonnade; c. a moulded block from the north-eastern corner of the *cella* walls (photos by the A.).

The preference for temples with prostyle or distyle *in antis* fronts is also evident in other examples on Rhodes, such as in the village of Theologos in the Ialysos deme. There, at a site which had been previously identified by Ludwig Ross²⁷, the Italian excavations brought to light a small prostyle temple dedicated to Apollo *Erethymios*²⁸ (fig. 13a). Recent exploration by the Archaeological Institute of Aegean Studies revealed that the edifice was inserted in a large *temenos* bordered by huge Hellenistic *stoas*²⁹ (fig. 13b). The temple, dated to the beginning of the 4th century, has been reconstructed with a simple *cella* preceded by a distyle *in antis* or prostyle *pronaos* with Doric columns. Notwithstanding the small dimensions (13.80 x 8.20 m), the temple has very large foundations and it is possible that, as in the *Aphrodision* in town, this *cella* was articulated inside with an architectural order of columns or engaged semi-columns.

At Lindos, at the beginning of the 3rd century, an older Archaic temple to Athena was rebuilt³⁰. The new building, whose date of around 300 is testified by an inscription on the architrave of the door between *pronaos* and *naos*³¹, also has an amphiprostyle scheme (fig. 14), with a double *façades*, one towards the entrance of the sanctuary and one towards the southern port of the city. As in the *Aphrodision*, notwithstanding the reduced dimensions of the *cella* (10.33 x 6.21 m), its interior was enriched with a Π-shaped line of pilasters placed against the walls and built from local sandstone coated with mortar³² (fig. 15).

²⁷ Ross 1840-1845, IV, pp. 57-58. The cult is mentioned by Strabo (13.1.64), and the sanctuary had pan-Rhodian importance (on the organisation of cult and festivities, see KONTORINI 1975).

²⁸ IACOPI 1932.

²⁹ TRIANTAPHYLIDIS, SARANTIDIS 2015.

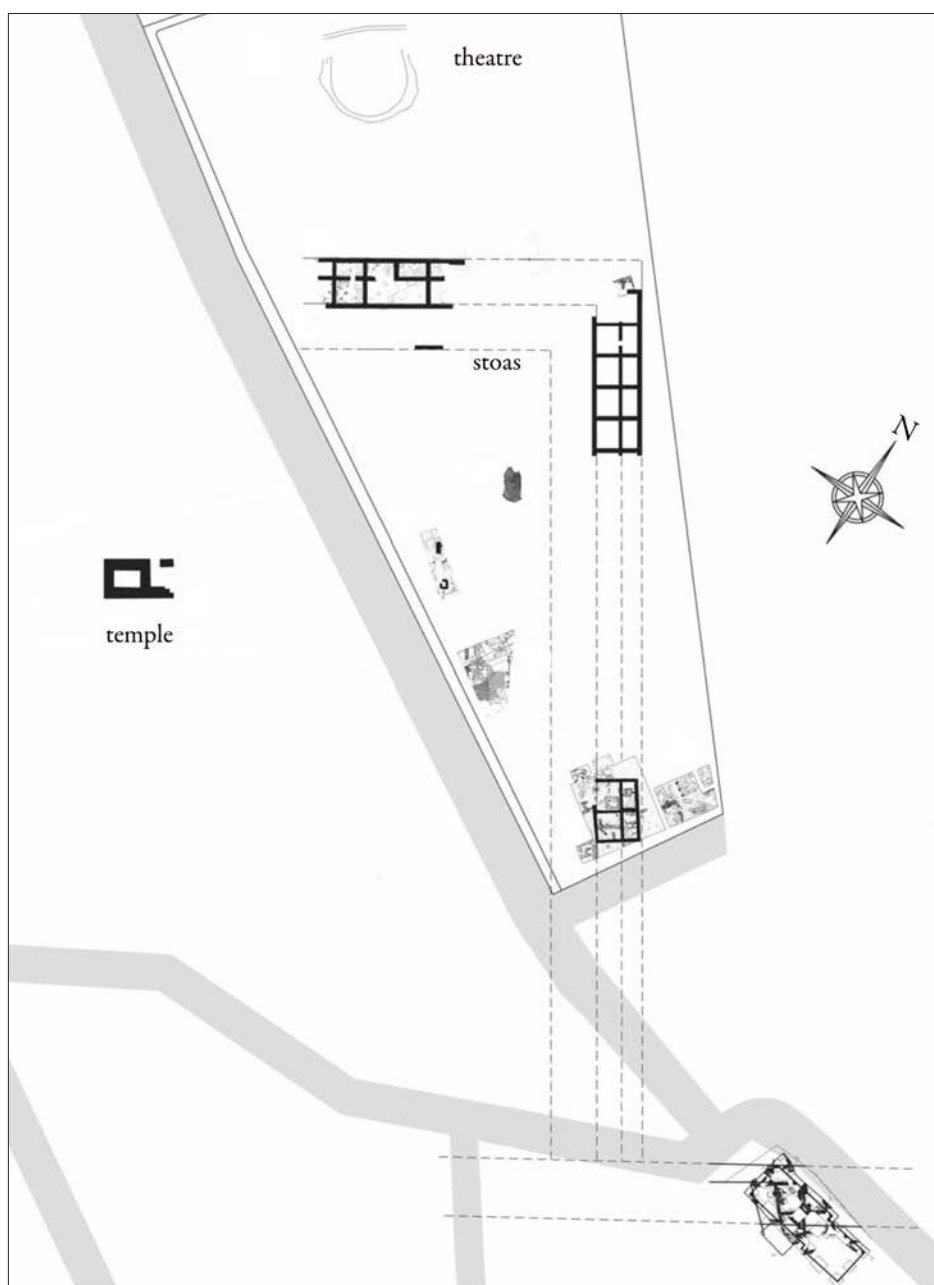
³⁰ DYGGVE 1960, pp. 81-154; LIPPOLIS 1988-89; for the date of the

edifice, see pp. 127-133.

³¹ The inscription mentions the donation of bronze doors by Kleandridas and Timotheos: LIPPOLIS 1988-89, with bibliography.

³² This matches the results of a new architectural study of the temple: ELEFThERIOU *et alii* 2015.

Fig. 13a,b. Rhodes, Theologos. Temple of Apollo *Erethymios*: a. general view, from the east (photo by the A.); b. plan of the sanctuary with the Hellenistic *stoa*, excavated in 2000-2014 (from TRIANTAPHYLLIDIS, SARANTIDIS 2015).



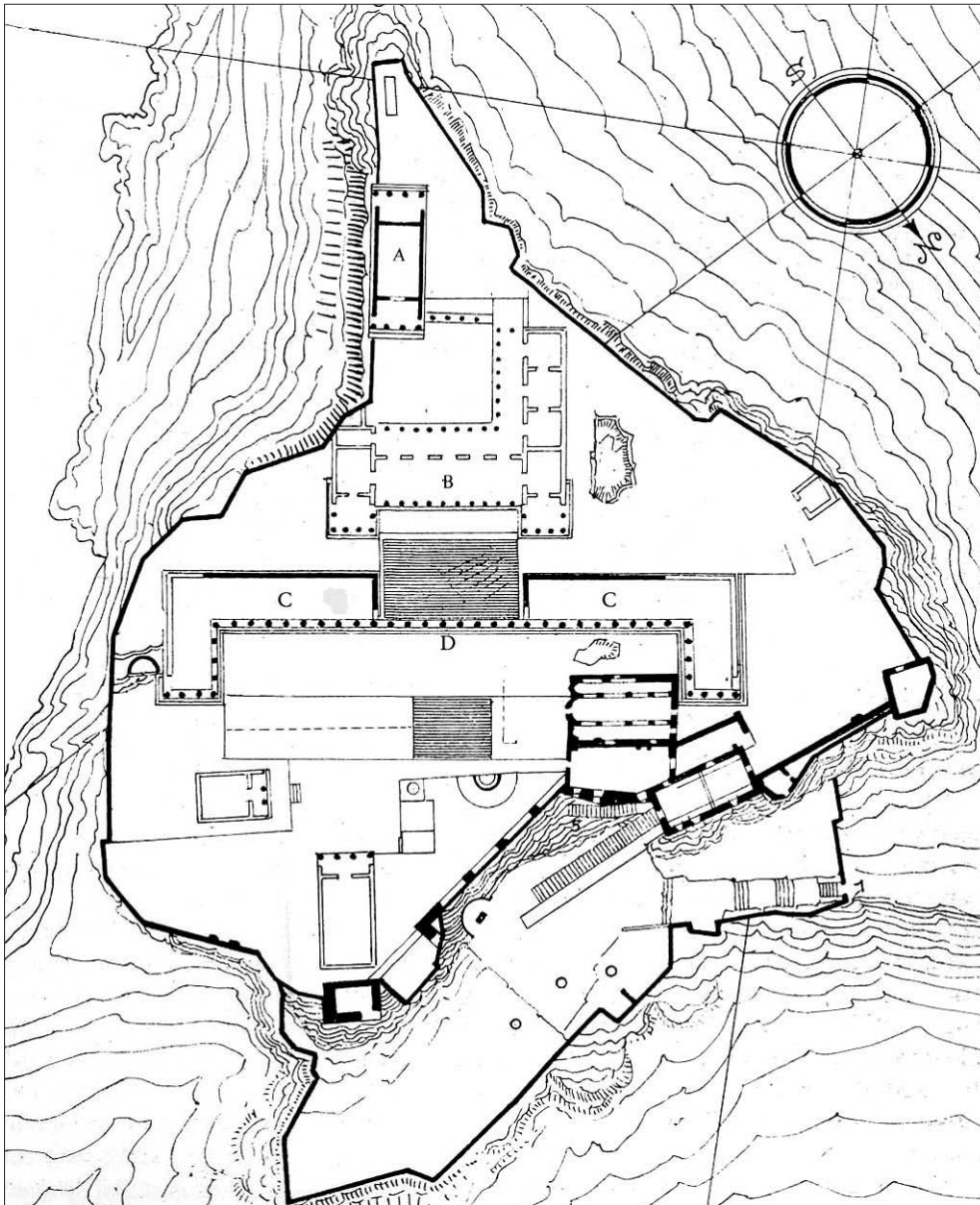


Fig. 14. Lindos, *Athenaion*. General plan: A. temple; B. upper terrace; C. stoa with *paraskenia*; D. colonnaded screen and stair to the upper terrace (elaboration by the A. of a drawing by M. Paolini, from E. Lippolis in LIVADIOTTI, ROCCO 1996).

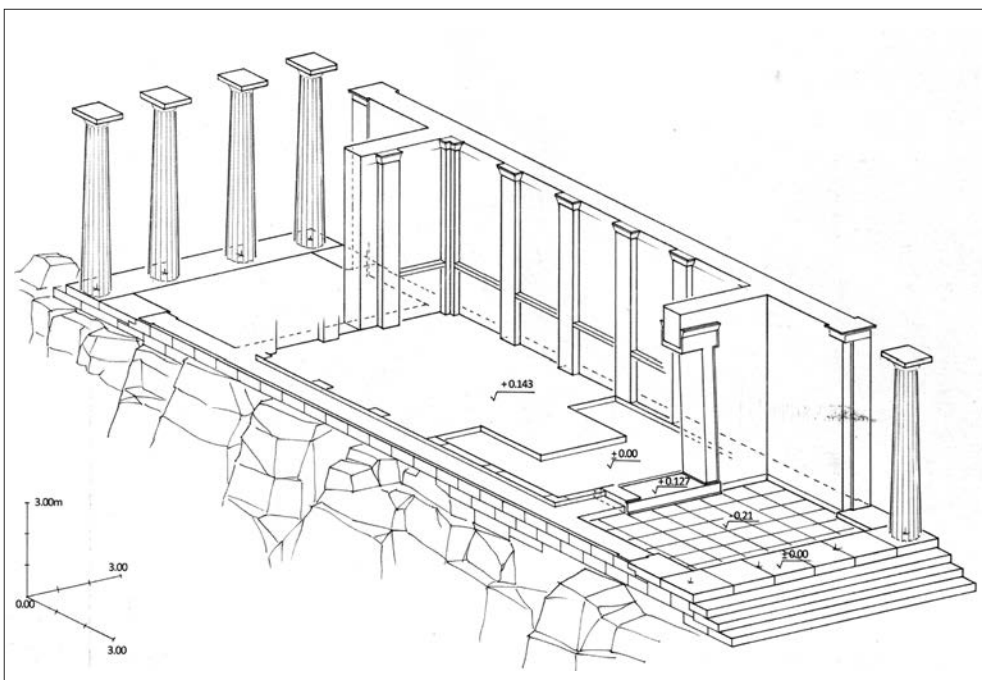


Fig. 15. Lindos, temple of Athena *Polias*. Inner restoration of the *cella* with a Π-shaped parastades along lateral and rear walls (from ELEFThERIOU 2015).



Fig. 17. Lindos, the terraced scenic arrangement of the sanctuary in a model created in 1938 (SAIA Archive, photo Paolini n. 43).

Fig. 16. Lindos, the eastern side of the temple on the top of the acropolis seen from the sea (photo by the A.).

Landscape architecture and the role of stoas

In order to improve its visibility from the sea, the temple of Athena Lindia was located, not in the centre of the available space, but on the very edge of the plateau, demonstrating the remarkable sensitivity to the scenic solutions typical of Hellenistic architecture, which exploits the features of the natural landscape to create suggestive results³³ (figs. 14A and 16). The particular orography of the acropolis and the arrangement of the sanctuary on artificial terraces supported by strong retaining walls were used to create striking landscape effects, which were emphasised by the skilful use of the porticoes. Indeed, during the late Classical and Hellenistic periods, the *stoa* became the architectural type best suited for creating urban spaces and sanctuaries because it admirably solved compositional problems caused by installations placed on lands in steep slope³⁴ (fig. 17).

In the sanctuary of Lindos, around the end of the 3rd century a large Doric *stoa* with projecting wings (*paraskenia*) was built³⁵ (fig. 14C). The *stoa* framed the monumental staircase leading to the upper terrace with the temple (fig. 14B). We must consider its central section, which was formed by a sort of transparent screen without a rear wall (figs. 14D, 17-18); the solution adopted had the purely aesthetic purpose of linking the two different wings of the *stoa* and allowing for the passage of people without sacrificing the formal unity of the portico elevation.

The closest parallel is the monumental *stoa* that dominated the upper edge of the acropolis of Kameiros: it introduced the poliadic temple of Athena (fig. 19a) on the acropolis of one of the three Doric *poleis* prior to the synoecism and the foundation of Rhodes³⁶. It is the only building whose image has been reconstructed with a certain degree of accuracy³⁷. In fact, the examination of the acropolis carried out by Luigi Calìò reconfigures the *stoa*, whose rear rooms have been identified as a sequence of rooms for banquets, *hestiatoria*. He dates it to the end of the 3rd century, but, based on its style, the *stoa* was previously dated to the beginning of the same century³⁸. The new dating

³³ On the Hellenistic propensity to exploit in their architecture the possibilities of the natural landscape, see LAUTER 1972. On the sacred architecture being viewed as a whole within the landscape, see Scully 1962 (revised 2013). In his opinion, it was typical for Greeks 'to use natural and man-made forms as complements for each other in order to embody the character of a divinity' (p. 98 about Lindos). The theme was more recently examined for the Minoan world in BLAKOLMER 2014.

³⁴ ROCCO forthcoming 3.

³⁵ DYGGVE 1960, pp. 217-289; LIPPOLIS 1988-1989, pp. 140-143. For its Doric order, see PAKKANEN 1998, especially pp. 150-152.

³⁶ LAURENZI 1959; DI VITA 1990.

³⁷ CALIÒ 2001; CALIÒ 2004, with bibliography.

³⁸ IACOPI 1932-1933, pp. 248-249; LAURENZI 1959. Its triglyphs in particular exhibit close parallels to the Late Classical *thesauros* of *Strategoi* in Cyrene and with the *gymnasion* of the same city. The



Fig. 18. Lindos. The transparent colonnaded screen of the central passage in the lower *stoa*, after the restoration of 1938 (photo M. Paolini, from E. Lippolis in LIVADIOTTI, Rocco 1996).

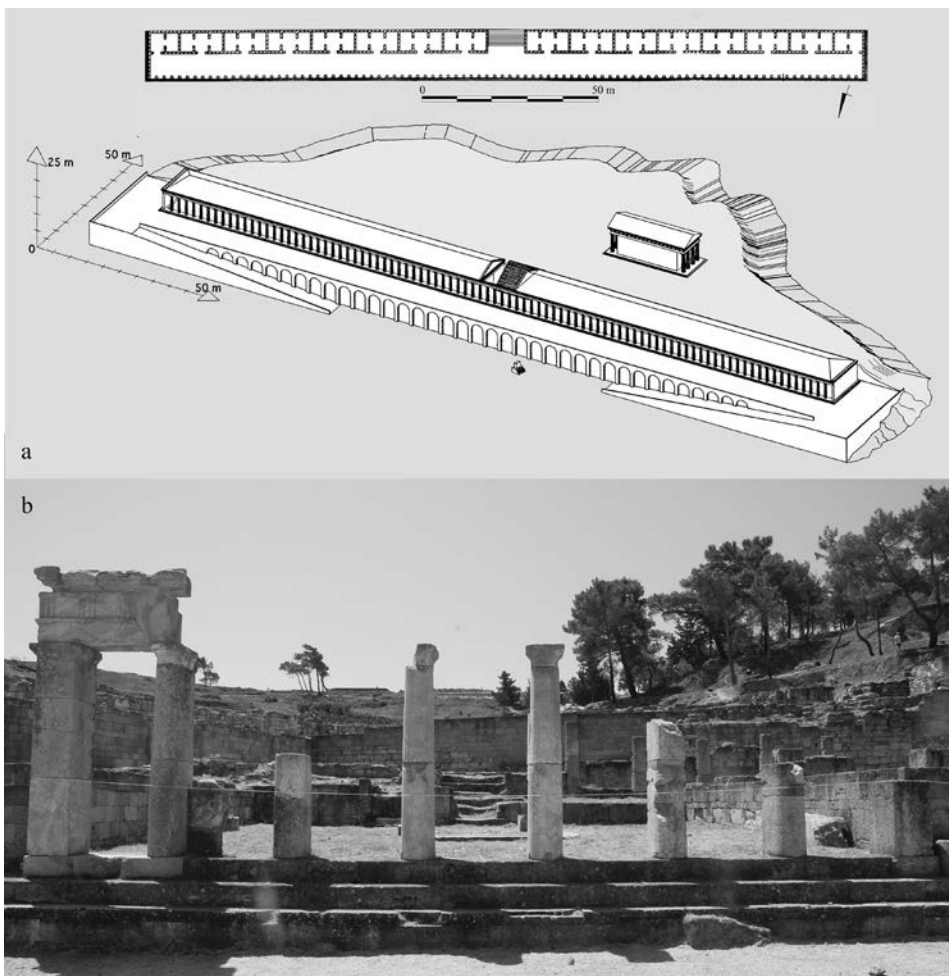


Fig. 19a, b. Kameiros: a. the monumental *stoa* leading onto the temple of Athena; b. the screen of pilasters with engaged semi-columns of the fountain in the lower agora (from L. Calì, in LIPPOLIS, Rocco 2011).

at the end of the 3rd century proposed by Calì, which is based on epigraphic evidence³⁹, dates the structure to another chronological period and throws new light on the architecture of Rhodes. In fact, after the earthquake, Ptolemaios III *Euergetes*' reconstruction activities in Rhodes, which were mentioned by Polybios⁴⁰, were particularly important and must be taken into account in order to undertake a comprehensive analysis of the architecture of the island during that period.

latter was more recently dated to the mid-2nd century and identified as the *Ptolemaion*: LUNI 1990; CALÌ 2001, pp. 98-99.

³⁹ IACOPI 1932-1933, pp. 182-184; For the inscription see *Tituli*

Camirenses, nr. 158.

⁴⁰ Polybios, V.88-89; CALÌ 2001, p. 102; CALÌ 2008; CALÌ 2010.

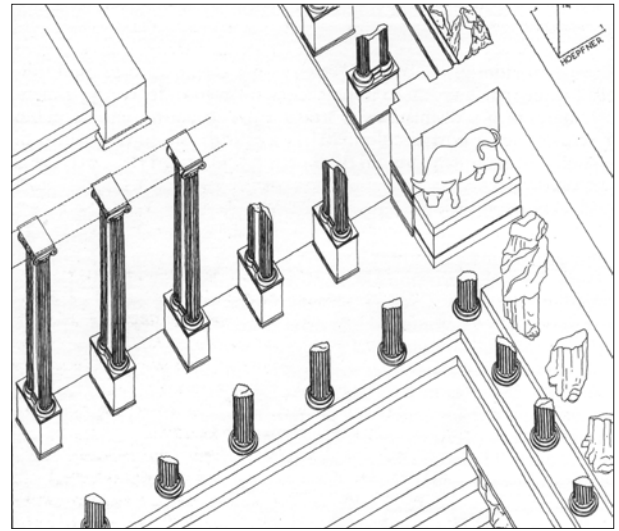
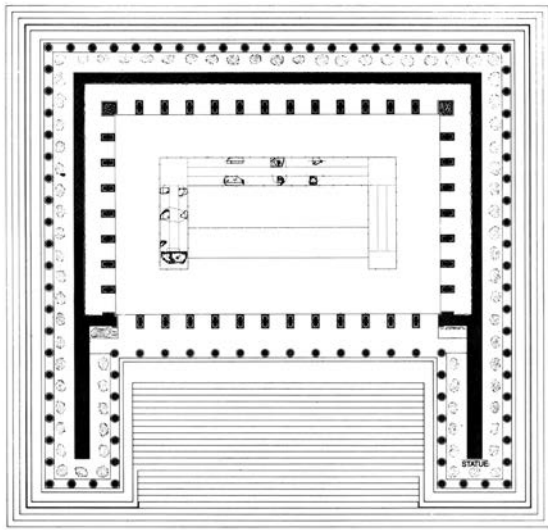


Fig. 20a, b. Pergamon, the altar of Zeus (2nd century B.C.): a. plan; b. detail of the screen of columns leading into the inner court (from HOEPFNER 1996).

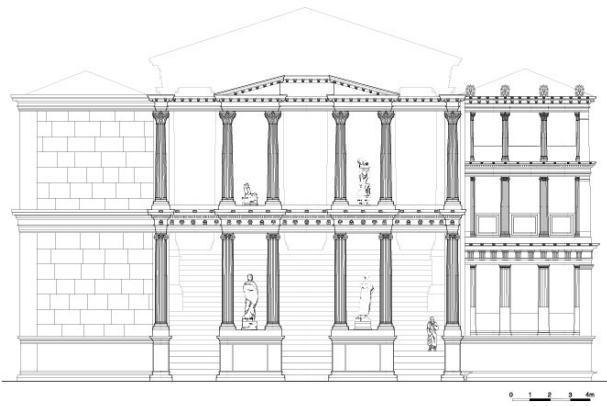


Fig. 21. Aphrodisias. *Sebasteion*, hypothesis of reconstruction of the *propylon* (<http://aphrodisias.classics.ox.ac.uk/excanastylosis.html>).

The central section of the *stoa* is once again formed by a screen of columns, without a rear wall, leading towards the staircase to the poliadic sanctuary without interrupting the continuity of the portico, thus revealing the same aesthetic purpose already suggested for Lindos. The same motif is found at Kameiros in the fountain in the lower agora⁴¹ (fig. 19b) and in the well-known Pergamon altar (fig. 20a,b). These transparent screens later enjoyed great success and were widely used during Imperial times, as evidenced, for instance, by the baroque *propylon* of the *Sebasteion* in Aphrodisias⁴² (fig. 21).

Terraced sacred complexes and their temples

The sanctuary of Athena at Lindos has a close parallel in the *Asklepieion* of Kos⁴³, which was constructed on four different levels as early as the 4th century and monumentalised during the following century when, in 242, it obtained the status of a Panhellenic sanctuary⁴⁴ – a sign of the growing prestige of the Koan state. On the opposite Karian coast, the sanctuary of Zeus at Labraunda⁴⁵ and the sanctuaries of Apollo and Athena at Knidos⁴⁶ exemplify the same desire for scenic arrangements on terraces and constitute good parallels.

This markedly theatrical solution is also present on the acropolis of Rhodes, which was built on the slopes of the highest hill overlooking the urban landscape and was visible from a long distance; thus, it constituted the focus

⁴¹ Hans Lauter (LAUTER 1982) dated the complex to the end of the 3rd century, but this is still debated: CALIÒ 2011.

⁴² On the building, see SMITH 1987; ISMAELLI 2011. On the *propylon* typology in Asia Minor during the first empire, see ORTAÇ 2001.

⁴³ On the sanctuary, see, in general, HERZOG, SCHAZMANN 1932;

INTERDONATO 2013; BOSNAKIS 2014. See a new interpretation of the functional relationships between the different terraces in ROCCO 2017.

⁴⁴ SHERWIN WHITE 1978, pp. 111-114, 341.

⁴⁵ HELLSTRÖM 1991; HELLSTRÖM 2007, with further bibliography.

⁴⁶ EHRHARDT 2009.

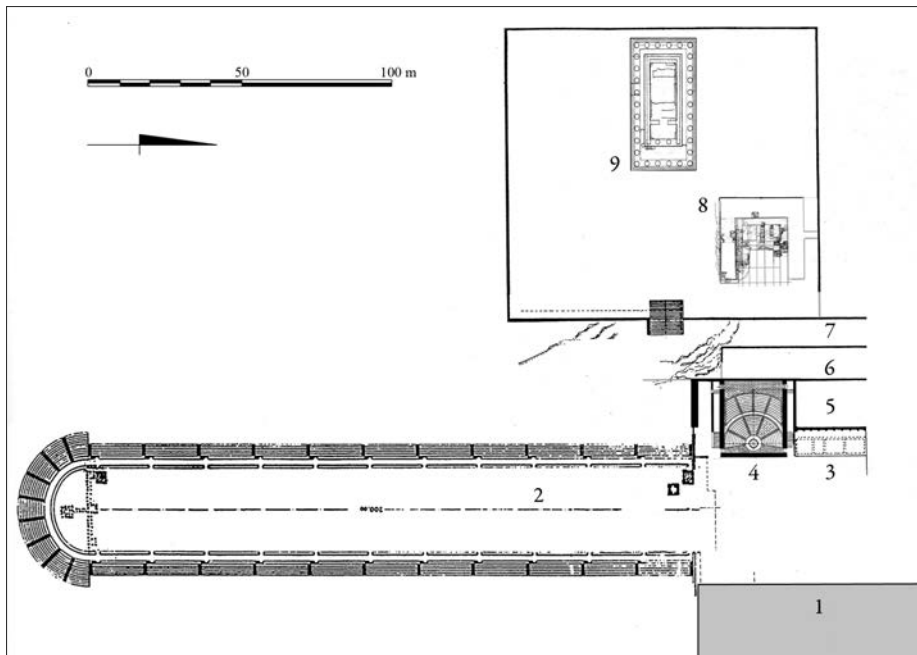
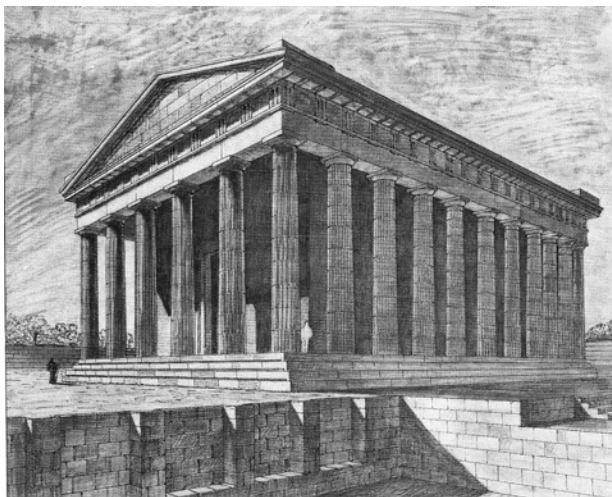
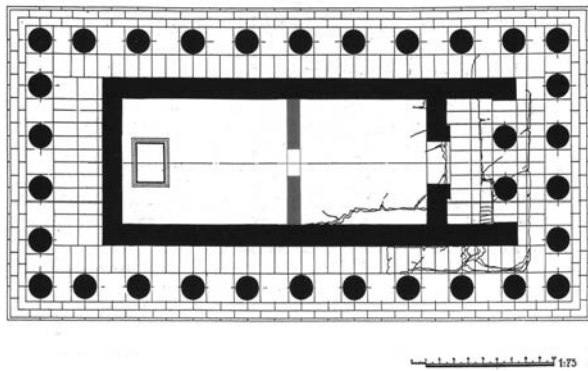


Fig. 22. Rhodes, the acropolis monuments: 1. *gymnasion*; 2. stadium; 3. retaining wall with fountain; 4. odeion; 5. second terrace; 6. third terrace; 7. fourth terrace; 8. possible Artemis shrine, 9. Apollo *Pythios* temple (from E. Lippolis, in Lippolis, Rocco 2011).

Fig. 23a, b. Rhodes, temple of Apollo on the acropolis: a. plan, b. reconstruction (drawings by M. Paolini, from LIVADIOTTI, ROCCO 1996).



of the entire urban composition. Diodoros of Sicily (XX.83) defined Rhodes as *theatroidēs* because of this feature (cf. fig. 4b), and the term clearly does not concern the urban form of the city, but rather its visibility. *Theatroidēs*, in fact, is not related to the form or to the orography (in the form of a theatre⁴⁷) of the urban layout; rather, it seems to suggest the need for the visibility of a late Classical and Hellenistic *polis* which used the urban spaces as scenic backdrops for its rituals and celebrations⁴⁸. Consequently, in the late Classical and Hellenistic cities the buildings were not, as was the case during previous periods, conceived as architectural objects isolated in their own space, but rather as architectural complexes which coordinated with one another and with the urban layout as a whole. Moreover, as has already been pointed out for several Hellenistic cities⁴⁹, monumentality did not now focus on the single monument, but rather on the main streets, which were incorporated into the religious celebration system.

In Rhodes, some of the long east-west oriented *plateiai* (P14-P15: cf. fig. 4a) probably formed the main processional routes that, beginning from the agora, passed by the *Asklepieion*, the *Pantheon* and the *gymnasia*, before finally arriving at the acropolis⁵⁰. There, the shrines were located on the highest terrace of the complex system, supported by massive retaining

walls, while the buildings for culture and the education of youths, such as a *gymnasion* with a library⁵¹ (fig. 22.1), a stadium (fig. 22.2), a monumental fountain (fig. 22.3) and an odeion (fig. 22.4), were situated immediately below the eastern slopes.

⁴⁷ Vitruvius (II.8.11), in fact, used the phrase *theatri curvaturae similis* to describe the urban layout of Halikarnassos, which was similar to that of Rhodes (on the Vitruvian description of Halikarnassos, see PEDERSEN forthcoming)

⁴⁸ KONDIS 1954, pp. 6-8; CALIÒ 2005.

⁴⁹ CAVALIER, DES COURTILS 2008.

⁵⁰ FILIMONOS, PATSIADA forthcoming.

⁵¹ PAPACHRISTODOULOU 1988.

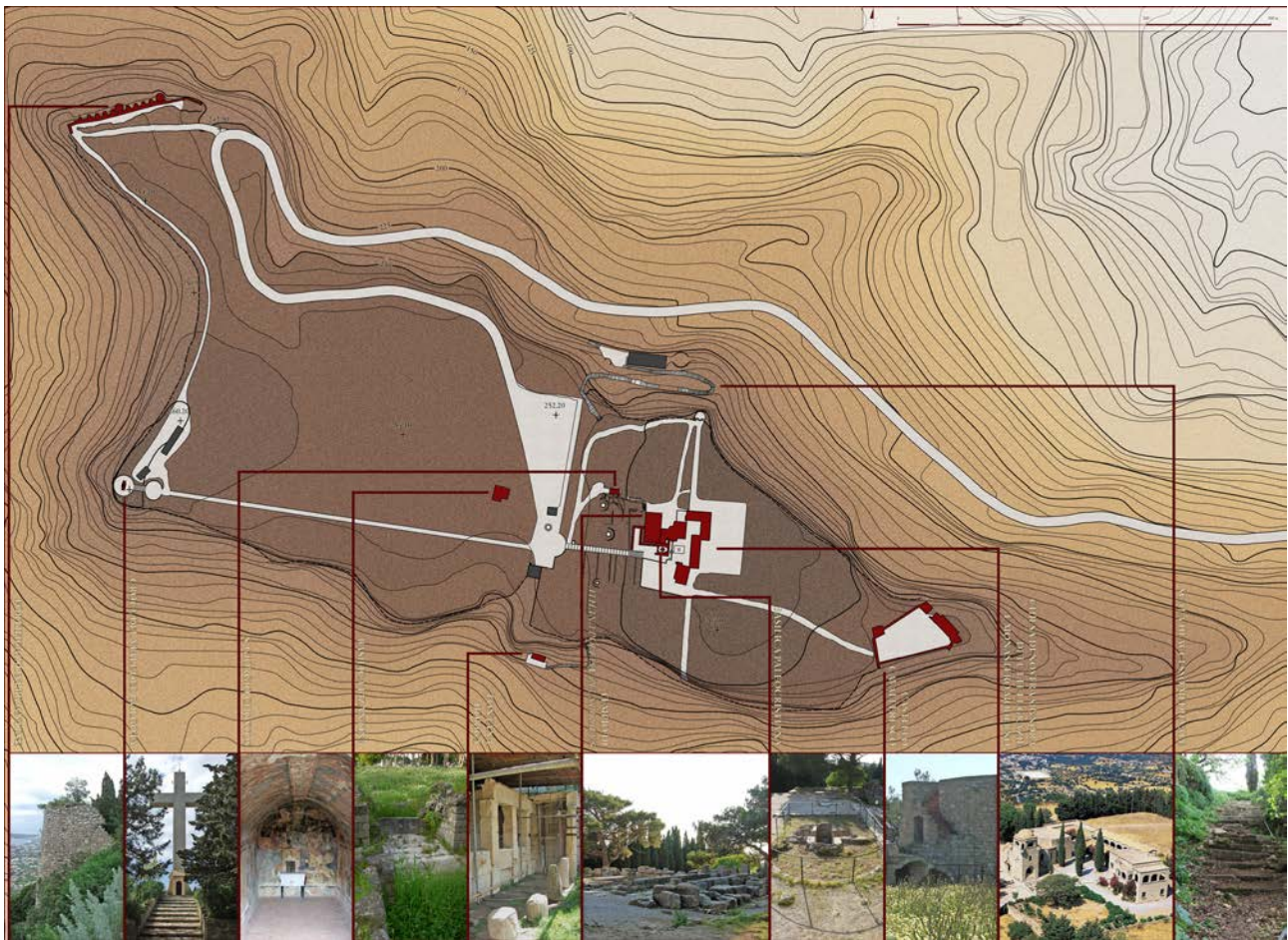


Fig. 24. Ialisos, the acropolis: actual state, general map and pictures of the main monuments (graphic elaboration by V. Bucci, M. Crocitto, F. Fiorella, F. Gotta, A. Maldera and A. Pellegrini, Polytechnic University of Bari 2009).

On the terrace above the odeion is the *temenos* with the temple of Apollo (figs. 22.9, 23a,b), whose date has been the subject of debate⁵². This is one of the few peripteral temples built on the islands⁵³, together with the temple of Asklepios in the suburban sanctuary of Kos⁵⁴. It is interesting to note that the two buildings, besides being peripteral, share further similarities: both are of the Doric order, are not very elongated (6 x 11 columns) and are devoid of an opisthodomus, just like other temples of the late Classical and Hellenistic periods⁵⁵. Unfortunately, we are less well informed about the temple of Athena *Polias* and Zeus *Polieus*, built on a high terrace supported by a long *stoa* on the northern hill of the Rhodian acropolis⁵⁶. Based on the few scattered architectural elements identified, we can only say that it must have been very large and monumental. Judging by the dimensions of the lower diameter of a column drum, another temple in town, located near the agora, was even larger. In this case, the scarcity of the remains, which are limited to the column drums reused in the Byzantine fortification, does not permit us to formulate a hypothesis on its typology. Wolfram Hoepfner suggests a peripteral temple⁵⁷, but the absence of a foundation does not permit any certainty.

Other information about the sacred architecture in Rhodes comes from the sanctuary of Athena *Polias* and Zeus *Polieus* on the acropolis of Ialysos, on Mount Philerimos (fig. 24), which was inhabited from the Mycenaean

⁵² The temple (22.25 x 40.90 m), which was built from locally quarried sandstone and then coated with stucco, has been dated to the 4th century B.C. (HOEPFNER 1999), but the morphological characteristics of the Doric capitals indicate a date in the 1st century B.C. (G. Rocco, in LIVADIOTTI, ROCCO 1996, p. 14). See also Lippolis 2016 for a hypothesis of the different phases with the addition of a *peristasis* to an older prostyle building.

⁵³ The Athena temple in Kameiros, as a close examination of the foundation trenches has demonstrated, was not peripteral as previously stated (DI VITA 1990), but rather prostyle or amphiprostyle: see LIVADIOTTI, ROCCO 1999.

⁵⁴ Temple A (HERZOG, SCHAZMANN 1932, pp. 3-13) has been considered an example of micro-Asiatic classicism (LAUTER 1986, p. 188; KNELL 1988, pp. 235-241) whereas the architectural connections with Pergamon are evident for Schwandner (SCHWANDNER 1990, p. 93).

⁵⁵ Two examples are the temple of Zeus at Nemea and the temple of Asklepios at Epidauros.

⁵⁶ MAIURI 1928b, pp. 46-48; MICHALAKI-KOLLIA 2013, pp. 82-83. See also FILIMONOS, PATSIADA forthcoming.

⁵⁷ HOEPFNER 1999, p. 54. See also FILIMONOS, PATSIADA forthcoming, with further bibliography.

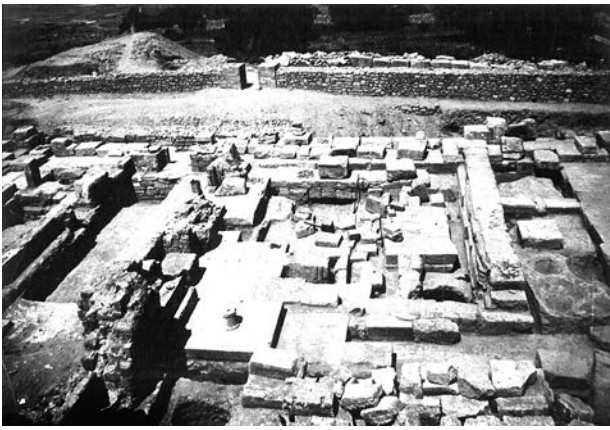


Fig. 25a,b. Ialisos, temple of Athena *Polias* and Zeus *Polieus*: a. the ruins of the temple after the excavations of 1924; b. the excavation of the votive deposit in 1923 (from LIVADIOTTI, ROCCO 1996).

period onwards. In this case, because of the buildings erected during the proto-Christian and medieval periods, which used architectural materials from the ancient structures, the general configuration of the sanctuary remains unknown, although some retaining walls exhibit the usual disposition on terraces. We do not have any data about a *temenos*, a *propylon*, an altar or *stoas*, and, of all the buildings on the acropolis, only the foundations of a temple and its sacred deposit have been found.

The site was fortified from the Classical period onwards, and remains of ancient walls in ashlar masonry were found at the north-western end of the plateau, under Byzantine and medieval structures. Approximately 30 m from the edge of the acropolis, a monumental Doric fountain was possibly located along the original route to the sanctuary⁵⁸. Perhaps the as-yet undiscovered settlement was located on the southern slope; on the opposite side, there is a necropolis, which was discovered by Auguste Salzmänn and Alfred Biliotti (1868-1871) and later excavated by Italian archaeologists⁵⁹.

The first Italian investigation of the acropolis was carried out by Luigi Pernier, then Director of the Italian Archaeological School of Athens, who conducted a brief survey in 1913. Between 1914 and 1916, the Archaeological Mission of Rhodes, directed by Maiuri, began a series of excavations which uncovered the foundations of the temple (fig. 25a), after having partly removed the rubble of the medieval church of Santa Maria di Tutte le Grazie, whose central nave was built on top of the remains of the temple. The apsidal sector of the same church was then restored by the Military Administration, under the scientific direction of Maiuri himself⁶⁰. Excavations continued during 1923, providing more details of the north, west and south sides of the building and uncovering a very rich votive deposit (fig. 25b), which enhanced the collections of the new Archaeological Museum of Rhodes. Research was also extended to the west slope, discovering the terrace retaining wall nearest the western side of the temple and the narthex of a large early Christian basilica, which was built using materials from the ancient buildings. From 1925 onwards, excavation work continued under the direction of Iacopi, who discovered a second terrace wall farther to the west and more votive deposits. In 1928, the excavation of the early Christian basilica was completed, and the entire area was arranged for an upcoming archaeological conference organised in Rhodes⁶¹. Hermes Balducci then studied the early Christian basilica with the baptistery in 1930: his investigations resulted in a monograph on the subject⁶², where the relationships between the various structures were clearly illustrated. In 1934-1935, a new Franciscan monastery was built to the east of the temple, defining the current appearance of the site. The new belfry of the church was partially built on the south-eastern corner of the temple.

Paolini began a graphic survey of the temple in the mid-30s, and he also formulated several hypotheses for the reconstruction of the plan, all of which were, however, inaccurate. Other drawings and measurements were carried out by Gizio Purchiaroni, an architect and collaborator of Giorgio Monaco, who, in 1953, undertook a study of the

⁵⁸ MAIURI 1928d; A. Di Vita, in LIVADIOTTI, ROCCO 1996, pp. 50-51, with further bibliography; GLASER 1983, pp. 47-49.

⁵⁹ G. Rocco, in LIVADIOTTI, ROCCO 1996, pp. 40-46, with bibliography.

⁶⁰ A modern inscription recalls the work and gives the year of the

restoration (1919). On this topic, see G. Rocco, in LIVADIOTTI, ROCCO 1996, pp. 261-265.

⁶¹ M. MAIURI, G. JACOPICH, *Presentazione*, in *Clara Rhodos* I, 1928, pp. 2-3; GROSSO 1928.

⁶² BALDUCCI 1931.

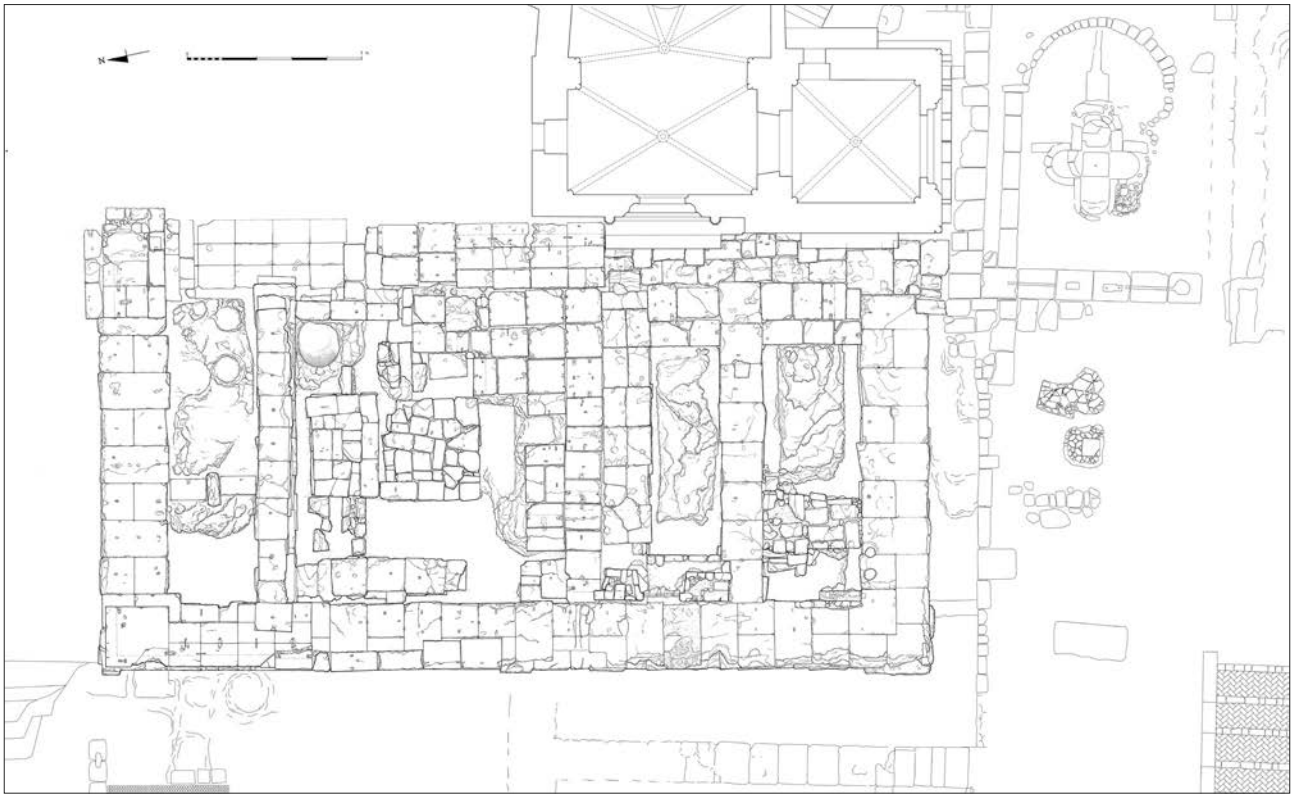


Fig. 26. Ialysos, temple of Athena *Polias* and Zeus *Polieus*. The new survey of the temple (drawing by G. Rocco, M. Livadiotti, 1986-1989).

acropolis of Ialysos, but died before completing it. Thus, despite these efforts, the temple remained unpublished and all the documentation passed to the Italian Archaeological School of Athens, whose director, Antonino Di Vita, in 1989, entrusted the study of the *stipe*, the votive deposits, to Marina Martelli and Maria Antonietta Rizzo⁶³, and the architectural study of the temple to me and Monica Livadiotti⁶⁴.

The current research is based on new measurements and drawings (fig. 26) and on the cataloguing and analysis of all the architectural fragments that definitely relate to the temple. The analysis of the remnants indicates that the *Athenaion* stood on the site of a cult area which is attested as early as the 8th century, but the worship does not correspond to a significant monumental presence until much later.

The first structure clearly connected with the cult is a large stone platform preserved at the centre of the foundation of the *cella* and dated to after the Archaic period. The discovery of several terracotta *gorgoneia* in the votive deposit⁶⁵ that do not belong to the present temple indicates the presence of at least a simple building made of wood, with a terracotta roof to protect the platform which survived until the beginning of the Hellenistic period.

The monumental remains and the architectural fragments on the site belong to a building dated to no earlier than the end of the 4th century and probably later than the siege by Demetrius Poliorcetes of 305⁶⁶. An examination of these provided much information that has made it possible to present an architectural restoration which differs from that of Maiuri and Paolini (fig. 27). The surviving fragments belong to two different buildings. One series (fig. 28) belongs to a Doric architectural order dating to the third quarter of the 4th century. They fit into a building of different dimensions than that of the present foundations. This can be concluded from comparing the measurements of the elements of the above-mentioned order with the length of the frontal side of the foundations. Maiuri, who believed that the temple was amphiprostyle tetrastyle, attributed these fragments to the temple, but they are clearly too large for the existing foundations if the temple was hexastyle, and too small if the front was tetrastyle. The second series of Doric fragments (fig. 29), which are far more numerous, belongs to the temple of Athena and can be dated to the end

⁶³ A preliminary report is given by M. Martelli, in LIVADIOTTI, ROCCO 1996, pp. 46-50. A complete edition of these materials is currently in preparation.

⁶⁴ A preliminary reconstruction was presented in LIVADIOTTI, ROCCO 1999.

⁶⁵ The *gorgoneia* are included in the publication of the votive materials. Their study was first undertaken by Eos Zervoudaki and has been now updated by Melina Philimonos (the publication is in preparation).

⁶⁶ On the siege, see BERTHOLD 1984, pp. 59-80.

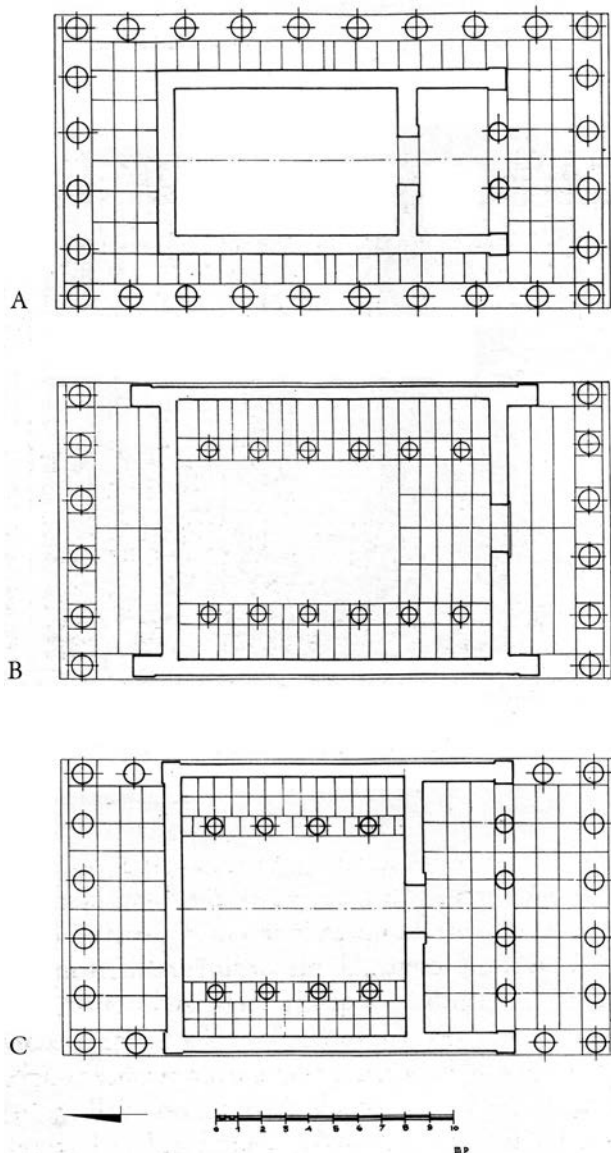


Fig. 27. Ialisos, temple of Athena *Polias* and Zeus *Polieus*. Different hypothesis on its configuration elaborated by A. Maiuri and M. Paolini: a. peripteral temple, b. amphiprostyle exastyle; c. amphiprostyle exastyle with tetrastyle *in antis pronaos* (from LIVADIOTTI, ROCCO 1996).



Fig. 28. Ialisos, temple of Athena *Polias* and Zeus *Polieus*. Architectural fragments – Doric frieze and cornice – not belonging to the temple (photo by the A.)

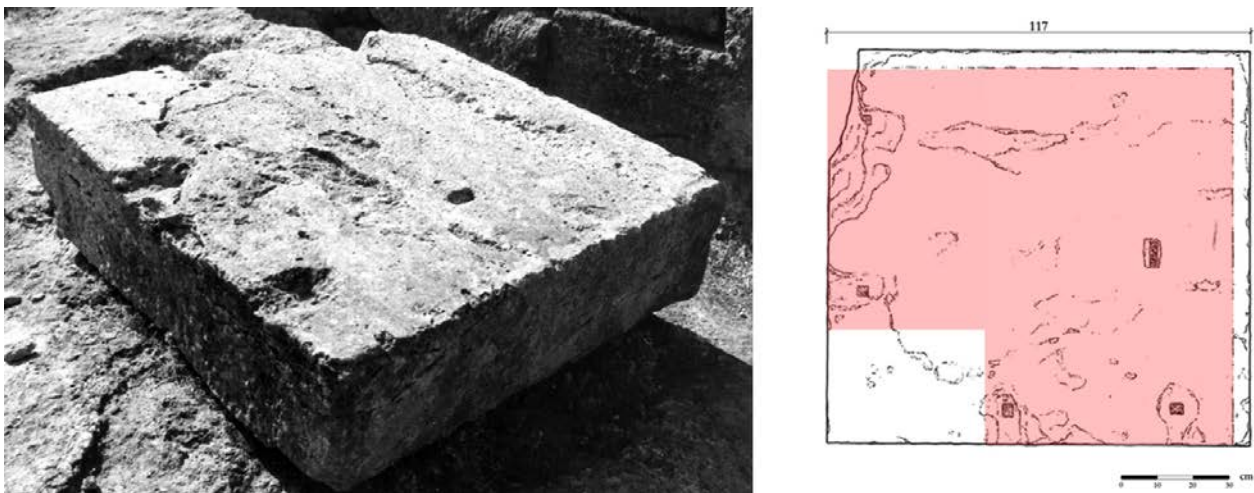
Fig. 29. Ialisos, temple of Athena *Polias* and Zeus *Polieus*. Doric frieze belonging to the temple (photo by the A.).





Fig. 30a,b. Ialisos, temple of Athena *Polias* and Zeus *Polieus*. The Corinthian capital of the inner order: a. survey (drawing by the A.); b. 3D reconstruction (drawing by A. Maldera).

Fig. 31. Ialisos, temple of Athena *Polias* and Zeus *Polieus*. The traces on the upper surface of an angular block of the stylobates belonging to the rear of the temple (north-western corner) permit us to note that the block supported a wall (in light red) and not a column (photo and drawing by the A.).



of the 3rd century. Two Corinthian capitals made of stuccoed poros belong to the inner articulation of the *cella* and to the same chronological horizon (fig. 30).

The identification of an angular block belonging to the stylobate at the rear of the temple has been particularly clarifying (fig. 31); the traces on its upper surface indicate that the block supported a wall, not a column, and allow us to reject all previous hypotheses on the building, which must be restored without a rear colonnade (fig. 32).

Based on the analysis of these fragments and the data coming from the foundation still *in situ*, it is possible to reconstruct a temple characterised by a Doric prostyle hexastyle plan with an Ionic tetrastyle *pronaos in antis*. The interior of the *cella* was enriched by a Π -shaped colonnade, which closed off a space at the inner end of the *naos*, creating a sort of *adyton*.

The plan strives towards a certain monumentality within the limited dimensions of the structure; in particular, the peculiar solution of the front of the building with a double colonnade and the *pronaos* tetrastyle *in antis* suggests parallels with the temple of Aphrodite (fig. 34b), near the harbour in Rhodes (see *supra* and fig. 8) as well as, once again, with the *Hieron* of Samothrace (cf. fig. 9).

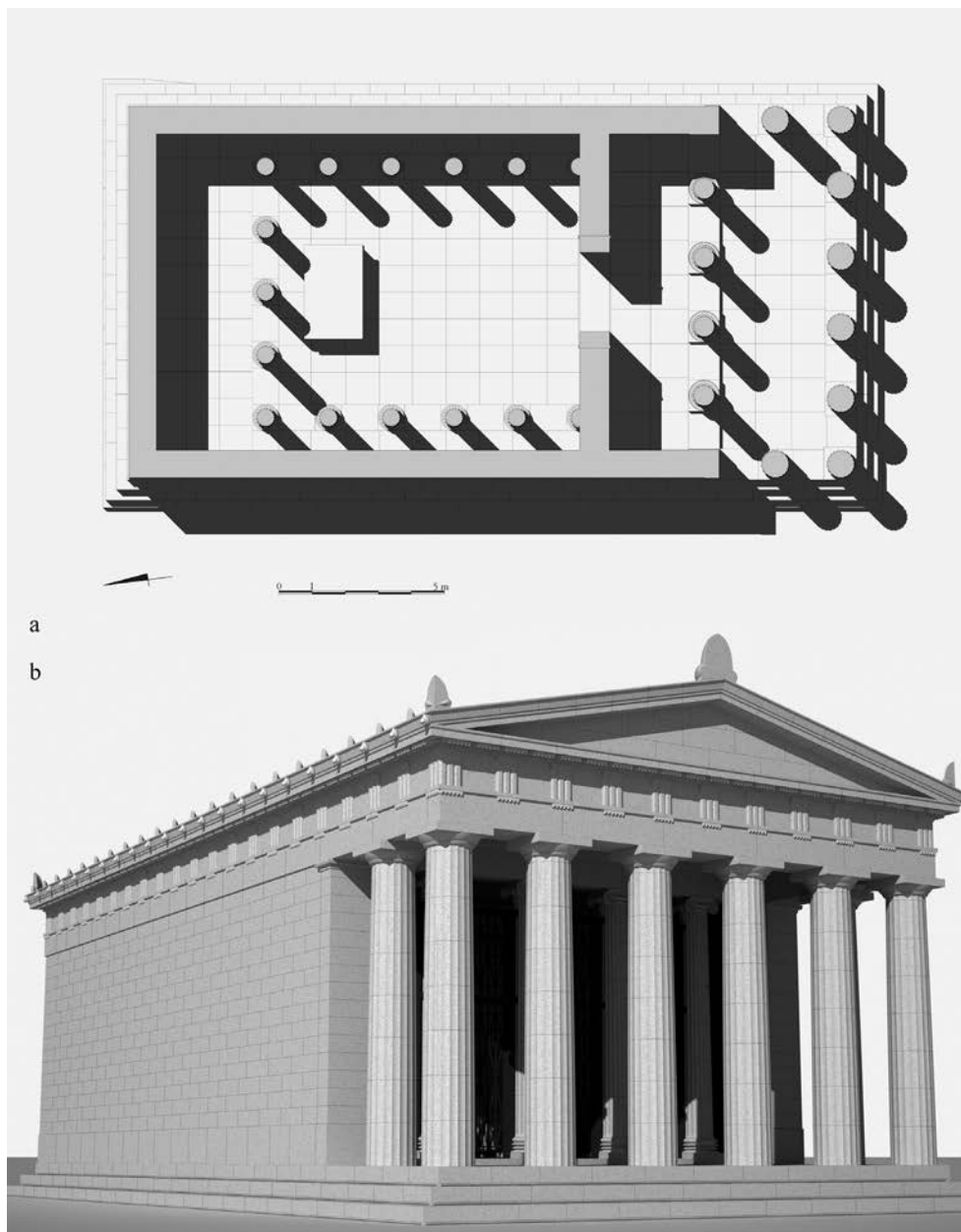


Fig. 32. Ialisos, temple of Athana *Polias* and Zeus *Polieus*. The temple was prostyle hexastyle with *pronaos* tetrastyle *in antis* and Π-shaped colonnade in the *cella* (3D graphic by F. Gotta; based on the hypothesis of G. Rocco and M. Livadiotti).

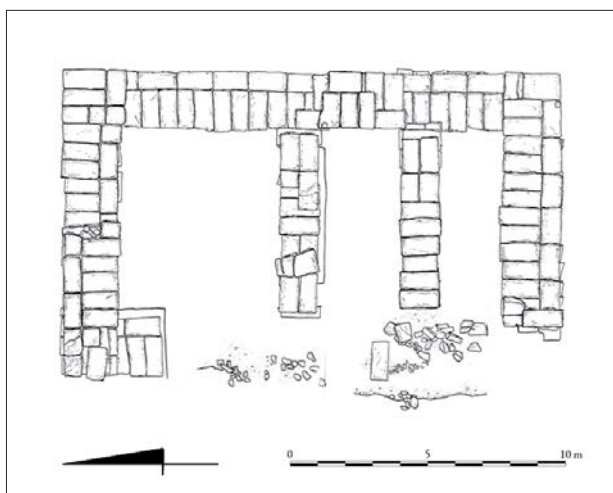


Fig. 33. Rhodes. Hellenistic temple of Isis, plan of the foundation (elaborated by the A. from FANTAOUTSAKI 2011).

Another building recently excavated on Rhodes, the temple of Isis⁶⁷, has been dated to the 3rd century. Preserved only at foundation level, its plan (fig. 33) is possibly marked by the same frontal solution with a double colonnade and could further confirm the diffusion of this unusual model in Rhodian sacred architecture.

The importance of the Ialysos temple is further confirmed by the adoption of sophisticated structural details such as the curvature of the stylobate. The adoption of the Ionic order for the front of the *pronaos* can also be interpreted as an expression of that decorativeness that can be clearly seen as well in the richness of the Corinthian solution for the interior of the *cella*. These traits recall the elaborate interiors of the Peloponnesian religious architecture of the late Classical period.

⁶⁷ FANTAOUTSAKI 2007; FANTAOUTSAKI 2011.



Fig. 34. Rhodes, the *nymphaeum* of the acropolis (from PATSIADA 2013a).



Fig. 35. Kameiros, an epigraphic document from the 2nd century B.C. inscribed on a false rock (photo by the A.).



Fig. 36. Kos, *Asklepieion*. The *alsos* of Apollo *Kyparissios* of the first terrace, with the natural rock intentionally left unworked (photo by the A.).

Integration of nature and architecture: the altar of Zeus Atabyrios

In most of the examined contexts, the nature of the sites has been artificially remodelled, the slopes terraced and amplified, and the natural rock has been integrated with the architecture and often artificially imitated. Such integration of architecture into nature is, perhaps, one of the most interesting novelties in Rhodian and Koan architecture, and its roots can be traced back to Alexandria, which was strongly influenced by the Persian *paradisoï*⁶⁸.

More generally, this feature is visible not only in the built structures but also in the artificial organisation of natural landscapes and in the sculpted scenarios organised as narrative pictures inside the *polis*. The suburban garden of Rodini on the south-eastern slope of the city of Rhodes provides a good example of that strong integration of built structures into nature which is one of the major features of Dodecanese architecture⁶⁹. In this area, the natural landscape is organised with artificial grottoes, statues and rock tombs, all perfectly in harmony with the natural environment. The garden was an important element in Hellenistic cities, and Alexandria was famous for its suburban quarters in the eastern section of the city⁷⁰. On the acropolis of Rhodes⁷¹, the scenic arrangement of the sacred landscape was in fact combined with idyllic solutions, such as the well-known grotto-like *nymphaea*⁷² (fig. 34), or the less well known open-air sanctuary located south of the *temenos* of Apollo⁷³.

In Rhodes, the *Pantheon* (fig. 4) was also an open-air *temenos*, without a temple but with an altar, a trophy and a grove, as indicated by the large open space covered by a layer of red earth and clay water pipes⁷⁴. The same Hellenistic taste for naturalistic effects is visible in several other Rhodian monuments, where the rusticated treatment of the surfaces was clearly intended to imitate natural rock⁷⁵, as in some epigraphic monuments at Kameiros (fig. 35)⁷⁶.

⁶⁸ NIELSEN 1999, pp. 130-154.

⁶⁹ According to Hans Lauter (LAUTER 1972; LAUTER 1986, pp. 71, 272) and, more recently, Vassiliki Patsiada (PATSIADA 2013a).

⁷⁰ LAUTER 1986, p. 72.

⁷¹ RICE 1995; NEUMANN 2012.

⁷² On the origin of the term, see SETTIS 1973.

⁷³ DRELIOSI-HERAKLEIDOU 1996; PATSIADA 2013a.

⁷⁴ KANTZIA 1999; PATSIADA 2013a. The Rhodians founded the

sanctuary in 304 B.C. in order to celebrate the successful resistance during the siege by Demetrios Poliorcetes; in fact, the sanctuary preserves the stone bullets of siege catapults as a form of *ex-votos*.

⁷⁵ On rusticated surfaces in Greek architecture, see, in general, KALPAXIS 1986.

⁷⁶ On the inscription in fig. 35, see IACOPI 1932-33, *Epigraphica*, cat. nr. 44, pp. 424-426.



Fig. 37. Atavyros, sanctuary of Zeus. The entrance of the Christian basilica, mostly made by reused blocks of the altar of Zeus (photo by the A.).

The attempt to create an architecture strongly integrated into nature is a phenomenon not limited to Rhodes; rather, during the Hellenistic period it spread all over the Dodecanese. At Kos, for example, the soil of the ancient sacred grove⁷⁷ on the highest terrace of the *Asklepieion*, the *alsos* of Apollo *Kyparissios*, is preserved in the natural rock that was intentionally always left unworked⁷⁸ (fig. 36). The same reference to nature can be seen in the unworked vertical surfaces (*apergon*) of the *krepis* or on the bottom of the walls of many Koan buildings⁷⁹.

Perhaps some architectural features of the sanctuary of Zeus *Atabyrios*, in the west part of Rhodes, can be explained in the same manner. The sanctuary, located at the peak of the homonymous mountain, Atavyros – the highest on the island, with an altitude of 1.215 m – was the seat of an important cult, which enjoyed great fame in the ancient world and is repeatedly mentioned in the literary sources⁸⁰.

The location of the sanctuary is known thanks to the 19th-century explorations of Ross, Hamilton, Lacroix and Guérin, but it was not until the 1927 that Iacopi led the first exploration campaign, the results of which were synthetically presented in 1928⁸¹. During that first campaign, ancient and Byzantine structures were found, in addition to a large quantity of *ex-votos*, mostly bronze objects, dating from the Geometric/Archaic to the late Imperial period.

Aside from this short report, the sacred complex remained unpublished. Recently, the Archaeological Institute of Aegean Studies of Rhodes, directed by Pavlos Triantaphyllidis, has undertaken new investigations in collaboration with an *équipe* of the Polytechnic University of Bari⁸². During three excavation campaigns, significant remains of the structures of the sanctuary, a later Byzantine church and a fortified monastery were brought to light, as well as important discoveries of votives. In addition, a survey of the entire sacred complex has been completed, clarifying the different building phases by isolating the structures of the earlier Greek periods from those of successive periods which reused earlier materials.

Thanks to the study of several architectural fragments reused in the later structures (fig. 37), it is now possible to posit scientifically documented hypotheses on the buildings of the Greek period and in particular on the great altar of Zeus, which dominated the view of the island from the top of the mountain.

⁷⁷ On the sacred meaning of groves in Greece, see, in general, BARNETT 2007, with further bibliography.

⁷⁸ ROCCO 2017.

⁷⁹ See, for example, for the 3rd century B.C., the eastern *stoa* of the harbour (G. Rocco, in ROCCO, CALIÒ 2016) or the so-called 'Tufa Stoa' (LIVADIOTTI forthcoming); for the following century, see the *krepis* of the eastern *stoa* of the agora and, in the *Asklepieion*, the *krepis* of the porticoes of the first terrace. On this topic, see also LIVADIOTTI 2005.

⁸⁰ Schol. on Pind. *Ol.* VII.159-160; Strab. 14.2; Apollod. II.2.1. They describe its ancient Cretan origins, attributed to Althaimanes, grandson of Minos, and the peculiarities of the rituals. This was one of the three pan-Rhodian sanctuaries on the island, which attracted pilgrims from all over the known world.

⁸¹ IACOPI 1928.

⁸² For the results of the recent archaeological research, see TRIANTAPHYLLIDIS forthcoming; TRIANTAPHYLLIDIS, LIVADIOTTI, ROCCO forthcoming.

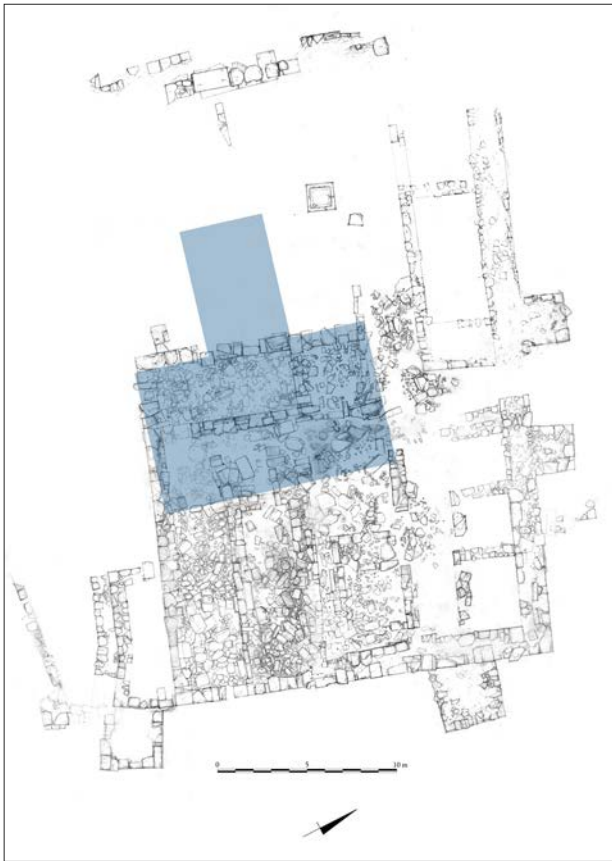
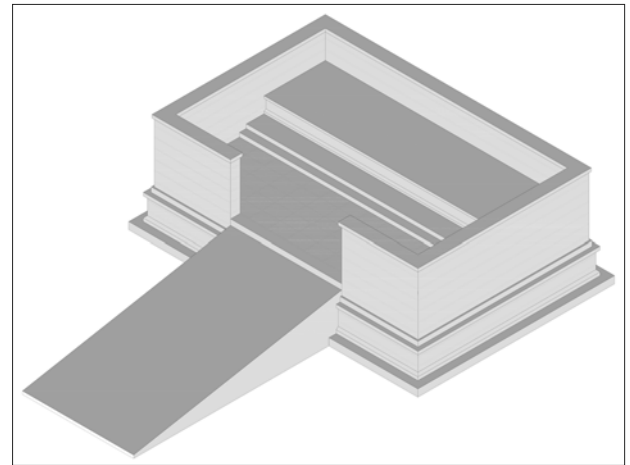


Fig. 38. Atavyros, sanctuary of Zeus. The foundations of the altar are not preserved, but some observations on the configuration of the natural bedrock allow us to restore overall dimensions of 8 x 13 m (graphic elaboration by the A. of a survey by A. Fino, F. Giannella, Polytechnic University of Bari).

Fig. 39. Atavyros, sanctuary of Zeus. Hypothetical reconstruction of the altar of Zeus Atabyrios as an Ionic altar (graphic elaboration by the A.).



The building material is local limestone marl, which is iron grey, somewhat frail and ill-suited to detail processing. Nevertheless, bases for statues, which are sometimes inscribed, were manufactured from this stone. Evidently, the difficulty of reaching the site has always made the use of better-quality stone from other locations difficult, if not impossible.

Although the foundations of the altar are not preserved, it is possible to reconstruct overall dimensions of 8 x 13 m (fig. 38), which are similar to those of the altar 'of Dionysos' on Kos (8.80 x 13.40 m). This reconstruction has been undertaken on the basis of some observations on the configuration of the natural rock bed, which in some places appears to have been levelled. The entrance could only have been from the western side, where the rock surface is smoother. The orientation of the altar is not exactly the same as that of the Christian basilica, as testified by a monument whose foundations lie just outside and partly beneath the northern front of the church. Perhaps it stood against the north-western corner of the altar, thus reproducing its alignment, which slightly diverges from that of the church.

The virtual reassembly of the identified blocks produces an altar on a high podium, with walls on three sides and an opening on the fourth, provided with a large ramp; inside, there was a *trapeza* for sacrifices, which was protected by the tall side walls (fig. 39). The architectural type is without any doubt related to the Ionic area and offers many similarities with the above-mentioned altar in the agora of Kos⁸³. A peculiarity of these two altars is the presence of a ramp for the animals; in fact, this characteristic leads to the assumption that the animals were sacrificed on the podium, inside the enclosure, in the same way as in the Altar Court at Samothrace⁸⁴.

The Zeus *Atabyrios* sanctuary did not have a temple, only an altar for an open-air cult. As already noticed by the first travellers, the main elements of the architectural orders (bases, drums, capitals, anta capitals) on the site seem to be completely absent. Furthermore, the few attested mouldings are schematic and functional (fig. 40), and this could be the manifestation of the previously noted taste for more natural, almost brutal, architecture visible in some Rhodian monuments, such as the so-called 'Tomb of Kleobulos' on the Hagios Milianos promontory, near Lindos⁸⁵

⁸³ STAMPOLIDIS 1987; STAMPOLIDIS 1991. On the Ionic altars in Asia Minor, see, in general, OHNESORG 2005.

⁸⁴ LEHMANN, SPITTLE 1964.

⁸⁵ Dated by Maiuri to the 5th century B.C. (MAIURI 1924, pp. 457-

458) and by Dyggve to between the 2nd and the 1st century B.C. (DYGGVE 1960). On the relationship between Rhodes and the Carian cities during the Hellenistic period, see BERTHOLD 1984, pp. 113-122, 167-178, 202, 219-220.



Fig. 40. Atavyros, sanctuary of Zeus, altar. The cornice Cat. nr. A1.9, relevant to the base of the podium (photo by the A.).



Fig. 41a,b. Adoption of simplified profiles in other monuments of the area: a. the so-called 'Tomb of Kleobulos' at Lindos (from MAIURI 1928c), b. tomb of Pedasa (Gök-Ciallâr, Caria), general view.

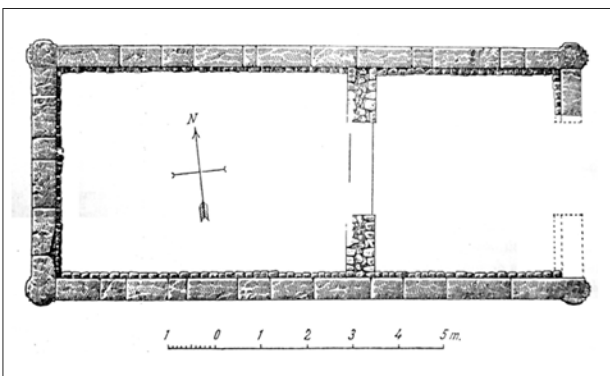


Fig. 42. Rhodes, Hagios Phokas. Plan of the Hellenistic temple (from MAIURI 1916).

(fig. 41a), and on the opposite Carian coast⁸⁶ (fig. 41b). The architecture of the temple of the acropolis of Hagios Phokas (fig. 42), in the ancient deme of Kymissala⁸⁷, dated to the 3rd -2nd centuries, with its walls of roughly rusticated blocks and its simple *pronaos*, may further illustrate the same concept.

Conclusion

Close contact with Alexandria, which derived its architectural forms mainly from Peloponnesian late Classical architecture⁸⁸ filtered by the Macedonian artistic culture, became more intense at the end of the 3rd century. This influence is mainly visible in the details of the architectural orders and, with regard to the temples' configuration, in the preference for richly decorated *cellae* and more sober external *façades*. The disposition of the edifices on terraces is a more widespread feature that, from Halikarnassos and Knidos to the great sanctuaries of Kos and Labraunda, seems to characterise the Aegean coasts from the late Classical period onwards.

Contrastingly, the particular simplicity of the architectural forms of the altar of Zeus, which is not in line with the formal language of Greek architecture, can be considered a precise cultural choice. In fact, even in the adoption of a consolidated typological model, the architectural language of the altar can be traced back to a different tradition, which is attested on Rhodes and in Caria. This aspect, which deserves further investigation, reveals another distinct phenomenon, i.e. the existence in Rhodian architecture, together with elements coming from Alexandrian artistic culture, of an ancient Carian substratum⁸⁹, which is more easily perceptible in the rural demes of the interior, where the architecture, far from the great city, has retained its simple and less-sophisticated character.

⁸⁶ See, for example, the Lelegian *tumuli* of Pedasa (Gökçeler Mevki), on the peninsula of Halikarnassos, which date to the Geometric period and were used over a very long time span (DILER 2016, with further bibliography). They have the same simple architecture, visible, for example, in the simplified form of the cornice: here at fig. 41b. See also the temple of Apollo at Loryma, dated to the 3rd century B.C. (HELD 2010, pp. 355-360).

⁸⁷ MAIURI 1916; MAIURI 1928, pp. 83-84; STEPHANAKIS, PATSIADA 2009-2011, particularly pp. 72-74. The edifice has a simple *cella* preceded by an antechamber, a model which finds close parallels in the *oikoi* commonly found in Crete from the Archaic to the Hellenistic period (ROCCO forthcoming 1).

⁸⁸ ROUX 1961 provides a general picture of the Peloponnesian sacred architecture of the late Classical period.

⁸⁹ As previously evidenced in MAIURI 1924 and MAIURI 1928c.

Bibliography

- ADEMBRI 2005 = B. ADEMBRI (edited by), *Acimnistos, Miscellanea di studi per Mauro Cristofani*, I, Firenze 2005.
- ADRIANI 1966 = A. ADRIANI, *Repertorio d'arte dell'Egitto greco-romano*, I-II, Palermo 1966.
- BAIRAMI 2001-2004 = K. BAIRAMI, *Πλατεία Αργυροκάστρου και πλατεία Σύμης (έργα ΕΠΙΟΣ)*, *ADelt* 56-59, 2001-2004, pp. 226-227.
- BAIRAMI 2017 = K. BAIRAMI, *Large scale Rhodian sculpture of Hellenistic and Roman times*, Oxford 2017.
- BALDUCCI 1931 = H. BALDUCCI, *Il Santuario di Nostra Signora di Tutte le Grazie*, Pavia 1931.
- BANKEL 1997 = H. BANKEL, *Der hellenistische Rundtempel und seine Altar. Vorbericht*, *AA* 1997, pp. 51-71.
- BARNETT 2007 = R. BARNETT, *Sacred Groves: Sacrifice and the Order of Nature in Ancient Greek Landscapes*, in *Landscape Journal* 26, 2007, pp. 252-269.
- BERTHOLD 1984 = R.M. BERTHOLD, *Rhodes in the Hellenistic Age*, Ithaca-London 1984.
- BLAKOLMER 2014 = BLAKOLMER F., *Meaningful landscapes: Minoan "landscape rooms" and peak sanctuaries*, in G. TOUCHAIS, R. LAFFINEUR, F. ROUGEMONT (edited by), *PHYSIS. L'environnement naturel et la relation homme-milieu dans le monde égéen protohistorique, Actes de la 14e Rencontre égéenne internationale (Paris 2012)*, *Aegaeum* 37, Leuven-Liège 2014, pp. 121-128.
- BLACKMAN, KNOBLAUCH, GIANNIKOURI 1996 = D. BLACKMAN, P. KNOBLAUCH, A. GIANNIKOURI, *Die Schiffshäuser am Mandrakihafen in Rhodos*, *AA* 1996, pp. 371-426.
- BLACKMAN, RANKOV 2014 = D. BLACKMAN, B. RANKOV (edited by), *Shipheds of the Ancient Mediterranean*, Cambridge 2014.
- BOSNAKIS 2014 = D. BOSNAKIS, *Asklepieion, An archaeological guide*, with contributions by G. Rocco and M. Livadiotti, edited by TAPA, Athens 2014.
- CALIÒ 2001 = L.M. CALIÒ, *Il santuario di Camiro. Analisi delle strutture e ipotesi di ricostruzione della grande stoà dorica*, in *Orizzonti*, II, 2001, pp. 85-107.
- CALIÒ 2004 = L.M. CALIÒ, *Lo hierothyteion e la funzione della stoà di Kamiros*, in *PdP* 59, 2004, pp. 436-459.
- CALIÒ 2005 = L.M. CALIÒ, *Teatri curvaturae similis. Note sull'urbanistica delle città a forma di teatro*, in *ArchCl* LVI, n.s. 6, 49-130, Roma 2005.
- CALIÒ 2008 = L.M. CALIÒ, *Un architetto a Rodi. Amphilochos di Laago*, in *SEBarc* VI, 2008, pp. 59-68.
- CALIÒ 2010 = L.M. CALIÒ, *La koinè architettonica tolemaica in Egeo meridionale*, in DI GIUSEPPE, DALLA RIVA 2010, C / C7 / 2, pp. 4-22.
- CALIÒ 2011 = L.M. CALIÒ, *The Agora of Kamiros. A hypothesis*, in A. GIANNIKOURI (edited by), *The agora in the Mediterranean from Homeric to Roman times, International Conference, Kos, 14-17 April 2011*, Athens 2011, pp. 343-355.
- CANTE 1986-1987 = M. CANTE, *Rodi: l'arco quadrifronte sul decumano massimo*, in *ASAtene* LXIV-LXV, 1986-1987 (1991), pp. 175-266.
- CAVALIER, DES COURTILS 2008 = L. CAVALIER, J. DES COURTILS, *Degrés et gradins en bordure de rue : aménagement pour les Pompai?*, in P. Ballet, N. DIEUDONNÉ-GLAD, C. SALIOU (edited by), *La rue dans l'antiquité. Définition, aménagement, devenir*, Rennes 2008, pp. 83-91.
- CORSO 2004 = A. CORSO, *Il sostrato storico-politico dell'Afrodite Cnidia*, in *ASAtene* LXXXII, serie III.4, t. 1, 2004, pp. 343-364.
- DI GIUSEPPE, DELLA RIVA 2010 = H. DI GIUSEPPE, F. DELLA RIVA (edited by), *Meetings between cultures, XVII AIAC Congress, Rome, September 2008, Bollettino di Archeologia on line* 2010, n.1.I, special issue.
- DILER 2016 = A. DILER, *Stone tumuli in Pedasa on the Lelegian peninsula. Problems of terminology and origin*, in O. HENRY, U. KELP, *Tumulus as Sema: Space, Politics, Culture and Religion in the First Millennium BC*, Berlin 2016, pp. 455-474.
- DI VITA 1955 = A. DI VITA, *Afrodite Pudica da Punta delle Sabbie ed il tipo della Pudica drappeggiata*, in *ArchCl* 7, 1955, pp. 9-23.
- DI VITA 1990 = A. DI VITA, *Camiro. Un esempio di urbanistica scenografica d'età ellenistica*, in *Akten des XIII Internationalen Kongresses für Klassische Archäologie, Berlin 1988, Mainz am Rhein 1990*, pp. 482-483.
- DRELIOSSI-HERAKLEIDOU 1996 = A. DRELIOSSI-HERAKLEIDOU, *Späthellenistische Gebäude in der Nähe der Akropolis von Rhodos*, in HOEPFNER, W., G. BRANDS (edited by), Basilea. *Die Paläste der hellenistischen Könige. Internationales Symposium in Berlin vom 16.12.1992 bis 20.12.1992*, Mainz am Rhein, pp. 182-192.
- DYGGVE 1960 = E. DYGGVE, *Lindos. Fouilles de l'acropole 1902-1914 et 1952, III. Le sanctuaire d'Athana Lindia et l'architecture lindienne*, I, Berlin 1960.

- ECKERT 2016 = M. ECKERT, *Die Aphrodite der Seefahrer und ihre Heiligtümer am Mittelmeer*, Berlin 2016.
- EHRHARDT 2009 = W. EHRHARDT, *Hellenistische Heiligtümer und Riten: Die westlichen Sakralbezirke in Knidos als Fallbeispiel*, in MATTHAEI, ZIMMERMAN 2009, pp. 93-115.
- ELEFTHERIOU *et alii* 2015 = V. ELEFTHERIOU, M. PIKOULA, K. KOUZELI, *Ο ναός της Αινιδίας Αθηνάς*, Αθήνα 2015.
- FANTAOUTSAKI 2007 = CH. FANTAOUTSAKI, *Οδός Αυστραλίας (Εταιρεία Κυπριακή Finance AEBE)*, in *ADelt* 62, 2007, B2, pp. 1325-1332.
- FANTAOUTSAKI 2011 = CH. FANTAOUTSAKI, *Preliminary Report of the Excavation of the Sanctuary of Isis in Ancient Rhodes: Identification, Topography and Finds*, in *Bibliotheca Isiaca* II, 2011, pp. 47-63.
- FILIMONOS 2004 = M. FILIMONOS, *Ρόδος I. Η ελληνιστική οχύρωση της Ρόδου*, Αθήνα 2004.
- FILIMONOS, PATSIADA forthcoming = M. FILIMONOS, V. PATSIADA, *...ούσης τῆς πόλεως θεατροειδούς. Ancient testaments and excavation finds from Rhodes*, in LIVADIOTTI *et alii* forthcoming.
- GIANNIKOURI 2013 = A. GIANNIKOURI (edited by), *Ὀλβιος ἀνερ. Μελέτες στη μνήμη του Γρηγόρη Κωνσταντινόπουλου, Ρόδος IV*, Αθήνα 2013, pp. 79-106.
- GLASER1983 = F. GLASER, *Antike Brunnenbauten (KPHNAI) in Griechenland*, Österreichische Akademie der Wissenschaften. Philosophisch-historische Klasse. Denkschriften 161, Wien 1983.
- GROSSO 1928 = O. GROSSO, *Il Congresso Archeologico di Rodi*, Bollettino Municipale "La Grande Genova" VI, 1928, pp. 3-11.
- HAVELOCK 2007 = C.M. HAVELOCK, *The Aphrodite of Knidos and Her Successors: A Historical Review of the Female Nude in Greek Art*, Chicago 2007.
- HELD 2010 = W. HELD, *Heiligtümer und Kulte in Loryma*, in R. VAN BREMEN, J.-M. CARBON (edited by), *Hellenistic Karia. Proceedings of the First International Conference on Hellenistic Karia, Oxford 2006*, Bordeaux 2010, pp. 355-377.
- HELLSTRÖM 1991 = P. HELLSTRÖM, *The Architectural Layout of the Hekatomnid Labraunda*, in *RA* 1991, 297-308.
- HELLSTRÖM 2007 = P. HELLSTRÖM, *Labraunda, A Guide to the Karian Sanctuary of Zeus Labraundos*, Istanbul 2007.
- HERZOG, SCHAZMANN 1932 = R. HERZOG, P. SCHAZMANN, *Kos I, Das Asklepieion*, Berlin 1932.
- HOEPFNER 1999 = W. HOEPFNER, *Zur Gründung und zur Architektur von Rhodes*, in *Ρόδος 2.400 χρόνια. Η πόλη της Ρόδου από τους Τούρκους (1523)*, Rhodes, October 1993, Athens 1999, pp. 51-58.
- HOEPFNER 2003 = W. HOEPFNER, *Der Kolossos von Rhodes und die Bauten des Helios*, Mainz 2003.
- HOEPFNER, SCHWANDNER 1994 = HOEPFNER W., E.-L. SCHWANDNER, *Haus und Stadt im Klassischen Griechenland*, München 1994.
- IACOPI 1927-28 = G. IACOPI, *Rapporto generale sul servizio archeologico a Rodi dal 1912 al 1927*, in *Clara Rhodos* I, 1928.
- IACOPI 1928 = G. IACOPI, *Esplorazione del santuario di Zeus Atabyrios*, in *Clara Rhodos* I, 1928.
- IACOPI 1931 = G. IACOPI, *I. (Inv. n.ro 13634) Afrodite pudica*, in *Monumenti di scultura del Museo Archeologico di Rodi* II, *Clara Rhodos* V.1, pp. 5-15.
- IACOPI 1932 = G. IACOPI, *Il tempio e il teatro di Apollo Eretimio*, *Clara Rhodos* II, 1932, pp. 77-116.
- IACOPI 1932-1933 = G. IACOPI, *Esplorazione archeologica di Camiro II*, *Clara Rhodos* VI-VII, 1932-1933 (1934).
- INTERDONATO 2013 = E. INTERDONATO, *L'Asklepieion di Kos: archeologia del culto*, Roma 2013.
- ISMAELLI 2011 = T. ISMAELLI, *Una nuova proposta di interpretazione per il Sebasteion di Aphrodisias: attività commerciali e bancarie nel santuario del culto imperiale*, *Mediterraneo antico* 14 2011, pp. 149-202.
- KALPAXIS 1986 = T.E. KALPAXIS, *Hemiteles: akzidentelle Unfertigkeit und "Bossen-Stil" in der griechischen Baukunst*, Mainz am Rhein 1986.
- KANTZIA 1991 = CH. KANTZIA, *Οδός Ιωάννου Θεολόγου (Οικ. Ζαφέρ Γιουσεμόγλου, K.M. 1415, O.T. 120)*, in *ADelt* 46, 1991 (1992), B'2, pp. 486-487.
- KANTZIA 1999 = CH. KANTZIA, *Ενα ασυνήθιστο πολεμικό ανάθημα στο ιερό της οδού Διαγοριδών στη Ρόδο, στο Ρόδος 2400 χρόνια. Η Πόλη της Ρόδου από την ίδρυση της μέχρι την κατάληψη από τους Τούρκους (1523)*, *International Conference, Rhodes 1993*, Athina 1999, pp. 75-82.
- KANTZIA, SKERLOU 1997 = CH. KANTZIA, E. SKERLOU, *Οδός Ιωάννου Θεολόγου (Οικ. Ζαφέρ Γιουσεμόγλου, K.M. 1415, O.T. 120)*, in *ADelt* 47, 1992 (1997), B'2, pp. 649-650.
- KNELL 1988 = H. KNELL, *Architektur der Griechen, Grundzüge*, Darmstadt 1988².

- KOKKOROU-ALEVRA *et alii* 2014 = KOKKOROU-ALEVRA G., POUPAKI E., EUSTATHOPOULOS A., CHATZIKONSTANTINOU A., *Corpus Αρχαίων Λατομείων. Λατομεία του ελληνικού χώρου από τους προϊστορικούς έως τους μεσαιωνικούς χρόνους*, Athens 2014.
- KONDIS 1954 = I. KONDIS, *Συμβολή εις την μελέτην της ρυμοτομίας της αρχαίας Ρόδου*, Ρόδος 1954.
- KONTORINI 1975 = V.N. KONTORINI, *Les Concours des Grands Eréthimia à Rhodes*, in *BCH* 99, 1975, pp. 97-117.
- KOUZELI *et alii* 2004 = KOUZELI K., LAZANI C., DIMOU E., *Fossiliferous limestones used in ancient Greek monuments: the influence of their specific features on their durability*, in *Proceedings of the 10th International congress on Deterioration and Conservation of Stone*, Vol.1, Stockholm 2004, pp. 123-130.
- LAURENZI 1959 = L. LAURENZI, s.v. *Camiro*, in *EAA* 1959, pp. 285-287.
- LAUTER 1972 = H. LAUTER, *Kunst und Landschaft. Ein Beitrag zum rhodischen Hellenismus*, in *AntKunst* 15, 1972, pp. 49-59.
- LAUTER 1986 = H. LAUTER, *L'architettura dell'Ellenismo*, Milano 1986 (Italian edition).
- LEHMANN, LEHMANN 1959 = K. LEHMANN, P.W. LEHMANN, *Samothrace: The Hieron*, New York 1959.
- LEHMANN, SPITTLE 1964 = K. LEHMANN, D. SPITTLE, *Samothrace, 4.2. The altar court*, New York 1964.
- LIPPOLIS 1988-1989 = E. LIPPOLIS, *Il santuario di Athana a Lindo*, in *ASAtene* 66-67, 1988-1989, pp. 97-157.
- LIPPOLIS 2016 = E. LIPPOLIS, *Gli scavi dell'acropoli di Rodi e il culto di Apollo e di Halios*, in *ArchCl* 67, n.s. II, 6, 2016, pp. 111-181.
- LIPPOLIS, LIVADIOTTI, ROCCO 2007 = E. LIPPOLIS, M. LIVADIOTTI, G. ROCCO, *Architettura greca. Storia del mondo della polis dalle origini al V secolo*, Milano 2007.
- LIPPOLIS, ROCCO 2011 = E. LIPPOLIS, G. ROCCO, *Archeologia greca*, Milano 2011.
- LIVADIOTTI 2005 = M. LIVADIOTTI, *Note preliminari sulle tecniche costruttive di Coa in età ellenistica e romana*, in *ADEMBRI* 2005, pp. 178-187.
- LIVADIOTTI 2010 = M. LIVADIOTTI, *Processi di standardizzazione del cantiere ellenistico: il caso di Kos*, in *DI GIUSEPPE, DELLA RIVA* 2010, C / C7 / 3, pp. 23-42.
- LIVADIOTTI forthcoming = M. LIVADIOTTI, *The Tufa Stoa in Kos: a hypothesis on its identification*, in E. PARTIDA (edited by), *Essays in honour of Richard Tomlinson*, forthcoming.
- LIVADIOTTI *et alii* forthcoming = M. LIVADIOTTI, R. BELLI PASQUA, M.L. CALIÒ, G. MARTINES, (edited by), *Theatroecideis. L'immagine della città, la città delle immagini, Atti del Convegno Internazionale, Bari, 15-19 giugno 2016*, forthcoming.
- LIVADIOTTI, ROCCO 1996 = M. LIVADIOTTI, G. ROCCO (edited by), *La presenza italiana nel Dodecaneso tra il 1912 e il 1948, La ricerca archeologica, la conservazione, le scelte progettuali*, Catania 1996.
- LIVADIOTTI, ROCCO 1999 = M. LIVADIOTTI, G. ROCCO, *Il tempio di Athena Polias a Ialiso: un contributo alla conoscenza dell'architettura rodia*, in *Ρόδος 2400 χρόνια. Η Πόλη της Ρόδου από την ίδρυση της μέχρι την κατάληψη από τους Τούρκους (1523)*, *International Conference, Rhodes 1993*, Athina 1999, pp. 109-118.
- LIVADIOTTI, ROCCO 2012 = M. LIVADIOTTI, G. ROCCO, *Il piano regolatore di Kos del 1934: un progetto di città archeologica*, in *Thiasos*, 1, 2012, pp. 3-18.
- LOVE 1972 = I.C. LOVE, *Preliminary Report of the Excavations at Knidos, 1970, 1971*, in *AJA* 76 (1972), pp. 70-75 and 402-405.
- LOVE 1973 = I.C. LOVE, *Preliminary Report of the Excavations at Knidos, 1972*, in *AJA* 77 (1973), pp. 419-424.
- LUNI 1990 = M. LUNI, *Il Ginnasio - "Caesareum" di Cirene nel contesto del rinnovamento urbanistico della media età ellenistica e della prima età imperiale*, in S. STUCCHI (edited by), *Giornata lincea di archeologia cirenaica, Roma, 3 novembre 1987*, Roma 1990, pp. 87-120.
- LYTTELTON 1974 = M. LYTTELTON, *Baroque Architecture in Classical Antiquity*, London 1974.
- MAIURI 1916 = A. MAIURI, *Ricerche archeologiche nell'isola di Rodi*, in *ASAtene* II, 1916, pp. 285-298.
- MAIURI 1920 = A. MAIURI, *Rodi, guida monumenti e del Museo archeologico*, Rodi 1920.
- MAIURI 1923 = A. MAIURI, *Lavori della missione archeologica italiana a Rodi*, in *BdA* III, s. II, 1923, pp. 234-240.
- MAIURI 1924 = A. MAIURI, *Viaggio di esplorazione in Caria II*, in *ASAtene* IV-V, 1924, pp. 425-459.
- MAIURI 1928a = A. MAIURI, *Rapporto generale sul servizio archeologico a Rodi dal 1912 al 1927*, in *Clara Rhodos* I, 1928.
- MAIURI 1928b = A. MAIURI, *Topografia monumentale di Rodi*, in *Clara Rhodos* I, 1928, pp. 44-55.
- MAIURI 1928c = A. MAIURI, *Monumenti Lelego-Cari*, in *Clara Rhodos* I, 1928, pp. 123-126.

- MAIURI 1928d = A. MAIURI, *Jaliso, la fontana monumentale*, in *Clara Rhodos I*, pp. 79-82.
- MATTHAEI, ZIMMERMANN 2008 = A. MATTHAEI, M. ZIMMERMANN (edited by), *Stadtbilder im Hellenismus, Die hellenistische Polis als Lebensform 1*, Berlin 2009.
- McKENZIE 2007 = J. McKENZIE, *The architecture of Alexandria and Egypt, c. 300 B.C. to A.D. 700*, New Haven and London 2007.
- MICHALAKI-KOLLIA 2013 = M. MICHALAKI-KOLLIA, *H ανάδειξη της ροδιακής ακρόπολης. Ένα μεγάλο αρχαιολογικό πάρκο της πόλης*, in GIANNIKOURI 2013, pp. 79-106.
- MIGEOTTE 2009² = L. MIGEOTTE, *The Economy of the Greek Cities: From the Archaic Period to the Early Roman Empire*, Berkeley-Los Angeles 2009².
- NEUMANN 2012 = S. NEUMANN, *Die rätselhaften Grotten auf der Akropolis*, in *Antike Welt* 43, 2012, pp. 73-83.
- NIELSEN 1999 = I. NIELSEN, *Hellenistic Palaces*, Aarhus 1999.
- OHNESORG 2005 = A. OHNESORG, *Ionische Altäre: Formen und Varianten einer Architekturgattung aus Insel- und Ostionien*, Archäologische Forschungen 21, Berlin 2005.
- ORTAÇ 2002 = M. ORTAÇ, *Zur Veränderung der kleinasiatischen Propyla in der frühen Kaiserzeit in Bauform und Bedeutung*, in C. BERNIS, H. VON HESBERG, L. VANDEPUT, M. WAELEKENS (edited by), *Patris und Imperium. Kulturelle und politische Identität in den Städten in den römischen Provinzen Kleinasien in der frühen Kaiserzeit. Kolloquium Köln 1998*, BABesh Suppl. 8, Leuven 2002, pp. 175-185.
- PAKKANEN 1998 = J. PAKKANEN, *The Column Shafts of the Propylaia and Stoa in the Sanctuary of Athena at Lindos*, in S. DIETZ, S. ISAGER (edited by), *Proceedings of the Danish Institute at Athens 2*, 1998, pp. 147-159.
- PAPACHRISTODOULOU 1988 = I. PAPACHRISTODOULOU, *Das hellenistische Gymnasion von Rhodos. Neues zu seiner Bibliothek*, in *Akten des XIII. Internationalen Kongresses für klassischen Archäologie, Berlin 1988*, Mainz am Rhein 1988, pp. 500-501.
- PARKER 2002 = R. PARKER, *The cult of Aphrodite Pandamos and Pontia on Kos*, in H.S. VERSNEL, H.F.J. HORSTMANSHOFF (edited by), *Kykeon, Studies in Honor of H.S. Versnel*, Leiden 2002, pp. 143-160.
- PATSIADA 2013a = V. PATSIADA, *Η αρχιτεκτονική του τοπίου στην πόλη της Ρόδου*, in GIANNIKOURI 2013, pp. 47-77.
- PATSIADA 2013b = V. PATSIADA, *Ρόδος III. Μνημειώδες ταφικό συγκρότημα στη νεκρόπολη της Ρόδου. Συμβολή στη μελέτη της ελληνιστικής ταφικής αρχιτεκτονικής*, Πόδος - Αθήνα 2013.
- PEDERSEN forthcoming = P. PEDERSEN, *Ancient Kalikarnassos. Theatri curvaturae similis - and theatroeideis*, in LIVADIOTTI *et alii* forthcoming.
- PENSABENE 1993 = P. PENSABENE, *Elementi architettonici di Alessandria e di altri siti egiziani*, in *Repertorio d'arte dell'Egitto greco-romano*, III, Roma 1993.
- RICE 1995 = E.E. RICE, *Grottoes on the acropolis of Hellenistic Rhodes*, in *BSA* 90, 1995, pp. 383-404.
- ROCCO 2003 = G. ROCCO, *Guida alla lettura degli ordini architettonici antichi*, II. *Lo ionico*, Napoli 2003.
- ROCCO 2004 = G. ROCCO, *Coo: il complesso sacro a est dei 'quartieri del porto'*, in *Χάρης χαίρε. Μελέτες στη μνήμη της Χάρης Κάντζια*, Υπουργείο Πολιτισμού, Αρχαιολογικό Ινστιτούτο Αιγαϊακών Σπουδών, Athenai 2004, I, pp. 175-194.
- ROCCO 2005 = G. ROCCO, *Alcune osservazioni sulla definizione e diffusione della variante peloponnesiaca dell'ordine dorico*, in ADEMBRI 2005, pp. 140-149.
- ROCCO 2009 = G. ROCCO, *Note sul santuario di Afrodite Pandamos e Pontia a Kos*, in *ASAtene*, 87, s. III, 9, t. I, pp. 571-584.
- ROCCO 2017 = G. ROCCO, *Il santuario di Asklepios a Kos: una rilettura funzionale delle strutture*, in C. MASSERIA (edited by), *Dialogando. Scritti in onore di Mario Torelli*, Pisa 2017, pp. 333-348.
- ROCCO forthcoming 1 = G. ROCCO, *Il tempio A. La tipologia architettonica*, in E. LIPPOLIS (edited by), *Gortina, l'isolato del ninfeo. Contributi per la storia e la topografia della città antica (campagne di scavo 2003-2008)*, forthcoming.
- ROCCO forthcoming 2 = G. ROCCO, *La Stoa Orientale del Porto*, in P. TRIANTAPHLLIDIS (edited by), *Τὸ Αρχαιολογικὸ Ἔργο στα νησιά του Αιγαίου, 1^ο Διεθνές Επιστημονικό Συνέδριο* (Ρόδος, 27 Νοεμβρίου - 1 Δεκεμβρίου 2013), forthcoming.
- ROCCO forthcoming 3 = G. ROCCO, *La stoa come elemento generatore di spazi urbani scenografici nella città tardoclassica ed ellenistica*, in LIVADIOTTI *et alii* forthcoming.
- ROCCO, CALIÒ 2016 = G. ROCCO, L.M. CALIÒ, *La ricostruzione di un paesaggio architettonico e religioso di età ellenistica: i santuari del porto di Kos*, in A. RUSSO, F. GUARNERI (edited by), *Santuari mediterranei tra oriente e occidente. Interazioni e contatti culturali* (Atti Convegno Internazionale, Civitavecchia-Roma, 18-22 giugno 2014), Roma 2016, pp. 471-484.

- ROSS 1840-1845 = L. ROSS, *Reisen auf den griechischen Inseln des aegaischen Meeres*, Stuttgart-Tübingen 1840-1845.
- ROUX 1961 = G. ROUX, *L'architecture de l'Argolide aux IV^e et III^e siècles avant J.-C.*, Paris 1961.
- SCHWANDNER 1990 = SCHWANDNER E.L., *Beobachtungen zur hellenistischen Tempelarchitektur von Pergamon*, in W. HOEPFNER, E.L. SCHWANDNER (edited by), *Hermogenes und die hochhellenistische Architektur, Internationales Kolloquium, Berlin 28- 29 Juli 1988*, Mainz 1990., pp. 85-102.
- SCULLY 1962 = V. SCULLY, *The Earth, the Temple, and the Gods: Greek Sacred Architecture*, 1962 (revised edition San Antonio 2013).
- SETTIS 1973 = S. SETTIS, *Esedra e ninfeo nella terminologia architettonica del mondo romano. Dall'età repubblicana alla tarda antichità*, in *ANRW* 1.4, 1973, pp. 661-745.
- SHERWIN WHITE 1978 = S.M. SHERWIN WHITE, *Ancient Cos. An historical study from the Dorian settlement to the Imperial period*, Göttingen 1978.
- SMITH 1987 = R.R.R. SMITH, *The Imperial Reliefs from the Sebasteion at Aphrodisias*, in *JRS* 77, 1987, pp. 88-138.
- STAMPOLIDIS 1987 = N. CHR. STAMPOLIDIS, *Ο βομώς του Διονύσου στην Κω*, Athinai 1987.
- STAMPOLIDIS 1991 = N. CHR. STAMPOLIDIS, *Νεότερα από το βομώ του Διονύσου στην Κω*, in *ADelt* 40, 1985 (1991), A', pp. 133-147.
- STEPHANAKIS, PATSIADA 2009-2011 = M.I. STEPHANAKIS, V. PATSIADA, *Η αρχαιολογική έρευνα στον αρχαίο δήμο των Κυμισαλέων (Πόδος) κατά τα έτη 2006-2010: μια πρώτη παρουσίαση*, in *Eulimene* 2009-2011, pp. 63-134.
- Tituli Camirenses* = M. SEGRE, G. PUGLIESE CARRATELLI, *Tituli Camirenses*, in *ASAtene* XXVII-XIX, 1949-51, pp. 141-318.
- TRIANAPHYLLIDIS forthcoming = P. TRIANAPHYLLIDIS, *Η αρχαιολογική έρευνα στο παρροδιακό ιερό του Αταβυρίου Διός*, in P. TRIANAPHYLLIDIS (edited by), *The Archaeological Work in the Aegean Islands* (Proceedings of the Conference, Rhodes 2013), forthcoming.
- TRIANAPHYLLIDIS, SARANTIDIS 2015 = P. TRIANAPHYLLIDIS, K. SARANTIDIS, *Το έργο της διαμόρφωσης και ανάδειξης του ιερού του Ερεθιμίου Απόλλωνος στον θεολόγο Ρόδου*, in P. TRIANAPHYLLIDIS (edited by), *Ερεθίμια. Διαμόρφωση και ανάδειξη του Ιερού του Ερεθιμίου Απόλλωνος στον Θεολόγο Ρόδου*, Athens 2015, pp. 11-28.
- TRIANAPHYLLIDIS, LIVADIOTTI, ROCCO forthcoming = P. TRIANAPHYLLIDIS, M. LIVADIOTTI, G. ROCCO, *Il santuario di Zeus sul monte Atabyros a Rodi: note preliminari*, in E. LIPPOLIS, V. PARISI (edited by), *Il sacrificio. Forme rituali, linguaggi e strutture sociali* (Atti del Convegno, Roma 2015), forthcoming.
- WINTER 2006 = F.E. WINTER, *Studies in Hellenistic Architecture*, Toronto 2006.

