AN ARCHAEOLOGICAL SURVEY
IN NORTH - WEST ANDROS, CYCLADES

by

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Degree: PhD
University of Edinburgh
Year: 1992
This thesis has been composed by myself and the work is my own.

\[Signature\]

Anthi Koutsoukou

Note:

Material from my research has been published with the approval of my supervisors as an article:
To my parents
Conjectural reconstruction of the tower at Choreza
VOLUME I
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ABSTRACT

The scope of this survey was twofold: a) to locate and study sites reported to have antiquities and b) to investigate selected areas with intensive methods. The sites are described and interpreted in Chapter III. Evidence from both the extensive and intensive part of the survey is combined to observe general trends in the distribution patterns from the Neolithic to the Roman period in the Conclusions.

A greater emphasis is given to the prehistoric period, for which two main observations were made: a) the number of Neolithic sites recovered show that the North-West part of the island was already settled since the Late phase of this period and b) during the Bronze Age the small number of finds suggest that Andros followed the general developments in the Aegean, except for the Early Cycladic period which is not well represented.

The limited number of ancient sources referring to Andros do not allow to reconstruct the ancient topography and history of the island in any detail. The effort to associate finds from the survey with historical developments had some success mainly for the Classical and Hellenistic period. It appears that the location of the port and the proximity of the North-West part of the island to the mainland was the main reason for the development of this region. Finds from the Roman period are more difficult to interpret since ancient sources are even more limited.
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DIODORUS SICULUS, Bibliotheke.
DION CHRYSTOMOS
DIOSEKOURIDES, o Anazarbeus, Peri Hyles Hiatrikes.
HERODOTUS, Historia.
HIMERIUS
HIPPOCRATES (?), Peri Gynaikeies Physios.
JUVENALIS, Satires.
LYKOURGOS, Kata Leokrate.
PLINY, Naturalis Historia.
PLUTARCHUS, Vioi Paralleloi.
STRABO, Geographia.
THUCYDIDES, Historia.
TITUS LIVIUS, Ad Urbe Condita Libri.
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ABBREVIATIONS

Books and Articles
Books and articles are all abbreviated by referring to the author and the date of the publication: Adam 1982, except in the following cases.

Abbreviations of series

**Agora V:** ROBINSON, H.S. (1959) **Agora V:** Pottery of the Roman Period: Chronology, Princeton.

**Agora VII:** PERLZWEIG, J. (1961) **Agora VII:** Lamps of the Roman Period, Princeton.

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**Agora XXIV:** FRANTZ, A. with contributions by H.A. THOMPSON and J. TRAVLOS (1988) **Agora XXIV:** Late Antiquity: AD 267-700, Princeton.

**BMC:** British Museum Catalogue

**CAH:** Cambridge Ancient History

**Corinth IV, II:** BRONEER, O. (1930) **Corinth IV, Part II:** Terracotta Lamps, Princeton.

**Corinth VII, III:** EDWARDS, G.R. (1975) **Corinth VII, Part III:** Corinthian Hellenistic Pottery, Princeton.

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Ateliers "Ioniens", Paris.

IG: Inscriptiones graecae


Other abbreviations

CNRS: Centre National de Recherche Scientifique


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<th>Periodical</th>
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<tr>
<td>Archaiognosia</td>
<td>AA: Archaeologischer Anzeiger</td>
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<td>AA: American Journal of Archaeology</td>
<td>AD: Archaeologikon Deltion</td>
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<td>AE: Archaeologike Ephemeris</td>
<td>AD: Archaeologikon Deltion</td>
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<td>Archaeology</td>
<td>AM: Mitteilungen des deutschen archäologischen Institutes, Athenische Abteilung</td>
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<td>BAM: Bulletin d’Archéologie Marocaine</td>
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<td>Archaeology</td>
<td>BAR: British Archaeological Reports</td>
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<td>Antiquity</td>
<td>BCH: Bulletin de Correspondence Hellenique</td>
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<td>Archaeology</td>
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<td>Archaeology</td>
<td>JdI: Jahrbuch des deutschen archäologischen Instituts</td>
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<td>Antiquity</td>
<td>JFA: Journal of Field Archaeology</td>
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<tr>
<td>Archaeology</td>
<td>JHS: Journal of Hellenic Studies</td>
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<td>Antiquity</td>
<td>JMAA: Journal of Mediterranean Archaeology and Anthropology</td>
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<td>Archaeology</td>
<td>JRA: Journal of Roman Archaeology</td>
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<td>Antiquity</td>
<td>MA: Mediterranean Archaeology</td>
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<td>Archaeology</td>
<td>OJA: Oxford Journal of Archaeology</td>
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<td>Antiquity</td>
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<td>Pandora</td>
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<td>Archaeology</td>
<td>Paideuma, Mitteilungen zur Kulturkunde</td>
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<td>Antiquity</td>
<td>PPS: Proceedings of the Prehistoric Society</td>
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La Recherche
RA: Revue Archéologique
Revue Archéologique de Narbonnaise
SIMA: Studies in Mediterranean Archaeology
Technologia
WA: World Archaeology
PREFACE

The topic of this represents an early interest in the archaeology of Andros, which was encouraged by D. Polemes and my supervisor R.L.N. Barber. The privileges of working in the island I originate from were obvious from the early stages of my research.

The survey covers chronologically early prehistoric to Roman sites. It will become evident to the reader that there is a greater emphasis to certain issues. This represents my interest in the prehistory of the island and other particular topics, which often do not attract great attention. I have made an effort however to record and present every site with the same accuracy, so that the reader can evaluate the information.

Working on my own in a survey had both advantages and disadvantages, which are discussed in Chapter II. The task of processing the so varied chronologically material was greatly facilitated by the fact that I was fortunate to be able to discuss my work and receive valuable advice from various people, whom I thank below.
Acknowledgments

I owe great thanks to my supervisors, R.L.N. Barber and E.J. Peltenburg, for their valuable advice and their encouragement.

I wish to thank the 11th Ephoreia of Prehistoric and Classical antiquities, the archaeologist responsible for Andros Christina Televantou, and the ministry of Culture for allowing me to work on Andros and use the Museum facilities. The phylakes of the Museum of Andros facilitated greatly my work. In particular, I warmly thank Maria Mpleziote for her company and valuable assistance during the fieldwork, under all kinds of weather, and Elene Chala for her hospitality at the Museum.

Gilles Touchais, who has been consultant in my fieldwork, willingly discussed various issues on the prehistoric material and encouraged me on my work.

A lot was learned for Andros from Demetrios Polemes, who has always encouraged me on my work.

Special thanks are owed to Olga Hadjianastasiou, who kindly looked at the prehistoric pottery from the survey and gave me her opinion and suggestions.

Myriam Caskey helped me with bibliography on relief pithoi.

Angiklia Agrafiote kindly advised me in my first steps of the study of lithics. Catherine Perlès had given me the first advice on bibliography for the same topic. Elene Kolaite identified the material of the denticulate from Kastri, and gladly offered her opinion in matters of geology.

Katerene Liampe helped me in the dating of the coins from Stavros and Polos.

Special thanks are due to the excavators of Palaiopolis, Michales Tiverios and Lydia Palaiokrassa, for discussions on Andros and help with the pottery. Panos Valavanes was kind to see the ancient towers in the survey area, and discuss the topic with me, offering interesting suggestions.

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Tony Kojelz is thanked for discussing with me issues on quarries and informing me on observations of his on this topic.

I also thank Adones Kyrou for the interesting discussions we had.

Ioannes S. Koutsoukos gladly agreed to survey for making the topographic plan of the site of Stauros, and is thanked for his contribution.

Richard Tipping joined me in Andros to study river systems (financed by the Baldwin Brown Scholarship of the Department of Classical Archaeology of Edinburgh University) and helped me to a better understanding of environmental issues.

The fieldwork was facilitated enormously by Ioannes Rerras, who would willingly inform me with great accuracy on placenames and ancient sites in N Andros. All his observations proved most valuable and helped me to see this part of Andros as a familiar environment from the very beginning of my work. I also thank the other villagers of N Andros for their hospitality and willingness to help me in my fieldwork.

The Abercromby Travel Expences Fund of the Department of Prehistoric Archaeology and the Baldwin Brown Scholarship of the Department of Classical Archaeology of Edinburgh University covered a great part of the travelling expenses of the fieldwork. The last fieldwork and study season was mainly financed by a generous grant from the Institute of Aegean Prehistory. All responsible bodies for these grants are thanked.

I am also grateful to the staff the British School at Athens for their hospitality, and in particular to Guy Sanders for always being available for any help. The staff of the Fitch laboratory assisted me in the study of metal objects and pieces of slag.

I tried to make good use of the advice offered by the people above, but still remain responsible for all errors.

I also thank warmly my husband Chrysanthos.
Kanellopoulos, cooperator in the last fieldwork season, for long discussions on the survey material, and particularly for his advice on architectural matters. Several of the architectural drawings are his, and some of the pottery.

Finally, I wish to thank my parents, for their support, help and financial assistance during my studies. To them I dedicate this work.
NOTE ON THE FIGURES AND DRAWINGS

Chrysanthos Kanellopoulos made the drawings in the following figures:
Architectural: 14, 17, 18, 28, 31, 32
Pottery: 37, 83 (lower page), 84, 86, 87
All other drawings of architectural features and small finds are mine.

N. Raisses took and printed the photographs in plates 18, 19, 56, 57, 70, 71. The remaining photographs were taken by me.
CHAPTER I

INTRODUCTION
A: INTRODUCTION TO THE ISLAND

Geography

Andros, the northernmost island of the Cyclades, is second in size after Naxos with 384km² (fig.3). To the N the Strait of Kaphereus, or Kavo Doro as it has been commonly known since the Frankish occupation, divides the island from Euboea. Though notorious for its rough sea and strong currents, Cavo Doro is, and apparently has been since prehistoric times a much frequented route. This strait existed long before any human activity was attested on the Cyclades, even during the low level of the sea at the end of the last glacial maximum c.18,000 BP.¹ The case is different in the S and much narrower channel, the "Steno", now dividing Andros from Tenos. It seems that the islands were still connected c.9,000 BP, during the last period of the rapid part of the post-glacial sea-level rise.² Although a eustatic sea level rise has been identified after combining the results of regional studies³, it is reasonable to assume that for islands with abrupt coasts such as Andros the sea-level change affected mostly the coastal plains.

Andros has a rather sharp relief with a main ridge crossing it longitudinally along its W side and four broad transverse ridges further dividing the island (see fig. 2 for locations). The area NW of the northernmost ridge Agioi Saranta has narrow, often steep ridges, occasionally forming plateaus which reach the sea in abrupt cliffs. Between Agioi Saranta and the next ridge Petalon, a series of parallel valleys begin in the W and debouch at the E coast forming narrow coastal plains. On the central plateau of Koubara is the highest point of Andros, Prophetes Elias, 995m. In the W is one of the main three plains of the island, Gaurio with a natural port, and to the S of it a smaller one of Agios Petros. From there southwards the coast gets gradually higher.

The valley of Andros is the largest and is defined
to the S by the Gerakona ridge. A lower one runs along the valley and ends at the small rocky promontory on the E coast, on which the present capital of the island is built. This region has rich water supplies, good agricultural land and is the most densely inhabited region of Andros. The third large valley is Korthi, to the SE of Yerakona, which has adequate waters and is also well inhabited. To the S of the last ridge, Rache, the land is barren and deserted. The SE and the SW coasts are precipitous.

The best natural harbour of Andros is Gaurio on the W coast, which is presently the main port, the others being Chora and Mpatsi. Many bays around the island can provide shelter for boats, depending on the winds.

Winds are accentuated on Andros because of the high relief of the island: where land forms an obstacle to the prevailing winds, these twist around the mountains and local, often strong currents develop. Rain is restricted to the winter months mainly and appears as heavy showers resulting in the formation of seasonal torrents. Snow is rare and never lasts long. Humidity however is high in higher altitudes, due to the clouds being trapped by the high peaks. Thus the land remains moist to some degree in these areas during the greater part of the year.

Water

Andros has adequate water supplies and for this reason one of her ancient names was Hydroussa.\(^4\) The hydrographic systems have developed in parallel zones of NE-SW direction on either side of the main mountainridge. Generally the E part of the island is better watered but even in the N, where water sources are rare, wells are successful in providing abundant water. Reservoirs were widely used but nowadays many are falling into decay as a consequence of the abandonment of agriculture. In areas where water is little small cisterns were constructed usually in rocky soil and incorporated inside terrace walls in order to collect the little amount of water which drips underground. They were mainly used for watering the animals
but today most are out of use.

Rivers have little water during the summer, used for irrigation, so hardly any water flows to the sea during the warm months. Most streams however are seasonal.

During the survey work it was realized that the landscape today, especially in non-inhabited areas gives a deceiving impression of its water resources, because springs are not being maintained and waters flow underground, or "sink", as is the word commonly used for this.

Vegetation

As a consequence of its rich water resources Andros is relatively well vegetated in contrast with the average Cycladic island. High wild vegetation is confined to the slopes of the well watered valleys. An originally large area in central N Andros around Amolochos has wild high vegetation, but much of this has been burned. The main wild and cultivated tree species that exist on the island are varieties of oaks, planes, poplars, cypresses, walnuts, mulberries, olives, citrous trees and various fruit trees. One of the ancient names of Andros, Lasia, indicates that the island was well vegetated in antiquity.\(^5\)

There is no study of the flora and fauna of Andros, it is however known that the island has a large variety of shrubs, two of which appear in the ancient literature. Hippocrates mentions the "strouthion" (saponaria officinalis) used for women's diseases\(^6\), still being used in modern times\(^7\). Dioskorides from Anazarbos includes Andros in the areas where aloe grows, a plant with medical properties for the healing of wounds.\(^8\)

Minerals

The extent and quality of metal ores on Andros has been highly exaggerated in early literature, probably because of the proximity of the island to the area of Laurion, which is rich in metals. Ores of iron, manganese,
copper, argentiferous lead, zinc, chromium, galena, steatite and nicelium have been mentioned by Paschales⁹ and Moschonesios¹⁰. Modern scientific research has shown that except for iron and manganese the other metals are found either in negligible quantities and /or are of poor quality and thus not suitable for exploitation.¹¹

Iron ores are found in the area of Agios Petros, in the W, where the main part consists of goethite, while there are little amounts of psilomelane and limonite/hematite. Neither the quantity, nor the quality is considered today worthy of exploration.¹² Foreign metallurgical companies exploited these ores, from the late 19th century until 1914.¹³

Manganese appears mainly in central Andros and particularly on mount Petalon, Vori and Vitali. This metal is found in quartzite environments, and the proportion of manganese in relation to quartz is small and difficult to extract.¹⁴ Mines operated at times since 1898, mainly at Vitali and Vori until the 1950s.

Architecture related to the rural environment

A characteristic feature of the landscape of Andros, being a mountainous island, is the terrace, locally called aimasia¹⁵ except in the N where the word pezoula is used instead by the population of Albanian origin. The retaining walls which form the terraces are built of local material, mainly schist with the dry-stone technique and are intended to create flat space for cultivation, simultaneously contributing to the retaining of the soil on the slopes (pl. 1). Their date of construction is unknown, but older and more recent constructions can be distinguished. Even the most remote and steep slopes have been terraced at some time. The maintenance of the less well built ones, which are the majority, requires frequent repair work, which today is not provided, thus the sight of deteriorating terraces is very common. The gradual abandonment of farming on difficult ground and the consequent use of the mountainous areas for pasture has.
accelerated the rate of destruction.

Wall enclosures divide literally the whole of the island in plots, which are usually small. As a general pattern, the poorer the land, the larger the plot is. They are built either in the dry-stone technique or dry-stone combined with upright slabs, the stemata, or rarely only with upright slabs, something that saves time and labour in building. Traces of old and ruined boundary walls are found occasionally.

The investment of labour in these retaining and boundary walls reflects the value credited to land and the need to exploit even the most unpromising areas of the island. We do not know as yet during which period or periods of history circumstances, like a probable population inflation, led to this extensive exploitation of the land.

The traditional architecture of Andros is characterized by the simplicity of forms, as is the case in most Cycladic islands (pl. 2). The typical Andriote house consists of a main room, usually rectangular and accordingly called makrynari (=longish), to which smaller rooms are attached, depending on the needs of the household. On the basement is at least one large room and often other smaller ones for storing goods, occasionally for processing of produce (vine treading), and keeping the animals. Depending on the wealth of the owners, there is greater or lesser diversification in the function of the rooms in the house. In larger and generally older constructions the basement has very narrow windows which splay inwards to provide the room with light, and simultaneously be safe from intruders and even allow for a gun fight.

Traditional roofs are flat (the doma) and it is usual that rooms of the same house have their own independent roof on different levels. The first step for the construction of the flat roof is executed in two techniques. The mountouloumi requires the corbelling of the long walls of the room so as to minimize the gap.
between them to a dimension which can be covered with long schist slabs. A poor version of this is seen in rural farmsteads. The other technique of roofing consists of successive layers of cypress trunks set about 0.45m apart across the small dimension of the room, on which slabs of stone or a straw matt is placed. This is more common than the former way of roofing, because Andros has the required timber as opposed to other islands like Kea, where stones are used primarily in the absence of wood. The following steps are common to both roofing techniques. Next comes an insulating layer of bushes or seaweed and finally three layers of alternately wet and dry fine earth, layered in total thickness of about 0.30m. The last wet layer is worked repeatedly and leveled with a cylindrical stone, the kylindro. Each autumn more earth is applied on the roof to ensure water-tightness. Today it is rare to see this work taking place and even so never annually, because most roofs have been cemented. Finally around the edge of the roof schist slabs, slightly projecting beyond the wall, conduct the water away from the roof and walls of the house.

Tiled roofs were mainly confined to neoclassical buildings until the recovery after the last World War, when finances allowed for improvements in the standard of living.

Walls are built of schist, this being an abundant commodity on Andros. Ashlar masonry is used in the larger houses, but even then it is confined to the lower part of the building and quoins. Internal partition walls are often made of wooden frames which are plastered. Generally most walls are plastered and whitewashed, but it is quite usual to see old houses left unplastered externally, except for doorjambs and lintels. Floors are of beaten earth which is periodically coated with oil leach. Upper floors are usually wooden.

A fireplace on a low platform for cooking and niches in the walls are encountered in all houses. Very frequent is the domed oven inside the house or in the courtyard, the area for many household activities, weather permitting.
Goods were stored in pithoi and jars kept in the basement. It is probably evident from this short review of rural architecture, that these houses are characterized by self-sufficiency.

In the countryside, farmsteads (kellia or konakia) are numerous to provide for the needs of the animals, tools and temporary crop storage and to be used for any activities that have to be carried out or near the field. Some also served as temporary dwellings for the peasants. They vary in their construction, size and complexity. The simplest is the one-room rectangular kelli, which is the most frequent and is used solely as an animal shelter. More complicated forms are created by building other rooms around the central, very often having one curvilinear wall. A comparison of the ground plan of some kellia with that of early prehistoric dwellings and specifically the but and ben plan reveals striking similarities, which indicate the efficiency of this plan, if not its survival in rural architecture.

Several farmsteads, mainly in the S part of the island, are roofed with a particular system involving a pier. A built pier or column (pissos) is erected in the center of the room (pl. 3). It is narrow at its base and gets wider towards the top, where larger projecting slabs are placed. Radiating long roofing slabs rest on the pier and on the corbelled walls of the room. The pissos (originating from pessos=pier) provoked the writing of an article by Karl Kerenyi, who considers that the minoan column is the ancestor of the pissos, which apparently had protective properties for the animals. Megas has already argued that the presence of this peculiar architectural feature is clearly functional: it is narrow at the base to save space wide at the top to minimize the distance between it and the side walls and usually round to facilitate the circulation in the room. It is the author’s belief too that the pissos represents a rational solution to the problem of easily roofing a square room without the use of timber. The farmsteads in question have to be large enough
to accommodate one or two oxen and apparently the system of corbelling alone is not sufficient as a roofing system. The technique of the *pissos* can be described as the execution of corbelling to a pier, which makes possible the roofing of a large room with average sized slabs.

Since the character of the *pissos* is purely functional, its use in antiquity can be expected, but not necessarily in the form of the Minoan column. Indeed the roofing of the Late Minoan IA farmstead at Ptellos in Thera represents a similar solution, only that here the *pissos* was of wood. 27

Threshing floors are found in great abundance on the Andriote landscape either isolated, or near farmsteads, or in villages (pl. 4). They are usually constructed at the edge of terraces on a semicircular projection so as to save space for cultivation. They have a fairly uniform plan with minor variations. 28 The main features are the paved circular floor with upright slabs at its periphery creating a sort of basin. In the windy areas of the island, part of the periphery on the exposed side of the threshing floor has either a wall with windows, or a system of built upright slabs or a combination of both. The windows are closed with branches and bushes to regulate the wind during winnowing. Most threshing floors on Andros have not been used for more than two decades. Some had been repaired by cementing the old pavement. Threshing floors were used for the threshing of lentils as well as grains.

The types of grain mills that occur on Andros vary according to the regional resources. Where water is in abundance, water mills have been constructed, as in Strapourgies 29 in the E of the island, which covered the needs of the wider region of Chora, at Mesa Vouni a series of mills along the stream 30, at Varydi and other areas. In the region of Gaurio we find three wind mills, at Marmara and at Sarakeniko and on the plain, and one at Ano Phellos. All three have now been badly destroyed and nothing of their original milling installation survives or is visible today. Three examples of a rare wind-mill type with horizontal
wheel are in the valley of Korthion and in the plain of Gaurio. Rotary hand mills were for household use and restricted for small amounts of grains that did not require fine grinding, such as lentils and wheat for cooking.

Oil mills and presses are numerous, due to the wide cultivation of the olive tree on Andros. In larger villages, two to three presses operated until the first post-War II decade, with the traditional millstone turned by a cow. Only the old wooden press had been replaced in the early part of our century with a metallic one, which also required the use of manpower to operate. The five-six contemporary mills used on the island are installations entirely operated by electric power. Ancient millstones found during the survey indicate that oil production was probably widespread in N Andros in antiquity.

The type of mill most commonly found on the island is that which consists of a large, shallow flat-bottomed stone basin about 2m in diameter. In this revolves a truncated cone, the small end of which is tied to a pole in the centre of the basin, and the other is attached to a yoke, so as to be turned by a cow walking around the installation. Variations to this type may have a slightly concave basin with an egg-shaped millstone, as in one of the mills in the village of Chartes (pl. 5A). Ancient oil mills of similar kind have been known since the Roman period from N Africa and Syria, but may have existed earlier too.31

A different type of millstone was used in the other oil mill in Chartes (pl. 5B): it has a cylindrical perpendicular stone, attached from its centre with a horizontal member to the central pole of the basin. This type, the moladearia, was used in the Roman world, either with one or two millstones.32

The traditional presses work by means of a screw, originally wooden, which was later replaced by a metallic one, aided to turn by a nearby-standing perpendicular wooden pole: while the pole is turned around its axis by human force, a rope is hoisted around the pole, with its
other end attached to the screw, which is consequently forced to turn and press the oil pulp. Presses with similar direct screw were apparently in use during the 2nd-1st centuries BC.\textsuperscript{33}

The numerous treading floors on the Andriote landscape indicate the greater extent of viticulture in the past decades. They are either incorporated in rural houses, farmsteads or are built alone in the field in each land plot with a vineyard. In most cases they are roofed as treading may require a whole day's work. The traditional practice of extracting the juice from the grapes is by treading alone (not followed by mechanical pressing), which takes place in a small cistern, either built and plastered or made up of large slabs in a sort of niche on a built platform, usually occupying the one end of the room. The juice runs from a channel in the centre of the treading floor's facade into a trough, which is usually a large pottery jar. Occasionally the whole room, smaller in this case, is used as a treading floor and the juice runs outside the room from a channel cut in the threshold. Most of these installations are not used today. Vine presses have not been used in modern times, apparently because production was small.

**Modern pottery workshops on Andros**

A short article written by a member of the Zagora team\textsuperscript{34} contains information on the pottery workshops of the island, and is the only literature published on this topic. Unfortunately all workshops have stopped operating by the late 1960s and much useful information has been lost, as for example the exact locations of the clay deposits used. An interesting addition to Birmingham's article is the fact that according to locals the workshops at Amolochos produced sufficient quantities of pottery to satisfy the needs of N Andros. Locally produced pottery beehives can still be found in niches of terrace walls, and some bear the initials of the owner, inscribed on the vessel (pl. 6).
Modern settlement on Andros

The location of most modern or recently deserted villages seems to have been dictated largely by orientation. S and E-facing slopes were preferred in order to avoid the N winds. Settling on the plains was avoided because of the humidity and because these areas were reserved for cultivation. Another decisive factor, equally important to orientation has been the availability of water. Finally other considerations such as the danger of piracy affected the location of older villages, which are usually built in areas concealed from the sea. Arid regions were generally avoided, but on the other hand there exist good agricultural areas which have not been settled. It was not rare for a peasant to walk as much as an hour, or more to get to his field. The usual walking distance would not normally exceed the half hour, or the corresponding time by mule.

There is a high concentration of settlements in the valley of Korthion, a series of villages along the coastal zone from the mid-W, Palaiopolis, towards the N, till Phellos. A number of small inland villages in the N evolved from seasonal rural dwellings of peasants from Megalo Chorio of the N, that is Amolochos. The narrow valleys of the mid-NW are sparsely inhabited mostly in their inland parts, with one larger village, Arnas uphill. All of these locations represent pockets of arable land.
D. Paschales studied classics at the University of Thessalonike. The wide range of his interests is reflected in his archive, where he collected various documents and information concerning Andros and even other Cycladic islands. He was appointed curator of antiquities on Andros in 1899. Information on archaeological sites of the island appears mainly in a short but compact section of his main work E Andros, published in 1925. Some notes reappear in his article "Kastra, Pyrgoi kai Vigles en Andro", where he is concerned with fortifications of all periods. The file with archaeological material from his archive (no 224) does not contain any further unpublished information. It includes the first catalogue cards Paschales made for the museum catalogue of antiquities, where he gives a detailed description of the items, their provenance and other particulars.

Paschales discussed extensively only the site of the ancient capital of Andros, Palaiopolis and the tower of Agios Petros. References to other sites are mostly brief. He was often restricted in mentioning nothing more than the presence of pottery or "ancient remains". It is evident that he had not visited all the sites and that part of his information is based on local's accounts. He tried to be accurate in his description, whenever he offered one, although he might not have noticed all features on each site. Generally he was more interested in the architectural and sculptural remains and coins. Pottery is discussed most briefly if at all.

Paschales rarely proposed dates except occasionally in broad terms especially when coins were available. A consistent error which was noticed during this study is that he mistook most Hellenistic towers for Medieval fortifications.

Despite these shortcomings Paschales' list of sites constitutes the only extensive and comprehensive record of antiquities on Andros. Sites mentioned by other sources,
mainly travellers of the previous century, are included. The period when this list was compiled is significant in evaluating how representative it is of the real archaeological remains. In the beginning of this century agricultural activities were still carried over most of Andros (irrespective of the distance from inhabited areas) and this is reflected in the distribution of archaeological finds reported by Paschales.

From the early prehistoric period Paschales does not seem to have noticed sites, except Mikroyiali, the information for which was communicated to him from others. It is not clear from his descriptions whether he refers to finds of the Later Bronze Age. On the other hand, later sites were easier to locate and more readily identified. Judging from the survey results, the site distribution of Classical to Roman sites as it emerges from Paschales notes is of the quality of an extensive survey, if not better.
The contribution of D. Paschales in the archaeological record of Andros was discussed above. I am not referring to sites mentioned by Paschales unless they have been visited, because the dates of the sites he discusses cannot be estimated. Only published chance finds are included in this chapter. Prehistoric sites and chance finds from Andros are discussed in more detail in Appendix II, with the related bibliography. Consequently they are only briefly mentioned here. Historical events are mentioned here only diagrammatically to provide a skeleton of Andriote history, which is useful in evaluating the finds from the survey. Paschales' History is useful for its collection of ancient sources on Andros in his history of the island. Sauciuc also has a survey of the history of the island.

Neolithic
Mikrogiali: chance finds early in this century, including a stone ax.
Vryokastro: site located by the research team of Zagora.

Early Cycladic
Palaiopolis: frying pan, possibly of the Kampos type.

Late Cycladic
Palaiopolis: LH IIIA-B small tankard and stirrup jar.
Piskopeio: LH IIIA-B alabastron.

Early Geometric period
Heidelberg amphora: chance find from Andros in Heidelberg.
Zagora: a high promontory on the W coast.
a) Burials with grave goods found at the neck of the promontory in 1899; b) pottery from a trench at the fortification wall

Middle and Late Geometric period

Amonakleiou: grave with pottery; one vase at Andros Museum.

Zagora: settlement excavated on the plateau of the promontory. The floruit of the town is estimated to have been in the 8th century, when expansion of house units is observed. Houses were built of schist with some local marble and were similar to the modern traditional Andriote houses. The town was fortified by a thick wall along the neck of the plateau. Pottery imports from Attica, Corinth and Euboea constitute the larger part of fine wares. The large number of Euboean pottery has led to the suggestion that Zagora was an Eretrian colony. The settlement at Zagora was abandoned ca. 700.

Other sites which have produced LG pottery are: Ypsele Aprovatou, a settlement with a temple on a high coastal hill on the W coast.

The area of the monastery of Zoodochos Pege.

The Archaic period

The town which emerged to be the capital of the island, ancient Andros is located in the area of the village Palaiopolis in the mid W coast. The date of its foundation is unknown yet, but ongoing excavations will probably answer this question. Although far from good agricultural land, the coastal location and abrupt slopes of Palaiopolis offered security against attacks.

Andros is reported to have established four colonies on the coast of Eastern Chalkidike, Akanthos, Sane, Stageiros and Argilos. These colonies were made with the cooperation of Chalkideans who were the major colonists in Chalkidike.

The Classical period

Andros was among the islands which sent to Darius earth and water, acknowledging his rule after the fall of Miletus in 494. The island remained under Persian rule.
until the battle of Salamis. Athens asked Andros for war indemnities and was unsuccessfully besieged by Themistocles.

With the establishment of the Athenian League in 478/7, Andros had to pay high taxes and accept 250 clerouchoi.

During the Peloponnesian war Andros originally participated on the Athenian side, contributing money ships and soldiers. After the failed campaign in Sicily, oligarchy was established on the Andros. In 411 Andros sided with Sparta and accepted a garrison.

In 407 Alkibiades campaigned against Andros, landed in Gaurio, and attacked unsuccessfully the city of Andros. Despite the Athenian threat, Andros remained under Sparta.

During the second Athenian League Andros had to accept again an Athenian garrison. Andriots participated in the battle of Chaeronea, after which the island came under direct Macedonian rule until 315.

The Hellenistic period

For the period 314-311 Antigonos the One-Eyed had secured control over the southern mainland, the Aegean and Asia Minor. In 310 Polemaios from Phrygia rebels against his uncle Antigonos and conquers the Cyclades. This instability gave the opportunity to Ptolemy of Egypt to intervene in the Aegean; he liberated Andros from Polemaios' garrison, but soon Macedonian rule was restored.

Andros is known to be a member of the Koinon ton Nesioton.

In 288-7 Ptolemy liberated the Cyclades and established a military base on Andros, before the revolt in Athens by Kallias in 286.

In 276 Antigonos Gonatas founded the Macedonian dynasty. Antigonos was successful over the Ptolemies in three naval battles, at Kos, Ephesos and Andros. The date of the last battle has been a topic of debate. After this battle (probably 246-5) the Cyclades came under Antigonos' control and Andros is mentioned to have a Macedonian garrison.
Andros is not frequently mentioned in texts thereafter. During the Second Macedonian war Andros was held by a Macedonian garrison.

In 199 Roman and Pergamene fleets captured Andros, looted the city, and sent its inhabitants to Delion in Boeotia. The island was then given by the Romans as a gift to Attalus in exchange for his help.

With the death of Attalus III in 133, Andros and the other possessions of the Pergamene king were bequeathed to Rome.

The Roman period

The Cyclades remained under the administrative unit of the Province of Asia.

During the 1st century the Aegean was the ground of battles, piracy and wars of Rome against Mithridates. During the First Mithridatic war, Mithridates is reported to have control of the islands.

In 42 Antonius gives Andros to the Rhodians after the battle at Philippoi. After the battle at Actium in 31 Octavian takes away the islands from Rhodes.

At the end of the 1st century Andros and Naxos are described as important islands by Strabo.

In the 1st century AD Andros received exiled Romans. During Nero's reign works of art from Andros were taken to Rome.

There appears to have been some revival under Emperor Hadrian, for whom many dedicatory inscriptions exist from Andros.

At the end of the 3rd century Diocletian transformed the eparchy of the Cyclades into the Provincia Insularum.

In the 4th century the sophist Himerius commented on poor conditions on Andros.
NOTES TO CHAPTER I

1. Van Andel and Shackleton 1982, 448-50, fig. 2.

2. Ibid., fig. 3.

3. See Rapp and Kraft 1978, for an informative account of the results of studies in the Aegean and relevant theories.


5. One of the ancient names of Andros, Lasia, indicates that the island was well vegetated in antiquity; Ibid.

6. Hippocrates, Peri Gynaikeies Physios, 033. 32. 28; this work had been attributed to Hippocrates but is not considered to be original; Littre 1961, vol. 1, 416-7.

7. Paschales 1925, 224.


12. see note above.


14. See above, note 11.

15. The word aimasia appears in ancient texts; Thucidides, Hellenika, IV 43.3.

16. During fieldwork in Kea, I noticed that land plots on mountainous terrain, are considerably larger than those in Andros.

17. Megas, 93, fig.9: house at Katakoilos (central N Andros).

18. Aravantinos 1978; Aravantinos notes that there is a high diversification of space in Andriote houses in relation to dwellings in other islands.
19. See Lygizos 1983, 321-33, on technical problems, construction phases, material and techniques in traditional Andriote architecture.

20. Ibid., 322-27, fig. 125; Megas 1967, 84-5, fig. 1.

21. Amurca (oil leach) was used in antiquity as a consolidating agent for floors; Columella, De Re Rustica, I 6.13.

22. Megas 1967, fig. 33, 34, 35.

23. Dinsmoor 1950, 4, fig. 1; Lawrence 1957, 18-9, fig. 14.


27. Doumas 1973, 164-5, fig. 1, pl. 80.

28. Vasileiades 1986; this publication is useful for its rich photographic record; the text however is unhelpful.

29. Lygizos 1983, 124, 145-6, figs. 51, 52, pls. 78, 79.

30. S. Nomikos is preparing a publication on the water mills of Vouni; for a preliminary report see Tsenoglou and Nomikos 1988.

31. Amouretti 1986, 163, 165, fig. 26: C.

32. Ibid., 164, fig. 26; Drachman 1932, 42, fig. 9.


35. For a catalogue of Paschales' publications see Polemes 1977. Paschales' archive is today in the Kaïrios Library in Andros; All his notes on archaeological matters are catalogued in file no 224; see also Polemes 1982, for an annotated catalogue of files of the archive of the Library.
36. The ancient sources for the Archaic until the Roman period are discussed in detail in the chapter of conclusions, where historical events are associated with the archaeoological record.

37. Paschales 1925, 201-438 on the history of the island to the end of the Roman period.

38. Sauciuc 1914, 47-96.

39. Kraiger and Kubler 1939, 118, pl. 44.

40. Sauciuc 1914, 47-9, Paschales 1925, 585.


44. This site is investigated by Ch. Televantou from the Cycladic Ephorate.

45. A Geometric kantharos? had been taken to the monastery, probably from some nearby location. This information was communicated to me by D. Polemes.
CHAPTER II

ORGANIZATION OF THE SURVEY
PURPOSE OF THE SURVEY

The original idea of this research, when it started as a project for the Master's degree, was to use the information gathered by the historian of the island, D. Paschales, and locate and study the ancient sites that he had recorded. Sites in Paschales' notes are scattered all over the island, and it would be impossible to undertake this task successfully. For this and other various reasons the research was limited to one region. The sceptic behind the choice of the NW part of Andros will be discussed below.

The purpose of the survey as it evolved for PhD research was in brief a) to locate and study Paschales' sites and b) to investigate selected areas in the NW, regardless of Paschales' or other information in order to identify settlement patterns. This strategy includes to some degree both probabilistic and purposive techniques of investigation.

The chronological limits of the survey were finally set to begin with the earliest prehistory and include the Roman period. This too was the object of much thought, since the interest and studies of the author were oriented in the prehistoric period, but the restriction of fieldwork in one region did not favor the chronological limitation of research. All sites were investigated with similar tactics, so that information of similar quality would be recovered from all sites. There is some differentiation in the final discussion (see below).

Despite the chronological limits set, it was decided to record the location and general features of later sites too, since the areas were walked anyway, and this information might prove useful for other research.

ONE - MAN SURVEY

Working on my own had both advantages and disadvantages. Positive aspects were that I could organize the fieldwork on a flexible schedule, and have control over
the recording of evidence. One-man surveys have been subject to much criticism, and this was taken into account, so that at least some of the negative aspects of such research are eliminated. Considering that I started working on "virgin ground" more extensive and less formal tactics could be used in order to access the general characteristics of the area. Before deciding the tactics of the survey, all bibliography on surveys in Greece was consulted, in order to evaluate which tactics would be appropriate for work on Andros, and plan a productive strategy suitable for a one-man survey.

The problem of working alone was firstly smoothed by the fact that I was in a familiar environment, and that besides the actual time of the fieldwork, I had already spent and could subsequently spent some time on Andros, getting better acquainted with its countryside and people. This proved an important advantage for the understanding of present and past aspects of life in these regions.

Secondly, several visits were made to the sites, and when possible at long intervals, so that there was time to process the material, think about the particularities of each case and recheck data. The one year gap between the first and second fieldwork season was also helpful in assessing the results and planning for a better investigation of the old and new sites.

Thirdly, the survey tactics were organized in a way which could be followed by one person, and would allow the retrieving of the maximum information possible within the time available.

Finally I had the opportunity to discuss the problems of the survey with many people, who most kindly offered their opinion and advice.

The absence of similar work on Andros was a problem, particularly for prehistoric sites, for which parallels had to be sought outside the island only.

**CHOICE OF THE SURVEY REGION**

Two regions were originally considered for
fieldwork, one in the SE and the other in the NW. The NW region of Gaurion and Makrotantalon (figs. 2, 3) was preferred mainly for four reasons: a) its proximity to the mainland, to test how this relates to record of prehistoric sites, b) that it includes the area of the port of the island in historic times, c) the large number of sites mentioned by Paschales in this region and d) the fact that the NW had endured fewer centuries of modern occupation and disturbance.

Originally, it was planned to include the area of Agios Petros, immediately S of the Gaurion valley, and work started there. The time consumed in walking proved longer than the first estimations, so it was preferred to restrict research to the main areas of interest. Furthermore, the ancient exploitation of mineral resources of Agios Petros extended on the next small valley to the S and it was not possible to extend the limits of the survey area so much, to make a full study of the region. The zone however that had already been searched is included in this study.

The specific areas of fieldwork within these regions are described in the chapter dealing with the sites.

LOCATING PASCHALES' SITES

Paschales' information about ancient sites is usually restricted to the reference of the placename and the type of finds (architectural remains, pottery, coins or other). The first step for the location of these sites was to learn about their placenames. This was possible only with the help of locals and in particular Ioannis Rerras, who gave me precise directions for each location and also sites that he knew of from his own observations. The notes of D. Polemes, who has made extensive research on the churches of Andros, were also most useful, since he had visited many of the locations mentioned by Paschales.

These and the other sites located during the intensive part of the survey, were investigated and sampled in the same way (see below). In cases where these sites were not included in the intensively walked areas, I made
random walks in the surroundings, so as to have a clear picture of the environment and locate closely associated sites.

THE INTENSIVE PART OF THE SURVEY

The choice of areas for intensive walking within the survey region was determined by the following thoughts: a) study environmental units, b) try to include in the survey area a large number of Paschales' sites and c) choose areas which would be easily accessible in order to save time from travelling and use it in actual fieldwork.

The areas originally chosen for intensive walking were the valleys of Gaurion and Phellos. As fieldwork progressed large parts of the Kalamos region and the area of Hellenikon towards Kaminaki were walked in a similarly intensive manner.

As a rule, the intensively covered areas were walked at 15 to 30m intervals. This distance was estimated by paces in flattish fields, and in cases of terraced slopes, walks were made along each terrace, or every other terrace in cases these were narrow. Terraces facilitated regular walking and the keeping of more accurate record of finds, by acting as a sort of grid.

RECORDING AND PLOTTING SITES

Technical problems were various. The lack of detailed maps for Andros was one of the difficulties of the survey, and the cause of some delay during the fieldwork in recording sites with precision. The 1:50,000 maps of the Greek Army Geographical Service could not be used for plotting the features of sites, nor for making good estimates of the size of sites. This problem was partially dealt by making photocopy enlargements of the available maps and the use of air photographs. For the Gaurion region I used the 1:7,000 series of photographs of the Greek Ministry of Environment and National Works. For the N region I used photographs from the Army Service in scale of approximately 1:4,000. Photocopies of maps and aerial
photographs or drawings of the fields from the latter were carried together on the field.

The separation of the land in fields, the boundary walls of which show on the aerial photographs, facilitated the research and the recording of finds. The fields were used as a unit for walking and reference.

Detailed notes were also kept on placenames, which tend to be forgotten by the younger generations. I did not get into the process of finding the owners of the plots of land where sites were found, unless I was told about it by the locals, and this for two reasons: properties change ownership, so this does not constitute permanent reference and locals get suspicious that their land is endangered if it is known to have antiquities.

Investigating the sites

Once sherds were noticed on the field, walking would become more intensive. Sampling, unless something of great interest appeared, usually started after having defined the limits of the site. The location was plotted on the map and on plans made from the aerial photographs.

Standard information was written down at the beginning of the investigation and included notes on: morphology of the area and its surroundings, soil cover, water supply, agricultural potential and modern land use, proximity to resources (metals marble), proximity to the sea and potential of the coast, prevailing winds, aspect of the site and visibility towards other contemporary sites, proximity to old paths and donkey tracks, modern disturbance of the area and other particulars, depending on the site. Finally factors which may have altered the distribution of surface material were also noted, so that it would be possible to estimate roughly to what degree the distribution of surface material is representative of the buried features.

Sampling

The first walking of the site also served to measure
the overall density of material (number of sherds or chips of obsidian per square meter) and note changes in the distribution of material and types of pottery present. Quantitative, qualitative and chronological changes in the distribution of pottery were noted and if appropriate, plotted on the plans of the sites.

No grid was used in sampling, for various reasons, the main of which were the fact that ground was usually inappropriate to lay down grids without topographical aid, and the shortage of time.

The basic unit of reference was the field. Ancient ruins or modern structures were also used for reference to specify the sampling areas. The sampling technique varied from site to site, and the reasons for this were the variations in the density of material and the need to recover diagnostic finds. In cases of thin scatters I collected potentially diagnostic pottery from each field in different bags. When fields were large, they were divided in smaller parts, and finds put in corresponding bags. In cases where some differentiation in the distribution of material was observed, these groups were also put separately.

In cases of dense material, sampling was organized differently. Selected areas of about 4-6m² were sampled, and then the site was walked again to pick up artefacts of particular interest or useful for the chronology, or representative of groups of pottery, not present in the small sampling areas.¹

The problem of what to collect was more intense in the beginning of the fieldwork, but was greatly eliminated when I became better acquainted with the material. The aim of sampling was to date the site, understand its function and if possible to identify particular activities within the site through the surface remains. Generally the study of pottery was limited so as to serve the above purposes, which are within the possibilities of a one-man survey.

From the small sampling areas all potentially diagnostic sherds were collected, that is those which had
some shape or surface treatment. A representative sample of sherds for various fabrics was also gathered, something which proved particularly useful for the prehistoric sites, and for identifying local wares.

Prehistoric sites were walked more intensively, because diagnostic material was rare and each sherd seen on the ground was checked. Obsidian was a different case. I collected all retouched pieces and cores from selected areas and random walks and took representative samples from small areas of other pieces, flakes, blades and similar. Only in one case a pattern in the distribution was identified. Again, when the scatter was thin sampling was adjusted.

**AFTERTHOUGHTS**

Despite the numerous difficulties encountered, most of which caused by the fact that on the whole I conducted the fieldwork alone, the result of this research contribute to the reconstruction of the overall characteristics of the investigated regions.

The variability of an island's environment is ideal to realize that there are no strict rules or models of surface investigation to be followed, and that initiative is necessary to cope with the particularities of each area and site. Acquaintance with the landscape and the realities of the Greek countryside proved essential in the understanding and the interpretation of the evidence.

Spending time with villagers proved to be as informative and productive as actual walking on the fields. It helped in recording placenames, locating sites mentioned by Paschales and new ones, getting information on movement of antiquities, reconstructing the environment as it was before land was abandoned, and therefore evaluating land potential and modern exploitation of resources, as well as other particulars which help in the understanding of rural life and approaching ancient sites with greater familiarity.
NOTES TO CHAPTER II


2. Ibid., 393-4; it is acknowledged that extensive surveys are compensating when there is little known for the research area.

3. This policy had been followed in the S Argolid survey; surveyors note that best material would usually occur outside the grid; Van Andel and Runnels 1987, 37.
CHAPTER III

DESCRIPTION AND INTERPRETATION OF SITES
LIST OF SITES AND FINDSPOTS
in order of appearance in text (Figs. 4, 5)

Sites with prehistoric and later material are given two numbers: ? indicates uncertain date, ( ) indicates limited material; h indicates habitation area, c cemetery, sp special purpose area; Pr: prehistoric; LAnt.: Late Antiquity; other periods abbreviated by their initials.

<table>
<thead>
<tr>
<th>Site</th>
<th>Function</th>
<th>Date</th>
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<tbody>
<tr>
<td>1. Rethi-I</td>
<td>h</td>
<td>N</td>
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<tr>
<td>2. Rethi-II</td>
<td>sp</td>
<td>LG-C (R)</td>
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<tr>
<td>3. Structures N of Rethi-II</td>
<td>?</td>
<td>as above?</td>
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<tr>
<td>4. Phournoi-I</td>
<td>h?</td>
<td>Pr</td>
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<tr>
<td>5. Phournoi-II</td>
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<td>6. Marmara-I</td>
<td>h</td>
<td>Pr</td>
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<td>C</td>
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<td>h?</td>
<td>Pr</td>
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<tr>
<td>11. Sarakeniko</td>
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<td>12. Kato Gaurio cemetery-I</td>
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<td>Pr</td>
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<td>17. Xerokampos - Agios Savvas-II</td>
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<td>18. Chrysostomos</td>
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<td>H?</td>
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<td>A?</td>
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<td>81. Tokeli</td>
<td>sp</td>
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THE AGIOS PETROS VALLEY

Landscape and resources

The small valley of Agios Petros is S of Gaurio and separated from it by the low hills of Sarakeniko. To the S, it is bordered by the ridge of Rethi and the promontory of Phournoi. The village of Agios Petros is situated on the upper slopes of the inner valley. It is only this well-watered area that is still being cultivated. The terraced slopes of Rethi and the plain are completely abandoned today, and the lower area rapidly turns into a tourist zone.

All slopes are covered with maquis, except the inner valley around the village, which has orchards and olive trees. There are water sources in the area of the village, but the rest of the valley is quite dry. It appears though that the present picture of the land is a rather recent development. The placename Rethi is Albanian, meaning forest. This implies that a substantial part of this ridge was well vegetated, at least until the fifteenth century, around when Albanians are believed to have migrated to N Andros.2

The long beach of Agios Petros is facing SW and is appropriate for anchorage during most weathers. Even today it is used by small ships for shelter. This bay and that of Kypri to the S, have rich fishing waters.

The main resources of the area are the manganese and iron ores on the ridge of Rethi. These were last exploited at the end of last century and the early years of the present.3 There are reports of locals about ancient mining shafts or wells, and it seems that the ores were exploited also in classical or later antiquity.

The area covered during the fieldwork is the greatest part of the W slope of the ridge of Rethi, a small part of the upper E slope, and the promontory of Phournoi, which is in fact the tip of the ridge.

Some general notes

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The most known antiquity of the area is the Hellenistic round tower of Agios Petros at the lower edge of the village. Various descriptions of the tower have been made by travellers and early historians, but no full study has been made yet of this monument, which is one of the best preserved of its kind in the Cyclades. Paschales has a full list of the related literature up to his times, where the function of the tower is usually related to the exploitation of the mineral resources of the area. The tower also appears briefly in recent bibliography.

Chance finds from the surrounding area indicate occupation around the Hellenistic period.
1. RETHI-I

Location and resources

The prehistoric site is located on a rocky acropolis on the ridge of Rethi 1.2kms inland of the bay, at an altitude of 300–310m (pls. 7, 8 at background, 14:a). It is a unique location in the region of Gaurio and Rethi: cliffs surround the site on all sides except the NE, where a narrow neck connects the knoll with the main ridge. The land is slightly seaward sloping, forming two main levels: an upper of ovoid plan and a lower zone around the S, seaward side.

The site has an excellent view towards the valleys of Agios Petros and Gaurio and the sea, where the Northern Cyclades are visible during clear weather. On the other hand it is very exposed to the winds and subject to intense erosion. Water sources are more than 15 minutes walk away.

The archaeological remains

a) Architectural features

Across the neck of the plateau is a low heap of stones (local mica schist and schist of the usual size used in rubble walls), 25m long, about 2.5m wide and around 0.60m high. It runs E-W to meet on either end the abrupt cliffs of the slopes (pl. 7). It appears that these ruins belong to a fortification wall of the prehistoric site for the following reasons: a) a modern field boundary wall on this location would not fit into the existing pattern of walls and there are no traces of an earlier network of walls; b) a wall at the neck of the acropolis would be required to protect the only undefended side of the site and is a usual feature on sites with similar layout, and finally c) the high concentration of pottery and lithics is restricted within the area defined by the cliffs and the ruins of the wall. "Outside" the wall not more than ten artifacts were found altogether.

Traces of possibly ancient walls are visible in the gaps between the cliffs of the seaward side of the acropolis: boulders are crammed within these gaps, which do
not exceed in length 1.50m, and are levelled with the plateau above.

Low and short walls exist on the lower level of the site. Considering their random location on the ground not all can belong to terrace walls for cultivation, and it is possible that they are vestiges of the prehistoric settlement revealed by erosion. Scattered stones are found all over the site.

b) Ceramics (fig. 34)

Ceramic material is found in low density, about 1 sherd/m² and is very worn. Fabrics are coarse with quartz and schist grits and large mica, indicating local manufacture. Vessels are fired hard. Most wares are plain and only a few have red and mainly dark brown poorly burnished surfaces (K4:26, 28, 22, 29 and other), or occasionally slipped and burnished (K4:24).

Plain vertical rims with dark burnished surfaces (K1:1, 4, 5) apparently belong to bowls with more or less vertical walls. The recovered lugs are pierced horizontally, horizontal plain or similar (K2: 6, 11, 13) and are shapes common in Final Neolithic contexts in the central Aegean. Baking pans with perforations below the rim (K2: 16) are also known from both periods.

Shapes and surface treatment of pottery found on Rethi-I are known both from Early Bronze Age and Neolithic sites. It is possible that we are dealing with material from two successive periods or with transitional material between the two phases.

c) Lithics (fig. 35)

Obsidian is present in higher quantities than pottery, at an average density of about 5 pieces/m² on the lower area, and about half of that amount in the upper area. No specific distribution patterns were observed, but it is clear that the material has been displaced by rainfalls on this barren terrain.

Very small waste by-products, probably resulting from knapping, indicate that there existed a local lithic industry, despite the present absence of cores. The
material is dominated by flakes, some of which are pointed. Blades are represented mostly by fragments: they are all irregular and have thick sections, usually triangular. There appears to have been little, if any, facetting of the core before their extraction.

Two pièces esquillées\(^8\) (nos 1 and 2) were found. No 16 could be a drill of the slug type, although it bears no traces of use-ware.

The absence of regular, parallel-sided blades (an absence attested during repeated visits to the site) suggests a Neolithic lithic industry.

d) Other stone (fig. 36)

A thick round stone disk of coarse grained stone probably served as a pot lid for a small jar. Such lids are known from Saliagos and Ayia Irini, although the latter are larger and intended for pithoi (see catalogue, S1). Stone slabs are still considered appropriate for covering pithoi, probably because they are heavy enough not to be moved by rats.

Conclusions

The material from the rocky acropolis and the extent of its distribution show that Rethi-I was a habitation site and is the only known in the region which can be identified as a settlement. Conveniences like proximity to water resources and agricultural land were secondary factors in the choice of the location for settling. The natural defense of the area appears to have been the primary reason for living in this exposed site. It appears that the inhabitants reinforced the security of their settlement by building a fortification wall.

The pottery and chipped stone industry of Rethi-I indicate a chronology towards the end of the Neolithic period. There are some shapes however which complicate the picture.

The location of the "acropolis or kastro" type was considered rather uncommon for settlements of this period, but recent research and specifically the Melos
survey shows that knoll tops within coastal zones were as
favourite as low promontories in the Final Neolithic and
Early Cycladic periods.\textsuperscript{11}

The few pieces of obsidian and early prehistoric
pottery found at Phournoi, the promontory at the tip of
Rethi, are discussed below and are certainly very few to be
well evaluated. We note however here the possibility that
the settlement on Rethi was associated with Phournoi, which
might have served as the coastal station for the major site
of the region.

2. RETHI-II

Location

This site is situated approximately 100m NE of the
previously discussed prehistoric settlement (pls. 8, 14: b). The same comments on wider landscape and resources
apply here as well.

a) Architectural remains on the knolltop

Paschales notes ruins of ancient structures on Rethi,
possibly associated with the mines. He does not specify
the location of these remains and it is not clear whether
he refers to the following material.

The main feature is a structure, which appears to be
a Late Geometric -Archaic temple, built on a small
elongated and partly artificial knolltop at the narrowest
area of the ridge top (pl. 9). Other remains were located
on the nearby slopes.

The knoll has a roughly N-S direction and its flat top
measures 21m along this axis and has maximum width 11m.
Its N and E sides are rocky, but the W has been
artificially supported by a retaining wall built in the
common dry-stone technique with flattish schist slabs. This
wall survives to a maximum height of 3.30m. Its lower part
(1m) projects slightly from the upper, that being a common
way to give stability to the wall. The only feature in the
construction of this wall that suggests its antiquity is
the use of exclusively flat schists, as opposed to the
modern walls of the region which are built with stones of various sizes. The visitor to the site realizes that such a wall would be necessary for the supporting of the small flat top, especially as there was a building on it. Certainly the antiquity of the present wall can not be established with means other than excavation, but even if it is modern it must stand on the location of an earlier one, contemporary with the building above.

A low sheep pen is attached on the S retaining wall of the knoll and obstructs the examination of the wall. As far as it is visible its masonry is similar to the W wall.

In front of the pen and on a lower level-terrace is a flat area, almost triangular in shape, about 90m² and surrounded by walls similar to the knoll. The peculiarity of this piece of land is that it is flat (note that animals do not have access to it) and totally clear of stones. It has not been cultivated and considering the remoteness and unsuitability of the area for any kind of agricultural exploitation, this flat piece of land appears to have been deliberately created for a particular purpose, possibly related to the building on the knoll.

The ruins of a rectangular structure oriented roughly N-S, are visible on the ground and the eroded sides of the knolltop (fig. 12). This is identified as a rural temple. It is 10m long and preserved to a width of 6.45m; all of the W side has been eroded. The walls are 0.60m thick and the E wall survives to a height of 0.30m above present ground level (pl. 10). It is built with local greyish marble slabs of various dimensions used as extracted or with little shaping, creating a double facing with a core of earth and rubble; stacked jointing was practised to fill the interstices on the faces of the wall, but does not survive well in all areas. Much building material has remained on the area of the structure and has probably sealed its lowest part intact, that is the foundation, or at best the floor. There are no visible traces of internal divisions indicating a cella and anteroom.

A gap in the S wall probably represents the location of
the entrance. Assuming that the doorway was on the centre of the wall, we can estimate that the width of the building was around 7.50m. The small width of the plateau would not allow a larger structure anyway.

In front of the building are traces of a feature which seems to be a step: this is the external face of a "wall" parallel to the S wall and at a distance of 1m from it (fig. 12:a). Around 0.40m below the level of these ruins another feature has been tentatively identified as the platform of the building (fig. 12:b): the inconsistency lies in that it is not exactly parallel with it. Poor traces of corners of walls have been revealed by erosion below and beyond the SE side of the building, and at slightly different orientations (fig. 12:c, d). Their function is not clearly evident: if they belong to a stepped platform the difference in levels between them and the upper feature identified as a platform is big, creating too high steps for a building of this scale (about 0.45m). The other possibility is that they represent earlier buildings, something which explains also their poor state of preservation.

b) Pottery (fig. 37)

Pottery is found in high density (about 7 sherds /m2) in the S area of the building and immediately outside it on the same side; some sherds were recovered from the packed earth of the roof of the pen. Fine wares constitute the majority of finds and confirm the use of the site in the eighth, seventh and sixth centuries; Classical sherds are rare. The high proportion of fine wares is a characteristic of areas of special function and in particular sanctuaries, since votive offerings include good quality pottery. In the case of Rethi it is believed that the pottery found belongs to a temple, which is identified as the building on the knolltop.

From the Late Geometric and very early Archaic sherds we note here the decorated handle of a skyphos with black paint on whitish slip (K2:24; the decoration has been weathered from a similar handle, K2:23), sherds of skyphoi
(K2:17), some of which with decoration, horizontal lines (K1:4) or vertical lines within horizontal banding (K1:5). Small fragments of body sherds from early vessels were also recovered (K2:21, 22, 25). Sixth century material includes fragments of black or poorly glazed skyphoi (K2:15, 19), the vertical strap handle of a kantharos (K1:1), a small kotyle, possibly Corinthian (K2:26), a cylindrical black glazed handle (K1:9) and small wall sherds (K2:20, 28).

Sherds K1:9 and K2:16 belong to black figured vessels of the late 6th or early 5th centuries. K2:29 appears to be a case of local black glazed pottery: the fabric has large mica and was fired dark grey with a red core and the glazed is dull. Some coarse wares belong to small storage vessels (K1:13) and cooking pots (K2:30, 31, 33).

Fragments of a late Roman lamp (nos 10 and 12) were also found but are the only definite finds from this period.

A rather coarse biconical spindle whorl was recovered from the roof of the sheep pen. Pieces of weaving equipment were often offered as votives.

Finally a few small fragments of very coarse wares may belong to early prehistoric pottery. A flake of obsidian was also found. Considering the proximity of this site to prehistoric Rethi I, it is possible that the knolltop was visited or used in early prehistoric times, although we do not know to what extent.

A fragment of a small skyphos (K3:34) was found at a rock shelter SW, in the close vicinity of the knolltop. It appears that it was moved there, since no other artefacts were found there.

Discussion

We have already seen that the quality of the pottery suggests that the building could be temple. The plan of the building, and the particular location also support this hypothesis.

The walking of the area around the site verified that this building is remote from inhabited quarters, except for
a structure about 40m to the N (see below). Sites known from chance finds in the vicinity are in the area of Kypri between Rethi and the hills of the monastery of Zoodochos Pege to the S and around the village of Agios Petros to the N, both more than twenty minutes walk away. These sites have not been investigated and we do not know whether they are contemporary with Rethi II, to be associated with it. The location is not appropriate for a farmhouse or other agricultural rural establishment, since the surrounding land is rocky and unfitted for cultivation.

The dimensions of the building on Rethi are similar to those of a group of small Late Geometric - Early Archaic temples, with length around 10m and width about 7m (all measurements external). From Andros, the archaic temple of Zagora measures 10.42 x 7.56m and that of Ypsele Aprovatou 10.20 x 7.15m belong to the same scale. The dimensions of other small contemporary temples are comparable to those of the building on Rethi: the Geometric temple at Dreros in Crete measures 10.90 x 7.20m, the 8th to 7th century slightly smaller temple B at Kommos in Crete measures about 8.30 x 6.46m, the Archaic temple of Athena at Emporio on Chios 10.13 x 6.23m and the Subgeometric - Archaic temple at Agios Georgios near Phaistos about 9 x 6.50m; while Xobourgo in Tenos retains the same proportions in smaller scale. Other temples including Apollon Pythios at Asine and Hera Limenia at Perachora, have a more elongated plan than that of Rethi.

The N - S orientation is common in early temples, including the discussed temples at Zagora, Xobourgo, Dreros, Phaistos, Asine and Perachora. In the case of Rethi orientation appears to have been dictated by the terrain.

The type of masonry on Rethi has been influenced by the mica schist environment: the stones could be easily used as extracted, with little or no shaping at all, employing the characteristic stack jointing. This masonry is commoner than ashlar in small temples of the Geometric and early Archaic periods.
Assuming that the morphology of the area has not changed drastically since antiquity, we could possibly identify the flat piece of land to the S as an open court, through which would be the access to the building.

Regarding the chronology of the temple, we have already noted in the description that there are several building phases. According to the pottery the main periods of use are the 7th and 6th centuries BC. The decline of material in the 5th century indicates a the gradual abandonment of the site, but still it was not completely forgotten and was occasionally revisited, judging by the odd Roman sherd.

3. STRUCTURES to the N of RETHI-II

About 60m to the N of the knoll with the building discussed above, and on the upper W side of the mountain, ruins of buildings are visible (pl. 11). They are built with slabs of greyish local marble and stand to a height of less than 0.20m. Three rooms next to each other and parallel to the slope can be distinguished. The N room, a, has sides 6 and 5.10m and its E wall is 0.60m thick. Of central room b, only parts of the W and S walls are visible. At a distance of 3.20m to the S another room was traced with sides 4 and 3.10m, c, and to the S it seems that there is yet another room attached, d. The E wall of room c stands to a height of 0.30 - 0.50m. The ruins are covered with scattered building material and earth from the slope.

No pottery was found within these ruins, only a few sherds of coarse wares, not diagnostic, to the S.

The date of the described structures is obscure. They are not sheep sheds and they do not seem to be modern. The absence of mortar suggests an early date, but the present evidence is insufficient in detecting relations between these ruins and the temple on the knoll to the S.

THE PROMONTORY OF PHOURNOI

45
Location and resources
Phournoi is the low ovoid promontory, which extends from the ridge of Rethi dividing the bay of Agios Petros from the small Golden Beach to the S (pl. 14: c). It is low and connected with the mainland with a narrow neck. Today the vegetation consists of bushes, but in earlier days the S side had been terraced and cultivated.

4. PHOURNOI-I Prehistoric remains
A few pieces of obsidian were found along a recently opened track on the neck of the promontory near the modern road. I could not check carefully the fields on the other side of the main road, but the overall rarity of material and the absence of pottery show that it was a minor site. The promontory itself would be appropriate ground for a prehistoric settlement, but no such evidence was recovered. The main site of the region was higher on the ridge of Rethi.

5. PHOURNOI-II Later remains
Paschales noted that the promontory took its name from the ancient furnaces there, operating with material from the mines of Agios Petros. Traces of mining in open ground on the E side of the promontory belong to abandoned test mines of modern times. In the same area a partly carved and built depression (around 4m in diameter) appears to be also a rather recent construction. There are pieces of metal but no slug was noticed to suggest that the above structure was a furnace.

There are similar ruins on the highest point of the area (near the topographical column of the army). These are two shallow cavities, partly carved on the bedrock and partly built (diameter 1.35 and about 1.90m; present depth 0.65m). These cavities are 2.65m apart, on slightly different levels, and are connected with a crudely carved ditch (pl. 12). The ruins are difficult to interpret as they are very badly preserved. A few sherds found in the vicinity seem to be later antiquity wares, if not more
recent.

About 8m W of the above are poor ruins of a circular structure, approximately 2.60m in diameter (pl. 13). The stones are small and irregular, and there is nothing to indicate the date of this structure. It is certain however that it is not a threshing floor.

Finally, on the recess at the W side of the promontory just above present sea level, a small cavity has been carved on the rock (diam: 0.25-0.20m; depth 0.15m). Such carvings are intended to receive wooden poles to be used for fastening the cables of boats. This feature cannot be dated, since it could belong to any period.

There are no definite signs of ancient activities on the promontory of Phournoi. The structures described above appear to be rather recent constructions, possibly related with the processing of metals. The same is suggested by the very few pieces of pottery found in this area.
The valley of Gaurio owes its recent importance and development to its natural port and its proximity to the mainland. Until the 1950s ferry boats made the tour of the island and stopped at Chora, because inland transport was more difficult. Besides the privilege of the port, Gaurio has the smallest of the three main plains of the island, and one of the few easy grounds for cultivation in mountainous N Andros. These two features constituted the main attraction to the area.

The valley is facing SW and is enclosed in the E by low hills, in the NE by the high ridge of Skimpi, and in the N by the ridge of Pelekete and in the W by Charakas which debouches to the sea. On either side of the narrow entrance to the bay are cape of Kastri in the W and the promontory of Marmara in the E; the mouth of the bay is about 300m wide.

In the N and NE inner part of the valley are the small villages of Koumari and Ano Gaurio respectively. There are pockets with dense vegetation in these areas: besides olive trees, there is wild vegetation, including varieties of oak trees.

All other slopes are covered with maquis. Their greatest part has never been cultivated, since the plain was preferred for agriculture. During the last decades an increasingly large part of it gets abandoned. Today a few fields are still cultivated for animal food and the rest are used for grazing cattle.

From the N and NE slopes flow the two main streams of the valley, Koumari and Megalo Potami (Big River), which merge in the middle of the plain. The latter only has water all year round, as it is enriched with water from springs. These are restricted on the N slopes, but there is enough underground water in the plain exploited through wells.
The villages of the valley are relatively modern, and in particular the coastal settlement. Its inhabitants came from the villages from the N part of the island, where there is still a tendency to move to Gaurio. At the end of the seventeenth century Tournefort noted that Gaurio was the best port of the island and was used by the Venetians during the war with the Turks. In 1831, the demogerontes of Amolochos were requesting the construction of a quarantine in the otherwise unsettled port. Buchon in 1841 noted 14-15 houses at the port and more around, implying those of Ano Gaurio and Koumari. Gradually Gaurio succeeded in becoming the main port of Andros. Recently, tourist enterprises are being developed in the area.

Archaeological notes

An effort was made to cover by intensive walking as great a part of the valley of Gaurio as possible. Although the coverage is far from total, it is estimated that no major sites were missed, with the possible exception of one site in Ano Gaurio (see appropriate entry). The areas covered are roughly the lower slopes around the valley, the entire low E hills, the upper plain and the summits of the ridges of Pelekete and Charakas. A few random walks were made in the lower plain: alluvial depositions appeared to have covered or displaced archaeological remains and it was decided to spend little time in this area.

Paschales' notes have limited information, repeating Sauciuc and Meliarakes information about antiquities in Gaurio, which appears in the following entries. It is interesting that Bent noted last century that there are "evident traces of antiquity" in Gaurio, mentioning also that there are "several towers built near it", but does not go into further details. It appears that much of the evidence has been destroyed with the building of the modern settlement around the port.
CAPE MARMARA

Cape Marmara is the E rocky promontory at the entrance to the port of Gaurio, and owes its name to its marble rocks. Under this heading we will discuss the wider low and almost triangular peninsula to the S of the modern road (fig. 14:n).

The NW part of the area is densely inhabited and construction is progressing towards the sea. Only the outskirts of the inhabited area were walked, where there are accessible plots of land.

The shore is very irregular and forms two beaches facing S, but reefs make navigation dangerous in this area. On the side of the port the shore is higher and abrupt. The land is covered with maquis and near the sea, it is barren and eroded. Visibility is often quite low.

a) Architectural remains

The promontory of Marmara has very steep sides and a narrow flat top, which due to erosion has retained only a thin layer of earth. At the very tip modern disturbances for the light house have revealed traces of a schist wall 0.30m high and 0.60m long; the rest has been destroyed or eroded. Near the neck of the promontory a circular structure, with approximately 2.50m diameter, is indicated by traces of a rubble wall and stone heaps. Some sherds from coarse wares, post-prehistoric, were found around. The date of these structures cannot be estimated, but their function on this location was certainly related to the entrance to the port; a light house is necessary for safe navigation.

In the SE area, and almost on the shore, are fragmentary remains of a wall built with small schists, visible within a scar of the slope for 3m. The sea has eliminated any other trace of this wall which probably belonged to a small structure. This masonry could not belong to something more substantial as mole. The antiquity of this wall is attested by the fact that it is below present ground level in an apparently undisturbed area; the structure would be in use at a time when the sea
level was lower (today small waves flood it).

It is possible that the latter architectural remains are associated with the early prehistoric material found in the same area and discussed below.

**b) Small finds**

**6. MARMARA-I. Prehistoric material**

Prehistoric pottery and obsidian are scattered in very small quantities over a coastal zone about 100m wide. Pottery is very fragmented and appears mainly on the SE most eroded tip of land. The fabric is very gritty and micaceous, comparable to that of other prehistoric sites of Andros.

Chipped stone is very weathered and consists mainly of fragments of blades with trapezoid sections (fig. 38): some are clearly irregular but others have roughly parallel sides and ridges (nos 2 and 8). The fragmentary condition of all pieces makes their identification difficult. One pièce esquillée was recovered (no 1).

The very limited amount of material is difficult to interpret and date. There could be a typical early prehistoric settlement occupying the SE tip of Marmara, where finds are more numerous. It is not clear whether material in the N area can be regarded as such, since it is so sparse. It can be more adequately explained as resulting from activities other than permanent occupation.

**MARMARA-II. Later material**

Small fragments of later pottery were found scattered over the W part of the main peninsula. Fabrics indicate a rather late post-classical chronology.

The fragment of a late Hellenistic fusiform unguentarium, was found on the NW slope bordering the central beach (fig. 38). Other undatable sherds are scattered in very low density on the same low slope and the eroded rocky ground above (a small area around 400m2). The unguentarium most likely indicates a burial ground, for which the soft slope is appropriate. The area behind the beach has been severely disturbed by mechanical diggers for
the construction of the hotel, and as mentioned no pottery was found there, nor in the sections on the ground.

A useful piece of information was communicated to the author by the assistant director of the British School at Athens, Guy Sanders, about a Roman coin found at Marmara about 10 years ago and handed over to the National Archaeological Museum in Athens. Unfortunately I did not have the opportunity to pursue the traces of this coin.

KATO GAURIO AREA

Fieldwork within the modern settlement of Gaurio is almost impossible since the area is densely inhabited.

8. KATO GAURIO-I. Classical and Hellenistic finds

AGIOS NIKOLAOS

During my fieldwork I was shown by Mrs Helene Rerra a Classical mug, found in the backyard of her house near the parish church of Agios Nikolaos, on the NW side of the hill. The vessel was recovered from a scar on the slope created by a mechanical digger clearing the grounds for building, at a depth of about 0.30m. The mug was resting almost on the bed-rock and had both old and recent cracks, the latter obviously resulting from the digger which actually revealed it. Nothing else was found then, and I was not able to locate any ancient pottery or other features during the fieldwork. The earth in the small patches of land which are still unbuilt in the vicinity, is thin and very disturbed from modern building activities.

Almost all pieces of the mug survive and I restored the mug to the extent that is shown on the photograph (pl. 106). It is a Pheidias shape mug, with moulded ribbed walls, round body, concave neck and a double handle. This type was very popular in Athens in the second half of the fifth century (fig. 39)

The good state of preservation of this mug and the rest of the information about its findplace indicate that it could have been associated with a burial. No other
similar cases are known from Gaurion and I tend to support that if this vessel represents a burial it was an isolated case rather than a burial within a cemetery. Furthermore there is no definite evidence of a classical settlement in the area of modern Gaurio.

Epigraphical evidence

Paschales includes in his list of inscriptions three from Gaurio, which have been transferred to the Museum at Chora. All three are dedicatory inscriptions and could belong to funerary monuments and are dated to the early (no 74) and later Hellenistic period (nos 82, 85), according to the character of the script. Two were built in houses at Gaurio and one is mentioned as coming from the same area, so their exact provenance is not known. In recent years no similar finds have been recovered, and therefore we can only assume that they come from Gaurio.

If any of the inscriptions belong to funerary monuments, this evidence could be associated with the unguentarium found at Marmara. Still, even during the construction of the hotel there, no finds have appeared.

9. KATO-GAURIO-II. The Roman settlement

There are various indications for a Roman settlement around the port of Gaurio.

Loutron

Last century a mosaic and coins were recovered at the site of Loutron (=Bath). Meliarakes noted that one coin was of Ptolemy and the other of the emperor Theophilos. Nothing more is known about the finds. Sauciuc has some interesting information about this site: he notes that it is located one hundred paces inland from the sea, next to the road; there was a well and a substructure, partly preserved; among these ruins were one doric and one Christian (meaning Corinthian?) capital; to the North and East of the road were ruins of walls plastered with thick mortar, 1m high and 1.5m thick; to the E is a room, the
East wall of which is 3m long and 0.65m wide. Sauciuc has a photograph with the ruins which is not very informative. It depicts three hollows, indicating rooms and heaps of stones around; to the left the corner of a plastered wall can be distinguished. Sauciuc's photograph however is somewhat confusing for the identification of the exact location of Loutro: it shows that the ruins are not located in the lower level of the plain; mountain ridges on the horizon at the background suggest that the photograph was taken from further inland than noted by Sauciuc, looking towards the N end of the ridge of Charakas and the area of Maroniti. The most likely location is the low hill to the E of the sports stadium.

It is noteworthy that today the placename of Loutro refers to the location of the quarantine used during last century for sailors arriving to the port of Gaurio. I am not positive, that this location corresponds to the site described by Sauciuc. There are some ruins which must come from the ancient baths and are described below.

**Remains E of sports stadium**

The flat field and low slopes E of the modern sports field produced Roman pottery and architectural material (pl. 14:d). Round and rectangular bricks and some pieces of marble have been reused in the field boundary walls (pl. 15). All these are built in modern walls and it is not possible to check whether the marbles are dressed; only broken surfaces are visible.

The round and rectangular bricks most likely indicate the presence of a Roman bath complex, with an installation of a hypokauston, that is a lower chamber with pillars supporting the floors of the heated rooms. Although Paschales mentions that the well (to which also Sauciuc referred to) was still being used at his times, today I found no trace of it.

Pottery appears on the two fields, between the modern sports-field and the back street of Gaurio, over an area of approximately one hectare. The exact limits of the scatter cannot be estimated, due to the school grounds and the
modern houses, which surround these fields. Ceramic material extends on the low hill to the E, but this area was not walked entirely, because it is being used for grazing cattle. Pottery in the W field appears in a density of around 3 sherds/m²; it is considerably less in the flat fields. Pottery consists of coarse wares. Diagnostic pieces are few; in particular I noticed combed and ridged wares of the fifth and sixth centuries AD. This site has not been sampled because I visited it during off-survey season.

Another architectural element was noticed in the vicinity. This is the fragment of an unfluted marble-schist column, now placed on a backyard wall of a house across the sports stadium (pl. 16). This piece is 0.50m long and preserves less than half the thickness of the column; the diameter is estimated to have been about 0.46m. The stone appears by visual comparison identical to that of the quarries of Trochalia and Strongyle at Phellos. The findplace of this piece in the vicinity of the finds described above and the use of coloured marble, which is a favourite Roman material suggest that the column probably belonged to the bath complex. No other trace of columns were noticed, but it is likely that they have been reused in the houses of modern Gaurio.

Evidence for metal working

Large pieces of iron ore were found built in the walls of the fields discussed above. This observation might be related with Paschales' information that in 1889 a large cave, rich in copper and iron ore was discovered under a house in Gaurio, and had traces of ancient mining. Paschales claimed that ancient miners were interested in extracting the copper and not the iron. It appears certain that this feature was indeed a mine, but there is no evidence about its date, nor is Paschales' information about copper reliable, considering the negative modern reports on the presence of exploitable quantities of copper in the ores of the island (see introduction).
Other material from Kato Gaurio

Sauciuc provides the photograph of the lower part of a hellenistic? statue (0.97m high, including the plinth) in the wall of the house of Alekos Psomas, near the mole at the port.\textsuperscript{37} While the statue shows well on Sauciuc's photograph, successive white-washing of the house had covered it to the point that it was hardly visible. I did not have the opportunity to study it, mainly for this reason. On my last visit to the island however (autumn 1991) I noticed that all stucco and lime wash were removed from the statue.

Panagia tou Gallou

Paschales mentions that this church, which is located further inland at the foot of the E hills, is built with ancient building material, including marble, and has a Latin inscription built inside, above the door:

\begin{verbatim}
DIOGENES PISCINAM
VETEREM NOVAM
NOVIT TOTAM \textsuperscript{38}
\end{verbatim}

The notes of Paschales are confusing in that he mentions a location lower in the plain, Loutroi, in relation to the fish tanks implied by the inscription. It appears that Paschales confused the fish tanks with Loutro, the baths discussed earlier. The actual location of the fish tanks cannot be recovered today, since the shoreline has been built up and consequently evidence must have been destroyed. The shoreline of Gaurio is sandy, as visible today, and therefore the fish tanks would most likely be built structures rather than rock-cut, and therefore more easily destroyed.

Regarding the church, it is impossible today to distinguish the ancient material because the walls are plastered and white-washed. I have not been able to enter the church, which is usually locked. Some of the surrounding fields to the E which were walked, did not produce other ancient material. It is possible however that this evidence has been obscured by building and
agricultural activities in this neighbourhood, and vegetation, which is high. Apart from the odd sherd in these fields, no significant amounts of pottery were noticed to indicate ancient activity.

Conclusions

According to earlier accounts about Gaurio and the available surface remains, there was a Roman settlement in the area of modern Gaurio, and in particular on the E side of the bay. The site probably extends to the NE as far as Panagia tou Gallou, but there is little evidence about this.

At least two features of the Roman settlement are attested: a bath installation on the location of Loutro and fish tanks somewhere in the bay. The remains from the baths, that is the mosaic found last century and the column, if they both come from the same structure, indicate that there was a luxurious establishment. The identification of the exact location of Loutro is problematic, because the development of the modern town of Gaurio has obviously disturbed the area substantially, and we cannot identify any of the features described by Sauviuc. A further public building is implied by the marbles reported to have been used in the church of Panagia tou Gallou.

SE HILLS OF GAURIO

Location and resources

The SE hills that border the valley of Gaurio have a gentle relief and most areas are covered with maquis vegetation. This land has not been cultivated for long, if at all. Recent building activities have started exploiting the lower slopes towards the sea, and also the upper slopes overlooking the Agios Petros valley.

Besides the material discussed below I noticed a small scatter of Byzantine pottery on the seaward slopes of
the hills SE of Tsouka.

10. SOUTH TIP OF THE HILLS

An extended very thin scatter of material was located on the S tip of the hills, above the modern road. The ground had relatively good visibility when visited, as vegetation in this area had been burned. The earth on the slopes is rather thin (around 0.70m), as can be seen in scars of the ground.

Pottery is worn and fragmentary. Some coarse fabrics are prehistoric. Others have the characteristic reddish orange colour of other Roman and later material known from the island.

Some obsidian was also found, mainly fragments of regular blades.

The distribution is very low, hardly perceivable: one artefact every 5-10m, even on a field cleared by a mechanical digger. No sample has been taken from this area. There is information that during the opening of a dirt track recently on the seaward tip of the hill next to the modern house there, a grave with goods was revealed; no trace of it was visible at the time of the survey.

11. ANEMOMYLOS - SARAKENIKO

Sarakeniko refers to the SE hills and their westward upper slopes. Anemomylos indicates the summit, where there is an old ruined wind mill.

As was the case at Marmara and the SE hills, a very thin scatter of material extends on these areas. Sherds are very fragmentary and fabrics include some coarse wares which could be prehistoric and others which appear to be much later.

Conclusions

Finds from the SE hills of Gaurio are difficult to interpret, because they are scattered over large areas and are limited in number. Neither prehistoric material mainly in the S, nor the later sherds in the N part of the hills
indicate with any certainty habitation areas, except perhaps a few very scattered dwellings. The artifacts on these hills might also be considered as background noise around more densely inhabited areas.

KATO GAURIO CEMETERY I and II

Location

The sites discussed are located on the fields NE and E of the cemetery of Kato Gaurio (pl. 14:e). Not all fields were walked because they were fenced and not accessible. The slope is generally soft and covered with maquis. Modern habitation quarters gradually proceed to occupy this area as well.

Two chronologically distinct scatters of pottery were located in this area. The earlier is prehistoric and the later Classical.

12. CEMETERY-I: The prehistoric site

A thin scatter of obsidian chips and very few sherds were found on the field on the steeper part of the slope, E and above the cemetery, occupying an area of about 0.1 hectare.

Chipped stone consists of flakes and fragments of irregular and wide blades, which indicate an early industry, but the number of finds is too small to be dated with any certainty.

The coarse fabric of the sherds is similar to wares from other sites in the survey area, which have been dated to the Neolithic or Early Bronze Age period. This similarity constitutes the only indication for the dating of this site.

This site represents one of the small rural installations of the early prehistoric period. The small amount of material suggests limited occupation, both spatially and temporally.

13. CEMETERY-II: The Classical site
Pottery is found in a density of less than one sherd/m² to the NE and mainly to the E of the cemetery, over about 0.3 hectares. Wares are coarse and include large jars and amphoras (fig. 40). Very few sherds are useful for dating. The high feet of lekanai (K1:2, 6, 10, K2:20, 22) are probably dated to the first half of the fifth century, and similarly the toe of an amphora (k2:16).

This small rural site might be identified as a farmstead or a neighbourhood of a few rural establishments, most likely associated with animal husbandry, rather than agriculture (being on the hill).

THE HILLTOP OF TSOUKA

Location and resources

Tsouka (=summit in Albanian) is a low elongated hilltop projecting from the E hills of Gaurio into the central plain. It has a roughly E–W direction, its slopes are fairly steep and its W side is eroded and rocky. Tsouka was most probably never used for cultivation, since the surrounding plain and the lower soft slopes to the E provide good land for agriculture. The nearest water source is about 200m away, to the N.

Tsouka has an altitude of 60m and overlooks the whole of the Gaurio valley and the port.

Archaeological remains

Two distinct sites were located on Tsouka: an early prehistoric small settlement and a late Classical round tower, which has been reported by Paschales.

14. TSOUKA-I

The prehistoric site is restricted on the W side of the narrow plateau of the hill and on the upper S slopes, covering a total area of approximately 1300m² (pl. 14:f).

a) Architectural remains?

Just below the W edge of the plateau are remains of a rubble wall, consisting of two to three irregular courses
of stones, which fill a small gap between the rocks. Ruins are very poor and certainly their antiquity cannot be attested; it is possible however that they belong to a wall built within the cliffs, which was intended to border the site.

There are very few stones on the plateau, which is being intensively eroded by the weather.

b) Pottery (fig. 41)

Pottery is very fragmentary (most sherds are less than 2 x 2 cm) and badly weathered. Only two shaped sherds were found and are the cylindrical handle of a large jar (K1:1) and another piece which appears to be a lug handle (K1:2). The fabrics are very coarse; surface treatment was not observed on any pottery of the site. The fabrics suggest a Neolithic or early EC date.

c) Lithics (fig. 42)

Chipped stone consists of obsidian blades, flakes and small waste by-products, which are found in density of about 4-5 pieces/m$^2$ on the summit. Material is very rare on the slopes.

Blades are less numerous than flakes, have irregular sides and dorsal arises and trapezoidal or triangular sections; some are thick, but there are some thin examples. One is pointed at its end and has traces of wear there; it could have been used as a drill.

Flakes are generally thicker and irregular.

One piece, no 16 is an exhausted core, from where flakes had been extracted. Tiny obsidian fragments were also found.

Due to the absence of characteristic tool types, chronology is based on the presence of exclusively irregular blades, which indicate a Neolithic date.

Conclusions

The prehistoric material found at Tsouka and its limited distribution suggests that the hilltop was occupied by a small group of people towards the end of the Neolithic period or the beginning of the EC period. The inhabitants
would probably live off agriculture and animal husbandry, since the surrounding land is good for either. The sea would be another source for exploitation, considering that at that time the sea shore would be nearer Tsouka during the early prehistory, as opposed to today that alluvial depositions have altered the landscape. The lithic industry does not show any specialization.

15. TSOUKA-II

Under this heading we discuss a small round tower in the SE side of the summit (pl. 14: g), and the associated pottery. Paschales refers to this structure, noting that its masonry cannot be dated later than the 4th century BC and that there is much pottery around, including many black glazed wares. 39

a) Architectural remains

The small round tower has external diameter 6.20m, width of wall 0.80m and surviving height 0.70m (fig. 13, 14). Two thirds of its periphery survive and part of it, to the N has served as foundation for a modern boundary wall. The building technique is irregular, using rough blocks of white-grey marble and schist together with smaller stones for the outer part of the wall; some of the larger blocks are placed as headers (pl. 18). Very thin schists slabs with occasional larger stones have been used for the interior part of the wall, in a careful and tight technique (pl. 19). It is impossible to distinguish internal features like partition walls, because the interior of the tower has been filled up with debris.

A hole with roughly rectangular section (0.10 x 0.20m) penetrates the whole width of the tower's wall in its W side, 0.10m above present ground level. This hole was probably intended to drain liquids from the lower part of the tower.

The base of the building has a slightly larger circumference than the upper part, projecting by 0.02-0.03m at the level immediately below the hole.

There is no clear indication for an entrance. If this
was on the ground floor, it would have to be on the S side which has been destroyed.

The large width of the wall of the tower would allow to restore the building to a substantial height, but its rather poor construction suggests a lower estimate. The masonry of this tower is distinct from any large scale work, and is paralleled only in unsophisticated domestic architecture. The absence of roof-tiles among the surface material indicates a flat roof.

On the N side of the tower are the remains of a wall with NW-SE direction, which is also underneath the modern boundary wall. It is visible for a length of 3.50m and height of 0.20-0.50m and is built in the same masonry as the tower. The junction of the two structures, being under the modern wall, is hardly visible but it seems that the wall was built after the tower was erected. It appears to be part of a courtyard, which would also have served to eliminate the effects of the prevailing N winds of Gaurio.

No other structures were distinguished in the vicinity. Furthermore the debris on the ground is too limited to suggest other buildings. Some of the building material from the tower has been used in the modern boundary and terrace walls of the area. The marble had been brought from a nearby source on the slopes E of Tsouka, where similar marble is found in small clusters.

b) Pottery (fig. 43)

Pottery is restricted over an area approximately 300m² around the tower and especially on its W side. It is denser around the building and gets rare away from it, so it is believed that it is directly associated with the tower.

Wares are mainly coarse: household and particularly kitchen wares (K1:10, 14) indicate permanence of occupation and the large number of pithoi sherds are important in determining the function of the tower. Wine amphorae are also present.

Some black glazed vessels were found and include fragments of skyphoi (K1:2) and a crater (K1:1).
The ceramic material is dated to the 5th and 4th century.

Discussion

Three observations related to the location of the tower are important in determining its function: a) it is a "single tower", in the sense that it is isolated, b) it has good visual command of the larger region and c) it is located within good agricultural land.

The building at Tsouka could not have served as a watch tower, because neither its location is appropriate for such a role, nor any sites or other towers can be associated with it in such a relationship. Its simple house architecture and small size are not suited for a primarily defensive role either; these two features attribute the construction of the tower to private initiative. The location of the tower in the midst of the plain implies some relation to agricultural activities.

Tsouka was probably part of a farm complex belonging to a landowner, whose wealth depended on the exploitation of a lot of land around the tower. The morphology of the area does not allow to estimate the possible limits of this associated land. The tower would offer a good view to the estate and apparently served as residence of the owner, since there are both household wares, which indicate permanent occupation, and fine black glazed pottery, which implies some financial ease. Finally, the large number of pithoi shows that the tower served also as a storing place; the hilltop location is appropriate for such a use, since it avoids the humidity of the plain.

Ancient sources mention that towers provided some security for their inhabitants and in them were kept valuable items such as tools. The tower of Tsouka therefore would also have a limited defensive purpose for occasional assaults by thieves or similar.

Despite the differences of construction, the function of this tower is similar to the country estates in Sounio discussed by Young and also to a large part of the towers of Siphnos discussed by the same author and more
recently by Ashton. The size and the construction of the tower would normally depend on the extent and wealth of the farm. These towers appear to have been common in the Greek countryside as parts of smaller or larger farm complexes, as for example the Vari house in Attica, and the Temple estates at Delos, Rheneia and Myconos, from where survive also the inventories mentioning their four main sources of revenue: livestock, grain, grapes and figs.

For the Sounio towers, Young notes that the associated pottery ranges from the end of the fifth century to the third (later material is considered to come from reoccupation). Tsouka is a further example of a relatively early "agricultural" tower. The general impression is therefore that the construction of towers associated with agricultural activities, was not restricted to a limited chronological period. At Siphnos, on the other hand, towers related to agricultural activities are all considered to be late. It would be difficult to test this observation because the chronology of towers has two major problems: a) well built structures attracted people long after their construction and therefore surface finds are not always informative on the earliest period of the building and b) architecture and masonry are not always safe time-indicators.

One question arises in the case of towers which appear to be built by individuals: why build towers at all? R. Osborne has proposed that the construction of towers at Thasos reflects a society where individuals or groups of people wished to display their status for various reasons, which are related to local developments; towers became an appropriate means of achieving this goal. This interesting hypothesis is helpful in understanding the mentality behind the construction of towers built by individuals. A tower could be made small and even be built in inexpensive masonry as the example at Tsouka, but is a strong building, which inevitably displays the status of the owner. It would be reasonable for a landowner to wish to make his presence and strength felt over and also beyond
his estate. The comparison of ancient "private" towers with medieval family towers in the Greek countryside is instructive, because they have several common features.49

Judging from the fieldwork carried out in NW Andros, and Paschales' notes, it seems that Andros does not have many towers as opposed to Siphnos which has fifty six50, Thasos with thirty six51 and Kea, which has many more than the twenty-seven reported in 195452. Paschales' notes on towers have to be treated with caution because describes ancient towers as medieval constructions (see below the example of the tower at Choreza). Still, the number of known or reported constructions which could be ancient structures is about fifteen only. Unimpressive constructions like the tower of Tsouka are usually elusive from the archaeological record, and in this respect it is an interesting and rare example.
THE ANO GAURIO AREA

landscape and resources

The NE slopes of the valley of Gaurio are in their larger part well vegetated with wild species. The ground is rather steep and had been terraced, although now most of the land, especially the higher slope, is abandoned.

The village of Ano Gaurio was the original habitation area in the region of Gaurio (see introductory notes for Gaurio). Today very few of its scattered houses are still inhabited, mainly in lower neighbourhood near the church of Agia Sophia.

Archaeological remains

The areas which were covered during the survey are the NE part of the plain, Xerokampos, parts of the slopes around the neighbourhood of Schole and the area around the church, Agia Sophia. Fieldwork continued to the W covering a zone on the lower slope towards Koumari. Random walks were made on the upper slopes.

Paschales mentions remains of ancient habitation, not clarifying whether he referred to structures or small finds. I have not been able to locate any definite architectural remains, but there are sites in the area of Xerokampos and Agios Savvas, around Agia Sophia, and possibly on the hill of Chrysostomos.

XEROKAMPOS - AGIOS SAVVAS

Location and resources

The area named Xerokampos is the part of the plain N-NE of the hill of Tsouka, to the E of Megalo Potami (Big River) coming from Ano Gaurio (fig. 14:i). Agios Savvas is the small country chapel just to the E of the stream (fig. 14:h). The land is flat and parts of Xerokampos are still cultivated, but the area of Agios Savvas is covered with shrubs. The stream has little water during the summer, thanks to water sources which run along its course. One such source is next to Agios Savvas.

The main material belongs to the Roman period. A small scatter of prehistoric finds was also located.
16. AGIOS SAVVAS I: The prehistoric site

At the junction of the two smaller streams a small and very thin scatter of prehistoric pottery and two or three chips of obsidian, over an area of about 600m$^2$.

Pottery is very fragmented (size of sherds about 2 x 2cm) and not any shapes can be restored from the sherds found. The fabric is coarse and gritty, resembling other assemblages dated in the Neolithic or Early Bronze Age period.

The small extent of this site and the limited number of finds probably indicate a temporary rural establishment. A degree of caution is retained because this site is located on the plain, and alluvial depositions may have altered the distribution and even presence of finds.

17. XEROKAMPOS - AGIOS SAVVAS II: The Roman site

General

There are no architectural remains in the area. Furthermore the amount of stones in the area is not unusually great, so as to suggest the presence of many ancient buildings. As mentioned above this may be a result of alluvial depositions, but it may also indicate poorly made and scattered constructions, which left few traces in the plain.

The pottery

There are rather thin scatters of pottery (about 1-2 sherds/m$^2$) in the fields of Xerokampos to the E of the main road to Ano Gaurio (pl. 14:i, fig. 44), and on the other side of the stream, around and to the S of Agios Savvas (pl. 14: h, figs. 45, 46). The two assemblages are thought to belong to the same site. The total area covered is about 9 hectares. I made random walks in the fields to the W of the main road and it seems that this area was not occupied; modern use of these fields as stockyards may have obscured the evidence.

All sherds belong to plain and coarse household wares and include a large number of large jars, pithoi and wine amphoras. Dated pieces like the handle of a frying pan
(Agios Savvas K1:9) and double rolled handles of amphoras (Agios Savvas K2:17), indicate the occupation of the site in the first centuries BC and AD, and possibly second century AD.

Some fragments of pan-tiles and also bricks were found.

Conclusions

The NE part of the plain of Gaurio was occupied in the Roman period, around the 1st century AD by a rural settlement. Due to the absence of architectural remains, and the low density of small finds, it is difficult to establish the exact limits of the inhabited area. The location of the site is appropriate for a community with agricultural economy, and in particular involved with farming. The activities of its inhabitants would extend to a large part of the plain.

The Roman remains in the lower plain, appear to be somewhat later than material from Xerokampos. If there is any overlap in the chronology of the two sites the relation between the site at Kato Gaurio and Xerokampos would be that between a town and rural establishments, the latter supporting the former with agricultural supplies. It would be justified to imagine for this period a setting similar to modern settlement in Gaurio.

18. CHRYSOSTOMOS

Location

The small country chapel of Chrysostomos is situated on the hilltop NE of Agios Savvas (pl. 14: j). The slopes are densely covered with shrubs, so visibility of the ground is low. The location is very exposed to the winds, and the whole hill probably was never cultivated.

From the narrow hilltop one has an excellent view of the valley of Gaurio.

Ancient remains?

There are sherds very thinly scattered on the slopes
of the hill. Some belong to the recent centuries, but others appear earlier, possibly Frankish. Small stone heaps and destroyed terraces on the W and S slopes indicate that the area was cultivated at some period. Both the rarity of finds and the chronologically varied material however suggest that this pottery did not come from a settlement, but has been accumulated there from general use of the area.

Paschales noted that the chapel of Chrysostomos is founded on remains of a small castle or round tower. What is in fact visible, are large unhewn schist slabs (some measuring 0.70 x 1m) below the NE external corner of the building. They represent two courses of irregular masonry, but the church has obscured any other remains. On the same side of the church is a low heap of smaller schists. A marble slab has been used to crown the low wall of the small yard. It measures 0.50 x 0.9 x 0.48m(surviving), and bears tool marks from a thick pick. The marble appears to come from Pelekete.

Conclusions

The church of Chrysostomos is founded on an earlier structure, built with unhewn schists, some of which are large. Marble was also used in this building. Its remains are underneath the apse of the chapel and are hardly visible. The date of this building remains unknown, because there is no diagnostic pottery in the immediate vicinity and architectural remains are not characteristic. It probably belongs to the later antiquity or subsequent periods, since no earlier material has been recognized with certainty.

Regarding the function of this structure, there are several possibilities. An interpretation implying a recent date is that of a church. If it is a still earlier structure, the hilltop location would be appropriate for a watch-place or similar.

19. ANO GAURIO-I (East)
A small site was located on the lower E slopes to the E of Agia Sophia, at the junction of two small streams, on the location of a modern deserted farmhouse (pl. 14: k). The slope is terraced and its upper part is still cultivated. There is little water in the nearby streams. The pottery (pl. 48)

A few sherds were found scattered on the lower terraces over an area less than 0.1 hectares. They all belong to coarse wares and include large storage vessels. Some fabrics are distinctive local, and are similar to wares found in Roman sites elsewhere in NW Andros. The few shaped sherds also indicate a Roman date.

Conclusions

This small site appears to be a similar case with the modern farmhouse on the same location, dated around the late Hellenistic or early Roman period. The limited number of finds show that there was limited occupation or use of the area, probably over a limited period of time.

20. ANO GAURIO-II: AGIA SOPHIA

Location

Agia Sophia, which is the parish church of Ano Gaurio, is located on the lower NE slopes (pl. 14: 1). There are scattered houses in the area. The modern road has disturbed the land, which is covered by the debris of the modern houses, storage yards, pens and similar.

The pottery (pl. 47)

Random walks between the houses were not productive, partly because of the modern disturbance of the area. The only pottery recovered was found either on the bed of the road, or at the cuttings of the slope on the side of the road, at depths 0.30 - 1m below present ground level.

Pottery consists of coarse wares, including cooking pots and plain amphoras. A few finer but apparently plain vessels were also sampled. They are dated in the Roman period, but are not late.

The exact limits of this site were not located. It
appears that it did not extend on the terraces below the parish, since these did not produce any material. Little was found beyond the second turn of the road above Agia Sophia, so the site was probably limited within an area of around 0.4 hectares.

Conclusions

According to the scattered ceramic evidence there was a habitation area above the modern church, sometime in the Roman period. It is something larger than a farmstead installation. The particular location would favour the establishment of a settlement, because it is a protected area, close to water sources and to agricultural land. If the modern wild vegetation on the slopes reflects slightly the ancient environment, this would be a further attraction for settling.

THE AREA OF KOUMARI

The area of Koumari is the NW inner part of the valley of Gaurio, and the landscape resembles that of Ano Gaurio. The upper slopes have wild vegetation and the lower are planted with olive trees. The plain remains uncultivated with the exception of very few fields. There are water sources which run to the stream of Koumari. Most of the houses are abandoned and permanent residents are rare.

I have walked on the lower slopes of Koumari and the greatest part of W slopes of the ridge of Pelekete, below the W dirt road leading to Koumari. I also made random walks on the higher N slopes, up to the area of Velanidies, where is a cluster of oak-trees.

Again there was the problem of walking within inhabited or recently abandoned areas with yards occupied with all sorts of household debris. No large sites were located. Most material belongs to the recent centuries. It was rather surprising to see that the main hill of Koumari to the E of the river, which was carefully searched, was not occupied during antiquity.
21. KOUMARI-I (East)

This is a findspot rather than a real site, on the slope E and above the main hill of Koumari, which was located during the course of a random walk.

Five pieces of pottery were found within the disturbed earth from the opening of a recent dirt road. Two badly damaged sherds bear traces of black glaze which appears to rather early, possibly archaic. Other wares are coarse.

Both the date of this site and its character are vague and impossible to attest from the available finds. Immediately around and on the slope below the findspot no ancient material was recovered, but the area above is occupied by a house and has not been checked. Walks higher on the slope were fruitless and therefore I incline to believe that it is a small site.

22. OTHER MATERIAL: KOUMARI-II (West)

The W slopes of Koumari were covered by intensive walking of most fields below the road and random walks for the rest of the area.

Although no actual ancient site was located, I note some observations, chance finds and some later material found in the area.

The field around the ruined pigeon-tower is a findplace of sherds from the last two centuries. Strangely enough, I found a sherd from an archaic relief pithos with a pattern that decorates also another pithos found at the site of Marmouristra, on the plateau high above and to the NW of Koumari (pl. 116). The fabrics of the Koumari and Marmouristra decorated sherds are slightly different, but the pattern is exactly the same, indicating that the two pieces were decorated with the same roulette.

The problem lies in the findplace itself, where no other definite ancient remains were located. Probably slope deposition has obscured the distribution of finds on these lower slopes.
23. Later material from KOKKINADA

Kokkinada is a recess on the lower W hills of Gaurio, immediately SW of Koumari, and has taken its name from the red coloured earth of the area. There is a spring on the lower slope. In the vicinity of this spring and over an area of about 0.2 hectares a very thin scatter of pottery was noticed, including combed wares of the sixth century AD, and pithoi. It is not clear whether this material is related to the spring, or whether it comes from a permanent installation there.

Some sherds of later, but not modern pithoi were found on the hilltop just S of Kokkinada, in the vicinity of a small animal shed.

THE PLAIN OF GAURIO

The parts of the plain which have been walked systematically are the lower SE area near the port, Xerokampos and the fields adjacent to the slopes of Koumari. The S part of the plain, around the main road towards Phellos, which is being cultivated and used for animal grazing, was not accessible for fieldwork. In the rest of the area, I made random walks across some of the fields. There is a very thin scatter of sherds (about 1 every 10m), which does not indicate habitation, but rather use of the land.

24. MEGALO POTAMI

Architectural remains

During the survey of river beds in the valley of Gaurio, some architectural remains were located in the left bank of the Megalo Potami, about 150m before it merges with the Koumari river. The river has passed through a structure, exposing sections of two walls at its bank (see also Appendix III).

The walls are at a distance of 3m and are roughly parallel (E wall lies N/NE-S/SW, while the W wall is closer to a N-S direction) and it is possible that they belong to the same structure. The foundations are at a level of 0.35
above the river bed and the upper surviving part around 2.60m below the level of the plain. They are both built of irregular schists of the size used today for field boundary walls. The E wall is 1.25m high and 0.90-1.20m thick and has a layer of stones on top of it 0.40m high. The W wall is 0.65 high and 0.45m thick; it has a foundation with smaller stones, 0.45m thick (pl. 17).

The earth surrounding these walls is not stratified and this shows that the walls were free-standing at the time that they started being buried. A few weathered sherds were found to the E of this latter wall, but are unhelpful for dating. No pottery was found in the vicinity beyond these walls and a walk on the field above was also unproductive. In the absence of diagnostic material it is impossible to date the structures. The fact that they are buried deep is an indicator that they do not belong to the recent centuries, but not more.

Conclusions

The walls visible on the banks of Megalo Potami provide us with valuable information which relates to the archaeology of the valley. Firstly, despite our inability to date the structure, we know there was human occupation of the valley on a level at least around 1.10-1.20m below present ground level in the middle of the plain, between the rivers of Koumari and Megalo Potami. This in turn shows that the surface material of the plain is not representative of the buried remains, especially when lying at great depths, as in the case of the walls discussed above.
CHARAKAS

The ridge of Charakas has a maximum altitude of 215m and borders the valley and bay of Gaurio in the W, separating it from the valley of Phellos (pl. 22). Its main capes are Kakogremi and Strongyle, on the side of Phellos. In the SE is the cape of Kastri. The shores from Strongyle to Kastri are abrupt. The E facing slopes are rather steep with low relief and covered with maquis. The soil is deep, but traces of cultivation were found only on the uppermost slopes and plateau. During the last decade some houses have been built on the side toward Gaurio along the lower slope. The slopes towards Phellos have a different morphology and are discussed later, under Phellos.

Two zones of Charakas were investigated during the survey. One comprises the higher part of the plateau along the summit (a zone of average width of about 350m) and included part of the NE and NW slopes and the cape of Strongyle. The other zone starts from Kastri and covers the lower coastal land below the modern dirt road, to the main beach of Gaurio. These areas are discussed below.
THE W SIDE OF GAURIO BAY

The W coastline of the Gaurio bay forms alternating small beaches and promontories called, starting from the N Stou Tzortze, Agios Nikolaos, Kamari and Kastri. Some of the lower coastal fields are terraced and planted with olive trees. There are no water sources in the area, only higher up in the middle of the slope of Charakas.

25. STOU TZORIZE

This is the NW beach of the bay which has a minor coastal plain with olive trees. On either side rise low hills. To the W is Agios Nikolaos.

Today part of the area has been severely damaged due to the opening of a road and unjustifiable disturbance by an earth remover on the hill around the church of Agios Nikolaos.

Paschales reported ancient tombs with precious grave goods including golden earrings and buckles, discovered during cultivation. On the occasion he visited the site in 1901 and found "at a substantial depth a bulk of broken sea shells within ruins", which he consequently interpreted as the remains of a Phoenician purple industry. Material however found in this area is far different from that described by Paschales and consists only of pottery indicating a small settlement.

The small finds (fig. 49)

Ceramic material is found in low density, about 2-3 sherds/m², on the coastal field but is denser within the disturbed earth on the N slopes of Agios Nikolaos. Pottery consists mainly of coarse wares and a small number of fine wares. The most characteristic sherds belong to combed and ridged wares of the fifth and sixth centuries AD.

The fragment of marble from a Holy Altar is not dated. It could belong to a later occupation of the site.

Discussion

If Paschales' information is correct, the graves would
probably belong to an earlier chronological period than that of the pottery recovered during the survey, since Christian graves do not have the richness of those described by Paschales.

The ceramic material found during the survey includes all types of household wares and cannot be interpreted as tomb material. A small settlement existed during around the 5th and 6th centuries in this protected corner of the Gaurio bay.

KAMARI

Location and resources

Kamari is the small low promontory N of Agios Nikolaos. Its S seaward side is terraced and planted with olive trees and has a well on the lower field. The E and N sides are covered with low maquis vegetation. A deserted modern house is on the hilltop.

26. Kamari-II. The prehistoric material

On the S slope of the promontory a findspot of prehistoric material was located. Despite careful walking of the area I found only about five small and weathered sherds and a piece of obsidian over a limited area of a few square meters.

This limited amount of material results from use of this area during one occasion, or a very limited period of time. The location would be favourable for fishing and we are probably dealing with the remains of a this or a related activity.

27. Kamari-II. Classical and later? material

The pottery (fig. 50)

There is little pottery on the summit of the hill and even less on the terraced slopes to the W. Most of the material was found in the upper NW terraces.

Most wares are coarse. The earliest piece is a 5th century skyphos (no 22). Other sherds are to be dated
later, probably to the Hellenistic period.

Conclusions

Kamari had a small habitation site from the fifth century which survived or was reoccupied in the Hellenistic period. It was a rural establishment, probably exploiting the marine resources of the area.

THE PROMONTORY OF KASTRI

Location and resources

Kastri is the high, roughly circular promontory with the big lighthouse on the left side for the one entering the port. It is connected in the NW to the ridge of Charakas with a short neck (pls. 20, 22:a). Its W side which is subject to erosion from the sea falls abruptly as a precipice, and the presence of sherds at the very edge of the cliffs indicates that erosion has altered the landscape since ancient occupation; the S and E sides are less steep. The summit of the hill, which is fairly flat and much disturbed around the lighthouse, and the lower plateau to the E, are covered by low maquis vegetation, which reduces the visibility of the ground to about 75%.

The hill is exposed to all winds and at a good distance from water sources and fertile lands but has to offer a good view of the port and the valley of Gaurio. Its strategic location however should not be overestimated: one can see from Kastri the W coast and sea S of Gaurio but the view to the W and N view is hindered by cape Kakogremi. A ship coming from Attica or Euboea remains unperceived from Kastri until it sails to a half-mile distance.

Paschales reported ruins of a medieval fort built on an ancient one. Traces of walls were found during the survey and are discussed first, while pottery and lithic material which belong to two distinct chronological periods, are discussed later under Kastri-I and Kastri-II.

Architectural remains

Traces of a wall which surrounds the summit were
located: on the N side survive one or two courses of mica-schist and schist irregular stones which belong to the external face of the wall (pl. 21). To the E and S a heap of stones about 2m wide and around 0.40m high continues on the same line. On the NW and SW side the traces stop at the edge of or near the cliffs. The total length of the ruins is about 170m. In the NE they are interrupted for 9m and outside this gap are heaps of stones. These ruins and stone heaps appear to be the remains of a fortification and the latter feature probably indicates the existence of a gate at this point.

In the middle of the NW slope is low heap of stones, 1.20m wide which can be traced for 20m, following the outline of the hill. These are apparently the ruins of another wall.

These walls could belong to a medieval castle despite Paschales' claim, since there is no trace of mortar. Lacking other clues, they are to be associated with the small finds and particularly with the LG-early Archaic material.

28. KASTRI-I

a) The pottery (fig. 53)

Prehistoric pottery was found on the upper half of the hill in low density (about 1 sherd /m²). Material is rare on the E slope.

Fabrics are distinctively coarse with large grits and mica and have a rather dark colour in most cases. Surface treatment has probably been eliminated from many of the sherds, which are very weathered and fragmentary. Two pieces are informative: (K1:21 and 14), which are plain rims of bowls with upright sides and red or dark red crusted and poorly burnished surfaces; the shape and surface treatment are known from Final Neolithic Kephala (see catalogue). The burnish is coarse, leaving the surface rather irregular. Most other sherds are plain; one of the coarse wares (K1:15) belongs to a cheese pot or baking pan.
b) The chipped stone (fig. 51, 52)

The chipped stone assemblage, which extends over the same area with pottery, consists mainly of obsidian; one piece of flint was also found. The density is about 1 piece/m².

Thick flakes are the main type represented, and some of which are large and pointed. One (1) has traces of ware at its pointed end. Fragments of blades are distinguished with difficulty from flakes as they are wide and irregular. Their coarseness suggests an Neolithic date. One pièce esquillée was found.

Tool (3) is a broad trapezoidal denticulate, made of altered rhyolite, a silicic volcanic rock, which has a white cortex with a light brown-chocolate core (pl. 107). Cycladic rhyolites appear at Phyra, Santorini, Antiparos and Melos. Torrence suggests that it was quarried from sources in Melos, but its use was restricted, despite its relatively good flaking properties, because it appears in small bands. Bosanquet and Welch note that there are numerous chips and pebbles of "white flint" (the rock that has been recognized today as rhyolite) along the NE coast of Melos, and were still being used at that time as strike-a-lights.

Denticulates found in securely dated contexts belong to the MC phase and most to the early LC period. Examples from the Cycladic islands were imported ready made, probably from Melos, because no chips or cores of this material have been found on the sites. Published denticulates are known from in Ayia Irini, Kea, Phylakopi, Melos and Akrotiri, Thera. The earliest mainland examples are dated towards the end of the EH period.

Although the use of the denticulate as a sickle element is not definite, its chronology in MC and LC contexts in the islands appears well documented. The example from Kastri can be dated accordingly to one of these periods, since the shape of the broad denticulate
cannot be easily confused with other earlier types.

The presence of a MC or LC artefact implies that some of the obsidian material which is not characteristic might belong to this period too.

The chipped stone therefore represents two chronological phases, Neolithic and MC or LC.

Conclusions

The upper part of the promontory of Kastri was inhabited at first during the end of the Neolithic period, at a time contemporary with the site of Kephala, with which the pottery has close affinities.

Another distinct phase of occupation of Kastri during prehistory is during the MC or LC period, attested by one characteristic find. It is admittedly disturbing that there are no other finds dated from either of these chronological periods, and we have to rely on one artefact only, no matter how safely dated this is. It is possible that the low visibility of the ground and the disturbance of the hilltop account for our inability to recover more material. If the interpretation of the denticulates as sickle elements is correct, it implies that they would be used on the fields. Kastri is certainly not a favourable ground for cultivation, and it is more likely that the denticulate represents a habitation area.

The attraction for settling on this exposed location deprived of water, could be no other than the sense of security inspired by the topography of the area: isolated, almost as an island, but still close to the plain of Gaurio and almost in the centre of the bay, with a good view of the surroundings. We may suppose that the economy of an early prehistoric settlement on Kastri would be more oriented towards the sea, that is fishing, rather than agriculture.
Ceramic material from this phase on Kastri has been found on the upper part of the hill in rather low density (less than 1/m²); most sherds were found at the edge of the crevice to the N and are very weathered.

All pottery belongs to the end of the LG period and the early Archaic period. Dating is based mainly on fine wares which are well represented, and in particular the inset rims of skyphoi and the type of slip used, which does not appear later than the 7th century.

One sherd (8) can be dated with certainty by cross dating with reference to LG decorated sherds from Marmouristra-II with identical chocolate-brown characteristic thick slip (K1: 6, 9).

Conclusions

Ceramic material shows an occupation or use of the uppermost part of the hill of Kastri definitely in the LG and early Archaic period. For two reasons I believe that this material does not represent an actual settlement: the extent of the site is small and there seems to be no reason for a small group of people to settle in this unfavourable environment, since there is a contemporary large settlement on an equally well defensible location, Stauros Peleketes.

The location is more appropriate for an installation for a specific purpose, related to the security of the port of Gaurio: probably a garrison controlling in some way the entrance to the port. Considering the location of Kastri, it is also very likely that there was a light house on the hill. Entrances of closed ports as Gaurio would need to be indicated by light houses and indeed some have been identified in Thasos.65 Certainly there is no direct evidence for this on Kastri, but the topography is appropriate.

The traces of the wall which surrounds the summit might also belong to the LG-early Archaic period, since there is no later material and we have excluded the possibility that they are medieval fortifications. The
presence of a fortification enhances the strategic character of the site.

It is possible however that the disturbance to which the summit has been subject to, has obscured information that would alter the above proposals. For example it is strange that there is no classical pottery on Kastri. Considering the obvious importance of the site during any time period, it is possible that we miss crucial evidence.
30. CHARAKAS I AND II

On the upper E slope of the ridge two small neighbouring concentrations of early prehistoric material were located on the flattish area created by a series of marble cliffs (pl. 22: b). The two sites are about are 30m apart and appear to be interrelated.

CHARAKAS-I

One site is located on one of the acropolis-like areas created by the cliffs. A thin layer of land has survived erosion and the soil is remarkably hard. The distribution of material covers an area with diameter around 20m.

a) Architectural remains

Possible remains of a fortification or enclosure wall are situated on the narrow zone of land on the SW edge of the site, on the same level with the cliffs: a single row of big marble boulders, 6m long and 1m high. The ruins probably represent a possibly abandoned attempt to surround the site, since there exist no other traces of this wall.

On the upper level of the site the amount of stones scattered is too restricted to indicate the presence of buildings.

b) Pottery

Pottery is very fragmentary and weathered, but appears in a dense concentration of about 7 sherds/m² in the central area of the site. A small number of sherds found near the rubble wall seem to have slid down to that point. The fabric is generally coarse, micaceous with large grits and red to brown colour. On two sherds of bowls traces of a black matt slip are visible, and one has its external surface burnished. The poor quality of the burnish indicates a Neolithic date.

Some of the sherds found next to the rubble wall are later, not prehistoric.

c) Lithics (figs. 56, 57)

Obsidian is restricted to the upper part of the site.
and appears in a density of about 2 pieces/m²; it is denser in the centre of the site and gets rare towards the edges.

Material consists mainly of fragments of flakes and irregular blades with large flat butts; some blades are thick. Small chips were also noticed.

Two large conical cores were found near the cliffs semi-buried in the ground (nos 9 and 10; pl. 108). Irregular blades and flakes had been extracted from these cores using the percussion technique; in both cases the debited surfaces slightly overlap each other. The smaller core has still a cortical surface, indicating that it has not been much reduced. Its striking platform is angular and not facetted, but appears to have been trimmed. The larger core has a flat striking platform with abraded overhang.

The conical type of core is typical of Late Neolithic chipped stone assemblages in the Cyclades. The similarity of these cores from Charakas with two larger ones from the site of Saliagos is noteworthy. They also look like the macrocores from the obsidian quarries at Melos and on some sites during the Melos survey.

CHARAKAS-II

Some prehistoric pottery was found about 30m to the S of the above site, next to the cliffs, over an area of about 60m². Fabrics and surface treatment are like the pottery found at Charakas-I. Only two small flakes of obsidian were found in this area.

Conclusions on Charakas-I and II

The close proximity of the two sites and the apparent chronological contemporaneity, suggest that they are associated. The artefact distributions described, are very limited in extent, but are sufficiently dense to show that they are the results of more than one occasional visit to this location. There was a small rural establishment of people who were probably occupied with animal grazing in the surrounding land. The choice of the location indicates
some concern for security; it is very unclear however whether the rubble wall was a work of these people.

The chronology of these sites to the Late Neolithic is based mainly, and I believe securely, on the lithics, since pottery finds are so poor.

31. CHARAKAS-III

Location

This site is on the summit plateau of Charakas and the upper terraces of the W slope, near the highest altitude, approximately in the middle of the ridge (pl. 22: c). It is oriented towards Phellos but overlooks also the upper valley of Gaurio.

Archaeological material extends over an area of about 0.6 hectares.

a) Architectural remains

On the upper part of a circular modern field is a small mound (measuring about 20 x 15m), which appears to have resulted from the ruins of a structure. Indeed, the modern wall which oddly runs along the N side of the mound is founded on ancient ruins: these are visible for 9m (direction E-W) and survive to a height of 0.30m above present ground level. In the upper part of the ancient wall stones are crammed, and crushed pottery appears within the ruins. From the W end of the wall projects for 1m to the S a stone heap, which might represent a wall vertical to the main one.

Although no plan can be deduced from these ruins, they indicate the presence of a building, which produced the pottery found in its immediate vicinity.

b) Pottery (figs. 58, 59)

Pottery appears in higher density on the mound (2-3 sherds/m²) and gets rare on the terraced slope. Fine wares occur exclusively on the top of the mount and include black glazed pottery of the 5th century (K2:8). Some wares probably date from the 6th century (K2:7).
Parts of two vessels were found within the upper crammed stones of the ancient wall discussed above (K1:1, 2), and are both dated to first three quarters of the 4th century (see catalogue). It is interesting that the trefoil-mouth oinochoe (no 2) has the same shape and fabric with one found at Stauros Peleketes. Considering that there are other vessels with the same fabric, but later (Roman: for example see Ano Gaurio-II, K1:1), these wares were either locally produced, or less likely, they were imported from the same area over centuries.

Sherds in the rest of the area are coarse wares, including a high proportion of wine amphoras.

Conclusions

The chronological beginnings of this site seem to go back to the 6th century, while the latest material is dated from the third quarter of the fourth century.

The disadvantages of living on the summit of Charakas are obvious: absence of water and exposure to the winds are diachronic problems in this region. The site was oriented towards Phellos, since the natural access is from this valley. Furthermore it would be to the W slopes of Charakas that the people living on the summit would turn for food and water.

Charakas-III had at least one structure on the summit, which due to its location and the fine pottery related to it, was probably the main building of the site. Considering the distribution of finds it seems that there were hardly any other houses in the area.

Regarding the function of the site, a likely explanation is that it was a farmstead, a case parallel to Tsouka in the plain of Gaurio, only that here the landscape suggests that the economy of the farm depended mainly on animal herding.

32. CHARAKAS-IV

Charakas-IV refers to the rocky knoll of a side ridge
spreading from the plateau near the site discussed above, towards the NW (pl. 22: d). A big cluster of rocks creates a tip on this ridge. This location has a good view to the lower Phellos valley and also to the slopes of Charakas.

A handful of sherds were found on the inland side of this small knoll. They are all coarse. The fabric of one or two (K1:1, 2) is similar to that of sherds found in well-dated prehistoric sites. Some are later (K1:6), but not dated, and some are debated.

Charakas-IV is a findspot rather than an actual site, meaning that the use of this area was restricted to one or a very limited number of occasions.

THE AREA OF MARONITI

Location and resources

Maroniti is a hill on the NE slopes of Charakas, facing the valley of Gaurio (pls. 22: f, 23). Its upper part is eroded and rocky; the stone is a whitish limestone. The slopes are rather steep and terraced only in the lower part of the site, below the modern road, while on the upper area terraces have been created by an earth mover, causing great damage to the site. A few olive trees and maquis constitute the vegetation of the area. There is a water source on the N side of the hill, next to the modern road. Below the rocky summit is a modern animal pen and a threshing floor.

Archaeological remains

According to locals, during the construction of the threshing floor around the beginning of this century, two graves were recovered containing oil-lamps, which have been lost, so we know nothing on their chronology other than that they could not be earlier than classical. There is no trace of the graves either.

During the survey Maroniti has produced material from various chronological periods. An effort was made to distinguish which features belong to each period and the results are presented below.
At least two distinct periods of occupation are known: a prehistoric and an Archaic-Classical.

33. MARONITI-I

a) architectural remains

The earth remover in the upper area has revealed part of an ancient wall to the S of the threshing floor: it is visible for a length of 6m (to the S it is buried within the terrace), and survives to a height of 1.90m (pls. 23, marked by an arrow, 24). It is founded on the bedrock and built with large unhewn limestone blocks in irregular masonry, using smaller stones in the loose interstices. According to the masonry and the particular location the wall could not have been free-standing, at least on this level, but was a retaining wall. Its massiveness indicates also a defensive character.

I propose that this wall belongs to the prehistoric period of the site for the following reasons: a) it is clear that the wall followed the outline of the slope and therefore in the N it would pass through the graves, something that indicates that the wall is earlier and was destroyed before, or during the construction of the graves; b) prehistoric material is restricted to the upper part of the site, while the distribution of archaic and classical pottery extends on the lower slope also: therefore the wall could be a prehistoric fortification, being at the edge of the prehistoric scatter and c) its masonry is different from Archaic or Classical examples, but similar to the fortifications of Ayia Irini69 and Phylakopi70.

b) pottery and lithic material

An ovoid dark blue-greenish serpentine with use wear at its ends (S1) was found in the upper area (fig. 61). Serpentine is common in river beds, and has naturally polished surfaces. This piece has a remarkable symmetry and has traces of ware at the ends of the stone. As it has no provision for being fastened on a handle, it is believed that it was used as a sort of hammer, grasped directly with the hand.
A few fragments of obsidian flakes were noticed in the upper area and mainly on the rocky summit (no sample taken). The material is too fragmentary and of little help in determining chronology.

Some coarse sherds on the upper rocky area have fabrics which appear to be prehistoric. One sherd K1:19, belongs to a fine vessel, with a painted band externally and slipped inside, which might be Mycenean. Unfortunately and despite careful search on the site to confirm Mycenean presence or absence, I could not find characteristic pottery.

Conclusions

There are no diagnostic artifacts to date the prehistoric assemblage. Probably slope deposition and the later occupation of the site have covered the features of the early site.

Very tentatively we mention the possibility that the prehistoric site is contemporary with the Middle and Late Cycladic site of Mazareko nearby (see below). If the wall is indeed a fortification, Maroniti-I represents a settlement, which can be related to Mazareko.

34. MARONITI-II

The Archaic-Classical site extends from the small stream in the S to the water source in the N and from below the summit to the lower slope (five terraces below the modern road).

a) architectural remains

The disturbance of the land has revealed parts of walls belonging to small constructions, below the level of the megalithic wall. Classical pottery was found around one in the upper area. Below the modern road some of the terraces are founded on earlier rubble walls, surviving to ground level, which could be ancient. Building material is scattered all over the area, especially on the upper part of the site. Some has been used for the construction of the pen together with fragments of pithoi and pan tiles.
Furthermore, the staircase leading to the roof of the farmstead is built with large schist and marble blocks. One of them and two other schists lying nearby, are roughly dressed: the dimensions of the blocks (1.34 x 0.22 x 0.18m, 1.12 x 0.29 x 0.08m and 0.80 surviving x 0.29 x 0.18m) indicates that they could not belong to the graves but rather to a good construction, probably situated on this upper terrace, where there is enough space for a large building.

A small weathered fragment of a little column carved in greyish, large-grained marble was found in the pen (diameter 0.16m). It does not appear to have been a cylinder for the roof, as there is already one in schist. Its small diameter indicates that it had a decorative function.

The animal pen, called tou Petrake, has two rooms. Part of the W wall is carved (for 7m) in the rock; at the NW side of the N room two small niches (measuring 0.30 x 0.10m, H:0.35m and 0.65 x 0.65) have been carved. Clearly they are not areas for feeding the animals. It is probable that these carvings belong to the ancient phase of the site, because humble structure like this animal pen have built niches, which are easier to construct. Therefore the site of the pen may have been originally occupied with some other structure.

The section of the ground created on the side of the main road has revealed the stratigraphy in this area of the site: undisturbed earth above the bedrock 0.30m, pottery and small stones 0.40m, dense concentration of stones 0.25-0.30m, pottery and small stones 0.40m and modern deposition of earth 0.30-0.40m. Unfortunately there was no characteristic pottery for close dating, but the fabrics were not prehistoric.

b) pottery (figs. 60, 61)

Pottery appears in small quantities and at different densities from place to place (1-4 sherds/m²): it is denser in the upper slope, while on the lower area it is little. Fine wares were found in small numbers only in the upper
area, on the terraces below the megalithic wall. All other pottery is coarse and includes a high number of wine amphoras, which constitute the greatest part of the material on the lower slope.

Some wares might be dated to the Archaic period (K1:17). Black glazed pottery of the 5th century includes a skyphos with reserved underside (K1:3). Two wine amphora belong to the 4th century.

c) a press bed

A press bed carved in local whitish marble had been unearthed during cultivation and deposited at the edge of the upper terrace (pl. 25). It measures 1.03 x 0.75m and has a shallow circular groove; two cuts have been made on the small opposite sides of the ara, destroying the circular groove and its mouth. This represents a later alteration of the press bed or ara71, probably for use as a weight for the press.

Conclusions

The later material from Maroniti represents a habitation site. The settlement is dated at least from the 6th century until the 4th century BC. This period coincides with the time of occupation of the large settlement of Stauros Peleketes (about twenty minutes' walk) and Charakas III (also at the same distance).

The location is privileged in many ways, occupying a quiet part of the slope, having water and being near the good fields of the plain. The presence of the press bed indicates the involvement its inhabitants with agriculture. Its location near the pass between the valleys of Gaurio and Phellos might also have had some significance. Note also that on the rocky summit above the site passes the old path leading from Charakas to Phellos, and this might have some relation to the ancient path.

35, 36. MAZAREKO

Location and resources
Mazareko is a rocky hill on the NW slopes of Charakas, overlooking the valley and bay of Phellos, as well as part of the upper Gaurio valley (pl. 22:f, 26). The S and SW slopes are steep and access is possible from the N and the E, through the main ridge. The knolltop has a small elongated flattish plateau, about 27 x 16m, with a roughly E-W orientation.

The location is characterized by the vertical gneiss-schist formations that have been exposed at different degrees on the slopes and the small clusters of blue grey marble in the E part of the plateau.

In the immediate vicinity of the plateau of Charakas, land is appropriate for dry farming; water sources are at some distance, around fifteen minutes walk towards Varsamia. Although there are no surface waters nearby, modern works in the area have exposed an undersoil rich in water.

The hilltop is crossed by modern boundary walls but was not otherwise disturbed.

a) Architectural remains

Ruins of a retaining wall are visible with total length of 22m running along or just below the N edge of the plateau. It is built with irregular or roughly shaped blocks of grey blue marble (measured example 0.60 x 0.35 x 0.50m), laid in courses with smaller stones filling the interstices. The wall is not freestanding, at least on this level. Not more than two courses survive to a height of 0.70m. In the E and best preserved section a (2.90m long) stones are set as headers and stretchers, without creating however a regular inner face, indicating that it was retaining wall (pl. 27:a). This part is attached to the marble clusters which border the E side of the plateau and have provided the building material for the wall. At the point where the E section is interrupted, wall section b begins at a slightly lower level (0.90m) and at a distance of 1m away from section a creating an arrangement for access to the plateau (pl. 27: b). Part b is not preserved as well as a, but can be traced for 19m towards
the W. There are no traces of the wall on the other rocky sides of the hill.

Both walls, which have similar masonry and building materials, are believed to belong to the same construction intended to support the plateau and provide access to it through the only convenient point, the NE. Considering the small distance between the two walls at the "entrance" it is possible that there was a passage, a ramp or a staircase, resting on a platform created by wall b at this point. The slightly more refined masonry of wall a was possibly intentional since it was at the entrance to the site and more visible than b to the visitor.

There are several features discussed in the conclusions suggesting that the site is not a habitation site and in this case the role of the wall would not be defensive. The absence of traces of a wall around the hilltop suggests that there was no interest in fortifying the site, since the cliffs on the seaward and N side of the hill do not make the plateau immune to attacks, although they give a sense of security. I believe that the wall system supported the plateau and possibly provided a boundary for structures and activities taking place on the hilltop.

The chronology of the wall constitutes a problem since its masonry is not characteristic of one or the other period represented by the ceramic material of the site: Middle and Late Bronze age and Classical period. Making a probabilistic guess, it is more likely that architectural remains belong to the more recent period of occupation or use of the site.

Stones are scattered on the plateau and some marbles used in the modern boundary walls are probably ancient building material. A low heap of stones (3 x 4m wide) on the E part of the plateau might indicate the existence of a structure on this location, as it is unlikely to be a clearance heap, since the area has not been cultivated.

b) Pottery

Pottery was found in medium density (around 4
sherds/m² on the plateau and on the upper E and N slopes. Material is denser towards the E part of the site. About half of the material belongs to the Middle and Late Cycladic II periods, while the rest to the Archaic and Classical periods.

I. Prehistoric pottery (fig. 62, pls. 109, 110)

More than half of the material belongs to fine wares. Storage vessels and kitchen wares are included in the coarse pottery found.

The earliest sherd is a small vertically pierced lug (K1:13), a shape common in EC and early MC contexts.

A mouth from a bridge spouted jar with black curvilinear decoration on white slip (K2:20) is dated in the later MC period. It appears to be a local version of a characteristically Minoan shape, using a type of decoration similar to the contemporary Painted Local pottery of Ayia Irini and Phylakopi (see catalogue). This single sherd places Andros in the context of Middle Cycladic developments, when Minoan influence was being excersed in parts of the Cyclades.

From the immediately following period a pithos with applied bands of rope disc pattern (K2:37-41) has parallels in the Cyclades in Ayia Irini, Phylakopi and Delos, either as Minoan imports or as local imitations. Sherds of a pithos with identical decoration were found at the Late Cycladic site at Pori in N Andros.

Although characteristic sherds are not numerous, the presence of Minoan elements both in fine and coarse pottery shows that this is not an accidental occurrence and that Andros was in some way in contact with Minoan culture in the later Middle and early Late Cycladic periods, following developments in the Aegean.

Kylixes of local manufacture (K2:44, K1:1) have parallels in Late Helladic IIB and IIIA1, and two imported kylikes are of Late Helladic IIIB1 type (K2:34, K4:74). A mouth of an imported, small stirrup jar with black decoration (K2:65) is dated to LH IIIA2, and the fragment of another stirrup jar, decorated with chevrons on the
shoulder is dated to the LHIIB2 (K1:69). Sherds from the walls of fine pottery are very small and all have decoration of dark horizontal banding on light background. The whitish or yellowish fabric of most fine pottery suggests that they are imports. Sherd (K3:56), has a dark fabric and is possibly a local product.

Other small finds - prehistoric (fig. 62, pl. 112)

A small pierced disc of local green schist was found on the plateau. Its small size (about 2.3cm diameter) and especially its low weight show that it could not serve as a weight of any kind in weaving or fishing. It appears rather to be an ornament, possibly part of a necklace, a hypothesis supported by its regular shape and the fancy colour of the stone itself. Similar discs have been found during excavations of prehistoric sites but their function is not always understood; for some Neolithic examples it is believed that they were elements of decoration (see catalogue S1).

The absence of obsidian is striking, especially since the ground was clear and repeatedly checked. Although chipped stone in Middle and Late Bronze age sites is not as common as in the earlier periods, the total absence at Mazareko is considered an indication that the site was not a habitation area, where at least some obsidian would be expected.

II. Later pottery (fig. 63)

A small amount of later pottery was found on the plateau and the E slope of Mazareko. It consists mainly of fine wares; some sherds are Archaic (K3:50, 52), and there is black glazed pottery of the late 5th century (K3:61, 62, 63). It appears that there was no continuous use of the site from the prehistoric period to this later phase.

The amount of this later material indicates regular visits if not continuous use of the site.

Conclusions

There are several reasons for which it is believed that the site on Mazareko was not a habitation area, at
least in its prehistoric phase:

a) its very small size,
b) high proportion of fine wares especially in the prehistoric period,
c) absence of chipped stone,
d) a retaining and possibly boundary wall providing access to the hilltop, of disputed defensive purpose.

The combination of the above features with the hilltop location suggest that the function of this site is related to ritual. Hilltops and peaks have been favourite locations for sanctuaries since the Bronze age; Leuven exposes evidence showing that peak sanctuaries are not a Minoan phenomenon, but were also part of the Mycenaean culture, with possible predecessors in the Middle, Early Helladic and even as early as the Neolithic period.\footnote{72}

Indeed two such sites are known from the Cyclades, on the peak of Troullos above Ayia Irini in Kea and possibly at Mikri Vigla in Naxos.\footnote{73} Finally hilltop locations often required retaining works and the sacred area was usually surrounded by a wall.\footnote{74}

Mazareko satisfies many of the requirements for being identified with a Bronze age peak sanctuary, during its LC phase.\footnote{75} A degree of caution is retained due to the absence of votive figurines. The figurines found at Mikre Vigla in Naxos, which may indicate the existence of a shrine there, have no parallels in the Cyclades\footnote{76}, where rural shrines are little known. If Mazareko proves to have the same function as a cult area during all periods of its occupation, it has the potential to throw light on the earlier and less known phases of religion.

Kastri has minimum indication of MC or LC I use. The possibility of a fortified Mycenaean settlement at nearby Maroniti has already been discussed. Both sites have inconclusive evidence, but Maroniti is more likely to have been associated with Mazareko, due to their proximity. It is believed that no major sites have been "missed" during the fieldwork at Phellos and thus the most likely and reasonable setting is the above.
There are no indications on what the function of the site was during the archaic and classical phase of the site. For factors that are related to the location of the site, and were already discussed above, it is possible that the function of the site remained the same.

37. CHARAKAS-V

Location

This site is situated on the upper slope immediately S of the hilltop of Mazareko. The relief is still soft, and there are low terraces in the lower part of the site. To the S is a spring.

a) Architectural remains

On the upper part of the field are poor traces of a wall, 1.45m long, consisting of two stones, one of which is a large boulder. It seems that the rest of the wall has been totally destroyed.

b) Pottery

There is a scatter of pottery in a density of around 7 sherds/m2 in the field with the wall remains. The surrounding fields have less pottery. The whole scatter extends over an area of approximately 0.2 hectares.

The majority of the pottery is dated to the Roman period, first centuries AD; some sherds may date to the Hellenistic period (K2:18), but this chronology is not certain. Most pottery belongs to coarse wares, including a high number of wine amphoras and pithoi.

Conclusions

Charakas-V is a small habitation site dated to the Roman period. When I located this site, I speculated that it might be related to the historical phase of Mazareko, the latest material from where is classical, but the study of the pottery does not justify this.
THE RIDGE OF PELEKETE

Location and resources

The mountainridge of Pelekete is the N part of Characas, runs NE-SW and separates the inner valleys of Gaurio and Phellos. The placename of Pelekete refers to the main quarry of the area that operated also in antiquity, exploiting the white marble of the ridge (see below: QUARRIES). This abundant resource in the Pelekete region has been exposed from erosion in the greater part of the ridge. The E and S slopes fall abruptly to the plain of Gaurio, and are covered with maquis. The W slopes are softer, though rocky and vegetation is rare. The elongated plateau has a slight inclination towards the sea, to the SW. At the summit is the old country chapel of Stauros.

The ridge itself has no water, but there is a source about 8 minutes away from Stauros, next to the stream that runs to the W of the ridge.

The main attraction to the site is its strategic location, mainly in terms of visual control of a large region: one has from the summit a bird’s eye view of the valley and the port of Gaurio, a good view to Phellos, and generally the coastal area from Ypsele, Aprovatou to the promontory of Ayios Sostes, and open horizon that extends from S Euboea to the N Cyclades.
Archaeological remains on the ridge of Pelekete

An ancient settlement dating from the Late Geometric period to the 4th century BC occupied the plateau and part of the W slopes of the ridge of Pelekete, covering approximately 2.4 hectares (pl. 28: a). A little to the N another site, closely related to Stauros, is discussed below under the placename Marmouristra. A fort, possibly of the middle Byzantine period, survives around the church and is also examined further below.

38. STAUROS: THE TOWN

a) architectural remains

The thin ground of the area and the small degree of disturbance allowed the tracing of several architectural features, which would have been otherwise eliminated from the surface.

The fortification

During some unknown period of its life the settlement of Stauros was provided with a defensive enclosure, which surrounded the plateau and had a dividing cross wall at about the middle of the site (fig. 15, walls indicated by F). The fortification wall runs along the upper part of the W slope (pl. 29, 30: A). In the S, the wall makes a U turn to the N (fig. 15: F1); there was probably a round tower created inside the turn, as is suggested by the large heap of stones in this area. From there it continues N, along the E edge of the plateau: on this side the builders took advantage of the rock clusters, which were incorporated into the defense (pl. 30: B). In the very N, the traces of the wall are difficult to follow. It appears that there was a back wall perpendicular to the slope walls which marked the N limit of the fortified site: this is suggested by the E section of the wall which makes a corner and turns to the W, obviously continuing to meet the W branch of the fortification (fig. 15: F2). The total perimeter of the wall would be about 820m.

The masonry of the enceinte is simple, using local marble which splits upon extraction, creating blocks with
two flattish surfaces, which are easily built without further shaping. Large blocks are used for the faces and rubble for the core. Not the same care has been taken for all parts of the wall: the SW and S are built more tightly and with somewhat larger stones; in the NE mainly irregular stones are used. The wall is 1.70m thick in the SW, where it is built on flat ground, while on the other sides, on the slopes, only the external face is visible. In most areas it survives around 0.20-0.30m above present ground level, while in the SW it must survive to an actual height of about 1-1.30m, of which the 0.20m are visible and the rest are estimated to be buried under the fallen building material.

Pottery dated from the second quarter to the late 5th century found within the ruins of the fortification at the U-turn (K 10:88, 89), suggests that the wall was probably built or at least in use around that time.

A cross wall crosses the plateau from E to W, and separates it into a larger sector to the N and a smaller to the S (fig. 15:F3, section A-B). It is estimated that the cross wall survives at places to a height of more than 1m. It is 1.60m wide to the W and becomes 1.40m, narrower to the E; its masonry is the same with the enceinte. Its W end is integrated with the main fortification, so both features can be considered contemporary. The junction with the E wall has been destroyed as the ground gets sloping there. At about the middle of the distance, the wall makes an indentation, probably indicating the area of a gate. A further feature which might be related to a gate arrangement is a small part of a curvilinear wall S of the indentation, at a lower level (fig. 15: f). This wall is visible for 1m (0.30m high) below the stone heap of the cross wall and a modern retaining wall which has been built in this location. Although the remains cannot be properly evaluated at their present condition, it is possible that this curvilinear wall belongs to a tower or bastion near the gate.

The heap of stones from the cross wall extends to 4-
5m to its N and another 2-3 to its S. It is not clear whether the greater amount of building material in the N resulted from bastions or additions to the wall on this side, or from the collapse of the wall to the N.

The morphology of the ground increases the defensibility of the site. The E slopes are very steep and at the N edge of the site the ridge becomes very narrow. Stauros is accessible only through the W and S slopes. Still, it is a difficult site to attack, because the enemy would have to advance on the rocky ground of the slope, while being exposed to the defender above. The plan of the fortification has been dictated by the topography of the region and the emphasis for better construction in the S, suggests that it was designed to withstand a seaward danger.

It is strange that there is no obvious gate to the enceinte: this could not have been in the E, because the slope is very abrupt, while in the S and SW, the wall can be traced with no interruption. The most likely locations for a gate would be the N and NW areas, where gaps appear.

Regarding the masonry of the enceinte, it is clear that there was no effort to built megalithic walls. This indicates either that there was no real need for them and/or that the fortification was built in haste. Note however that parts of the fortification wall of the ancient capital of Andros were built with large slabs of local schist, and that dressed blocks have been used only for selected parts of the city’s defenses. Therefore the use of unhewn stones in the fortifications of a provincial town, like this on Stauros, should not be surprising.

Other structures

Remains of at least four structures were located within the fortification wall. They are all built with local unhewn marbles of smaller size than those used in the fortification.

Structure a is within the S area of the enceinte (fig. 15:a). It appears to have been a large building, considering that one of its walls is visible for 12m and
there is a large stone heap.

Another large stone heap on the field immediately to the N of the above, indicates the location of another structure, b. Only the edge of a wall is visible among the heap (fig. 15:b).

Structure c is situated close and parallel to the W wing of the fortification (fig. 15: c). It is covered with its own building material. The width of its walls is 0.50-0.55m; the visible length of the wall which is parallel to the slope is 8m and testifies the existence of a large building. The associated pottery includes black glazed wares of the 4th century.

Very poor ruins of another structure, d, were traced N of the church, where the plateau becomes only around 10m wide (fig. 15: d). The ground is very eroded on the E side because of the rain and the passing of sheep. The architectural remains are very difficult to trace, but are important because they are associated with a large amount of fine pottery from the archaic till the late Classical period (see below, K1). These ruins might belong to a temple, which is responsible for the presence of this type of pottery.

Finally, outside the enceinte, traces of a corner of a building with one wall parallel to the slope, were located below the SW part of the fortification, about 40m away (not in plan). This is also built in the same masonry with the walls described above.

One architectural member, which has been used as a lintel for the door of Stauros, might belong to this structure, although the much later tetrapyrgion constitutes also a possible provenence. This grey marble block (measuring 0.16-0.40 x 0.96m; depth not measured) has two rectangular holes indicating that it was a door jamb. Inside the church, is a white marble slab, roofing the small Holy Altar. The colour and quality of the marble are similar to the marble of nearby Pelekete. There are tool marks of a pick on the visible surface of this stone.

There is abundant building material, that is unhewn
stones on the plateau. Some of it has been gathered in stone heaps, although the benefits of this task are not obvious, since the ground is rocky and unfit for cultivation. Other stone heaps indicate the presence of buildings below them. Building material is also scattered on the central part of the W slope below the fortification, showing, in combination with the ceramic evidence, that habitation extended on this slope as well.

b) Ceramics (figs. 65-69, pls. 111, 112)

Generally, pottery extends over the whole plateau and the central part of the W slope beyond the fortification. Its distribution is uneven throughout the site (ranging from less than 1 to 10 sherds/m^2, except for pottery in the area of structure d), but there appears to be little chronological differentiation, again except for pottery in the vicinity of structure d (fig. 16 with the sampling area plotted). Pottery dates from around the 8th to the late 4th centuries BC. Late Geometric pottery is rare. Sherds of this period have been found on the plateau, except the very S and N areas; they do also appear on the upper W slope (K5:91, K7:4, K9:39, fig. 67). Archaic and Classical pottery is more common and extends over the whole site. The latest pottery of the site belongs to the late 4th century and was found in the area of structure c (K2). Except for the material associated with this structure, the pottery found on the rest of the site is predominantly coarse, and includes most types of household wares.

Density on the W slope is about 2 sherds/m^2, getting denser or rarer at places, apparently indicating the presence of structures; as a rule, sherds are more numerous near the fortification. Density is lower in the S area of the fortified plateau, near the U-turn. There is some increase in the numbers near structure a. A large area around the cross wall is occupied by its building material and no sherds were found there. Similarly, other stone heaps cover totally the ground.

Pottery associated with structure d (K2) is
discussed separately below. From the remaining material, sherd (K9:25) deserves special reference (fig. 67). It belongs to a small pithos with a band of relief decoration (see catalogue): a schematic figure is distinguished, possibly in dancing position (arm raised above head, which is turned left, while the torso is in frontal position); next to it is a feature, which could be part of a tree, or other vegetal motif, which is often used as a decorative motive in between dancing figures in geometric art. Both the rendering of the figure, and the depicted scene, point to a Late Geometric date for this sherd.

Other archaic pottery decorated with impressed and incised decoration are K6:30, 29, belonging to a pithos and a louterion respectively (figs. 68, 69). Impressed circles decorate also sherd K4:96 (fig. 66). K3:16 comes from the wall of a small pithos decorated with double or perhaps triple cable, executed with a roulette, probably dated to the 7th century (pl. 115). Finally at the very N edge of the site sherds of a pithos were found with curvilinear relief decoration (K1:86-87); judging from the characteristic whitish sandy slip, it is probably a Naxian import.

An accumulation of three ceramic spindle whorls (K8:12, 6, 8) and a pottery bead with impressed decoration (K8:13) was located 4-5m outside the E wall of the fortification, to the N of the cross wall (fig. 66, pl. 115). The function of similar decorated beads found in Delos has not been identified with certainty (see catalogue), but they might have served as spindle whorls. The clustering of these three objects together might represent the existence of a workshop or similar installation in this location.

In the NW, beyond the church, pottery is very rare. In the very NE however, some pieces of black glazed and red figured pottery were found, including the handle of a crater, which is decorated at its base with the popular pattern of ionic eggs (K1:83, fig. 83).

Tiles were not found on the site, except a few
fragments of cover tiles found around structure c, suggesting that most buildings had flat roofs. Considering the absence of running water within the limits of the settlement, flat roofs would be convenient for collecting rain water, as it is thought for Zagora.

Pottery from a sanctuary - structure d (fig. 65)

A large amount of fine pottery, about 20 sherds/m², was found in a restricted area around structure d, where the ground is continuously being eroded. Sherds are very small. Almost all pieces belong to small or miniature fine vessels, which are usually associated with sanctuaries as votive offerings (fig. 65).

Shapes include small skyphoi or kotylai, some of which are Corinthian (K2:48, 78) and others appear local (K2:53), a small plain hand made bell? (K2:80) and salt cellars. K2:101 belongs to the foot of a thurible (thymiaterion), a vessel used for the burning of incense, and therefore associated with ritual practice. Dates range from LG? (earliest material K2:59, 67, 100) to 3rd century (K2:99).

The good quality and large amount of pottery in this location, are reliable indicators that the material comes from a ritual context. The poor architectural remains in this area have already been mentioned above (structure d). The finds could be explained therefore as follows: this location is either the site of a temple, or the dump of the sanctuary. The latter possibility is mentioned because of the humble appearance of the preserved ruins associated with the pottery, and the fact that there is little flat ground for a structure in this area; in this case the location of the actual temple would probably be towards the church and the tetrapyrgion, which would have covered its remains.

c) Other finds

Stone: fragment of a millstone of basaltic andesite was found on the W side of the plateau near the cross wall (pl. 113). A big irregular lump (about 15 kilos) of the same basaltic andesite was found nearby. It does not have
traces to show that smaller pieces had been quarried from it.

Metallic nails (fig. 70, pl. 114): two metallic nails, one bronze (M3:1) and the other iron (M3:2) with disks slightly rounded at the top, were found on the central plateau. They are of the usual type appearing at Olynthus (see catalogue). The bronze nail which is thicker, had its disk apparently gilded with gold, since a tiny gold fragment survived between its bent surfaces. The use of gold indicates that the nail was intended for some special and elaborate construction, possibly a box; if it belonged to a door, we should imagine a wealthy context.

A bronze arrowhead (fig. 70, pl. 114): this was also found in the central area of the plateau (M2:1). It is a two-edged arrow head with a spur and hollow socket, cast in bronze. This type appears first in 8th century Asine and was replaced around the time of the Persian wars (see catalogue for parallels and chronology).

The presence of military equipment in the archaic period might indicate the existence of military activity on the site during these times. We will discuss later historical events that could possibly be associated with the site of Stauros.

The area outside the S tip of the fortification

About 40m SW of the U-turn of the fortification some finds may not represent habitation remains.

The area in question is flattish, and the amount of stones on it is too small to be attributed to buildings (pl. 31). There are however stones set on line on the ground creating, together with low rock clusters, a roughly roundish pattern with a diameter around 7.5m; another row of stones is difficult to be followed. In the same area, here and there, large fragments or perhaps remains of whole pithoi are visible on the ground. They appear to be the only type of ware in the area.

A silver Athenian coin was also found there (M4) (fig. 70, pl. 114). It has the head of Athena in the
archaic style, and on the reverse the owl and olive spray in an incuse square (see catalogue). It is dated within the last three quarters of the 5th century, and is quite weathered, indicating that it had been used for some time before its deposition.

What do these features represent? It seems that this is not a habitation area for the following reasons: the particular location outside the most prominent feature of the settlement's fortification (the U-turn and probable tower); the absence of any habitation remains in the S area; the nature of the finds themselves: absence of building material from buildings, the strange patterns created by stones visible on the ground, and the presence of only one variety of wares, that is large storage vessels. Finally the find of the Athenian drachma may also prove significant. Very tentatively, we note the possibility that these remains belong to a small number of burials, made there for a particular reason, or on a special occasion. Locations outside the town walls are appropriate areas for burial grounds.

39. MARMOURISTA-II: THE CEMETERY

Location

At the N limit of the site, the ridge forms a narrow saddle, on the other side of which starts a plateau. The beginning of the plateau, 200m NE of the church of Stauros, is bordered by marble cliffs on the side towards Gaurio, and for this characteristic it is called Marmouristra.

The deep land of the plateau had been used for dry farming, as suggested by the heaps of stone from the clearing of the field. A ruined limekiln is on the E side of the site.

Archaeological remains

Archaeological material extends over an area of around 450m² and consists of early prehistoric and historical material. The chronologically later finds are discussed here first.
There are no architectural remains other than the schist stones gathered in several longish heaps. These schists are of the common size used in walls and are probably ancient building material, but they cannot be attributed to the prehistoric or the later site.

a) the pottery (figs. 71-74, pls. 115, 116)

Pottery is found in an average density of about 2 sherds/m², is more numerous on the flat area to the W of the limekiln and gets rare at the beginning of the slope. It is dated to the Late Geometric till the 4th century and consists mainly of fine wares and some archaic relief pithoi.

The earlier wares are fragments of Late Geometric painted vessels (fig. 71, pl. 115). Meander patterns are common (K1:1, 15), and in one case the meander is hatched (K1:10). Other sherds have parallel lines or other indefinable patterns. All decorated sherds of this period belong to quite large open vessels, probably craters. Some wares have been decorated with a thick layer of a distinctive chocolate brown colour. An identical ware was found at Kastri (Kastri K1:8). This colour does not appear on vessels from Zagora exhibited in the museum; it is similar to wares identified as imports from Attica, but not exactly; the colour is not as red. The fabric is light beige, quite clear, with fine mica and could be Attic.

A small pottery fragment (K1:7) is of a shape which cannot be restored to a vessel, and it is possible that it belonged to a figurine or a terracotta model. The relief pithoi: the most interesting perhaps group of pottery is that of the archaic relief pithoi. Fragments of at least three pithoi were found. Their chronology is difficult because no figured decoration survives on the sherds, which would help dating with greater accuracy. The dates proposed are based on similarities with other published pithoi.

Pithos K1:17 (fig. 72, pl. 116) has a frieze of double anthemia with triple horizontal antithetic spirals, between zones of a schematic single cable resembling
running spirals, executed with a cylindrical seal. The
decoration of this pithos, both that of the main frieze and
the bordering bands, is not exactly paralleled on other
relief wares. A date within the 7th century was suggested by
comparisons with similar motives (see catalogue). A more
precise chronology is not possible for the present.

K1:18 comes from the neck panel of a pithos and is
decorated with the lotus and bud pattern (fig. 73), quite
similar to the known burial amphora from ancient Thera (see
catalogue). The fabric has a distinct yellowish colour,
which is not local. The execution of the flower is
schematic, quite distinct from other lotuses, while the bud
is clearly triangular. Both spring from a line which
divides them from the gracefully made stems. The
representation of this pattern appears earlier than the
Thera amphora, where the parts of the flower and the bud
are well articulated.

K1:19 has a relief band with curvilinear patterns,
possibly creating an open spiral (fig. 74). It is strange
that this fine pattern was executed on very coarse clay.
The fabric is local.

All pithoi have coarse fabrics with large quartz and
schist inclusions (see catalogue for detailed description).
K1:17 and 19 could be local products. The patterns on the
same pithoi were made with the technique of rouletting on
added bands, which had been applied on the scratched
surfaces of the pithos.

Parallels for these relief decorations were found
among pieces of Archaic pottery. The pithoi of Zagora have
different patterns, their execution is coarser, and they
are obviously earlier than those of Marmouristra.

b) metal finds

Some small fragments of very corroded iron artifacts
were found scattered on the plateau of Marmouristra. Only
one can be identified, and belonged to a blade (M1). The
dating of these metal pieces is not possible because of
their very corroded and fragmentary condition, but their
association with the Late Geometric-Archaic pottery
indicates their contemporaneity.

Conclusions on the sites of STAUROS and MARMOURISTRA-II

The finds from the described sites can be interpreted as follows: Stauros was settled in the Late Geometric period. Even at its beginnings the site extended over a large part of the plateau. The choice for settling on this exposed ridge is attributed to concern for security, a common feature of Geometric sites.

The plateau was protected by a fortification wall which was probably built in the 5th century. Despite its unimpressive masonry, the ground plan of the fortification at Stauros displays a sophisticated attitude towards defence, so that elements of it can be compared to the fortifications of large cities. The S tip of the wall at Stauros resembles that of the NW part of the fortification at Rhamnous in Attica. The plan of the acropolis Teloneia at Priene has a similar arrangement to that of Stauros: a cross wall at the enceinte which surrounds the acropolis, creates a keep of triangular plan, which has a large semi-circular tower at the outer corner. Certainly the greatness of the above fortifications cannot be compared with Stauros, but these similarities in ground plan indicate that Stauros, for its scale, had a sophisticated defensive system.

Stauros continued to be occupied until the 4th century, after when it was abandoned. Probably the sanctuary area was visited for the following few decades. Its inhabitants apparently felt greater safety, which allowed them to move to a more hospitable location lower in the valley of Phellos. The temple of the site however seems to have been visited for a while afterwards.

During the Geometric, Archaic and possibly the early Classical period, it appears that the area of Marmouristra was used as a cemetery. Both the strong presence of fine or decorated pottery and the particular location outside the town walls suggest this interpretation for Marmouristra. Relief pithoi have often been found.
associated with burials, either as grave markers or as actual resting places for the dead. The Geometric decorated vessels might have also served as markers. The amount of stone in the area suggests that at least some tombs were not simple shafts, but consisted of a built construction. If marble was used for the decoration of the tombs, this has probably disappeared in the limekiln which was later constructed on the site.

Stauros would be related to the port of Gaurio, and also to the plain, which would provide the town with food. The proximity of the site to the port, elevates the status of Stauros to something more than a mere provincial town, and was the main site of the region, especially since there is no evidence for another large Classical site in the area of the bay. The fortification of the town, which was a big task, mainly because of the length of the enceinte, rather than for its masonry, also shows that Stauros was a site of some importance. It seems that the visible defenses were built sometime during the 5th century. I believe that Stauros was possibly involved with the events of 407, when Alkibiades landed in Gaurio, with the intention of punishing the Andriot for abandoning the Athenian League during the Peloponnesian war, and that the fortification might be associated with these developments.

Alkibiades fought victoriously a battle against Andriots and Spartans upon landing, and is reported to have fortified Gaurio, and even set up a trophy. Traces of a fortification were located also at Kastri, but no classical pottery was found on this site, so unless serious evidence has been removed from the site, Kastri was not occupied during this period. It is most likely therefore for various reasons that the town in question was Stauros (see final chapter for further discussion).
40. TETRAPYRGION PELEKETES

The ruins of a small tetrapyrgion on the highest point of the saddle of Stauros Peleketes have already been mentioned (fig. 16:T, pl. 32:A). No definite reference to it exists in any known record of the island, nor in travellers' accounts. Paschales notes the remains of a fort, probably referring to the tetrapyrgion rather than to the earlier fortifications of the area.

Description of the fort

The fort is a trapezoidal structure with four roughly square towers projecting along the sides, to the E and W (fig. 17). Its dimensions are: N and S walls, including towers: 32.15 and 30.90m respectively; E: 25.70m and W 24.60m. The towers project from the fort as follows: NW: 3.60x2.55m, NE: 3.85x2.20, SE: 4x3 m and SW: 5.90x3.60.

The fort has been reduced to ground level along the top of the saddle, while the walls to the E and W are founded on the slopes and are covered with heaps of building material (see fig. 16 section C-D, pl. 32:B). It is estimated that the buried part of the walls at the corners of the fort is at least 1-1.50m.

The building material is local white-grey marble, used as extracted from the quarry, in the form of thick slabs of varying dimensions with two flat surfaces. Larger stones were reserved for the wall faces and small rubble was used for the core, all bound with a whitish-beige cement. This is rather brittle and includes small fragments of local stone (1-2mm³) and some larger; no sea pebbles are included in the mixture. The cement has been used abundantly to tighten the masonry, but there is no indication that it was also used to coat the walls as plaster. No bricks or tiles have been found.

A large amount of building material lies around the W wall and especially on the slope below it, while on the E side stones have rolled down the steep slope. Material from the N and S walls has been largely reused in the small church of Stauros and the modern boundary walls.

The ground inside the fort is irregular and mostly
occupied by low heaps of stones and earth, possibly resulting from recent diggings, so that it is difficult to estimate the level of the original ground (pl. 32:A). The preserved walls appear as free-standing features and therefore it is believed that they do not belong to the foundation of the building, but to a higher part (consider that the lower part of the E and W walls should be built as retaining walls to create a flat area on this narrow part of the ridge). The original ground consequently should be below the lowest preserved ruins, that is those of the towers. A rectangular hole in the S wall appears to be for drainage (pl. 32:C). If this is identified correctly, it indicates that the ruins at the higher present level belong to a second storey.

The entrance to the fort was most likely through the S (seaward) side, which is the most convenient place*. Indeed on this side and slightly off-center towards the E, the wall is not visible for 2m. Furthermore in this area traces of another wall exist on an oblique line inside that of the S wall, at a distance of 2.70 to 3.30m from its external face. Only its N face is visible and consists of marble rubble. Could this be an arrangement for a defensive gateway?

A peculiar feature in the masonry of this fort is what will be called here the double wall: the greater part of the main walls consists of two attached walls, the external wall having a width of 0.90m and the internal one of 0.60m; the areas where this appears are indicated on the drawing (fig. 17). This feature can be explained in two ways: the double wall is either a) a building technique for a purpose not readily identified; earthquakes however are not a problem for Andros, or b) the result of a reinforcement of the original structure. Specifically in the latter case it could be that the outer and thicker wall was the original one, and that the inner one was added later and the masonry at the corners was then interlocked to ensure stability. This however appears technically impossible and it is to be doubted that a thickness of
0.90m would have ever been considered adequate in strength for the main walls of a fort. The examination of the ruins also shows that the cement is the same throughout the structure and appears to have been applied simultaneously. It is therefore more likely that the double wall is a building system applied here for unknown as yet reasons.

The towers project along the N and S walls of the fort which are indented, thus forming a sort of corridor towards the NE and SE towers, while at the N

the indentation is formed further away from the tower.

The small dimensions of the three towers (NW, NE, SE) would not have permitted their use as rooms. The NE and SE towers have symmetrical plans, and the NW has the indentation on the outer wall moved further away from the tower thus creating an elongated rectangular plan. Their internal space of 1.70 x around 2 (NE and SE) or 3m (NW) would only have been sufficient for a staircase, probably in the form of a wooden ladder, to mount to the top of the walls, to a walk for patrolling and possibly fighting. The walk on top of the walls could have acquired an appropriate width by a wooden platform projecting internally and resting on wooden or even stone beams.

The SW tower is larger with internal space measuring 3.70 x around 2.80m, and could have had ordinary rooms on its floors. Although its walls are not any thicker than those of the other towers, its size suggests that it rose higher than the others and could have been the stronghold of the fort in case of attack.

The traces of one roughly rectangular structure attached internally to the N wall are visible on the ground, with dimensions 4 x around 5.60 and thickness of walls 0.65m. The greater part of the S wall and the SE corner of this structure cannot be traced. Externally, on the N side and slightly off-center is a buttress of trapezoidal shape (external sides measuring 0.90m and the attached side 1m). The ruins seem to indicate that all these features were executed according to a preconceived
plan. This buttress could have supported a chimney which started on a higher level. The possibility that the room was a water reservoir is rather faint as the rest of its walls are not thick enough and do not have similar reinforcements like this buttress.

Finally, the church of Stauros is founded on the N wall of the fort and on another attached structure, traces of which are visible below its W wall. The decision to build on this earlier structure, for convenience or other reasons, dictated the uncanonical orientation of the church.

The debris in the interior of the tetrapyrgion does not allow to distinguish other structures. Forts of this type, however, have usually few rooms along the walls and are rather empty as we shall see later. It is possible though that there existed wooden constructions which have been destroyed. A conjectural reconstruction of the tetrapyrgio appears in fig. 18.

Two white marble slabs were used on the Holy Altar and the roof of Stauros, as well as a grey marble block with two rectangular holes possibly from a door jamb have already been mentioned in the discussion on the earlier occupation of the site. At present their attribution to one or the other period is not possible, as they do not bear any characteristic features helpful for their dating.

Pottery is almost absent inside and around the tetrapyrgion, which is due to the amount of building material fallen on the ground. The fabrics of three or four sherds which are not recent (from the modern use of the church) are clearly later than Roman, considering that they do not resemble any of the fabrics found on Roman sites elsewhere in the survey area.

Function and date of the tetrapyrgio

The small size of the fort and the scarcity of structures inside it indicate that it was a provincial military establishment that could only accommodate a small
The choice to build the fort at this site was dictated by the excellent visual command of the port of Gaurio and the sea to the W and the N.

Due to the absence of diagnostic artifacts the dating of the fort is based mainly on the study of its architecture. Two features can be helpful for the chronology: the plan and the masonry.

a) The ground plan of the tetrapyrgio is reasonably clear and in the following pages is a review of structures with similar plan. We cannot however reconstruct with much certainty the elevation of the fort.

b) The masonry is helpful in dating only in general terms. The use of mortar shows that the structure is not earlier than Roman, and its relatively poor quality suggests a Byzantine date. Otherwise the masonry does not present any characteristics which can help in the dating of the construction. The fort at Stauros is of poor construction in comparison both with the Late Roman and good Byzantine fortifications, probably indicating that it was built in a hurry and/or that there was no need for massive masonry. We may add that the abundance of stone in the area of the tetrapyrgio determined the use of stone alone without brick. The same is observed in the later castles of Andros.

Before concluding on the chronology of this structure, I made a brief survey of structures with similar plan and noted the periods during which tetrapyrgia were constructed. Finally, a search was made in the old maps of Andros and travellers' accounts to see if there is some reference of the tetrapyrgio at Stauros.

**Similar structures**

a) Hellenistic

The plan of the tetrapyrgion is known from the Hellenistic period at the citadel of Theangela in Caria in Asia Minor where it is integrated in the circuit as a refuge. A 3rd century sacred enclosure of the same plan has been excavated on the island of Ikaros (modern Failaka) near Bahrain in the Persian gulf, but otherwise
Hellenistic examples are rare.

b) Late Roman

For later examples of the tetrapyrgion type we have to look in the Late Roman period, on the fringes of the empire in the Middle East, the Danube region and N Africa.

Forts of this type with sides more than 50m had already been built in Arabia by the Nabateans, before the Romans, to protect their frontiers and trade routes, and usually had no or few structures inside. The lower fort at Muhattet el-Haj has only two projecting towers which are built along the walls. The indentation of the main wall at the entrance to the tower is strikingly similar to that of Stauros.

During the extensive fortification programs of the late 3rd and early 4th centuries AD, numerous Roman forts of rather small size were built on the E frontiers of the empire. Justinian's fortification program was the most extensive in Byzantine history. Most of these forts have fully projecting square towers which appear to be an essentially Eastern characteristic. Small forts of the tetrapyrgion type were built for supplementary protection to house garrisons, not for siegecraft. Many forts of the Roman period are built with quadrangular blocks in an almost isodomic technique; others have alternating rows of stone and brick. Mortar is reported on various forts but is not described.

Some forts of similar size to the tetrapyrgio of Stauros but with towers projecting at right angles are the following from the SE frontier of the Roman Empire.

Arabia
Qasr eth-Thuraiyya: related with Diocletian's building programme; square, 40m (dimensions do not include the towers); no structures inside.
Khirbet ez-Zona: of the same period; 40 x 36m; no internal structures, with small interval towers and corner towers with sides about 4m.

NE Jordan
Qasr el-Quwera: 4th century; square, 35m; no internal
structures. Eski Hissar: 4th century; square, about 32m; structures along one side, small interval and corner towers with sides about 4.5m. Qasr el-Hallabat: last phase with the corner towers and more rooms around the walls was probably built under Justinian’s reign; square, 38m.

S Palestine
En Boqeq: excavated, contained objects dated about 370-400; 23 x 28; few rooms in interior.

All the above have parallel sides but there exist others of various sizes with trapezoidal ground plan, both from Jordan and from the Danube (see below).

At the other frontier of the Late Roman Empire along the Danube, similar forts, quadriburgia (burgus) are small in size, almost exclusively square, with few internal structures and a single gate. Their towers project usually at right angles from the corners and walls are less than 2m thick. Excavations in a large number of them have shown that they were built during the period of the Tetrarchy at the beginning of the 4th century in order to safeguard previously unfortified areas. They are common on the Dacian Ripensis Limes and in Moesia Superior.

N bank of the Danube: Lower Moesia
Gornă: square, about 36m; no internal structures, similarly to the next three forts.
Dierna: about 30 x 31m

Lower Danube
Ravna: square, about 35m.
Orsova: square, about 31.5m.
Nova Gerna (inner fort): only half visible, square? about 33m; internal structures around the walls, interval towers.

Porecka Reka: very similar to Stauros, trapezoidal ground plan but larger; about 67 x 65 x 59 x 68m.

Finally a Late Roman quadriburgium with towers along the walls, exactly on the plan of Stauros exists at Jublains in France: square, 30m, surrounded by a ditch and
another later enclosure; an internal structure at the center.\textsuperscript{102}

We saw that the fortification programs of the 3rd and 4th centuries AD concerned primarily the fringes of the empire with the intention to safeguard the frontiers. The administrative reforms of Diocletian and particularly the creation of the Provincia Insularum, which included the Aegean islands, are an indication that peace was maintained in the Aegean during this period.

c) Byzantine

Another group of tetrapyrgia is rather indefinitely dated in the 8th and 9th centuries AD. These are discussed briefly by Lawrence and others:\textsuperscript{103}

Sigon/Sayum, Syria: (small fort inside the citadel) considered to be Byzantine, built after the capture of the site ca.975 by Ioannis Tsimiskis; 25 x 35m; interval and corner towers with sides less than 5m.

Buyuk Kale on the Sakar Mountains, Bulgaria: 8th century, related to protection from Bulgar raids, as suggested by Lawrence; beacon fort, square, but its dimensions are not known.

Monemvasia, Greece: 8th or 9th century, related to the Arab dominance in the sea and the increasing danger since their capture of Crete in 823; lop-sided beacon fort, destroyed, 37m.\textsuperscript{104}

Prinias: undated; almost square, 40 x 43m, towers less than 5m.

Forts of the end of the 1st millennium are related to piracy or inland raids. The Aegean islands became vulnerable targets, especially for the Arabs who occupied Crete.

Travellers' accounts and cartographical evidence

Cartographical evidence and accounts of travellers are inconclusive in their own way: we cannot be sure that early travellers would have noticed the fort, if this was already abandoned and ruined, or that they would have distinguished it as a feature of importance, worth discussing. A striking example is the round tower of Ayios
Petros, which is nowhere mentioned or depicted in maps, until the 18th century. We can only speculate that travellers would mention the fort if it was still standing at the time of their visit to Gaurio. Some early maps repeat a feature in the area of the port which could indicate the fort at Stauros, but there is nothing characteristic to justify the identification, as for example the bridge at the Venetian castle of Andros.

Buondelmonti, who was the first of travellers to visit Andros in 1419, does not have on his map any indication of a fort in the area of Gaurio.

Francesco Ferretti's map, published in his Isolario in 1579, presents a rather confused picture of Andros: the small isles to the E of the island could be the isles outside of Gaurio, which were misplaced; is Camio in the SE a corruption of Gaurio, especially as it is placed near a big bay? In the same area is a large structure on a mountain: the location indicates the Apano Kastro of Phaneromeni, above Korthion. There are small structures on a tip of the land in the NW, probably indicating the castle of Makrotantalon. Finally, lower in the SW, is a large structure with a flag on a mountain near a coastline which could indicate the port of Gaurio. Could this indicate the fort at Pelekete, or is it a misplaced feature? It is strange that three islands to the E of Andros would be the misplaced islands outside of Gaurio.

Marco Boschini's maps, published in 1658, are based on the work of earlier cartographers. In the area of Gaurio are two bays, the S of which is named as the port. There are two large structures inland of these bays, the N of which is on a mountain and is titled? HIDRUSSA. Below the S the following are noted: ANDRO VECHIO and immediately below PONTE OSTEDOSIA. Regarding the latter, it is an issue not yet clarified by the available evidence. It is possible however that one of these features represents the tetrapyrgion of Stauros.

The map of Alain Manesson Mallet, published in his work De l'Europe in 1683, seems to have been based on that
of Boschini, since it has the same features and similar
rendering of them and onomatology, but their location is
closer to their actual. Gaurio has also the same features
as on the map of Boschini.

Olfert Dapper, who admits never to have visited
Greece, has apparently consulted the two previous
cartographers to create his own map of Andros published in
1686 (Description des Isles de L' Archipel ...): the shape
of the island is far more realistic, but it is clear that
he repeats the features and onomatology of Boschini or
Mallet.

Francesco Piacenza’s work, published in 1688, has
been influenced by earlier works and namely that of
Boschini, but there is no indication of a structure in
Gaurio on his map.

At the end of the 17th century, Tournefort noted
that while being in Gaurio he intended to search for the
ruins of the ancient site, which Alkibiades took and camped
there when he came to besiege Andros, but he never did,
because it got dark and afterwards bad weather forced the
traveller to leave the island earlier than planned: "...la
nuit qui nous surprit ne nous permit pas d’examiner s’il
rest encore quelques vestiges du chateau de Gaurium."¹⁰⁵

It appears that since Tournefort visited Gaurio and
did not see nor was told about the fort at Palekete, the
tetrapyrgion must have already been in ruins by the end of
the 17th century; this would also mean that it was not used
by the Venetians, who were coming for shelter in Gaurio
during the war with the Turks, as Tournefort informs us in
the same entry. The memory of the fort was probably
forgotten by the time of Tournefort’s visit.

Conclusions

Let us examine historical circumstances which could
have provoked a need for the building of a fort on Andros
in the area of its main port, during the periods that have
experienced the building of tetrapyrgia.

During the Late Roman period Diocletian’s reforms
have established the Provincia Insularum. There is no reason to suppose that the Aegean islands were subject to any sort of danger from frontier wars. The tetrapyrgia included in the fortifications of the empire were restricted to the fringes of the empire in the NE the E and N Africa, as we saw earlier.

Unfortunately for the period during which the Aegean islands were part of the Byzantine Empire, there exist hardly any written sources to which we could turn for identification, but some observations can be made. It was not until the 9th century with the raids of the Arabs of Crete, that there was acute danger for Andros and all the Aegean islands. This historical background might have necessitated the building of the fort at Pelekete. Its small size and the absence of many structures inside indicate that it was intended for a garrison. The location is ideal as a watching place for ships sailing to Andros and the fort could have served in case of danger as a refuge for a restricted number of people. The area was hardly inhabited at that time.

It is unlikely that the fort is a Venetian work, not only because of its different masonry, but also for the following reasons: if it were built after 1204 it would have been maintained for some centuries, considering its vicinity to the port and its strategic location. Note also that the tetrapyrgion would have been well visible from the bay of Gaurio if it was standing to a height of 2m. No documents refer to it, and cartographical evidence is inconclusive, but not clearly negative.
41. PLATEAU NW OF MARMOURISTRA

The area to the NW of Marmouristra is a dry and barren plateau with soft relief. About 200m NW of Marmouristra is a small knoll, where some pieces of pottery were found. A scattered heap of schists may indicate the existence of a structure.

About fifteen sherds were found on this knoll over an area of about 15m² (fig. 75). Most wares are coarse including pithoi, one of which has impressed decoration which may be dated in the archaic period (K1:5).

The finds are therefore contemporary with those from nearby Marmouristra and Stauros. The character however of this findspot is unclear. A farmstead on this exposed area is unlikely. Perhaps the remains relate to the security of the settlement at Stauros, considering this location has an aspect inland and towards the upper valley of Phellos. The short life-span of this site and its poor remains probably indicate that it did not acquire much importance, whatever its role was.

42. MARMOURISTRA-I (prehistoric)

The site is located on the NE side of the plateau of Marmouristra around the limekiln and extends over an area of about 150m². The higher density around the limekiln obviously resulted from the disturbance of the ground from this modern construction; therefore the real extent of the site might be larger, but cannot be estimated because of the debris from later occupation and activities.

a) Pottery (fig. 76, pl. 117)

Pottery is found in rather low density (about 1 - 2 sherds/m²) and only a very small number of diagnostic sherds was recovered. The fabric is coarse and micaceous, usually with large schist grits. Most of the sherds, both of large and thin vessels, have a characteristic orange colour throughout or are misfired in parts to grey. Finer sherds retain traces of a dark brown or black slip, in one case poorly burnished.
Characteristic shapes include the fragment of a baking pan pierced below the rim (K1:10) and typical Neolithic lugs (K1:7, 14). Although the vertically pierced lug is rather rare in the Late Neolithic, the horizontally pierced lug is frequent and both occur on a common variety of bowls with spreading sides. A coarse ware sherd has very worn traces of digital decoration (K1:12).

The ceramic material of Marmouristra is comparable with the material from the site of Ayia Irini in neighboring Kea, Saliagos, Mavrispilia in Mykonos and the cave of Kitsos in SW Attica. Unfortunately the amount of pottery is very limited to detect with which site of the above there are closer affinities. In any case all shapes of Marmouristra are present in Kephala and only two of them appear in Saliagos, so we may expect that the site belongs to the latest phase of the Neolithic, which is represented by the finds of Kephala.

b) Lithics (figs. 77-80)

Obsidian occurs at a density of about 5 pieces/m². Few very small chips which could be waste by-products were found and only one small pyramidal core, from which flakes have been extracted with percussion techniques (L1:7). The large facets on the striking platform appear to have resulted from reshaping rather than preparing for the knapping tool; none of the debitage pieces either has a faceted butt.

Blades are irregular and two of them have been retouched (K1: 14, 15), the latter possibly to be used as a sickle element. Three pièces esquillees were also found (K1:19, 20, 21).

Other tools include two small ovates (K1:18) and six projectile points. Four of the points were clustered over an area of 1.5m² in the SE side of the site (K1:1, 2, 4, 5) and one was found on the SW edge of the site (K1:5). Nos 1, 2 and 3 have a tang and more or less pronounced shoulders rather than barbs, while nos 4 and 5 have also a tang but their shoulders are hardly articulated and merge with the head. All have flat flaking, covering or
invasive, except no 3, where retouch is marginal on both sides. Careful workmanship is exhibited, since the retouch is parallel and long; see especially no 1, which is larger and thicker than the rest. The size of the points ranges between 2.3 and 3.8 cm in length, 1.2 and 1.4 cm in width and 0.5 and 0.7 cm in thickness.

Tool (K1:6) was found together with the four points; it has a roughly triangular form, close to an ovate and could have been used as a projectile.

The chronology of the lithic assemblage is based mainly on the core and the points (fig. 77). The core is a typically Neolithic example. The points are distinguished into the two large categories of barbed and barbed and tanged points. In stratified deposits in the Cyclades these types appear mainly in Saliagos, while four pieces from Kephala are very different and lack the fine retouch that characterizes the points of Saliagos and Marmouristra. One shouldered and one barbed and tanged arrowhead collected from Paoura, Kea, are also Neolithic, but cannot be dated more closely. A surface collection from Mavrispilia on Mykonos yielded twelve points of these types, most of which are very similar to the Andriot examples. Points of triangular shape, similar but larger than no 6, were also present in the Mavrispilia assemblage. Renfrew has concluded that this material from Mykonos is to be dated late in the mainland Neolithic and has affinities with Saliagos rather than Kephala.

Findspots of the discussed types of points have been listed by Diamont. Of these we note that the points from Francithi which are similar to those of Marmouristra are dated in the Late Neolithic: the shouldered type could be transitional between the transverse type, dated in transitional Early to Middle Neolithic and mostly Middle N; the tanged and barbed and tanged types are dated in the Late N only; at the very end of the Late N the tanged type seems to disappear.

Forty whole examples and fragments of tanged and
tanged and barbed points from Kitsos cave in S Attica, were discovered in Late or Final Neolithic strata; Perles believes however that there is no chronological significance in shapes present in the cave. 116

The lithic assemblage therefore is definitely dated to the Neolithic period and most likely to the Late phase of it rather than the Final.

Conclusions

Prehistoric material from Marmouristra represents a small settlement which is probably more extended than what is suggested by the surface finds today. Shapes in pottery and lithics have been found Neolithic contexts elsewhere in the Aegean and some are considered to be characteristic of the Late Neolithic period.

The presence of a relatively large number of tanged and tanged and barbed projectile points, is not only an indicator that the site belongs to the Late Neolithic, but probably reveals something about the subsistence economy of the inhabitants. Since the surrounding landscape is inappropriate for agriculture, the inhabitants were, partly at least, occupied with hunting.
THE VALLEY OF PHELLOS

The valley of Phellos was the next unit of research after Gaurio. The village is scattered in the inner part of the valley and divided into the upper (Ano) and lower (Kato) neighbourhood. On the low E hills above the main plain is the quarter of Varsamia which, at its largest, is recently inhabited. Houses near the bay are also recent constructions. Part of the central village of Phellos, called by locals Gorantza (from Chora=town), is uninhabited since the middle of the 19th century, when the land subsided after a heavy rainstorm.117

The landscape is more varied than the basin of Gaurio: hills and smaller ridges project from Charakas and the ridge of Pelekete which border Phellos from the SE. The N ridge which debouches to the sea, the Katergon, is softer but is uninhabited and barren. Water sources are scattered in the area of the village.

Meliarakes noted in 1880 that Phellos was richer than Gaurio, well vegetated and watered and had 400 inhabitants.118 Much of the land remains uncultivated now, but it is still evident that the valley has experienced times of intense exploitation. Slopes were terraced for dry farming of crops and olive trees. Today the few permanent inhabitants live off their cattle and sheep, while agriculture is restricted to a small number of fields on the plain. Olive trees also provide a standard income.

The seashore is as varied as the interior. Between the S cape of Strongyle and the N are two bays, of which the larger called Kourtale, corresponds to the plain of Phellos. Both bays offer good shelter for a vessel against all weathers, except W winds. The phenomenon of accentuated winds observed at Gaurio is not met here.

Archaeological remains

Archaeologically the valley of Phellos proved to be one of the most promising regions. Although the area was not covered totally it produced relatively more sites than Gaurio. Phellos is indeed more attractive for the variety
in the landscape and its water sources. Its small size however is not adequate to support a large population. The survey, although not exhaustive, showed that this area has been diachronically popular. We have already discussed sites on the upper W slopes of Charakas, which overlook Phellos.

All of the sites mentioned by Paschales were located but not all features noted by him were identified. New sites were recovered mainly by walking large zones around the known sites and checking promising locations. Roughly all periods from the Neolithic to the Middle Roman are represented at Phellos, with two major exceptions: the early Early Cycladic and the Early and apparently Middle Geometric.
43. VARSAMIA-upper site

Location

The site discussed is located within the modern quarter of Varsamia, to the right of the road which leads to Kato Phellos.

Pottery (fig. 81)

At first the site was located due to the pottery visible at the section produced in the slope, before the beginning of the survey. Unfortunately the site was not sampled than and recently afterwards a dirt track was opened in this area, destroying much of the evidence.

Only pottery was found. The scatter extends in low numbers (less than 1 sherd/m²) on the three terraces above the main road, over approximately 0.4-0.5 hectares; the upper limit of the site is not clear because the area is inhabited and could not be checked properly. The earth which was moved during the opening of the track did not produce more pottery.

Most of the sherds belonged to coarse wares, including pithoi and wine amphoras. During the first short visit a fragment of a relief pithos with a coarse running spiral was noticed, but it was buried or destroyed thereafter, and I could find it again. Pottery sampled later included some fine wares with red slip which are dated to the Archaic period.

Conclusions

The variety of pottery types recovered from modern Varsamia show that it was a small habitation area and possibly a farmhouse, occupied during the Archaic period. The partial, at least, chronological contemporaneity of this site with that of Stauros, suggests that the establishment at modern Varsamia was a related, "satellite" site to the large settlement higher up on the slope (see conclusions).

44. VARSAMIA - metochio

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Location and resources

Varsamia is the low long hill on the E side of the main plain of Phellos about 700m inland from the bay (pl. 33). The plateau of the hill is eroded and rocky with some wild vegetation. The slopes of the hill, of which the E is rather steep, have been terraced and planted with olive trees. To the E a small plain is formed between Varsamia and the hill of Trochalia. The location has a limited view to the N side of the bay and to the N towards the upper village of Phellos.

There are no water sources in the close vicinity.

The area is a metochio (property outside the monastery) of the monastery of Zoodochos Pege and on the NE part of the hill are the ruins of establishments of the monks and next to them is the chapel of Metamorphosis tou Soteros. To the S is Agios Charalampos.

Archaeological remains

Paschales reports that near the ruins on the rocky hill is an acropolis surrounded by a wall, and also below the hill an ancient well and above it a large old reservoir. The historian notes also that most features have been destroyed by the monks for the building of their dwellings.\(^{119}\) The acropolis was found but no trace of the other features was recovered. It is difficult even to estimate from Paschales' description where these were located.

a) Architectural remains in the S plateau

The acropolis described by Paschales is on the S part of the hill, where the sides of the plateau are abrupt and around 4m high in the S. Specifically there are megalithic terrace walls surrounding the plateau on its E and S side in between the rocks (fig. 19:a). These walls are built with large unworked stones in irregular masonry, with rather careless and loose stacked jointing (pl. 34). Some blocks measure as much as 1.75 x 0.55 x 0.55m. The stone is local mica schist and there are traces of the associated quarry: on the E side of the plateau a block has been abandoned while being prepared for extraction: the
platform is stepped and three holes for wedges have been opened along the attached back of the block. Since there exist no other definite marks of quarrying it is possible that a great part of the building material was extracted from the sides of the hill while preparing the ground for the supporting wall.

The best visible part of wall is the easternmost, which is 8m long and survives to a height of 2.40m. Only the SE and S parts survive up to the level of the plateau, with maximum height of 4m in the SE, but are covered with vegetation. A right angle corner is formed on the NW side but the N wall, which is visible on the ground, cannot be traced for long.

A series of large unhewn stones visible on the ground on a perpendicular line to the W retaining wall seem to belong to a wall which defines a rectangular area in the N part of the plateau (fig. 19:b). This area is completely flat while the S is sloping towards the edge where the walls are destroyed.

The E side of the plateau is bordered by low rocks. Between them are traces of a cobbled pavement made with thin slabs set vertically into the ground (fig. 19:e).

Vertical faces have been carved on the rocks in the NE area of the enclosed plateau: the N is straight and 8.25m with maximum visible height at the E end 0.80m and forms corners at its ends; the E is curving. On the rock surface above is a shallow rectangular carving with traces of a pick. It could have served for a wooden construction.

Access to the "acropolis" is possible only from the E side. There is a path today along the top of the hill which leads one to the upper N area while walking next to the rocks. At a narrow point of the path, about 40m away from the terraced plateau, is a round shallow carving on the ground rock which appears to have been intended for the socket of a wooden door or fence.

b) The metochia and the church of Transfiguration

Ruins were found among the buildings of the metochio, which are probably those mentioned by Paschales.

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In the NE area a corner of a wall with coarse or roughly shaped stones at its faces and rubble pack filling is visible for 2 and 4.50m. The width of the wall is 0.75m and the visible height 0.25m (two courses, irregularly laid).

Ancient building material has been used in the cells and the church of Christ's Transfiguration. It consists of roughly rectangular stones of various sizes with broached work; grooves are vertical but randomly made. Material is either greyish gneiss-schist or white marble, similar to that of Pelekete. Larger blocks have been preferred for use in the church and a few are left in the courtyard. The external walls of the church are only white-washed and material is well visible in contrast with the interior which has been plastered. Three stones, one in the courtyard (pl. 35) and two built in the external SW corner of the church, have a slightly curving face with irregular broached work. They measure 0.92 x 0.165 x 0.255m, 1.15 x 0.20 x 0.21m, and 0.98 x 0.195 x 0.16m respectively. The curvature of these stones is very slight implying that they belong to a large monument or rather a semicircular construction; a greater amount of building material would be expected there existed a whole building. A podium, a staircase or a fountain are more likely possibilities. Another large stone has been used as door jamb and measures 1.25 x 0.55 x 0.20m.

Most other material is of smaller size. It appears that it belongs to a public building. We can not yet identify this building with the described ruins of the wall, because of the difference in the building material.

Round bricks pierced in the centre (A6), or plain have been used for building material in the monks' dwellings.

There is a rectangular hole on the upper surface of a low greyish mica schist rock near the cells, with 0.195m sides and a depth of 0.08 - 0.16, indicating quarrying in the area. The hole is identical to those in the quarries used for inserting wooden poles to tighten ropes for the
transportation of the extracted material (see below: the Quarries of Phellos). The ground is covered with earth and thus the actual quarry is not visible. It is possible that this quarry also provided material for the retaining walls of the hill.

c) The E plain

A large amount of stones, ordinary irregular schist, has been piled up in heaps or thick boundary walls. This building material indicates the existence of buildings in this protected area.

Pan tiles were found on the plain and one fragment has an L shaped incision made before firing (A2). Round bricks from columns, probably of hypokausts from baths were also found there (A4). Finally A6 is the base or the crowning from such a brick column. This architectural material dates from the Roman period, but there are no characteristic finds for more precise dating.

d) The S slopes of the hill

Part of a wall was found just below the SW wall of the acropolis. It is 12m long and 0.70m high and appears as a terrace wall. It is built with large squarish or irregular schist blocks placed at about 0.50m intervals which are filled with small flat stones. Some of the building material has been piled up on a heap after the dismantling of the wall. It is believed that this is an ancient construction, though not a necessarily a building, mainly because of its masonry and because a modern wall would have no purpose in this location.

Part of a supporting wall, 3m long and 1.50m high, is on the foot of the hill to the S, near a modern sheep shed, by the dirt track. It is built with large coarse, longish schists (example measuring 1 x 0.45 x 0.40m), irregularly coursed and is founded on the coarse bedrock; its W end is attached to a rock cluster. There are not other traces of the wall further W. The location is appropriate for a fortification, but we would have to suppose in this case that all other parts of the wall around the hill have been destroyed, something quite
unlikely. The other possibility is that it is simply a retaining wall; the terrace created above has not produced anything that reveals what stood on it.

e) Pottery (fig. 82)

The scatter of pottery extends on the hill and the plain to the E. Particularly there was little pottery found on the W slope which has been disturbed recently by the track and almost nothing on the rocky summit of the hill. Small fragments of pottery were found within the poor mortar of the monks' buildings and some larger fragments of pithoi and bricks have been built in the walls. There is only little material to the N of the church of the Transfiguration.

The W terraced area of the hill produced pottery only at its S side, where erosion has washed away the earth above the great supporting wall. Fourth century sherds were found on the NW slope (K5:51).

There are high concentrations of pottery (about 8/m²) on the E slope of the hill, on the first and second modern terraces below the SE part of the supporting wall. This dense scatter may extend also to the S, where vegetation obstructs visibility for about 12m along the terraces. About one third of the sherds found in this area belongs to fine wares and includes black glazed vessels, Hellenistic black and red glazed mould made bowls (K1:3, 10, K2:29, 32) dated till the beginning of the 1st century. A fragment of a Hellenistic unguentarium was found on the second terrace from the top. A much later sherd with combing of the late Roman period (K2:28) was also found in this area, but no other definite late sherds were recovered.

Pottery on the fields of the plain is scarcer and consists of large coarse vessels, including the handle of a wine amphora with a plain rectangular impression (K4:55).

Conclusions

The material from Varsamia belongs to a settlement
which occupied the hill of the metochio and the plain to the E of it. The settlement dates from the early part of the 4th century till the Roman period. Hellenistic material seems to be concentrated on the slopes of the hill, while Roman extends also on the plain.

Public buildings were on the hilltop and included structures of marble, the building material from which has been used in the churches. The great retaining wall around the S part of the hill probably had a defensive character, and shows that this area was the acropolis of the site. Erosion has eliminated most features from this part of the plateau, but the large amounts of pottery, which have been washed down from there suggest that it was densely occupied.

45. HELLENIKO - Kato Phellos

Location and resources

Helleniko in Kato Phellos is located in the inner part of the valley to the left of the river above the very beginning of the plain and just below the dirt track. The site overlooks the central part of the plain but the view to the bay of Phellos is obstructed.

The slope is terraced and apart from its lower part, which has olive trees, it is presently uncultivated. There are water sources in the vicinity, near the river.

Paschales reported from this site ruins from an ancient oblong building and a great amount of ancient pottery. The survey located a retaining wall hidden under high vegetation and pottery.

a) Architectural remains

The wall mentioned by Paschales is a \( \Box \) shaped terrace wall, parallel to the slope. Its long side is oriented SW - NE and is 14m long (fig. 20, pl. 36) and the small sides are visible for 2m and 1.50m in the SW and NE respectively. The maximum surviving height of the wall at the SW corner, where the foundation of the wall on the bedrock is visible, is 1.60m, while most of the wall stands
to a height of 1.40m. The upper part of the wall has been destroyed and some of the building material is lying in front or has been used in the small sheep shed nearby and the modern terrace immediately below. Today the wall is covered by the branches of trees and bushes which have grown within its ruins, and is difficult to locate unless given detailed directions.

Masonry is irregular using large and rather irregular schist blocks with roughly finished external faces and smaller flat stones to fill the interstices (fig. 20). This very careful stacked jointing survives mainly in the lower part of the wall. In general, larger stones have been used for the upper part of the wall. With this type of masonry the builders exploited to the maximum readily available or easily extracted coarse building material and consequently had to invest more labour in the jointing of the wall. Large quoin stones give stability to the construction. In the SW, the corner of the higher surviving quoin stone is drafted (simple indentation). This type of masonry is not characteristic of a specific chronological period.

Earth with pottery has fallen from the terrace above into the space between the wall and a large boulder 3m from the SW corner. This boulder is set perpendicularly to the slope. It is difficult to distinguish whether this stone belongs to another wall because it is partly covered with earth and vegetation. Any small stones may have been displaced. Probably access to the terrace was organized through this space between the retaining wall and the boulder.

The plan of the wall and its masonry show that we are not dealing with a retaining wall for agricultural purposes. The identification however by Paschales of the wall as that of a building is erroneous since its masonry is definitely inappropriate for a free standing wall (note the coarseness of the upper part). This is a retaining wall for a specific area, defined by the length of the wall (14m) and by the width of the terrace above, limited to
about 7m presently, due to slope deposition, but obviously wider in antiquity.

The existence of a building on the terrace is attested by two pieces of evidence: a fragment of a pantile of Corinthian type (A1, fig. 84) found on the terrace and a small piece of clay with irregular impressions of small branches and straw; it appears that the rest have been buried within the terrace. The piece of clay can also be restored to the roof of the building. It is known from ancient sources that the clay layer on which tiles were laid, had straw inclusions which apparently increased the resistivity of the material. An inscription associates the clay mixed with straw with the use of rushes, which latter are known to appear with Lakonian tiles. On the other hand the word dorosis is used to indicate generally the layer of clay below the tiles and thus it is believed that clay mixed with straw was used for better results regardless of the type of tiles, Laconian or Corinthian.

a) Ceramic material (figs. 83, 84)

Pottery appears in high density (up to 10 sherds/m²) in the area in front of the wall and within the earth sloping down from the terrace at the SW corner, diminishes substantially on the next lower terrace and becomes rare on the lower slope.

More than half of the sherds from the vicinity of the terrace wall belong to fine wares, which are absent from the lower slope (fig. 83); black and red glazed mould made bowls with vegetal decoration and jewelled lines are common (see Fine wares from K1, and in particular nos 27, 18, 33, 26, and 21). Oil lamps are also present: a Roman mould made (K1: 31) and two plain wheel made oil lamps (K1: 4, 3, fig. 83, pl. 118), the latter two found within the earth of the terrace. Plain wares include cooking pots, lekanai, wine amphoras and pottery beehives (fig. 84).

An important find from the NE corner of the wall is the lower part of a female standing statuette (pl. 118);
the folds of the dress are indicated by low relief. It is a Hellenistic work, of probably local manufacture.

The terrace created by the ancient wall produced the pan tile mentioned above, but hardly any pottery. The fact that the earth which has moved down from the terrace at the SW end of the wall is full of pottery shows that the scarcity of material on the terrace, is due to the deposition of earth from above; furthermore this area does not appear to have been much cultivated as opposed to the terrace below the wall. No pottery at all was found higher up on the slope.

Some weathered coarse sherds found on the plain further to the S have probably been washed down from this site and brought down with the river.

Conclusions

Helleniko at Kato Phellos is a rural establishment with material concentrated around a retaining wall. The masonry of this wall, although not very impressive, suggests that it is a public work and as such, it would be intended to support a terrace for an important building. It is possible that this was a temple, considering the high numbers of fine pottery found and the terracotta fragment. Most material belongs to the Hellenistic period, and less to the Roman period, until the first centuries AD.

Helleniko was probably related with the contemporary settlement on the metochio of Varsamia, which is 1km away.
ANO PHELLOS

Paschales notes finds from two neighbouring sites in Ano Phellos which appear to have been related, due to their proximity and the nature of their features. These are Agios Matthaios and Hellenikon - Rakagio.

46. HELLENIKON - RAKAGIO

Location and resources

The site is located in the upper valley of Phellos on the E slope, between the destroyed chapels of Stauros and Agios Georgios (pl. 37). The area is a metochio of the monastery of Zoodochos Pege and there is a ruined complex of monks' dwellings on a rocky knoll in the upper part of the area. The involvement of the monks in distilling alcohol (rake) from mulberries gave the placename Rakagio to the site.

Below the monks' dwellings is a plateau with low and very wide terraces and then the slope becomes steep again. This area is bordered on either side by streams, the N of which is enriched by water sources. There is one water source in the middle of the plateau but its water has "sunk". The land was being cultivated until recently as the soil is deep and fertile. A few mulberry and fig trees constitute the only high vegetation of the area.

The site is not very exposed to the weather and has a fairly good view of the lower valley and the bay of Phellos.

The archaeological remains

Paschales noted the existence of an ancient wall, called Hellenikon, and a large carved stone larnax of "old craftsmanship" at the water source nearby.¹²²

The survey located the retaining wall recorded by Paschales and elements of sculpture. The stone larnax was not found. According to locals who had seen it, it was circular and carved in black stone. It was placed on the ground in front of the source for the water to run in it, and apparently has been buried with earth and stones.

a) Architectural features
The wall named Helleniko is located on the SW edge of the plateau above the small stream, and in fact it is a shape retaining wall. Its long side, oriented NW - SE, is approximately 20.30m long and survives to a height of 2.30m (fig. 21, pl. 40); it is quite destroyed in parts and has collapsed in the SE. The N side is visible for less than 2m and seems to continue into the terrace. The E side is visible for 4.70m (pl. 41) and the rest is buried: stones of its upper course can be traced on the ground of the terrace above and stop at a buried rock cluster, giving a total length of 15m to this side.

The wall is built with large and mainly oblong roughly worked schist blocks irregularly coursed with stacked jointing. Only on the E side does masonry survive in good condition (fig. 21). The loose appearance of the long side is probably the result of the dismantling of the wall for getting building material, which caused the falling of the small stones from the interstices, rather than a difference in masonry.

The wall appears to have been a public work; its massive masonry and the prominent location suggest that it supported eminent structures. The terrace itself offers no clues about what stood on it; other areas of the site were more productive.

b) Other features

Dressed pieces of marble believed to belong to sculptural complexes were found in the two ruined churches of the area.

On the same altitude as the retaining wall and to the N is Stauros. A roughly cylindrical curving piece of marble has been used to span the left humble door of the schist wall separating the cella from the altar (pl. 38). It is broken, 0.37m long and 0.14 - 0.19m thick; its surfaces are dressed coarsely with a thick tool. The marble is white and could be from Pelekete. It probably belongs to a plain free standing support of a standing statue, a common feature in Hellenistic and Roman statuary.
The chapel of Agios Georgios is located higher than the monks’ quarters. Today it is partly ruined; it has no internal divisions and the holy altar is built in the niche of the apse; a small square built bench is attached to its left side. This bench is topped with a roughly square marble slab measuring about 0.50 x 0.65m with two shallow square depressions (fig. 22:2), which has been cemented to stay in place on the bench. The edges of its two sides have been damaged. The average thickness of the slab is 0.065m and its lower surface appears rather regular except for a 0.03m projection near and possibly along one edge. Tool marks of a thick point are either perpendicular or oblique to the upper surface, which has been flaked away in areas. Similar tool marks exist on the bottom of the square depressions. These have sides 0.13m are about 0.02m deep and are placed at a distance of 0.32 -0.33m from each other. The use of this particular slab is problematic because of the shallowness of the depressions as opposed to those made to accommodate either wooden posts, or a fence for example. What stood on this slab would have to be light if it was freestanding, or was a wooden facing possibly of a doorway.

Other marble pieces have been cemented on the Holy altar of the same church. Two broken slabs, measuring 0.85 x 0.52 x 0.08 and 0.59 x 0.64 have very damaged surfaces. A smaller broken marble belongs to a stand for a sculptural work (fig. 22:1): the surviving piece suggests the restoration of an ovoid depression, 0.015m deep, in a slab of minimum thickness 0.08m. The edge of the slab is slightly rounded and the upper surface has tool marks of a thin point and a claw chisel. Another marble has been used as the threshold of the church and belongs also to a stand. It measures 0.40 x 0.30m and is 0.095m thick; all of its small sides are broken. Its surfaces are well finished and do not bear any tool marks.

There are four broken marble blocks built in the facade of the church. All have very coarsely dressed surfaces and are made of the same marble as the rest of the
ancient members in this church.

No definitely ancient material was found in the monks' cells. A possibly ancient member is the drum of a small column, built perpendicularly into a wall, with diameter 0.43 - 0.45m and visible height 0.13m; it has a small round hole at its centre with diameter 0.055m and depth 0.05m, apparently from a second use of the drum as a cylinder for repairing earthen flat roofs.

c) Quarrying activities

Quarrying activities probably associated with the large retaining wall were attested around the buildings of the metochio and specifically on the schist clusters to the N and W of the buildings.

The planes of foliation are sloping, following the slope angle and material has been extracted according to them. A few negatives of extracted blocks are visible but a large part of the rock surface has been covered with earth. The quarrying technique involved the drilling of holes at small intervals along one of the long sides of the block to be extracted (pl. 39), instead of cutting a channel, and the exercising of force possibly by using wedges at the base of the other long side to help to detach the block from its back. This technique of extraction has been used at the quarries of Aliki in Thasos in the late Roman and early Christian periods.

The quality of the stone is appropriate only for building material. The quarrying activities are of limited extent and apparently served the needs of the ancient site in this area and particularly the building of the retaining wall which is at a distance of about 200m to the SW.

d) Small finds

Pottery is rare and generally very fragmented over the area of the plateau and the first two or three terraces below (fig. 85). A slightly higher density (1 sherd/m²) occurs around the retaining wall. Only coarse and plain pottery was found and very few had any shape to be used for dating. The ridged handles (K1:1. 2) and generally the fabric of the pottery suggest a Roman date, in the first
centuries AD.

The limited amount of pottery is disturbing, considering the architectural and other remains, but it is possible that this has been caused by slope deposition on the plateau.

Pieces of slag were found in the area around the dried water source and towards the N, near the buildings of the metochio.

Conclusions

The site at Helleniko-Rakagio is dated roughly to the first centuries AD. Unless post depositional factors have altered significantly the distribution of artifacts, it appears that Helleniko is not a habitation site.

The massive retaining wall is the main feature of the site. There is no evidence however in situ of what stood on this terrace. The sculptural element and marble stands in the churches of Stauros and Agios Georgios indicate the existence of public or other prominent structures.

Random walks within the village of Phellos were not productive in locating a Roman habitation area, with which Helleniko might have been associated.

47. AGIOS MATTHAIOS

The country chapel of Agios Matthaios is built on the plateau (30 x 45m) of a small hill to the S of Helleniko, with a good view of the valley of Phellos. The land around the church is abandoned; only the wide terraces further below are being cultivated with crops for animal food. I have walked the slopes, below Agios Matthaios until the modern road and made random walks below the road in the fields with the ruined houses. No archaeological remains were identified in these areas.

Meliarakes noted the discovery of graves with pottery in the area, some of which he saw. Paschales repeated this information adding that the church is built...
on earlier ruins and that various dressed marbles were found there, including the bust of an archaic statue transferred to the monastery of Zoodochos Pege by the abbot Athanasios Volikas. Although Paschales was probably capable of recognising an archaic statue, we are not sure whether he actually saw it, or whether the chronological evaluation is Volikas', which would be less reliable.

The deteriorating situation in the monastery of Zoodochos Pege did not allow access to the treasury where sculptural pieces had been transferred in the past. By courtesy of Dr D. Polemes the author was able to check a photocopy of a catalogue (dated 18.6.1968) of the "archaeological items" of the collection. The items are numbered but the brief descriptions are not helpful in identifying the statue from Agios Matthaios, if indeed Paschales identified it correctly as archaic.

a) Architectural features

Agios Matthaios is built on a heap of stones, better visible below and around its E side. Along the N wall of the church poor traces of a rubble wall are visible on the ground for 1.30m. Around Agios Matthaios are small heaps of stones as well as pieces of long schist slabs. If we associate these with Meliarakes' information about graves found in this area, they could be cover slabs.

There are a few marbles built in the church, roughly shaped in rectangles, but very weathered. A marble block in the E corner, measuring 0.64 x 0.115 x 27.5m, has broached work with small strikes of a pick on one of its small sides. Inside the church two white marble slabs have been used in the left niche and on the apse serving as the Holy altar. They measure 0.55 x 0.43 x 0.17m and 0.95 x 0.43 x 0.07m respectively. Their surfaces have marks of a point faintly visible because of the successive layers of white-wash applied to them.

b) Pottery

Pottery is very rare (1 or less sherds/m²) and is restricted over a small area in front of the church and the upper W and NW slopes of the hill. Sherds belong mainly to
coarse wares and finer pieces are also plain. I have not been able to find any characteristic pieces for dating.

Conclusions

According to Meliarakes and Paschales accounts there were graves in the area of Agios Matthaios. Paschales information about the archaic statue found at this site remains unchecked. If it is verified, there is only one settlement which could be associated with these graves, which probably belong to a cemetery, and this is Stauros Peleketes. Considering however that a cemetery area for LG and Archaic Stauros has been already identified with a fair amount of certainty on the location of Marmouristra, two options exist: a) the cemetery at Agios Matthaios belongs to another settlement, something unlikely according to the survey results, and b) the graves are later than was suggested by Paschales, and therefore contemporary with the later phase of Stauros, or with the Hellenistic - Roman settlement at Varsamia.
THE QUARRIES OF PHELLOS

Phellos is privileged in possessing one of the few marble resources of the island. A zone of marble runs along the ridge of Stauros and Charakas deteriorating into mica-schist towards the sea.

QUARRIES IN THE AREA OF PELEKETE

The mountainridge of Stauros has the largest amount of the best quality of white and white-grey marble on Andros. There is one major quarry, Pelekete A, another totally destroyed but perhaps equally large, Pelekete B and two small quarries, Pelekete C and D.

Regarding the chronology of these quarries, there are no clear characteristics which point to a particular period. The quarrying techniques used here, were practised elsewhere from the archaic period onwards until the Roman period with little change. I have not been able to discover features which would help for a more precise chronology, like a large number of wedge holes, or large quarry faces with tool marks.

Considering that two other quarries at Phellos, Trochalia and Strongyle W, are dated with certainty to the Roman period and later, I am inclined to believe on probability grounds that some of the quarries of Pelekete must be earlier and that at least the large ones did not operate simultaneously.

On the issue of the destination of the material from the quarries of Pelekete, there is no geological study made yet. The marble even to the inexperienced eye, is not of high quality to be ideal for sculpture, although it appears that it has been used for such purposes at Palaiopolis. The ancient town of Andros would be the greater market for the quarries, because there is no marble in this area.

48. PELEKETE A

This quarry is on the W side of the ridge of Stauros, facing NW towards Phellos. Its larger part, to
the W, has been destroyed in the 1960s when the quarry operated to provide material for the construction of the port of Gaurio. Fortunately there exists a photograph and descriptions of Pelekete before the destruction. The earliest reference is by Fiedler in the 1830s who mentions large blocks and a sarcophagus without cover. Bent referred to the tradition that Pelekete provided marble for the temple of Athena at Sounion, and Miliarakes noted the same information. Philippson actually measured the quarry and some blocks: the quarry face was 100m long and 10m high; two parallelepiped blocks had the following dimensions: 2.15 x 1.75 x 1.30m and 2 x 1.30 x 0.85m and a carved vat, which is referred to in the literature as a sarcophagus, measuring 2.25 x 1.10m (see also below). Sauciuc took the only photograph of the quarry before it was destroyed and Paschales reprinted it with all known information about the site, noting that quarrying was done in the technique used at Pnyx in Athens, that is the stepped.

In Sauciuc’s photograph, taken from the N, one can see the vertical face of the quarry. The area in front is flattish and covered with earth and stones, deposited from slope erosion. The "larnax" described by the early visitors is buried almost to the rim, so we can estimate that the original ground there would be around 0.50-1m below the ground level pictured in the photograph. Regarding this larnax, I believe that in fact it was not a sarcophagus but a vat for water to cool metal tools after forging. Such carved vats in stone were found at all other quarries of Phellos and have been reported from S Euboea and Thasos. They have been identified as small water reservoirs in which metal tools repaired by forging were dipped to harden (hardening by quenching), while similar basins, which were pierced at their bottom for reviving the fire, served as fireplaces for forging.

Sauciuc’s picture is not helpful in identifying the quarrying technique. We can only see the vertical quarry face, which looks rather irregular.
Today only the NE edge of the ancient quarry survives, where the rock is not solid and has crevices. There exist no quarrying faces and the ground is covered with rubble. Above it however, and next to the cliff are two roughly parallelepiped blocks of marble measuring 1.75 x 1.20 x 0.75m and 3 x 0.55 x 0.85m. The latter block has a small indentation along one of its long sides, 0.04 x 0.05m and its surfaces have been worked with a pick. The other block has irregular surfaces. A third semi-buried block is below the above, next to the road: 1.70m of its long side are visible.

Small stones from the shaping of the extracted material are found mainly outside the NE part of the quarry. The discussed blocks lie on a heap of debris measuring about 10 x 15m and of varying depth, which at the section of the track ranges from 1.50 to 0.50m. This deposit obviously extended below the modern track which has passed through it and scattered it.

Paschales had noted the existence of a track for transporting the material from Pelekete to the bay of Kourtale. No such feature was found today in the vicinity of the quarry. There are traces however of a destroyed path below and to the N of Mazareko, crossing the hill of Trochalia to the S of the quarry and continuing towards the bay, down to the small stream near the southernmost house.

Traces consist at their best of two low parallel heaps of stones, less than 1m apart. This path could well connect the area of Pelekete with the bay of Kourtale, but there is no evidence for its chronology. We can assume however that material from the quarries of Pelekete would have to be carried to the sea in order to be transported by boats to distant places, since the mountainous terrain of Andros is not appropriate for transportation by land.

49. PELEKETE B

This quarry was on the site of the main modern quarries at the junction of the main road to Phellos and the dirt track towards Stauros. There is no trace of
ancient quarrying areas other than the large heaps of small stones from the shaping of the material to the N of the modern quarry. Again here the track has passed through the debris. It is about 1m high and seems to cover an area of 15 x 20m. A piece of worked marble was found buried in the debris with a circular shoulder, belonging to a stand.

50. PELEKETE C

This quarry is located higher than Pelekete A, about 7 minutes walk to the E, on the tip of the ridge. The marble here is white-grey and there are several vertical crevices in the rock. The material appears slightly inferior to that of Pelekete A.

There are two adjacent quarrying platforms at different levels, lower and upper (fig. 23).

Lower level

This platform occupies an area of 13 x 14m and possibly extends a few more metres to the W, where the rock is covered today with stones and earth. There is no continuous vertical quarrying face due to the inhomogeneity of the rock. The most regular face is in the NE (a) and is 8.60m long with maximum height 2.90m. In the NW a lower indented face (b) has apparently resulted from the extraction of single blocks with similar heights.

The ground of the quarry at the inner part is covered with earth and stones from slope erosion. The foreground is clear and bears the traces from the extraction of long blocks. The quarrying technique used consisted of digging parallel and vertical trenches (phalkai) at distances which define the dimensions of the blocks to be extracted (fig.23a, b and c). These trenches are 0.15 to 0.35m wide and the traces of the blocks 1.30m, 1.28m and 1.05m with minimum length of 3.35m. Traces of two used holes for wedges were distinguished at the edge of one of these channels. These and the negatives of the extracted blocks indicate that blocks were detached by inserting wedges at the junction of the blocks with the bedrock. A sole hole for a wedge (0.15 x 0.3m, depth
0.10m) on a free standing rock in the foreground was apparently opened to knock down the disturbing rock as quarrying progressed towards it.

Four extracted blocks lie within the quarrying area and a fifth is still attached to a large irregular piece of rock which may have been detached from the bed rock (pl. 42). Two are roughly parallelepiped and the rest are prismatic. Their surfaces have been worked with a thick point and have been intensely eroded since.

**Upper level**

The upper level is above and to the S of the vertical quarrying face and occupies an area of 8 x 9m. Traces of channels and negatives of extracted blocks exist parallel to the edge. The latter are 0.97 and 0.90m wide and channels 0.20m; one of the fully visible channels is 2.70m long. No wedge holes are visible.

About 8.50m to the S is a small indented vertical quarrying face forming a corner. Two marble vats stand on the cleared foreground ground of the corner, from where they have apparently been extracted (pl. 43). They have the following dimensions: smaller: 1.25 x 0.90m (height not visible) and depth 0.25m (fig. 26:1); larger 2.45 x 1.40 x 0.45m and depth about 0.15; one wall of the latter has been either broken or knapped away for a second use of the stone and its floor has parallel rows of pick marks. Another vat of roughly triangular shape is located 12m S of the above and measures 2 x 1.75 x 2.05 x 0.80 with height 0.40m and depth 0.22m (fig. 26:2). They all have wide shoulders measuring 0.10-0.25m on the smaller vat and 0.22-0.40m on the two larger. The small and the remote large basin are water vats for cooling metal tools (see above, Pelekete A) whereas the broken large vat could be a fireplace.

Two working areas for the dressing of blocks were distinguished, one to the SW below the quarry, where low heaps of stones cover an area of 18 x 15m and another to the N over an area of 8 x 6m.

About 40m lower of the quarry is an irregular block (measuring 1.10 x 1.03 x 1.30m) coarsely worked with a
thick pick. Two others were found nearer to the quarry, one polygonal (main dimensions 1.60 x 1.03 x 1.30m) and a quadrangular (0.90 x 0.40 x 0.55)m. It appears that these blocks were abandoned during transportation.

Conclusions

Pelekete C has produced a small number of elongated polygonal and prismatic blocks and appears to have operated as a systematic quarry despite its limited extent. The technique of exploitation was superficial quarrying or deep quarrying with partial cutting.

The extracted blocks are suited for polygonal massive retaining or fortification walls, although the amount of the material already extracted and exported from the quarry would not be sufficient for the completion of such a major project. No such works exist in the area of Gaurio and Phellos neither in the vicinity; in fact no wall built in such masonry is known at present from Andros. Ignoring the destination of the material it is difficult to identify the reasons for the abandonment of the quarry. Was the quarry considered inappropriate, or did the building project not require more stones? In the latter case Pelekete C would be only one of the quarries providing this project with building material.

51. PELEKETE D

Location and resources

Pelekete D is located about 100m to the N of Pelekete A, above the dirt road on the W facing slope of the ridge, overlooking Phellos. Quarrying has been restricted to layers little below the surface, where the rock is white grey with large crystals and has some crevices along and across the planes of foliation.

Description (fig. 24)

The quarrying area has total length of 16m. Only the N 7m have been exploited to a depth of 1.95m; the resulting vertical quarrying face is irregular to the N, while its S part is rather even and has tool marks from a
thick point. On the ground at least three longish parallel blocks have been partly prepared for extraction by cutting trenches between them (pl. 44). Earth has covered the N area and has filled up the channels. These are 0.40-0.30m, 0.30m and 0.55-0.77m wide from S to N respectively. The blocks taper in the foreground, where they are covered with earth. They measure from S to N 4.20 x 1.02m, 3 x 1.20m and 3 x 1.45m respectively. At this level the rock is homogeneous.

The blocks would be detached from the bedrock by undercutting, since channels are wide enough to allow this technique and none of the blocks bear marks of wedge holes from the extraction of the previous layer.

Although we do not know the depth of the blocks, their length suggests that they could be intended for column drums.

A sole wedge hole, already used, 0.20 x 0.04m and 0.02m deep is on the vertical face of the rock in the N part of the quarry, and was probably indented to prepare the quarry face.

In the S area, on the original surface of the rock attempts were made to extract smaller blocks around 2m long. Trenches were only traced and not deepened.

No extracted blocks are found in the vicinity. Any material however extracted from the upper layers would have been of smaller size than the lower blocks, because of the sloping planes of foliation. Material extracted from this area was dressed elsewhere, since there are no marble chips in the vicinity to indicate a working area.

Conclusions

Pelekete D operated for a very limited production of long marble blocks, possibly for the production of column drums. It seems that this small quarry represents a test to evaluate the ground for further exploitation.
52. TROCALIA

Location and resources

The quarry of Trochalia is located on the seaward (SW) side of the elongated hill that springs W of Mazareko into the lower plain of Phellos. It is immediately below the summit, with aspect towards the bay which is around 600m away. This location is well protected from the N winds.

The rock is mica schist with colour ranging from light grey to light grey-brown; upper layers consist mainly of schist with intense folding. The rock becomes solid at depth of about 1m from the surface in the quarrying area.

a) Quarrying platforms and extraction techniques

Quarrying operations extended over an area of 40 x 40m, excluding the areas of quarry debris (sketch plan of the quarry in fig. 25). Three main platforms are visible today in the N part of the quarry. The central platform on the plan (d) has been worked lower into the rock forming a corner which faces SW with sides 11 x 4.25m and maximum visible height 3.70m (pl. 45). Tool marks on the vertical face are too eroded to distinguish a working pattern. The ground is covered with earth.

Two smaller platforms are on a higher level on either side of the central. On the E (b) is a long block (4.63 x 0.50 x 0.65m) freed from all sides except its back waiting for extraction (pl. 45, left). On the bedrock along its long attached side are abandoned attempts to start cutting short narrow channels, possibly the beginnings of wedge holes (pl. 47). They are around 0.02m wide and 0.015m deep, with various lengths (0.10- 0.50m) and at irregular distances from each other (not exceeding the 0.10m).

On the narrow triangular platform (c) which has remained between the main platforms, above (d), a small irregular block (0.50-0.55m) at the NE corner was being prepared for extraction before abandonment: a future trench is traced with a pick around the corner attached to the vertical rock face.
Platform (a) forms an indentation to the NE with sides 5.40 x 2.70 x 2.10m. Negatives of extracted blocks are visible on the foreground to the S which is clear of stones and earth, on a NE-SW direction. (fig al) SW of platform (a) on the foot of a large high rock a small block has been detached from all sides except its back, awaiting extraction.

Waste from the preparation of platforms and shaping of the blocks has formed small and low stone heaps to the S. Immediately E of the easternmost block is a high heap with generally larger stones covering an area of approximately 200m². I estimated that the maximum depth of the heap is roughly 2.50m.

In the S area of the quarry two neighbouring large pieces of rock, which stand on different levels (f1 is 1.50m higher than f2), have each on their flat and almost horizontal upper surfaces one square depression measuring as follows: f1 0.20 x 0.20m, D 0.20m and f2 0.25 x 0.25m, D 0.25m (pl. 48, f1 left). Such holes occur around quarries and at paths near them, on the bedrock or large detached blocks, and were intended to receive beams, which had round section at their upper part; ropes for moving the blocks were put around them to restrain the descent of blocks on sloping ground. The holes at Trochalia have the usual dimensions encountered in holes of other quarries.

On the flattish area to the W are remains of a workshop for the metal tools of the quarry. There are two vats carved in irregular blocks, one of which was taken from the upper stratigraphical layers (pl. 49, fig. 26:3, 4). Some small pieces of metal slag were found around the vats, supporting the theory that they were features of a workshop for metal tools.

b) Extracted material

The products of Trochalia include columns and long blocks at various stages of shaping towards monolithic columns. The material lies mainly in the foreground of the quarry and on the area to the W, over a radius of around 35m from the corner of platform (d). Two more blocks, not
included in the plan, are further away to the SW.

CATALOGUE

of members according to their length; location is noted
after serial number (c indicating central area).

BLOCKS

18 SW: 2.45 x 0.60 x 0.40-0.55m (not on plan; 14m SW
of column 13).
17 SW: 2.40 x 0.53 x 0.72-0.80m (not on plan; 12m SW
of 13).
15 c: 2.70 x 0.70 x -.
1 W: 2.90 x 0.70 x 0.65m.
14 c: 3 x 0.70 x -.
9 c: 3.75 x 0.60 x -.
12 W: 4.15 x 0.75 x 0.45m; irregular boss projecting
by 0.25m along one end.
6 W: 4.20 x 0.45 x 0.60, 0.80m.
8 c, partially rounded: 4.30 x 0.50-0.55 x 0.50mv;
4 E: 4.30 x 0.60 x 0.60m.
5 E: 4.60 x 0.55 x 0.60m; irregular bosses projecting
along ends and on the side of one of them.
3 E: 4.80 x 1.15 x 0.85m.
2 W: 5.30 x 0.40, 0.85 x 0.50mv.

COLUMNS

11 S: L. 4.30m, D. 0.60m; thickened band at one end:
L. 0.20m, Th. 0.015m. Pieces broken along one side
lie next to the column.
10 S: L. 4.85, D. 0.60; rounded along its half, while
the other was being shaped.
13 W: L. 5.45m, D. 0.67m; thickened bands at both
ends: L. 0.30m, Th. 0.015m and irregular boss
projecting by 0.25m along one end. I have not been
able to check whether the column tapers. There are
at least nine cuttings perpendicular to the length
of the column. One close to the one end surrounds
the column and has maximum depth 0.035m. The other
cuttings are only partially visible, because the
column is semi-buried and these do not surround its
whole periphery. Tool marks of pick can be distinguished and considering that they appear less eroded than other parts of the surface of the column, they probably represent later attempts to cut the column to smaller parts of convenient size, something supported by the location of the grooves at distances of 0.33 to 0.40m from each other and 0.60 and 0.80 from the column ends.

c) Associated ruins

About 80m to the E of the main platforms, are low heap of stones from buildings. Very few sherds were found in this area, which could not be dated. It is possible that the ruins belong to structures related to the quarries.

d) A path?

In the entry for Pelekete A we discussed the existence of a destroyed path presumably starting from Pelekete and passing next to Trochalia. If its antiquity is established, it is possible that the path was also used to transfer material from Trochalia down to the bay. The existence of two blocks (18 and 19) lower on the slope towards the bay definitely shows that the products of the quarry were indeed taken to the sea.

Conclusions

Trochalia produced mainly monolithic columns and a smaller number of long blocks. Certain observations regarding a) the material and b) the proportions of the columns produced help us limit the possibilities of chronology to the Roman or even later periods.

a) material

The poor quality of the stone available at Trochalia does not permit fluting, thus we are talking about unfluted columns, some of which could be monolithic.

Marble was the standard building material for public buildings in the classical period, as its properties made it appropriate for the required uses.
Coloured marbles started being used in the Hellenistic period and continued to be popular in the Roman period when they were widely.

b) proportions

The columns of Trochalia are slender. The ratio of the height of column to its diameter (no tapering could be measured, and if it exists, it is very slight) or of length of block to its smallest side, even without considering the protecting *envelope* (chiton), is already high:

<table>
<thead>
<tr>
<th>Ratios of height to diameter or small side</th>
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<tbody>
<tr>
<td>3: 5.41</td>
</tr>
<tr>
<td>8: 6.25</td>
</tr>
<tr>
<td>11: 7.16</td>
</tr>
<tr>
<td>4: 7.16</td>
</tr>
<tr>
<td>14: 7.37</td>
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<tr>
<td>13: 7.8</td>
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<tr>
<td>10: 8.08</td>
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<tr>
<td>5: 8.36</td>
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<td>2: 8.83</td>
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<td>12: 9.22</td>
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<td>cl: 9.26</td>
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<td>6: 9.33</td>
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The ratios of pieces 4 - 5m long range between 6.25 and 9.26 with only one at 5.41 and that of the three members longer than 5m is 7.37 - 8.83.

The same proportions in the Ionic order range between 7.82 - 9.91. Blocks and columns are not uniform in size, showing that they were intended for more than one building. They can be arranged into four groups according to their length:

A) 5 are between 4.15 and 4.30m
B) 4 are between 4.60 and 4.85m
C) 2 are 5.30 and 5.46m
D) 1 is 5.90m.

Monolithic columns, after the archaic period, become popular again during the Imperial period, when they were usually extracted in horizontal beds, as is the case at Trochalia.

To conclude, the type of material produced at Trochalia shows that the quarry operated during the Roman
period and perhaps until the early Christian era.

The early Christian basilica in Palaiopolis has monolithic columns made of brown greenish mica schist similar to that of Trochalia. Comparison is not easy as the effect of erosion is different on the well finished surfaces of the basilica columns and on the coarsely treated material of the quarry. Nonetheless, the diameters of the three visible columns are between 0.40 and 0.45m. The only fully visible column has length 3.50m. The quarries of Trochalia possibly produced columns for early Christian Palaiopolis. Similarly, the same applies for the W quarry of Strongyle (see below).

We mentioned already the traces of what appears to be an ancient path, leading towards the sea. The transport of the columns by sea is the most convenient way to take the columns to their destination, be that Palaiopolis or places outside Andros.

QUARRIES ON CAPE STRONGYLE

The cape of Strongyle springs from the ridge of Charakas and borders the two bays of Phellos from the S side. As is denoted by its name its has a fairly circular shape. All sides have steep cliffs falling to the sea except the N, which is low and offers a small protected bay at the neck of the promontory. To the SW a narrow and high promontory is formed. Strongyle is very exposed to the winds is deprived of water sources and has only shrub vegetation. Modern wells however are successful in locating water at the neck of the cape.

The area was uninhabited until the last decade, when a few houses where built on the SE side above the precipice. It had been used as pasture land but the small humble sheep sheds are now in ruins.

Paschales has noted the existence of an "ancient marble quarry" on Strongyle.140

53. STRONGYLE - West
Location and resources
A small unit of beds and lenses of cipolino within mica schists is crowning the top of the promontory, an area of approximately 1.4 hectares. The marble is light grey in colour and is interrupted by mica schist veins often folded, giving a patterned texture to the marble. Cleavages in the rock are generally few.

Quarrying platforms and techniques

A large quarrying area is on the soft upper W slope overlooking the open sea (pl. 50). The ground is rather flat, like a continuation of Strongyle's summit plateau. Later depositions of the earth in the quarry area have favoured the growth of vegetation inside the quarry platforms.

The interest of this quarry lies mainly in the abandoned columns and the identification of a forge for repairing the metal tools.

There is one main quarrying area extending over approximately 100m². Quarrying operated horizontally creating two walls at an obtuse angle, the E of which makes an indentation and extends S, separating the quarry into two parts. The height of the walls does not exceed 2m and their surfaces are smooth. Two levels are visible on the floor: a large step is formed parallel to the N wall and across the indentation of the E wall, having a maximum width of 0.50m and height of about 0.50m. The floors are covered by vegetation and earth but appear to be rather irregular. On a low rock surface in front of this area an attempt was made to carve a square depression (0.15m sides) obviously for a wooden post required for the transportation of the extracted material.

Lower and to the W is another quarrying area with a main vertical face 12m long and 1.40m high. At the one end it forms an indentation. The original ground is not visible.

Evidence for the quarrying technique comes from smaller operations outside the above area. A rock mass about 10m to the NW of the entrance to the main quarry has a flat upper surface but slightly sloping according to the
planes of foliation of the rock. The beginning of the carving of a channel around a block is visible: a guideline was made with a pick, and was subsequently widened to 0.15m and deepened. Work was abandoned before the channel had acquired its final depth.

Another rock mass about 30m to the SW of the quarry entrance and lower on the slope has planes of foliation heavily sloping westward at an angle of 20° and quarrying was organised according to them (pl. 52). One long block measuring 4.60 x 0.70 x 0.60m had been freed on all sides except its long back and was abandoned before extraction. Part of the block has been coarsely dressed. The channel that separates this block from another parallel to it is 0.58m, indicating that the final stage for the extraction of the material was the undercutting of the block and not separation by means of wedges.

There are indications of quarrying on at least one other small rock mass to the S of the main quarry where traces of a wedge hole were found on a block awaiting extraction.

The distribution of the quarry debris is very little around these random openings indicating that little, if any at all material has been extracted from them. It is possible that these were the first testing attempts for the exploitation of the area.

Working areas for the shaping of the extracted material were identified mainly in the S and N where exist low heaps of stones.

About 20m to the N of the main quarry and within an assemblage of stones of approximately 8m² is a carved vat with the following main dimensions: L 1.56m, W 0.72m, D 0.15m; its depth is not visible (pl. 55, fig. 26: 5). Three small pieces of slag and a few non diagnostic coarse pottery sherds were found near the vat. Considering the stones around it appears that there was a built structure used as a workshop for metal tools.

Extracted material

Seven long blocks which represent columns at
different stages of finishing lie on the flattish ground outside the entrance to the main quarry (pl. 53). Most are laid in an orderly way parallel to each other. They all have the veins of the rock run along their long axis and have been heavily weathered (still less intense than the material of Trochalia). Full length long blocks and columns have lengths ranging between 4.20 and 4.82m. Block 5 is too short and 8 and 9 are too thin to have been intended for columns.

**CATALOGUE**

of material in order of length

**BLOCKS**

9: 3.02 x 0.41 x 0.12m; triangular boss projects by 0.10m from one end while the other is pointed. This block and 8 are lying to the NW of the entrance.

8: 3.10 x 0.48 x 0.18m; 5: 3.13 x 0.64 x 0.43m; boss and pointed other end similar to block 8.

5: 3.13 x 0.64 x 0.43; an irregular pointed boss projects by 0.10m along one end.

7: 4.75 x 0.61 x 0.68m.

**COLUMNS**

3: carved round only along its one half: L. 4.35, D. 0.54m; thick band on one end: L. 0.23m, Th. 0.015m.

6: 1/3 of its thickness missing along the whole block, possibly destroyed by accident during shaping: L. 4.20, Th. 0.56 x 0.45m.

1: L. 4.82m, D. 0.58m, thicker band at either end: L. 0.21m, Th. 0.01m and L. 0.28.5, Th. 0.015m respectively (PL. 54).

4: small part broken along its axis; buried under stones, L.v. 3.50m, Th. 0.74m; thick band at end: L. 0.27m, Th. 0.01m; a boss protrudes along the end: L. 0.10m, Th. 0.30 x 0.33m.

2: broken: L.s. 3.30m, D. 0.67m, thicker band at end: L. 0.32m, Th. 0.03- 0.06m; rectangular depression on end: 0.08 x 0.07m, Depth 0.055m. At 0.73m from one end there has been an attempt to cut the column by
carving a channel. This has cut through half of the thickness of the column, is 0.22m wide at the surface and about 0.06m at its bottom. Erosion at the cutting indicates that it is not very recent.

Discussion

Strongyle W operated during two periods. The first phase involved, probably exclusively, the production of monolithic slender columns and other building material consisting of long blocks. Regarding the function and the dating of the material, the observations noted about Trochalia apply here as well. Both the type of stone and the proportions of the columns produced indicate that Strongyle operated during the Roman and/or the early Christian period.

The subsequent phase is represented by the attempt to cut column (2) to smaller pieces and by the burying of some columns and long blocks with new debris. We do not know whether other large blocks and columns have already been successfully cut and taken from the quarry, but it seems likely if we are to explain the reason for operating such a distant quarry. If on the other hand this is an isolated attempt, it might have been intended to acquire a cylindrical stone for an olive mill.

Today stone is quarried from clusters near the area of the work site. A large modern quarry, which is located at the foot of the hill of Trochalia facing the sea, must have satisfied the most recent needs of the region of Phellos. The period therefore that Strongyle operated last, must probably be sought at a time earlier than the last centuries, with an interest to get building material of larger size than that acquired in schist quarries.

54. STRONGYLE North

Location

Quarrying operations also took place on the N side of cape Strongyle about 40m from the coast (pl. 50: b). The bedrock is as described in the introduction for
Strongyle. It has greyish colour has horizontal planes of foliation. Fissures are visible vertically to the horizontal plane.

a) The quarrying areas

Three small quarrying platforms had been opened on the same altitude on the slope, at distance of approximately 15m from each other, named A, B and C from E to W.

Quarry C has exploited fractured rock and has very irregular walls. Its floor has been covered with earth and small stones. The quarried area has main dimensions 3.50 x 4.50m and maximum height of walls 2m.

In the other two quarries traces of quarrying are better visible and in front of them lie extracted blocks. The rock has been exploited horizontally in a stepped manner, producing corners to the rock. Quarry A has sides 2 x 4m with maximum height 2m and a lower level buried by earth and stones. Platform B has sides 3 and 3.50m with stepped ground (maximum height of quarry face 1.60).

Characteristic of both A and B quarries is the irregular face of the walls and floors, where visible, something partly due to the irregularity of the rock mass and also due to not systematic quarrying techniques. Most of quarry B is covered with earth, but on the floor are visible traces of the beginnings of a channel along one side of a block. Natural fissures of the mica schist bedrock have been exploited for easier extraction of the blocks.

Quarrying debris is limited and scattered in front of the platforms but there is no real heap of stones indicating a specific working area, probably because no advanced dressing took place on the spot.

b) Extracted material

Extracted blocks lie randomly on the slope below the quarries, mainly in front of A and B. Some of them are covered by vegetation. Material includes ten large roughly parallelepiped coarsely dressed blocks, with similar dimensions to the following example: 1.70 x 1.20 x 0.50m.
There is one exceptionally long block in front of area A, with almost rectangular section, measuring 3.90 x 0.90 x 0.50m. A few smaller and irregular blocks are also scattered around. Their surfaces have been deeply eroded.

Discussion

There are no diagnostic features in this quarry to date it within a specific period in antiquity. The fact that three platforms were opened may indicate that quarrying was not very systematic and/or the bedrock was unsuitable for extended vertical exploitation.

The relation of these quarries with the W quarry of Strongyle is also unknown. Theoretically both could operate simultaneously: the large quarry near the summit producing columns and long blocks and the W quarries near the embarkment point producing smaller blocks.

Transportation of the extracted material from Strongyle

Carvings on the rocks on the seashore below the N quarries to provide for the lifting of the blocks show that the extracted material was transferred by sea to its destination. There are no visible traces of a path from either of the quarries towards the sea.

Rocks on the seashore have been shaped so as to provide for the loading of the blocks on vessels. Two rectangular holes have been carved on the irregular surface of the rock mass above the sea, 2.40m and 1m respectively inland from the edge of the rock (pl.52). They are at a distance of 5.80m from each other with the following dimensions: 0.22 x 0.18m, D0.13m and 0.16 x 0.15-0.14m and D 0.075-0.05m, E and W respectively. The seaward side of the rock has been carved vertically over a length of 3.80m and max height of 1.50m. Today the foot of this vertical face is 0.30m below sea level and from there a slightly sloping rock surface (possibly natural) advances for 4m towards the sea. At the W end of this sloping platform is another rectangular hole with sides of about 0.25m carved on a higher rock at present sea level, about 4m away from
the vertical rock face.

Considering the sea level rise since antiquity, the greater part of the sloping platform would be above the water, even with an assumed minimum difference of 0.50m in the sea level.

The two holes on the upper level were obviously intended for wooden posts of two mechanisms (holes being that far apart), which lowered the blocks to the sloping platform below. It may be however that the holes were opened at this distance to facilitate the lowering of long blocks, the ends of which were attached to the two posts. The vertical face had been carved to facilitate the task. From there, blocks were pulled to the edge of the platform to be transferred by boats to their destination. The hole which is now in the water would serve for a post either for fastening the boats or again for the manoeuvring of the blocks upon embarkation. Similar but more numerous holes were found on seashore rocks at the quarries of Aliki at Thasos and have been similarly interpreted\textsuperscript{141}.

It is obvious that the above features are most likely associated with the W quarries which are just above them. and it seems that these provisions for the embarkment of blocks also served the W quarries. If the quarries were contemporary, both would use the facilities, considering that the coastline of the cape is abrupt on all sides except the N.
55. A PREHISTORIC FINDSPOT ON STRONGYLE

Three obsidian flakes were noticed on the E part of the summit of Strongyle. Having checked the surroundings and not found any other trace of prehistoric material, I catalogued this "site" under findspots, that is areas where material resulted from an activity at one particular occasion in antiquity. The flakes do not have any characteristic that could suggest a date for them.
During the annual clearing of the dirt roads in the summer of 1989, a plain amphora was revealed in the side cutting of the road from Phellos towards Mermigies, about 0.30m below present ground level. It had been placed sidewise with its mouth facing N. Part of its belly was destroyed by the clearing, but several of these pieces were found around.

The guard of the Museum and I decided to remove the amphora, because it was already well visible and therefore exposed to danger and the next clearing of the roads would destroy the rest of it. When the first lumps of earth were removed, it became clear that the amphora had been damaged much earlier, probably upon its deposition there: its body had collapsed and the edges of the fragments were somewhat trimmed, in contrast to the sharp edges of some parts destroyed recently. When most of the pieces were removed, a small black glazed askos with its neck and handle broken, but in situ, was revealed at the bottom of the amphora.

The earth found within the vessel did not contain traces of burned bone or other materials. It included only a few small stones, which apparently penetrated into the damaged amphora after deposition.

The surroundings of the findplace were walked, but no pottery was found and no disturbance was noticed on the ground.

The mending of the amphora has not been possible till now, because there is no permanent conservator on the island. It appears however that most of the fragments were recovered. It was possible to make a drawing of the vessel by putting together a few pieces at a time (fig. 86). It is a quite round table amphora dated in the 5th century.

The askos is of the shallow variety (fig. 87, pl. 118); its glaze is rather poor and has flaked in many areas. Exact parallels of the shape occur in the Athenian Agora, and are dated within the last 30 years of the 5th century.
Conclusions

It is clear that the above finds do not belong to the context of a habitation site, but must be related to a burial, dated towards the end of the 5th century. No visible traces of cremation were found in the amphora, which therefore was not an urn pot. Probably the vessel was originally standing upright and was used for libations, poured in it with the small askos, which was finally deposited inside the amphora. At some point the amphora fell down, hence the old breaks of the pot.

The location of the burial itself, if inhumation was practised in this case, would be somewhere around the amphora, but not underneath it, since the vessel was found almost lying on the bedrock.
Location and resources

The small and scattered village of Mermygies is situated to the N of the valley of Phellos on the upper part of the W-looking slope. Permanent inhabitants are very few, occupying two or three houses. Above the village runs the dirt road to the NW through a barren plateau. The land, despite the poor and in some areas stony ground, has traces of ploughing.

The site overlooks the W coastland from the N cape of Phellos to the cape of Agios Sostes in the N, having a relatively good view of the strait of Kaphereus. To the E ones looks over the central ridges of the region.

The country chapel of Agia Marina was built early in this century at the edge of the plateau above the village. There is a water source in its humble courtyard.

Archaeological remains

An early prehistoric site and a round tower associated with late Classical-Hellenistic and Late Roman material were located to the E of the church.

57. AGIA MARINA-I prehistoric

Material is scattered mainly on one field NE of the church (next to the dirt road) over an area of approximately 0.2 hectares. Most finds were recovered from a strange heap of earth and rubble running E-W, which is about 70m long, 15m wide and around 1m or less high. It could be a clearance heap created during the cultivation of the fields, which occurred before the construction of the field boundary walls, which are built on it.

a) Pottery

Pottery is very fragmentary (sherds less than 2 cm$^2$) and rare. No characteristic shapes were found; an absence of large, thick vessels was noticed. The dating rests on observations on the fabric, which is invariably coarse with large inclusions and mica. Surface treatment was not noticed on any of the sherds.

b) Chipped stone (fig. 88)
Obsidian, on the contrary to pottery, is more numerous, about 3 pieces/m² in the W and becomes rare around. No cores were found. Flakes are predominant, and are generally large. Blades are mainly irregular and thick, but some parallel-sided and thinner ones were recovered too. One has traces of wear (no 4), while no 9 might have been used as a pièce esquillée.

More interesting are two drills, one of the slug (no 1) of a type common in Saliagos, which appears also in the cave of Kitsos¹⁴² and Neolithic and transitional (Neolithic to Early Bronze Age) sites recorded during the Melos survey¹⁴³. The other drill is a retouched notched piece also used as a drill (no 2), of a type which appears at Kitsos¹⁴⁴. Both have traces of use-wear at their points, which were shaped at the proximal ends of thick pieces of obsidian, in order to have greater resistivity.

No 11 is an unusually thick ovate with irregular bifacial retouch.

The chipped stone assemblage has shapes common in the Neolithic period, but includes some blades which probably indicate that already better forms could be achieved.

Conclusions

The prehistoric material from Agia Marina belongs to a habitation site, which is dated mainly on the basis of the lithic material to the end of the Neolithic period. The economy of the site would obviously have depended on agricultural activities on the surrounding slopes. The existence of water must have been the main attractive factor for the decision to settle there.

58. AGIA MARINA II - THE TOWER

The tower is situated on the highest point of the area, immediately to the SE of the prehistoric site. Paschales recorded the remains of the tower, but considered it to be medieval.¹⁴⁵

a) Architectural remains
The tower was built on the rocky flattish ground, which is now exposed in front of its ruins. It has been destroyed in its greater part and only one third survives in the NE under a modern boundary wall, at a maximum height of 1.80m (pl.56). The building is among the smallest of its kind, with 'external diameter 4.80m'1 (fig. 27). Its walls are 1.05m thick and the building technique, as in the tower of Tsouka, is close to masonry for houses. Here flattish schists of rather uniform size (average dimensions: 0.40x 0.15m) are used both for the interior and exterior lining of the wall. The core of the wall is filled with earth and rubble. The entrance would be to the S or SW looking towards the sea.

Along the external side of the NW surviving part of the tower, another wall, 1m thick, is attached and is visible in section among the ruins. Its masonry differs from the inner wall in the use of large irregular stones together with smaller. It is not clear whether this wall, visible for 1m, surrounded the whole tower, because such evidence is obscured by the modern wall; only the large heap of stones associated with the tower is a positive indication. Most likely the external wall belongs to a second architectural phase, which could be associated with other ruins to the N of the tower.

At a distance of 6m to the N-NE of the tower, a construction of two horizontal slabs is distinguished within a heap of stones and earth that extends as far as the tower (pl. 57: a). The slabs rest on a built foundation 0.50m above present ground level, are roughly rectangular and have their upper and side surfaces coarsely dressed. Their N sides give a curvilinear plan (fig. 27:A). To the E of the slabs and on the same level, survives part of a low retaining wall, 3.45m long and 060m high, which marks the E limit of the debris heap (pl. 57: b, fig. 27:B). It is built with irregular schists in masonry similar to the external addition of the tower.

The association of the above features behind the tower is problematic as they are fragmentary. The two
slabs, and probably others that are buried under the heap, form a stable platform, apparently intended to receive some installation, the debris of which is the stoneheap. The surviving wall to the E is the one end of the complex, while the role of the external addition to the tower is unclear: apparently it was required to the modification of the tower for a new function.147

b) The pottery (fig. 89)

The distribution of pottery in Agia Marina extends over an area of approximately 0.30 hectares around and to the N of the tower and on the upper seaward slopes. It is denser in the immediate vicinity SW of the tower. Late classical and Hellenistic material is restricted on the field of the tower, while Roman sherds are also scattered on the upper slopes to the W of the tower.

All types of wares were recovered, including a fair number of fine wares, which were found exclusively in the immediate vicinity on the W side of the tower.

The earliest material from the site belongs to the end of the 5th century (K1:7, 3). Hellenistic moulded bowls were also found (K2:12, 13), and one (K1:4) with a distinctly different fabric is probably a Roman ware, produced in an overseas workshop.

Some other wares are dated to the late Hellenistic and Roman period (K1:8, 6, K2:16). Density on the upper slope is less than 1 sherd/m2.

c) The millstones

Stones from a mill and presses were found at the nearby church of Agia Marina.

One piece is part of the ring, the catillus of a rotary mill (pl. 58), with striations on its internal surface. Similar Hellenistic or early Roman examples are known in Greece from Delos and the Nekyomanteion in Epirus. It consists of a hollow pyramidal core with flaring lower edges, the meta, on which rests the external ring which is turned around by pushing a pole attached to the ring. The mill is made from several parts which are bound together by means of metal rings. The example from
Agia Marina is made of grey porous stone and strangely does not have attachment holes; probably the metal ring was tightened around the catillus, not requiring attachments. The internal surface of the piece has vertical striations, the wear of which indicates the long use of the mill. Unfortunately this is the only piece found in the area.

This type of mill appears to be a rather primitive conception in comparison to other mills in that it has no real hopper for feeding the machine with olives or grains. This defect was apparently the reason for its limited use and its disappearance in the Roman period, when more efficient types of mills are used. The "hour-glass" type or Pompeian mill, which is larger and turned by animals, is dated in the 1st century AD and appears to have been an evolution of the mill discussed above. Therefore we can assume that our example did not survive much later than the 1st century AD.

Other pieces of agricultural equipment are two counterweights for a press. These had been found in the vicinity and were built in the SE corner of the church of Agia Marina in the beginning of this century (pl. 59). They are two tapering cylindrical marble blocks with two wedge-shaped mortises and a groove on the upper surface (the beginning of the groove is visible on the upper stone). They appear to be similar in size, although one is built deep into the wall of the church. The lower which is more exposed is 0.48m high, with mean diameter approximately 0.668m. The other has the same height, but its diameter cannot be measured.

Cylindrical counterweights are best adapted for presses with lever and winding gear, but were also used in lever presses. The exact parallel for the stones of Agia Marina was used in a lever oil press, of a type common in Maroco (fig. 28). These cylindrical counterweights appear to have replaced the parallelepiped types at the end of the 2nd century AD, because their cylindrical shape is easier in transportation. Column drums have a convenient shape to be altered for reuse as weights for presses in
antiquity\textsuperscript{131}, but in the case of Agia Marina there is no evidence that the counterweights were differently used before.

The presence of two counterweights indicates either that there were two presses, or that one was a spare part, since only one of these stones is required for the operation of this type of press.

If we associate the mill with the counterweights of the press, it would be sounder to date the mill fragment late, in order to match the chronology of the counterweights, since the latter are better known and more safely dated, around the 3rd century AD.

We do not know the very exact findplace of the stones, but it is said to have been near the church and the tower. Where was the installation? We have discussed a platform behind the tower, which was obviously intended to support something. It is possible that it was the press that operated on this platform, for which there is no other obvious alternative explanation.

Conclusions

The pottery and millstones indicate occupation or use of the area during two, possibly distinct, phases: late Classical - Hellenistic and Roman. The proposed attribution of the architectural features of the site to each chronological period is tentative.

It appears that originally the tower was constructed alone, possibly with a courtyard. This period is associated with the earlier pottery found in the immediate vicinity of the building. Several observations are helpful in determining the function of the tower: a) the choice of the particular location for the building of a single tower indicates a concern for visual control of the plateau, b) the tower is situated next to the modern track and old path, which follow the most convenient way to NW Andros. Although there is no indication of an ancient road, it is likely that it took the same direction to the NW, c) the water source near the tower must have played a determining role in the choice of the location, in this primarily dry
region and d) there are no settlements or other towers associated with Agia Marina to support the watchtower theory. There are no strong indications to relate the tower with agricultural activities in the late Classical-Hellenistic periods. It is possible that its function associated with the road towards the NW sector of the island. It could have served as a sort of guard of the pass and/or station. Its construction and size imply a very limited installation with hardly a defensive role.

Regarding the Roman period, it was already proposed that the mill and press installation might be associated with the outbuildings on the N side of the tower. Cases of towers with agricultural installations in their vicinity, or attached to them, are known from other areas; note particularly the case of Aspros Pyrgos at Siphnos, which has an olive - press in its ground floor and one outside\textsuperscript{154}. It is likely that this is the case also in Agia Marina, only that here the changing of the function of the tower required alterations to the building: this would explain the addition of the platform and the external reinforcement to the wall of the tower. The wider distribution of the later pottery indicates that there was more extended use or occupation of the region, reflecting a small agricultural settlement.
THE AREA OF KALAMOS

Location and resources

Following the road from Mermygies towards the N one travels approximately 2km inland from the W coast and parallel to it. The seaward slopes are soft with a number of small streams flowing to the coast up to the area of Kalamos, from where start the abrupt N ridges. All this area is facing NW into the strait of Kaphereus and SE Euboea.

The area of Kalamos is 2km inland from the bay of Mplychada and the Venetian tower of Makrotantalon on the nearby coast. The slopes of Kalamos are rather soft with large flattish areas and constitute a pocket of fertile land with deep soil, which used to support two scattered neighbourhoods, Psoriariza to the S and Ae-Giannes to the N. The former area is covered with high wild vegetation. Water was available only on the lower slopes, towards the ridge of Helleniko but today this problem has been met with deep wells. Originally the houses at Kalamos were konakia (seasonal dwellings) used seasonally during the work on the fields and other agricultural activities by villagers from Amolochos. Gradually during the last century these families moved permanently to Ae-Giannes and Psoriariza. Today only three houses are inhabited permanently by peasants who are mainly living off their animals. Farming serves the needs of the animals and is restricted to the fields on the upper slopes.

It is surprising that neither Paschales nor any other source mentions anything about the archaeological remains at Kalamos, not even the obvious architectural material in secondary use.

Polos is the saddle on the ridge above Kalamos (pls. 62, 68). The site extends also to the E and upper W terraced slopes which are being cultivated. Along the foot of the E slope runs a small stream, which is supplied with water from a source immediately below Polos. The view from
the plateau is free to the surrounding areas.

Louri is the narrow triangular piece of land between Psoriariza and Ae-Giannes defined by the dirt road above and the two small seasonal streams to the N and S which converge on the lower slope. Olive trees are planted over most of the area.

The main archaeological features of Kalamos are the architectural remains which are scattered in the areas of Polos, Ae-Giannes and Louri. It is believed that most of the ancient building material has been taken from Polos, since this is the only area where marbles are unearthed during cultivation and where pottery is found in some quantity. For this reason material from the slopes is presented first.

**AE-GIANNES and LOURI**

Three old abandoned houses in the N neighbourhood of Ae-Giannes and another to the S and the central area of Louri are discussed here. The houses belong to the traditional rural type, built with schist and are left unplastered.

Ancient building material of marble has been incorporated in the houses primarily as quoin stones (pl. 60A), or in places where they are well visible, not in interiors. A small sheep pen at Louri has been built with ancient blocks in tight masonry with stacked jointing (pl. 61). Marble blocks have also been used in the long terrace below the dirt road in the area of Louri. Most pieces are very damaged but very few seem to belong to rectangular blocks. Five categories of material were distinguished:

a) Blocks with broached work consisting of densely placed and rather orderly short vertical grooves; only one fragment of a rectangular block with such surface treatment was found and has coarse anathyrosis on one side (pl. 60A). This type of broached work appears on building material mainly of the 4th century.

b) Blocks with irregular broached work: long vertical grooves randomly executed; one broken block in the upper
large terrace at Louri, measuring 0.92 x 0.28 x ?.

c) Blocks of various sizes with coarsely dressed surfaces on which tool marks made with a point are visible. Some blocks are rather long: example at the houses 1.06 x 0.31 x 0.30m. Most pieces however are shorter blocks with thickness around 0.25 and 0.30m and these constitute the majority of reused ancient material (pl. 60B).

d) Fewer rather thin blocks with thickness around 0.12m, some of which are long: notice the slab used as lintel at the animal shed of A. Athanasiou and others at the threshing floor nearby (pl. 60B).

e) Small thin slabs, less than 0.10m thick, appropriate for stacked jointing (pl. 60B, 61).

The described material may be assigned to at least two types of masonry: one would be regular and possibly isodomic, using blocks with broached work, involving material of type a and b, probably in different structures since a shows more refined craftsmanship. Blocks catalogued under type b could belong to a structure with fairly regular masonry. Finally the rest of the material indicates an irregular masonry with stacked jointing. It is possible however that all material, except type a, belonged to a single structure.

59. POLOS

a) The E area

A high retaining wall, resting on ancient foundations is supporting the plateau in the E and N. Earlier phases exist on the N side for 6m (fig. 29A:a1) and on the E side for approximately 25m (fig. 29A:a2-3) The S part of the E wall (fig. 29A:a2), which seems to be the earlier section, survives to a maximum height of 1.10m. At places it is covered by a modern reinforcement and a heap of stones. Masonry is irregular and tight, using rather small roughly hewn stones and stacked jointing with small flattish schist stones (pl. 65). The N wall (a1) is also built with the same masonry.

In the NE a higher level of the wall is visible,
because of the earth fallen from the plateau in this area (fig. 29A:a2). The lower 1m is built in irregular masonry using medium sized rather irregular schists and marbles and stacked jointing with flat stones and tiles (pl. 66). Marble blocks are in secondary use here: although most are totally coarse pieces, they are probably fragments from larger blocks. The corner in the NE is founded on bedrock and is constructed carefully using a large schist as the lower quoin stone.

The N part of the E wall (fig. 29A:a2) differs from the lower S in the use of larger stones and marble and in the looser masonry. It seems that the two parts represent different building phases of the wall: the SW part of the E wall and the N wall represent the earlier phase, which surrounded the plateau; probably the corner at the N belongs to the same period. Later repairs were made in the NE part of the E wall, reusing marbles and tiles from earlier buildings of the site, a practice common from Roman times onwards.

The upper part of the wall is modern, built with schists and some roughly rectangular or trapezoidal marble blocks with coarsely dressed faces. Pieces accessible for inspection do not have traces of anathyrosis. In some places, immediately above the ancient masonry, marble blocks are used almost exclusively, in irregular and loose masonry (pls. 65, 66, upper part of wall).

Parallel to the terrace wall and around 2m away from it are rock clusters, the E faces of which have been dressed, to create the back walls for structures (fig. 29A:b,). The S part is 1 - 1.50m high and 7m long and has holes for square beams and flatter boards for a roof, 1.40m above present ground (figs. 29A:b1, 29B) The N rock is around 1m high and 5m long and probably represents another structure the end of which is defined by a carved corner to the N (fig. 29A:b2). Both facades are not strictly vertical and are leaning slightly backwards. Furthermore the surfaces have crevices and small cavities at places, so the structures attached to them were probably humble.
b) The plateau - building material

The owner of the land informed me that about 20 years ago, while he was digging the land on the upper field of the plateau "marble walls" were revealed at depth of approximately 1m, together with numerous fragments of black glazed pottery.

A further useful piece of information about the site is that marble blocks were taken from there and used in the mid 1920s for the enlargement of the nearby church of Agios Ioannes, which is located on the summit of the same ridge to the N.

The plateau has two very low terraces, one to the N and one to the E. The E terrace has served as a clearance heap for small stones brought to the surface during cultivation (pl. 63 right). The N terrace is built exclusively with large marble blocks which have not been placed there very recently, since there is an old sheep pen attached to them (pl. 63 background, centre). The blocks are mostly irregular longish or trapezoidal; only a few have their upper and lower surfaces flat. One stone measuring 0.23 x 0.40 x 0.58m (surviving length) has an oblique parallelogram section; on its surviving small side five parallel rows of four to five small round hollows have been carved. These carvings do not represent a recent intervention on the stone, but on the other hand no parallels for this surface treatment were found. The function of the stone is also problematic: its surfaces are slightly irregular and not well finished to be restored to a fine structure.

Small clearance heaps with schists and fragments of marbles are still being produced on the plateau, since the area is being continuously cultivated.

The marble found on the site of Polos has probably been brought from the nearby hill to the N which has marble on its summit (see below). The described building material is distinguished into two categories: a) small marble blocks (around 0.50 x 0.25 x 0.30m and smaller) rectangular or trapezoidal with coarsely dressed surfaces and no
anathyrosis; these stones are appropriate only for irregularly coursed masonry; b) large roughly hewn marble blocks which could be restored to a retaining wall.

A few coarsely worked pieces of marble and fragments have been used in the small pen on the lower E slope.

Within the small finds, pieces of very hard mortar were found mixed with ground pottery and fragments of pan tiles (A:1).

c) Press installations on the plateau

At the NE part of the plateau a rock face 1.10m high has been carved vertically in total length of 26m making an indentation towards the S (fig. 29A:c1, pls. 63 right, 64). Another face is carved in front of this and on a lower level, 8m long and 1.50m high (fig. 29A:c2 and section A-B, pl. 64). Their purpose is not clear; they do not have beam holes or similar features to characterise them as walls of structures and look more like provisions for a pathway. They may be related to the press installation discussed below, but there is no evidence of the contemporaneity of these features.

Two press beds are semi-buried in front of the above features, apparently at their original positions. One is carved in a marble slab 0.30m thick and 1.70m long (fig. 29A:d, pl. 64:d). Its frontal side is visible and part of the circular groove and spout; the groove is 0.15m deep near the mouth and 0.04m wide and continues on the vertical face of the slab. Only three meters away is a rather damaged press bed made of schist: this is also covered with stones and earth (fig. 29A:e, pl. 64:d). The visible side is 1.50m long and 0.20m thick and has a central groove terminating to a projecting mouth. The choice of schist is unusual because this material is not ideal for such a use.

It seems that the presses were intended for vines rather than olives, since no millstones were found in the area. The date of these press beds is difficult to estimate because they are not all visible, and the schist press bed probably differs little from the modern ones.
Hellenistic marble aras are well known from Delos\textsuperscript{155}, but the example from Polos is of a very simple form compared to them.

\textbf{d) The pottery (fig. 90, 91)}

Pottery appears in medium density (about 4 sherds/m\textsuperscript{2}) on the plateau, while it is less numerous on the E slope. It is possible that this difference is due to the continuous cultivation of the plateau, which continuously unearths sherds. Coarse wares constitute the majority of finds and appear throughout the site. Wine amphoras are common. A few sherds of fine pottery were found in front of the N part of the retaining wall; it is possible that they have fallen from the plateau. Few sherds however are diagnostic. Sporadically we get dates ranging from the early Hellenistic period to the 6th century AD.

Characteristic sherds come from wares with black glaze of good quality, which could be dated to the 4th century (K1:6, K2:22) and a long petal bowl dated to the late 2nd century (K1:3). Characteristic later material is the handle of a pan (K2:17), dated to the first half of the 1st century AD, and ridged or combed wares of the 5th and 6th centuries AD.

The plateau and upper E slope have produced both Hellenistic pottery and Roman to Late Roman pottery. Material on the lower E slope, which belongs exclusively to coarse wares seems to be Roman.

\textbf{e) A coin (fig. 92)}

A bronze coin of Andros was found on the NW side of the plateau, near the old sheep pen. It is well preserved, and has the head of youthful Dionysus on the obverse and a kantharos with the word \textit{ANAPI} on the reverse. A similar coin in the British Museum is dated in the early 3rd century BC, after ca. 308 BC, when Andros was freed by Ptolemy from the Macedonian garrison.\textsuperscript{156}

Dionysus, bearded or youthful, appears often on Andriot coins, as it does to coins from other islands; the kantharos is also a common motif; both have been associated with viticulture on Andros.\textsuperscript{157}
There is one early study of Andriote coins, by Paschales who discusses material from museums, obviously chance finds. No coins from the Hellenistic period have been found in hoards, or other datable contexts, thus their dating is possible only in broad terms.

f) Other small finds: metal and stone

Pieces of lead were found on the plateau; one is an amorphous flattish piece and the other is a well preserved repair joint for a 0.02m thick pithos (M3).

A small bronze plain necklace or bracelet was found near the press beds (M2).

Finally a piece of obsidian was found also on the plateau; it appears to be an exhausted core (L1). Since no other chipped stone was found, nor any prehistoric material, it is possible that this is a case of obsidian use in historical times.

Conclusions

The finds on Polos indicate a long and apparently continuous occupation of the site from the late 4th century BC until the 6th century AD. It is not known whether the function of the site remained identical throughout this period.

The E slopes appear to have been habitation areas. The plateau has architectural and ceramic features which indicate a different character, at least for the early phase of the site. The existence of a public building on the plateau is attested a) by the dressed blocks known to have been reused in modern times, b) by the account of the owner of the field and c) by the remaining material on the site. The plateau was supported then by the retaining wall, 1st phase. At some later time in Later Antiquity, the wall was repaired with marble blocks from this public building. Around this time or later humble structures were attached to the rocks next to the wall.

The press beds indicate the existence of a treading floor, but there is no evidence about the chronology of this installation.
60. VIGLIA

Location and resources

Viglia is the conical hill to the N of Kalamos, overlooking the W coastal zone from Agios Sostes to the tower of Makrotantalon and Phasa and the valley to the E of Kalamos (pl. 68). The NE part of the small flattish summit (which is less than 0.1 hectare) is occupied by a cluster of marble rocks which have been exploited in the limekiln at the centre of the plateau; the rest of the land is barren with thin soil. Viglia is very exposed to the weathers.

Possible architectural remains

The higher part of the hill is surrounded by a roughly circular modern wall, founded in the SE on larger irregular schists visible for 4m, which may belong to an earlier wall.

a) Ceramics (fig. 93)

Pottery is restricted to the summit of Viglia and is generally little (less than 1 sherd/m²). Characteristic finds consist of fragments of jars with vertical walls and poorly burnished dark surfaces (K1:3, 4), a tubular lug (K1:1) and a greatly projecting lug (K1:2), which have parallels at Saliagos and a lug common at Kephala (K1:7).

The ceramic material is associated both with Saliagos and Kephala, but the very limited number of characteristic sherds does not allow a closer chronology.

b) Lithics (fig. 94)

Obsidian appears in very low numbers on Viglia; I collected all pieces. Blades with slightly irregular margins and dorsal arises and rather thick trapezoidal and triangular sections (L1:1-5) represent about half of the assemblage. A small fragment of a blade? with truncated ends has a lozenge section. The rest are flakes, one of which has possible retouch on its dorsal surface and marks of wear on one edge (L1:9).

The limited amount of material and the absence of characteristic forms allows only tentative dating of
the assemblage. The irregular blades suggest a Neolithic date.

Conclusions

The combination of the lithic and ceramic material suggests that the site on Viglia is a small habitation site dated to the Late probably, rather than the Final Neolithic period. The hilltop location was chosen regardless of the lack of water, as in the cases of other contemporary sites in the Cyclades, probably for security reasons. The economy of this site would probably depend on agriculture, since the sea is at a considerable distance (about one hour walk).

61. SOULITARA

Soulitara is a small rocky knoll on the ridge of Spartia, about 1.35kms N - N/NW of the church of Agios Ioannes at Kalamos.

Over an area of about 20m² between the rock clusters of the knoll, a handful of prehistoric sherds and some obsidian flakes were found (fig. 95). The pottery does not have any surface treatment and the fabric is coarse and micaceous.

The limited amount of finds on this particular location, which is inappropriate for a habitation area, indicates that this material resulted from some activity restricted in time.
THE RIDGE OF HELLENIKO

Location and resources

Helleniko is a low narrow ridge with a flattish plateau running roughly N-S, below and W of the slopes of Kalamos (pl. 68 along the centre of the photograph). The E slopes are steep and partly terraced, but not cultivated any more. A stream with water sources runs along this side. The N part of the W slopes has a soft relief and areas of it are still cultivated, while the S part is mostly rocky. Much of the land today is used for pasture and for beekeeping. Some old pottery beehives can still be seen abandoned in their niches (pl. 6, towards Liediza).

The view from the N part of Helleniko covers the S part of the strait of Kaphereus and the N Cycladic islands. The coastline of Andros is not clearly visible, because of the low hills W of Helleniko. Towards the E one has a good view of the slopes of Kalamos.

62. CHOREZA

Archaeological remains

Ancient remains consist of a ruined square tower, its building material and small finds.

The tower has been noticed first by Fiedler in 1830s and subsequently Gounaropoulos, Sauciuc and Paschales, all of whom make only brief references to its existence.

a) architectural remains

The tower

The tower is situated on the higher part of the N end of the ridge of Helleniko, above the E slope (pls. 67:a, 68). It is square with sides 6m long, standing today severely destroyed to a maximum height of 1.77m (fig. 30, pl. 69). The surviving parts are the NW and the SE; part of the N side of the tower is buried below present ground level (fig. 31). According to accounts of locals, the dismantling of the NE corner and the upper courses of the other sides is a result of clandestine activities in the

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recent decades. All blocks thrown inside or immediately around the tower were overthrown during this particular incident. Small stones which had been used as wedges for the dismantling are still found in between the blocks.

The building technique is trapezoidal isodomic with bosses. Large blocks of local white-grey marble have been used for the external lining of the tower, placed occasionally as headers (pl. 70). The size of these blocks varies substantially: 1.10 x 0.45 (face) x 0.50m to 0.60 x 0.44 (face) x 1.05m. There are slight differences in the height of the courses (0.05-0.09m). Occasionally minor indentations are made (0.025-0.04m high), which appear to be refinements of the vertical dimensions of the blocks. Three indentations can be seen in the surviving parts of the E, N, and W walls, and on some of the fallen blocks. Some displaced blocks, which belong to the upper courses are thinner, indicating that the height of courses tends to diminish in the upper part of the tower.

Internally the walls are lined with small, roughly rectangular or coarse marbles (0.40 x 0.20 x 0.25m) in rather irregular coursing. The core of the wall is filled with rubble and earth. Occasionally headers project by 0.05m inwards beyond the thickness of the wall, which is 1.05m in the E and W side, 1m in the N side, while it is not preserved in the S. The walls of this tower are among the thicker examples of rectangular towers, supporting together with other examples Young's observation that in towers with diameter or sides up to 9m, the thickness of walls is not directly proportional to the horizontal dimensions of the tower. It is more likely that the thickness of the walls was related to the height of the structure.

No dowels or other binding devices were used and blocks fit tightly together thanks to their large size and their trapezoidal sections. The upper and lower face are flat, finished with a point. There are no traces of pry holes, but perhaps there was no need for particular provision for a crow bar for putting the stones in place,
since the surfaces of the stones are quite coarse. The side faces are partly treated in a sort of primitive anathyrosis and the inner part of the stones is only roughly shaped. The upper and lower joints are coarsely bevelled. The external side is quarry faced, with irregular bosses, which project up to 0.12m and are usually thicker on the upper part of the stones. Some of the corner blocks are provided with simple drafting: the edge of only one side is drafted (pl. 71). This treatment might have been intended to alternate in each course, as in the case of Agia Marina in Kea. 164

Within the building material scattered in the area, there are blocks similar to, but slightly smaller than those of the external lining of the tower and without bosses and bevelling of the edges. Their provenance could be either the courtyard wall (see below) or the upper part of the tower. For the latter possibility we note among other examples, the case of the tower in Konon's fortifications of Piraeus, where the lower courses are quarry faced, while the upper are smoothly dressed165, and also the tower of Agios Petros in Andros166, where the same technique was used.

The entrance to the tower was probably on the S side, the W part of it has been completely demolished. The S orientation of the doorway is common in many towers and we may attribute this preference, also observed in traditional architecture, to protection from the weather and particularly the N winds167. Regarding its width, the length of the surviving E section of the S side limits the gap for the entrance to 1.40m, if we assume that the destroyed W section had the same length. Still, the possibility of an asymmetrically placed doorway cannot be excluded168. Since the width of entrances in towers of similar size to Choreza ranges between 1m and 1.30m, we may suppose that the doorjamb stood slightly beyond the surviving stone of the lower course of the S side to allow for an entrance with the usual dimensions. The lower course of the S side, which has no bossage, seems to be the
lowest course of the tower, especially since the ground is rocky below that level.

The present maximum visible height of the tower is 1.77m and the original can be estimated to 12-15m\textsuperscript{169}. The width of its walls, securely estimated by the headers to be 1.05m, and the solidity of construction could support the maximum height, if that was required for the function of the tower. A height of even 12m would allow amply for three storeys and possibly a terrace. It is not possible to tell whether the tower had a built staircase running along its four sides\textsuperscript{170}, cantilevered stairs, or simply a wooden ladder\textsuperscript{171}. It was observed that some headers have a special finish in the inner part of their upper surface (see the header in the upper course of the E wall, fig.32); it is possible that this treatment was a provision for built-in stairs. The upper floors most probably were wooden\textsuperscript{172}, although the surviving height of the building is too low to have preserved any sockets for beams on the walls.

The sole indication for the roofing of the tower is the absence of tiles within the surface material. This negative evidence combined with the strong local tradition\textsuperscript{173} of flat roofs in the islands, suggests that the tower was flat-roofed and possibly had a terrace with a parapet\textsuperscript{174}.

It has already been mentioned that the tower has suffered severe destructions even in recent years. Sixty large blocks from the external part of the walls were counted in the vicinity\textsuperscript{175}, more are probably buried deeper in the clearance heaps, and others have probably been burned in limekilns or used otherwise. Two blocks have been used in the water fountain at Chartes, 2kms away from Choreza (see below, Chartes). Within this building material five corner blocks were recognized, but no specific architectural members as lintels, doorjambs or other were identified with any certainty. A small number of quadrangular, rather thin blocks, which are more carefully finished than the rest of the building material.
(sizes varying between 0.83 x 0.30 x 0.15m and 0.97 x 0.35 x 0.24m) could be window lintels.

From the eighteen blocks that lie inside or immediately around the tower, nine can be securely restored to their original positions and appear in fig. 32.

Clusters of marble occur on the plateau approximately 50m away to the SW of the tower and also 30m to the N. It is possible that marble was quarried from these rocks, although I found no traces of systematic quarrying. Only a half-buried cluster of grey marble bears placed randomly traces of four wedge holes. Grey marble has been used for the internal lining of the tower.

The upper part of a freestanding rock to the N (1.35m high) has been carved around, so that its upper part is rounded (measuring about 0.85 x 0.60 x 0.45). An identical feature was also noticed at the N part of the acropolis at Stauros. It is not clear what these features are; it is possible that they are markers.

A courtyard

Parallel to the S and W walls of the tower and at a distance of 2.20m and 3m respectively, traces of walls are visible on the ground and appear to belong to a courtyard (fig. 31). The W wall is preserved as a retaining wall. Very poor traces of a wall, possibly the E section of the frontal wall, are attached to the low rock clusters outside the SE corner of the building. It seems that these rocks by forming some sort of boundary in the frontal E area of the building, contributed to the space arrangement by guiding the visitor towards the entrance of the building. The topography of the area does not allow the courtyard to extend to the E of the tower more than 2.50m, but only towards the N. Assuming that the entrance of the tower is on the S side, it is likely that the courtyard did not extend substantially behind the building. We may therefore imagine a small courtyard intended to define the immediate environment of the tower.

Other ruins

To the SE of the tower and on a lower level by
1.60m, the remains of a rubble wall were noticed, consisting of one course visible for 1.90m, roughly parallel to the tower. They probably belong to a low retaining wall, which created a large terrace for the tower and its outbuildings, if there were indeed any.\textsuperscript{177} The morphology of the area would require low terracing.

b) Small finds

Pottery is rare in the immediate vicinity of the tower. In the flattish area to the W of the building, the density rarely exceeds the 3 sherds/m\textsuperscript{2}. Wares are predominantly coarse and are all plain (fig. 96). They include storage vessels, household wares and a small number of pottery beehives. The very fragmentary condition of the pottery does not allow precise dating. It appears that the site was occupied during the late Classical period, while most of the diagnostic belongs to the later Roman period and specifically to the 4th and 5th centuries AD.

Fragments of a mill of the hopper rubber type and a lower stone, carved in black and greyish respectively porous volcanic stone, were found.

The limited number of small finds indicates that there were very few structures in the vicinity of the tower.

Conclusions

The building of the tower of Choreza required a considerable amount of labour and expense\textsuperscript{178}, indicating that its construction was part of a public programme rather than the work of an individual. The latter hypothesis is also weakened by the rather limited potential of the surrounding lands, which would not allow much wealth from agricultural activities\textsuperscript{179}. The architecture of the tower suggests that it is a military work. Although it cannot be associated with a specific chronological period with certainty\textsuperscript{180}, it can be related to the new concept of military architecture that emerged in the 4th century BC, precipitated by developments in siege warfare\textsuperscript{181}. Some examples of masonry similar to that of Choreza are the
earlier fortifications at Rhamnous, the rectangular
tower of Varnavas near Marathon, the fortification of
Agia Paraskeve in the same region, Tower E in the
Megarid, the tower of Ayia Marina on Keos, the tower
of Naoussa on Paros and some towers on Tenos. Most
of these structures are dated within the 4th century, and
mainly to its first half.

The masonry of Choreza represents a deviation from
the architectural traditions of Andros. No other building
is known with similar masonry, even in the area of Phellos
or Gaurio, where marble is readily available. This
difference is partly imposed by the nature of the material.
On the other hand, the very choice of marble instead of
schist in an environment where both materials are available
and the monumental masonry exhibit three notions: a)
concern to built a strong and imposing structure, b)
availability of funds to finance this project and c) a
different approach from the local tradition in building
towers.

The tower of Choreza could not have provided any
actual protection from a seaward danger, as it is removed
from the coast, but could have served as a sort of a watch
tower possibly associated with the site at Kalamos, with
which it is partly contemporary. Although its location is
not ideal, the tower has visual control of the S part of
the strait of Kaphereus. The proximity of the tower to the
donkey-tracks, which might follow the traces of ancient
paths is a further indication that this is a public work
with a defensive character.

The historical circumstances, which may have
provoked the building of a tower in advanced military
architecture probably have to be sought in the strife
between the Hellenistic rulers for control in the Aegean.
The various options will be further discussed in the
conclusions.

The wide chronological range of the little pottery
found in the area shows that the tower continued to attract
people until at least the 6th century AD. We do not know
until what time it served a function similar to the one it was intended for when constructed.

63. NTARDISTRA

Ntardistra is located about 150m N of Choreza, on the plateau of the ridge. A cluster of rock in this area has been carved to receive an attached structure to it (pl. 72). The S side of the rock has been carved to create a vertical face, (1.50m maximum height above present ground level) with corners on either side. There is a central niche, measuring 0.50 x 0.45m and 0.10-0.15m deep, which has a small carving on its one side, as if to receive a small door. Other carvings at the sides of this facade seem to be provisions for beams or similar, although their location does not always justify this.

On the upper surface of this cluster are five carvings for roof beams, and along their inner part runs a shallow channel, which seems to have been intended for drainage (pl. 73).

On the W side of the rock cluster and on a lower level, a curving facade is carved with 8.80m periphery (pl. 74).

Another rock cluster 15m S of the above has simpler carvings creating an irregular facade 11m long, facing W.

A handful of coarse sherds were found in the vicinity of the N cluster, but were not helpful for dating.

The chronology of these facades is difficult to determine. The accumulation of earth however is informative in establishing that the ground of the structure attached to the N cluster must have been at least 0.60m below present ground level, to allow for a roof around 1.90m high. Considering also that these features are situated on a plateau, where deposition of earth occurs slowly, the time allowed for their burying to the present level, should be estimated to amount to a considerable number of centuries. It would be reasonably to assume that
these carvings are probably not later than later Antiquity.

There is no characteristic evidence regarding the function of these structures. The niche in the facade of the N rock may suggest that it was intended for some particular purpose, possibly related to religion, for example to hold the image of a god.

64. Mpenetsouri

Mpenetsouri is located about 0.6kms S of the tower at Choreza, to the right of the path when travelling S (pl. 67a, 75).

a) Architectural remains

On the right side of the path at Mpenetsouri, immediately before it splits to the W and S, is a poor, roughly rectangular construction of irregular long marble blocks, measuring 5.5 x 0.40m visible, and 0.50m high (pl. 76, fig. 33). This feature is identified by locals as a tomb, but they cannot offer any explanation for it, other than its vague similarity with a grave. Its exposure next to the path has eliminated all pottery or other features which would be associated with it, and there is no real basis for any interpretation of its function.

b) The pottery (fig. 97)

Pottery was found on the circular field above and to the NW, and on the slope below and W of the above feature, over a total area of 0.3 hectares. Density is less than 1 sherd/m2 on the upper field and slightly higher on the W field.

All sherds belong to coarse wares and include a large number of pithoi. No characteristic shapes were recovered. It seems the material is dated roughly during the Hellenistic period.

Conclusions

Mpenetsouri was a small and apparently scattered rural habitation site, occupied probably during part of the
Hellenistic period. Although we cannot estimate exactly its date, it seems that it was partly contemporary with the tower at Choreza.
65. WADI N OF LIEDIZA

A small amount of pottery was found N of Liediza. Sherds belong to coarse wares which appear Roman. They do not seem to represent some permanent habitation site, but rather a farmstead.

66. LIEDIZA

Location and resources

Liediza is situated on a W facing slope about 1.4 kms S of Helleniko - Choreza (pl. 78). Even though it is only 0.7km inland from the sea, the view towards the coast is hindered by a hill to the W, which is discussed below (pl. 80, upper site at foreground and view to the W). To the NW one can see S Euboea and cape Mandeli.

The slope has long and wide terraces with good earth for dry farming. It appears that the fields were cultivated until the last five or so years but today they are used as pasture land for sheep. The lower terraces have olive trees. To the W, between the slopes of Liediza and the foot of the hill runs a stream which flows to the bay of Mplychada. Smaller streams flow on either side of Liediza. There is a water source to the NW, towards the plain of Mplychada, while at the S lower edge of the site, water plants indicate the presence of underground waters.

The site is protected from the N winds but is exposed to the S weather.

The archaeological remains

Paschales has noted "ruins of ancient buildings, old marbles and an ancient millstone" for the site of Liediza. These and other archaeological remains were found scattered on the slopes, over an area of approximately 6 hectares.

a) Architectural features
The upper flat area of Liediza is surrounded by a modern retaining wall which is founded at places on earlier walls: on the N side of the plateau a row of coarse schists is visible for 6.20m and has maximum height 1.10m (pl. 79, location of wall indicated by arrow, pl. 80). Stones are generally large but of varying sizes, placed irregularly with small stones in the interstices. The coarse nature of the ruins certifies that these belong to a retaining wall and not to a building. The foundation of the modern terrace wall in the central area of the W side of the plateau consists of large irregular schists; it appears that they are also part of the ancient terrace which continued around this side too, rather than reused material.

The N modern retaining wall has been built very thick and there are stone heaps on this side of the plateau where ancient building material brought to the surface during cultivation has been piled. This consists mainly of unhewn schists, often rather small, and fragments of white marble, a material which is not local. Five marble blocks have been used in the small sheep shed in the NE area of the site and one is lying nearby. All are very weathered, with damaged edges; tool marks from a thick pick are visible on their original surfaces. A few badly fragmented pieces of marble with no original surfaces exposed have been used in the other animal shed on the lower W terrace of Liediza.

b) Evidence for mills

A large press bed of gneiss schist is situated on a small terrace to the NW immediately below the plateau (pl. 81). This is probably its original location because the large size of the stone would not allow unnecessary transfers. It is rectangular, measuring 2.35 x 2.40m and is 0.33m thick. Its greater part is covered with earth and stones, so only part of the circular groove (2m in diameter) is visible, which is rather shallow for the size of the ara (about 0.02m deep or less) and 0.08m wide. The spout is probably on the N buried side where is a
rectangular indentation on the edge of the stone, possibly for a wooden device.\textsuperscript{190} Behind this press bed (towards the upper terrace wall) are low rocks, the W faces of which have been dressed to create vertical faces around 0.70m high. These features are obviously related to the operation of the press.

A smaller press bed carved in marble has been broken in two pieces which are used on the W wall of the plateau (pl. 82). The whole ara measures 1 x 0.95m and is 0.14m thick. The circular groove in this ara is 0.03m deep and 0.05m wide and there is no projecting spout.

Considering the proximity of the discussed press beds (they are only 25m apart) it is believed that there was a large installation in the area of the schist ara.

Small fragments millstones of black volcanic material (S1:1) and of vesicular whitish stone (S1:2) were recovered from the lower fields. The whitish millstone is probably dated in the Medieval period, according to studies in other sites (see catalogue for references). Millstone L1:1 might belong to a large mill installation, but the fragment is too small to recognize the type of mill.

c) Pottery (figs. 97, 98)

Ceramic material extends from the plateau down to the W stream and between the N and S smaller streams. A few sherds were found to the SE towards the donkey track and on the narrow plain to the SW. Pottery is denser on the slope below the press beds (about 8 sherds/m\textsuperscript{2}) and becomes rare on the lower site. There is little pottery on plateau, and this belongs mainly to coarse wares unearthed during cultivation; the limited presence of pottery there is probably due to the earth washed down from the slope above.

Most sherds belong to coarse wares, predominantly pithoi, wine amphoras and smaller jars, and all appear to be Roman. Ridged ware, the latest of which is dated to the 6th century are present in the central area (K1:9). Only one sherd of a red glazed vessel was found (K4:20), apparently of Roman date and the handle of a mould made oil
lamp (K2:12), also Roman.

(d) A coin (fig. 100)

A bronze coin was found in front of the schist press bed. It represents Great Constantine in a veil, indicating that it was cut after his death. A series of memorial coins were produced in the Eastern provinces after Constantine's death between 337-348 AD. The name of the mint is too weathered, but the surviving letters indicate Alexandria (abbreviated SMALA). The inscription on the obverse is weathered and parts of the periphery of the coin have been damaged.

Conclusions

Liediza was a rather extended habitation site occupied during the Roman period until around the 6th century AD.

The economy of the site appears to have been based on agriculture. This conclusion is based firstly on the location of the site: good agricultural land is available at the plain of Mplychada, less than 10 minutes walk away, and on the nearby slopes for dry farming; probably the lower slopes of the site were also cultivated, considering the relatively small amounts of pottery found there; and secondly on the presence of a press installation, which indicates cultivation of olives and/or vines.

67. MODERN FARMHOUSE E OF Liediza

Part of the ridge top above Liediza was walked as well as well as the E slope of the same ridge, exactly "behind" Liediza. The slopes produced some ancient material which appears to be contemporary with Liediza.

There is a deserted farmhouse on the upper slope, which has six marble blocks of various sizes built in its facade (one of the lower which I could measure is 0.30 x 0.15 x 0.25). They are roughly shaped and their surfaces bear random vertical tool marks from a pick. These blocks are similar to those found at Liediza, and could come from
the same structure.

A thin scatter of pottery is found on the lower terraces of the slope, below the house. All sherds are coarse and seem to be Roman.

This material resulted either from a farm installation, or from agricultural activities exploiting the area.

68. KAMINAKI

Location and resources

Kaminaki is the name of the small coastal valley S of the beach of Mplychada (pls. 83, 84). Two small ridges on either side debouch to the sea, forming this fertile plain. The beach is exposed to the winds and waves, which bring remains of shipwrecks ashore. The valley is enclosed from the E by the lower slopes of the ridge of Makrotantalalon, from were flows a small stream on the S side of the site. The lower parts of the ridges have remains of old terraces, which are now abandoned and used as pasture land. The small plain is being cultivated and is watered from the stream and the water sources of the E slope. It is in the large lower field of the fan on the E slope, between the two ridges that the ancient site is located. The lower and narrower terraces have olive trees, while the upper and flatter were used for crops.

The site has a good view generally Westward and overlooks S Euboea with Cavo Mandeli and the NW Cyclades. To the S, E and NE the view is hindered by the slopes.

The archaeological remains

Paschales had noted a retaining wall and pottery on this site.191 Besides the above features, a schist quarry was also located.

a) The retaining walls

Two well preserved parts of retaining walls survive in the upper part of the area (see a sketch plan, fig. 34.1, pls. 83, 84, terraces marked with arrows). They
follow the curvature of the slope and form a wide terrace. They are of similar construction, built with large trapezoid or rectangular quarry faced schist blocks in more or less regular courses.

The W and better constructed wall is visible for 6.40m and survives to a height of 1.60m above present ground level (pls. 83:a, 85, fig. 34.1:a). Its upper course is level with that of the other wall and it seems that they did not rise higher than that point. The lower courses are semi-buried. A marble block found next to the wall has dimensions, which would allow to restore it on the upper course of the wall to the N, where it was found. The presence of this block indicates that marble of local provenance was also used as building material. Close to the S end of the wall is a carving on a stone of the middle courses apparently intended to retain a wooden device like a fence (pl. 85, marked with an arrow).

The 14m gap between the two walls is partly terraced with a modern wall and to the S is a small cluster of rocks. The S wall is 10.60m long and 2.40m high, has rather irregular courses and more spaces filled with small stones (pls. 83:b, 86, fig. 34.1:b). It is founded on bed rock which is levelled with small schists up to a height of 0.50m in the middle, where the rock is hollow. This foundation projects by about 0.30m beyond the upper part of the wall, which is leaning slightly inwards. To the W, the wall is almost attached to the rocks and to the E, it forms a corner turning to the N. Larger stones are used for the corner and all except the lowest are drafted forming an indentation of 0.08-0.10m (fig. 34.2). Finally the stone of the fourth course from the top projects to the E side, but the modern terrace wall attached to the drafted corner does not allow to see anything more of the E part of this wall, which apparently still survives buried inside the terrace.

Another wall perpendicular to (a) is visible in section on the next lower terrace (fig. 34.1:c, pls. 83:c, 87 upper arrow). It is built with large stones but it is
very dismantled, and therefore it is not clear whether it is a retaining or a free-standing wall and what specific space arrangement it served. It appears however that the focal area of the site was the wide flat terrace created by retaining walls (a) and (b).

Parts of other walls were found in two occasions. A corner of a small structure is attached to the foundation of wall (c) and the neighbouring rocks (pl. 90, lower arrow). It is built with small flat schists with gritty mortar and its sides are visible for 0.50 and 0.40 m length and 0.20 m height. The surviving part belongs to the foundation which rests on bedrock. Its location indicates that it belongs to a structure built after the construction of wall (c).

A row of stones, 8 m long, has been exposed by erosion along one of the terraces in the middle of the same slope. They probably belong to an ancient retaining wall of poor construction.

b) The schist quarry

The quarry is located in the field to the N of the above walls, next to the farmhouse and it provided material for the retaining walls described, since the stone is the same (pl. 83:d). An internal corner with sides 4 (N-S) and 2 m (E-W) has been formed on the rock. This area has been filled up with earth from slope erosion and the visible height of the faces is 0.50-0.30 m. Traces of thick picks are visible on the surfaces, but since the ground is covered I found no evidence on the way the blocks were extracted.

On the SE edge of the same rock cluster (immediately next to the farmhouse) is a narrow primitive ramp 1.40 m wide and 2.50 m long with five carved shallow steps climbing towards the slope in a W-E direction. The stone there is rather brittle and the steps have been eroded. It seems that they are related to the quarry.

c) The pottery (fig. 101)

Pottery appears in a quantity of about 4 sherd/m² on the two terraces, in the area below the gap between the
large walls. Further away it is rare and extends over a total area of about 0.15 hectares.

Fine wares include Hellenistic mould made bowls (K2:22, 16, 17, 15, 19). Coarse wares constitute the majority of finds and include wine amphoras, cooking pots and other coarse jars.

Discussion

The small extent of the site of Kaminaki and the nature of its archaeological remains indicate that this is not a habitation area. The large retaining walls are public works, which do not belong to a fortification or a tower, but were intended to create a terrace for some building of special importance, possibly a temple. The reason for the absence of good building material on the site is probably hidden in the placename of the site: Kaminaki suggests that there was a limekiln (kamini = kiln), which used the marble of the structure in question. Finally, the topographic location of the site with the view over the small plain and the Aegean is appropriate for a rural sanctuary.

69. HILLTOP W OF LIEDIZA

Location and resources

In this entry we discuss a hill W of Liediza and to the N of Kaminaki (pls. 79 left background, 84 right) about 500m inland, from where one has a good view of a wide coastal zone from Agios Sostes to the hilltop of Phasa and across to the village of Kallivari; S Euboea is also well visible.

The upper slopes of the hill are steep and rocky with thin soil. At the foot of the E slopes runs the stream, to the E of which is Liediza. The hill is covered with maquis.

a) Architectural remains

The presence of an enclosure-like structure on the
small elongated summit of the hilltop is attested by a roughly circular heap of stones, with a diameter of 11m and about 0.80m high and 2m wide (pl. 77). The stones are medium and small irregular schists, that is ordinary building material, indicating a simple structure. The ground within the circle is flattish and level with the heap, but has few stones. It appears that the ruins belong to an enclosure rather than an actual building.

The possibility that this is a modern construction is very limited both because of the poor state of remains and because there is no apparent purpose for the existence of such a structure there in modern times, not even an animal pen. Furthermore there is some pottery with which we can associate it.

b) Pottery (fig. 102)

Very few sherds were found around the stone heap on the summit and belong to coarse wares, which are difficult to be dated. They are probably late Hellenistic or early Roman.

Conclusions

The function of this site is probably associated with the excellent visual control of a large region from this particular location. Considering that Liediza is deprived of an open horizon, the two sites could be related. Similarly, Kaminaki would have benefited from a site on the hilltop, because it does not have a view to the N.
THE AREA OF CHARTES

Landscape

Chartes is the village to the NW of Kalamos, situated on the soft slopes of a narrow valley. There are a few scattered houses, of which three or four are permanently inhabited today. The area is fertile and the lower E slopes are still cultivated. The small stream is enriched with water sources.

The village has two abandoned oil mills on either side of the stream (pl. 5 A, B), indicating a prosperous community. The mill on the left bank of the stream was constructed in the 1950s and its millstone (pl. 5 B) was quarried from the marble clusters on the hilltop N of Polos and brought to Chartes by man and animal force. For some years the old and the new mill operated simultaneously, both with metal presses (a beam of the old wooden press of the old mill has been placed as a door jamb of the mill house).

Archaeological remains

At several locations in and around the village scattered and poor traces of ancient remains were found. In most cases the date proposed is based on little evidence; it seems however that all of these features are contemporary and dated roughly within the late Roman period. The absence of an extended scatter of pottery between the various findspots shows that this was a very scattered settlement.

70. MPRAILA

Mpraila is the first hill below the road when coming from Kalamos to Chartes. There is an abandoned neighbourhood of old houses on the flat summit. They are built with local schist and are not plastered or whiten washed. The W house has some small coarsely dressed schist blocks. It is not clear whether these constitute ancient building material, or a modern attempt at better
A very thin and uneven scatter of pottery (less than 1 sherd/m²) was noticed on the upper W slopes of the hill, over an area of approximately 0.2 hectares. The fabrics suggest a late Roman chronology.

71. STOU KALOGRIDE

This placename indicates the hill to the left of the stream. There is a modern house and farmstead on its summit. Parts of the terraced slopes are cultivated today.

There is a rock cluster next to the house, the vertical face of which has been partly evened and bears two holes for small beams. It is impossible to date this feature without associated evidence.

A very thin scatter of pottery was noticed on the N and NE slopes and the summit of the hill. All sherds belong to coarse wares, but most have no diagnostic shapes to be dated (fig. 103).

Sherd K1:1 is a prehistoric horizontal lug handle, a shape related to barrel jars of the late EC and MC period. The fabric of one other sherd indicates that it is a prehistoric ware too. These sherds and a small obsidian chip were found on the hilltop, which has a thick cover of debris from the farmhouse. Considering the disturbance of the area, it is possible that this material represents a habitation area, rather than a findspot of material deposited there once. Furthermore the hilltop is a likely location for a prehistoric settlement.

The fabric of the other sherds suggests a Late Roman or possibly a still later date. Their very low numbers on the slopes indicate that they probably resulted from sporadic use of the area.

72. THE SCHIST QUARRY

Location

The quarries are located at the very beginning of
the narrow valley of Chartes, on the lower part of the slope, to the right of the stream (pl. 88). The slope is rather abrupt, has a thin cover of earth, and low maquis vegetation.

a) Description of the quarry

The rock is dark grey mica schist of poor quality with sporadic quartzite veins. The planes of foliation are sloping at an angle of around 30 degrees.

The quarry is 44m long, parallel to the river. Its lower part has been buried and it appears that it extended further towards the stream. The quarrying technique applied involved the opening of trenches around the blocks, along the planes of foliation; consequently the exposed surface of the quarry is sloping. Most channels are between 0.20 and 0.25m wide, while one is quite narrow (0.15m). Some of these channels appear to have been abandoned before reaching the desired depth, since they are very shallow (0.20m), while others are buried.

The visible blocks prepared for extraction are few; one measures 2.20 x 0.50m and others semi-buried have similar widths. One small block (0.82 x 0.45m, thickness 0.18m has been freed from all sides by channels 0.20m wide and still lies on its back (pl. 89). There are no traces of holes for wedges at the sides of this or other blocks, but much of the evidence concerning the extraction of the blocks is buried. The narrow channels indicate that wedges were most likely used, although it was common to undercut the block with rocks of poor quality, as is the case here. Tool marks, apparently of a pick, are visible on the surfaces of the quarry.

b) Pottery (fig. 103)

Very few sherds were found in the vicinity of the quarry. They belong to coarse vessels and their fabric indicates a Roman date. The small number of sherds and the absence of architectural remains shows that there was no permanent establishment for the workers of the quarry.

Conclusions
The quarry at Chartes operated for the extraction of squarish and longish mica schist blocks, by means of cutting channels around the blocks. This technique indicates that the quarry could be dated from Archaic until the late Roman times, but the few sherds in the vicinity are in favour of a late date in this period. There is absence of features characteristic of Byzantine quarries and no visible modern disturbance of the area.

The stone is appropriate only for building purposes and it is commonly found; these two factors and the small extent of the quarry indicate that the demand for the extracted material must have been strictly local.

73. STE VRYSE

I.

The Vryse (water source) is located about 200m N of the schist quarry, next to the stream. There is a simple small fountain house, built with ordinary schists and some coarsely dressed marble blocks, which have been white-washed (pl. 90). The largest block is placed above the opening for the water and has an indentation in its upper surface; this observation proved significant, when I was told by a villager that these marble blocks were brought from Choreza in 1956 to be incorporated into the reconstructed fountain house.

Indeed the indentation on the upper surface of the big block is the same as in the blocks at Choreza, which was explained as a "correction" of the vertical dimension of the blocks.

II.

In the field to the N of the above is a small animal pen, which has two small blocks of white marble (pl. 91). They measure 0.38 x 0.17 x 0.17m and 36.5 x 12.5 x 16m and are coarsely dressed with a pick.

I was told by the same villager who informed me about the provenance of the blocks at the fountain house,
that the marbles in the sheep pen had been unearthed during cultivation from the field where the pen is. He added that much pottery was unearthed during cultivation from the upper part of the same field, at the foot of the slope. I did not find pottery other than the odd sherd, despite careful walking within the vegetable orchard.

74. AGIA PARASKEVE

Agia Paraskeve is the small church on the slope to the right of the river at Chartes.

Outside the church and next to its door stands a pedestalled mica-schist font (pl. 92). Its dimensions are H. 0.68m, rim diameter 0.63, base diameter 0.58, and the height of the upper part is 0.38m. The basin of the font has been filled with cement, to hold it together because it has been broken, and it is white-washed. Locals always remember this piece to have been in the church and used as a font before it broke.

There are several reasons for considering that this piece was in second use as a font: a) this is perhaps the only stone font in a church on Andros, b) the village and church are relatively modern and c) the basin is shallow to have been originally constructed as a font. It is possible that this piece is a pedestalled mortar, like similar examples from Delos.²⁹³

75. PYRGAKI

Location and resources

Pyrgaki is the placename for the ridge above Chartes. The summit of the ridge is flattish, and is called Matrounga. The land is very dry and covered with maquis. One has a good view of the surroundings from this area.
Information about this site comes from the owner of the isolated house at the S part of the ridge, Chr. Athanasiou. During cultivation of the field to the S of the house, a rectangular construction was revealed, built with rectangular blocks of schist. These blocks were transferred to the house and built into the courtyard wall (pl. 93). The stone is similar to that of the prediscussed quarry and could come from there. All four have similar dimensions:

a) 0.91 x 0.21 x 0.115m
b) broken, 0.48s x 0.21 x 0.28m
c) 0.92 x 0.21mx ?
d) 0.97 x 0.21mx ?

Their external faces have tool marks showing either as poor broached work or as pick marks struck perpendicularly to the stone.

The description of the blocks as found suggests that they could belong to a well constructed fireplace or perhaps even an altar. Their findplace today has no traces of any other ancient features.

PYRGAKI-II

a) Architectural remains

Approximately 70m N of the Athanasiou house, at the W edge of the summit of the ridge, survive remains of an ancient wall, which have served as foundation for a modern retaining wall (pl. 94). The ancient wall is 7.50m long and 0.75m high. It is built with irregular schists of various sizes and small flat schists stacked in the interstices, in a masonry that recalls that of Helleniko at Kato Phellos, although here in a smaller scale (compare with pl. 36). The state of the ruins does not reveal whether the wall belonged to a structure or was a retaining wall.

b) Pottery (fig. 103)

There is a dense concentration of pottery around the wall (about 5 sherds/m²), over a small area of approximately 500m². All sherds belong to coarse or plain
wares, without characteristics helpful for precise dating. It seems that they belong to the later Roman period.

Conclusion

The wall remains at Pyrgaki can be interpreted to belong to a structure rather than a retaining wall, since they are associated with a fair amount of pottery. Apparently this was an isolated building, which according to its pottery seems to have been roughly contemporary with the other material from Chartes.

76. LAGOUDI

Location and resources

Lagoudi or Lagoudia is located on the lower slopes to the right of river, opposite of Pyrgaki (pl. 95). The placename refers specifically to a 17th - 18th century neighbourhood of eleven scattered houses, which were deserted by the early 1900s. They constitute good examples of well constructed traditional rural complexes; some of them, which are apparently the older, have protected ground floors, with slots instead of windows. The vine presses, which most houses have, indicate a flourishing viticulture, probably on the steeper slopes, to reserve the lower and flatter area with the deeper soil for crop cultivation, and the growing of olive trees. Some fields were being cultivated until the last decade.

The region is rich in water, although today the three sources with their adjacent reservoirs are out of use and waters flow underground throughout the year towards the small stream passing through Lagoudi and flowing to Amboulo. The area is generally protected from the winds but is severely deprived of an open horizon due to the ridge of Pyrgaki to the W.

Archaeological remains

The ancient site at Lagoudi extends on the lower slope with the wide terraces, below the houses, and is bordered to the S and W by streams (pl. 95 centre). It covers
an area of approximately 5 hectares.

a) Architectural remains

The owner of the central fields at Lagoudi informed the author that dressed marble blocks had been unearthed during cultivation, apparently before the second War. For this reason locals would call Lagoudi also Helleniko, or Hellenikades. Note that marble is not a local commodity and if the information is correct, this building material suggests the existence of a prominent structure. No trace of these blocks or of any marble at all was found during the walking of the area, although the ground was clear.

A circular structure with external diameter approximately 6.20m was located on the low ridge which forms the N limit of the site. The remains are very poor and so is the masonry: the walls stand to a maximum height of 0.30m and are built with irregular schists of medium and small size (pl. 96). No gap is visible at this level to indicate an entrance. The interior is filled up with building material, making the internal face of the wall hard to distinguish.

The antiquity of this structure can be questioned, but certain positive indications do exist. Firstly its state of preservation is substantially poorer than the deserted houses and no building material is left around the ruins to suggest a recent dismantling of the structure. Secondly the possibility that it is a modern threshing floor is unlikely because there is one, apparently contemporary with the houses, less than 15m away in the same field. Finally, there is ancient pottery (about 8 sherds/m²) in the vicinity of the structure to the S and W which may associated with it.

Regarding the function of this structure, it is very possible that it was an ancient threshing floor, especially since the site appears to have an agricultural character and the location on the hill is favourable winnowing. Other hypothesis on the function of this structure are related to the location of the structure: the site is favourable for storage, because it avoids the humidity of
the lower fields and it is also appropriate for a watch-
place, because it has better view to the N than the rest of
the site. The poor masonry however suggests that the ruins
belong to a rather humble structure and therefore it is
more likely that its function was related with agricultural
activities.

The amount of stones in the clearance heaps in the
fields and the terrace walls is small, implying a scattered
habitation of the site. No distinguishably ancient
building material has been used in the old houses.

Eight fragments of bricks were noticed in the
central upper area of the site. They have the same
thickness of 5cm and are made of local micaceous very
gritty and coarse clay. Some bear deep fingerprints (A1).

b) Pottery (fig. 104)

Pottery is unevenly distributed over of the site
(highest density about 4 sherds/m²), but in certain areas to
the N and especially in the vicinity of the circular
structure (K2), it appears in greater quantity. All
surface material is plain and mainly coarse, belonging to
household wares; pithoi are the most common group. One
pottery lamp had been found early in the century, but has
been lost, according to the owner of one of the fields.
Fragments of internally irregularly combed wares seem to
belong to pottery beehives (K1:1), while some small similar
sherds cannot be identified with certainty.

Pottery is dated to the first centuries AD.

c) Millstones

A small fragment of millstone with parallel grooves
on one surface, carved in vesicular whitish stone, was
found one of the lower terraces (S1).

A small fragment of the upper stone of a rotary
quern carved in conglomerate stone was found next to one of
the houses to the S.

It is not clear whether these millstones belong to
modern, medieval or ancient mills, because the material
which is used is thought to represent medieval and later
mills. It may be noted here that Lagoudi is the second
Roman site after Liediza, where a millstone made of this vesicular whitish stone were found. This observation might prove useful for a further evaluation of the millstones made of this material.

Conclusions

Lagoudi appears to have been a scattered Roman settlement occupied during the first centuries AD. It appears that the lower flat fields were reserved for cultivation, since little pottery was found in them. Houses were mainly in the upper part of the site, on the lower slope.
The region of Kallivari

The village of Kallivari is located on the central high ridge of N Andros; there are two neighbourhoods, on the summit and on the upper W slopes. Permanent inhabitants today are few, in about five houses. Cultivation is restricted to a few pockets of fertile land on the slopes. The ridge has some areas with high wild vegetation. There are several water sources on the lower slopes of the ridge.

Archaeological material

The wider region of Kallivari was the last region of fieldwork. The purpose here was to locate four sites, Goumourada, Pori, Giour Petrite and Mortrera, briefly mentioned by Paschaless to have produced pottery; it is clear that Paschaless had not visited these sites, but only heard vague reports about them. Of the four sites I have not been able to investigate Giour Petrite, although I have made a brief visit to this location. A further site, Tokeli was also identified.
Location and resources

Goumourada is an elongated hill on the lower W facing slope of the ridge of Kallivari, about 2km inland from the bays of Peza (pl. 97). A flattish plateau is formed before the slope falls abruptly to the river Ampulo. This central area is encircled with low terraces, has deep soil for cultivation and is still being partly exploited. The upper slopes are steep and rocky. There are some isolated clusters of low quality marble on the plateau. On either side of the hill run streams which flow to Ampulo; the S wadi is enriched higher up from a water source while in the N stream water is very little. On the steep slopes to the S of Goumourada are clusters of schists, where there is evidence of quarrying.

The view from this location is very restricted since Goumourada is situated on the lower part of the narrow valley. On the other hand the area is quite protected from bad weather.

Modern constructions other than the terrace and boundary walls include a well on the plateau, opened during the second World War and a roofed treading floor on the lower SW slope.

The archaeological site extends from the plateau and its upper slopes to the lower part of the steep slope above, between the N and S streams, an area of approximately 3 hectares. To the S of the S stream a schist quarry was located.

a) Architectural remains

Architectural ruins consist of parts of terrace walls and a possibly ancient "water collector".

The well preserved terrace wall and the "water collector" are situated next to the S wadi, across the schist quarries. The retaining wall survives below a modern wall to a length of 9.8m and height of 0.80m (pl. 97:b marked with an arrow). It has a NW - SE direction and is slightly curving, following the curve of the slope (pl. 98). The ancient lower part is built with flattish unhewn
schists in tighter masonry than the upper part, where building material consists of stones of smaller size and rougher shape, similar to the other modern walls of the area. The distinction between the masonry of the two parts is only slight but clear and I believe that the lower earlier part is contemporary with the other archaeological finds of the site. The unsophisticated masonry indicates that this wall supported a terrace for cultivation.

This area next to the S wadi is rich in water, which was being collected in two small built reservoirs, now filled up with mud. What is called here a "water collector" is within the terrace below and to the W of the wall discussed above (pls. 97:a, 99). It consists of a tunnel approximately 6m long, built inside the terrace and perpendicular to it; this is rectangular in section, 1.20m wide and 0.60m high near the mouth and gets narrower inwards (note that the accumulation of silt may have reduced the original height). It is roofed with long schist slabs. A slab is set upright at the mouth as it is done in the small reservoirs and another long schist is placed in front of it between the jambs as a sill. The jambs are built with flattish schists in masonry similar to the terrace wall discussed above: they are 0.60m thick and 1.20m high, leaving an opening 0.60-0.80m wide, roofed with a large slab. They survive to a length of 0.60m on either side within the modern retaining wall.

There is no evidence that the "water collector" was ever a freestanding construction: it was incorporated into an earlier terrace wall and since water has always been a valuable resource it was being maintained and survived. It is likely that it is contemporary with the early part of the terrace wall above.

This "water collector" differs from the modern constructions in that the latter are constructed on ground level or even a little lower. Both are used in cases were water has little or unsteady flow or is just dripping. No other ancient collector was located during the survey; I had noticed a similar construction built inside an ancient
retaining wall during survey in S Kea, in the region of Chavouna.

Traces of ancient masonry were distinguished in the foundation of a modern retaining wall in the central area of the site: one course of coarsely dressed rectangular and indented blocks of schist and local marble is semi-buried in the ground and is visible for almost 3m, following the curve of the slope (direction roughly NE-SW). The curvature of the wall suggests that it is a well built terrace wall rather than an actual building.

It was observed that some of the low terrace walls of the S slope appear like earth banks because they are covered with earth, as a result of modern cultivation (pl. 99, foreground); possibly these buried terrace walls are ancient constructions.

Finally a large amount of common building material, unearthed during cultivation, has been piled in exceptionally thick modern retaining and boundary walls, especially in the E part of the plateau.

b) The schist quarries

Quarries operated S of the wadi, exploiting clusters of schist: one is opposite the water collector (exposed rock about 15 x 20m) (pl. 99, right foreground) and the other, which is smaller and partly covered with earth, is about 40m to the E, higher up on the same slope.

The rock is micaceous, sloping westwards, and has slightly irregular planes of foliation. Rectangular blocks were extracted by means of carving channels around them: occasionally eroded traces of such channels are visible in the large lower quarry. Also small round holes (diameter 0.05m, depth 0.05m) are set in pairs around 2m apart along the planes of foliation. Their distribution is unusual and as such they cannot be classified as Byzantine (the latter are many, set at 0.10 -0.15m intervals, see quarry at Rakagio, Ano Phellos). It is possible however that they represent very early stages in quarrying, as a sort of tracing the block to be extracted, before opening further holes.
Considering the fact that traces of quarrying for large blocks are few, it is possible that some stone has been extracted as ordinary building material, that is irregular stones. Below the large quarry is a low heap of stones, some rather large to be identified as waste from the shaping of blocks. Some of the stones may have been washed away by the wadi.

c) Ceramic material (fig. 105)

Pottery is dense (about 6 sherds/m²) in the upper, SE area of the hill. This is the only area where a few finer but plain pieces of pottery were found (no 1 and some small weathered fragments from walls of vessels). To the N pottery is less common, while on the flat fields to the W sherds are rare and belong exclusively to pithoi.

The earliest pottery is dated to the Hellenistic period (K2:9, 15). Double rolled handles apparently belong to Roman imitations of Koan amphoras (K1:3, K2:14), belonging to the first centuries AD.

On the lower part of the steep slope above Goumourada a biconical spindle whorl and a fragment of a jar were found within irregular and rocky ground, somewhat isolated from the rest of the material.

d) Millstones

Fragments of millstones carved in basaltic andesite were found in the SE and S area (4 pieces found on the field). Two belong to hopper-rubbers with striated underside (larger fragment sampled: S2, pl. 120), one to a plain lower stone (S1) and one small piece could be the upper stone of a saddle quern.

Saddle querns are thought to have been used until the end of the classical period, but hopper rubbers appear until the 3rd century and perhaps even later.\textsuperscript{196}

Conclusions

The archaeological remains of Goumourada belong to a habitation site. It seems that the site was settled at the end of the Classical period and was occupied until the
first centuries AD.

It was noticed that both pottery and building material appear densely in the SE area of the site, while the W and flatter part of the hill is almost deprived of these features and has produced only storage vessels. The following space arrangement is therefore proposed: the irrigated flat lower area was reserved for cultivation and the settlement was restricted to the upper area, where we observe a higher density of material.

78. PORI

Location and resources

The placename of Pori refers to a location NE of Kallivari, an area belonging to people from the nearby villages of Kallivari and Ano Varydi. The lower slopes form a sort of plateau with terraced large flat fields with deep soil which are still being cultivated. The peripheral areas are abandoned and barren. A water source in the lower area marks the beginning of a wadi. There are several very destroyed cottages.

Pori is concealed from the sea and the view is restricted to the surroundings. The area is generally protected from the winds.

Archaeological features

Paschales reported that ancient graves had been found near the path in the area of Pori, with unguentaria and other grave goods. Villagers confirmed that graves are occasionally revealed during cultivation at Ano Varydi, which is on the upper slope NE of Kallivari and it appears that Paschales recorded the finding of burials in a field of the Chelmes family. The grave goods, according to the historian, belong to the post Classical era, something indicated by the presence of unguentaria. I was not shown by the villagers the exact location of the field, but it seems that Paschales has confused the placenames, because I understood that Pori is located NW of the N edge of the village of Kallivari.
During the 1987 fieldwork season I was shown at Kallivari an almost intact miniature Mycenean stirrup jar with only its spout missing, presumably coming from Pori. The pot is 9.5cm high (I have not been able to photograph it). Both the small size of the vessel and its good state of preservation are safe indicators that it is a grave offering; furthermore it was found at depth of about 0.20m. The field of provenance is believed to be on a S looking, terraced slope in the E part of Pori, although I found no pottery in this area (this slope is to the left of the area pictured in pl. 100). This area has long been left uncultivated and there is vegetation which obstructs severely the ground visibility.

The area which produced prehistoric material is the harvested fields shown on the photograph (pl. 100, centre of photograph, fields with light colour); the presumed field of provenance of the stirrup jar is to the left of the foreground.

**Pottery (fig. 106)**

Prehistoric pottery was found mainly in the higher ground, on the NE part of the harvested fields. Density varies from one to three sherds/m². It seems that rarity of pottery in the lower part of the area is due to the greater deposition of earth there, as opposed to the surrounding slopes. Some pottery was also found on the field NE of the main area.

An interesting case are ten sherds from a pithos with the characteristic LM I applied rope-disk pattern, which were found along the track of the plough (no 18). This decoration decorates also two other pithoi (nos 14,21 and 24). Other decoration on pithoi consists of curvilinear relief lines (no 30).

**Conclusions**

The central area of Pori was occupied by a settlement dated to the beginning of the LC period. I believe that the stirrup jar found in the vicinity belongs to the cemetery of this settlement and consequently the
chronology of the site is extended to the middle phase of LC, to which period the jar seems to belong.

A main characteristic of the site is that it is concealed from the sea, at a protected though not defensible location: the site is seen only when one comes very close to it. This indicates that part of the reason for settling there was security, combined to the fact that this is a pocket of good land, with water sources.

Later material from Pori

Later than prehistoric material, probably Hellenistic, was noticed on the slopes to the SW of the large flat field. This being the last site to be visited during fieldwork, there was no time to further investigate the area and establish the limits of the later site.

MORTREIRA

Location and resources

To the E of the bay of Peza is the low ridge of Mortrera\(^{199}\) running roughly N-S (pl. 101). It is surrounded in the E and SW by wadis and to the W by a higher ridge, Vardiana, which obstructs the view towards the sea. Mortrera has a limited horizon due to the relief of the surrounded lands. This offers some protection against the winds. The E slopes are steep while the rest of the area is a relatively flat plateau with deep soil, cultivated until the recent years (pl. 104). There are clusters of white -grey marble in the upper area and especially on the S part of the ridge and the SW, where cliffs define the edge of the plateau.

Along the E side of the ridge passes the donkey track which connects Kallivari with the bay of Leukivari. There are two sheep sheds on the upper part of the ridge.

No water sources were located in the vicinity of Mortrera.

Archaeological remains

Remains of two sites recovered during the survey
occupy the plateau of the ridge, the corresponding flattish fields on the W slope, and the rocky area to the SW and belong to two distinct chronological phases.

79. MORTERA-I

a) Ceramics (fig. 107)

Early prehistoric pottery was found in the SW rocky area at an average density of about 2 sherds/m², but unevenly distributed: as a rule pottery was found at the foot of the rock clusters, where it is revealed by erosion, over an area of around 400m² (pl. 101:1). The fabric is very coarse, micaceous and in some cases brittle. Some wares have coarsely burnished dark surfaces (K2:3, 4, 5, 6). All sherds, except a cylindrical handle and the flat base probably of a pithos (K1:2, 1), are too fragmentary to indicate shapes of vessels they belong to, other than bowls with curving walls.

The fabrics and the burnish suggest a date either in the Final Neolithic or the beginning of the Early Bronze Age, based on their similarity to the fabric of pottery at other sites on Andros with characteristic shapes of these periods.

Some sherds of the same coarse fabric were also found in the central area of Mortrera and towards the W stream. It is possible that more material is buried there under the debris of the later site.

b) Obsidian (fig. 107)

Two fragments of obsidian blades were found in the rocky SW area and one flake on the W slope. L1:1 is thin, has parallel sides and ridges and trapezoidal section and has no visible traces of wear; it could be dated to the Bronze Age. L1:2 is thicker and less regular. It is characteristic that both pieces have maintained their lustrous texture, probably because they remained buried until recently. The small amount of material and absence of characteristic pieces, is not informative on the date of the site.
Conclusions

If the rare pieces of prehistoric pottery found in the central area are only a small portion of the actual buried remains, it appears that there was a settlement at Mortrera in the Final Neolithic or the beginning of the Early Bronze Age.

The presence of material in the SW rocky area is problematic because this place is not appropriate for habitation: there is not enough space between the rocks for structures, no matter how small. This particular area may have served some special function; the possibility that it was burial ground is a reasonable explanation.

**80. MORTRERA - II**

The later site extends on the plateau of the ridge the W slopes and until the wadi and cliffs to the S, covering an area of approximately 0.6 hectares (pl. 101:II).

a) Architectural remains

These consist mainly of heaps of building material and traces of one wall. The latter is a corner of a wall about 17m NW of the sheep-shed on the plateau, underneath a modern terrace wall: N side: 1.10m; W side: 3.30m (pl. 101, location indicated by lower arrow, pl. 102, 0.50m scale). Two courses of large irregular marble blocks with stackwork at the joints survive; they are founded on bedrock. Both the coarse building technique of the ruins and their location show that they belong to a retaining wall, which supported the central upper level of the plateau. The marble used is locally available.

A large heap (measuring 20 x 4m and about 1.50m high) of unhewn schists and fragments of marble unearthed during cultivation, has been piled up next to the sheep-shed on the plateau (pl. 101, upper arrow). A courtyard wall adjacent to the shed has been built very thick in order to dispose of the stones. Some apparently ancient building material has been used in the shed.
The marbles, although not dressed, are roughly rectangular and have fairly regular surfaces; most are fragments of larger blocks.

b) Pottery (fig. 108, 109)

Pottery is dense in the upper flat area, in some cases up to 6 sherds/m². It becomes gradually less on the slopes and is very rare on the plain. It is very fragmented, probably because of the intense cultivation of the land. Fine wares are rare and restricted in the higher area. Pithoi are the commonest type all over the site.

The dating of the pottery from Mortrera is based on a small number of datable sherds. Two rims from lekanai are dated to the advanced Hellenistic period (K1: 24, 3). Ridged ware from the Late Roman period until the 5th-6th centuries AD were also found. The fabrics indicate that most wares are dated to the Roman period.

Conclusions

A settlement occupied the higher plateau of Mortrera probably during the Hellenistic and Roman period. The large amounts of stone in this area suggest the presence of several buildings in fairly good masonry. The habitation area was restricted there and also towards the E wadi. The rarity of pottery and absence of stones in the lower areas, (which were also cultivated until recently and therefore subject to the same disturbance), indicates that these fields were probably reserved for agriculture.

81. VARDIANA

I walked along the summit and upper E slopes of the ridge of Vardiana, W of Mortrera. On the highest part of the ridge, E of an old ruined sheep pen, a handful of pottery was noticed. They are coarse wares, the date of which is uncertain. Their fabric shows that they are not earlier than Roman.

Considering that there are no traces of architectural remains in the vicinity, this findspot has
probably resulted from one particular activity. Despite the function that is implied by the name of the ridge, Vardiana (watch-post), there is nothing to justify this name.

82. TOKELI

Location and resources

The placename of Tokeli describes N end of Vardiana, and seaward slopes on the N coast, and immediately to the W of the small bay of Leukivari. The land belongs to villagers from Kallivari. The seaward slopes of the ridge are soft before falling abruptly to the sea and were being cultivated (dry farming) until a few decades ago, according to locals' accounts; now they are covered with low maquis vegetation. The E slopes are steep and inappropriate for cultivation.

There is no water in the vicinity, but only lower in the wadi which flows to Leukivari. The whole region is extremely exposed to the winds and particularly the characteristic N currents of the channel of Kaphereus between Andros and Euboea. From Tokeli one looks across the channel to SE Euboea, which is only 16km away, from cape Kaphereus to cape Mandele; the view towards Andros itself is restricted to the abrupt coast from Phasa to Leukivari and inland towards the plateau of Vigla at Kallivari.

The ancient remains

Paschales refers to Tokeli only in regard to the ancient pottery found there\textsuperscript{200}. It is clear that he had not visited the site, which is not surprising since it is very remote from any village or even the old path network. The ruins of a Classical and Hellenistic tower were located during the survey with the aid of instructions from villagers of Kallivari\textsuperscript{201}.

a) Architectural features

The tower stands isolated on the narrow ridge-top, before this starts its steeper descent towards the sea,
about 600m inland from the N coast and 150m above the sea.

The tower is square and has been severely damaged. A few of its features can be traced within a heap of stones and earth about 1.60m high (pl. 103, fig. 36): these are the doorjambs on the NW side and the N and E corners, which allow us to estimate the dimensions of the building. The NE side measures 7.87m while the NW is estimated to be about 8.20m, assuming that the entrance was roughly in the middle of the frontal wall.

The building material is local mica-schist shaped into rough rectangular long blocks varying in size, occasionally with broached work, which were probably laid in relatively regular courses. Much of the building material lies around the tower or is reused in walls. Large blocks (1.54 x 0.80 x 0.38m) are used as quoin stones at the N and E corners. At the E corner, where two courses survive, the external small sides of the stones project slightly beyond the line of the wall.

The entrance faces NW towards the sea and is 1.18m wide with large schists as doorjambs measuring 0.88 x 0.20 x 1.08m visible height (pl. 104). They have been heavily weathered.

Poor traces of an internal partition are visible on the ground parallel to the frontal wall and at a distance of 4.23m from it. They consist of two slabs set vertically into the ground (pl. 103, marked with arrow). The partition was apparently attached to the NE wall and it extended at least 2.50m to the SW. It is not clear whether these slabs alone create the internal partition which would then necessarily be as high as these slabs, or whether they belong to the lining of the partition wall.

One displaced stone used in the wall behind the tower merits recording, because it is a serious indication for an upper floor with an entrance. It is a schist slab measuring 0.75 x 1.07 (visible) x 0.11m, with a rectangular hole (0.11 x 0.15m) opened slightly off-centre. It might have been used as a door jamb, although obviously not for the main entrance of the tower since door jambs there
survive in situ. This stone suggests that the tower had a second floor provided with a door as well, as in the case of Agios Petros.

About 11m to the N of the tower, traces of a rubble wall are visible on the ground for 1m. The wall appears to curve. The ruins are too poor to be safely associated with the tower, but it is possible that they belong to a low terrace and/or courtyard wall.

Behind the tower and at a distance of about 4m is a curvilinear low terrace wall, which extends to the E of the tower and is built in loose masonry mostly with stones similar to the tower. It is obviously earlier than the modern field boundary system, since such a wall passes partly on top of it. This terrace wall was constructed when or after the tower was demolished, using its building material.

No other structures were located in the surroundings.

b) Pottery (fig. 110)

Pottery is restricted to an area of approximately 60m² around the tower and is found in small numbers (about 1 sherd/m²). It consists mainly of coarse wares. Some black glazed sherds are helpful for dating; the foot of a skyphos (K2:11) provides the earliest date for the site, in the second quarter of the 5th century and the glaze on other sherds (K2: 12, 14) indicates a date in the 4th century BC. Other sherds appear to be later; there is one Roman ware with deeply ridged surfaces (K2:13), dated to the 5-6th centuries AD.

Conclusions: function and chronology

The key to understanding the function of the tower at Tokeli is its location, and specifically its relation to the strait of Kaphereus. It is clear that the location was chosen so that the tower would have good visual control of the channel and mainly its N part (pl. 105). It is also characteristic that the entrance of the tower is oriented NW towards the channel, regardless of the exposure to the
winds in this direction. The above observations, combined with the absence of valuable resources in the region requiring protection and the low agricultural value of the surrounding land, confirm that the existence of the tower is directly associated with the strait of Kaphereus. The exhibited concern for this trafficked channel and the construction of this "single tower" at Tokeli suggest that this structure belonged to the defensive system of Andros.

The possibility that the tower is a lighthouse is refuted both by the construction of the building and by the location: such a structure would be expected much closer to the coast. The idea however of lighthouses on either side of the channel is plausible and future investigation along the coasts in this area will probably discover such installations.

The survey in the basin of Karystos in S Euboea, has located classical installations including two towers, which are related to the control of the naval route during the Peloponnesian war. The study of pottery from Tokeli indicates that the tower was probably built before the second half of the 5th century, but not so early to suggest that it was related to the Peloponesian war. It appears that the role of the tower was restricted to the visual control of the circulation of ships in Kaphereus.

Garrisons stationed at various times on the island probably had their base in the city of Andros, so it would be difficult to relate the reference with towers so distant from the capital, although this is tempting. It is fair however to associate towers located at such strategic locations, with state policies: under this respect Tokeli is clearly related to the control of the central and N part of the strait. The limited amount of small finds is a problem in estimating the period during which the tower was mainly used. If it was indeed used in the 5th century, did it continue to play the same role during the Hellenistic period? As in the case of Choreza, the tower was visited or occupied until the early Christian period.

The tower at Tokeli represents also the closest known
visual contact between Andros and Euboea and consequently with the mainland. We do not know whether there is a tower on Euboea at an analogous location, with which the tower might have communicated. In regard to possible contact of Tokeli with other sites inland, random walks in the higher part of Kallivari, Viglia, where something would be expected, were fruitless.
NOTES TO CHAPTER III

1. This classification was used for sites of the Melos survey; Cherry 1982b.


3. Paschales 1925, 175; see also introduction for more references on the exploitation of mineral resources in the area of Agios Petros.

4. Ibid., 611 n.1, 617 n.1.


6. The fortifications of Ayia Irini in Kea were built across the neck of the low promontory; Caskey 1971, fig.2.

7. References on parallels of pottery are given in the catalogue of finds and generally are not repeated here, in the discussion of the pottery.

8. Pieces esquillees are generally rectangular obsidian pieces, often small, and have at their extremities flakings usually bifacial caused by violent percussion. They are known from the cave of Kitsos, in S Attica and Franchthi, but are not reported from Saliagos; Perles 1981, see K10-K42. See Runnels 1985, 374, n. 27, on the two theories on the use of pieces esquierre: a) manufacture of bone and stone tools and b) tinder-flints for striking fire (Runnel’s view).


13. Ibid., 600, 604, 606 on sites in the area of Kypri and Agios Petros.


15. Data presented at a lecture by Dr Ch. Televantou during the First Cycladological Conference, 6th-9th September 1991, Andros.

16. Marinatos 1936, pls. 26, 27, 31; Drerup 1969, 5-7, fig. 3.


18. Boardman 1967, 5-22, figs. 5, 6, 7, pls. 1, 2: a-c.


22. Payne and others 1940, 110-22, pls. 7, 116, 140; Drerup, 8-9, 126, fig. 5. Tomlinson has reconsidered the evidence on this building, suggesting that it was not a temple; Tomlinson 1977.

23. There was yet no consistent rule for the orientation of temples in the 7th century; Herbert 1984, 32.

24. Of the temples mentioned above, those at Gortsouli, Xombourgo, Kommos, Asine, Zagora and Ypsele are not built in ashlar masonry.


27. Paschales 1925, 76-77.


29. Bent 1885, 293.

30. Paschales 1925, 521: no 74, 525: no 82, 527: no 85, with references to other publications of the inscriptions.

31. Meliarakes 1880, 115; Paschales 1925, 602.

32. Sauciuc 1914, 28-9, pl. 37.

33. See the hypokauston (heated room underneath the bath) from the Palace of the Giants in the Athenian Agora; Agora XXIV, pl. 65: a.

34. Paschales, 1925, 602.

35. Sear 1982, 85, on the use of colored marble in the Roman period.


37. Sauciuc 1914, 28, pl. 34.

38. Ibid., 602, 535, inscription no 111.

39. Ibid., 602.

40. Demosthenes[?] refers to a house with a tower implying that there were tools kept there; during an attack women locked themselves up in the tower, which was not entered by the thieves... Anonymous oration against Euergos and Mnesiboulos attributed to Demosthenes, XLVII, 53-7 and For a discussion of houses with towers references to ancient sources: Nowicka 1975, 90-139.

41. Young 1956b.
42. Young 1956a.


44. Jones et al. 1973, 369-72, fig. 4.

45. Kent 1948, 299-300.


47. Lawrence 1979, 235, 245.


50. For the full list of towers on Siphnos see Ashton 1991.

51. Osborne 1986, 175-8 for the list of towers on Thasos.

52. Walter 1954, 87-90.

53. Paschales 1925, 599.

54. Ibid., 602.

55. Ibid., 206; Paschales notes that the field belong to a Gauriote called Demetriades.

56. Ibid., 206, 606.

57. Geologist Elene Kolaite, kindly identified the material, suggesting that it comes from Melos, and provided me with the following reference on rhyolites; Nockolds et al. 1978, 42, 48.

58. Torrence 1986, 95.

60. Cummer and Schofield 1984, pl. 44: 488, 489, 490; Cherry and Torrence 1984, 22-3; Torrence 1986, 95-6, pls. 36, 66: S22.

61. Bosanquet and Welch 1904, fig. XL: 11-17; compare 11 with the example from Kastri.

62. Moundrea-Agrafioti 1990, 401, noting that the natural tablets of rhyolite were knapped with bifacial retouch in order to take off the cortex from the edges.

63. Van Horn 1977, 391-2, including references to published examples from the mainland.

64. Torrence 1986, 96, on the various suggestions regarding the use of denticulates as sickles, saws or other use in edge-like fashion.


66. Cherry and Torrence, 1982, table 3.1, pl. 3.1.

67. Evans and Renfrew 1968, pl. XXXIV, fig. 60.

68. Torrence 1982, 208, fig. 15: 11; Cherry and Torrence 1982: fig. 3.2: H.

69. Davis 1986, pls. 3-9.

70. Atkinson 1904.

71. See Drachman 1932, fig. 33, the Vallebona ara for an example of a direct screw press.

72. Leuven 1981, 43, 44.

73. Ibid., 45; Barber and Hadjianastasiou 1989, 131-2.
74. See the example at the peak sanctuary of Mount Juktas; Karetsou 1981, fig. 5, 11, plan and photograph of the sanctuary. The arrangement of the ramp leading to the sanctuary, is very similar to the space arrangement suggested for Mazareko.

75. Leuven 1981, 42, on features which indicate a Bronze Age sanctuary.


77. Pouilloux 1954, pl. XVII: 1, 2.

78. Felsche 1934, drawing of ground plan at the end of the book.

79. See Kurtz and Boardman 1971, 49-51 on cemeteries in Geometric times; 68-70 for the Archaic period and 91-6 for the Classical period.

80. Semantone-Mpournia 1984, 54, for material from Naxos; it is not known whether the pithoi were grave markers or whether they were actually used for the burial. Attic, Rhodian and Lako nian pithoi had been buried placed horizontally on the ground; Ibid., n.63.

81. Byzantine mortars are generally poorer than Roman and Venetian; they also usually have a brownish colour resulting from the mixture of earth in them; for the information on late mortars I thank H. Heberhard.

82. Lawrence 1979.


84. Lander 1984, 111, 112 maps of the Eastern and N African frontier; 113-4 on Severan activities.

85. Ibid., 18, fig.3.


89. Lander 1984, 201, 202: fig. 198.

90. Ibid., 201, 202: fig. 199.

91. Kennedy 1982, 76, fig. 15.

92. Ibid., 76, fig. 15: 6.

93. Ibid., 17-53; Lander 1984, 138-9, figs. 129, 130: the three phases of construction.


95. Kennedy 1982, 127, fig. 28.

96. Scorpan 1980, 87, 100-1.

97. Lander 1984, 206, 207: fig. 206 left; the masonry of the fort at Gornea and the following two forts consists of alternating rows of bricks and stone.

98. Ibid., fig. 206 right.

99. Ibid., fig. 207 centre.

100. Lander 1984, 206, fig. 210; Scorpan 1980, uncertain date (second half 3rd cent. - first half 6th cent.), 87, pl. XLIV: 1


102. Lander 1984, 165, 178, figs. 145, 164: there is some inconclusive evidence for the dating of the blockhouse (inner fort) to the mid 3rd century. Lander considers that the towers are in an awkward position and that their date is uncertain. The blockhouse is thought to be a police station (see above for references).
103. Sayum: Lawrence 1983, 219, fig. 21; Buyuk Kale: ibid. 217; Prinias: Pernier 1909, 58, fig. 1 (erroneously dated in the Hellenistic period); Lawrence 1979, 312-3, fig. 60 (a later date is suggested).

104. Lawrence 1983, 217, fig. 19; Andrews 1953, 206-7, figs. 218, 219, pl. 36; Calligas 1990, 30; no research or excavation has been conducted in this area of the citadel, so there is no conclusive evidence on the date of the tetrapyrgio.

105. Tournefort 1917, 352-3.

106. Cherry and Torrence 1982, 27, fig. 3.2: E, from the Melos survey; Cherry and Torrence 1984, 21.


108. Compare Marmouristra K1:1 with point in Evans and Renfrew 1968, pl. XXXVII, upper row, second from left; other points in same plate similar to the other points from Marmouristra.


110. Ibid., pl. 95: P28, P 29.

111. Belmont and Renfrew 1964, pl. 126.

112. Ibid.

113. Ibid.


115. Jacobsen 1969, 7: Late Neolithic obsidian arrowheads nos 1, 3, 4; Perles 1973, 82, pl. 17: b, shouldered and barbed and tanged arrowheads. The tanged arrowhead is replaced by the large triangular bifacial points.

117. It is said it rained for forty days and nights; Paschales 1925, 598. Locals still narrate this story.

118. Meliarakes 1880, 84.

119. Paschales 1925, 597, 598.

120. I.G., II, 1^2 (1) 463, 68; see also Orlando 1965-66, vol. 1, 70 and n. 1 in same page. On the same topic see Haselberger 1978, 106-7, fig. 6; Hodge 1960, 63, fig. 15.


122. Paschales 1925, 598.

123. Compare with the support of the Roman copy of the classical statue of Doryphorus; Cook 1972, fig. 49: a, b.


125. Meliarakes 1880, 115.

126. Paschales 1925, 600, 598.

127. Fiedler 1840, 218.


130. Philippson 1901, 218.

131. Sauciuc 1914, 35, fig. 41.


133. For Euboea see Papageorgakes 1964, 266-7, 270; For Thasos see Kozelj 1988, stone vats or "gournes" in pl. 4, reconstruction of quarry area in pl. 7.
134. Ibid., 7.

135. See above Pelekete A for a discussion of vats at quarries.


137. See the columns of colored Karystian marble in the facade of Hadrian's library in Athens; Travlos 1971, 244-52, pls. 314, 319.

138. See chronological list of ancient temples with their proportions and dimensions in Dinsmoor 1950, between pp. 340 and 341.


140. Paschales 1925, 173, 603.


142. From Saliagos see Evans and Renfrew 1968, fig. 16: E.I.
   From the cave of Kitsos see Perles 1981, 167-8, figs. 112: 4, 5.


144. Perlès 1981, 167-8, fig. 112: 1.

145. Paschales 1925, 605.

146. Towers with external diameter less than 5m are exceptional; Young 1956b, 134-5.

147. At Siphnos tower 10 in Young's catalogue has a buttressed foundation, but the height of this external attachment is not reported; Young 1956a, 52, fig. 2: 10.
   The external wall of the tower of Agia Marina is probably a similar reinforcement.
148. Delos XVII, pl. II: 392, 393 right.

149. Dakares 1960, 119, pl. 90: b.

150. Storck and Teague 1952, 78, fig. 40, for a reconstruction of the "Delian mill" as the authors refer to it; they also note that this type is also known from South America for crushing ores and other heavy materials, and it is often called the Chile mill.

I thank Dr Curtis Runnels for providing me with a photocopy of this reference and information on the chronology of this type of mill. Besides the above reference I was also given photocopies of plates showing meta and catillus from mills of the same type from Morocco; BAM, vol. XIV (1981-1982), pls. VI, PL: 1 (unfortunately I do not have the full reference of the article in which these mills are discussed).


152. Brun 1986, 102-4, fig. 59: 12.

153. Agora XIV, pl. 81, a: column drum from the temple of Ares, reused as a counterweight.


155. Delos XVIII, pls. XXXIX, XL.

156. Head 1977, 482; After ca. 308 until Roman times coins followed the Ptolemaic or Rhodian standard.

157. Paschales 1898; Paschales 1925, 452-67, for a catalogue and description of Andriote coins.

158. Fiedler 1840, 218; Fiedler reported the ruins of massive walls with large ashlar blocks.

159. Gounaropoulos 1871, 181; ruins of ancient buildings are mentioned; apparently Gounaropoulos had not visited the site.

160. Sauciuc 1914, 36; Sauciuc reported "ein hellenischer Wartturm".

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162. Stones from the internal lining of the walls, which are small and light have been amply used in the sheep shed in the W side of the field, in terraces and boundary walls of the surrounding fields.

163. Young 1956b, 135 n.31.

164. Lawrence 1979, pl. 19; notice the SW corner of the tower of Agia Marina.

165. Wrede 1933, pls. 69, 70.

166. Le Bas 1888, pl. 2.

167. Young suggested that the preference for a S or E orientation of the entrance of towers was due to the need for getting light into the ground floor; Young 1956b, 135-6.

168. Some examples of towers with entrances asymmetrically placed: The Red and Hilltop towers in Sounion; Young 1956b, 128, fig. 5 and 129, fig. 6, respectively. The tower at Delphoi; Valavanes 1980, fig. 3.

169. Young restores towers to 2-2.5 times their diameter or side, based on observation on towers surviving to or near their full heights; Young 1956b, 135.

170. Such staircases are usual in square towers; Young 1956b, 137.


172. Sockets for horizontal beams preserved at most towers, indicate wooden upper floors; Winter 1971, 173, pls. 161, 162.

173. Valavanes 1980, 335. No roof tiles were noticed either from the towers of Agios Petros or Agios Georgios.

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175. Sixty blocks can theoretically be restored to two-three courses in this tower.

176. The towers from Sounion which have a courtyard, stand in the middle or at one corner of the enclosure, with their entrance oriented towards the central area; Young 1956b, fig. 139.

177. A similar arrangement of external space is observed at the Vari house in Attica, where a veranda is constructed in the S front of the building with a small enclosure. The wall SW of the courtyard of Choreza can be compared with the arrangement of the outer enclosure of the Vari House; Jones et al. 1973, 369-72, fig. 4.

178. One block measuring 1 x 0.50 x 0.50m requires one man's labour to be dressed in the quarry face manner.

179. Mines of argentiforous lead were reported on Cape Selienites, less than 2kms NW of the tower by Davies 1935, 263 n.2; This information is untrustworthy, according to the modern mineralogical study. I also walked this area and I did not notice any traces of mines. Apparently Davies assumed that mines would exist there, based on the proximity of the island to S Attica and the region of Laurion.

180. The attribution of masonry styles to specific chronological periods has often proved to be erroneous; Lawrence 1979, 235, 245.

181. Quarry-face as a surface treatment eventually proved to resist attacks of improved siege machines introduced at the end of the 5th and beginning of the 4th century; Lawrence 1979, 239-40; Winter 1971, 311-24; Ober 1987, 569ff.

182. Pouilloux 1954, 43-66 on the chronology of the circuit and pls. 6, 7.

183. Chandler 1926, 19, fig. 11.

184. Wrede 1933, 32, 57, pls. 68, 82.

186. Lawrence 1979, pl. 19.


188. See the towers at Smovolo and Avdos: Etienne 1990, pl. IV: 1 and IV: 3, 4 respectively.

189. Paschales 1925, 605.

190. A similarly large press bed from granite, measuring 2.10 x 1.95m (diameter of circular groove: 1.50), was found at Koukounaries, Paros and is supposed to be one of the largest known in the Aegean; it was in use during the archaic period, but could also be earlier according to the excavator; Ergon 1988 135-6.

191. Paschales 1925, 605.

192. Young noted that a tower in the area of Sounion had completely disappeared between his first and second visit, because its building material was burned in a limekiln; Young 1956b.

193. Delos XVIII, 106, fig. 130, and representations of pedestalled mortars in fig. 133. The date of these mortars is not mentioned.

194. Paschales 1925, 604. Only the placenames are mentioned with the information that pottery was found there.

195. Giour Petrite (meaning in Albanian the rock of Petrites, which is a type of eagle) is a rocky knoll NE of Kallivari. During my brief visit to this location I found a few chips of obsidian with small fragments of prehistoric pottery, and also in the same area some later sherds, the fabric of which appeared to be Classical or early Hellenistic, scattered over an area of less than 0.1 hectare. I have not been able to revisit the site for further investigation.

197. Paschaless, 597.

198. The owner of the field who found the pots would not reveal the location to me, but subsequently I was shown by another villager one of this man’s fields, where he keeps now his beehives.

199. Mortrera in Albanian refers to a variety of thorn, Acantus mole.


201. Originally I was informed by villagers from Chartes that Tokeli is the slope above Mpraila, at Chartes. Apparently Paschaless did not refer to this place, since it has no trace of pottery. In 1989, villagers from Kallivari told me that they called Tokeli a location N of Mortrera, where they had noticed architectural ruins. This is the site I discuss in this entry.


CHAPTER IV

CONCLUSIONS
From the fifteen prehistoric pre-MC period sites, three are definitely Late or Final Neolithic, two are dated to the same period but on limited evidence, two appear to be transitional to the EC, one is possibly EC and the remaining six are undated. Some of the very small assemblages of material (findspots) are discussed here mainly because of the absence of Bronze Age characteristics, rather than because of clear Neolithic features.

The sites discussed below cover the period from the end of the Neolithic to the Early Bronze Age. In brief, a relatively large number of Neolithic sites was located, but EC sites were not identified with certainty. It is clear from the presentation of these sites that their material was usually little and not always diagnostic; the fragmentary and weathered condition of pottery made dating even more problematic. Several sites were mainly scatters of obsidian with rare pottery fragments, something that was also encountered in Melos. There is a number of small sites, which cannot be dated to a particular period, but some appear to be not later than MC. All of these are included in the discussion on the size of sites.

The purpose of this discussion is to study a broad chronological unit, that is the Neolithic and the beginning of the Early Bronze Age, with emphasis on certain features of the sites, mainly size, location and function. A comparative study of these, together with some other observations, will illustrate the characteristics of early prehistoric sites on Andros in general terms and will be used to study the island in relation to the rest of the Cyclades. At the end of the chapter particular problems of the early prehistory are discussed with reference to the finds from Andros. Finally, some general comments on the pottery and chipped stone of each period are offered.
General observations

SIZE

The issue of the extent of the sites is discussed first, with reference to the quantity and type of finds, because these three factors were used to determine the primary function of sites, that is habitation, cemetery areas or special function areas.¹ This typology of sites covers all possibilities of human presence and activities, from the most extended and organized, to the most limited and ephemeral.

The problem of assessing site size is greater when we are dealing with earlier sites, since these have been subject to disturbances for longer periods. It is possible however to estimate roughly whether the surface material is more or less representative of the actual evidence.

In Melos we observe a large number of sites with large size²: of the twenty-six LN and EC "Grotta-Pelos" habitation sites, twelve have size of less than 0.5 ha, six have sizes between 0.5 and 1 ha, four between 1 and 3 ha and there is one exceptionally large FN site of 6.9 ha (for the remaining three sites no exact size is given, but they appear to be less than 2 ha). The average size of these twenty-three prehistoric sites is 0.947 ha. Renfrew in 1972 noted that the size of typical Neolithic settlements in the Aegean ranges between 4 - 8 hectares, while the size of Early Bronze Age settlements is not much greater (around 10 hectares), a strikingly low figure, when compared with Near Eastern sites.³ It appears that the environment of the Aegean islands (with the exception of Crete, which is much larger) could not support large, concentrated populations.

Evidence from Andros ought to be cautiously compared with that from other, more exhaustive surveys. One cannot help however noticing a striking contrast between the sizes of the sites in Andros and those in Melos. Early prehistoric sites on Andros are generally small, with size ranging from a few square meters to 0.5 ha. It is believed
that no large sites were "missed" in the survey areas, considering that these are usually situated on obvious locations (knolls, hills, promontories), all of which have been checked. Nonetheless, evidence from other parts of the island may change this picture, and for this reason information yielded from excursions elsewhere on Andros has been included in the discussion (see appendix).

The early prehistoric sites from the survey area and those known from other regions can be divided into four categories according to their size: a) findspots of only a few square meters, b) very small sites occupying about 0.1 ha, c) larger sites between 0.2 and 1 ha and d) large sites occupying more than 1 ha. Sites belonging to the last category have not been located in the survey area.

a) Findspots ... Neolithic - Bronze Age

The author has encountered six cases with minor indications of human presence: Stou Tzortze, Charakas IV, Strongyle, Soulitara, Kalogride and Zorkos. In two cases only two to three pieces of chipped stone were found: these were flakes and irregular blades of obsidian which could be Neolithic, but none of the assemblages could be securely dated. The remaining findspots have produced very few fragments of pottery. Finds were never associated with architectural remains. Three locations are coastal: high promontories (Zorkos and Strongyle) and a low coastal hill (Stou Tzortze), and the two other are rocky knolls on ridges overlooking the sea from a distance (Charakas V and Soulitara); Kalogride is an inland hill concealed from the sea.

Modern use of chipped stone would result in the removal of obsidian artefacts rather than their displacement and the "creation" of the small sites discussed above (see also general discussion on the chipped stone).

The locations of most of these findspots are inappropriate for habitation areas. The absence of architectural remains and the absence or rarity of pottery
shows the ephemeral nature of activities which took place at the particular location, and rules out the possibility that the finds belong to a settlement. It is also believed that they do not constitute grave goods, both because of the humble types of artifacts concerned, and the fact that they appear isolated from other features. Chipped stone would probably be carried by people during a food gathering expedition, like hunting or fishing, an exploration walk, or similar activities. In these cases there was no need to carry pottery; water, if necessary, would be conveniently carried in skins. The locations of these findspots are not necessarily associated with agricultural land; we may note finally another possibility, that of an activity related with the sea and the nearby bays (the coming of a boat perhaps).

Similar findspots were located in Melos, and the surveyors suggest that they result "from the performance of strictly limited activity set perhaps on a single occasion in the past". These findspots in Melos probably represent more extended activities than the findspots in Andros, since they have more finds, including pottery, which implies some permanency, scattered over a larger area. It was decided to use the term findspot for the type of these "minor sites" discovered in Andros because it describes more accurately this case rather than the type of site discussed in Melos. Such simple sites with only a few chipped stone artefacts have also been located in the South Argolid survey; their function and exact chronology is unknown, but the surveyors suggest that they probably belong to the Bronze Age.

Locating these findspots was a matter of luck, since the finds are scattered within very few (less than ten) square meters. It would be too time consuming and probably not cost-efficient to fieldwalk so exhaustively the land in order to locate such features, which are difficult or impossible to date, or to discuss in their proper chronological context and associate with other contemporary sites. With the little available evidence we can note
simply that these finds reflect the circulation of people in the countryside, for the reasons described above.

b) Very small sites

Cases of minor sites with both lithic and ceramic material scattered over an area of around 0.1 ha are classified into this category: Agios Savvas, Charakas I and II, Tsouka I and Marmouristra I (although the last may prove to be a larger site). They are not associated with architectural remains (except perhaps Charakas I). It is believed that they represent humble establishments like animal shelters, a fisherman's or shepherd's hut or similar, which were apparently used for short periods of time or seasonally (see also below discussion on location in relation to resources).

Modern rural life offers informative parallels. A certain amount of pottery is always found inside or in the immediate vicinity of animal pens, even if these are not intended to be used also as occasional dwelling for the shepherd or farmer; a broken vessel for feeding the small animals or a water jar are probable items in such contexts. Rural houses used seasonally are also equipped with household wares, besides the necessary tools for the farmer's tasks. Much of the equipment is usually abandoned in the farmhouse and on the field.

The archaeological material of these sites is usually little and again difficult to date. The coarse fabrics indicate an early date, which is confirmed by the Neolithic chipped stone industry of Charakas I. Some of these sites have very little material (Agios Savvas, Viglia) and others are richer (Marmouristra, Charakas I, Tsouka). The former probably represent establishments of the kind discussed above. The greater density of pottery remains in the other sites might indicate a greater degree of permanency, thus we may be dealing with very small villages.

Similar sites located during the survey of Southern Argolid, often on high ground and ridges, were also identified as shepherd's huts, sheepfolds or sheds for tools
and produce, or other installations used seasonally.

c) Larger sites

Only three relatively large sites (to about 0.5 ha) were located in the survey area, Agia Marina I (FN), Kastri I (FN) and Rethi I (transitional FN-EC I). The latter two are situated on defensible locations. All are characterized by medium to high densities of material and obsidian is the commonest artefact. There are also traces of architectural remains. The large size of these sites, the density of archaeological material and their distinct locations suggest that they were prominent settlements in their regions. Unfortunately both Agia Marina and Kastri have been severely disturbed and their pottery is badly preserved, therefore conclusions are mainly based on the study of the chipped stone. This does not show any specialization that allow speculations on the economy of each site: the coastal location of Kastri implies that it might have been a fishing village. Two Neolithic sites are known to the author in other parts of the island (see Appendix III): Vryokastro S of Zagora and Mikroyiali; the first two are promontories.

Compared with material from other islands, the above two sites fall into the category of the most common sites of this period, with size between 0.1-0.5 hectares.

d) Large settlements

The surveyed regions have not produced extended settlements. From various walks around the island two such sites were identified in the middle of the W coast, Strophylas (FN, transitional FN-EC I) and Plaka (EC - early LC?) (see Appendix III).

The site on Strophylas occupies roughly 4.5 ha of high promontory land and seems to have been fortified. The high density of material implies density of habitation. The size of Strophylas is comparable to that of known prehistoric settlements in the Cyclades, namely Saliagos and Kephala. Despite the large size of these
sites, it is more accurate to describe them as large villages, since they would be similar to those excavated, which lack features of urban organization. 9

In the case of Plaka it is difficult to estimate the extent of early EC occupation even with a systematic survey of the site, which was anyway beyond the possibilities of this research. Considering however the obviously extensive later occupation of the site, we should expect a large EBA settlement. It is interesting to note that in the coastal zone between Strophylas and Plaka, there are three sites, two of which appear to have been substantial settlements. In Kea, Kephala and Paoura are also close to each other (see below).

It appears that Strophylas is one of the few if not the only large site of the FN and transitional period to the EC on the island. The size of other sites visited by the author falls into the next smaller group. Paschales has not recorded anything interesting, although we know that he was able to recognize early material as in the case of Mikroyiali.

Intensive survey work in the surroundings of the large settlements would show the organization of the countryside around them, and possibly show, in association with excavated finds whether these sites reflect some sort of centralization.

LOCATION

a) Natural and artificial defences

Observations on the location and surroundings of early prehistoric sites show that the choice of land for habitation follows certain trends. In Melos, where the sample is larger and scattered over the island, the ratio of sites of these periods located on knolls, high promontories or similar locations against those found on lower slopes is 2:1. 10 In Kea, even before the survey of the NE part of the island, it was recognized that "possibility of defence" was probably a consideration in
the choice of Kephala for settlement, and also in the other two known contemporary sites of Paoura\textsuperscript{11} and Sykamias\textsuperscript{12}: the preference for defensible promontories is clear. Two surveyed sites in Mykonos, Mavrispilia (FN) and Anavolousa (EC I?) are also located on coastal ridges or peninsulas.\textsuperscript{13} In Naxos Neolithic and EC sites are situated on hills, promontories or slopes, preferably in coastal plains.\textsuperscript{14}

In Andros we observe a similar preference for morphologically distinct locations with good views of the surroundings, for both smaller and larger sites: Charakas I and II, Marmouristra I, Mortrera, Viglia, Tsouka I, Kastri I and Rethi I. The large settlement of Strophylas is situated on a high, defensible promontory. Only some are clearly defensible locations: these are generally associated with the larger sites, some of which have traces of fortifications (Rethi I and Strophylas).

Settling on high ground appears to have been a general tendency both within small groups of people, or even individuals, and large communities. Security against other humans is the cause for building defences, but what were the reasons for defensive behaviour even when there was no interest in fortifying the sites? these were apparently protection from heavy rainfalls, which would dangerously flood the streams, protection generally against the humidity of the lower ground and possibly from animals (rodents and snakes which gather near crops in the plain).\textsuperscript{15} Even if these were not frequent threats, the inevitable fear and prejudice of man against nature would be appeased by settling on high ground. Visual control of the surroundings would ensure timely recognition of the coming danger.

The choice of defensible locations usually was at the expense of immediate access to water resources. This attitude towards water, which is also observed in the Geometric period (see Zagora), implies, at least for early prehistory, that settlements were not endangered by prolonged attacks, which could create problems in water supply.
That fear for organized human threat was not direct is also shown by the absence of fortifications at early sites. The traces of fortifications at two sites in Andros, Rethi I and Strophylas, if verified and dated to these early periods, would show a different attitude. The evidence generally implies that human threat had the form of occasional raids, a sort of primitive piracy even, for which the Aegean become later a favourite ground. There are no indications however that the islanders faced anything like the turmoil of the EC IIIA period, when we observe the building of fortifications at most Cycladic sites (see below).

b) Proximity to the sea

Proximity to the sea has already been identified as a common factor in the location of many early sites. The results of the Melos survey suggest that there was some preference for settling on coastal zones rather than inland; there are clusters of roughly contemporary sites in the SE, the mid S coast and around the open bay in the N.\(^{16}\) The seaward orientation of sites implies in the simplest case involvement with fishing and in more advanced terms seafaring for exchange or trade of goods, both requiring the use of smaller or larger boats. It is possible to estimate roughly the capacity of bays for sheltering prehistoric vessels, taking into consideration the changes that have been observed between the present and the prehistoric coastlines in regional studies.\(^{17}\) The archaeological record does not possess a large record of representations of ships or models from this period\(^{18}\), but the picture emerging is that vessels were small enough to be sheltered in a small bay, if this was not exposed to the prevailing winds, and were easy to beach, if necessary.

The coastline of Andros has many bays which would offer good sheltering conditions for vessels and attract prehistoric people to settle in their vicinity.

Fieldwork in NW Andros was limited to coastal zones, with the exception of the area of Kalamos and Chartes, so
it is difficult to draw conclusions about a trend for choosing coastal sites for settlement. If we combine however this evidence with the notes of Paschales, information communicated by locals and random walks around the island, it seems that there was some preference for coastal locations. Not many sites are situated exactly in the coast, like Kastri I, but all survey sites are close to the sea, less than 3kms inland, and most around 1km away from the coast. Finally most, except Viglia in Kalamos and Ayia Marina, have a good view of a nearby bay. The above observations also hold true for other early prehistoric sites on the island (Plaka, Vryokastro near Zagora, Strophylas and Mikroyiali).

Larger sites in the Cyclades appear to be situated almost exclusively in coastal areas: Kephala, Mavrispilia (Mykonos), Grotta and Saliagos, to mention the better known. Excavations have shown that Saliagos was probably a tunny-fishing community, but even when we lack evidence similar to that of Saliagos it is fair that the sea would have provided for possibly a great part of the inhabitants' diet: the study of fish bones from Saliagos has shown that they belong mainly to very large fish (97% of which are tunny), showing that the Aegean waters were far more fertile than presently. This might explain the choice of coastal locations even where topographical conditions were unfavourable for agriculture (Vryokastro near Zagora, Mikroyiali).

The concern for communicating with other islands or the mainland via the sea also accounts for the coastal location of larger sites. It has been argued that by the end of the 4th millennium there was already a modest trade network in the Aegean, which involved certain value goods (obsidian, flint, millstones, wool and possibly a few other materials). Van Andel and Runnels believe that during the transition from the Neolithic to the Bronze Age, the more efficient exploitation of domestic animals, which has been termed "the secondary products revolution", which I add is believed to have occured earlier than previously.
thought, the need of metals and improvements in ship-building technology, made possible the colonization and exploitation of less fertile lands like the Cycladic islands, where self-sufficiency was not guaranteed. These developments also stimulated the development of trade and the appearance of a "set of emporia" at appropriate locations. I consider this explanation as more comprehensive than the others that have been proposed.

It appears that the sites from Andros discussed here belong to the beginnings of these developments and positive feedback in the Aegean. Of all sites, we could assign the title of primitive "emporia" with greater certainty to Strophylas, while we should be more cautious for Rethi I and Kastri I, because of their relatively small size. Certainly such a hypothesis would have to be proved through excavated finds. The remaining sites are too small to have been distribution centres. They apparently belong to rural sites which were involved with agriculture (see below).

c) Proximity to inland natural resources

The proximity to food resources (productive soils and high-yield fishing waters) has been considered by Bintliff a primary factor for the choice of location for settlements in his study of sites in Melos and Mykonos. It has been observed however that many sites are not situated in the most appropriate location in relation to the best agricultural land. Waggstaff's study on modern agricultural practices on Melos has shown that farmers live in centres which are not located at the best areas to exploit in the most efficient way natural resources. This was common practice in Andros in modern times and obviously in many other islands. We should consider however whether it was safe for prehistoric man during this period to invest his labour at distant areas from his residence. Were relations between the various groups of people living in islands, of such a nature that the danger of intra-island raids did not exist? It is very likely that there was such behaviour, considering that the risky
environment of dry islands did not guarantee self-sufficiency for large populations.

A solution to this problem, if it was indeed a threat to the well being of a community, would be the practice of seasonal rural establishments for direct control over the exploited land and animals. Such small sites have been identified and, in the case of the Southern Argolid, it appears that gradually clusters of small sites were related to a larger central site. Each small site would be located thus, so as to exploit efficiently one or more natural resources.

Generally, early sites on Andros are well situated in relation to natural resources, if we include fishing as a considerable source of food. Agricultural land is less than 15-20 minutes away from all sites located in the survey area, with the exception of Rethi I, where the descent to the plain is steep and long, and similarly the smaller sites of Marmouristra I and Charakas I and II. Regarding Rethi I and by extension other large sites situated in similar environments, it is believed that they represent settlements which could afford a location where self-sufficiency was not guaranteed, because there was already a primitive exchange network, either intra-island and/or involving inter-island relations.

Mountainous landscapes as those of the Cycladic islands present a problem in assessing the suitability of land for farming in prehistory. We should consider the fact that the cultivation of most slopes, even for dry farming, would require the creation of terraces. It is possible that during early prehistory man did not have to exploit yet those steeper slopes, which needed terracing, and was limited to the softer slopes and plains. Geomorphological studies in the Southern Argolid have identified serious sheet erosion during the EBA, long after the agricultural expansion of the LN. It cannot be identified whether the cause of erosion was human activity, that is neglect of minimal soil conservation, or natural disasters. If this observation for the Southern Argolid
is representative even to small extent of the situation in the similar mountainous natural environment of the Cyclades, we would expect that agriculture until the EC period was rather unsystematic.

The practice of secondary products would find appropriate ground in the Cycladic islands, where the dry and mountainous environment is better suited for animal grazing, rather than farming. Cherry has already proposed that the fitness of the Cycladic landscape for this new form of productive pastoralism may partly account for the colonization of the Cyclades. 27

Proximity to water sources was not a decisive factor for the choice of settlement, even in the case of large sites, during these periods. Sources are in general within 5 to 15 minutes walking distance from the site; except for Agia Marina I, where a source is adjacent to the site, there is no case among the discussed sites in Andros until the archaic period where a site has a water source within its limits. This phenomenon characterizes sites in other areas too; promontories and hilltops in general do not have water sources on them and the case of Myrtos in Crete is a good example. 28 Andros has adequate water resources and few are the areas that one has to walk more than 30 minutes to reach water. It is possible that the inhabitants of Kephala took water from wells. 29 From the Middle Bronze Age we have the example of the well at Ayia Irini, while there is evidence for wells in LC Phylakopi. 30 Such constructions have not been identified in Andros even for later periods. Caskey has suggested that pithoi were used for collecting rainwater. 31 The practice of collecting rainwater still survives on dry islands. 32

The consideration of the distinction of the organization of life and standard of living between the larger settlements and provincial villages might not apply for the Neolithic and the beginning of the Bronze Age, since there is no evidence of urban organization yet. 33

It is enlightening to view the evidence of early settlement in relation to the traditional village and rural
establishment, something that can be experienced now only in few secluded areas of the Greek countryside. Water until recently, and in some cases today, had to be transported to the house from the water source or reservoir. The cost of having water at home restricted its use to the absolutely essential needs, while other activities, like laundry, are carried out at the fountain of the village in communal facilities: at the village of Chavouna in SE Kea women do their laundry at a source which is 1/2 hour on animal back away from their homes. In dry and poor regions where the construction of wells is either not possible or too costly, even the advent of metal or plastic pipes does not help, because water from other areas cannot not reach the desired destination in cases of villages on high locations.

It is along these lines that villages in prehistory and early historical antiquity most probably functioned in relation to their water needs. These were probably even more limited than those in modern villages.

A further consideration in regard to the location of sites is their relation to old paths or donkey tracks. Regarding these early periods one cannot claim the antiquity of the particular track, but only the possible coincidence of some prehistoric and modern paths, based on the assumption that paths always follow the most convenient way to connect environmental units and natural resources. Although this topic will be discussed also for later periods we note a few observations; promontories are usually removed from the modern communication network, as they seldom have anything to offer to modern man. Inland sites tend to be located on or near modern paths and occasionally crossroads; most important is that these tracks connect environmental units like the valley of Kypri with Agios Petros for Rethi, the valley of Gaurion with the region of Amolochos for Marmouristra, the valley of Phellos with central and NW Andros. Tsouka and Viglia are located within two of these larger regions. Traces of prehistoric country roads would be too difficult to find and
A road network however would be expected to develop with the emergence of a centralized economy and the need for redistribution of goods. In cases like MC Melos, where it is believed that such a system operated, with oxen as means of transportation, roads, no matter how primitive, would be a necessity.
THE NEOLITHIC SITES

Some sites are defined by scatters of obsidian and very little pottery, something that was encountered also in Melos during the survey there. Pottery often was not characteristic of a particular period, and in some cases chronology has been based on obsidian tool types.

The sites that have been assigned to the Neolithic period with certainty are Marmouristra I, Charakas I and II, Kastri I, Agia Marina I, and Viglia.

At Marmouristra, the presence of tanged and barbed and tanged points might indicate that the site belongs to the LN rather than to the FN. Unfortunately it is not possible to make a similar observation for the pottery, since the few types of pottery found are not characteristic of the LN, but occur also in later contexts.

Charakas I-II and Agia Marina I also have types of lithics that are common in Neolithic sites: conical cores, slug and drill. At the latter site only tiny fragments were found, the fabric of which looks early, but there are no further characteristics. At Charakas I-II some sherds bear traces of burnish on reddish surfaces. Similar burnish was found on a few sherds from Kastri I, where the chipped stone is dominated by flakes and thick irregular blades.

In the N, at Viglia, the little pottery found included some typically Neolithic handles and a few burnished wares with brown surfaces.

The burnished wares from Rethi I resemble those from Viglia. At both sites I found upright rims of burnished bowls with upright walls.

It is possible that other sites too belong to the Neolithic period, but there is no concrete evidence about it. The predominance of irregular and occasionally wide blades at Tsouka indicates an early lithic industry.

It appears also that there exist sites in the remaining part of the island which belong to the end of the Neolithic. One has been mentioned by Paschales,
Mikroyiali. Other Neolithic sites which are known to the author are located on the rocky knoll of Vryokastro S of Zagora, the promontory of Strophylas N of Zagora, while there are indications of Neolithic activity on the promontory of Plaka S of Zagora (see Appendix III). The chipped stone industry of these sites, has common elements both with Saliagos and Kephala.

The pottery

For references to parallels, see site discussion (Chapter III) and catalogue of finds (Appendix II). In general, the sherds found belong to pottery that is common in wide chronological periods. All vessels are hand made and have rather uneven surfaces.

a) Fabrics: all fabrics have mica, the particles of which are usually large and easily visible, with silver colour. Some wares are very coarse with many and large inclusions, mainly schist and occasionally quartz. Finer wares have smaller inclusions, which are still numerous.

In general, coarser wares have a light brown orange colour which often varies on the sherd. Finer fabrics have darker colours, dark brown to almost black. Most sherds are not well fired, and the colour of the fabric is usually dark but varies from sherd to sherd.

b) Surface Treatment: burnishing is rare, apparently covering the whole vessel; no patterns were observed. Tool traces are not deep, and the surface has a rather uniform texture with reddish brown to dark brown colour, which varies on the sherd. Wares with red burnished surface are very similar to the wares from Kephala. No painted decoration was found. Applied decoration consists of narrow bands with digital decoration, common in Neolithic and Bronze Age sites. No incised, stamped or painted decoration was found.

c) Shapes: it was possible to distinguish only a few
shapes. The most usual form is the bowl with concave or upright walls and plain rims. Several handles from bowls were recovered, which find parallels in Saliagos and Kephala and Kitsos. Fragments of large storage vessels with very coarse fabric were recovered. Sherds of pans with a row of perforations below the rim, were also encountered, although not in the characteristic very coarse fabric of the cheese pots, known from the Dodecanese and Euboea; the fabrics appears similar to that of sherds found in Kephala and Saliagos.

The chipped stone
For references to parallels see site entries and catalogue of finds

Lithics survive better than pottery and for many sites studied through surface investigation, are the only or major means for dating. Still, being surface material, they are fragmented and weathered, so that is is often difficult to distinguish original wear or breaks from post-depositional damages, and normally impossible to detect features such as gloss. All chipped stone has been produced from obsidian, most likely of Melian origin; tools of altered rhyolite, also coming from Melos, were encountered at Kastri I and Strophylas.

Overall obsidian was found in rather low densities rarely exceeding the four pieces per m². Except in minor sites as Charakas I, where all pieces were collected, only a representative sample of the debitage was taken but all retouched pieces were collected, as these are usually characteristic. Sites being rather small, it was possible to check in the field the material and its distribution, but only once did a pattern arise, at Marmouristra. There three obsidian points and one ovate were clustered within an area of less than four square meters. Considering that most of the sites have been disturbed to a greater or lesser extent, little could be expected to appear in terms of distribution patterns. In addition obsidian in modern
times has been used as a strike-a-light for guns and lighters instead of flint, and is still being collected, especially larger pieces, as an item of curiosity. In post-prehistoric antiquity obsidian has been used mainly in the geometric period, as is the case in Zagora. It is not however difficult to distinguish whether the scatter belongs to a prehistoric site since then it is usually accompanied by pottery. 38

Comparative material was found mainly in the publications of lithics from Saliagos, Kephala, Ayia Irini, Phylakopi and the survey of Melos. 39 Publications of mainland material have also been consulted, mainly from the cave of Kitsos, Franchthi and Lerna. 40

The chronology proposed is based on the presence or absence of certain characteristic artefact types that have been associated with specific chronological periods. A main guide for sorting out the material was the chronological distribution of lithic forms in the Cyclades, as presented by Cherry and Torrence. 41

For the end of the Neolithic, the transitional phase to the EC and the very beginning of the EC, the following observations have been made:

1) Strong presence of tanged and barbed and tanged points in one site: Marmouristra produced four such points (fig. 77), while in three of the six prehistoric sites visited outside the survey area, such points were noticed. The abundance of these arrowheads at Marmouristra contrasts with their rare appearance in Kephala and associates the Andriote site with LN Saliagos rather than FN of Kephala. Parallels from Francthi are also dated before the end of the Neolithic period, although at Kitsos they appear throughout the Neolithic.

A typically Neolithic slug, ovates and two large conical cores were also recovered. From these cores (Charakas I) small blades and flakes have been removed in an unsystematic manner leaving overlapping blade scars (see fig. 57). No facetting appears on the striking platform. The same description suits the small conical core found at
Marmouristra, which however does not have a flat platform. Large cores have been found in Saliagos and later Neolithic contexts.

The presence of cortex on two of the three cores and on several debitage pieces shows that obsidian was being imported to Andros in raw form. On some sites small waste by-products might have resulted from knapping.

Blades have also been used for dating. They are usually outnumbered by flakes and are coarse and irregular to a greater or lesser extent. No facetting appears on their platform. There are no crested blades, which would indicate that cores were prepared before the knapping of the desired tool.

Flakes are common in most assemblages; probably most of them belong to the category of "instant tools". 42
Until recently the available evidence from the Cyclades suggested that the great rarity of Late and, less so, of Final Neolithic sites in the Cyclades was a phenomenon that characterized this region; caution against inadequate research was considered a way to avoid serious analysis. Approximate colonization dates of the islands suggested by Cherry in 1981 were based mainly on material from Renfrew's Emergence and the Gazetteer of Hope-Simpson and Dickinson; neither work involved the fieldwalking of new areas but mainly checked and synthesized the available evidence.

In this thesis it is believed that the drawing of conclusions on the topic of the colonization of the islands is risky, until we have some information about the larger islands, assuming that these were more likely to have received and supported larger groups of people in permanent settlements. In the case of Andros, until recently there were only a few EC and LC chance finds, the exact provenance of which is not known with certainty, therefore the picture of the island in the studies mentioned above was rather misleading. This may prove true for other islands which have been little investigated.

Already cases of new early sites, besides Saliagos and Kephala, have started appearing in the bibliography, while there are others which require investigation to prove the dates assessed from surface data. Grotta-Palatia in Naxos, which has been partially excavated and occupies a large area, has some shapes and decoration associated with Saliagos, although not all characteristics of the pottery and particularly the lithics are paralleled: the last excavator of the site believes that the finds indicate a date late in the Saliagos sequence. The example of Mavrispilia in Mykonos, which has features related with Saliagos shows that even small and dry islands were
permanently settled in the LN. Paoura in Kea has material similar to that of Kephala and appears to be a permanent settlement.50

Successful colonization of an island is considered to depend also largely on its accessibility.51 Considering that Andros is close to Euboea where Neolithic settlements are common and also to the real mainland, Attica, it fulfills successfully these prerequisites of size and proximity, and therefore it would be expected to have received early settlers, at least at a rate similar to nearby Kea. Furthermore the geographical location of the island in the Aegean and its natural environment would have been positive factors for attracting settlers.

The finds of the survey prove that the NW part of the island was already settled by the end of the Neolithic. Certainly the very small sites represent small installations probably with short period of occupation, but indicate that the activities of these early settlers had expanded in many parts of the region and not necessarily on coastal locations. Chance finds show that the same happened at least in the central part of the W coastal zone.

Considering the difficulty, or even inability to estimate through surface finds the life of very early settlements, research ought to be cautious when discussing Neolithic occupation, since sites may not be strictly contemporary. Small sites, which probably represent short-lived settlements, might imply mobility of the population.

Future research could be oriented to study the density of early settlement in the Cyclades, in order to identify which islands were inhabited first and to what extent. A comparative study of early settlement would test the hypothesis that larger islands, and consequently richer in resources, attracted settlers earlier than the smaller and less privileged ones. It would also be interesting to see if proximity to the mainland indeed affected positively the rate of colonization.
We saw that the picture of NW Andros, as outlined by the survey finds, does support the above theories. Finally, intra-island study would be useful to determine which areas were favoured for settling, and particularly what was the situation on the E side of Andros.

THE DEVELOPMENT FROM THE NEOLITHIC TO THE EARLY CYCLADIC PERIOD

Although a high percentage of settlements at the beginning of the Early Bronze Age are on new locations, it is becoming gradually evident that there was continuation of culture from the Neolithic to the Bronze Age.

The only excavated FN site from the N Cyclades, Kephala, is closely related to the EC culture, by sharing common features, principally common burial practices, similar forms in figurines (though differing in material) and stone vessels. Similar evidence is recovered from surface investigations: chipped stone from some sites in Melos has characteristics of both periods and is considered to belong to a transitional phase between the periods represented by Saliagos and the earliest deposits of Phylakopi A1. Characteristics of the chipped stone industry of Saliagos, and in particular the barbed and tanged arrowheads, which are used as time indicators, appear to persist in later phases of the Neolithic and often the rarity of datable pottery in many sites does not allow precise relative dating.

It would be risky to use survey data to prove continuation of settlement in these early periods, but valuable observations can be made. According to descriptions of sites from the Melos survey there are not any distinguishable differences in the size nor in the choice of the location for habitation between sites of the FN and the "Grotta-Pelos" culture. Fieldwork in Andros located sites with surface material with unclear features, which cannot be assigned to one or the other period. It is
possible that they belong to this transitional period.

The available evidence therefore excludes sharp cultural change: we are dealing with a development. Characteristically Van Andel and Runnels note that "the boundary between the Neolithic and the Bronze Age is a matter of definition and convenience...". 57

Summary

New data from NW Andros suggests that the island was inhabited as early as the LN, Saliagos period; there is clear evidence of larger permanent settlements from the end of the Neolithic and the very beginning of the Bronze Age. Other parts of Andros have similar traces, also of even larger habitation sites. It is suggested that Andros was a favourable environment, both because of its natural resources and its geographical location, to have received people in permanent establishments at the end of the Neolithic, even during the period of Saliagos. The location of sites suggests that inhabitants were occupied with agriculture, animal husbandry and fishing, and that there was differentiation in the economy of each site; some sites appear to be seasonal or ephemeral establishments. The coastal location of some probably implies inter-island relations.

SOME NOTES ON THE EARLY CYCLADIC PERIOD

We have seen that some sites do not have clear Neolithic or Bronze Age characteristics. Definite signs of the advanced EC I and EC II periods were not identified, although there exist possible candidate sites. The author did not encounter in the survey area characteristic wares of these periods (no painted or incised pottery earlier than MC has been found), or marble artefacts, or abundance of fine parallel-sided obsidian blades and flat rectangular cores, characteristic of the advanced EBA. Similarly rare is the evidence coming from the rest of the
island.

EC I settlements are not well known on other Cycladic islands either, probably because of their small size and the fact that some are buried under later remains.\textsuperscript{58} Finally, our biased knowledge of EC I from the cemetaries may be a reason for not identifying easily pottery from habitation sites and possibly not distinguishing it from FN material. In Andros, Paschales has reported burials from Vitali with obsidian, marble vessels, figurines, silver and gold jewels, bronze daggers and arrowheads, and also vessels with black burnish; he used the term glaze however for black glazed sherds as well and it is not possible to understand what he really meant.\textsuperscript{59} These finds were apparently kept by the farmers or have been lost. The site has not been checked by the author.

The frying pan at the British School at Athens, which is supposed to come from Palaiopolis (see Appendix III), belongs to the Kampos type and is another piece of data for this period. Finds of the EC period have not been reported yet from recent work at Palaiopolis.

Some of the sherds at the British School at Athens from the promontory of Plaka belong to EC I wares. We do not know to what extent the promontory was inhabited during this period, but the location could have supported a town, which was also seaward oriented.

To return to the survey area in NW Andros, probable sites of the EC period are the S area of the promontory of Marmara, where some parallel sided blades have been found, but no diagnostic pottery was recovered. The location however would be appropriate for a settlement of this period.

Evidence from the other islands for EC II is also mainly from graves. Renfrew had reported about thirty-one EC II sites in 1972, but the number today is certainly much higher.\textsuperscript{60} Excavated towns produced substantial architectural remains. At Ayia Irini, EC houses are laid out consistently on axes, and their careful masonry stands out.\textsuperscript{61} At Melos, there is evidence for many small and
scattered settlements often with their associated cemeteries, which are however known only from surface material.\(^62\)

The subsequent EC III A and B phases do not appear to have clear representatives in Andros, at least in the survey area. This rarity of sites might be attributed to the unrest in the Aegean that is observed during the EC IIIA period: settlements are few and located on defensible, remote locations.\(^63\)

The only evidence in Andros comes from Plaka, which appears to have been occupied during this period, if the dating I have proposed for the numerous ledge handles belonging to plain jars (probably of the barrel shape type) is correct. I believe that in the case of Plaka, we are dealing with a multi-period settlement comparable, in size and importance to the sites of Ayia Irini and Phylakopi. The coastal location is also an important common feature.

**Summary**

There is very limited evidence for early EC I settlements within the survey area and on the remaining part of the island. It is strange however that sites of the advanced ECI and II have not been recognized with certainty, when we observe expansion of settlement and flourishing communities on other islands. Finally no sites of the EC III A and B periods were found, something compatible with the turmoil and unrest in the Aegean at this phase.
THE MIDDLE CYCLADIC PERIOD (fig. 7)

The history of the MC has been assembled from the results of excavations at Ayia Irini, Phylakopi, Akrotiri and the survey of Melos. The main characteristics of settlement are centralization displayed in the concentration of the population in the larger settlement of the island (or when larger in two or three sites), greater organization of life within the settlements and concern for additional defences. There are then a few only large centers, still more than during the preceding phase, on defensive locations and/or fortified, a situation consistent in all parts of the Cycladic group. Virtually no small sites are known.

The survey in NW Andros did not produce any site that could be one of the MC extensive settlements of an island as large as Andros, which might by analogy, for example with Naxos, have had more than one centre. Only the site of Plaka on the mid W coast is a sizable settlement which appears to have been inhabited also during this period. Plaka would be one of the very few, if not the only large settlement on the island. Its coastal location and the fact that there are traces of earlier and later habitation relates Plaka with the other known sites in the Cyclades.

Kastri I might be a smaller habitation site, on the spot of an earlier (N). The only artefact which could indicate a MC date is a broad sickle element of rhyolite, which is more common in the LC I period, but appears also in MC contexts as in Phylakopi, Ayia Irini and Akrotiri. If Kastri is dated to this period, it might have been associated with Mazareko.

The small size of Mazareko I and the high numbers of fine pottery of the LC material found, suggests that it was a shrine, something that may be true also for the MC phase of occupation. Evidence from this period is however very limited to be interpreted in such a way.

Evidence from nearby Kea shows that MC pottery and
possibly that of the N Cyclades in general, had close connections with the mainland early in the MC, exhibited in the relation of Cycladic Geometric with the mainland Matt painted and Cycladic Dark Burnished with mainland Grey Minyan.\textsuperscript{67} These were gradually overshadowed by Cretan influence observed in ceramic shapes and decoration, and other aspects of material culture of Ayia Irini, period IV.\textsuperscript{68} During the late MC period at Phylakopi pottery becomes increasingly related with Cretan types, while Minoan imports are more numerous.\textsuperscript{69}

Mazareko I produced only two diagnostic sherds of the earlier and later phases of the MC, one of which comes from a bridge-spouted jar (M 19-20) of local fabric, with curvilinear motifs in matt black on a whitish slip. This shape is a favorite Cretan form,\textsuperscript{70} while this type of decoration is related to local Cycladic matt of Ayia Irini and the painted ware of the Geometric period at Phylakopi (see site entry). This sherd is a unique piece of evidence from Andros showing contact with the Cretan culture, either directly or through the other Cycladic islands.

The character of the MC was a product of a long development that began in the EC IIIB period, when a period of consolidation of the Aegean culture succeeded the unrest and dislocations of the immediately previous phase. It gradually led to more sophisticated social organization, economy and contacts within the Aegean, with Crete becoming the influencing party.\textsuperscript{71} The nucleated settlement pattern in the MC period, acted as an accelerating factor, since concentration of population in towns required organization of labour to support the town and ideally to make a profit by exploiting the surplus production. All these trends in the material and non-material culture become clear in the following period.

Summary

The MC period in Andros is represented in the survey area definitely by one site only, which could be a hilltop shrine, Mazareko. A single later MC sherd from this site
shows affinities with Crete and Ayia Irini, indicating that Andros was not isolated during this period.

The promontory of Plaka probably continued to be inhabited during this phase, and in this case Plaka would be a multi-period center comparable to Ayia Irini and Phylakopi.
THE LATE CYCLADIC I PERIOD (fig. 7)

Developments related to the expansion of the Minoan "sphere of influence", which were observed in the MC period, were established and become more evident in the archaeological record of the excavated sites in LC I. Sites in the Cyclades are few, and underwent rebuilding at the end of the previous period or at the very beginning of the LC I.

Specifically in Ayia Irini, period V, there is increasing imitation of Minoan pottery and adoption of Minoan standards. LC I in Ayia Irini experiences a period of change in religion, manifested also by the appearance of the large clay statues in the Temple, early in LM IA, which despite their originality appear to have been influenced by Cretan cult features.

Similar developments are traced in Melos, at Phylakopi early city III, when shapes and decoration in pottery are very much dependent on Cretan prototypes, following the trend of the previous period. Other aspects of material culture, as frescoes and architecture (the building of the "mansion"), and the presence of Linear A tablets show Minoan influence. It is not clear what attracted the interest of Crete in Phylakopi. Exploitation of the obsidian quarries seems unlikely, since their study showed that they were probably exploited directly by the interested parties.

The strong Minoan character of Akrotiri has been interpreted as evidence that the site was a Minoan centre in the Cyclades, probably a similar case with Kythera, much earlier in EM II.

A certain pattern of interactions had been identified within the above pieces of evidence, and was described as the "Western String Network". The core of this theory is that the Cretan and mainland material, which are predominantly found in the Western Cycladic islands and specifically Thera, Melos and Kea, indicate a movement of
trade along this line between Crete, the Cyclades and the mainland, involving the continuous trading and renewal of the cargo of ships, whether these were sailed by Cycladites or Cretans. Equally important in this hypothesis are the following: a) the distribution of mainland pottery in the beginning of the LBA in the those three islands is reduced towards the S; b) high densities of mainland material are found in sites where there is a substantial presence of Minoan elements as well and c) the central and E Cyclades are all characterized by a very small number of finds of mainland or Cretan origin.

We cannot help criticizing that the three sites involved in this theory, are the only which have been thoroughly excavated in the Cyclades. We would expect that larger and more fertile islands, with greater opportunities to participate in trade, did not remain isolated during this period. Indeed, recent excavations at Grotta, Naxos, have revealed part of a sophisticated coastal town, which indicates, together with the associated pottery, that Naxos had close contacts with Crete during the early LC period, and also with the Dodecanese before LC III. There is also evidence from Mikre Vigla in Naxos that the site had contacts with Crete during the MC period and continuing into early LC I. These recent finds from Naxos show that the pattern of interactions in the Aegean was more complex than previously envisaged, already by the beginning of the LC period. It is believed that most of the Cycladic islands were involved in exchange or trading interactions, the nature and frequency of which depended on their resources, needs and geographical location.

Did Andros have any chance in participating in this network? It would be useful to review the finds of the period first. The available evidence for the beginning of the LC comes from Pori (settlement and cemetery), Mazareko I (possible shrine?) while there is some evidence for Kastri I (settlement?); there is a little evidence for a fortified settlement at Maroniti, but this could be later. A characteristic type of pithos decoration appears
both at Mazareko and Pori: applied bands with rope disc pattern. This decoration is common in LC I-II deposits in Ayia Irini and Phylakopi and is also common on LM IA and B Cretan pithoi which appear to have been the prototypes (site entry). The fact that Minoan type of decoration appears on large coarse vessels shows that contacts were not restricted in the field of luxury items, but was intense enough to have influenced coarse pottery as well. There exist therefore indications that Andros was in some way related with the other Cycladic islands and Crete.

The trip from Crete towards the mainland or vice versa could be covered by day-trips with stops at the Western islands, as is suggested by the Western String Network. In this pattern Ayia Irini is conveniently located to appear as the last stop towards the mainland and makes it unlikely that a vessel would be diverted by going to Andros, unless there was good reason. It may also be argued that the inconvenience caused by the usual N currents in the strait of Kaphireus might have been a retraining factor for early navigators. The apparent involvement, however of Naxos in the trade network cast doubts on the Western String theory. It is believed that the available evidence from Andros is a further, though small, hint that there was a more expanded network than that originally assumed.

The geographical location of Andros favours contacts with Euboea and from there with Attica, or even directly with the mainland. Equally possible are the links with Kea and Tenos, which would open the route via the central and W islands. Finally another orientation of contacts may also be considered: that with the N parts of the Aegean. Andros, being at the northernmost edge of the Cycladic group, may have served as a port of call for trips towards the N, although we do not have any evidence for this as yet.

Andros does not possess valuable resources which could be exploited in the Bronze Age, as the obsidian of Melos and the metal ores of Siphnos and possibly also Kea. Min. Minerological studies have shown that the metal ores of
Andros are difficult to extract and, at least by modern standards, not profitable, therefore it appears impossible that the little amount of copper contained in the ores of Andros could be extracted with Bronze Age technology.\textsuperscript{82} Andros would have to participate with other commodities that she could offer as a large and relatively well watered island. Indeed excavations at Phylakopi and Ayia Irini have shown that trade involved perishable commodities as wool and cloth: the study of animal bones from Phylakopi suggests that the economy of Melos was oriented to produce excess of wool, apparently to be exported.\textsuperscript{83} In Ayia Irini the intense and specialized weaving industry that culminated in the LC I period\textsuperscript{84} may be another instance of massive wool production, which was, as in Melos, favoured by the nucleated settlement pattern. Other possible goods include some pottery, probably saffron and unguents from Thera, while there is some indication for a perfume industry at Ayia Irini.\textsuperscript{85}

The inhabitants of Andros would probably exploit in similar ways their land. The main plains of Garión, Korthi and Chora, but also the smaller ones on the NE coast, like Ateni, could produce extra agricultural goods, if cultivated systematically, while a number of low slopes might have been used for olive-trees and viticulture.\textsuperscript{86} Large parts of land are appropriate for animal herding, both cattle and small beasts, which would provide tradable items, like wool, hides.\textsuperscript{87} Bee-keeping was extensive during historical periods of the Andros, until today. There are indications that honey was an important produce in Bronze Age Aegean.\textsuperscript{88} Considering that Andros is today good land for bee-keeping because of its variety of shrubs, it is possible that honey was also produced in the Bronze Age and traded. The list of perishable goods in a ship's cargo could be much longer, but it is hard to detect these commodities in the archaeological record, and almost impossible to identify their provenance.

There appears to have been a general tendency to increase production by appropriate exploitation of
resources; contacts with other lands acted as a positive feedback factor since technical knowledge was also exchanged, which in turn resulted in the improvement of production and efficient processing of goods. The increasing competition coming with trade and possible specialization to cope with it (probably represented by the wool industry in Melos and the weaving industry in Ayia Irini), also attributed positively to the above result.

Assuming that Andros could be self-sufficient in agricultural goods and animal products, the primary needs of the island would be restricted to metal and specifically to lead-silver and copper from Laurion, and possibly copper and tin from Anatolian sources. Other items would be obsidian and rhyolite from Melos (see sickle element from Kastri I) and luxury items (oils, scents, pigments, ivory, gold, precious or fancy stones and similar materials), probably from parts of the E and SE Mediterranean via the islands. The more distant the source of goods, the more indirect and perhaps complicated would be their way of reaching their final destination. Many of these observations apply to the rest of the Bronze Age and also later phases of history of the island.

Summary

Finds from the LC period in Andros are rare, and it is admittedly risky to draw conclusions, when there are approximately one or two sherds only to represent each chronological subdivision. This discussion was rather an effort to place these finds within the known developments in the Aegean, and to demonstrate in which ways the archaeological record of Andros is potentially important in accessing the history of this period.

The LC I is represented in NW Andros by a settlement concealed from the sea, at Pori near Kallivari, and possibly another one at Kastri. The case of Mazareko is not clear: fine wares of later LC suggest that it might have been a sanctuary area, something which may be true also for the early part of LC.
The developments that began in the MC are now better attested by a few diagnostic finds: motifs of Cretan origin are used on pithoi from Mazareko and Pori. This constitutes some evidence to argue that Andros had contacts at least with Crete, directly or indirectly, and was not isolated from the trade network operating in the Aegean.

**THE LC III PERIOD**

LC II experienced the destructions of all palaces in Crete except Knossos, destruction at Phylakopi and the earthquake disaster at Ayia Irini, which ended this period of prosperity. Mycenaean elements in the palace of Knossos\(^9^0\) indicate Mycenaean presence or control of Crete; parallel developments appear in the Cyclades, where an increase in settlement is attested in early LC III.\(^9^1\) At Phylakopi the building of a mainland type megaron in the beginning of early LC III is the most direct manifestation of Mycenaean influence in the political life of the islands.\(^9^2\) Religion adopted Mycenaean elements, which appear in the newly built shrine of Phylakopi\(^9^3\) and the later Mycenaean deposit below the temple of Artemis in Delos.\(^9^4\) The field of ceramics was dominated by pottery in the Mycenaean style by early LC III, suspending any creativity until later phases.\(^9^5\) Finally, during this period of Mycenaean dominance the activities of mainlanders extended impressively beyond the Aegean to the E and W.\(^9^6\)

We have seen that until LC I and probably early LC II, two sites in Andros produced some pottery with Cretan features. At Mazareko locally produced plain kylikes appear next, the shape of which is paralleled in LH IIB and LH IIIA1 pottery. The first characteristic Mycenaean ware comes from the same site and is dated in the LH IIIA1; Mycenaean pottery of the LH IIIA2, LH IIB1 and B2 was also recovered from Mazareko. The stirrup jar from Kalyvari is probably dated in the LH IIB or early C period.

Finds are admittedly few, approximately one sherd
representing every period; they represent however the transition from Minoan types to Mycenean by the beginning of LH III. In fact, all decorated Mycenean wares are imported. The chance finds in the Museum of Andros, which are reported to come from Palaiopolis and Piskopio at Korthi, are dated in the LC IIIA and B periods. These are all miniature versions of a stirrup jar, a two handled straight-sided alavastron and a tankard (see introduction), apparently coming from graves. Decoration consists of fine lines and bands and possibly zig-zag on the first two vessels, while the tankard is plain.

The turmoil that characterized the LH IIIB1 and B2 periods on the mainland, with the eventual destruction of palaces ca.1200, had an impact on the settlements of the Cyclades. On 28 LC settlements reported in 1981 either from surface finds or excavations, 13 are built on high defensible locations. During middle LC, defensive locations are occupied and fortified, with characteristic examples Ayios Andreas in Siphnos and Koukounaries in Paros. At Phylakopi new stronger fortifications are built (phase F) and at Ayia Irini the fortifications of this period are extended to enclose the well of the town, while there is some evidence for similar activities in other sites in Melos and Siphnos. Despite its strong fortifications Koukounaries was fiercely destroyed by the end of this period and Ayios Andreas in Siphnos was abandoned at the same time as the destructions in the mainland. It seems however that the Cyclades were attractive ground for émigrés who had to leave the mainland, and that the renewed prosperity that is attested in islands like Naxos, was a result of their presence.

Finds of the early LC period in Andros come from Mazareko I, Pori and Palaiopolis (chance finds in Museum). These sites are situated on remote or inaccessible locations, although Mazareko seems not to have been a settlement. Local wares are plain. The fragment from a decorated stirrup jar found on this latter site indicates
that Mycenean pottery was still imported in LH IIIB2, a period during which there is a marked reduction of mainland imports in the Cyclades.\textsuperscript{103}

We do not know whether Andros enjoyed any of the renewed prosperity of LC III late, as for example Naxos\textsuperscript{104}, since there are no definite finds from this period. The following facts are considered relevant to the history of Andros during this phase: Attica had escaped the wave of destructions which disturbed Phokis, Boeotia, the Argolid and S Pelopon\-n\-e, and even appears to have received refuges from these regions.\textsuperscript{105} That Attica did not suffer disturbances, is a reassurance that Andros did not either, and that the absence of LC III finds is due to other reasons. Most sites are concentrated on or near the E coast of Attica, maintaining a strong Mycenean character, while occupation in the W had started declining since the beginning of this period, and deteriorated rapidly.\textsuperscript{106} Finds from the rich cemetery of Perati, dated to the LH IIIC middle, show that this Mycenean site had clear contacts with central and SE Aegean, and particularly Naxos and the Dodecanese, through which it probably received material from as far as the E Mediterranean and Egypt.\textsuperscript{107}

The situation in Attica provokes speculation on whether nearby islands received refugees either directly or through Attica, or simply had renewed contacts with Attica. Considering that more distant islands like Naxos attracted Mycenean elements, Andros had also a good chance to become ground for similar activities, due to its geographical location.

The final phase of the Mycenean sequence is generally little known because of the decline of activity and the abandonment or shrinking of settlements within a generally deteriorating situation.\textsuperscript{108} There are no finds of this period known from the survey area in Andros, or from other parts of the island. In fact, the phase from the end of LC III until the Late Protogeometric, which is represented by the earliest pottery from Zagora, remains completely unknown.
Summary

Evidence from the survey area in Andros from LC III comes from two sites, Mazareko and Pori, of which the latter only is definitely a settlement. Chance finds from other parts of the island, Palaiopolis and Piskopio, belong to the earlier part of LC III.

It may not be fortuitous that one of the few diagnostic sherds from Mazareko I belongs to a Mycenean LH IIIB2 vessel: this might be taken as a hint that Andros had contacts with the mainland until the eve of the great destructions, at the end of this phase. This sherd is the latest definite piece of evidence from Mycenean Andros, with the possible exception of a stirrup jar from Kallivari.

Theoretically, Andros would probably have attracted mainlanders who fled to safer lands during the destructions. Her geographical location near the mainland is the only basis for this hypothesis. Finally, and for the same reason, it is very likely that Andros had contacts with the prosperous coastal sites of Attica at the later part of LC IIIC.
THE GEOMETRIC PERIOD

Early Geometric

Evidence for the early Iron Age in Greece, is in general mostly confined to graves, while far fewer settlements are known109. In the mainland where buildings are constructed with mudbrick on stone foundations, the remains are fugitive. The islands on the other hand have abundance of durable building material, so that the whole construction was of stone110.

Already in Chapter III we have discussed the evidence from Andros, which comes from Zagora and Amonakleioi, while the provenance of the "Heidelberg amphora" is unknown. Evidence from all over Greece has shown that there was a severe depopulation by as much as three fourths, from the end of the Mycenean period until the early Iron Age.111 Therefore it is not surprising that the record from Andros is so limited for this period. The possibility however remains that earlier material is not well represented within surface finds, being buried under later deposits. This proved to be the case in Zagora, where the earliest pottery was recovered from a trench along the fortification during the very last excavation season112. Still, the available evidence does not shed light on the beginnings of this town.

Material from the EG period has not been recovered during the survey.

Middle and Late Geometric

The 8th century experiences a general revival: rise in population figures and greater settlement organization, the building of the first temples113, reactivation of commerce and revival in art and letters with the recovery of literacy114. The increase of population and need for raw materials enhanced the colonial movement to the W, and in parallel the concept of the polis started being established.115 In the light of these developments in the
Greek world, Andros appears to follow the general trend.

The sites and locations (fig. 8)

From the survey area there is no definite evidence for sites dated to the Middle Geometric period.

For the Late Geometric period we start having evidence from NW Andros. LG sites located during the survey are the following: Rethi-II is a rural temple, probably associated with a settlement in the area of Zoodochos Pege, nearby\textsuperscript{116}; Kastri-II, produced LG pottery and was possibly related to the security and control of the port; Stauros Peleketes was the largest settlement in the region of Gaurion and Phellos; its cemetery was located to the NE, at Marmouristra; there are few sherds from Maroniti that may be dated in this period. Finally the hilltop of Mazareko at Phellos was probably visited during this period, although finds are rare. Some material from Maroniti may also date from the LG period.

Sites beyond the survey area which have produced LG pottery are the following, and are located on the W coastal zone: (from S to N) Agios Georgios Pharales, a site on the high slopes S of Zagora\textsuperscript{117}, a location between Aprovatou and Agia Eleousa, N of Palaiopolis\textsuperscript{118}, Ypsele Aprovatou and the region of Zoodochos Pege.

All survey sites, continued to be occupied in the Archaic and/or the Classical periods. Mazareko is the only site in the survey area where both Mycenaean and possible Geometric material were found together, although there is no evidence within surface finds to indicate continuous use of the site. This issue would be interesting to clarify in further investigation, considering that Mazareko probably had a shrine during the Late Bronze Age and the function of the site might have remained the same in the historical period. The case of Maroniti is more unclear, since both Mycenaean and Geometric remains are very limited and not securely dated.

Evidence therefore from the W coast of the island is quite rich, suggesting that indeed a revival occurred on
Andros as in the rest of the Aegean. The expansion of habitation units at Zagora towards the end of the 8th century is a clear intra-site indicator of a population increase. Such a development could not be traced within the surface finds of any site during the survey.

Unfortunately, for all sites except Zagora, our knowledge depends on surface material only, which is limited. A fuller study of the Geometric sites of the W coast will shed light on why the W of the island was a favorite ground for settling. It is noticeable that no Geometric site was located or is otherwise known on the coastal zone N of Phellos. This pattern is in contrast with the relatively high number of sites S of Gaurion. There is no definite evidence from the E about Geometric sites, but the picture may change if the area is searched.

Most of the mentioned sites are located on high ground, on or near the coast, with access to bays which could be used as ports. The richness of the surrounding lands is varied. The very locations of the settlements of Zagora and Stauros are hostile, since they are exposed to all weathers and do not have water sources within the inhabited area; the ridge of Stauros in particular has inconvenient rocky ground. Obviously the benefits of natural defenses of these sites were considered of primary importance by their settlers.

Concern for security in the Geometric period is a feature which characterizes sites of the Cyclades, Crete and Ionia. Snodgrass proposed that the reason for the Geometric fortifications of sites in the Aegean islands was the threat of piracy, a phenomenon which seems to have been the cause of prehistoric defenses, and appears to have waned in the Archaic period. Thoucydides’ famous passage on piracy, the supression of which he related to Minos, appears to be relevant to the Iron Age conditions in the Aegean islands, where fortifications were built during this period, as opposed to the mainland, where there seem to have been very few fortifications built in the Geometric period.
The settlement at Stauros Gaurion was occupied from the LG period, close to its full extent, that is the plateau and upper slopes of the ridge. We do not know whether a Geometric fortification preceded the existing fortification which is believed to be Classical. Considering the evidence from other contemporary sites, this would be likely. Stauros, being situated on a high ridge above a good port of Andros, may be compared with the sites of Emporio at Chios and Minoa at Amorgos. They are all situated on similar locations, dominating over a large area and share a similar lay-out: the higher area is used as the acropolis and has the temple, public or other prominent buildings and part of the habitation area which also extends on the slopes. The settlement at Emporio was abandoned by 600, a case parallel, though later, with the abandonment of Zagora. Minoa and Stauros continued to be occupied. It appears that the site at Stauros remained a provincial town, and it certainly never reached the prosperity of Minoa or even Emporio.

For many reasons it is deduced that food production increased during the 8th century. The increased population required greater production, although it might be more realistic to consider that these developments have a positive feedback effect on each other. It is possible that agrarian farming became more systematic in order to cope with the demands of the rising population. Accordingly, the didactic epic of Hesiod, Works and Days dedicates a large part to husbandry and farming, probably reflecting the growing need for food in the late 8th century.

The distribution of known Geometric sites along the W coast, and the absence of sites from the very NW, is compatible with increased importance of agrarian farming, since the very N has rather limited water resources. Despite the fact not one site is located within the best agricultural lands, the slopes near the other sites are also appropriate for cultivation, because they are well watered. For Zagora however it is thought that its
livelihood depended on communication with other areas, rather than agriculture and animal grazing\textsuperscript{126}. Only the settlement at Stauros was in position to exploit the land of a plain.

The pottery

In general little Geometric pottery was recovered during the survey and most of it comes from the site of Stauros and Marmouristra. Very few sherds were found at the other sites, which are much smaller in extent. It has not been possible to identify with certainty particular wares from outside Andros within the sample, something that is probably due to the bad weathering and fragmented condition of the sherds. Consequently the influx of Eretrian pottery attested at Zagora could not be traced within the surface finds from NW Andros. One ware, represented by a few sherds at Marmouristra and one at Kastri, stands out. The rather soft and clear, light coloured fabric and in particular the distinctive chocolate colour of the internal slip and the decoration, have not been exactly paralleled among the exhibited pottery from Zagora at the Museum, although it resembles slightly some Athenian wares (see catalogue of finds). Considering the NW location of the sites, it is likely that there were close contacts with Attica and that there would be a flow of Athenian pottery. Andriot workshops are not well known yet, although there exist areas with earth appropriate for making pots.\textsuperscript{127}

External relations

The large numbers of Euboean pottery at Zagora have been associated with Strabo's information that Eretria controlled Andros, Tenos, Keos and other islands.\textsuperscript{128} Was Zagora the only town related in some way with Eretria, probably as a stopping point for her enterprises in the Aegean\textsuperscript{129}, or had the Euboean power established wider contacts with Andros? It seems that these answers cannot be answered on the basis of the available surface finds from
the NW of the island. We know however that the port of Gaurion was being used, had some installation at its entrance, Kastri, and there was a town on the ridge of Stauros, controlling visually the wider region and coast, with possibly one small "satellite" site, at Maroniti. The coastal location of these and the other sites beyond the survey area in the W coastal zone, probably represents an interest in external contacts.

Summary

The first two phases of the Iron Age in NW Andros remain obscure, since no material from these periods has been recovered during the survey.

In the LG period there is evidence for organized activity and settlement in the same area, with the settlement at Stauros dominating in the region. The smaller sites in the vicinity, the rural temple at Rethi and other LG sites to the S, along the W coast, known either from excavations or surface finds, show that at least the central W coast of Andros was well populated by the 7th century. It has not been possible to identify within the pottery close external relations with a particular area, therefore we do not know whether contacts between Andros and Eretria involved other parts of the island besides Zagora.
THE ARCHAIC PERIOD

Evidence for the Archaic period is slightly richer than from the LG in the survey area. Other parts of the island have more substantial remains, especially Palaiopolis\(^\text{130}\). A general characteristic of all Archaic sites discovered during the survey is that most continued to be occupied in the Classical period. Again it is possible that surface finds are not numerous due to the overlay of later depositions.

The sites (fig. 8)

The sites which produced Archaic material are Rethi-II, Stauros, Maroniti, Kastri-II, Varsamia - upper site, perhaps Varsamia - metochion and the hilltop of Mazareko.

Maroniti produced more finds from this period. It was a small settlement, but its location suggests that it also had to do with the security of Stauros and the road from the plain of Gaurion to Stauros and the valley of Phellos. It has been proposed that the megalithic wall at this site is Mycenean rather than Archaic. If we consider the latter, though slight, possibility, Maroniti might be described as a fortified stronghold.

Finds from Stauros reflect a provincial community, which spread on the W slope of the ridge of Stauros. A temple was probably built during this period, although its architectural traces have not been identified with certainty, and received an abundance of votive offerings in the form of pottery. The presence of a bronze arrowhead in the settlement area might indicate that there had been some military enterprise during this period. At Marmouristra, which is believed to have been the cemetery area of the settlement, relief pithoi have been found which may be associated with burials.

The site of Mazareko produced Archaic pottery, and I would propose again that this area was not a habitation site.
At modern Varsamia was a small rural installation. Similar small sites did not produce clearly diagnostic material and it is not clear whether they belong to the 6th century or 5th century (Koumari-I, East). Paschales' information about an Archaic statue found at Agios Matthaios at Phellos could not be verified.

It is difficult to distinguish which of the sites mentioned by Paschales have produced Archaic material. Ancient Andros, on the location of Palaiopolis, was already inhabited in this period and Ypsele Aprovatou was also occupied. A kouros, now in the museum of Andros, was found in the area of Zaganiari, near Stavropeda\textsuperscript{131}.

The pottery

Particular reference will be made to the relief pithoi recovered from Stauros and Marmouristra. Decorative motifs include the multiple cable, lotus and bud, double anthemia with multiple volutes and other simpler curvilinear or rectilinear patterns. The fabric of some pithoi indicates that they are probably local products: the fabric is red to dark red with large schist and quartz inclusions and large mica. Others are imported, possibly from Naxos. The absence of figured decoration and the small number of finds does not allow comparison with other groups of relief wares, since the other patterns occur widely.

Some of the miniature votive offerings, resembling Corinthian ware from the temple at Stauros and Rethi-II also appear to be local products.

Historical developments

Ancient sources refer to three Andriot colonies in the area of Chalkidike, Akanthos, Sane, Stageiros and one in Thrace, Argilos.\textsuperscript{132} The foundation date of these colonies is usually placed in the mid 7th century.\textsuperscript{133} The creation of the colonies indicates either that the island was overpopulated, or that the political situation was such that it drove some parties abroad\textsuperscript{134}. The
number of the colonies is also remarkable and shows that whatever the cause or causes for emigration, these were strong. Considering the survey results, sites in the NW area were not so numerous to imply overpopulation. With the plain in their vicinity the population in the area of Gaurio would not face a problem of subsistence. We do not know what was the policy of Palaiopolis, which has little land available for cultivation, towards richer areas like Gaurio, but this could become an issue of internal dispute.

Finally, Andros is mentioned to have founded two of its colonies, Akanthos and Sane in cooperation with the Chalkideans, following perhaps the old bonds between the island and Euboea in the previous centuries. The most likely source of more evidence for these events would be Palaiopolis. The survey has not produced enough material to illustrate particular external relationships.

Summary

Sites of the Archaic period discovered during the survey are more numerous than the Geometric sites. The focus is again in the area of Gaurion, the site at Stauros, which was the main settlement of the area. Three other smaller sites in the same region continued to be occupied during this period, of which Maroniti might have been related to the path leading to Phellos and Stauros, and Kastri probably was associated to the control of the port. No other small rural installations have been identified with certainty.
THE CLASSICAL PERIOD

It is from the 5th century onwards that some association might be attempted between the finds in the survey area and actual historical events. Ancient sources referring to Andros are limited, at least for the time being. Future excavations may recover inscriptions which will illustrate further the history of the island.

Another aspect of Andros that is obscure is its ancient topography. The only placenames of Andros mentioned by ancient authors are Andros, the capital, and Gaurion, which is described as a port. Clearly, a large number of placenames in N Andros have Albanian origin (Liediza, Mazareko, to mention two with the characteristic endings -iza and -eiko). Some sites were given names inspired by the presence of antiquities there: Polos is said by the locals to have originated from the word polis, while the placename Helleniko, Hellenika or Hellenikades is the most usual name granted to ancient sites, and in particular those located on fertile fields.

There are hardly any placenames which might have an ancient origin in the survey area. The area N of Marmouristra is called Midaion, a name which itself implies some relation with antiquity, but no archaeological remains were found there. Considering that Classical and later sites are quite numerous in the survey area, it is possible that the abandonment of this area in medieval times and the installation there of Albanians in the 15th century are partly responsible for the loss of ancient placenames.

The sites (fig. 9)

Sites during the 5th and 4th century are more numerous than other periods. There are large settlements, smaller habitation areas and small rural installations, apparently related to agricultural activities.

In the area of Gaurion, the settlement at Stauros remains the major site. The fortification which surrounded the plateau appears to have been built, or rebuilt during
this period. The provision for a stronghold within the enceinte indicates increased concern for security. The architecturally elusive temple continued to receive votive offerings. It is believed that the reason for the absence of dressed marbles has to be looked for in the nearby limekiln. Some burials were probably made outside the S tip of the fortification at the end of the 5th century. Finds dated after the 5th century become rare in the habitation area, but continue to appear in the area associated with the temple.

Maroniti was also occupied during this phase and expanded on the lower slope. As mentioned for the previous centuries, the location of this site indicates that it was related to the security of Stauros. Its finds suggest that it developed into a site with agricultural economy, associated with the nearby plain of the valley.

Other sites in the Gaurion basin did not produce sufficient material to be described as settlements. They constitute rural installations. The inhabitants of another small Classical site in the NW side of the bay (Stou Tzortze) might have been occupied with fishing. Possible farmhouses were identified on the lower slopes of Koumari, and at Tsouka.

At Tsouka a small round tower with courtyard was built on the hilltop, in the 5th century, to be used as storage area, residence and refuge in case of danger. The tower of Tsouka probably belonged to an estate, which comprised part of the plain of Gaurion. This appears to be a typical case of an "agricultural" tower. I did not encounter a similar tower from this period in the survey area, despite that Gaurion and Phellos would be primarily agricultural regions.

Two small rural installations were located, near the cemetery of Kato Gaurio and on the plateau of Charakas.

The hilltop of Mazareko continued to be visited until the end of the 5th century.

In the valley of Phellos, the hilltop of Varsamia (metochion) was probably settled first in the 4th century.
Some 4th century sherds come also from the related site of Hellenikon - Kato Phellos, where a sanctuary area was identified.

In the region of Kalamos no definite Classical finds were recovered. In the very N only one Classical site was located, Goumourada, the economy of which apparently depended on agriculture. It is premature to draw conclusions about central N Andros, since fieldwork was restricted to particular sites in this region. It seems clear however that the NW had few, if any sites during the 5th century.

In the very N, the tower at Tokeli, built in simple, though tight masonry, had a clear purpose, of inspecting the naval channel of Kaphereus. The location of the tower shows, as we have discussed in Chapter IV, that it was a public work and obviously a "military tower", constructed probably in the 5th century.

Historical developments

Andros appears to have been subject to Naxos around 500 BC, although we lack further details.136

Confronted by Darius threat, Andros, as well as most of the Cycladic islands submitted to the Persian monarch in 494, until the naval battle of Salamis in 480.137 Athens asked ransom from the cities and islands for submitting to the enemy, but Andros claimed inability to pay the money because of her poverty. This reply made Themistocles attack the city of Andros. The siege was not successful, but convinced other islands to give money to the Athenians to avoid similar attacks.138 Proximity to Attica can be considered as a negative factor in such situations, since probably this was the reason that Andros was attacked first. We do not know whether Andros truly could not afford to pay the ransom, or simply avoided it. It is likely that both things happened.

The picture assessed from the survey does not imply a thriving countryside, until the 5th century. It is noteworthy that there is hardly any evidence for monumental
architecture in good materials, in a region that has the only marble resources of the island.

Andros became a member of the First Athenian League (established in 478/7). Around 455-440 Athens sent to Andros 250 clerouchoi, while Naxos received 500. The difference in the number of the clerouchoi sent to the two islands suggests that dissatisfaction in Andros was less in relation to Naxos.

The Athenian Tribute Lists for the year 451/450 mention that Andros had to pay 12 talents to the Athenian League. In the year 450/449 Andros payed half the amount, that is 6 talents. The 50% decrease in the tribute of Andros and other states has been related to the clerouchies: a) when settlements were made on the territory of state members, the tribute of these states was reduced, and b) old citizens lost some land and therefore paid less, and new clerouchs contributed in military service.

Certainly the toll on Andros in comparison to other islands was heavy. For the year 450/449 Siphnos paid 3 talents. It is surprising that Andros had to pay for tribute an amount double as high as that of Siphnos, which exploited mines producing precious metals, and the wealth of which is documented by the treasury of the Siphnians at Delphi. We mentioned in the introduction that the ores of Andros have only iron and today are not considered worth exploiting. There has been no research on the ancient mines on Andros to establish their date of operation. Even if the ores were exploited as early as the 5th century, the importance and income from the extracted metals could not equal that of the precious metals of Siphnos and Laurion. Under this perspective, it appears that the wealth of the taxed islands had little to do with the tribute. On the other hand, it is obvious that the taxes were not be proportional to the population of the island. The estimate based on the taxes by Cavaignac, who raises the souls of Andros to 48,000, is an exaggeration, only by considering the size of the island. Furthermore, there is
no evidence from the survey that the countryside was so densely populated at any period. The suggestion that the imposition of a heavy tribute was related to the island’s misgivings with Athens is very likely.

Two burials in the region of Gaurion and Phellos are dated around 430-420. First, a Pheidias shape mug was found on the hill near the church of Gaurion and obviously belongs to a burial. It is dated around 420, and was a very popular shape in Athens during the second half of the 5th century. Second, the amphora and askos found just N of Phellos, also indicate a burial. The shallow askos, was a popular shape in Athens during the last thirty years of the 5th century. Considering that these burials have favorite Athenian vessels for offerings there is a possibility that they belong to Athenians; further evidence would be required to suggest that these people would be the clerouchoi sent from Athens.

Andros followed the Athenian expedition to Corinth in the summer of 425, together with Milesians and Karystians, although we do not know with what force.

In 414 Andros took part in the Sicilian expedition. Thucydides recorded an incident at Sicily of an Andriote Diomilos, who defected from the Athenian army, led 600 Sicilians at Epipolai against the Athenians and was subsequently killed at the battle.

Peisandros in 412 imposed oligarchic regimes in Andros and Kea and took hoplites from both islands and Karystos to help the anti-democratic movement in Athens.

In view of the above adventures in which Andros was involved, probably without her will, and the general discontent against Athens, it is not surprising that the island deserted the Athenian League and joined in 411 the Spartan, receiving a Spartan garrison.

For this rebellious move, Andros faced the anger of Athens in the form of an expedition with 1500 hoplites, 150 cavalry men and 100 ships, led by Alkibiades in the autumn of 407. The force was impressive and indicates that Athens was determined to punish Andros, and also that the
island was considered difficult to handle militarily. Alkibiades sailed to Gaurion. According to Xenophon, the troops disembarked at Gaurion, and attacked the Andriotes and Lakonians who were there, killed some Andriotes and the Lakonians, while the others withdrew to the city. Alkibiades set up a trophy and after staying on the island for a few days, sailed to Samos.\(^{150}\) It is not clear from Xenophon's account whether the battle actually started at Gaurion or at Palaiopolis.

Diodorus notes that Alkibiades took Gaurion and "walled a phrourion". The Andriotes came out of the city, obviously Palaiopolis, together with the Peloponnesian garrison and there was a battle, during which many from the Andriote side were killed, and some of the survivors spread into the countryside, while others withdrew inside the walls.\(^{151}\)

It appears clearly from Diodorus' account that upon the arrival of the Athenians at Gaurion, there was a battle for control of this area. What fort did Alkibiades fortify? We are not told whether this was a new site, or whether he fortified an existing site at Gaurion. This enterprise would anyway require a considerable amount of time.

It is tempting to associate some of the survey finds with the above events, always with a degree of caution because of the inherent risks in the interpretation of survey material.

Two sites in Gaurion were probably involved with the events discussed above, Kastri and Stauros Peleketes. The upper part of the hill of Kastri is surrounded by a wall. Although no Classical material was recovered during the survey (which may be due to later disturbances) there is a possibility that this wall belonged to the phrourion walled by Alkibiades.

Another fortification that could be related to the above events is that of Stauros Peleketes. There is little evidence to date the fortification, but there are indications that it was built, or at least repaired around
the middle of the 5th century. Since it is established by
the survey results that Stauros was the main settlement in
the region of Gaurion where Alkibiades disembarked, it
would be its inhabitants who were involved in battle with
the Athenians, as is suggested by Diodorus' account. We do
not know whether the phrourion fortified by Alki iades in
Diodorus account was related to that of Stauros. Although
the masonry of the fortification at Stauros indicates that
it was built in haste, I suggest, on the basis of the
pottery found in its ruins and historical circumstances
that it it probably already existed before Alkibiades'
attack. Considering the poor relations between Andros and
the mainland, Andriots would have probably taken care of
fortifying a town in the region of the port where the enemy
would disembark.

To return to the comment on Alkibiades' fortification, it is possible and likely that he would not
fortify a new site, but an already existing one. This
issue cannot be clarified on the basis of the available
surface evidence, since Stauros seems to have already been
fortified. We may note however that the location of
Stauros is more appropriate than Kastri for visual control
of the surroundings.

Finally, a small find may be related to these
incidents. In the area S of the fortification wall at
Stauros, a silver Athenian coin was found within sherds of
pithoi, and it was suggested that these finds belong to
burials, made there possibly on some particular occasion.
The coin is dated towards the end of the 5th century. It
is possible that these burials were related to the battle
between the Andriots and the troops of Alkibiades,
although one would expect that the battle probably took
place on the plain.

Alkibiades was not successful in his attack to the
city of Andros, and sailed to Samos, leaving back Konon,
who was later replaced by Phanosthenes. The expedition
however remained unsuccessful, and Alkibiades in particular
was later accused for the failure of this expedition. 152
The incident from the naval battle of Arginouesai in 406 that is described by Xenophon, is indicative of the negative attitude of the Athenians against the Andriots. General Philokles threw overboard Andriots and Corinthians from their ships, an act for which he was later executed at Aigos Potamoi by order of Lyssandros. 153

It is not clear with which developments the tower at Tokeli was related. Tower installations in S Euboea have been related to the control of the strait of Kaphereus during the Peloponnesian war. 154 The minimal evidence on which the date of the construction of the tower at Tokeli is based is problematic. The tower, once built, would serve similar purposes related to the traffic in the naval route of Kaphereus. Still we do not know whether this work was a project of the state of Andros or of the Athenians. This could be clarified only by new evidence, which probably remains buried in the capital of the island.

There are no direct references on Andros for the following years. In 394 Konon removed the Spartan harmostes for the islands. Andros joined the Second Athenian League (founded in 378) and had to accept an Athenian garrison in 357. 155 In 376 the Spartan navy blockaded the grain supply of Athens, by sailing around Aigina, Kea and Andros. 156

An inscription honouring the Athenian Antidotos for the supply of grain to Andros suggests that the island could not support its population. 157

Andros participated on the side of the Athenians in the battle of Chaironia, after which the island came under Macedonian control. 158

Summary

The history of Andros during the 5th century is characterized by the poor relations between the island and Athens, a situation which was aggravated by the proximity of the island to Attica.

The archaeological record as emerging from the results of the survey, suggests that Gaurion acquired importance, being the natural port of the island and the
place which would be first attacked by outsiders. This would explain the absence of substantial classical remains in the area around the port, and the existence of a large fortified settlement at Stauros. This site was probably directly related to the incident with Alkibiades. Concern for the security of the island from the N and the control of the naval route is indicated by the presence of the tower at Tokeli.
THE HELLENISTIC PERIOD

The sites (fig. 10)

The number of sites during the Hellenistic period is higher than during the previous periods, although it is possible that some are situated on earlier remains. Two main areas of interest were studied, Phellos and Kalamos towards Kaminaki.

There was no large settlement during this period in the area of Gaurion. The settlement at Stauros has not produced pottery dated after the 4th century. The only late 4th and 3rd century pottery recovered comes from the area of the temple, or its deposit area. It is therefore suggested that the inhabitants of Stauros moved from the inhospitable ridge of Pelekete to the plain, but continued to visit for some time the sanctuary at Stauros. This case is reminiscent of Zagora, only that there the temple was built after the abandonment of the town, and was subsequently visited.

Three inscriptions at houses in Gaurio, if they were actually found there would indicate the presence of a settlement during the Hellenistic period. This site is probably buried under the modern settlement, since there was no characteristic material from this period, except for the unguentarium at Marmara, which could represent the cemetery of the settlement.

The settlement of Maroniti continued to be occupied.

Phellos is much richer and Varsamia was the major settlement there, built on the hill and the adjacent plain. It is not clear whether the site was fortified. Dressed marbles incorporated in the church there, show that the site had public buildings. In the inner part of the plain, at Hellenikon - Kato Phellos was a sanctuary, contemporary with the settlement of Varsamia. Unfortunately very few architectural remains of the actual structures exist. The well built terraces which survive, are considered to be
reliable indicators that the structures they supported were public buildings.

The finds at Hellenikon - Ano Phellos are difficult to date and interpret, because of the rarity of pottery or other diagnostic finds. The long terrace and the few scattered pieces of dressed marble indicate here the presence of public buildings. Judging by the similarity of the masonry of the terrace to those at Kaminaki which are dated in the Hellenistic period, it was suggested that this site has been occupied or used since the Hellenistic period.

On the convenient route from Phellos to the NW, at Agia Marina, a small tower was built probably in the 4th century and was in use during the Hellenistic period. Considering its location it was suggested that it was originally intended to be a road station and/or guard.

In the area of Kalamos in the NW we observe an apparently new site on the hilltop of Polos. Its character is not clear; there were public buildings, and possibly a settlement around, exploiting the surrounding plateaus and slopes. Polos is one of the few sites where building material in marble from several buildings has survived, giving the impression of a wealthy community.

On the slope of Kaminaki, the organization of the area with carefully built terraces and the fine pottery found in the vicinity, suggest the presence of another rural sanctuary. This site has been tentatively associated with Polos, since no other contemporary settlements are known in the region.

On the way from Kalamos to Kaminaki is the tower of Choreza, built within the fourth century. The impressive architecture of this tower suggests that it was an ambitious public work, for a variety of defensive purposes, which might have been protection from a seaward danger, safeguarding of the route from Kalamos to Kaminaki, and of the surrounding agricultural land. The architecture and more precisely the masonry of the tower of Choreza is unique in NW Andros, and possibly on the whole island,
judging from Paschales' notes and my own experience. In contrast, this masonry is quite common in the mainland and other islands. It is possible that this particular architecture represents some outside influence on the island, and particularly the Macedonian.

The finds in the NW region, from Kalamos to Kaminaki show a development of this area from the 4th century onwards. The importance of this area seems to be associated with its proximity with the mainland. To take this idea further, the development of this part of Andros could be part of a state policy related to the fact that the ancient town of the island was much further to the S, and could not have direct control of the N.

In the region of Kallivari, Goumourada and Mortrera were settled sometime in the Hellenistic period; they both represent agricultural communities.

Monuments and sculpture

It is remarkable that there is little evidence for monuments in good architecture, or sculpture from the Classical or the following periods in NW Andros. Some sculptures had been transferred to the Monastery of Zoodochos Pege, but little is known about their exact provenance. Many were taken there by the Father Superior of the Monastery, Athanasios Volikas, who apparently had some interest to preserve the antiquities found by farmers. These pieces have not been studied and remain unpublished, while there is a list of them in the monastery. It would be reasonable to assume that these antiquities come from N Andros.

Regarding structures in marble, it is possible that these were not numerous. Some building material in marble was found in the areas of Stauros, Varsamia, Hellenikon - Ano Phellos, Kalamos and some traces in Kaminaki. No specific architectural members however were known or discovered during the survey at sites which appear to have public buildings, as for example Stauros, Hellenikon - Kato Phellos and Kaminaki. Two things may have occurred, either
that the buildings of these sanctuaries were in humble materials (schist), or that marble has been subsequently destroyed. Although it is hard to imagine that whole buildings have been reduced to lime, the presence of limekilns near sites (Stauros), or the very placename of sites (Kaminaki) suggest that this is a reasonable explanation. The reuse of ancient building material in churches has been attested in several cases, and to various degrees. Either large amounts of material were used (material from Polos used at the church of Ae-Giannes at Kalamos), or some members were selected for specific uses in the church and in particular for the Holy Altar (Hellenikon – Ano Phellos).

The later uses of marble therefore might have altered the picture of some sites to a considerable extent. It is difficult however to attribute the relative poverty of the countryside in good architecture solely to the above post-depositional activities. It probably also reflects limited resources.

The quarries

Finally, the destruction of the main quarries of Phellos in the area of Pelekete, has eliminated most traces of early quarrying and we cannot therefore identify the beginnings of the exploitation of this resource. The small quarries C and D could be as early as Archaic, and the same could be true for the N mica schist quarries of Strongyle. The little building material in marble, and marble stands found in Ano Phellos, appear to come from the quarries of Pelekete. The building material in Kalamos looks similar to the marble of Pelekete, but this would require geological study to establish.

Quarrying therefore was part of the economy of Phellos probably since the Archaic period. We do not know however the circumstances under which the quarries operated, whether they operated continuously or in order to provide material for building projects in progress, and what sort of benefits the inhabitants of Phellos enjoyed.
from the exploitation of this resource. Also, it would be interesting to know whether the apparent prosperity of Phellos was related to the quarries. We can only assume that the human force required for the operation of the quarries would come from the same region.

It seems that Palaiopolis received the bulk of this material, but this will have to be verified in the current excavations there. It seems unlikely that marble was exported from Andros, since neighbouring lands (Tenos, Attica) have this resource in better quality.

**Historical developments**

Antigonos Monophthalmos secured control over the Aegean in the years 315-314, and organized the Cyclades under the Koinon ton Nesioton, based in Delos. Andros probably acquired some importance thanks to her location on one side of the strait of Kaphereus, since Antigonos took measures to ensure the grain supply. We know that Andros was a member of the League from an inscription mentioning Andriotes among the theoroi chosen by the League to go to Alexandria, ca. 280.

In 309 Polemaios from Phrygia, nephew of Antigonos, acted independently and took over the Cyclades. Ptolemy of Egypt took the opportunity to intervene and is reported to have sailed with a large force from Myndos and "liberated Andros and drove out the garrison", on his way to the mainland. It appears that this garrison was imposed there by Polemaios, rather than Antigonos himself, who did not follow a policy of direct control over his territories. This seems to have been only an incident and Andros returned to Antigonos.

Andros and the other Cycladic islands came under permanent Ptolemaic control in the years 288-287, and a garrison was established there before the revolt in Athens in 286. This is the first known demonstration of Ptolemaic expansion in the Aegean, involving Andros, which could serve as a blocking zone between the islands and lands occupied by Demetrios Poliorcetes.
After the victory of Antigonos Gonatas of Macedonia over Ptolemy the Second in the battle of Kos, the Cyclades were conceded to Antigonos in 255, who installed a garrison on Andros. The islands returned to the Ptolemies until ca. 246, when Antigonos defeated the fleet of Ptolemy the Third, in the naval battle of Andros and most of the Cyclades come under Macedonian rule.

During the Second Macedonian war, we are informed by Livy that Andros, as well as Paros and Cythnos continued to be under Macedonian rule, had garrisons, and were not received into the Rhodian alliance (ca. 200).

The various garrisons imposed by the Hellenistic rulers would be established in the town of Andros, and it is there that we should expect to recover some detectable archaeological evidence for them. In the case of Polemaios' garrison, which was on the island only temporarily, traces would be minimal if any, but in the case of Ptolemy there may be more to expect. The use of Andros by the Ptolemies as a "buffer zone" between the rising Macedonian kingdom and Ptolemaic possessions due to the island's strategic location, would probably involve the control of the strait of Kaphereus, the creation of military installations in NW Andros. It is possible that the towers at Tokeli and Choreza, which are believed to be public works related to the security of the N region, were related to these developments. Although we have seen that Tokeli was apparently built in the 5th century it is possible that it would be used during this period.

The tower of Choreza cannot be readily associated with control of the sea. The masonry of this tower is compatible with the the 4th century developments in military architecture, promoted by changes in warfare techniques during the emergence of the Macedonian power and the subsequent wars between the Hellenistic kingdoms (see Chapter IV). Even if the purpose of this tower is not as obvious as in the case of Tokeli, it may be related to an increased interest in controlling the N lands and by
implication the N seas.

Haselberger has noticed similarities between a group of large defensive towers in the Cyclades and Pergamene defences.\textsuperscript{171} It seems that we cannot date the tower of Choreza so late, but this observation acknowledges the possibility of external factors influencing the construction of towers in the Aegean.

Osborne in his study of towers in Thasos, has suggested that towers represent a deliberate display of wealth and/or security by the individual or group of individuals who constructed them.\textsuperscript{172} This theory has wider application to public works and in the case of Andros it seems that there was an effort to show was safe and strong through the building of towers near the coast, and possibly also through other public works, like the sanctuary at Kaminaki.

The exact time of the construction of these structures certainly requires further investigation which is beyond the possibilities of a survey. It must be reminded here that "single towers" have not been the ground of excavations, possibly because their often impressive architectural features alone provoke discussion, regardless of the absence of other finds, or the possibility to make other associations, as mining in Siphnos. Consequently the various suggestions on their chronology are based on architectural features and surface finds. Neither features constitute always safe time indicators, because a) few types of masonry are characteristic of particular periods, and b) original material may be obscured by later artefacts, since many well-constructed towers continued to be used over long periods of time.

Finally, a functional typology of towers does not necessarily have inherent chronological implications. Ashton suggests that towers in Siphnos are grouped in four chronological phases, which are related to a particular function, or group of functions.\textsuperscript{171} This relationship however cannot always be reversed so as to date towers according to their function.
During the Second Macedonian War, Andros suffered greatly from the attack of the Romans in 199. The Roman and Pergamene fleets sailed from Piraeus to Andros, which was then controlled by Philip the 5th, and anchored at Gaurion. The Andriotes were warned to surrender but refused, claiming that it was the Macedonian garrison that held the town. The Romans apparently had the necessary equipment for a siege and managed to take the city, while the people retreated to the acropolis for three days, after which time they surrendered. There was a harsh agreement, that the Andriots and the garrison were transferred to Delion in Boeotia bearing only one garment, apparently in return for their lives. 174

From the sources we know only that the city of Andros suffered heavily from this attack. Nothing is known about the rest of the island. It appears from Livy’s description that the Roman and Pergamene fleet did not face any resistance in the area of Gaurion where they anchored. Those who were exiled to Boeotia were probably the inhabitants of Palaiopolis only, there is no reference to the other parts of Andros. The exiling of the whole population of the island would be impossible. The Hellenistic sites in the NW (Varsamia and Hellenikon - Kato Phellos, Hellenikon - Ano Phellos, Polos and Kaminaki) were still occupied during the 2nd century BC, apparently uninterrupted from the previous century. This continuity suggests that life in the NW was not disrupted for a long period, if at all.

The island was subsequently granted to Attalus of Pergamon in exchange of his help during this operation. The islands come to Rome after the death of the last king of Pergamon, Attalus III in 133 BC.

Summary

During the Hellenistic period the Aegean become the ground of dispute between Alexander’s successors. Andros being between the territories of the Macedonian and the Ptolemaic kingdom seems to have experienced these
developments to a greater extent than the other islands.

The archaeological record in the NW part of the island suggests a shift of settlements from the area of Gaurio to Phellos and the development of the NW region, in the area of Kalamos. This is believed to be related to the increasing importance of the island as a buffer zone between the two kingdoms and the importance of the strait of Kaphereus during the continuous circulation of their navies in the Aegean.

It appears that the capture of the city of Andros in 199 and the intimidation of its population did not affect the NW countryside, where we observe continuity of occupation in all sites.
OBSERVATIONS ON THE ROMAN PERIOD

The sites (fig. 11)

Sites in the valley of Gaurio cover chronologically the whole extent of the Roman period, down to the 6th century.

The main settlement was in the lower E plain. There are indications for baths, other public buildings, fish tanks, and the pottery suggests occupation of the site until the 5th-6th centuries AD.

Further inland on the plain, Xerokampos - Agios Savvas-II were occupied during the first centuries AD. A smaller site was situated on the lower slope of Ano Gaurion, around the main church, but its extent and chronology have not been defined with certainty; it appears to be earlier than the other sites.

Finally, there was a small installation in the NW part of the bay, Stou Tzorlze, which is dated to the 5th and 6th centuries AD.

At Phellos, the settlement of Varsamia continued to be occupied in the first centuries AD, and what is believed to be a sanctuary at Hellenikon-Kato Phellos continued to be visited, although Roman material is less than Hellenistic. The date of Hellenikon in Ano Phellos is uncertain, but it seems that it covers the beginning of the Roman period.

The two main mica-schist quarries of Phellos, Trochalia and Strongyle are dated to the Roman or early Christian period, and both operated for the production of similar material, monolithic columns or long column drums.

At Agia Marina in Mermygies during the first centuries AD, a small agricultural site with an olive press was established in the vicinity of the earlier small tower, which was apparently altered to serve a new purpose.

Further N, Polos continued to be occupied and probably expanded then lower on the E slopes. It is not clear whether the press beds belong to this or the
preceding period.

The tower of Choreza continued to attract people, who settled also on the flattish land of the vicinity. It is possible that the function of the tower changed.

A quite large settlement occupied the slopes of Liediza, where two press beds were found, indicating possibly the agricultural orientation of the economy of the site.

There are poor and scattered archaeological traces in the region of Chartes, probably from the early Roman period, indicating that there was Roman activity in this small valley. A small mica-schist quarry operated also in the area, but its chronology is incertain.

In the area of Kallivari, Goumourada was probably occupied in the early Roman period and Mortrera until the 5th or 6th century AD.

Historical developments

Andros and the other islands remained under the Province of Asia, which was organized upon the bequest Attalus III of his territories to Rome.175

During the 2nd and 1st centuries the Cyclades develop close relationships with Asia, something which is seen in the exchange of judges within the province.176 Andros is known from inscriptions to have judges to Peparethos, Karystos, and Adramytteion.177

During the first century the Aegean was ravaged by piracy and wars between Rome and Mithridates. With the First Mithridatic war the king of Pontus conquered the islands178, which do not recover from the catastrophic effects of the wars179.

In 42 after the battle at Philippoi, Antonius gives Andros, Naxos, Tenos and Myndos to the Rhodians, in exchange for their cooperation. The islands remained under Rhodes until Octavian restored Roman rule180.

Etienne suggests that in the following period the Cyclades enjoyed the Pax Romana, but not the Abundantia, probably because of the system of exploitation by Rome.181 Still Strabo describes Andros and Naxos as important
islands of his times (mid 1st century BC - early 1st century AD). Andros and the other Cycladic islands are known to have received exiled Romans.\textsuperscript{182}

During Nero's reign (54-68), Andros was among the places from where pieces of art were taken to be transported to Rome.\textsuperscript{183}

The presence of six dedicatory inscriptions for Hadrian indicate that the island probably benefited from the policies of this Roman Emperor.\textsuperscript{184}

Andriots are mentioned in literature of the beginning of the 2nd century to be among Greeks who have migrated to Rome, a movement which implies poor conditions in the motherland.\textsuperscript{185}

At the end of the 3rd century Diocletian organized the Provincia Insularum, comprising the Aegean islands and Asia Minor, with Rhodes as a centre.\textsuperscript{186}

Finally, in a 4th century work, Andriots are mentioned to honour Apollo by having only fire burning on the altar, because they could not afford to make a proper sacrifice.\textsuperscript{187}

It is difficult to associate the developments in the Roman period with the evidence from the survey, because sites are dated in general terms and there are no specific sources for this area of the island. We can only therefore observe trends in the settlement pattern and general characteristics.

The number of sites and their size in relation to other periods, shows that the countryside in the NW was well populated, although we have to bear in mind that these sites are spread chronologically over seven centuries. Sites are located within or near pockets of agricultural land. The frequent presence of press beds in Hellenistic and Roman sites in NW Andros, indicates that the cultivation of olive-trees and possibly also of vines was widespread.

The inland location of many sites and the fact that they are not visible from the sea probably reflects some
concern for security against the piratic raids and wars in the Aegean between Rome and Macedonia and then Mithridates.

The development of a large settlement around the bay of Gaurio is greater than in any other period, but cannot be closely dated. The settlement at Varsamia at Phellos is possibly related to the operation of the quarries of Trochalia and Strongyle. It appears that little of the material from the quarries remained in the NW region, and most was transported probably to Palaiopolis.

The architectural remains are of poor materials except for the finds at Gaurio, indicating the poor conditions of the period that are suggested by the sources.
NOTES FOR THE CONCLUSIONS OF THE PREHISTORIC PERIOD

1. This typology has been used to classify sites in the Melos survey and has been adopted in my work as most comprehensive.

2. These observations are based on data from the register of archaeological sites on Melos: Cherry 1982b.

3. Renfrew 1972, 236-44.

4. Skins were used until recently as water recipients in the countryside before the advent of plastic.


7. Ibid., 161.

8. Paschales 1925, 598.

9. Most obvious is the absence of town planning, special purpose buildings, and other factors which have been identified as indicators of urbanism; Konsola 1984, 52-53.

10. See register of sites on Melos, n.2.

11. Prehistoric remains at Paoura were identified by the American team working in Kea; Caskey 1971, 392; Caskey 1972, 358; Coleman 1977, 156-8 (Appendix 6).

12. Sykamias was also located by the same team; Caskey 1972, 358; Coleman 1977, 158 (Appendix 6).


15. The only type of wild animal living today on Andros, which is capable of provoking some disaster to poultry, is a type of marten. The study of animal bones from Geometric Zagora did not identify wild animals other than some birds and hare; Cambitoglou 1981, 81- 82. At Saliagos, fox was the only wild animal present; Higgs, Clegg and Kinnes 1968.

16. Cherry 1982a, 21-22: fig. 2.2 for Neolithic sites and fig. 2.3 for Early Bronze Age sites. The same preference appears in Naxos, although the survey did not cover large inland regions; Treuil 1983, 62: fig. 1.
17. For general observations on Late Paleolithic and Mesolithic coastlines see Van Andel and Shackleton 1982; for the Bronze Age see Rapp and Kraft 1978. Studies of particular regions have started appearing lately in the bibliography; for the Argolid see Van Andel and Lianos 1983; Van Andel and Sutton 1987.


19. Evans and Renfrew 1968, 78-80; Renfrew, J.M., Greenwood and Whitehead 1968. Also, other studies have shown that around 9000 BP fertile water was flowing from the Dardanelles towards central Aegean; Van Andel and Sutton 1987, 50-51 and 55, fig. 24.


21. Sherrat 1981; Cherry 1981 and 1985. The actual practice of making secondary dairy products in a recent study is proved to have occurred earlier than Sherrat proposes; Russel 1988, 29-32.


28. Myrtos is 0.5km away from a water source. Wagstaff notes that it is not uncommon for settlements to be located at some distance away from their domestic water supply; Wagstaff 1972, 282.


30. Caskey has suggested that the lower part of the well at Ayia Irini was constructed at least as early as the building of the major fortifications of the town in the sixteenth century; Caskey 1971, 365-7. At Phylakopi a well was lined with earthenware cylinders; Atkinson et al. 1904, 58.

31. Caskey 1971, 365. There is little and indefinite evidence for cisterns in the Bronze Age; Barber 1987, 44. Furthermore cement which is required to water-proof built reservoirs, was not in use during these periods.

32. I note the example of Kea, which is today a
primarily dry island and where most needs are met by using rainwater collected reservoirs.

33. See above n.9.


35. Van Andel and Runnels 1988, mainly 242-3 on their theory on emporia.


37. One fifth of the sites have mainly obsidian and a little pottery: Cherry and Torrence 1984, 14.

38. Runnels 1982, on chipped stone in historical contexts.


40. Francthi: Perlès 1973; Lerna: Runnels 1985; Diamant’s article (1977) is also very useful for arrowheads, particularly in bringing together all evidence. For further publications see discussions of sites.


42. Torrence identified this class in Ayia Irini, period V; Torrence 1986.

43. Cherry 1985, 28.


45. Renfrew 1972, 513.


47. Cherry 1981, 50-52, fig. 3; Cherry 1985, 17, fig. 2-5; see also relevant bibliography in the latter article.


50. See above n.11.

51. See above n.47.

52. Renfrew 1972, 247.

53. Several features from Kephala are "directly relevant to EC culture": stone-built cist graves, terracotta

54. Cherry and Torrence 1982, 24, 32.


56. Observations from data in Cherry 1982a, 24; Cherry 1982b.

57. Van Andel and Runnels 1987, 82-83.

58. Barber 1987, 53; Barber and MacGillivray 1980 for the whole period.

59. See the example of graves goods from Kamini: Paschales 1925, 604.

60. Renfrew 1972, Appendix I, fig. 1.2: sites of the 3rd millenium BC.


62. Refrew 1982, 35-7; Cherry 1982, 22: fig. 2.3.

63. Note for example the cases of fortified sites at Kastri in Syros: Bossert 1967; Panormos in Naxos: Doumas 1964; Mount Kynthos in Delos: Mac Gillivray 1980; see also Barber 1987, 54-57.

64. Despite the intensity of the Melos survey, no new MC sites were discovered and this can be considered as a verification of the nucleated settlement pattern. Cherry 1982a, 22: fig. 2.4; Renfrew 1982, 37-38. Bintliff considers that nucleation is a general phenomenon in the Aegean islands during the MC period; Bintliff 1977 I, 64. The increase in cattle attested from the study of animal bones in Phylakopi phase II and III is believed to indicate a nucleated settlement pattern, where traction animals were required for working at a distance from the main settlement; Gamble 1982, 168-9; Barber 260: n.33.


66. Barber 1978, 374; 1987, 252: n.16 for references on MC sites in relation to their defensive location, and/or fortifications. The most impressive fortifications known are the Great Fortifications of Ayia Irini, period V, which show an enormous concern to ensure the security of the site; Davis 1986, 8-15, 101; pls. 3-9.
67. Caskey 1972, 375-83; Davis 1986, 84-86 on mainland imports and non-minoanising pottery.

68. This is seen in imitations of the early MM style in local pottery.
Davis 1986, 86-88.
Davis 1984, for changes in Ayia Irini related to the Minoan expansion, and discussion on the presence of Minoan type terracotta loomweights in period IV.


70. Barber 1987, 149.

71. Ibid., 154-6, and chapter 7: "The Cretan Connection".

72. see above n.65.


74. Renfrew 1978, 411-2, 409: fig. 12; Barber 1981, 2-3, 4-6; 1982;

75. Torrence 1982, 220.

76. Barber 1987, 199; see also Doumas 1983.

77. Coldstream and Huxley 1972, particularly the site on Kastri and discussion of pottery. Coldstream and Huxley 1984, for the discussion on the reasons for regarding Kythera as a Minoan colony.
The case of Kythera is showing the strong interest of Cretans to establish contacts.

78. Davis 1979, presents the Western String Network theory, further discussed in Cherry and Davis 1982.


80. Barber and Hadjianastasiou 1989, 140.

81. Siphnos has the most conclusive evidence for Bronze Age mining at Ayios Sostis. Gale 1980, 188-9.
Barber 1987, 106-112, for a discussion of the evidence and implications on Bronze Age metallurgy.

82. see introduction.

Halstead suggests that a nucleated settlement pattern, like that observed in the MC period, would favor sheep-raising for wool; Halstead 1981.
84. Davis 1984, 161-3.

85. Davis 1979, 154-6.

86. It seems that olive became an economically significant cultivar mainly in the Late Bronze Age; Runnels and Hansen 1987, 306-8. The numerous by-products of olives would be tradable items.

87. It is possible that Andros, thanks to its topography and water resources could keep a number of animals perhaps sufficient to provide manure for productive cultivation, and therefore increased production. We note here that Andros has been self-sufficient in modern periods with high population numbers. The problem of keeping animals is more acute in smaller islands; Gamble 1982, 161.


89. It is more likely that Andros was supplied from Laurion metals, both because of the proximity and the richness of the ores. The lead-silver ores of Siphnos and oxidized copper ores of Kythnos were very limited in comparison to the Laurion resources. On the provenance of metals in Bronze Age Cyclades see: Gale and Stos-Gale 1981 and 1985.


92. Atkinson et al. 1904, 55-58; Renfrew 1982, 37-40, on the transition to nucleation and the development of central authority.


95. Characteristic is the case of Ayia Irini; Cummer and Schofield 1984, 146.


Cyclopean fortifications.


101. See above n.99.


104. See for example finds from the cemetery of Aplomata in Naxos, which constitute one of the most impressive demonstrations of the last Mycenean prosperity; Kardara 1977.

105. See above note 97.


107. Ibid., 115-6; Iakovidis 1969-70, on the cemetery of Perati.

108. Vermeule 1964, Appendix III: Building activities and Destruction Levels in the Late Mycenean World, 323-5. At Ayia Irini occupation was restricted to the area of the Temple: Caskey, M.E. 1984.
NOTES FOR THE CONCLUSIONS ON THE HISTORICAL PERIOD

109. On the number of Geometric sites see Snodgrass 1971, 364-7; Coldstream 1977, 369 n. 2.

110. More advanced building techniques were used in the Cyclades and Crete; quality in construction in Crete was in direct relation to the strength of Bronze Age survival; Snodgrass 1971, 370-3. In the absence of excavated Bronze Age sites on Andros, and considering the disruption in the central Aegean at the end of the 2nd millennium, it is unlikely that life in the Geometric period benefited from Mycenean civilization.

111. Coldstream 1968, 369.


114. Ibid., 295-302.

115. Snodgrass 1988, describes the techniques of emergence of the Greek polis.

116. The temple at Rethi-II has been already discussed in relation to contemporary temples in Chapter III, where it seemed more appropriate.

117. Information about LG material at Pharales was communicated to me by D. Polemes.

118. I thank Richard Catling for informing me about this material, which he had located while working in Andros.

119. The expansion of house units in Zagora is an example of this development: Green 1990, compare fig. 3, area of covered living space at Zagora by date to fig. 1, number of Kerameikos burials by
date, to see a parallel trend in expansion of houses and population increase.

120. Snodgrass 1986.

121. Thoucydides, Hellenika, I. 4, 5.

122. Snodgrass 1986, 126-8, discussing the fact that Geometric fortifications are a phenomenon of the islands and costal cities in Asia Minor.


128. Strabo Geographia, 10. 1.10.


130. Sauciuc 1914; Paschales 1925, 554-84 for a description of ancient features at Palaiopolis.

131. Paschales 1925, 593-4 and figure in 594.

132. Akanthos: Thucydides, Historia IV, 84. 1, on the establishment of the colony; Strabo, Geographia VIII, 31.
Sane: Thucydides, Historia IV, 109. 3.
Stageiros: Thucydides, Historia V, 6. 1.
Argilos: Thucydides, Historia IV, 103. 3; for recent excavations in the cemetery of Argilos see Grammenos and Tiverios 1990.
See also Hammond 1959, 656, on the chronology of the colonies.

133. Hammond 1959, 656.


136. Aristagoras, the governor of Miletus provoked Artaphernes of Sardeis to campaign against Naxos to gain control of the island and its dependencies, Paros and Andros; Herodotus, Historia V, 31. 2.

137. Ibid., IV, 48-49.


139. Plutarchus, Pericles II. 6.

140. Meritt et al. 1939, 230-1.

141. Gomme 1945, 276, 374.

142. Meritt et al. 1939, catalogue.

143. Cavaignac 1913, 16, 18.


145. Thucydides, Historia IV, 42. 1.

146. Ibid., VII, 57. 4.

147. Ibid., VI, 96-97.

148. Ibid., VIII, 69. 3.

149. Diodorus Siculus, XIII, 69.

150. Xenophon, Hellenika I, 4. 21-23

151. Diodorus Siculus, XIII, 69.
152. Plutarchus, _Alkibiades_ XXXV, 1.

153. Xenophon, _Hellenika_ II, 1. 31-32.


155. Paschales 1925, 360-1, publishes the inscription and related references to earlier publications.

156. Ibid., IV, 4. 61.


158. Lykourgos, _Kata Leokrate_ 45.

159. The date of 314-314 is believed to be more likely for the establishment of the League; _CAH_, vol. VII, part I, 48.

160. _IG_, XII, 7, 506.

161. Diodorus Siculus, XX, 37. 1.

162. Siebert, 188 n.41.

163. Most of the Aegean islands did not have garrisons, according to the available evidence, but were still under Ptolemaic control and visited by Ptolemaic officials; Billows 1990, 220-5, 242-3.

164. Ibid., 222-1, n.31.

165. The garrison on Andros is mentioned in the honorary decree for Kallias from the Athenian Agora; decree published in Shear 1978, 2-4.

166. Shear 1978, 17-8; Etienne 1990, 90 n.15.

167. Plutarch, _Aratus_, 12.
168. See Etienne 1990, 92, on the theories on the chronology of the battle of Andros; the date of 246 or 245 suggested by Burazelis prevails as the most likely; Burazelis, 1982.

169. The Rhodians were granted Athenian citizenship and appear to lead a new alliance of islanders; Titus Livius, XXXI, 15. 6.

170. In general garrisons were manned by mercenaries who would often be accompanied by their families, slaves and possessions; Bagnall 1976, 220.


172. Osborne 19886.


174. Titus Livius, XXXI, 15, 45.

175. CAH, vol. IX, 102, 142.

176. Etienne 1990, 127-8, and particularly on Andros: 130.

177. For Peparethos: IG XII, Suppl., 258. For Carystos: IG XII, 9, 903. For Adramytteion, where Andriot. judges were honoured: IG, XII 5, 722; Suppl. XII, 127-8.

178. Plutarchus, Sylla, 11.


181. Etienne 1990, 151.

182. Paschales has collected the references to exiled Romans in Andros; Paschales 1925, 416-23.
183. Dion Chrysostomos, XXXI, 151.


185. Juvenalis, Satires III, 70.

186. CAH, vol. XII, 389-96.