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Edited by *Erik Hallager and Jesper Tae Jensen*



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Cover illustration: Submerged structures from shipsheds in the Zea harbour, Piraeus.

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Archaeological field work in ancient Kalydon

2001-2004

First preliminary report

Søren Dietz, Lazaros Kolonas, Ioannis Moschos, and Maria Stavropoulou-Gatsi

Acknowledgements

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Fig. 1. A view towards south from the acropolis of Kalydon.

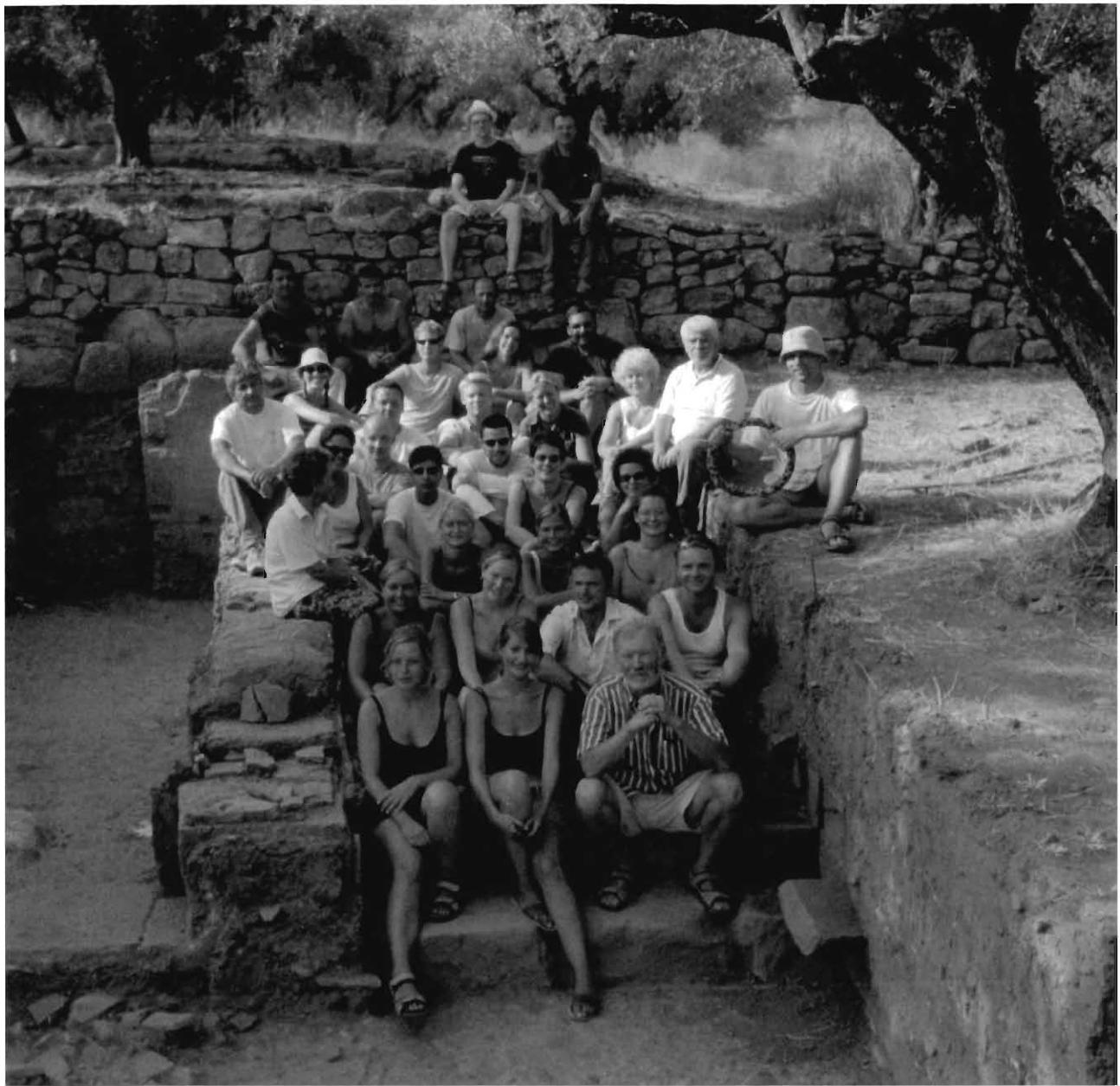


Fig. 2. Some of the participants in the field work in Kalydon, the campaign 2003 placed on the stair case on the north side of the building with the shrine.

The following persons have participated in the field work in Kalydon (Fig. 2):

Søren Dietz, director

Ioannis Moschos & Maria Stavopoulou-Gatzi
representatives of the Greek part

Elizabeth Bollen, pottery

Jonas Eiring, pottery

Mette Schaldemose, pottery

Camilla Normann, pottery

Claus Grønne, tiles

Charalambos Marinopoulos, surveyor

Constanza Marinopoulos, surveyor

Anne Hooton, architect

Mette Mouritzen, architect

Irini Gkion, drawing of objects

Ann Thomas, drawing of objects

Henrik Frost, photographer
Angelique Sideris, photographer
Ingrid Sofianou, photographer
Eleni Ioannou, conservator
Leonidas Paulatos, conservator
Sas Hemmi, conservator
Mikkel Mayerhofer, IT-responsible
Tatjana Smekalova and Sergej Smekalov, geo-magnetic surveys
Kaj Strand Petersen, geologist
Vagn Buchwald, metallurgy
Pernille Bangsgaard, animal bones
Jørgen Mejer and Steven Tracey, epigraphy
Maria Logodoti, field archaeologist
Pernille Andersen, trench master
Rune Frederiksen, trench master
Mads Møller Nielsen, trench master
Emma Ljung, trench master
Constantinos Methenitis, responsible for the survey and trench master
Spiros Pittas, technician

Yiannis Tiropanis, technician
Apostolis Zarkadoulas, technician

Students:
Agnete Lassen
Anja Czepluch
Anne Sofie Hjermov
Ben Streat
Camilla Sondrup
Christos Kolonas
Elin Vanting
Fredrik Olson
Karen Christensen
Konstantin Kitsais
Kristian Minck
Nikolaj Wendt
Niels Ladefoged Rasmussen
Rikke Lund Pedersen
Sasha Mauel
Svend Warburg

Preface

The Danish-Greek excavations in ancient Kalydon were carried out during a series of campaigns in 1926, 1928, 1932, and 1935 with a smaller campaign in 1938. The field work concentrating on the sanctuary of Artemis Lauria and the so-called Heroon (the Leonteion), both situated outside the city wall itself, was conducted by Frederik Poulsen, Konstantinos Rhomaios, and (from 1932) by Ejnar Dyggve. The architectural remains were partly and admirably published by Ejnar Dyggve and Konstantinos Rhomaios.¹

Due to the outbreak of the 2nd World War and Poulsen's death in 1950, quite an amount of material from the old excavations remain unpublished, first of all, the minor objects from the excavation including the majority of the votives dedicated to Artemis Lauria. As for the Artemis Lauria temple itself, Dyggve and Rhomaios concentrated on the

remains from the Archaic and Classical periods. A smaller number of architectural terracottas were left from the later periods, the 3rd and 2nd century BC. Some of them were lost or destroyed by the local inhabitants between 1935 and 1938.² On the other hand, almost all the building elements from the Heroon were carefully dealt with by Dyggve in his 1934 publication. During the recent campaign in 2001 some cleaning was carried out both in the Heroon and on the stoa on the temple terrace in order to detect the state of preservation (Fig. 3).

The city itself, which is the main topic of the ongoing studies, was not largely studied by the

¹ Poulsen & Rhomaios 1927; Dyggve, Poulsen & Rhomaios 1934; Dyggve 1948; Rhomaios 1951.

² Dyggve 1948, 195.



Fig. 3. During the first campaign in 2001 minor cleaning was performed in the area of the sanctuary and in the Heroon in order to control the state of preservation. As shown the cult room in the Heroon is still rather well preserved.

expedition – with a few exceptions,³ and the plan depicted in Dyggve, Poulsen, and Rhomaios 1934 includes only the western part of the city wall.⁴ In addition, a small excavation had been carried out by Sotiriadis on the acropolis in the beginning of the 20th century.⁵ The excavator reported the existence of Mycenaean wall constructions and Mycenaean pottery. Finally during the Danish-Greek field work in the 1920s and 1930s one further minor excavation was carried out on the acropolis in order to trace Mycenaean remains. Instead of Mycenaean, however, walls from Hellenistic times with plaster and rich wall paintings came to light.⁶

The recent field project – 2001 onwards⁷

The overall aim of the ongoing research in ancient Kalydon was to get an impression of the city in its

setting – road systems, harbour facilities, ancient shore lines, an estimation of the territory, city plan, fortification systems, entrances, sacred and profane architecture, patterns of production (pottery, tiles, glass, metals etc.) and subsistence. In order to obtain the optimal results within the frames of this ambitious spectrum of objectives, the following activities have been undertaken:

1. Measurements and registration of the city wall and all architectural remains visible on the surface inside the fortification walls and in the immediate

³ Dyggve, Poulsen & Rhomaios 1934, 11-21.

⁴ Dyggve, Poulsen & Rhomaios 1934, pl. 6. Ferdinand Noack's entire plan, which has been available for the excavators in copies was evidently never published.

⁵ Sotiriadis 1908, 99.

⁶ Dyggve, Poulsen & Rhomaios 1934, 8.

⁷ As for previously published reports on the recent field work in ancient Kalydon, see Dietz & Moschos 2003; Dietz 2005.



Fig. 4. View of the Central part of the city, seen from the south. Parts of the wall surrounding the lower acropolis is seen to the right of the cypresses.

surroundings were carried out by a surveyor with a small team.

2. Traditional surveys were conducted inside the walls. The teams collected diagnostic materials; counted various categories found on the surface and completed a preliminary description of visible architectural remains.

3. Geomagnetic surveys were performed every year.

4. A geological research programme was carried out in the catchment area.

5. Selected excavations were undertaken.

Architectural remains, surveys and geomagnetic field work

Measurements of architectural remains visible on the surface were carried out during all four campaigns, 2001 to 2004. In addition the surveyor was responsible for the general system of measurements

– in order to secure all activities to be included in the same general plan.

Already during the old excavations outside the town it was observed that “rocky Kalydon” of Homer was situated on a mountainous outskirt of the Arakynthos chain and that the habitation should necessarily have been constructed on slopes – there are practically no level surfaces in the town (Fig. 4). In order to stabilize the settlement quite an amount of terrace walls were placed on the slopes and quite a few of them are still visible, especially in the western part of the city – the section we have baptised the “Lower Town”. Usually the old terrace walls are covered by modern additions constructed by rough field stones, some of them built as late as after the 2nd World War in order to stabilize the olive plantations laid out after the 1930s. On the plan (Fig. 5) the terrace walls in the Lower City are seen clearly. The acropolis site on the northern hill, 167 metres above sea level, consists of three parts: – the

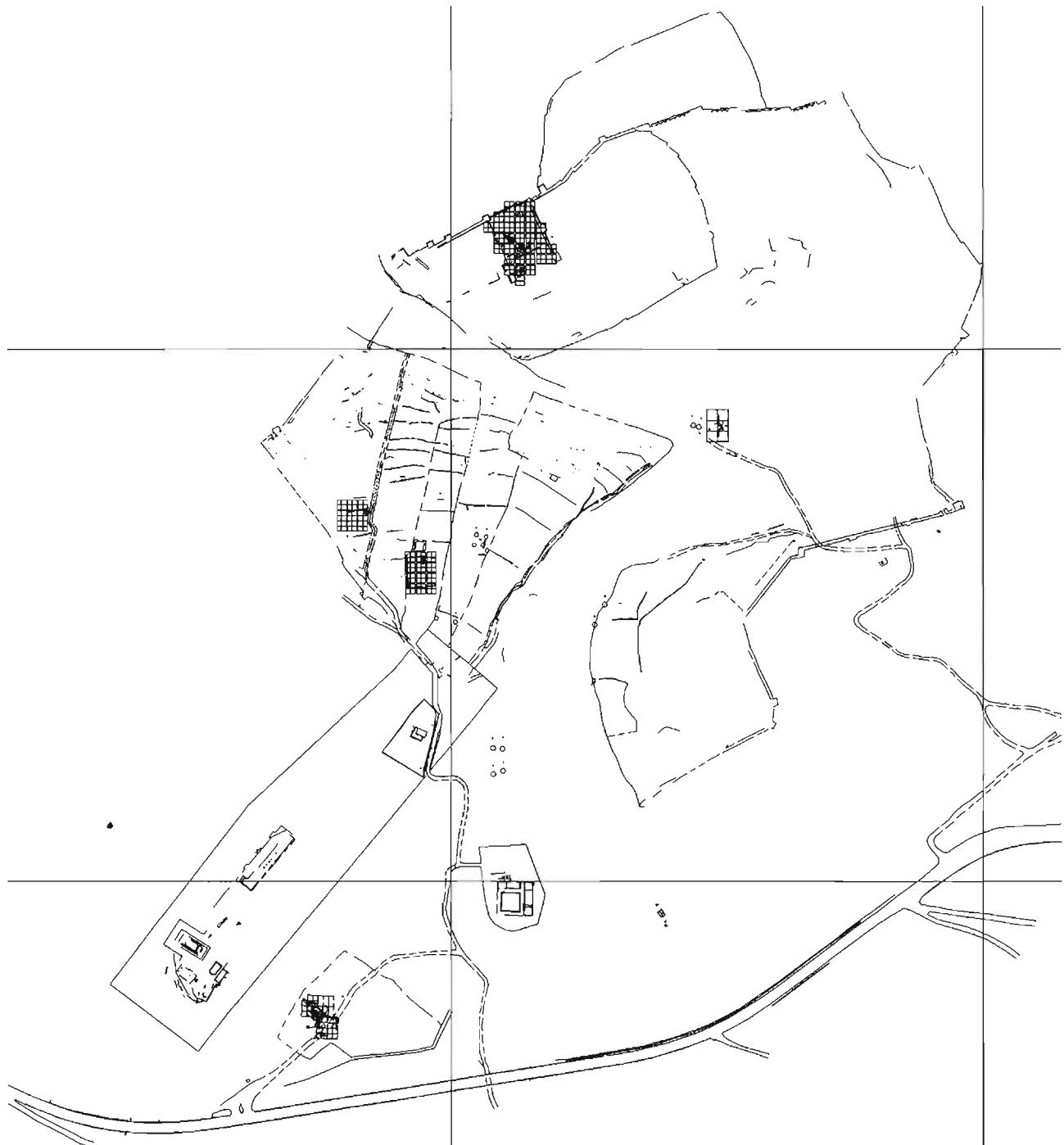


Fig. 5. Map showing the city wall and the architectural remains visible on the surface. The sanctuary of Artemis Lauria is seen in the lower left part of the plan (measured by Charalambos Marinopoulos).

upper central part is a rectangular terrace surrounded by considerable walls – the terrace towards west is somewhat larger and lower and seems to be slightly less fortified – while the lower acropolis to the south and east of the two mentioned terraces, is

much larger and slopes downwards. The last section has been interpreted as the refuge stronghold of the city surrounded by a substantial pseudo-isodomical wall still preserved to considerable heights in many places (Fig. 4).

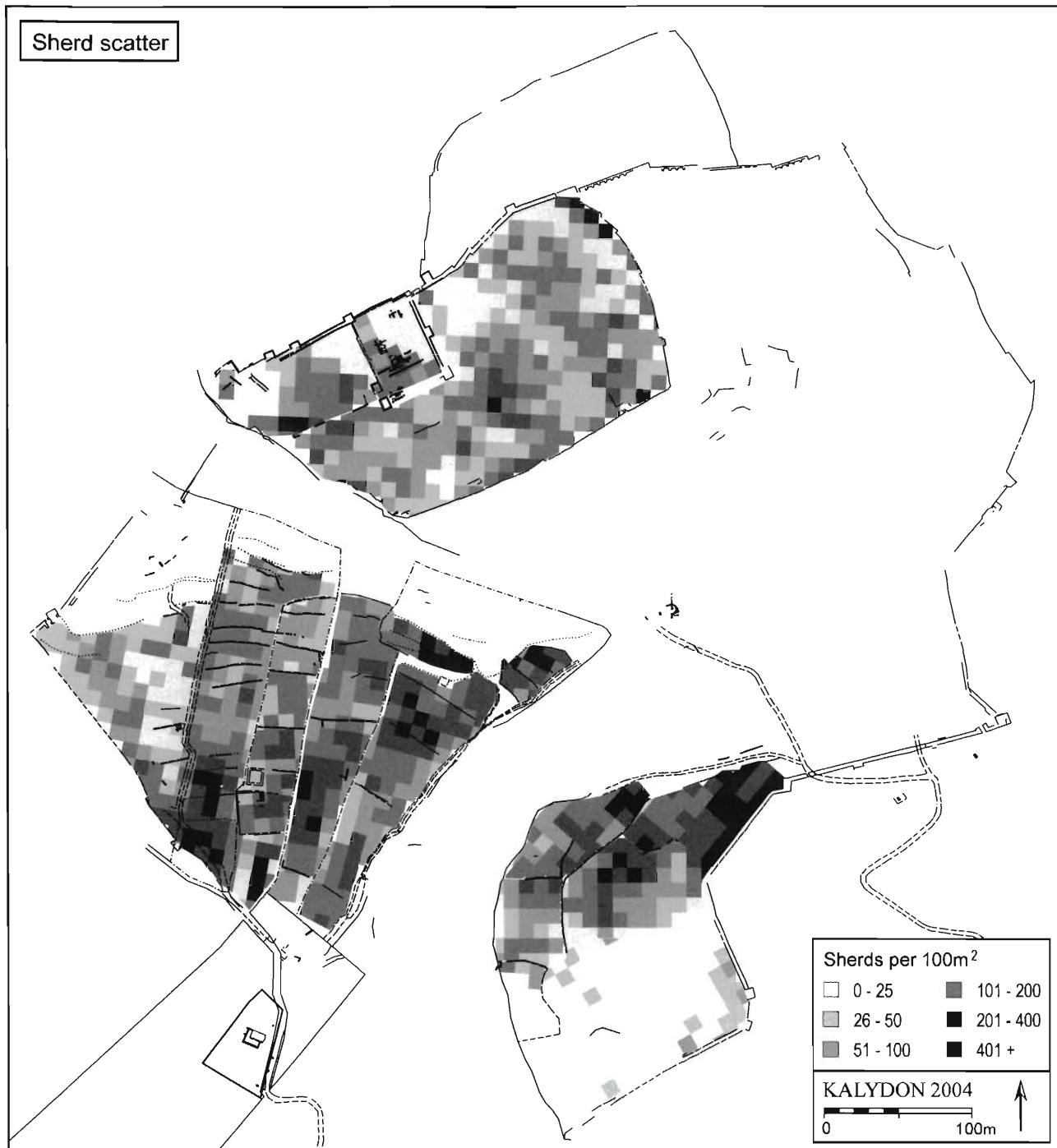


Fig. 6 Sherd scatter from surveys inside the walls of Kalydon, produced by Constantinos Methenitis.

Of the four substantial entrances observed in the curtain running up and down the hills, two were measured by Dyggve.⁸ The South-West Gate joining the town with the sanctuary of Artemis Lauria was considered to be the main gate by Dyggve, Poulsen, and Rhomaios. This “Haupttor” of

Dyggve, badly preserved and not excavated in details, was of the type “defenses of frontal openings” with two towers (approximately 6.90 × 5.90

⁸ Dyggve, Poulsen & Rhomaios 1934, 16, pl. 12.

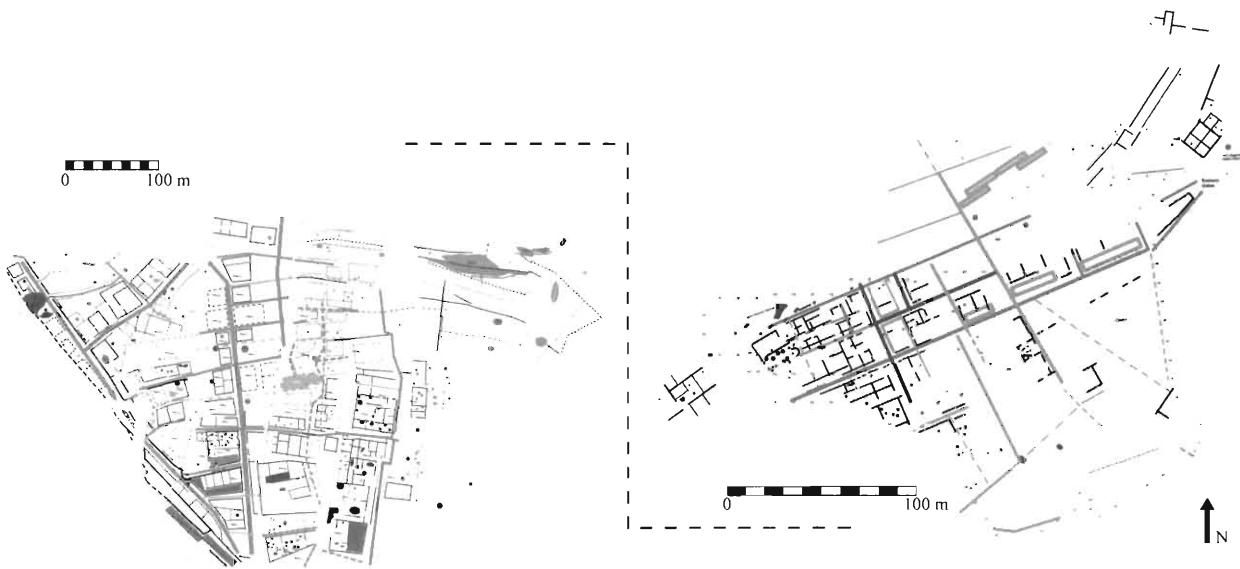


Fig. 7. Results of the geomagnetic surveys, interpretation map of the Lower and the Central part of the city. Lower town to the left. The South-West Gate is just outside the plan towards south, plan by Tatyana Smekalova.

m) on both side of the 6.90 m wide entrance. A division by ashlar might suggest that a gateway measuring approximately 6.40 m led inwards to another of 5.60 m.⁹ The North-West Gate with one broad tower was evidently smaller and of less importance. Another frontal and rather simple gateway is found near the easternmost angle of the curtain near a square tower, while the final gateway is situated further north. This East Gate is of the type with lateral openings and one large tower.¹⁰ Between 12 and 15 towers, especially well defined and placed with narrow intervals on the north-west side of the acropolis, were identified. We are inclined to agree with Woodhouse that the fortification system of Kalydon is not very impressive and must derive from an earlier age than for instance the more complicated system of defence in nearby New Pleuron.¹¹ We have good reasons to believe that the general plan of curtains and gates of Kalydon derives from around 400 BC or slightly after.

Intensive surveys have been carried out in parts of the town inside the walls, in the Lower Town, on the acropolis, and on the southern hill, slightly more than 120 metres above sea level. Sherds, tiles, and several other objects were found abundantly in

the surveyed areas, except in the southern section of the south hill where neither buildings nor surface material was attested (Fig. 6). This area might have been used for grazing inside the town?

Geomagnetic surveys were carried out during all four campaigns from 2001 to 2004. The conditions are most favourable for the implementation of this kind of research, partly because the subsurface is sandstone, partly because the roads were usually packed with tiles and pot sherds. Some obstacles are created by the hilly terrain and the scrubs in larger areas of the site. A preliminary interpretation of the results will be suggested below.

In the Lower Town, surveyed in 2001 and 2002, the streets run diagonally from the South-West Gate towards the acropolis and perpendicular to the terrace walls. One street, approximately 200 metres long, joins the South-West Gate and the North-West Gate. It runs between the fortifi-

⁹ Lawrence 1979, 259, n. 9.

¹⁰ Lawrence 1979, 332. This East Gate is going to be measured in 2005.

¹¹ Woodhouse 1897, 199.



Fig. 8. General map of the geomagnetic surveys, plan by Tatyana Smekalova.

cation wall and a smaller wall placed inside this wall. Other streets follow the orientation of the terrace walls and are usually situated near the edge where the terrace is supported by the stone wall. Along the main street, on the right side coming from the South-West Gate and very close to the gate a large square building approximately 30×25 metres has been partly excavated (in the lower section of the plan (Fig. 7), see also below) and further towards north-west a pottery kiln in the corner of a substantial building has been totally excavated and studied (see below). From the surveys it is suggested that at least two metal workshops, four pottery kilns and some wells were situated in the Lower Town. One large building along the eastern street, measuring around 21×22 metres was interpreted as an important metal workshop or a mint. It should be noted that quite an amount of

“blanks” were found in the area in the 1960s – the exact position, however, was not recorded.

From these preliminary results we have suggested that the Lower Town inside the South-West Gate was an industrial quarter – but as should be mentioned below, the excavation of a large public building with attested cult activities, but without traces of industrial activities, indicates that there is more to be analyzed about this area of the town. The presence of industrial activities was supported by the results of the conventional survey in the area.

In 2003 and 2004 the geomagnetic examinations of ancient Kalydon passed on to the central and eastern parts of the city. From the plans (Figs. 7–8) it appears that the streets join in more or less right angles, in a grid system, which deviates considerably from the one found in the Lower Town.

We have interpreted this area with a Hippodamian street plan to be part of the habitation quarter of ancient Kalydon. One long street measuring around 240 metres is seen in the centre of the plan, running west south-west to east north-east from the western end of the section to the eastern fortification wall, terminating near the East Gate. The last 40 metres turn in a more northerly direction and follow the wall until the gate. Traces of rectangular buildings are found between the parallel streets and the cross streets running up the slope towards the acropolis, probably provided with stair cases. The magnetic signals, at any rate, were by far as strong as on the parallel streets based on tile and pottery fillings. Streets ran also along the inside of the fortification walls.

In the eastern part framed by the long main street, the fortification wall and the central perpendicular street the existence of a “plateia” has been suggested. It measures some 5000 square metres and is possibly the commercial agora of the town. It is situated on an artificially (?) levelled, lower lying surface close to the East Gate. The western limitation is made up by a well-built wall defining a terrace where substantial buildings (including a bath?) were erected. Along the northern border two heavy, long rectangular stone buildings are shown on the plan, the one measure approximately 30×7 metres. They are considered to be stoas. A very large building is seen to the north and just above the East Gate, which continues in a flat, level plateau outside the wall and further to the Evinos river and the harbour in Kryoneri (see below) and last but not least to the fertile areas along the river bed where the majority of the city’s *chora* should be found.

The main part of the acropolis area was searched by geomagnetically surveyed. The central plateau showed to be especially closely covered with building walls placed in the same directions. In the area of the refuge stronghold below the upper acropolis habitation is placed on terraces defined by retaining walls facing south-east. We should finally like to mention that geomagnetic surveys outside the fortification walls gave rise to a definition of the cemeteries around the town and revealed two substantial kilns (tile-?) between the

city wall and the Heroon. The quantity of miss-fired tiles mentioned by Dyggve as making up part of the foundation for the Heroon, might derive from this area.¹²

Finally we should like to mention that a geological survey has been performed by Dr. Kaj Strand Petersen during all four campaigns. The main subject has been to estimate the position of the shore line and thus the character of the landscape between the ancient city of Kalydon and the coast and the probable position of the ancient harbour. Drillings have been undertaken in several spots showing that no marine deposits are found in the area inside the present shore line. Today the delta of the Evinos river is to a great extent cultivated, but in Antiquity it was occupied by water-filled lagoons; the present state derives from extensive embankment works carried out in the 1920-30s by Dutch specialists. Based on the geological results it is possible to say that the shore line in Antiquity has to be found further out (more than 100 metres) in the gulf and that the only possibility for a harbour, as already suggested by Rhomaios,¹³ was to be found in Kryoneri where the mount of Varassova joins the sea. The results are supported by AMS dates of shell materials.

Excavations in the theatre on the south slope of the Artemis Lauria sanctuary

In connection with the construction work of the national road in the 1960s a substantial structure built by large rectangular ashlar was uncovered and partly destroyed by the bulldozers. A succeeding rescue excavation was undertaken by the 6th Ephoria in Patras and briefly published by E.I. Mastrokostas in 1967 (*ArchDelt* 22, Chron. B' 2, 320 (no. 11), pl. 229). The part of the structure uncovered by the ephoria showed a series of superposed seats joining at right angles climbing the slope towards the Artemis sanctuary. The

¹² Dyggve, Poulsen & Rhomaios 1934, 23-5.

¹³ Dyggve, Poulsen & Rhomaios 1934, 11.

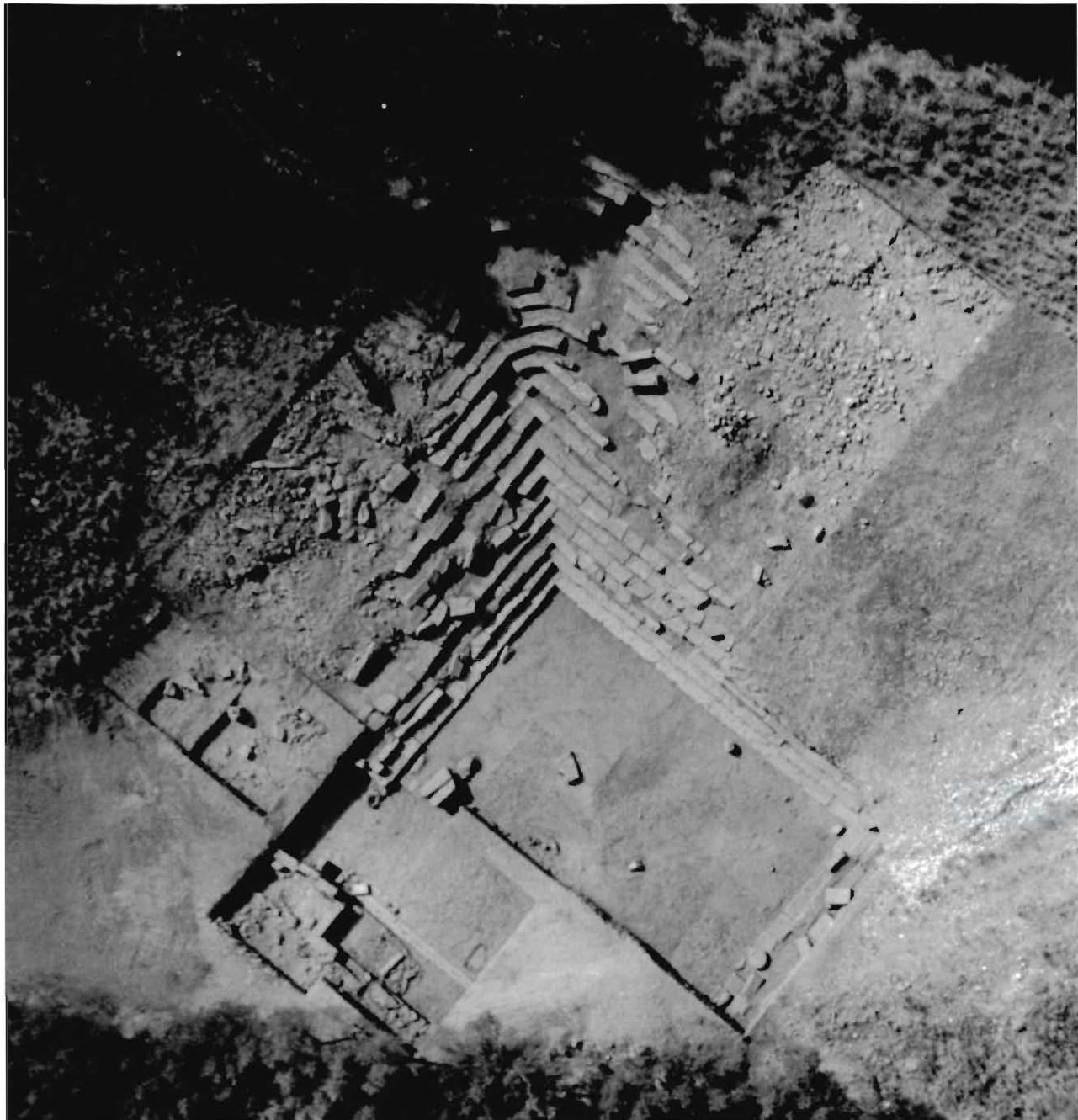


Fig. 9. Aerial photo of the theatre, photo by Petros Konstantopoulos, 2003.

shape gave rise to the interpretation of the structure as a bouleuterion.

In order to obtain a better understanding of the monument – which was not known to the previous excavators – excavations started in the summer of 2001 and continued during the succeeding campaigns until 2003. The results of the work are seen on the aerial photo (Fig. 9).

During the first season in 2001 the area was cleaned and research initiated in the lower part, at the “orchestra” and upwards where remaining seats were laid bare, indicating that the total number of seats exceeded to 26. In addition geomagnetic surveys were conducted in the area between the “bouleuterion” and the Artemis Lauria sanctuary on top of the mound indicating that no struc-



Fig. 10. A view of the parodos during excavation. Stone basin and terracotta figurine.

tures had existed on the slope in Antiquity. This result was confirmed by the fact that only very few sherds and other ancient remains were found on the surface.

The 2002 campaign showed that a square orchestra probably existed measuring approximately 16 metre in width and with a parodos situated at the western termination of the lower row of seats. In addition to a considerable amount of Laconian tiles a circular limestone basin and a partly preserved rather large female Hellenistic terracotta figurine were found in the entrance (Fig. 10). While the stone basin and the terracotta figurine were still *in situ* thus giving the first indication of a dating, the tiles probably came from constructions higher up the slope.

In spite of the fact that at the end of the 2003 campaign the monument was only partly excavated some general conclusions might be indicated. 26 rows of seats constructed by large rectangular ashlar were observed in one area of the auditorium. Even if the monument might thus originally have been of considerable size it should be emphasized that the seats in other parts of the construction are badly preserved - if the whole construction was ever finished? Even if there are good reasons to believe that to a large extent the ashlar have been removed and reused by local contractors during the years it is important to be aware that the excavation only sporadically reached the bed rock

where additional information concerning the construction of the koilon might have survived.

Already before the excavation started it was obvious that at least two phases were present in the construction of the auditorium; thus the lower nine rows, which join in right angles seem to belong to an earlier phase while the remaining upper seats where the corners between the rows of stones are rounded must be a later addition. No tiles were found in this area and there are only few traces preserved which point to the existence of an original lighter roof cover.

During the 2003 campaign a larger part of a construction which is clearly a scene building with a proscenion was unearthed. The scene itself, which is only slightly excavated, consists of an angular ashlar construction including the southern wall of the parodos. In front of the scene rectangular grooves and moulded strips on the low limestone indicated the presence of doorways on the proscenion (Fig. 11). A drain carrying the rain water to a square stone basin is placed in front of the plinth. Ionic columns produced in poros covered with stucco were placed on top of the square grooves. In one instance the stucco was still partly preserved (Fig. 12). Ionic capitals in a bad condition found in the fill undoubtedly derive from the columns on the proscenion. Further and better preserved capitals were found by Mr. Mastrokostas and are now kept in the Museum of Agrinio.¹⁴

If the theatre was symmetrically constructed it is reasonable to suggest that approximately the one half has been excavated. As six columns are found in this part 12 ionic columns should thus originally have been positioned on the proscenion. Even if only little material is found dating the scene construction it is quite safe to say that this part of the monument derives from the Hellenistic period and probably contemporary with the second phase of the auditorium. At that time the construction was evidently a theatre with a square orchestra measuring 16×14 metres. It has been suggested that the southern wall in the parodos was part of an older

¹⁴ The entrance in the protocol says "from the ancient theatre in Kalydon".



Fig. 11. The proscenion and the basin, photo by Henrik Frost.

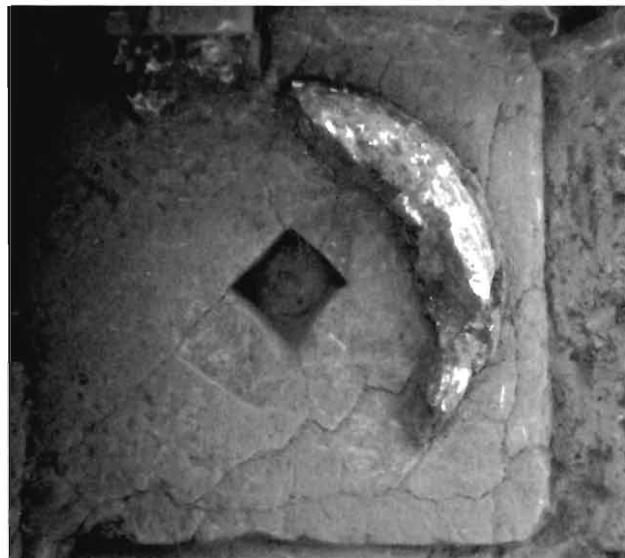


Fig. 12. Preserved stucco from one of the Ionic columns in the proscenion.

building phase probably from the Classical period, or as early as the 5th century BC. If so – this might give an indication of the dating of the earlier phase in the auditorium, even if a safe dating must await further excavations in the area itself.¹⁵

¹⁵ Parts of the theatre have been measured by architect Mette Mouritzen. In 2003 Dr. Rune Frederiksen served as a field director and contributed with many important observations. More recently Jesper Jensen, Assistant Director of the Danish Institute at Athens and Architect Dr. Michaelis Lefantzis have studied the remains and produced important theories concerning the original use of the “theatre” indicating that the early phase of the building was not a theatre at all but some sort of a less pretentious (?) cult area. We are greatly indebted to Dr. Michaelis Lefantzis for the information that the southern wall of the parodos is probably part of a 5th century construction. For a more recent treatment of the “square” type of theatre, see Junker 2004.

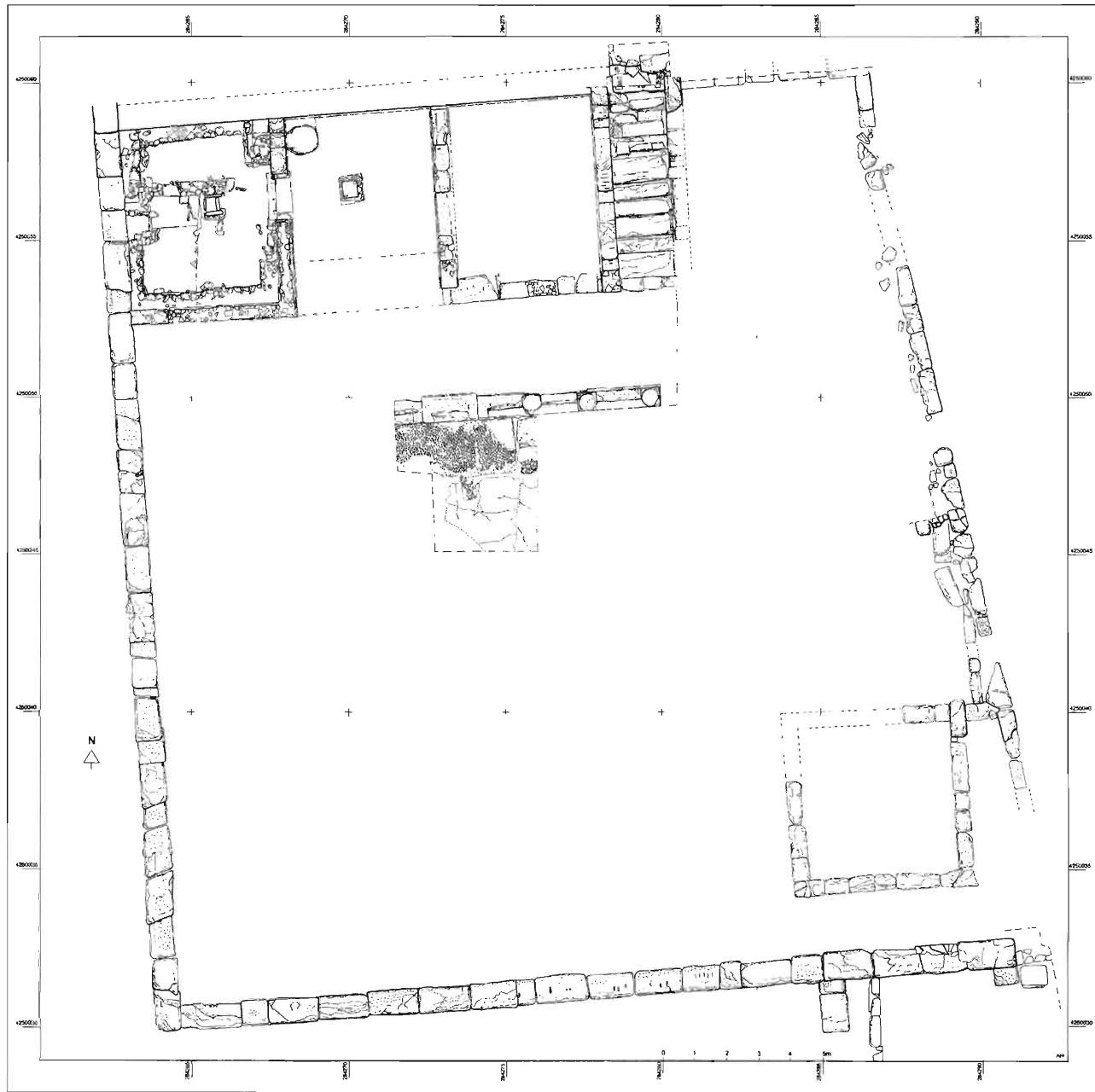


Fig. 13. The building with the cult room in the north-west corner, drawing by Anne Hooton.

Excavations in the Lower Town of Kalydon

The Courtyard House with the cult room

In 2003 excavations were initiated in a large approximately rectangular construction placed some 50 metres inside the West Gate. Among the

reasons for the choice was the desire to detect the position of the Mint. Before the excavation only structures related to the restored terrace wall system were visible, but the geomagnetic surveys indicated that the building faced the main street on the right hand coming from the gate and measured some 30×25 metres (Fig. 7, left). In 2003 the excavated part of the building including

the frame constructed by large ashlars was measured by Anne Hooton (Fig. 13). The plan shows a nearly rectangular construction oriented in a north north-west to south south-east direction along the main street. The bend on the northern wall seen on the geomagnetic plan derives from the recent reinforcement of the terrace wall while the slanting orientation of the east wall is due to a later addition already made in Antiquity. Without further excavation it is not possible to state the reason for the changed orientation of the east wall. It should, in general, be emphasized that only less than one third of the building has been excavated.

The building is framed by substantial walls made up by large sandstone ashlars while in the interior of the building walls are constructed by mud bricks on stone foundations. In several places the wall plaster is still preserved *in situ* on the stone walls, red on the upper part and yellow on the lower separated by a white band. Along the north side three rooms have been excavated placed west of a stone-built stair case (Fig. 14). The stairs lead to a narrow street towards north and to a square construction, considered to be a small temple. In the room in front of the cult room in the north-west corner a blue limestone base for a bronze statue was placed exactly in front of the entrance to the cult room (Fig. 14). The inscription on the base mentions that Sosikles sacrificed the votives to the Gods and the town and that Alexarchos from Sikyon made the statue. The heavy base rested on an older one, which broke when the new base was placed on top of it. The inscription points to a dating in the 2nd century BC. Towards the centre of the building a sandstone stylobate and plinths with circular marks indicate that the columns were placed parallel to the north wall. A floor mosaic made of pebbles from the river bed made up the centre of the building (Fig. 13).¹⁶

The room in the north-west corner was excavated in 2003 and partly in 2004. The entrance to the room with a well-preserved and nicely executed grey/blue limestone threshold was found in the east wall. Fragments of tiles were placed on top of the stone foundations as support for the mud brick wall, a technique used everywhere in the building



Fig. 14. The rooms and the stair case along the northern wall of the building, photo by Ingrid Sofianou, 2004.

(Fig. 14). Just below the surface level a fairly compact layer of Laconian tiles came to light, among which several with the stamp BAR GATHIS also found among the tiles from the old excavations in the sanctuary of Artemis Lauria.¹⁷ Quite a quantity of iron nails were found in and especially below the tile horizon, but also iron slings came to light in the horizon below the tiles.¹⁸ The tiles evidently derive from the roof, which collapsed and the nails probably from woodwork of an upper storey. In the following we should like to give a very brief summary of the stratigraphical situation and an

¹⁶ As in the Heroon, see Dyggve, Poulsen & Rhomaios 1934, fig. 32.

¹⁷ Dyggve 1948, 198, pl. 25. The tiles from the new excavations are being studied by Rikke Lund Pedersen.

¹⁸ To be studied by Mads Møller Nielsen.



Fig. 15 Lamps from the room in the north-west corner, photo by Henrik Frost.



Fig. 16 Thymniateria from the room in the north-west corner. The torch container is seen in the centre, photo by Henrik Frost.

indication of the chronology of the layers below the tile horizon.¹⁹

In 2004 a smaller part of the lowest layer situated directly above the bed rock was excavated. This layer represents the first use of the building and served as part of the foundation of succeeding floor levels. The latest pottery derives from the 2nd century BC. The layer above this first level contained many cooking-pots and cups, jugs and bowls in fine wares used for serving food and drink and a coin from the Aitolian league to be dated 279-168 BC.²⁰ The layer on top of this level was of approximately the same date, but contained in addition to cooking ware and fine ware equipment also large amphorae to be used for oil and wine. This horizon was covered by a tile layer used as foundation for the stamped clay floor of the last and final phase of use of the room.

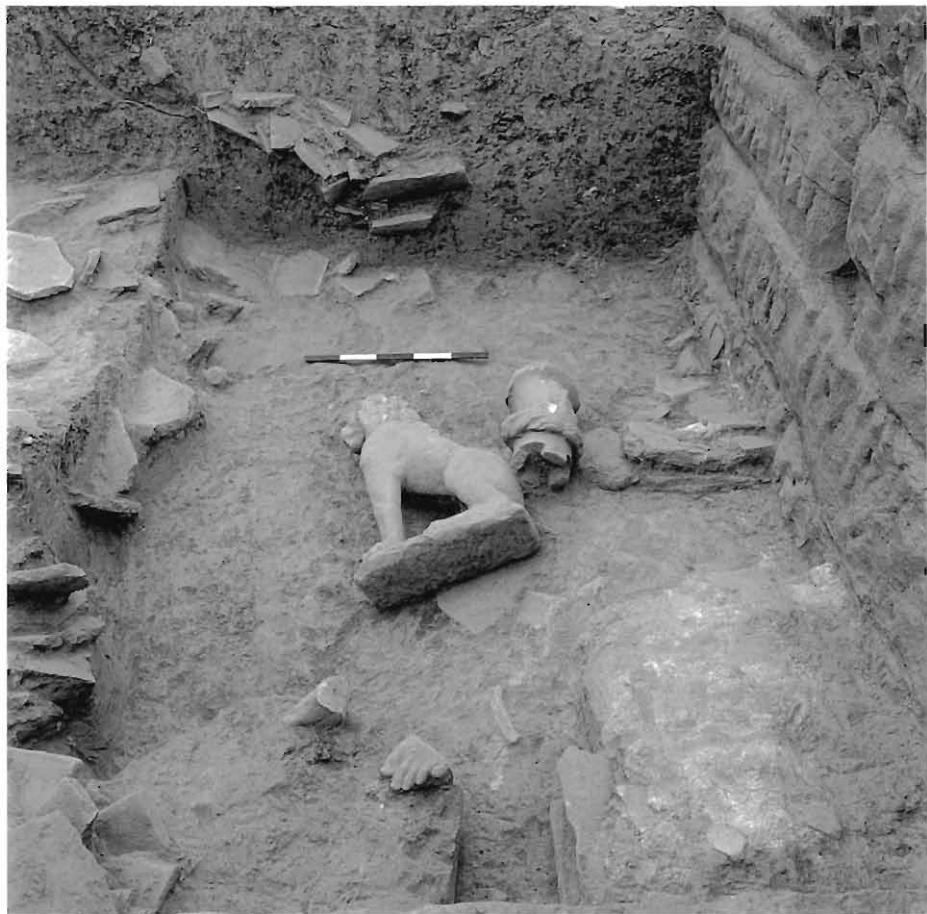
On top of the floor two coins from Corfu dated 229 to 48 BC were found in addition to more than a thousand fragments of fine ware pottery, cooking vessels, and transport amphorae. Traces of

pithoi were almost absent. The majority of the fine ware pottery is typical of the late Hellenistic period with a matt glaze changing in colour from black to red. Variations in colour of the originally black Hellenistic glaze occur early and are never rare, but the common variation in colour on the same vessel is typical of the 1st century BC. 90% of the fine ware potteries in late Hellenistic and Roman contexts are products of low quality with a thin matt glaze in black, brown, or red shades. The red colour on the local pottery has been interpreted as a wish to imitate the colour on the sigillata pottery with red or red brown clay and red, shining surface often with stamped decoration. The earliest red

¹⁹ The brief report is based on a catalogue of the pottery from the trench D5/D12 prepared by Jonas Eiring. The amount of Classical and Hellenistic pottery found in context during the new excavations are being studied and published by Jonas Eiring and Elizabeth Bollen.

²⁰ The coins are under study by Georgia Alexopoulou from the 6th Ephoria in Patras.

Fig. 17. Goddess and lion *in situ*, photo by Angelique Sideris.



sigillata, the Eastern Sigillata A was not found in the deposit, but a few pieces of Italic sigillata of the early Roman Empire were found.

Finds in the cult room

A large collection of oil lamps came to light in the floor level (Fig. 15). Most of them are wheel-made and of a type common in the Hellenistic period with a continuation into the Roman Age (the three left and two to the right on Fig. 15). Most of them are produced locally and might thus be difficult to date in comparison to other centres. Two lamps are mould-made and easier to compare (the two lamps in the centre of Fig. 15). The lamp in the front number 2 from the right on Fig. 15 has a concave floor and volutes on each side of the spout. On the lowered plate of the surface a naked male person in relief was depicted. The aperture used to fill the lamp with oil is very small and placed between the legs of the male person. In

addition an air hole is placed at the beginning of the nozzle. The wick was placed in the large hole of the flat-topped nozzle. This kind of moulded lamp appears for the first time in the 1st century BC in Italy, but was soon imitated in other places in the Mediterranean. Closest parallels belong to the time of Augustus and his successors.²¹

Another lamp resembles the first, but is slightly smaller and has no relief decoration. In addition it has a ring handle with a central groove on the shoulder. The base is almost flat and the top plate is very low with a large, central hole. It might well be a local imitation of an Italic type from the period around the birth of Christ. Lamps of this type

²¹ A good parallel is found recently in Pompeji in a context to be dated 1-50 AD. Also, see Dressel 9-16; Loeschke I-V; Broneer XII-XIV for the type in the 1st century BC. Close parallel in Petropoulos 1999, 147, no. Π138, pl. 13, 52, between 80 and 90 AD. Informations from the preliminary manuscript by Jonas Eiring.

were produced in Patras, where it has been dated late in the 1st century BC.

But the most spectacular clay objects from the room were the many thymiateria, incense-burners and an object, which has been interpreted as a container for a torch (Fig. 16). Fragments of 15 thymiateria were found in the room, which constitutes the find to be among the largest in the Greek world. As none of them are identical they have not been mass-produced, but they are all of the same general type: a semicircular bowl where the incense was burned on a high base or pedestal. The base is often hollow, but might be of solid clay. Most are between 8 and 9 cm high while others, only partly preserved measure up to 20 cm. All were originally painted but insufficient burning and the corrosive earth in the area have left only very few traces of paint. The best preserved piece with traces of colour is a bell-shaped pedestal with painted red bands on a thick white ground (fig. 16). The motive with a red bow on a white ground is found on similar incense-burners on Delos.²² The white paint or rather a layer of lime has been interpreted as an attempt to imitate marble and it is possible that prototypes should be found in stone rather than in metal. The considerable amount of incense-burners found in the room probably points to some sort of official, public cult.

The cult objects and the requisites used in the cult were placed on the stamped clay floor and the low benches along the walls. Immediately inside the threshold was found a very small herm in Pentelic marble with its head broken off. Further inside the room near a square altar or cult table in whose construction a sundial had been reused, a larger herm dedicated by Lanikos was found. Near the niche along the wall behind the cult table were found a goddess and a lion, the first produced in island marble, the latter in Pentelic marble. Several other cult objects had been placed on the floor together with hands and feet belonging to the goddess. Among the more spectacular are small poros altars, a marble kernos, and a terracotta protome of a woman in almost natural size. The lamps mentioned above were placed in connection with the cult objects.

We should like to comment briefly on some of the sculpture found in the cult room.²³

The head of the goddess and the lion were found lying close together near a niche in the bench along the western wall of the building (Fig. 17). The head (Fig. 18), executed in coarse-grained island marble of fine quality measured 0.41 meter in height. The marble probably derives from Paros or Naxos. In addition two arms with fingers belonging to them and two feet all from the same statue and produced in the same marble were found on the floor. The fingers were broken off except the middle finger and the ring finger on the left hand.

The head and the marble members belonged to an acrolith statue where the marbles were fixed to a wooden framework covered by drapery. The head of the goddess is slightly stooping, which probably indicates that she was seated. On her head she wears a mural crown – a corona muralis. As indicated by two small holes in the palm she probably carried a sacrificial bowl, a phiale in her bent and outstretched right arm. The position of the left arm shows that the elbow rested on a pedestal (?) while the hand probably held a drum, a tympanon in bronze, as the phiale. Both feet had finely elaborated sandals with red painting and the hair and mural crown on the head of the goddess had been covered by gold leaf. The total height of the sculpture might have been around 2 m as shown on the preliminary reconstruction on Fig. 19.

A goddess with a mural crown is usually identified as a city goddess, a Tyche, the personification of fortune and destiny. The mural crown shows that she was the protector of the city and brought good fortune to the town. The type originates in the Near East. The combination with the lion, however, points iconographically rather towards

²² Deonna 1938, pl. 929.1.

²³ We are most obliged to the three conservators who made an excellent work to clean the sculpture: Eleni Ioannou, Sas Hemmi, and Leonidas Paulatos. The following is based mainly on Dietz 2005. The sculpture was studied by Jesper Jensen, to whom we are most obliged. The text concerning the sculpture is entirely dependent on his contribution.



Fig. 18. The city goddess, photo by Henrik Frost.

the Anatolian goddess Kybele – the great Mother and the mistress of the wild animals with the lion as her sacred animal. She was often depicted with a *polos* – the mural crown is not found until Hellenistic times. As pointed out by Jesper Jensen there might be reason to believe that the sculpture is in fact a representation of the Greek goddess Meter, but in the shape of Kybele.²⁴

The somewhat sweetish approach, the deep cuttings in her hair and the delicate carving of her neck indicate a stylistic dating to the first half of the 2nd century BC or more precisely between 180 and 160 BC as indicated by the shape of the sandals.

The lion (Fig. 20) measures 55 cm in height and is executed in fine-grained Pentelic marble. The lion was painted and traces of red paint are found on the base. The supple lion rests on the hind legs while the fore legs are stretched. Both fore- and hind paws show marked claws. The muscles are



Fig. 19. Reconstruction of the city goddess with the mural crown, by Jesper Jensen and Michaelis Lefantzis.

tense, even if the lion is represented seated. The eyes are wide open and lie deep in the broad face surrounded by the mane. The surroundings of the nose are square, the lower jaw is small. The mouth opens so that the canine teeth become visible. The mane runs down the neck in large thick curls. The forceful, baroque musculature points towards the same dating in the 2nd century BC as the goddess.

²⁴ See Dietz 2005, 159.

Fig. 20. The lion, photo by Henrik Frost.



Finally, the large herm (Fig. 21) measures in total 85 cm in height, with the head and neck 22 cm, the shaft 55 cm and the base 8 cm. The base is produced by a hard, blue limestone while the herm itself was manufactured in Pentelic marble like the small herm and the lion. It is well preserved except for small breaks where the head broke from the neck. In addition the tip of the nose, a small part of the chin and the “arms” are missing. A thick and hard layer of mixed soil and lime which covered the surface is not totally removed on the photo Fig. 21. On the limestone base there is an inscription of dedication saying: ΛΑΝΙΚΟΣ : EPMAI which indicates that the herme was presented by Lanikos to the God Hermes. The dialect is Doric or north-western Greek as should be expected from an

inscription from this area. Lanikos is known only from this inscription.

In this occasion the head is not a representation of the God Hermes; the very much individual features rather indicate that Lanikos himself is portrayed. He is young with short curly hair and wears a circular diadem around the head. His eyes are small with heavy lids while his ears are shaped without specific care; maybe “cauliflower ears” usually indicating that a boxer or athlete is represented. The mouth is in the shape of a rosebud and slightly open with full lips. The diadem, a twisted string, might support the idea that an athlete is depicted, an athlete with a specific high status as his portrait was allowed to be shown in the sanctuary of the town. A herm from Delos is very

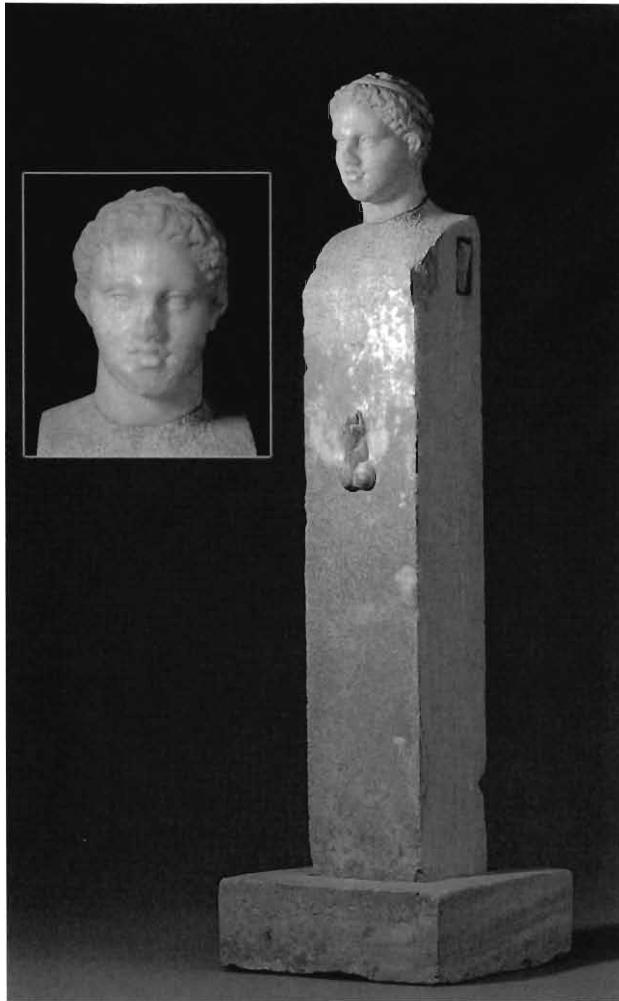


Fig. 21 The herm, photo by Henrik Frost.

closely related to the herm of Lanikos even if the dedicant is not the same.²⁵

Architectural terracottas

Several architectural terracottas from the building were found during the excavation. They cover the timespan from the late 5th century BC to late Hellenistic. We have selected one example from a series of antefixes probably contemporary with the “Courtyard House”:

F05-2075 (Fig. 22)

H: 25.0 cm

Moulded clay antefix with concave face and relief decoration. Intact except for some surface damage bottom on the left corner and the very top. Back with central, vertical ridge. The base is well preserved and very rough. Over the remains of a small palmette two lower volutes. The caulinus of two



Fig. 22. Clay antefix with scalloped edge found in the Courtyard House, photo by Ingrid Sofianou, (F05-2075).

upper volutes grows from a vertical cluster of acanthus leaves. In between the volutes are placed two antithetic bell flowers. The palmette with ten petals, without central petal occupy the upper part of the face with two four leaved flowers in the central space. Dating: Local type 3rd to 2nd century BC.²⁶

The function of the building can not be estimated with certainty, but has to await further excavation. The plinth with the columns on the stylobate in the central part of the building makes it likely, however, that we are dealing with a palaestra – at any rate probably a public building. Another possibility is, as it has been suggested, that the building is the metroon of the town. This interpretation is dependent on the reading of the goddess with the mural crown.²⁷

²⁵ Inv. no. A 4256

²⁶ Dyggve 1948, 197, pls. 202 I (probably from the stoa), 206 I, Heroon, pl. 47, 10-11.

²⁷ The idea was suggested by Jesper Jensen. See Dietz 2005, 162.

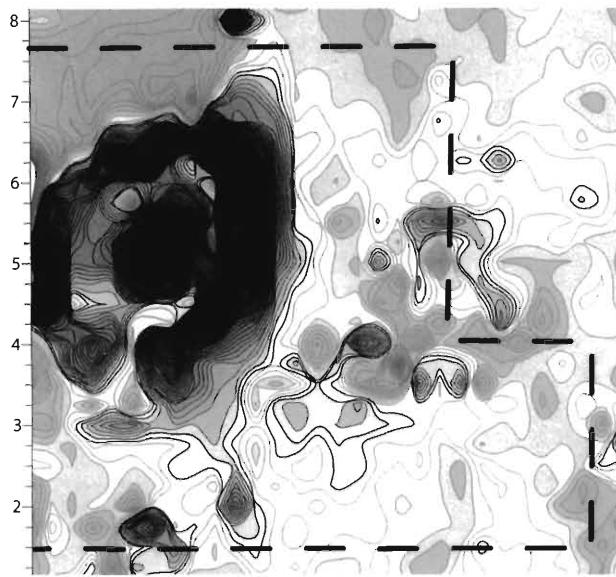


Fig. 23. Geomagnetic plan of the kiln; plan by Tatyana Smekalova.



Fig. 24 The kiln as excavated, photo by Ingrid Sofianou, 2004.

The kiln

Further up the main street on the left side a kiln was located with the aid of the geomagnetic survey. The results of the measurements before excavation are shown on Fig. 23. It was placed in a corner of a substantial building and was surrounded by huge ashlar walls. The kiln is unusually well

preserved, the dome still stands to a considerable height, the central clay construction where the floor was situated is well preserved and the “feeding canal” still very easy to recognize (Fig. 24). Tools found in the kiln indicate with certainty that pottery (and probably tiles) was produced in the kiln and large and well-preserved fragments of painted architectural terracotta’s found in the later fill show that the kiln with great probability was placed in or near an important building.²⁸

Excavations on the acropolis

Excavations on the central acropolis terrace was initiated in 2002 and continued to 2004. In the central and highest part of the terrace where tesserae were found abundantly on the surface before excavation, several square rooms from a Roman building came to light including one room with a relatively well-preserved mosaic (Fig. 25). Architectural members in marble from earlier building activities on the acropolis were reused as thresholds. In the area of the Roman building bedrock came to light less than 10 cm below the surface.

Further south a series of parallel stone foundations were excavated (Fig. 26). In Roman times the stone walls were reinforced by concrete additions probably in order to resist a higher weight and the orientation in Roman times consequently followed the predecessors. In the eastern part of the trenches a well-preserved Roman terracotta drain came to light. In the area several pits with charcoal, coins, pottery etc. from the Roman occupation were found. The pits were probably used for cooking.

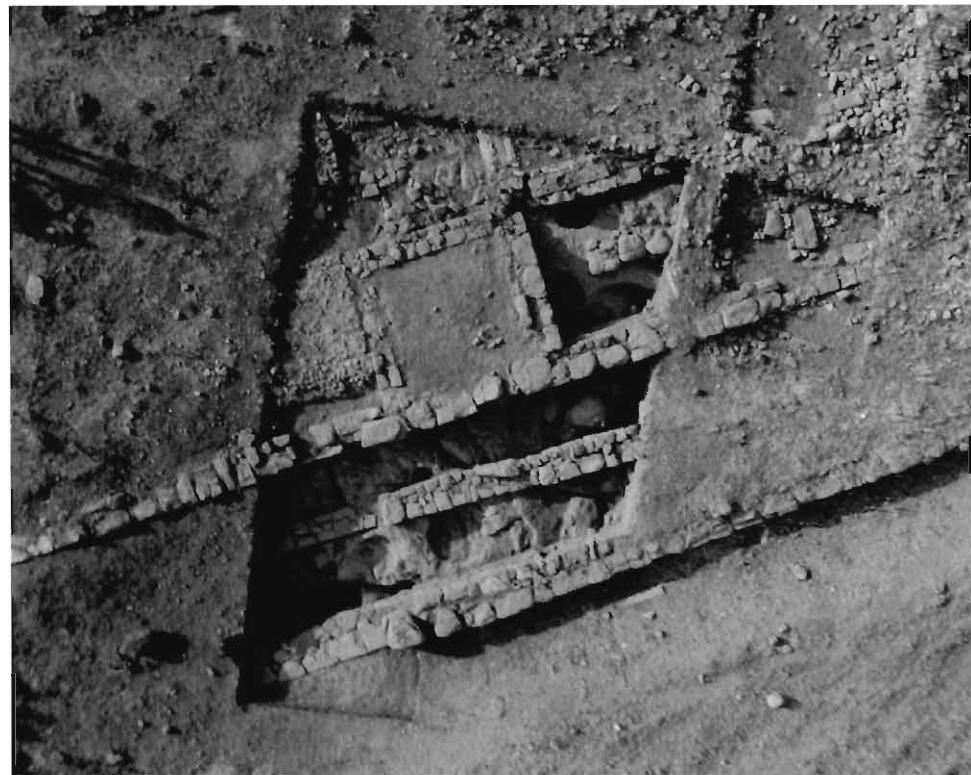
During the excavations in 2002 and 2003 the area between the three southernmost foundations were excavated. Material from Archaic and Classical times was unearthed and a lower stone foundation came to light, which showed a slightly different construction and orientation than the higher foundations. Examinations of the fill below

²⁸ The kiln is being studied by Emma Ljung, PhD student at the University of Princeton.

Fig. 25. Mosaics from the Roman house on the acropolis.



Fig. 26. Foundations primarily of Archaic, Classical, and Roman dates from the acropolis, photo by Petros Konstantopoulos, 2003.



the large stone foundations produced material of Archaic and early Classical date and the foundations have subsequently been dated to somewhere around the middle of the 5th century BC. In the fill between the foundations, many miniature cups (Archaic and later), terracottas (mainly female),

some bronze figurines (of Classical date) were found. Some Hellenistic sherd material, coins, and a gold finger ring were found in the upper fill.

Among many other objects found in this area should briefly be mentioned a series of architectural terracottas from various periods (Fig. 27):

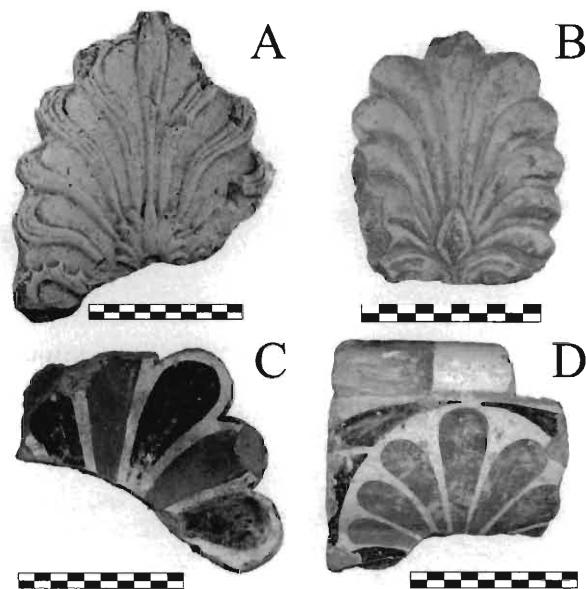


Fig. 27. Archaic, Classical and Hellenistic architectural terracottas from the acropolis (F02-1056).

F02-2027 (A.M.A. 2275) (Fig. 27 C)

H. 17.9 cm

Fragment of a ridge tile with tongue-shaped palmette leaves (probably with seven leaves) painted on both sides in alternating red and black colours framed by a white band. The type is usual among antefixes from the sanctuary of Artemis Launa. The type is dated to the late Archaic period around 500 BC.²⁹

F03-1035 (Fig. 27 D)

H. 12.5 cm

Fragment of a raking sima with seven palmette leaves painted red in a mushroom-shaped white zone surrounded by a black lotus. The sima is painted in an Archaic tradition with the same dating around 500 BC.³⁰

F02-1056 (Fig. 27 A)

H. 21.4 cm

Antefix with palmette in low relief, lower right part is missing. The surface is covered with a pale yellow (2.5Y 8/4) matt slip. Large part of the kalypter is preserved among this one lower edge and the ridge in the middle. Edge appears scalloped at palmette petals. Nine petals grow from a small slightly raised palmette. The lower part of the tendrils is plain, but becomes tripartite higher up turning inwards. The central petal is solid and swollen. Dating: Hellenistic, 2nd century BC.³¹

F02-1009 (Fig. 27 B)

H. 13.5 cm

Antefix with 11 accurate moulded, elongated outcurving leaves emerging from a diamond-shaped red painted hearth. The central leaf is probably angular at the top. The paint is only preserved at the hearth. Below the palmette the upper

parts of two grooved volutes turning inwards are seen. A close parallel from the Temple of Asklepios in Corinth indicates a date in the late 4th century BC.³²

Excavations in the southern end of the central acropolis plateau were conducted in 2002 in order to get an impression of the walls surrounding the acropolis. Two to three meters inside the exterior enceinte a well-built wall of large ashlar was partly preserved. The orientation derives from the canonical order and the construction evidently belongs to the late Archaic/early Classical occupation horizon outlined above. Three large pithoi, one of them repaired with staples of lead, were placed upside down inside this fortification system. The pithoi, already visible on the geomagnetic plan, were possibly of Archaic/early Classical date. The area in the southern end of the central acropolis was severely damaged by pits dug during Roman times and in general the stratigraphy in the area was disturbed by many human activities.

Trenches in the northern part of the central acropolis plateau were opened in 2003 and excavations continued in 2004. The aim of the examinations was partly to get an impression of the architecture in the area, which was difficult to estimate from the geomagnetic surveys and partly to collect material able to date the well-preserved northern fortification wall around the acropolis. In the upper levels badly kept foundations of Roman date were recovered, but in the deeper strata, approximately 50 cm below the surface a reddish fill in broad bands was observed on the surface. These patterns also seen in the section are the preserved parts of the mud brick superstructure on substantial and well-built stone foundations. Only a smaller section of an evidently planned habitation

²⁹ Rhomaios 1951, fig. 60 (antefix), 63 (antefix). See also for a close parallel from Sikyon, Krystalli-Votsi 1994, 115 and pl. 30a). A ridge tile palmette from Olympia (Stadion-wall IV) is dated to the fourth quarter of the 6th century BC, see Heiden 1995, 101.

³⁰ Heiden 1987, 113-6. Section close to Winter 1993, fig. 6, 10 (510-500 BC). The clay probably indicates a Corinthian origin.

³¹ Compare Themelis 1994, 162, fig. 20 (first half of 2nd century BC).

³² Roebuck 1994, pl. 18d.

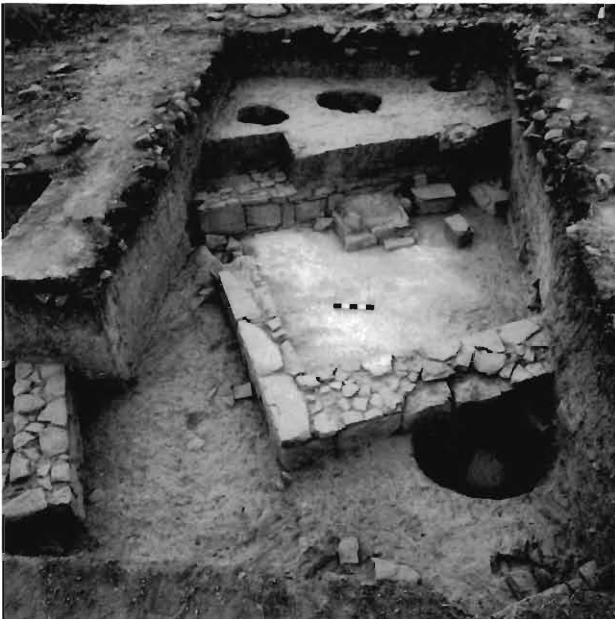


Fig. 28. Trenches along the northern border of the acropolis.

with narrow streets between square houses was examined (Fig. 28). The foundations are constructed by large, partly prepared sandstones establishing a plane (orthostatic) front towards the street and a layer of broken tiles and flat stones on top as a bed for the mud bricks of the wall. A lime cover indicates the position of the floor. On Fig. 28 the circular cooking pits of the Roman Age are seen clearly. The material from the excavation 2004 has not been studied in details but as a preliminary estimation is that the habitation derives from the Hellenistic period.

In 2003, finally, a trial trench was laid out in the central part of the city, partly in order to estimate the construction and dating of a circular/apsidal construction and partly to control the orientation of the street system in this part of the town. Late Classical (4th century BC) remains seem to dominate the picture in this part of the city.



Fig. 29. From the “Lower City” of Kalydon, the Courtyard House where the city goddess and the lion were found towards the temple of Artemis Lauria. In the background the north-western point of the Peloponnesos with the promontory of Araxos.

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