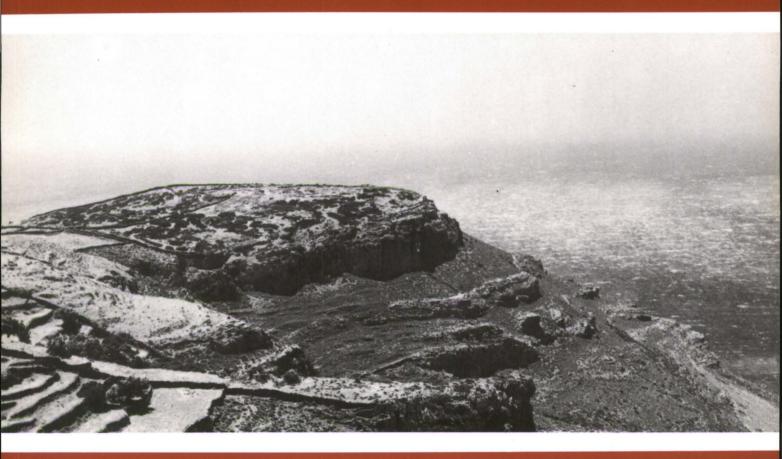
# Zagora 1

ON THE ISLAND OF ANDROS, GREECE



Cambitoglou Coulton Birmingham Green

THE ARCHAEOLOGICAL SOCIETY AT ATHENS

### Zagora 1

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## Zagora 1

## EXCAVATION OF A GEOMETRIC TOWN ON THE ISLAND OF ANDROS

EXCAVATION SEASON 1967; STUDY SEASON 1968-1969

ALEXANDER CAMBITOGLOU
J.J. COULTON
JUDY BIRMINGHAM
J.R. GREEN



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#### **Preface**

The expedition to Andros was started as a six-year project financed by the Athens Archaeological Society, the University of Sydney, the Australian Research Grants Committee and the Sydney Association for Classical Archaeology. On behalf of the expedition I wish to thank these bodies for their help but more especially the Inspector General and the Director of Antiquities of Greece, the Council and Staff of the Athens Archaeological Society, the Australian Embassy in Athens, the Royal Greek Embassy in Canberra and Chandris Lines (Aust.) Pty Ltd. I am especially indebted for help to Professor Nicolas Kontoleon, to whom I owe my first acquaintance with the site and to Dr Nicolas Zapheiropoulos, to whom I owe a good deal of useful information about the excavations on the site carried out by him in 1960. The expedition would not have been possible without the assistance of the Administration of the University of Sydney, the help of the Council and members of the Sydney Association for Classical Archaeology, and especially of the Chairman, Mr A. T. George, and on the island of Andros without the help of Mr George Semertzakis, Ektaktos Epimeletes of Antiquities in the island. Thanks are also due to the Council of The Australian Academy of the Humanities for undertaking to publish this report and to the University of Sydney for a grant from the W. H. and Elizabeth M. Deane Archaeology Fund.

The present preliminary report aims at giving briefly the results of the first excavation season at Zagora between 31 May and 8 August 1967 and the first study season at the base of the expedition between 17 December 1968 and 28 February 1969.

The team of the excavation season comprised as academic members: myself as the director, Fellow of the Athens Archaeological Society and Professor of Archaeology at the University of Sydney, Miss Judy Birmingham, University of Sydney, assistant director (directing site excavations), and Dr J. J. Coulton, Lecturer in Classics, Australian National University (architect of the expedition); also Mrs Elizabeth B. Cameron (records); Mr R. K. Harding (photography); Mr F. C. G. Dungey (conservation); Messrs I. D. McPhee and J. P. Wade (students); Miss Robyn Tracey (graduate); Miss Mary Burness (student) and Miss Phillipa Rudder (volunteer). With the exception of Dr Coulton, Miss Burness (a student of the University of Athens) and Miss Rudder, all other members of the team came from the University of Sydney. In addition to myself the team of the study season comprised Dr J. R. Green (pottery), Mrs Elizabeth B. Cameron (records), Mr Zacharias Kanakis (conservationist of the Athens Archaeological Society) and Messrs R. R. Darling and J. P. Wade (postgraduate students of the University of Sydney). Mr Wade is responsible for the photographs and slides of the finds taken during the study season.

The base of the expedition is at Menites, a village outside the capital of the island called Andros, but more commonly known as Chora. The finds are also stored at Menites.

ALEXANDER CAMBITOGLOU

Note: This reprinted edition was made possible thanks to the support of the Archaeological Society at Athens and the assistance of Mr Basil Goulandris and Mrs Eliza Goulandris. A list of errata is added at the end of the book.

#### **Abbreviations**

Arch. Deltion 'Αρχαιολογικόν Δελτίον. Τόμος 16 (1960): Χρονικά

Annuario Annuario della Scuola Archeologica di Atene

BCH Bulletin de Correspondance Hellénique

BSA Annual of the British School at Athens

Coldstream J. N. Coldstream, Greek Geometric Pottery. A survey of ten local styles and their

chronology, Methuen, London 1968

Emporio John Boardman, Excavations in Chios 1952-1955. Greek Emporio, BSA Suppl.

vol., No. 6, Thames and Hudson, London 1967

Graham J. W. Graham, The Palaces of Crete, Princeton University Press, Princeton

1962

Lefkandi M. Popham and L. H. Sackett (eds), Excavations at Lefkandi, Euboea 1964-66.

Preliminary Report, Thames and Hudson, London 1968

Palace of Nestor C. W. Blegen, The Palace of Nestor at Pylos in Western Messenia, Vol. I,

Princeton University Press, Princeton 1966

Paschalis D. P. Paschalis, 'H "Ανδρος, Vol. I, Hestia, Athens 1925

PGP V. R. d'A. Desborough, Protogeometric Pottery, Clarendon Press, Oxford 1952

Praktika Πρακτικά της εν 'Αθήναις 'Αρχαιολογικης 'Εταιρείας

Sauciuc Theophil Sauciuc, 'Andros' Sonderschriften des Österreichischen Archäologischen

Institutes in Wien, Vol. VIII, 1914

#### I Introduction: choice of site (Maps I, II, and III)

Andros, which is the second largest island of the Cyclades and at a distance of approximately 60 kilometres from the north-east coast of Attica is, archaeologically speaking, comparatively unexplored. (See Map I.) Its proximity to the other northern islands of the Cyclades (more especially Tenos) as well as to Euboea and to Athens and, above all, its position on a natural route between mainland Greece and Asia Minor made the island attractive as a field of archaeological research. Zagora is a rocky promontory on the west coast of the island and the ancient settlement is built on it (Maps II and III, Fig. 3). The existence of the settlement has long been known among the Andriotes, and the historian Paschalis, in his history of the island, mentions walls of houses projecting above ground level as well as a fortification wall on the neck of the promontory. 4

In 1899 two graves were found by peasants working on their fields near the promontory with ' $\kappa\tau\epsilon\rho i\sigma\mu\alpha\tau\alpha$ ' in them including a number of vases now displayed in the Museum of Andros.<sup>5</sup> According to Desborough the graves may have been cist burials and the ' $\kappa\tau\epsilon\rho i\sigma\mu\alpha\tau\alpha$ ', apart from the vases, bronze pins and rings.<sup>6</sup>

<sup>2</sup> On the grouping of Andros with Tenos, Delos, Rheneia and Mykonos see PGP, pp. 127ff.

<sup>4</sup> Paschalis, p. 73.

<sup>5</sup> Paschalis, p. 585; Sauciuc, pp. 46ff.

'no. 154, χάλκινον σκευάριον κωνικόν

no. 155, χάλκινος δακτύλιος άπλοῦς ἄνευ ἄλλης διακοσμήσεως

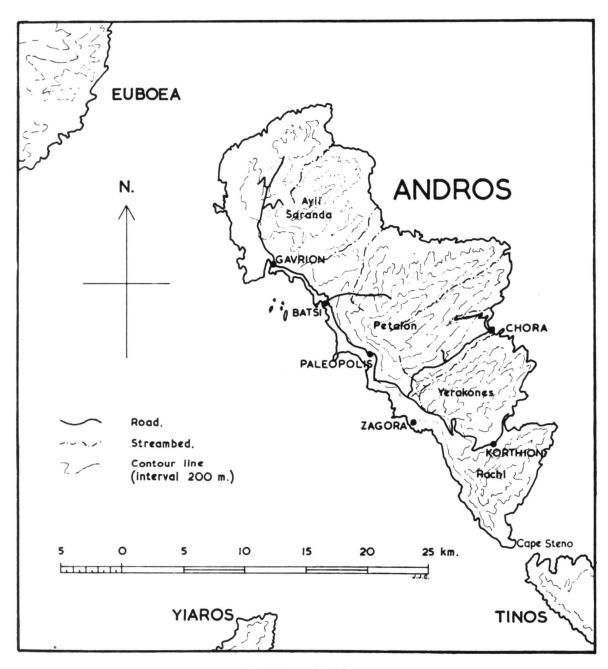
no. 156, χαλκίνου δακτυλίου κλάσμα έκ τοῦ περὶ τὴν σφενδόνην έξογκώματος'

and the remark that these objects 'were found in a grave in the field of B. Pantazis or Poriotes in Zagora of Korthion'. The area is now the property of John Mendrinos and is also called 'Karyophylli'. Mendrinos

<sup>&</sup>lt;sup>1</sup> The usual way of travelling from Athens to the island is by car or bus to Raphina and then by ferry-boat to one of the two little harbour villages on the west coast of the island, Gavrion or Batsi.

Samos and to cities on the west coast of Asia Minor as far north as Smyrna. Other routes were probably followed through the Southern Cyclades, to the Dodecanese and the southern colonies of the west coast of Asia Minor. It is worth noting that both Zagora and the later city of Andros (Paleopolis) lay on the west coast of the island, which is nearer to the main centres of the mainland and to Euboea, while Chora, the modern capital, lies on the east coast. Dr D. I. Polemis informs us that there are no sources available about the date of the foundation of Chora. Venetian documents occasionally refer to the 'castle on the island' and this is usually taken to be the castle off Chora. If this interpretation is correct then Chora may have been founded by the Venetians early in the thirteenth century after the island was taken by them. On the other hand the Venetians may well have found an existing Byzantine castle and town and may have simply repaired the fortification. I. K. Boyiatzides argued that the town was indeed Byzantine, its foundation going back to the fourth century ('Glossa Kai Laographia Tes Nesou Androu' in Andriaka Chronika, vol. 4 (1951), 233-6). Although plausible, this argument is by no means proved to be correct by the sources.

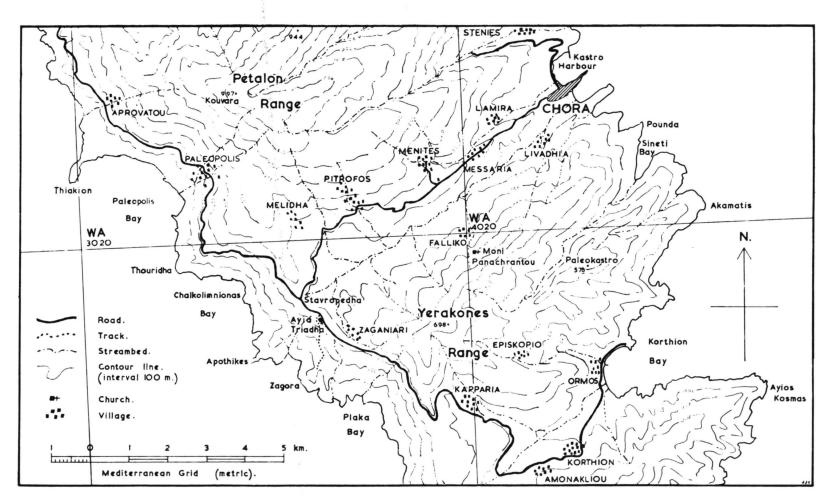
<sup>&</sup>lt;sup>6</sup> PGP, pp. 128-9. Mr Semertzakis kindly informed us that he found the following relevant entries in the inventory:



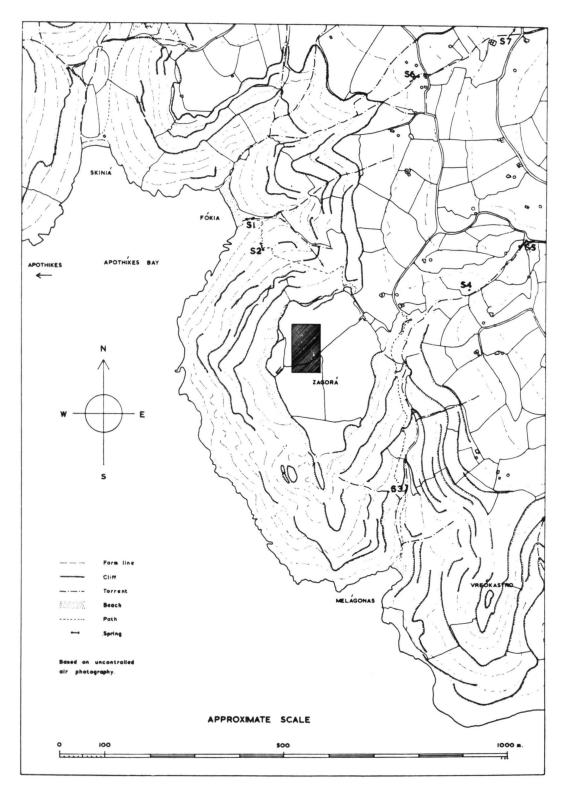
I Map of Andros

In more recent years the settlement caught the attention of Professor Nicolas Kontoleon while he was Ephor of Antiquities of the Cyclades, and he was the first archaeologist to

informed us that during the 1950s another grave was discovered in his field, which from his description, must have been a child's grave containing several pots. These were unfortunately broken or lost. One should note that Zagora belongs to the administrative district of Korthion.



II Map of the valley of Messaria



III Map showing the promontory of Zagora between the double Bay of Apothikes to the north and the Bay of Melagonas to the south

realize its importance.<sup>7</sup> As a result of his efforts excavations were carried out at Zagora in 1960 under his successor in the Ephorate of the Cyclades, Dr Nicolas Zapheiropoulos.<sup>8</sup> These excavations showed that at least part of the settlement dated mainly from the Geometric period and that the whole settlement probably came to an abrupt end early in the seventh century BC, which made the site attractive since it suggested the existence of reasonably well-preserved foundations of a town from the time of Homer, untampered with by later buildings.

The archaeological evidence about the architecture of the Geometric period is limited since most of our information comes from individual graves, cemeteries, and sanctuaries. This is true not only of Attica and Athens itself, which as the pottery suggests was already the most important centre of Early Iron Age Greece, but also of other districts on the mainland and certainly of the islands in the Aegean which are of more direct interest to us. 10

Looked at in such a context Zagora seemed to be a promising site and it was hoped that its systematic excavation would answer problems related not only to domestic architecture, but also to the layout and fortifications of the towns as well as to temple architecture. Finally it was hoped that enough pottery would turn up which would allow the excavators to study the cultural relation of the island with mainland Greece and the rest of the Aegean and provide the basis for a more secure dating of Early Iron Age Greek pottery in general.

<sup>&</sup>lt;sup>7</sup> The settlement is merely mentioned by Sauciuc as having been spotted earlier by Miliarakis. He himself did not visit the site (Sauciuc, p. 37).

<sup>8</sup> Arch. Deltion, 248-9.

<sup>9</sup> Coldstream, pp. 399ff.

<sup>&</sup>lt;sup>10</sup> The evidence on the architecture of the Geometric period is now usefully put together by Heinrich Drerup in Griechische Baukunst in geometrischer Zeit in the Archaeologia Homerica series.

## II Description of the site and its surroundings in relation to the inhabitants of the settlement (Maps I, II, and III)

ALEXANDER CAMBITOGLOU and J. J. COULTON

From the point of view of harbours the west coast of Andros can be roughly divided into two halves (Map I). The northern half has three harbours named after the villages near them. The first two, Gavrion and Batsi, provide more or less adequate shelter to relatively large vessels and are used nowadays by the ferry-boats running between the island and the north-east coast of Attica. The third harbour of Paleopolis is not used very often at present, although it served the ancient city of Andros, and was no doubt the main harbour of the island in Antiquity. The southern half has no harbour worth mentioning, but only little bays separated from each other by small promontories. Although these bays are useless to large modern vessels, they offered adequate shelter no doubt to the comparatively small vessels of the Geometric and early Archaic periods. Zagora is one of these promontories between Paleopolis and the south end of the island opposite Tenos, known as Cape 'Stenon'.1

In addition to the three villages mentioned above there are three other important ones, near the east coast: Stenies, Andros or Chora (which, being the capital of the island is a little larger), and Korthion. Each of them is built in one of the three fertile valleys which run, broadly speaking, from west to east, and are very important to the inhabitants of an island which is mostly barren.

All six villages are linked by a sealed road which starts at Gavrion, runs south through Batsi and Paleopolis and extends as far as Stavropeda where it forks into two branches, one leading through the middle valley of Messaria to Chora and then on to Stenies, the other leading through the third, southernmost valley to Korthion and the little harbour village, Ormos.

Stavropeda is a saddle in the centre of the island south of the mountain range of Petalon and Mount Kouvara which supply the waters that make Messaria a fertile valley (Map II). It is the only point through which one can easily move from the west coast to the east and is therefore the natural crossroads of the whole island. Messaria is the most important valley, between the ranges of Petalon to the north and Gerakones to the south, starting at Stavropeda and running down toward the east as far as Chora.

<sup>&</sup>lt;sup>1</sup> The name 'Zagora' is not Greek but Slavonic and means 'on the other side of the mountains'. In Greece the name is found also in other districts; for example at Pelion in Thessaly where there is a village called Zagora. On Andros the name is used by the inhabitants for the promontory itself, but also to indicate a larger area around it. In the present report the name is used in a narrow sense indicating only the promontory on which the archaeological site is found (Paschalis, p. 72).

Along the west coast the mountains north and south of Stavropeda drop abruptly toward the sea. Their slope is divided into two distinct parts separated from each other by a line of continuous cliffs, the top of which is at a height of approximately 150m. above sea level. This line runs more or less continuously along the coast for several kilometres. Above it the slope is about 22° and more or less steady and uninterrupted. Below it the ground drops gradually in alternating stages of a slight slope of the ground and vertical cliff (Fig. 3).

During heavy rain the torrents run from the upper part of the mountain slope over the intervening cliffs to the lower part of the slope and through it to the sea. The waters fall with a good deal of power over the cliffs so that with the passing of years precipitous ravines were formed which alternate with flat-topped cliff-walled headlands.

The difference of landscape between the upper and lower part of the slope along the west coast has a geological basis. The upper part consists mostly of micaceous schist which is soft, while the layers of sheer cliff and the headlands consist of hard grey marble. Below the main layer of marble, which has a thickness of about 30m., there are alternate thinner strata of schist and marble. In the course of centuries the lower strata of schist have weathered to a slope of about 28°, while the layers of marble have a vertical precipitous profile interrupted only in places.

The promontory of Zagora is south of Stavropeda and at a walking distance of about twenty-five to thirty minutes from it<sup>2</sup> (Maps II and III; Fig. 3). Although Andros is the second largest Cycladic island it is relatively small so that the inhabitants of the settlement must have been familiar with the harbours of the north half of the west coast as well as those of the east coast. It is therefore reasonable to assume that they settled on the promontory for defensive reasons only. The settlement was built on the plateau at the top of the headland which consists of grey marble and covers an area of about  $15\frac{1}{2}$  acres or 6.7 hectares. The highest point is toward the west, approximately 163m. above sea level; the plateau slopes a little toward its east end, where the height is about 150m. above sea level. The south-west end is rather flat. The settlement was naturally fortified since it was surrounded mostly by sheer cliff and since the plateau is easily accessible only at the north-east end through a saddle which links the headland with the rest of the island. From the air the plateau resembles the shape of a wedge with the flat edge toward the north and the point toward the south<sup>4</sup> (Fig. 2).

To the north of Zagora is the Bay of Apothikes which is in reality a double bay protected from the north wind by a small headland bearing the same name but also known as Strophilas (Map III). The two small bays forming Apothikes are called Phokia and Skinia. To the south of Zagora is the Bay of Melagonas which is considerably smaller and is protected from the south by the small promontory Kakovolos, whose top is known as

<sup>&</sup>lt;sup>2</sup> The members of the expedition travelled daily by car to Ayia Triada, a small chapel south of the crossroads at Stavropeda and not far from it. The path leading to Zagora starts at this point and follows, roughly speaking, a north to south direction. With the exception of a few precipitous stretches the walking is not difficult since the path skirts the slopes of the hills.

<sup>&</sup>lt;sup>3</sup> The sites of Karphi in Crete and Emporio in Chios were no doubt chosen by their inhabitants for the same reason.

<sup>&</sup>lt;sup>4</sup> The distance between the north side and the south end of the site is about 330m.; the distance between west and east sides is approximately 250m.

Vreokastro.<sup>5</sup> If the inhabitants of the promontory were settlers from the mainland, they probably landed in one of the two bays when they first arrived which they also used later on for their communication with the outside world<sup>6</sup> or a shelter for their boats during the period of the 'ἐτησίαι ἄνεμοι', nowadays known as the 'meltemia'.<sup>7</sup>

In the Melagonas Bay are remnants of a wall projecting from a bank of earth at a distance of approximately 3m. above the south end of the beach. This wall is likely to be contemporary with the settlement since its width and construction resemble those of the walls excavated on the plateau. Furthermore, the soil on either side is relatively rich in pottery sherds, which are on the whole rare in the two bays.

The present path leading to Zagora from the little bay of Phokia climbs steeply up the northern slope of the promontory. The path from Melagonas follows the narrow gully between Zagora and Vreokastro. The two paths end at the neck of the Zagora headland outside the fortification wall (Map III). During the Geometric period the northern path, or rather a branch of it, may have led directly from the northern slope into the fortified area. Such a branch was no doubt blocked in time of enemy attacks.

The saddle through which the promontory is linked with the rest of the island forms a kind of segment of the periphery of the settlement some 140m. long (Fig. 2). This segment is not naturally fortified. The remains of an ancient wall were found here, which will be studied during the second excavating season. The exact width of the ancient wall is not certain at present; its visible parts show that it consists mainly of schist blocks<sup>8</sup> (Fig. 4). At its south-east end the wall recedes toward the south-west forming a right angle perhaps made necessary by the steep slope at this point or the presence of a gate<sup>9</sup> (Plan I); to the north it extends beyond the north-west end of the saddle, where it continues to the west for about 60m., to a point where the precipice itself becomes deep enough to provide sufficient protection.<sup>10</sup> The westward extension of the wall along the north side of the plateau aimed at blocking the entrance to the settlement by a natural ledge which projects from the north rocky precipice. It is 3m. wide toward the east and gradually narrows to about 2m. toward the west.

There are two more weak points in the defensive system of the settlement: a kind of semicircular depression in the north-west corner of the plateau, through which the enemy could climb to the settlement, and the south end of the plateau where, instead of a precipice, there is a slope which although steep is not insurmountable (Fig. 2).

- <sup>5</sup> There is some confusion and uncertainty about the use of these names. In the present report their use is based on combined information taken from the British military map 'Aegean Islands, 1:50,000, Andros South', Paschalis' book (pp. 72-3) and the local people.
- <sup>6</sup> In addition to pots of island manufacture during the 1967 campaign Attic, Corinthian, and Euboean vases were also found on the site. In his report of the 1960 excavations Dr Zapheiropoulos mentions the discovery in front of the temple of fragments of Attic black-figure vases, clearly showing that the worship of the deity continued after the excavated part of the settlement was abandoned around 700 BG (Arch. Deltion, 249).
- <sup>7</sup> During the 1967 campaign it was noticed that the fishing boats during the 'meltemia' took refuge in the Bay of Apothikes rather than that of Melagonas.
- <sup>8</sup> These seem to be less carefully dressed than the schist blocks in the walls of the temple and the houses of the settlement.
- 9 The quality of the masonry at this point is better and the stone blocks are grey marble and larger.
- <sup>10</sup> The lower part only of this wall survives. Because of the abrupt slope toward the north and the earth filling to the south only the north face is visible. The preserved stones are irregular and of different sizes.

The settlement at Zagora could not survive without water. So far, however, no wells, springs or reservoirs have been found within the fortified area and the existence of wells or springs should also be excluded because of the nature of the rock and the great height of the promontory.

Most Cycladic islands are short of sufficient quantities of water even in our own days and because of this shortage the roofs of the houses are often used for the collection of rain water canalized by means of pipes and stored in reservoirs in the basements.<sup>11</sup> In modern Andros the most densely populated areas are well supplied with spring water and therefore such storage is not widely practised.

Since no reservoirs have so far been found in the excavated area of Zagora one may assume that rain water was collected from the roofs of houses into pithoi of which fragments were found all over the site. Such storage would have been necessary at all times, but especially during enemy attacks. In normal times, however, we can assume that all drinking water was brought to the settlement from a small number of springs in the area around the promontory. Three of them, numbers S4, S5, and S7 (Map III) are especially worth mentioning. S4 is the spring nearest to the settlement and runs in the valley east of it in the area where the ancient cemetery probably was. It is a partly natural hollow approximately 1.5m. under the surface of the ground which collects water flowing from a crack behind. This spring dries during the summer. S5 is a little higher in the same valley; it does not dry in the summer although it produces only about one litre of water per minute. Spring S7 is richer, producing during the summer about 1.7 litres per minute; it is however at a much greater distance from the settlement. A fourth spring, S3, is in the gully between Zagora and Vreokastro which leads to Melagonas Bay; during the summer this spring becomes a mere trickle delivering no more than one-third of a litre per minute. All these springs however are considerably richer during the winter.

Although the problem has not as yet been systematically studied there is no doubt that there were springs in this area in ancient times. The water supply from them, however, must have been difficult and its shortage must have contributed greatly to the abandonment of the settlement. It is also possible that the island was more densely wooded in Antiquity and that the springs around Zagora were richer. With the passing of the centuries, however, the quantity of water was perhaps reduced because of the layers of marble which are mostly under those of schist, so that the drainage of the water is underground. In addition, underground channels were possibly blocked as a result of earthquakes and the water was canalized to other districts along the coast.

The small headland of Kakovolos south of Zagora has already been mentioned above. Paschalis discusses Vreokastro, 12 the plateau at the top of Kakovolos, because of an

<sup>&</sup>lt;sup>11</sup> Especially in Syros.

<sup>12</sup> The name is used in relation to a number of medieval fortresses (κάστρα) on the Greek islands. The most important variants are: Evriokastro, Ovriokastro, Evreokastro, Ovreokastro and Vriyiokastro. The etymology of the word is uncertain. Phaidon Koukoules (Lexikographikon Archeion, Vol. 6, pp. 318-20) suggests that the first compound is the word 'βρύον' and not the word 'Έβραῖος'. If this interpretation is correct then 'Vreokastro' is the moss covered fortress (see Papyros-Larousse, Vol. 5, p. 964). If the first compound is 'Έβραῖος' then 'Vreokastro' is a corruption of the word 'Evraiokastro' meaning 'the Jews' fortress'. In relation to the second possibility it is worth mentioning the toponymic 'Evraiika' between Korthion and

IO ZAGORA 1

inscription found on it which, although ancient, is later than the Geometric period.<sup>13</sup> He also mentions traces of ancient habitation, the remains of a wall surrounding the fortress and a second wall, as well as traces of other ruins. Finally he mentions a staircase on the rock of which six steps remain. The inscription was obviously found outside the wall, southwest of it.<sup>14</sup>

The approximate dimensions of the plateau are 39m. from north to south and 17m. from west to east. This area is naturally fortified by a surrounding cliff about 5m. high. A systematic exploration of the site was impossible during the 1967 campaign although the members of the expedition noticed traces of grey marble walls, pottery sherds not easily identifiable and bits of chert and perhaps also of obsidian. Such a small area could not have been used at any time as a regular settlement, but rather as an observation post and a defensive tower for the protection of the bay below.

The two graves found near the settlement in 1899 (see p. 1) contained pots, some of which are Protogeometric in style and could be dated as early as 900 BC but are more likely later (see p. 1). These graves were obviously found in the valley east of the settlement, near springs S4 and S5 (Map III) not far from the path leading from Ayia Triada to Zagora (see p. 7, note 2). No doubt they were connected with the settlement, since among the pottery finds from it there are several Protogeometric sherds which are, stylistically speaking, contemporary with the Protogeometric vases from the burials. 16

If the cemetery was in the valley where springs S4 and S5 are—and it is difficult to imagine where else it could be—its exploration will not be easy. The existence of water has turned the valley into a small oasis of cultivated land, while the whole area is covered by terraces.

At the present stage of investigation the number of inhabitants of the settlement cannot be even approximately estimated. There are indications that in a large portion of the settlement the buildings were as dense as in the portion already excavated. The population could easily amount to over a thousand.

By the standards of the period the economy was rather sophisticated, since there is evidence that the people were not mere agriculturalists and cattle-raisers. Fishing and trade (as the imported pottery shows) were important because of the proximity to the sea. Samples of carbon, soil, bone and shell from the 1967 excavations are being analysed and will in due course no doubt throw light on the question of the diet of the Zagoritans.

The importance of the site from the defence point of view has already been emphasized. To the natural fortification of the cliff the inhabitants added the wall on the neck of the promontory. Nevertheless one might suppose, particularly in view of the difficulties of the

Ormos indicating the existence of a Jewish community on the island from an early date (Paschalis, pp. 444-5 and pp. 672-3).

<sup>Paschalis, p. 549.
Paschalis, pp. 595-6.</sup> 

<sup>&</sup>lt;sup>15</sup> In a letter dated 22 March 1968 Mr Desborough has kindly expressed the following views about the vases from Zagora illustrated in PGP, Plate 16. 'There is of course no doubt that 149 and 151 are Geometric . . . 147 is extremely difficult to date and I wouldn't like to make a guess. 150 is surely very close to Attic PG and I would think perhaps PG/EG c.900 or even a little earlier. The skyphos 145 could be anywhere between 900 and 825, I think, But 45 and 146 I would be prepared to put between 900 and 850.'

<sup>&</sup>lt;sup>16</sup> See p. 60.

water supply, that the settlement was built not to withstand long siege, but rather sudden attacks by pirates<sup>17</sup> or raiding parties.<sup>18</sup> The danger of piracy for the towns of the Early Iron Age is discussed by Thucydides in the first book of his *History* in which he also gives a brief description of ancient fortified cities (I,5). This description obviously refers to the period of the Zagora settlement and agrees with the general principle followed in its building (I,7). Some representations mainly on Attic Geometric vases give at times the impression of the occurrence during this period of important sea battles. But it is more likely that the vase-painters depicted poetic sea battles of heroic character rather than real contemporary naval clashes. The settlement of Zagora could not have resisted an organized invasion with the help of a large fleet.<sup>19</sup>

In this respect its fortification might be compared to that of Emporio, where, however, the wall built around the acropolis was considerably weaker and therefore utterly inadequate for defence against strong enemy attacks. The acropolis of Emporio served as refuge for the 'townsfolk from the hillslopes'<sup>20</sup> against small piratical groups from the sea, while at Zagora the whole settlement was apparently within the fortification wall. In contrast to the wall of Emporio, the wall of Old Smyrna during the Geometric period was apparently much stronger;<sup>21</sup> unlike the islanders, the inhabitants of that city feared strong attacks from inland.<sup>22</sup>

On the basis of the archaeological evidence available at present the inhabitants of Zagora may have abandoned their promontory in the beginning of the seventh century, taking with them their most precious possessions. The reason for this move is not certain at present. It may have been caused by an earthquake which damaged their houses and reduced the quantity of water in the nearby springs<sup>23</sup> or they may have decided to abandon their settlement not because of an act of God but rather because of the general improvement of conditions in the Aegean, which made the refuge offered by the barren and windy headland less necessary. Under these new conditions the most important factor in choosing a site for a new town would have been the proximity of a harbour and water. Such a harbour with copious springs near it is that of Paleopolis, a little further north than Zagora, near which the city of Andros flourished in Classical and later times, founded perhaps by the inhabitants of the Geometric settlement who migrated there.

<sup>&</sup>lt;sup>17</sup> Odyssey III, 73ff.; IX, 252; also Hymn to Apollo, 452ff.

<sup>18</sup> The small quantity of chance finds from the Geometric and early Archaic periods on the island perhaps suggests that Andros was sparsely populated in the Early Iron Age. Therefore the Zagoritans must have felt secure from enemy attacks originating on the island itself. A guard was perhaps permanently placed at Stavropeda to supervise the district and warn the authorities of the settlement against the appearance of enemy forces in the Messaria valley or moving from the north along the west coast. Another guard might have been stationed south of Zaganiari to check any possible move of enemy forces coming from the valley of Korthion.

<sup>&</sup>lt;sup>19</sup> See T. B. L. Webster, 'Homer on Attic Geometric Vases', BSA, 1955, 43; also J. S. Morrison and R. T. Williams, Greek Oared Ships, 900-322 B.C., Cambridge University Press, London 1968, pp. 41-2.

<sup>&</sup>lt;sup>20</sup> Emporio, p. 5.

<sup>&</sup>lt;sup>21</sup> R. V. Nicholls, BSA, 1958-9, 39ff., 114ff.

The first recorded attack against Smyrna is that of Gyges during the first half of the seventh century, Herodotus I, 14; J. M. Cook, BSA, 1958-9, 14.

<sup>&</sup>lt;sup>23</sup> Such an earthquake seems to have destroyed Smyrna at the end of the Geometric period, BSA, 1958-9, 14.

As far as we know the area of Paleopolis has not yielded up to now finds as early as the beginning of the seventh century. It is hoped that it will be explored in the near future with the specific target of determining the date of its first inhabitants.

#### III Description of the excavated buildings

#### ALEXANDER CAMBITOGLOU and J. J. COULTON

In this chapter a description will follow of the buildings excavated by Dr Zapheiropoulos in 1960 as well as those excavated by us in 1967. A discussion of the stratification problems of the 1967 excavations is included in Chapter VII. The term 'unit' is used for both rooms covered by roofs and for courtyards. Individual units are referred to by a capital letter of the Latin alphabet which indicates the areas of 10,000 sq.m. into which the plateau and its surroundings have been divided (Plan I), followed by the number of the unit. Individual walls of units are referred to in the same way with the addition at the end of one of the four letters N, S, E, W used instead of the words north, south, east, and west. Thus D1E means the east wall of unit 1 in area D, while H18W means the west wall of unit 18 in area H (Plans II, III, and IV). The units excavated during 1960 are numbered from D1 to D14.¹ To these should be added units E1 and E2 near the fortification wall (Plan I) and the temple which consists of units H30 and H31 and was only explored approximately down to floor level. The units excavated during 1967 are numbered D15 to D16 and H17 to H29 (Plans I, II, III, and IV).

In the following paragraphs distinction is made between older and later walls. A wall is considered later than another when it butts against it: for example, D3N is considered to be later than D1E. However, the difference in time between such walls cannot be determined on architectural grounds alone and could be minimal—a few days or even a few hours. Nevertheless in many cases differences in walling techniques do suggest that successive walls belong to different building programmes.

#### Rooms and courtyards

Units D1-D16, H17-H29 and E1 and E2 (Plans I, II, III, and IV)

Units D1 to D4 form a group and will therefore be examined together. In contrast to the buildings south of this group the walls here were built mainly of marble. The west wall of room D1 consists of two parts; while the south part is built of schist, the north part is built of marble (Fig. 5). This difference is due to the fact that the two parts were originally built as

<sup>&</sup>lt;sup>1</sup> It may be helpful to co-ordinate the preliminary report of the 1960 season with the reference system used here. The units described in *Arch. Deltion* 16 (1960) Chron. 248, col. 2, paras 2-3 are D1-D4. Plate 217a shows units D6, D7 and D8, Plate  $217\beta$  shows units D1, D2, D3 and D4 from the south-west; Plate  $217\gamma$  shows units D4 and D3 from the south before the collapse of the west part of the door leading to D3 and Plate  $217\delta$  shows the south part of the temple (H30 and H31) from the west.

east walls of two separate units west of room D1, only partly excavated by Dr Zapheiropoulos in 1960 and not explored by us in 1967.

The foundations of wall D1E project slightly to the east, are stronger than those of the other walls of the room and provide a more stable support for the floor filling. This difference in technique can be explained by the eastward sloping of the ground. Room D3 has a floor that is lower by about 1m. It must be later than D1 as proved by wall D3N, which butts against D1E.

The east wall of unit D4, which is a continuation of the east wall of unit D3, butts against the north wall of unit D5 and must therefore be later than it. We can assume therefore that units D3 and D4 are somewhat later than units D1, D2, and D5. The external surface of the wall in the north-east corner of room D3 is curved suggesting the existence of a road or footpath running more or less parallel to the external face of walls D3N and D3E (Fig. 6).<sup>2</sup> This theory is based on a comparison with the external face of the corners of houses near roads or footpaths in present-day villages of the island where a similar curvature can often be observed.

Apparently following the construction of units D1-D4 wall D2E was pulled down and rebuilt, this time with an admixture of a considerable quantity of schist. With these repairs probably belong also the bench in unit D2, the cubic structure between units D2 and D4 (Fig. 7)<sup>3</sup> and the west part of wall D3S, all of which contain a substantial quantity of schist. Wall D1S belongs to the same building phase since it too contains a good quantity of schist. The east half of this wall is linked to the east wall of units D1 and D2 by a bonded T-junction, the only example of a bonded T-junction so far discovered in the settlement. These repairs and additions seem to belong to one phase and are later than walls D3N, D3E, and D4E which are built of marble.

A definitive interpretation of the cubic structure between D2 and D4 is impossible.<sup>5</sup> Its proximity to the corner of the walls D2E and D3S would preclude its being a pillar, since an additional support would not have been called for at this point. On the other hand the adjacent bench of unit D2 had perhaps a function connected with it and different from that of the benches of other rooms, since it is lower and narrower, having a width of 0.40-0.50m. and a height of 0.35m.<sup>6</sup> It should also be noted at this point that the exceptional width of wall D3E-D4E may be due to the need of a strong support of an upper floor extending over a portion of group D1-D4. All these considerations lead to the possibility that the cubic structure may have served as a platform of stone steps or even a wooden ladder leading to an upper floor<sup>7</sup> and that the adjacent bench was used as a step to this platform (see p. 25).

In contrast to units D1 and D3, which were presumably roofed rooms, units D2 and D4

<sup>&</sup>lt;sup>2</sup> The north-east corner of unit D1, however, is normal.

<sup>&</sup>lt;sup>3</sup> The bench and cubic structure are continuous.

<sup>4</sup> Schist is concentrated in the west half of this wall; the east half contains only few schist stones.

<sup>&</sup>lt;sup>5</sup> Its dimensions are 1.15m. from N to S and 1.05m. from E to W.

<sup>&</sup>lt;sup>6</sup> The preserved height of this bench is the original height since the top surface, which consists of schist slabs, is in a good state of preservation.

<sup>&</sup>lt;sup>7</sup> If the steps were of stone there was room for three, each step having a width equal to that of the adjacent bench and a height of 0.30m. If the steps were constructed in such a fashion, the height of the upper floor would have been about 2.05m. above the floor of room D3.

may have been open courtyards. The floor of D4 is slightly lower than D2 and communication between the two units was facilitated by a step. The entrance to the group D1-D4 was obviously possible through the narrow doorway of wall D4E but, since the south boundary of unit D2 has not been explored and the south end of wall D2W is not yet determined, it is possible that a second entrance to the group existed at this point.

The frame of the door between units D1 and D2 is not well preserved and both threshold and jambs have disappeared. The threshold, however, of the door leading to room D3 has survived and also parts of the jambs. As a result of the collapse of the west half of wall D3S, the west jamb no longer stands upright but is in an oblique position, its top leaning against the east jamb and blocking the entrance to room D3 (Fig. 8). The group D1-D4 was perhaps divided into two houses, D1-D2 and D3-D4, communicating by means of their open court-yards and belonging to members of one and the same family.

No traces of a doorway were found in unit D5 and, since the surface of the ground to the north and east of the unit is considerably lower than its floor, a door in the north or the east wall should be excluded. Also, no traces of a doorway exist in the well-preserved south wall which would have made direct communication with group D6-D8 possible. Since, however, the northern half of wall D5W is destroyed, it is possible that the entrance to the unit was there. It is hoped that the character and function of D5 will become clearer when the area west of it is explored.

Close to the south wall of D5 and parallel to it was discovered a bin built within the floor and consisting of five thin schist slabs, a flat one serving as its bottom and four upright ones which are its walls. Similar bins were also found in other units of the settlement (see p. 26) and were obviously used as water-troughs for the animals, like very similar structures in the courtyards of present-day houses on the island, for the storage of grain and fruit or even as sinks for washing up pots and other vessels.

The north wall of unit D5 is technically interesting and can be divided horizontally into three parts: (1) the lower part of the foundation built for the most part of rough heavy marble stones forming a base with a fairly level top surface; (2) the upper part of the foundation consisting of several layers of large schist blocks reaching to the height of the floor of the unit; and (3) the wall proper which is set back about 0.12m. from the outer face of part 2. In the upper part of the foundation only the external face is built of schist; the main body consists of rough marble stones, which are probably coherent with the floor foundation behind (Fig. 9).

In their present state of preservation units D6, D7, and D8 form a single group. Originally, however, the subdivision of the space they occupy may have been different. The west half of the north wall of D6, which is a little to the north and a little narrower than the eastern half, as well as walls D6W, D6E, and D7N have two important characteristics in common: (1) they consist of a mixture of schist and marble (in contrast to the other walls of the group, which are built mainly of schist) and (2) they all butt against the walls they touch. By contrast wall D7W consists almost entirely of schist and resembles in both material and

<sup>&</sup>lt;sup>8</sup> The absence of a dividing wall between the two units and the long distance between walls D2W and D4E support this view.

The preserved height of the west jamb is about 1.25m., that of the east jamb is 1.32m.

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technique wall D5W with which it is aligned. It is therefore probable that originally wall D7W extended as far as the north boundary of the group and that this did not include the area west of D7W. If such a hypothesis is plausible, the group may have consisted originally of two units with the entrance in the middle of D7W. Since the distance between D7W and D8E is great (about 10m.), it is reasonable to assume that, although no traces have yet been found, there was a partition wall a little to the east of D6E and D7E, which was pulled down during the later repairs.

Whatever the original shape of group D6-D7-D8, its final plan (Fig. 10) resembles that of the houses D1-D2 and D3-D4. Although the area covered by the floor of D8 is extremely large (about 53 sq. m.) this unit would more reasonably have been a roofed room. <sup>10</sup> D6 was probably a courtyard, while D7 may have been a pen for animals. <sup>11</sup> Since walls D5W, D6N, D8N, and D8E form one continuous structure it is possible that units D5, D6, and D8 were built at the same time.

At first glance units D9 and D10-D11 seem to be different from each other; they are however very similar and must be discussed together. D9 at first gives the impression of being a single unit.<sup>12</sup> A more careful study, however, shows the existence of a small part of a wall butting against the middle of the south face of D9N suggesting that, originally, there was in the NE or the NW corner of D9 a small room similar to D10. The entrance to the small room, like the entrance of D10, may have been toward the south (see below). Traces of the threshold of the doorway to D9 can be seen in the south wall of the unit (not indicated on the plans).

Units D10-D11 cover an area almost similar to that of D9. Although only the east end of wall D10S is preserved, it is probable that it extended as far as D11W with a gap in the middle for a doorway. The doorway to D11 can be easily seen in wall D11S. Its threshold consists of a single schist slab somewhat removed from its original position and broken into two pieces. One should also mention two other features in this unit: a small squarish bin built against wall D11E (Fig. 11) and an unusual construction in the SW corner. The bin was probably of a use similar to that of unit D5, which is however oblong. Another difference between the two is that the bin of unit D11 is built on the floor and touches the wall near which it is built, while that of unit D5 is built in the floor and stands at a small distance from the south wall.

It is impossible to determine with any amount of certainty the function of the stone construction in the SW corner. Although poorly preserved, there is no doubt about its original shape, which was rectangular. It was built of an admixture of schist and marble on the bedrock which projects above ground level.<sup>13</sup> Units D10 and D11 may have been both roofed rooms. It is also possible however that D11 was an uncovered courtyard.<sup>14</sup> A similar arrangement was possible also in unit D9.

<sup>&</sup>lt;sup>10</sup> If so, it is the largest room found up to date in the settlement.

<sup>&</sup>lt;sup>11</sup> In the SW corner of D7 the bedrock projects above the ground level; it is unlikely that there ever was a packed clay floor here (see p. 26).

<sup>12</sup> If it were so, it would have been the largest excavated unit of the settlement, about 71.5 sq. m.

<sup>&</sup>lt;sup>13</sup> Its dimensions are about 1.65 x 0.80m. The original height is not known.

<sup>&</sup>lt;sup>14</sup> For a different possible arrangement see p. 29.

Units D12, D13, and D14 were only partly excavated in 1960 by Dr Zapheiropoulos. It is therefore difficult to have at this stage positive views about them. The west ends of the north and south walls alone have been uncovered. They butt against the east walls of units D8 and D11 and are therefore later. Wall D12N is carefully built of schist; wall D12S (=D13N) is built mainly of schist with a small percentage of marble, while D13S (=D14N) is also a mixture of both kinds of stone. The masonry of D14S is bad and all the walls discovered east of D8 and D11 are poorly preserved. In unit D14 there is a bench along the north and west sides.

The buildings described below were all excavated in 1967.

South of units D9 and D11, continuing the line of D9E (=D11W), there is a wall of which only a small part has been uncovered so far. This wall presumably extends as far as unit D16. The existence of a wall by itself in this part of the settlement is difficult to interpret and it was thought that it should belong to a unit to the east or to the west. Although the area to the east of D16 and H18 was not explored thoroughly, there is no suggestion of a unit on this side. On the other hand, although the south face of wall D9S was examined, no trace was found of a structure that could be identified as the west wall of a unit D15 which wall must therefore be further west. This theory was supported by the excavation of the area immediately west of D16S which did not yield any wall either.

D16 (Fig. 12), the excavation of which started early during the 1967 season was no doubt a room, as is proved by the floor material and the hearth found in it a little north-east of its centre. It is possible that an L-shaped bench ran along the south wall and part of the east wall of the room. In the west wall a doorway was found with a well-preserved threshold suggesting that entrance into the room was from unit D15 which was presumably a courtyard (see pp. 31 and 41).

The space between D16 and H18 was carefully explored but no trace of any kind of structure was found in it. Since it is rather narrow (about 3.5m. wide) and falls between two rooms, we suggest that it is a passage (see p. 42), although the digging here did not bring to light any traces of stone-paving.<sup>16</sup>

Units H17, H18, and H20 communicate by means of doorways and will be examined together. Because of its relationship to the other two units, H17 should be a courtyard rather than a room, communicating to the north with D15.<sup>17</sup> In approximately the middle of H17E there is a break in the structure which can be interpreted with certainty as a door, although the jambs and threshold are lost and one cannot estimate its length.

There is no doubt that unit H18 was a room (see p. 43). Apart from the NW and NE corners, which are missing, its walls are sufficiently well preserved. At the east end of what is left of wall H18N there is a big marble stone placed vertically as if it were a corner-stone (Fig. 13). Wall H18E is somewhat curved projecting slightly to the east; its north end is missing and one could argue that H18N never extended as far east as the line of the external face of H18E, but that the two walls met at the big marble stone mentioned above, forming

<sup>15</sup> On the character of the pottery found in the area west of the wall see p. 42.

<sup>&</sup>lt;sup>16</sup> The roads at Karphi were paved (see BSA, Vol. XXXVIII, 1937-8, 66); so in part were the roads in the Archaic settlement of Emporio (Emporio, p. 35).

<sup>&</sup>lt;sup>17</sup> No foundations were found in the north-east part of the unit which has already been excavated.

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a corner resembling the NE corner of room D3.18 The northern half of H18W (=H17E) is not well preserved and the total disappearance of its end at the NW corner of the unit is due to the fact that the wall was built at this point, without foundations, directly on the bedrock which projected to ground level.

In this unit there is an L-shaped bench running along wall H18E and along three-quarters of wall H18N. This bench, like the  $\square$ -shaped bench of storerooms H26 and H27 was used for the storage of pithoi as indicated by the many fragments found on and near it and by at least one pithos emplacement discernible on its top (Fig. 14).

South-east of room H18 is unit H20 which, because of its position in relation to H17 and H18 and because of the finds in it, must also have been a roofed room. Interesting from the stratigraphical point of view is the discovery of two floors and also of the lower part of a bench, below the upper floor, along the south wall. It would seem that the bench was pulled down when the upper floor was added. On the threshold of the door in wall H20N a number of carefully stacked stones were found, suggesting that the doorway was perhaps blocked at a later date or that the threshold was raised when the floor level was raised. The second possibility is more likely although no horizontal slab was found covering these additional stones.

Architecturally the most important unit in the complex excavated in 1967 is H19 since it has the largest floor area, the largest hearth and the most sizeable bench (Figs 15 and 16). The bench is  $\square$ -shaped<sup>20</sup> running along the north, east and west walls of the room. The east and west arms do not extend as far as the south wall and are of unequal width and length, the east arm being shorter; the west arm in fact butts against the north one, and so is later.

Close to the west arm of the bench is a shallow, square bin-like structure. Another unusual feature of the room is the stone pavement which covers the small square space between the west arm of the bench and the south wall. The doorway into the room is in the south wall.<sup>21</sup> In addition to having a very large floor area unit H21 must have been a courtyard, since it had no south wall and gave access to a number of rooms around it, namely H19, H28-H29 and perhaps also H22 (see pp. 30 and 45-7).

South of the doorway leading into unit H28 the thin wall H21W continues for a while in the same width, then widens all of a sudden. This widening is at present difficult to explain. Like the wall opposite, H21E widens toward the south but peters out at a point where it meets bedrock projecting above ground level.

Within the unit and parallel to H21E the remains of a wall were found below the upper two floors. This wall could have been identified as a bench if, unlike all the other benches,

<sup>&</sup>lt;sup>18</sup> The curving wall H18E can be used as a further indication of the existence of a north to south road running along it, from which the passage between rooms D16 and H18 branches off. Obviously the inhabitants of the settlement did not like abrupt corners in their streets. This aversion is also noticed in some cases at Karphi (BSA, Vol. XXXVIII, 1937-8, Plate IX) and also very often in the streets of present-day villages of the island.

<sup>19</sup> See p. 44

<sup>&</sup>lt;sup>20</sup> Its greatest preserved height is approximately 0.60m. from the top floor in the NE corner.

<sup>&</sup>lt;sup>21</sup> Within the room, near the door, some large schist slabs were found leaning against the south wall, stacked as if they were to be used in the future. In present-day villages we have observed that used schist slabs are often stacked near walls of houses for future use.

it did not have two faces instead of the usual one. It is reasonable to assume that it was built at an earlier stage, prior to the building of wall H21E in its final form (see pp. 46-7).

East of H21 are units H22 and H23. The walls H22N and H22E form a continuous structure to which may also belong wall H22S.<sup>22</sup> Wall H22W (=H21E) is not well preserved and, since there are no traces of a door in the three other walls, we assume that the doorway to the unit was here. This conjecture is supported by certain irregularities a little to the north of the middle of the wall and the presence of some vertical thin schist slabs. Such a doorway would have been exactly opposite the hearth<sup>23</sup> of the unit whose discovery proves that H22 was a roofed room. The suggestion of a doorway is further supported by the discovery on either side of the wall of sherds seeming to belong to a single pot.

Unit H23 was no doubt also roofed; its east wall is very poorly preserved and its south wall is entirely gone, so that the position of the door is uncertain; it may have been in the south wall.

West of H21 are units H28 and H29 which were also roofed rooms. H28 had two doorways, one in wall H28E, the other in wall H28S. The first provided no doubt the entrance into this group from the courtyard. On the threshold of the second door were found stones whose purpose was probably similar to that of the stones stacked on the threshold of the doorway between rooms H18 and H20.<sup>24</sup> Room H28 has a bench along its north wall. Only the north-east corner of H29 was excavated in 1967.

West of room H19, corresponding to H20 are storerooms H26 and H27, only partly excavated in 1967. The structural unity of their external walls suggests that originally there was here only one space divided later on into two by means of a partition wall running east-west. A  $\square$ -shaped bench (the second of this shape discovered in the settlement up to date) was found extending through both storerooms along the north, east and south walls of the original room and with it a second simple, narrow and low step-like bench<sup>25</sup> built along its east arm. The width of these benches, which is the same to the north and south of the partition wall, suggests either that they were built earlier than it or that the partition wall was built simultaneously with the benches. The main bench was used for the storing of pithoi as proved by the circular cavities on it, at least one of which contained pieces of a large storage jar bearing relief decoration.

In the NE corner of the floor of H26, at the point where the lower bench meets the north arm of the  $\square$ , there is a small enclosure formed by the two benches and a semi-circle of rough stones on the floor. This enclosure was also perhaps used for the support of a large pithos (Fig. 18).

It has already been mentioned that, during 1967, only the eastern half of these two storerooms was excavated.

North of storerooms H26 and H27 are two units, H24 and H25, a small portion of which has only been excavated so far. They will be discussed after the next excavating season.

<sup>&</sup>lt;sup>22</sup> Owing to the excavation baulk in the south-east corner of the unit the study of the masonry at this point is at present impossible.

<sup>23</sup> It will have been noticed that in rooms D16 and H19 too the doorways are exactly opposite the hearth.

<sup>24</sup> See p. 18.

<sup>25 0.55</sup>m. wide.

In 1960 Dr Zapheiropoulos also excavated two rooms close to the fortification wall of the settlement to which we gave the numbers E1 and E2 (Fig. 17). E1 is square while E2 is slightly oblong. E1 has an L-shaped bench along the north-east and south-east walls. The north-east walls of the two rooms are preserved to a height of about 1.5m. and seem to be at a distance of about 3-4m. from the fortification wall.<sup>26</sup> That the two units were at a distance from it is also made likely by the north-east and the south-east walls of E1 which form a continuous structure.

The future exploration of the area along the internal face of the fortification wall may bring to light other buildings in the same line as units E1 and E2 and even a military road parallel to the wall which would have been useful during a siege.

Both units are built of schist with walls of normal thickness. Although there are no traces of doorways left, they existed in the south-west walls.

#### The temple

Units H30-H31, Plan V

The temple of the settlement was excavated almost but not quite to floor level by Dr Zapheiropoulos in 1960.<sup>27</sup> It faces 20° east of south. In contrast to the houses the temple stands by itself, at a distance of a few metres from room H23 and consists of a closed prodomos and a cella which is almost square (Fig. 19). The external dimensions are approximately 10.42 x 7.56m.<sup>28</sup> The internal dimensions of the prodomos are 2.80 x 6.29m.; those of the cella are 5.87 x 6.30m.

Within the cella, near the north wall and a little to the east of the central axis, a trapezoidal structure was discovered which, on grounds of a comparison with a similar structure in the temple of Emporio, could be interpreted as an altar or the base of a statue.<sup>29</sup>

The temple is almost entirely built of schist with only sporadic use of marble. By comparison with the walls of the other excavated units, those of the temple are rather wide (about 0.65m.) except for the south wall of the prodomos which is narrower.<sup>30</sup>

The distance between west and east walls is fairly long (about 6m.), and it is hoped that further excavation will uncover stone bases of internal columns supporting the roof.<sup>31</sup>

The technique of the walls is different from that used in the walls of the houses. Characteristic features are the almost exclusive use of schist, the neat appearance of the external faces and the filling of the gaps between large stones by means of small schist blades (Fig. 20).<sup>32</sup> The corner stones of the temple project slightly from the walls, as is the case also in some other buildings.

<sup>&</sup>lt;sup>26</sup> An additional reason for excluding the possibility that the north-east walls of these two units are parts of the inner face of the fortification wall is that the north-west and south-east walls of these rooms do not butt against it. In fact the south-east wall of El bonds with its north-east wall.

<sup>&</sup>lt;sup>27</sup> Arch. Deltion, 249.

<sup>&</sup>lt;sup>28</sup> The exact length of the walls are as follows: E, 10.462m.; W, 10.383m.; N, 7.57m.; S, 7.55m.

<sup>29</sup> Emporio, pp. 5ff. The east side of the structure is 12° E of S; the west side is 16° E of S.

<sup>30</sup> The south wall of the cella has a width of about 0.53m.

<sup>31</sup> In the temple at Emporio the excavators found the bases of such internal columns.

<sup>32</sup> See pp. 23-4.

Of the external doorway of the temple, which has a width of 1.26m., only one jamb is preserved. The cella doorway is somewhat larger (1.40m.) but its door-jambs are lost. Between the preserved jamb of the external doorway and the east half of the façade of the temple, there is a separate narrow piece of wall consisting of thin schist slabs stacked carefully one on top of the other, about 0.20m. wide (Fig. 21). This narrow piece may be a later addition aiming at narrowing the doorway; or it may be a more sophisticated 'filling' of the gap between jamb and wall, less careful examples of which have been noted in other buildings of the settlement. The threshold of this door will be discussed after the next excavating season, when we hope to study the lower part of the temple in all its details.

The trapezoidal structure within the cella is built of schist and is framed along its south and west sides by long thin slabs. The east side is carefully built and better preserved. The top surface is not well preserved and therefore the original height of the structure is unknown.

It has already been remarked that none of the sides of the trapezoidal structure is parallel or equal to any of the others; its centre is about 0.52m. east of the axis of the temple. These two features suggest that it was perhaps built earlier than the temple and that it probably belonged to an older sacred enclosure. A comparison is possible with 'Altar A' of the temple at Emporio.<sup>33</sup> Like 'Altar A', the trapezoidal structure of the Zagora temple was probably at first the altar of a small open sacred enclosure which was turned into an offerings table when it was incorporated in the temple, which replaced the enclosure. The large size of the structure rather precludes its identification as the base of a statue.<sup>34</sup>

There is no evidence about the shape of the roof which, like those of the other buildings, was in all probability flat consisting of horizontal beams on which were placed schist slabs covered by a layer of packed clay. Since the cella is almost square, the beams could have been placed in a north to south or an east to west direction. The first possibility is less likely since the partition wall between cella and prodomos would have been a somewhat weak support because of the door in its centre. Again, in the portion of the roof above the prodomos the advantage of the use of short beams in a north to south orientation would have been partly neutralized by the disadvantage of placing these beams on two walls weakened by doorways. For these reasons it seems more likely that the beams were placed in an east to west direction over both prodomos and cella.

<sup>33</sup> Emporio, pp. 5ff.

<sup>34</sup> The size of the base of the statue of Athena in the temple at Emporio is much smaller (Emporio, p. 13).

## IV Characteristic architectural features

## ALEXANDER CAMBITOGLOU and J. J. COULTON

(a) The building materials The walls of the houses in the Zagora settlement are all built of stone. Schist is on the whole more popular although there is always a quantity of grey marble mixed with it. Grey marble is predominant in rooms D1 and D3. The remains of some buildings near the north and south edges of the settlement also consist of marble. In the south, however, the great quantities of schist lying near the foundations suggest that the walls above them were schist.

The quality of the schist walls is often high, especially in the temple where the masonry is very sophisticated. Marble, being hard, is more difficult to work, so that the walls built of marble tend to be coarser (Figs 5 and 6). On the other hand mixed walls seem to be less carefully built<sup>3</sup> and are on the whole constructed later.<sup>4</sup> The sizes and shapes of the stones vary from small and thin slabs to large rectangular blocks whose height can often be equal to half their length.<sup>5</sup>

As mentioned above, the Zagora plateau is mainly formed of grey marble, which is therefore abundant. Schist must have been mainly brought in from outside, from the neighbouring slopes. In all probability the schist used for thresholds, door-jambs and roof-slabs was brought from further afield since it is of a special grain, silver-grey and harder.

(b) The foundations In those parts of the plateau where bedrock was more or less level and close to the surface of the ground the walls were built directly on it, of the same width from bottom to top, without special foundations. Where the ground was sloping the foundations of a building were also used as retaining walls for the filling of the floors of the units and had to be stronger. In such a case the external face of the foundation projected 0.10 to 0.15m. from the external face of the wall above it and formed a kind of ledge at the height of the floor. Examples of such foundations are found in walls D5E and D8E. Less elegant examples are the foundations of walls D1E and D2W.

In the northern part of the excavated area where houses were built in very difficult positions, large, unworked pieces of grey marble were used for the rough levelling of the

<sup>&</sup>lt;sup>1</sup> The percentage of marble is at times 25% (e.g. wall D10E) or even as high as 50% (e.g. wall D1S, the west half of wall D3S and walls D6E, D6W, D12S, D13S, D7N).

<sup>&</sup>lt;sup>2</sup> With the exception of walls D1S and D3S.

<sup>&</sup>lt;sup>8</sup> For example walls D1S, D2E, D6N, D6E, and D6W.

<sup>4</sup> However wall D14S, which is almost entirely constructed of schist, is poorly built too.

<sup>&</sup>lt;sup>5</sup> Note that the stones of the walls H26N, H26E, H27E, and H27S are in general bigger than the usual size.

<sup>&</sup>lt;sup>6</sup> So far no trace of an ancient quarry has been found near the promontory. One schist slab found in the 1967 campaign shows the cutting made to take the quarryman's splitting-wedge.

ground-surface to make construction possible. The same technique was used less clumsily toward the south; in wall D5N it was combined with a projecting foundation like those discussed above (Fig. 9).

(c) The walls The normal thickness of the house walls at Zagora varies from 0.55m. to 0.65m., but some are considerably thinner, especially door-walls and the walls of small rooms. The external walls of H26 and H27, which form a continuous single structure, are unusually thick, perhaps because they belong to a different period since they are the oldest walls in the southern complex excavated in 1967. On the other hand walls D3N, D3E, and D4E are thicker (0.69m., 0.74m.) than usual perhaps because they supported an upper storey.

Wall H28E does not have the same width throughout its whole length. Most of it is narrow with a width of 0.38-0.44m. Its southernmost end however is considerably wider (0.59-0.61m.) and this difference is at present difficult to interpret (Plan IV).

The walls usually consist of two skins of facing stones, normally placed horizontally. Smaller stones are used for the filling of the gaps between the two skins and few stones run through the whole thickness of the wall. Dry mud was found in the gaps between stones and it was probably used as a binding medium. So far no traces were noticed of mud or plaster coating on the surface of walls, internal or external.

The masonry of the temple is in many respects unusual. Its walls are almost exclusively built of schist<sup>10</sup> with exceptionally smooth faces. The gaps between stones placed one on top of the other are filled with small schist blades while the gaps between adjacent stones<sup>11</sup> are filled with schist wedges<sup>12</sup> (Figs 19-20). The regular, smooth faces of the walls of the temple and their characteristic appearance are due to this technique which is used from the Geometric down to the Hellenistic period, especially in walls built of schist combined with marble or other hard stones.<sup>13</sup> By filling the gaps between large stones with blades of soft stones the builders gave a smooth face to the walls without dressing more than one side of each hard stone. The technique was probably used in the Zagora temple not because schist is hard but because the natural joint planes of schist stones are not at right angles to each other, so that rectangular joints would be difficult to achieve.

To make the corners of walled areas stronger, in a number of cases large stones were used,

<sup>&</sup>lt;sup>7</sup> Some of them have a length greater than 1m. and a width greater than 0.40m.

<sup>&</sup>lt;sup>8</sup> Such are wall D7N (door-wall) with a width of 0.47-0.50m., D10S (door-wall) with a width of 0.49m., D10E with a width of 0.52-0.55m. and the small visible part of wall subdividing D9 with a width of 0.50m. Also walls D16N (0.40m.) and D16W (door-wall; 0.45-0.50m.) are narrower. Wall D3S (door-wall) with a width of 0.49-0.52m. and the south walls of the cella and vestibule of the temple (0.53m.) are also rather narrow.

<sup>&</sup>lt;sup>9</sup> Such stones are more frequent in Xombourgo (Praktika, 1953, Plate I, opposite p. 266).

<sup>&</sup>lt;sup>10</sup> The size of the stones is often big, their length being up to 0.50m.

<sup>&</sup>lt;sup>11</sup> There is always a little gap left between such stones (about 0.10m.) since, owing to their rough ends, they are never placed up against each other.

<sup>&</sup>lt;sup>12</sup> The height of these blades is 0.01-0.02m.

<sup>13</sup> Cf. the Thesmophorion' in Delos (BCH, 1929, 250-3, Fig. 31) and the buildings at Xombourgo (Praktika, 1949, 126-9, Figs 5-10 and 1958, 222, Fig. 2); cf. also the Oikos of the Naxians at Delos (R. Vallois, Constructions antiques de Délos; Documents, Fig. 13), the temple of Kartheia Athena at Keos (Arch. Deltion, 1963; Chronika, Plate 326δ) and the Hellenistic houses of Delos (Délos, VIII, iii, 238, Plates XXXIIIA and XXXVIB).

as for example in the north-east corner of room D16. As we have mentioned above the heavy stone at the east end of H18N may be a corner stone (Fig. 13).<sup>14</sup>

In the buildings excavated up to now bonded T-junctions are avoided. Walls as a rule butt against each other and this is true also of the walls of the temple which was presumably planned completely before its construction began. The only example of a bonded T-junction was found in the south-east corner of room D1 and is the result of later alterations.

(d) The doors The position of the doors was determined usually before the beginning of the construction of a building. This is evident from the empty spaces left for them in the walls, which extend below the floors, down to the bottom of the foundations. The thresholds were usually placed on stretches of wall separated from the main walls by jambs sunk below the level of the threshold; but in the door of room D16 the construction is different, with the ends of the threshold, which is longer than the width of the door, projecting into the main wall of the room on either side (Fig. 12). The jambs of this door are not preserved, but there is no doubt that their bottoms rested on the threshold itself.

The walls usually get thinner toward the doors, the frames of which have a width of 0.40-0.50m. This gradual thinning is especially clear in the east wall of D4, where the width is reduced from about 0.70m. to about 0.54m. (Plan III). The gaps between the jambs of doors and the ends of the walls on either side were filled with small stones. The filling is very clear in the door of room D3 (Fig. 8). These observations lead to the conclusion that during the construction of buildings empty spaces were left for the doors and that thresholds and jambs were added later.

In the doors of rooms D16 and H19 the thresholds are higher than the floor. Such differences of height are less clear in the walled areas of the settlement excavated further north in 1960. The width of doorways varies between 0.75m. and 1.25m. Naturally smaller rooms have narrower doorways; thus in D7 the width of the doorway is 0.80m. while in the large room H19 it is about 1.30m.

The best preserved door was found by Dr Zapheiropoulos in the wall between D3 and D4 (Fig. 8). <sup>15</sup> The west jamb has a height of 1.25m. while the east jamb has a height of about 1.32m. <sup>16</sup> Another jamb was found on the floor of room H28 with a height of about 1.60m. although it is broken at one end. Lintels were not found anywhere in the excavated area and they may have been made of wood or schist slabs broken into small pieces as a result of collapse. Also, since no holes were found in any of the preserved thresholds for door-pivots or bolts, one should assume that the doors were supported by internal wooden frames. <sup>17</sup>

The door of a room was usually placed near the centre of one of the narrow sides; although this general rule, applied for structural reasons, is not without exceptions: the doors of room

<sup>14</sup> However, the stones of the north-east corner of room H22 are of normal size. On the other hand in the north-east corner of room H19 fairly large slabs project alternately from the north and east walls recalling the corners of a log cabin; the south-east corner of the temple is built in the same way. This feature too may be due to the builder's inability to obtain more than one true face perpendicular to the bedding of the schist.

<sup>&</sup>lt;sup>15</sup> West of the doorway this wall is preserved to a height of about 1.20m.

<sup>&</sup>lt;sup>16</sup> These may be very close to the original heights, since in modern huts on the island doors are often no more than 1.5m. high (see p. 15).

<sup>&</sup>lt;sup>17</sup> Such holes were found in the threshold of the Xombourgo temple (*Praktika*, 1952, 535).

D16 and H19 for example are in one of the longer sides. Rooms seem seldom to have opened northwards presumably because the inhabitants of the settlement wanted to protect themselves as much as possible from the northerly wind. The door of unit D7, however, is an exception, opening to the north into D6 which was probably a courtyard.

- (e) The windows If we are right in believing that H18 and H20 were rooms that could be entered through courtyard H17 then we may assume that some at least of the Zagora buildings had windows, for otherwise light could only reach H20 through the doorways of H17 and H18. If there was in fact a deep shed in front of H19, it too would have been rather dark in spite of its fire providing some additional light. No external wall is preserved to a height of more than about 1.5m. and most are considerably lower; therefore it is not surprising that no traces of such windows have been found. Since the roofs were flat the rooms must have been of varying heights, so that H19, for instance, probably had windows opening above the roofs of the surrounding units which, besides providing light, also helped to relieve the room of smoke.
- (f) The benches Stone benches have been found with certainty in seven of the rooms excavated up to now.¹8 Two, those of rooms H20 and H28, are built along one wall only (Plans II, III, and IV). Three others, those of rooms D14, H18, and E1, are L-shaped, built along two walls. The bench of room H19 and the large bench of H26-H27 are □-shaped (Plan IV and Figs 16 and 18). Parallel to the east side of the □-shaped bench of storerooms H26-H27 and up against it is a second shorter, step-like bench about 0.55m. high which no doubt facilitated the access to the one on which the pithoi were placed¹9 (Fig. 18).

It has already been mentioned that the bench in D2 is peculiar (p. 14) being narrower, lower and shorter than the others.<sup>20</sup> It should perhaps be interpreted in relation to the neighbouring, cubic structure east of it. It is possible that, in addition to being used like any other bench,<sup>21</sup> it was also the lowest of a small flight of steps leading to a room above D3, the other steps being on the cubic construction against wall D3S.

Some of the arms of the benches are shorter than the walls along which they are built. The width varies from 0.70m. to 1.40m., the average width being 1.12m. Except for the bench in D2 none has its top surface intact and the greatest preserved height is about 0.60m. in room H19. The benches were undoubtedly added following the completion of the construction of the rooms. They consist of a face wall built at an average distance of about 1.12m. from the wall of the room and a fill of rough stones behind it.<sup>22</sup> On the whole schist is favoured for the face and marble for the fill.

<sup>&</sup>lt;sup>18</sup> Benches were also found in two rooms of the Geometric period in Siphnos (BSA, 1949, 8 and 11), in some houses of Emporio (Emporio, pp. 37 and 42-3) and perhaps also in the Geometric house at the Athenian Agora (Hesperia, 1933, 547). Bronze Age examples exist at Eutresis (H. Goldman, Excavations at Eutresis, Harvard University Press, Cambridge, Mass. 1931, p. 18), at Korakou (C. W. Blegen, Korakou, Boston and New York 1921, pp. 93-4) and in Aghios Kosmas (G. E. Mylonas, Aghios Kosmas, Princeton University Press, Princeton 1959, pp. 38 ff., drawing 11).

<sup>19</sup> Cf. the terracotta footstool found in the magazines of the Phaistos palace (Graham, p. 132).

<sup>&</sup>lt;sup>20</sup> Its height is about 0.35m., its width about 0.50m., and its length about 2.50m.

<sup>&</sup>lt;sup>21</sup> The top surface is well preserved and consists of three long schist slabs approximately 0.06m. thick.

<sup>&</sup>lt;sup>22</sup> The stones of the face of a bench can be different from those out of which the wall of the room behind it is built. For example in room H18 the face of the bench consists mainly of marble stones while the wall behind it is built of schist.

The use of the benches must have varied considerably. Like the wooden 'menderia' of some modern peasant houses in Greece they served probably as beds during the night and for sitting during the day.<sup>23</sup> On the floor of room H19, near the bottom of the bench, spindle whorls were found, suggesting that they were perhaps kept in a box on it. The □-shaped bench of rooms H26-H27 had large pithoi set in it resembling somewhat those of storerooms 23 and 24 in the Mycenaean Palace at Englianos.<sup>24</sup> The bench of room H18 must also have been used for the storage of pithoi since a good many pithos sherds were found on its remains.

- (g) The hearths In the floor of rooms D16, H19, and H22 a hearth was found built near the centre, opposite the door (Figs 15 and 16). Each hearth consists of at least four horizontal schist slabs which form a rectangular frame.<sup>25</sup>
- (h) The bins These consist of four upright schist slabs 0.03-0.05m. thick and a fifth horizontal slab which serves as the bottom. Bins were found in D5 and D11 (Fig. 11) and are built very close to one of the walls. Similar structures are used nowadays in the courtyards of peasant houses or huts of the island as troughs for the watering of animals. In the Zagora settlement bins in courtyards were presumably used in the same way, while those in rooms were used for the storage of grain and other kinds of food. While the bin of D11 is built on the floor of the unit, the bin of D5 is set into the floor.<sup>26</sup>

In room H19, close to the west arm of the bench, a rectangular structure was found somewhat resembling the two other bins; it is very shallow and consists of four thick, rather than thin, slabs<sup>27</sup> (Fig. 16).

(i) Other structures In the south-west corner of unit D11 a rectangular structure of uncertain purpose was found, only partly preserved. In room H19 a small squarish structure was discovered with a group of small pebbles on it against the east half of the south wall.

It has already been mentioned (p. 19) that in the north-east corner of the floor of storeroom H26 a small semi-circle of rough stones was discovered no doubt used for the support of a big storage jar.

(j) The floors A good deal is said about the floors on pp. 39-40. They consisted of packed red or yellow clay which had occasionally a whitish colour suggesting the presence of lime. They resembled no doubt the floors in some modern peasant houses of Andros which consist of a mixture of clay, lime and olive oil and have a smooth surface which can be easily swept.

Where the bedrock was fairly level, the floors of the Zagora houses were usually quite close to it and so no special packing was needed below. But in D5, which was built on sloping ground, a cutting made in 1960 just within wall D5N reveals rough chunks of marble beneath

<sup>23</sup> A. C. Smith, The Architecture of Chios, Tiranti, London 1962, p. 71.

<sup>&</sup>lt;sup>24</sup> At Englianos the benches, which were narrower (0.70-0.80m.) and lower (0.30-0.45m.), were built round the pithoi which were already in position (*Palace of Nestor*, pp. 135-6, 139-40, Figs 22 and 420). In Cretan palaces storage pithoi were often placed on low platforms, not built into them (Graham, pp. 130-2). Pithoi were sunk into the floor of the easternmost room of the sanctuary at Xombourgo (*Praktika*, 1953, 260).

<sup>&</sup>lt;sup>25</sup> The approximate dimensions of the hearths are: room D16, east to west 0.47m., north to south 0.53m.; room H19, east to west 0.61m., north to south 0.71m.; room H22, east to west 0.93m.

<sup>&</sup>lt;sup>26</sup> Remains of bins are also visible at two other points on the plateau, at M5002 and E1614.

<sup>&</sup>lt;sup>27</sup> The dimensions of the structure are 0.40 x 0.30m.

the floor to bring it up to the required level. When the floor of a room was worn, a new layer of the same material was added over the old one.

(k) The size and shape of the rooms In general the walls of the houses at Zagora are rectilinear and the buildings are rectangular. Many units are almost square. Of those excavated up to date none has a length as much as 1.5 times its width; seven rooms have a length of more than 1.25 times their width, while twelve come closer to a square than that.<sup>28</sup> The only important deviations from the rectilinear are to be found in the eastern walls of rooms D3 and H18 along which very probably ran roads (pp. 14 and 17). Deviations from the rectangular shape in the units are more frequent, but since they can be discerned on a plan only (not on the site itself) they may be unintentional. In units D1 and D6 however the deviations from the rectangular shape are considerable and should therefore be intentional.

In the building of the temple itself the difference of measurements planned as equal are very small, never exceeding 0.75%.<sup>29</sup> The linear errors in the other buildings are greater although in D8, D11, D16, H18, H20, and H22 they do not exceed 0.10m.

The sizes of rooms and other units vary according to their use and the means of the owners of the houses. The smallest unit is D7 with a floor area of about 5.5 sq.m.; the largest is H21 with an area about 62 sq.m. H21 however was no doubt a courtyard and, therefore, the largest roofed room in the south group of buildings excavated in 1967 is H19 with an area of 51.0 sq.m. In the north group, excavated in 1960, D8, which was in all probability also a roofed room, is even larger with a floor area of 53.1 sq.m.

(1) The roofs In the larger rooms the roof span was considerable and therefore internal wooden posts must have been used as supports. The stone bases of these supports will no doubt be discovered when the floors are excavated in greater depth. In the large room H19, in spite of the fact that the minimum span (6.80m.) is from north to south,<sup>30</sup> we cannot be sure that the roof beams were placed in a north to south direction, since the south wall would have been a somewhat weak support because of the 1.30m. wide doorway. For similar reasons there are doubts about the orientation of the roof beams of the cella of the temple. Among the other excavated units, some of which were no doubt rooms, minimum spans of over 5m. are by no means infrequent<sup>31</sup> in contrast to present-day houses of the island in which, according to information given us by our workmen, the maximum roof-span does not exceed 5m.

<sup>&</sup>lt;sup>28</sup> In this respect they resemble the houses with benches at Emporio (*Emporio*, pp. 35-7) which are almost square. The excavated units at Xombourgo are also squarish (*Praktika*, 1952, 539, Fig. 10; 1953, Plate I, opposite p. 266).

<sup>&</sup>lt;sup>29</sup> The worst error is the difference between the overall length of the temple along its east and west sides (10.462m. and 10.383m.).

<sup>30</sup> The span from east to west is 7.60m.

<sup>&</sup>lt;sup>31</sup> For example in D1, D5, D8, H18, H23, H28, and E1. Similar spans for flat roofs are found in Minoan and Mycenaean buildings (Graham, pp. 159-60; *Palace of Nestor*, pp. 147, 318, 344; Key Plan, rooms 27, 99, 105). The westernmost room of the sanctuary at Xombourgo has a minimum span of about 4.80m. (*Praktika*, 1953, Plate I, opposite p. 266). Column-bases are frequent at Emporio, where the largest span is about 3.50m. (*Emporio*, Fig. 18). At Siphnos, also, a stone was found in a room with a span slightly under 5m. which was probably a base (*BSA*, 1949, 12).

Thin pieces of schist and layers of clay were found above a number of floors suggesting that the materials and the construction of the roofs in the Zagora settlement resembled those of many present-day houses in Andros and consisted of wooden beams covered by thin schist slabs, which were in turn covered by packed clay. In no part of the excavated area were traces of tiles found and pitched roofs should also be excluded because of their complex structure and because of the problem of the drainage of the rain water, which must have been greatly simplified by the construction of individual flat roofs of varying heights over successively built rooms.

(m) Upper storeys Nowhere in the settlement can one prove the existence of an upper storey. However in group D1-D4 the peculiar bench in D2 and the cubic structure next to it (Fig. 7) suggest perhaps the existence of an upper storey at least above room D3 (see p. 14).

<sup>&</sup>lt;sup>32</sup> Owing to the comparatively thin walls and great roof spans, roofing by means of corbelling is to be excluded although this method is used in certain cases in the modern buildings of the island, for example in the Ayia Triada chapel near Stavropeda.

## V Interpretation of the architectural evidence

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The views expressed in this chapter are tentative. Some of them will no doubt be modified by new evidence resulting from further investigation. In addition to the architecture account is also taken of the evidence of the finds.

## a. Units D1-D14 (Plan III)

It is not always easy to work out the grouping of units into houses, partly because this part of the settlement has not yet been fully excavated and partly because, in most cases, the preservation of the buildings is by no means good.

The plan of the house D10-D11, however, is apparently complete since no other unit was found south of D11 communicating with it, and there was definitely no door in any of the other walls. The house consists of the small rectangular unit D10 which probably was a roofed room and the larger L-shaped unit D11 which may or may not have been roofed. The most likely restoration is perhaps with a roof only over the area between D10 and D11E, so as to form a shed facing south onto an open court, for there are indications of a similar shed in D15 between D16 and D9S (see p. 42).

The interior of D9 has not yet been excavated; nevertheless the small piece of wall butting against the south face of D9N suggests that D9 was a self-contained house resembling D10-D11. This plan, which can be called 'rectangle within rectangle', is found only at Zagora and not at Emporio<sup>2</sup> or—as far as one can judge from the publication—in ancient Smyrna.<sup>3</sup> It is, nevertheless, found in the complex of buildings discovered at Xombourgo and more particularly in the third and fourth units from the west which contain smaller rectangular rooms occupying one of their corners.<sup>4</sup>

Although the plan of the house to which unit D5 belonged is at present uncertain, since the area west of it has not yet been investigated, groups D1-D4 and D6-D8 are better preserved and therefore their plans are clearer. The units of the group D1-D4 fall naturally into two pairs, D1-D2 and D3-D4. The pair D3-D4 was no doubt built later than D1-D2 while the bench of unit D2 and the adjacent cubic structure are the result of later alterations (see p. 14). D1 and D3 were probably roofed (D3 certainly so if it carried an upper storey) while D2 and D4 may well have been open. But, since in the later stages D2 and D4 are so

<sup>&</sup>lt;sup>1</sup> See p. 16.

<sup>&</sup>lt;sup>2</sup> Emporio, pp. 35-7.

<sup>&</sup>lt;sup>3</sup> BSA 1958-9, folded plan at the end of the volume; Ekrem Akurgal, Die Kunst Anatoliens, Walter de Gruyter, Berlin 1961, pp. 8ff. and 184ff.

<sup>&</sup>lt;sup>4</sup> Praktika 1953, Plate I opposite 266. One should note, however, that the buildings of Xombourgo are of religious character.

closely connected and since the suggested upper storey above D3 (see p. 28) could only be reached from D2, it would perhaps be reasonable to suppose that to the original house D1-D2 a further living area was added repeating the original plan, perhaps to accommodate a family that expanded through the marriage of one of its members. Both the original house and the later addition resemble to a certain extent some of the houses at Karphi and the 'megaron' type houses at Emporio.<sup>5</sup> It should be noted, however, that access to the group appears to have been from the side, not the front.

The definition of the plan of the group D6-D7-D8 is more difficult, partly because the area west of wall D6W has not yet been excavated. All the same, it is almost certain that the three units belonged to a single house, whose west boundary was wall D6W. If units D6 and D7 are considered for a moment together, without unit D8, they recall house D10-D11. However, in view of the door between D6 and D8, D8 clearly belongs to the same house and, since it is at the back, it was probably roofed rather than open. If so, the plan of the whole house would consist of a courtyard (D6) entered from the west with a small room (D7)—perhaps a pen for animals—in one corner, and a large hall (D8) opening off it to the east. In some respects, therefore, the plan of this house resembles that of D1-D2 and D3-D4.

## b. Units D15-D16 and H17-H29 (Plans II, III and IV)

Further south the excavated units can be divided at present into two groups: group D15, D16, H17, H18, H20 and group H19, H21, H28, H29, H22, and perhaps H23. To these should be added the storerooms H26 and H27 and perhaps units H24 and H25 of which only a small part was uncovered in 1967. The second group seems to be more important. The focal point of the buildings of this group, as it stands at present, is room H19 with courtyard H21 in front of it (see p. 18). The ceramic finds in this courtyard consisted of much worn sherds in the south half of the floor and better preserved ones in the northern half, indicating that the northern half of the courtyard was possibly protected by a roof. Although no traces of a south wall remain in the courtyard, access to it was no doubt gained from the south. The area of the floor of H19 is considerable, about 51 sq.m. This room must have been imposing, not only by its size, but also by its furniture, its impressive \( \subseteq \)-shaped bench and its large hearth, and by the paved area in the south-west corner, which is so far a unique feature, is difficult to explain and may have served as a solid base for a ladder leading to the roof or to an upper storey. Its superiority to the other rooms excavated up to date is so great that we tend to believe that it was the centre of the residence of an important person of the settlement. This theory is further supported by the imposing position of the group in the settlement and its proximity to the temple. It remains to be seen whether there are others of its kind elsewhere.

Units H22 and H28-H29 have doors leading to H21 and were no doubt parts of this house to which should also be added H23, although the position of the doorway to this unit is not certain.

<sup>&</sup>lt;sup>5</sup> BSA, Vol. XXXVIII, 1937-8, Plate IX, 137, 144, 138, 139, 140 and Emporio, plan of Fig. 24, opposite p. 46.

The archaeological evidence is not entirely clear about the use and function of these units. The long bench and the large hearth in the centre suggest that H19 was the main living room. The spindle-whorls found on the floor near the bench show that it also served as an every-day room for women to sit and work (see p. 47).

From its pottery contents H28 seems to have been a storage room and kitchen. Room H22 was remarkable for the unusual number of plates found in it. Room H23 yielded a good quantity of fine and important pottery and may have served as a reception room.

Units D15, D16, H17, H18, and H20 should be examined together since they are connected to the passage between D16 and H18 (see pp. 17-18). D15, the west boundary of which has not yet been traced, was no doubt a courtyard open to the sky except for the space between D9 and D16 which was probably a shed. The passage mentioned above gave access to the courtyard which in turn gave access to room D16 on the one hand and to units H17, H18, and H20 on the other.

H17 has no boundary to the north and was probably a courtyard divided into a northern part open to the sky and a southern part covered by a roof (see pp. 17 and 43). H18 was a covered room and so was H20. The former was used at least in part for the storage of pithoi. In H20 the ceramic finds from the lower floor consisted mainly of skyphos sherds, while the finds from the upper floor included a number of spindle-whorls, cooking vessels, and a fibula. This difference may mean that the unit was perhaps used at first as an 'andron' but was turned later on into a working room for women (see pp. 44-5). While there is no doubt that H17, H18, and H20 formed a single house, it is not certain that D16 was part of it.

There is no doubt whatsoever about the use of units H26-H27 as storerooms (see p. 19).

A comparison of the southern units excavated in 1967 which, as we have already hinted, may have included the residence of an important family, with corresponding buildings elsewhere is difficult. The great house at Karphi is smaller and less formally planned, while the 'megaron hall' of Emporio is a very simple building. A comparison with the Bronze Age palaces is not generally helpful here, although the mainland ones with the dominating megaron, the hearth in the domos and the surrounding rooms are much closer to the complex around room H19 at Zagora than the Cretan palaces. Closest of all is the third period palace of Phylakopi at Melos, which consists of a number of minor units surrounding the main room containing a hearth. In spite of these common features the differences between the two are great; it is worth noting for example the absence of a real prodomos and of narrow corridors at Zagora, which characterize the palace of Phylakopi as well as the other Mycenaean palaces.

<sup>&</sup>lt;sup>6</sup> Even if we suppose that it did not extend to the west much beyond the west wall of H28 and to the north beyond the north wall of H18 it still covered an area larger than 500 sq.m. With this area compare the areas of houses A, B, and C at Tylissos, which are respectively 510, 345, and 415 sq.m. (J. Hadzidakis, Les Villas Minoennes à Tylissos; Études Crétoises III, Plates VI, VII, and XI) and the area of 'The Villa of Good Fortune' at Olynthos which is 442 sq.m. (D. M. Robinson and J. W. Graham, Olynthus, VIII, p. 55).

7 BSA, 1937-8, 77-9, Plate IX, units 8-9 and 11-18.

George E. Mylonas, Ancient Mycenae, Routledge & Kegan Paul, London 1957, pp. 51ff.

<sup>10</sup> T. D. Atkinson, R. C. Bosanquet, et al., Excavations at Phylakopi in Melos, JHS, Suppl. Vol. 4, 55-8, Fig. 49, 269-70. This palace was probably built during the LH IIIA period (V. R. d'A. Desborough, The Last Mycenaeans and their Successors, Clarendon Press, Oxford 1964, p. 148).

<sup>&</sup>lt;sup>11</sup> It has been mentioned, however, that the north half of the courtyard H21 was probably covered by a roof.

## c. The temple

(Units H30 and H31—Plans IV and V)

The identification of the building made up of units H30 and H31 as a temple is undoubtedly correct, not only because it stands detached in a dominating position, but also because it is constructed more carefully than any other structure so far discovered. The identification is further supported by the obvious use of the area over a period longer than that covered by the rest of the settlement, by the resemblance of the building to temples discovered on other islands of the Aegean and on the mainland and by the presence in the main room of a structure which could only be an altar or the base of a statue.

The temple consists of a cella and a closed pronaos instead of the usual open one with columns. This variant of the 'megaron' plan is by no means unusual and is met also in later times. The closest parallel is the temple of Athena at Emporio in Chios, dating from around 550 BC. Since the foundations of the Zagora temple have not been excavated as yet, it is not possible to determine at present its date with certainty. The temple at Emporio has a very similar plan and almost the same dimensions, while in the cella of both temples there is a very similar asymmetrical structure. The masonry of the Emporio building is, however, decidedly different because of the different kind of stone used and also because of the bonded T-shaped junctions at the ends of the partition wall between cella and pronaos. In the Zagora temple the ends of the partition wall butt against the long sides of the building. In its final form the Emporio temple has a cella which is longer than it is wide. Originally, however, it would seem that the temple was planned with a cella shorter by 0.90m. having, therefore, a width that exceeded slightly its length.

Another comparable temple, this one nearer to Zagora geographically, is that excavated by Professor Kontoleon at Xombourgo on the island of Tenos.<sup>20</sup> The Xombourgo temple is considerably smaller, its dimensions being 5.10 x 3.84m. Although its plan is somewhat obscured by the walls of the complex of which it is part, there is no doubt that it resembles the Zagora temple in having a squarish cella, a closed pronaos and a north-south orientation.

<sup>&</sup>lt;sup>12</sup> According to Dr Zapheiropoulos, during the 1960 excavations, Attic black-figure sherds were found in front of the pronaos dating from the sixth century BC (Arch. Deltion, 249).

<sup>13</sup> R. Vallois, L'Architecture Hellénique et Hellénistique à Délos jusqu'à l'éviction des Déliens, Boccard, Paris 1966, Première Partie, pp. 121-4.

<sup>14</sup> Emporio, pp. 5ff.

<sup>&</sup>lt;sup>15</sup> Dr Zapheiropoulos places it with some hesitation in the seventh century BC (Arch. Deltion, 249).

<sup>&</sup>lt;sup>16</sup> The dimensions of the Zagora temple are 10.42 x 7.56m., those of the temple at Emporio are 10.13 x 6.23m.

<sup>17</sup> Emporio, p. 3.

<sup>&</sup>lt;sup>18</sup> At Emporio bonded T-shaped junctions occur in the lower megaron (Emporio, Fig. 18).

<sup>19</sup> Emporio, p. 10.

<sup>&</sup>lt;sup>20</sup> Praktika, 1952, 531ff.; 1953, Plate I, opposite p. 266. The temple at Xombourgo is dated in the later eighth century on the basis of the pithoi found in the unit at the east end of the complex (*Praktika*, 1953, 266).

## VI Relative chronology of the excavated buildings on the basis of the architectural evidence (Plans II, III, and IV)

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Neither the types of buildings discovered at Zagora nor the technique of their masonry can be used as evidence for their dating. The successive butting, however, of one wall against the other allows us to establish a relative chronology although this criterion is only valid for units that are structurally connected with each other. It should also be remembered that a wall need be no more than a few hours later than the one against which it butts.

There are only two clear cases of structures that went out of use, the bench of room H20 and the wall within the courtyard H21, close to H21E (=H22W). There are also some later alterations, like those mentioned in group D1-D4 and in units H26-H27; but on the whole the changes that occurred in the settlement were due to the addition of new units rather than alterations to already existing buildings.

The relation of units D15 and D16 to the buildings north and south will become clearer when further excavation is carried out west of D15E<sup>1</sup> and north of unit H17. Apart from D15 and D16 the external wall of house D10-D11 is the oldest in the D area,<sup>2</sup> while the external wall of house D9 follows chronologically, since it butts against it.<sup>3</sup>

Since D7W, which was perhaps the west wall of house D6-D7-D8 in its original form (see pp. 15-16) and D8E butt against the northern walls of houses D9 and D10-D11, house D6-D7-D8 must be later. On the other hand wall D5W appears to form a continuous structure with walls D6N (east part)-D8N and D8E and therefore unit D5 must be contemporary with or later than house D6-D7-D8 in its original form.<sup>4</sup>

Unit D14 is later than house D10-D11; units D12 and D13 are later than house D10-D11 and house D6-D7-D8 in its original form.

Units D3 and D4 are contemporary and since D4E butts against D5N they are later than unit D5. As it will be shown, however, D3-D4 are also at the end of another series of buildings.

<sup>&</sup>lt;sup>1</sup> Although the baulks have not yet been removed it appears that walls D16E and D16S are continuous with D11W-D11N-D11E suggesting that the units enclosed by them were planned and built together. Furthermore the thinness of the north wall of D16 seems to presuppose the construction of unit D9, which therefore must have been built as part of the same scheme.

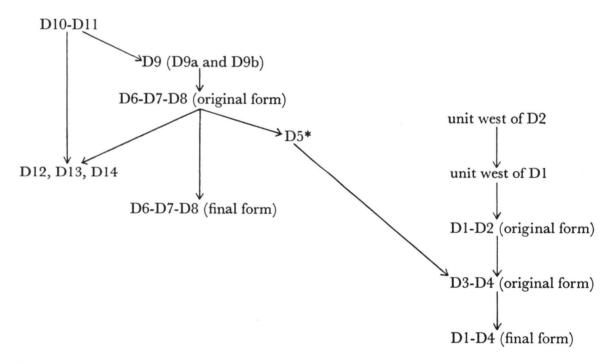
<sup>&</sup>lt;sup>2</sup> The east and south walls of D10 are later.

<sup>&</sup>lt;sup>3</sup> The wall of which a small piece is preserved butting against D9N was added following the completion of the external wall of the house.

<sup>&</sup>lt;sup>4</sup> The structure in the south-west corner of unit D5 is not clear.

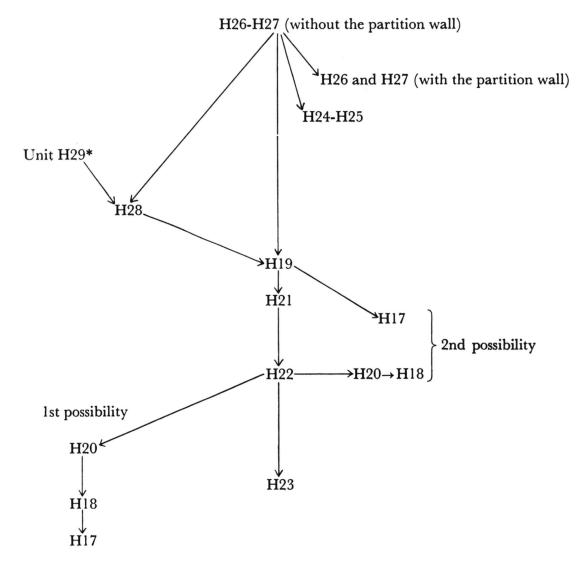
West of D5 there was perhaps another unit on whose south wall D6W butted. Any comments, however, about this part of the settlement must be deferred until further excavation is carried out. The northern part of D1W, which is built of marble, belongs to the unit west of D1 and is later than wall D1W (south part)-D2W. This means that the unit west of D1 is later than the one west of D2. Since wall D1N and the west half of wall D2N butt against walls D1W and D2W, units D1-D2 must be later than the units immediately to their west and so must units D3-D4 which butt against D1-D2. The addition of the bench and the cubic structure in units D2 and D4 is later than the completion of the two pairs of units (see p. 14).

On the basis of this analysis the increase of the size of the settlement in the D area is not a continuous chain of events but rather a more intricate development with ramifications and parallel growth. Nevertheless in this area there are no structures that can be proved to be later than the repairs mentioned on p. 14. The following diagram shows the chronological relations of the various units:



\* D5 however could also be contemporary with D6-D7-D8 (original form)

In area H the oldest wall is the external wall of H26 and H27 in their original form of one room, before the partition wall butting against H19W was added (see p. 19). Wall H29E may have originally belonged to an independent building south of H28, in which case it would be one of the oldest; but it could also be contemporary with H28E or it could even be a later southward extension. H29E meets H28E, which is much narrower, at a distance of about 1.10m. from the south-east corner of room H28. Since the north and south walls of room H19 butt against the external wall of the storerooms, H19 must be later.



\* However H29 could also be later or contemporary with H28

The east wall of H24 and H25 form a continuous structure butting onto H26N, suggesting that these two rooms are later than H26-H27. Unit H28 also was added following the completion of H26-H27 as indicated by H28E which butts against H27S. Since the west half of H19S butts partly against H27E and partly against H28E, room H28 must be contemporary with or earlier than H19.

Courtyard H21 should be contemporary with room H19 and the present footing of the wall west of H22W perhaps belonged to an earlier east boundary. Room H22 should be later since wall H22N butts against H19E. Wall H22W is a somewhat interrupted structure due probably to a doorway leading into it from courtyard H21. It is possible that an earlier east wall of courtyard H21 (wall C, see pp. 18 and 45) was pulled down when room H22 was built or that units H22 and H23 were built following the collapse of the earlier wall.

The line of wall H23E, which is a little to the west of wall H22E, might suggest that H23 is somewhat later than H22.

Since wall H20E butts against H22N and wall H20N butts against H19E, unit H20 must be later than both H19 and H22 and since H17E butts against H19N, H17 is also later than H19. The relation between H17, H18, and H20 is very close and the doorways between them suggest that they were built at the same time as a single house.

Generally speaking the buildings of area H seem at present to have spread mainly toward the east of H26-H27. It is most likely, however, that further digging to the west and north will show that they spread in all directions.

It will be remembered that the excavated units in area D spread in a northward direction; further exploration will show more accurately the way in which the settlement grew on the plateau.

The diagram on p. 35 indicates the chronological relations of the various units in area H.

# VII Stratification problems of the excavation (Map III, Plans I, II, III, and IV)

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In the early stages of the 1967 season a survey of the Zagora plateau was carried out with the aim of producing a contour plan of the area; at the same time a grid, oriented true north-south, was laid out, with pegs fixed at intervals of 20m. This grid is the basis of our reference system; as already mentioned (see p. 13) the plateau and its immediate surroundings have been divided into 100 x 100m. areas, to each of which a letter has been allotted. Points within each 100 x 100m. area are identified by a four digit number which, like a normal map grid reference, gives first their distance eastwards, then their distance northwards from the south-west corner of that area; thus point D7682 is located by moving 76m. east from the south-west corner of area D, and then 82m. north.

Excavation was carried out within 5 x 5 squares based on this grid. Each square is identified by the reference for its south-west corner, e.g. H7575. Thus squares H7575, H7580, H7585 etc. all lie in a line running north-south, while H7575, H8075, H8575 etc. all lie in a line running east-west. A total of twenty-eight 5m. squares was wholly or partly excavated. Bedrock varied between a few centimetres and about 1m. below ground level. Baulks were left between squares, but sometimes removed after recording. Main sections were left along D-H7500 (north-south), and along H0080 and H0000 (east-west). All soil except surface dust was sieved, and all pottery kept for quantitative analysis. Excavation was by cultural layer with occasional subdivision into arbitrary vertical spits; floors and other layers rich in pottery were gridded into 1m. squares for greater control in plotting density and dispersal of individual pots. Up to twenty-two workmen were employed on the site, usually in teams of three—pick or trowel man, siever, and barrower. They were supervised by a total of seven trained members of staff. Wind on the promontory, frequently reaching Beaufort Force 6-7, and occasionally 8-9, often made the use of goggles necessary and not infrequently stopped work.

## Stone piles (Plan IV)

When excavation began, the area, like the rest of the promontory was dotted with piles of loose stones, under some of which could be seen small stretches of dry-stone walling of uncertain date. The alignment of ploughed terraces between these piles showed that they

were the result of partial clearance of the land for agricultural use. Recent field walls and terrace walls, again of unknown date, represented further redistribution of the Geometric building materials. All stone piles were planned before removal, and a stone count of building materials (schist and marble) was kept to assess comparative frequency and total surviving mass. Whether this can be ultimately used to estimate original building heights remains questionable. However, a pattern in the correlation between stone piles above ground and wall stumps below ground began to emerge by the end of the season; main stone piles lay within rooms or courts immediately to the east of their west walls.

## **Deposits**

By the end of the season the general character of the buildings had emerged fairly clearly and the cultural layers on this part of the site at least were comparatively predictable. The surface deposits were of two main types which for future reference are here classified as A and B. Type A is the yellow-brown loose plough soil with small stones and chips of schist in it, as found in the cultivated terraces running between the stone piles (Plan IV). Here on the plateau it is about 10-15 cms deep, and its bottom is usually marked by the tops of walls, and the large stones and yellow clay of the Late Geometric debris. Evidently in the course of cultivation such wall tops and stone collapse as existed originally at a higher level were pulled out and thrown—presumably downhill—to form the stone piles which are here termed deposits type B. These, especially in their upper parts, tend to have a strong growth of thorn bushes, with leaves, grass and wind-blown dust forming a rich black humus, doubtless also the result of differential moisture retention. Deposit type B is then characteristically one of rich black soil and loose redeposited stones. Sometimes such deposits have formed over previously ploughed soils, so that there is again a sharp distinction at about 10 cms below natural ground level to a more compacted layer, in this situation usually discoloured or otherwise affected by the richer growth above it. Otherwise stone piles have formed over areas not previously ploughed, in which case there is no particular differentiation at 10-15 cms depth.

Below the surface deposits the pattern was again comparatively regular. The collapsed walls of the Geometric houses produced a compacted filling of large schist slabs and/or marble blocks in a yellow, occasionally red, clay matrix which was at times extremely hard (deposit type C). This type of deposit, usually found immediately below the plough soil (deposit A) formed the bulk of the room fill, and overlay the other common type of room fill, consisting of an almost stoneless yellow clay deposit with a gravelly appearance caused by the numerous tiny schist flakes and chips in it which we call type D. The few stones occurring in this fill are different from those in C. They are most commonly fragments of thin slabs of schist, lying more or less flat, and, on analogy with traditional Andriot houses, must represent roofing slabs. Thus the coarse yellow (or red) clay of deposit D seems likely to be from the roof, probably a layer of water-proofing and insulating material laid over the schist roof slabs as still used in Andriot houses today. It is noticeable that the comparative depths of deposits C and D vary. Usually the stony fill C is deepest in the centre of the room, while the roof fall (D) is highest around the edges, as for example in H18, H19, and H20. However, in some instances the stone fall is heaviest in the corners of

the room, and it remains to be seen whether this represents some real variation in roofing method (south-west corner of H18 and H17).

One other category of room fill sometimes occurs—a fine powdery orange-brown deposit found at greatest depth round the edges of the room (deposit  $type\ E$ ). Such deposits give a strong impression of burning, but this remains to be proved.

Below the room fillings is the thin occupation layer of fine stoneless material—yellow or red clay—which we call deposit  $type\ F$ , which contains much pottery, some bone and perhaps shell and charcoal in it, as well as occasional patches of burning. Then comes the floor make-up (deposit  $type\ G$ ) and the levelling fill (deposit  $type\ H$ ), each being of a distinctive nature, although subject to slight variations. The floor itself is also essentially of yellow or red clay, but includes more stones in it, and is very much harder. Below it is either another deposit type F and a floor (deposit type G) or a levelling fill consisting of chips of stone in loose clay, often with some pottery, used to bring the crevices in the bedrock up to its height in the centre of the room. Sometimes a series of floors and deposits type F form successive skins about 4-5 cms apart. Ethnographic parallels suggest that such packed and puddled clay floors, still used in some villages, were perhaps renewed every two or three years; also that each floor incorporated some fallen roof material in the course of time.

#### **Floors**

Further characteristics of the Zagora floors emerged in the course of excavation. The main floor was usually found to be at the general height of the highest bedrock in the middle of the unit. Where bedrock rose higher round the edges, the floor deposit followed it upwards, and often pots appeared to be purposely placed on ledges of these projections close to the walls. Some difficulty was experienced in distinguishing deposits type F and floors (deposits type G) since the same red or yellow clay characterized room fill, deposit type F, floor and levelling fill. Texture was usually the guide; on the whole deposits type F were softer and finer than both fill above and floor below. The level of the floor was also often given by the position of roofing slabs fallen either vertically or horizontally on it, as well as by the levels of fallen pots. However, quite often a certain amount of roof fall appeared around and even under some pots, suggesting the possibility of either a continuously crumbling ceiling, or else that the pot had fallen from above ground, at the time of the room's collapse. Some coarse pots indeed might well have been used for storage or as chimneys on the roof, as is the practice on the island also today. A further problem, not yet solved and perhaps also related to the question of the cause and manner of the town's destruction (cf. pp. 5 and 11), is that often marble stones from collapsed benches seem to have fallen not so much onto the contemporary floor but into it, in some instances well below the floor height in the centre of the room.

The type of floor described above (deposit type G) is characteristic particularly of the covered rooms, since it is often associated with fallen roof slabs. However, a second type of floor surface was found in the south part of H21, and to some extent in H17, of stamped brown loam with a rough stone cobbling (deposit type  $\mathcal{J}$ ), which from the worn nature of the pottery appears to be characteristic of unroofed areas.

It is difficult to relate floors to walls since virtually all walls are found on bedrock, which

can be above the height of at least some of the floors. Occasionally the walls are built directly onto sterile earth, but again begin above the height of the main or even latest floor. One is led to the view that sometimes at least the interior of these rooms was dug out after the walls were built. Foundation trenches are rare, and so far only exist in an early context (northern part of H21). Occasionally there is a marked change in the style of wall-building at the level of one particular floor (see below, H21). Benches and hearths can usually be more easily associated with their relevant floor, since they tend to be built directly on it without preparation. However, since the benches were added following the completion of the construction of the rooms, they still do not assist in the ultimate relationship of floors to wall foundations. Thresholds give some indication of the latest floor height, since they are usually a few centimetres above it; sometimes there is evidence of the raising of a threshold to serve a later, higher floor (H18, south threshold). In H19 a step was added between the threshold and the floor which was particularly low.

### Pottery and other small finds

In general surface deposits A and B contained little pottery beyond a few pithos fragments and some sherds of other coarse ware except where, as in H22, ploughing had disturbed the lower deposits. Equally, deposit type C, rarely contained much pottery except near its junction with deposit type D, where often quite large quantities of sherds, almost all heavy pithos fragments, were found. Such pithos fragments usually appeared slightly above the main floor deposit, sometimes because they had rolled from benches together with part of the marble bench packing (see p. 52) and sometimes, where there were no benches, presumably because the pithoi had been stored at a higher level. The main pottery yield, especially of fine wares and unworn sherds, was predictably found immediately above the floor, in deposit type F, which in several rooms yielded a quantity of finds in situ. Probably because of the greater protection afforded by the walls, such finds were commonest around the edges of rooms, both fine and thin coarse wares. In addition to pottery, deposits type F yielded a variety of other small finds; there are for example quantities of thin round schist slabs of varying sizes, which were apparently lids or stands for pots. In addition there are occasional querns and rubbing stones, as well as large numbers of sea pebbles of varying sizes, occasionally with polishing or bruising marks on them, found singly or in groups up to 30 or 40. Lumps of pumice from the beach were also found (especially in H20). Clay spindle-whorls and loomweights of various kinds were again found both singly and in groups, as if once held in a box or a bag (especially in H19), and also lumps of iron slag, alongside occasional objects of iron and bronze.

The floor make-up itself (deposit type G) also yielded pottery, mostly in smaller fragments and in more worn condition, together with bone fragments and occasional sea shells. In fact the presence of bone and shell was an indication of the presence of floor make-up and earlier occupation debris. It is noticeable that the quantity of bone and shell tended to be higher in the open-air floor deposits, as for example in the south part of H21. The bone from these deposits is being studied and should yield some indication of room function, livestock, and food materials.

In one or two units (H23, H22) the nature of the floor make-up and levelling fill was somewhat different and gave the impression of redeposited material brought in from elsewhere.

The following description of the rooms and their contents is based on partial excavation and partial study of the finds only. Quantitative analysis of the finds, together with excavation down to bedrock of all rooms, should yield considerably more information about room function, grouping of units and successive room use, as well as date.

## Units D15, D16, H17, H18, and H20 (Plans I, II, III and IV)

These units can logically be considered together since they are all related to the space between D16 and H18 which must be a passage. No evidence was found that building continued eastward here (with the possible exception of the area just east of D16), while the surface features and gradient along the external face of H18E are quite consistent with a road or track.

This is the most clearly defined unit in this part of the site. When it collapsed, the west wall fell inwards, the south and east walls outwards. At surface height, the SE half of the room lay under ordinary plough soil (deposit type A), the NW half under a deep and thorny stone pile (deposit type B). Below wall-top height to the SE began a layer of stony fill in a matrix of red clay (deposit type C), which in turn overlay the much less stony roofing clay with occasional roof slabs. In the NW part of the room these deposits were darkened and softened by the action of the roots and growth above them. The deposit immediately above the floor make-up (deposit type F) appeared to be quite a thick one, although there is specific evidence of more than one floor. A quern was found in the NW corner (inv. 1018) at the same height as the hearth, and a good range of shapes was represented in the sherds without any particular preponderance of either coarse or fine wares. There were few traces of large pithoi, and the room appears to have been a general purpose one. The floor level was a few centimetres below the threshold.

Among the inventoried objects found in this room, we mention the handle of a jug inv. 2, the fr. of an open pot inv. 3, the fr. of a thin-walled coarse pot with incised decoration inv. 17 (Fig. 39), the pithos frr. inv. 22 and inv. 28, the fr. of the pedestal of a krater inv. 67, and the plate frr. 865.

This is an irregularly shaped space, which at present lacks definition as a unit on both south and west sides and is defined formally only by the west limits of the grid squares D7005 and D7010. The character of its floor deposits—stony, loamy and with worn pottery—suggests that it was unroofed at least to the west of D16.

Surface deposits here were obscured by dumps from the 1960 excavation, as well as by extensive stone piles in D7000 (predominantly schist), the east half of D7005 (marble and schist), the north-east quarter of D7500 and the north-east quarter of D7505. The top of wall D16W projected into one of these black stony deposits (type B). Otherwise the Late Geometric remains lay well below them.

Below the surface dump and stones in that part of D15 which is north of D16 was a thin layer of loose brown plough soil (deposit type A) 5-10 cms deep, ending at the height of the top of D16N. Below this was a thin grey-brown loamy occupation-type deposit 5-8 cms deep which overlay a harder brown surface with some pottery in it (floor 1). Below this floor was another grey-brown loamy occupation deposit rich in pottery and bone overlying a second floor below (floor 2). Some bedrock began to appear at the level of floor 1. The occupation deposit between the two floors, as well as floor 2, were markedly redder in colour than the layers above them; much pottery and bone were found in both. Below floor 2 was a red clay levelling fill containing marble chips and little pottery. For the most part, the two floors could be traced in the south half of this part of the unit, although the portion immediately north of D16N lying in D7005 was blackened and disturbed by the stone-pile centred further south. Again bedrock in this portion appeared at the level of the lower floor.

The state of the finds confirms the impression given by the nature of the deposits themselves that, while the unit to the west and south was evidently open to the sky, the part north of D16, with its standard type of red clay floor (deposit type G), was probably a shed, at least in its earlier phase. The pottery of both floors 1 and 2 in this covered space was more abundant and much less worn than that from the remainder of the unit, which was found in very small pieces. There was a particularly rich deposit of sherds in the extreme south-east corner of the covered space on floor 2, some of which were MG II in date, including Euboean imports, most of them in a very good state of preservation. No evidence of post base was found and the westward extent of the roofing remains to be defined.

Among the inventoried objects found in this area we mention the pounder inv. 52, the fr. of a whet-stone inv. 1053, the pithos fr. inv. 849, the rim frr. inv. 875 and the fr. from the neck of a vase inv. 893.

### Passage between D16 and H18 (see p. 31)

While there appears to be no solid form of division between the south limit of D15 and the passage south of D16, there is nevertheless a difference between the type of pottery and the deposits of the two areas. (Different from these two are the type of pottery and the deposits of the adjoining H17, which does not seem to have a northern boundary either.) The pottery on the surface of the passage was more worn than that of D15 proper and the surface itself was hard, reddish and compact indicating that it served probably as an entry to D15. There are few inventoried pottery fragments from this passage, among which we would like to mention the two base frr. inv. 903 and inv. 900, as well as the fr. of a handle with relief decoration inv. 902.

H17 (see pp. 17 and 31)

This unit is delimited on the west side by the long wall forming the eastern boundary of units H24-H25, and on the south by H19N. There appears to be no boundary to the north.

Most of it (H6590-H7090) lay under a large stone pile (see Plan IV). The unit extended into the SW quarter of H7095, where the stone pile ended and bedrock was very near the surface and into H6595, where there was a deep deposit of plough soil. Under these surface deposits of either A or B type a stony fill of schist fallen from the south wall covered the whole area. It was black on top, changing to a yellower, harder layer below (deposit type C) which in turn overlay the reddish clay deposit type F and the floor (deposit type G). The floor was very clearly identifiable in the SW corner where a quantity of pithos sherds were found, as well as a mass of fallen stone. Here too was a thick deposit of powdery orange soft dust (deposit type E) which elsewhere appeared to be part of typical roof collapse, possibly burnt (cf. H19). Elsewhere in the unit the floor was more difficult to trace, (a) because ploughing along the terrace in the eastern half had churned it up, (b) because the bedrock rose very close to the surface in the centre and north, and (c) because the floor itself was a rather soft layer of stamped earth, at least further north, immediately under the thick scatter of flat schist stones. Along the west wall the stone pile had discoloured the soil and disturbed the deposits virtually to bedrock; large quantities of pithos sherds were found here among the lower stones.

Most of the pottery found in H17 came from the SW quarter, where the deposit type F (immediately above the floor) contained a particularly high proportion of not especially worn pithos sherds (inv. 1011); comparatively large quantities of sherds also were found all along the south side, covering a wide range in date. It is interesting to note that fewer sherds came from the more northerly parts of the unit and that some of them were more worn.

More work remains to be done in H17, but it seems already clear that the unit was a courtyard with only one floor level, that this was presumably contemporary with the upper floor in H18 and that at least the south part of the unit was roofed, possibly with overhead storage of pithoi. From the appearance of the deposit above the floor, from the somewhat worn nature of the sherds and from the lack of a base of wooden post supporting a roof over this wide span, it would appear that the northern part was open to the sky (see H21).

Among the small finds in this unit worth mentioning are the pithos frr. inv. 1011 (Fig. 33), the kantharos handle inv. 43, the pithos fr. inv. 708, the fr. from the wall of a pot inv. 727, the relief pithos frr. inv. 737.

H18 (see pp. 17-18 and 31)

The surface features of this room consisted of a circular stone pile (deposit type B) just west of the centre of the unit with two cultivated terraces, one SW, the other NE of it running obliquely from NW to SE (deposit type A). Further east there was also a retaining wall of the NE terrace with a kind of ridge over it necessitated by the eastward slope of the plateau (see Plan IV). Deposits type C and D were preserved particularly deeply along the SW and

west edges of the room. In its north and NE quarters, on the contrary, ploughing had churned well into the upper floor, and had knocked a lot of stone from the bench top. Quantities of coarse pithos fragments were mixed with this bench collapse.

Floor 1 lay immediately below the roof and bench collapse, with a thick deposit type F over it. As in H20 there was a considerable build-up of ceiling material around and even under the pots and other finds lying on this floor, suggesting the possibility of gradual accumulation over a period of time. The floor itself was of standard red-clay with small schist stones in it, and lay a few centimetres below the levels of the two thresholds. Bedrock was higher in the SW corner and along the W wall, and finds here were also correspondingly higher. Fragments of coarse pottery and cooking pots were predominant on floor 1, together with some fine wares—notably skyphos rims and fragments of other drinking vessels—towards the south part of the room.

Below floor 1 was a layer of earlier occupation, particularly deep, black and soft in the SW quarter and also very rich in pottery. Much of this pottery was burnt, especially in the SW area; some of it was of MG date. The stone bench goes down to floor 2 below this deposit, and thus is part of the original concept of the room.

Among the objects found in this unit we mention the neck of a neck-amphora, inv. 102, the plate inv. 136, the fr. inv. 236 (Fig. 58), the fr. of the rim of a pyxis inv. 781 (Fig. 46) and the fr. inv. 801 (Fig. 45). In this room was also found the iron nail(?) inv. 55.

## H20 (see pp. 18 and 31)

This room was less well preserved than H18 since it had a cultivation terrace covering its whole east half (see Plan IV), which also damaged the east jamb of the north door. A stone pile covered practically the whole west half of the room, although it did not seriously disturb the lower layers. Below these two surface deposits (types A and B) the room contained the usual room fill deposits types C and D, the clay being yellow rather than red, as in H18. In the east half of the room ploughing had virtually reached the top of deposit F.

There were two main floors in H20 with corresponding deposits type F over them. The top floor (floor 1), as in H18, was particularly rich in finds of the last occupation and also appeared to represent either a steady accumulation through time or a prolonged seepage of roof-material after the time of the final destruction or collapse. Numbers of pot bases (many from coarse cooking pots), some necks of large vases, examples of near whole jugs and skyphoi were scattered all over, especially along the west wall. In addition to pots there were also pebble-polishers and pounders, spindle-whorls and loomweights, schist pithoi lids, a quern, and lumps of pumice, all suggesting that in its latest phase H20 was a working room probably used by women. This floor ran over the remains of a bench at the south end.

The bench was built onto floor 2, which is the lower floor level with some areas of bedrock in the centre of the room. Floor 2 has not been reached all over the room as yet, although part of the deposit type F over it has been excavated. This included some coarse cooking pots, but also some fine wares. In the SE corner and in the bench itself there was a par-

ticularly high proportion of skyphos rims and fragments of vases of other shapes, also a fragment of a terracotta horse possibly from a pyxis lid. Again some of this material seems to be MG in date. It is possible that in its earlier phase H20 (perhaps like H18) had a less utilitarian function.

Among the objects found in this room we would like to mention the necks of hydriai inv. 33 (Fig. 43), inv. 34 and inv. 36, the neck and mouth of the oenochoe inv. 40, the fragmentary skyphos inv. 45, the fragmentary chytra inv. 46 (Fig. 36), the polished stone disc inv. 57, the spindle-whorl inv. 134 (Fig. 61; Ergon, 1967, 80, Fig. 80), the jug inv. 138 (Fig. 56, Ergon, 1967, 80, Fig. 81 middle; AJA, 1968, Plate 128, Fig. 5 middle), the kotyle inv. 154 (Fig. 54), the skyphos inv. 450 (Fig. 55), the fragment of a terracotta horse (?) from a pyxis lid inv. 833, the fragments of pithoi inv. 834 (Fig. 26) and inv. 837 (Fig. 22) and the iron fibula inv. 35 (Fig. 62). The fragment inv. 810 consisting of part of the rim and body of a coarse pot was also found in H20 (H7585 20N). It is very different from the coarse ware so far found at Zagora and looks like Late Neolithic (see p. 47).

## Units H21, H19, H22, H28, H29 (Plans I, II, and IV)

In this more southern group, as further north, a set of rooms (H19, H28-H29 and presumably also H22) open onto unit H21, which must have been a courtyard and which itself appears to give access to a more public thoroughfare. There is no sign of a threshold in the preserved height of H21E, which is anyway low, but it is difficult to see where else the entry of H22 could have been. Excavation of H21 was extended southward with particular care to see whether this service space had a south wall. There is no doubt that such a wall did not exist. At about this point on the site the buildings seem to come to an end at the line of a probable east-west road passing just to the south of H21. Moreover the nature of the deposits in H21, much deeper than those in H17, leaves little doubt that the unit was a courtyard with its southern half open to the sky. The deposits in the southern half consist of a series of pebbled surfaces beginning already in later MG times.

The MG deposits in this area raise an important question. The walls, as they survive, manifestly represent a set of interconnected units as described above, in the state in which they passed out of use toward the end of the LG II period. The architectural layout of the area in MG II and even LG I may well have been somewhat different; it is not yet possible to reconstruct it and indeed may never be.

## H21 (see pp. 18, 30 and 35-6)

The east wall of this unit is continuous with H19E. However it narrows suddenly near the middle and also bulges toward the south owing perhaps to a repair or alteration after its original construction. Immediately to the west of this possible repair is the low stump of a wall (wall C) on a slightly different alignment, which is covered by the upper floor deposits in the unit. Wall H21N (=H19S) could, from the nature of its junctions, be a later addition to walls H19N, H19E, and H21E; from its relation to the floor deposits of

H21 it may have been added at the time of floor 3 (see below). The two surviving thresholds in H21 are both at the same height and clearly relate to the later floors.

Excavation of this large unit was particularly complicated by its surface features, which varied from extreme paucity of deposit in the SE to a very large and thickly-rooted stone pile centred over the south half (see Plan IV), which affected all deposits down to floor 2 in a very large part of the unit. Around the edges of this stone pile were cultivation terraces, which caused the removal of much of the remaining walls almost down to bedrock, which is here high, especially in the south-east corner of the unit.

After the removal of the surface deposits a major difference became apparent between the north and south parts of the unit, previously obscured by the different effects of the stone pile. In the north part, extending south about 3.50m. from H21N, the layers below surface were what are now known to be standard for Zagora—wall fall (deposit type C), predominantly H21W and partly H21N, roof fall (deposit type D) especially abundant in the NE and NW corners, reddish occupation deposit (type F) and stonier floor make-up (floor 1) just below the height of the two thresholds. There were pots in situ in the NE and NW corners at this level, and the floor itself came to an end just south of the west threshold. Below floor 1 was an earlier phase, floor 2, with a very similar occupation deposit over it consisting of much bone, LG sherds, scraps of iron and schist pithos lids. Both these floors were clearly related to the surviving walls in the north part of the unit as well as its thresholds. Both had continuations in the south part, but different in nature—hard brown earth surfaces with small stones set into them, rich in soft, very worn pottery (also affected by the stone piles above it). These two courtyard surfaces in the south unroofed part were separated by a deposit of loose brown loamy soil. There was certainly no wall or partition dividing the northern half which, we think, was roofed. The corresponding deposits in the two areas were simply different in character.

One feature of the north part of this unit throughout the deposits of floors 1 and 2 was a disturbance along the west face of wall H21E down to the bottom of floor 2, possibly in connection with the remodelling of the wall, or else the reuse of stone from the stump of wall C. In this part vertical joins of pottery fragments were possible throughout the deposits of both floors, including fragments of the figured Euboean krater inv. 416 (see Figs 47-8), of which many more pieces were found just north of the temple. The fragments of the krater were probably thrown into the open trench as part of the levelling fill brought from the nearest available spot.

Below floor 2 there was evidence of a major reorganization in at least the northern part of H21. A layer of stony debris overlay the wall stump C and floor 3 with its noticeably brown and loamy occupation deposit. This deposit was particularly rich in bone and its pottery contained a good many MG II fragments.

Floor 3 overlay floor 4, which was again a standard red clay stony floor make-up with a thick reddish occupation deposit over it including pottery, bone and some ash and charcoal. Floor 4 with its occupation deposit underlay wall C. It was in fact at the height of the main bedrock area extending to the south beyond the covered part of the courtyard as well as continuing right up to H21N and H21E. The pottery in this floor as well as the levelling fill underneath appears, on preliminary study, to be mainly MG. Floor 3 appears to be related

to a subsequent change in the north part of H21, involving the use of wall C. Floors 2 and 1 follow the collapse of wall C and are connected with the final shape and use of the unit. There is a slight change in the character of walls H21N and H21E at the height of floor 2 and upwards.

The pottery in H21 was very abundant, especially in the south end where, however, it was worn and in rather poor condition in all the layers. The MG pottery from both covered and uncovered parts of the courtyard remains to be more fully studied.

In addition to the frr. of the Euboean krater inv. 416 (Fig. 47) among the pieces found in H21 we would like to mention the fr. inv. 468 (Fig. 52), the pithos fr. inv. 61, the krater fr. inv. 68, the pithos frr. inv. 376 and 406 and the frr. of the stamnoid jar inv. 168 (Fig. 35). Here were also found the frr. inv. 472 (Fig. 57). Worth mentioning is also the core of obsidian (?) inv. 1064 which may represent earlier, more casual, habitation of the site (see also pp. 45 and 50).

## H19 (see pp. 18 and 30)

This was not only the largest room excavated in 1967 but also the best preserved, for, although the large stone heap (deposit type B) that covered H17 extended even more completely over H19, the upper floor of the latter lay at a greater depth than that of the former.

Below the wall stones (deposit type C) were a series of deposits of perhaps bench fall and roof fall (deposit type D), the lowest part of which was white, powdery and burnt. The same powdery deposit was also found overlying the bench on the north side. The fragments of coarse pottery, which were abundant in lower levels in most parts of the room, also showed signs of burning. There is little doubt that H19 at least was finally destroyed by fire, perhaps caused by the collapse of its wooden rafters into the burning hearth. A concentration of blackened clay and charcoal immediately above the hearth extending up into the lowest part of the stone wall fall (deposit type C) gives further support to this theory. The occupation layer immediately below the burnt powdery deposit and above the last floor of the room (floor 1) was rich in pottery consisting of coarse as well as fine wares, some of which belonged to the last stages of the Late Geometric period. There were also a number of schist pithos lids, spindle-whorls and a group of small pebbles on a small squarish stone structure against the east half of the south wall. The spindle-whorls were found in two groups, one of ten, the other of six, as if they had been stored in boxes. Some coarse ware was clustered around the impressively large hearth. With the exception of the group of small pebbles, most of the finds mentioned above were found in the NW and SW quarters of the room, where floor 1 was more fully explored. It was less extensively reached in the S and SE and scarcely penetrated at all in the east. In the west part of the room pottery was found on the bench and many large pithos sherds, presumably from a large storage jar that once stood on it. Two more pots (cooking pots?) had fallen from the bench and there were in addition sherds of a large fine-ware amphora, of skyphoi and kraters. A certain amount of bone was found in the vicinity of the west arm of the bench as in H18, suggesting the preparation and consumption of food in this unit.

zagora 1

The existence of at least two further floors (2 and 3) below floor 1 was established in parts of the room. These yielded pottery and bone and, although a close study of the sherds has not yet been possible, they seem to be mostly early Late Geometric and some of them seem to be Middle Geometric.

Among the objects found in this room worth mentioning are the pounder or polishing stone inv. 60, the loomweight inv. 59 (Fig. 59), the kantharos inv. 115 (Fig. 53), the skyphos fr. inv. 278, the frr. of the Euboean krater inv. 282 (Fig. 49), the fretwork handle of a pithos inv. 1000 (Fig. 31).

H22 was predominantly covered by plough soil (deposit type A) with a stone pile in the NW quarter of the room which also covered the hearth. Only under the stone pile were there preserved any of the usual room fill deposits (types C and D). Elsewhere ploughing had removed the walls to their lowest courses, and had damaged in places both floors 1 and 2. These uppermost floors in fact survived only around the hearth and in the north part of the room. They were of standard red clay with small stone packing, and yielded a good quantity of LG pottery, some of it broken in situ. Both floors appeared to be associated with the hearth, which was built on floor 2 and remained in use also after the building of floor 1. They seem to correspond closely in terms of height, character and date of pottery to floors 1 and 2 in the north part of H21.

Among the objects found in room H22 we mention the krater fragments inv. 66, the trefoil-lipped juglet inv. 153, the fragments of a small round 'table of offerings' inv. 242 + 690 (Fig. 38), the plate fragments inv. 243 + 245 + 702, and the plate fragments inv. 137 + 696 (Fig. 50).

The threshold from H21 into H28 shows the relationship of the latter to the rest of this group in at least its latest phase. The uppermost floor is at the same height below the threshold as that in H21. There is a further threshold in the south wall of H28 leading into H29. A stone bench was built along the north wall.

As in most units there was here too a surface stone pile which covered the west two-thirds of the room causing some discoloration and disturbance to the sequence of floors in the middle. Around the edge of this stone pile was the usual plough soil (deposit type A) and below it, merging into one pile was a continuous layer of schist slabs representing fallen walls (deposit type C) overlying in turn the roof clay (deposit type D), especially in the corners and along the walls, which protected some pots shattered in situ on the uppermost floor. One of them lay just inside the threshold of wall H28E and two others in the SE corner. Excavation in the west half of the room revealed three further floors or probable floors below the top one, on the lowest of which lay a large shattered door jamb. There was

a lot of pottery along the walls in the lower layers, but so far nothing suggests that the occupation of this room began earlier than LG I.

Excavation in unit H29 was barely started in 1967.

Among the objects found in room H28 here are mentioned the pithos fragment inv. 133 (Fig. 29, Ergon, 1967, 82, Fig. 83; AJA, 1968, Plate 128, Fig. 7), the cup inv. 307 with a profile head incised on it, the plate fragments inv. 317, the incised pithos fragment inv. 330 and the fragment of a hydria inv. 447. The stone loomweight inv. 1054 (Fig. 60) was also found here.

#### Unit H23 and the area north-west of the temple (Plans II and IV)

Some excavation was carried out to the east of H23 and north of the temple, in the grid squares H8575, H8580, H9075, and H9080. No walls or structural delimitations of space defined this area. Bedrock lay very close to the surface rising towards the south; the edge of the plateau lay only a few metres to the east, while a strip along the outer face of the north wall of the temple, which might have been expected at least to have cut through earlier deposits in the area, had already been dug to bedrock by Dr Zapheiropoulos in the 1960 excavation. Thus space was here defined more by the extent of significant surfaces than by walls.

Surface features were few but interesting. Immediately north of the north wall of the temple was a dump in two thin layers from the 1960 excavation, together with a modern field dry-wall and another construction for aiding the removal of excavated soil from within the temple. Below lay a thick brown loamy deposit with some stone in it, which here and there manifestly looked like roof fall or other debris. The scatter of stone debris spread out into H9080, due north of the temple.

Walking surfaces extended almost continuously from the southern limits of H21 right across to H9075 and H9080, characterized by a rather hard texture and abundant, mostly worn sherds, especially pithos fragments. These surfaces do not seem to be floors of rooms, the walls of which have been ploughed out completely, but rather, as the superficially worn character of much of the pottery suggests, a single continuous open area of much the same character as the southern part of H21 (see pp. 46-7).

### H23 (see pp. 19 and 30)

Since only three walls survive in H23 the unit gives the impression of a courtyard facing south. It is more likely however, that it was a room, the south wall of which was completely destroyed, because it was built directly on bedrock, which rises markedly toward the south boundary. The entry, which does not survive, probably was in the south wall; a second door could have existed in the north wall connecting the room with H22.

The stratification was extremely difficult to follow. The room stands in an exposed position and the upper levels had been subject to disturbance by ploughing. Again, as the bedrock rose high here, particularly in the southern part of the room, the floors were

disjointed and uneven. The result of the disturbance is that the pottery occurs in some quantity close to the surface. The surface deposits, which are not very clear, consist of vestiges of what may have been large stone piles, namely, two or three obliquely-standing slabs west of the centre (deposit type B) and a loamy plough soil (deposit type A) which contained more than the usual quantity of pottery because of the disturbance of the floors below. Remains of the wall fall (deposit type C) existed mainly in square H8075 extending a little into H8080. Some of the roof fall (deposit type D) and part of the upper floor levels were also preserved.

Among the many inventoried objects found in room H23 we should mention the pithos frr. inv. 646 (Fig. 23), inv. 542 (Fig. 27) and inv. 603 (Fig. 37), the fr. of a coarse vase inv. 575 (Fig. 40), the fr. of an Attic (?) lekythos (?) inv. 574 (Figs 41-42) and the frr. of the Corinthian skyphos inv. 1 (Fig. 44). The aryballos fr. inv. 72 and the fr. of the krater inv. 12 with a bird painted on it were also found here.

#### H8575-H9075-H8580-H9080

In this space the dump of the 1960 excavation covered only a small part of H9075. Apart from this the surface deposits consisted of light brown loam comparatively shallow in H8575 but becoming thicker in the remaining three squares where they incorporated a certain amount of stone dump material. This was found to be continuous in H8575, H9075 and through H8580 and H9080.

The first recognizable floor lay under this light brown loamy layer (floor 1 or walking surface 1). It was everywhere distinguished by quantities of sherds embedded in its yellow clay surface. Here were found most of the fragments of the krater inv. 416 discovered in H9075 6 but also straying into H8575 3 and even in H21 (see p. 46). An interesting small cache of vases was also found hidden under a pile of stone fall in H9075 6 consisting of cup-skyphoi and kotylai, including inv. nos 39 (Ergon, 1967, 80, Fig. 81 left and AJA, 1968, Plate 128, Fig. 5 left). This floor may be continuous with floor 4 in the south end of H21; this relationship however has to be confirmed by further digging in the area. It is possible that a second lower floor also existed underneath floor 1 traced in H9075 and H8580.

In addition to the pieces mentioned above the following items were also found in this area; the firr. of a pithos made in the coil technique inv. 922 (Fig. 34), the pithos firr. inv. 907, inv. 909, inv. 41 and inv. 924, the plate fr. inv. 930 and the fr. of a stand or strainer inv. 929. We should also mention the bone point inv. 105 and a flint chip (inv. 110), as well as two pieces of obsidian (?) (inv. 117 and inv. 107) which were found close to bedrock, and may be remnants of earlier, more casual, habitation in this area (see also p. 47).

## H26 and H27 (Plans I, II and IV)

These two units lay at the west limit of the 1967 excavation and at that time it could only

be established that entry to them should lie further west. A large stone pile covered a good part of the units.

H26 (see pp. 19 and 34)

The walls, especially towards the west, were preserved particularly high. Abundant pithos fragments began to appear under the surface stones in the vicinity of the bench tops, many of them with relief decoration. It soon appeared that a series of large depressions in the top of the benches had once held very large jars. Red clay, discoloured by decomposed pithos fragments presumably fallen from the bench, was mingled with the stone fill in the centre of the unit. This stone fill overlaid the main floor occupation deposit, a brownish clayey layer with pottery, which in turn overlaid the uppermost floor which was brownish in colour. Below it an earlier floor was discovered which was redder and which marked the top of a levelling fill underneath extending into the bedrock fissures.

Among the objects found in this room we would like to mention the big relief pithos inv. 148 (Fig. 28, Ergon, 1967, 81, Fig. 82; AJA, 1968, Plate 128, Fig. 6), part of the 'Parian' vase inv. 429 (Fig. 51), the handle of pithos with filling of cubes inv. 449 (Fig. 32), the fragment of the neck of a vase inv. 968 and the pithos fragment inv. 982.

H27

A very similar series of layers was found in H27 with an upper floor and a lower floor.

## VIII The pottery

## ALEXANDER CAMBITOGLOU and J. R. GREEN

All the pottery from the 1967 campaign was retained with a view to providing a full statistical analysis of the contents of each unit.¹ However, a series of objects has been selected for particular study, and these have been given inventory numbers which are used below.² Our eventual aim is to identify the fabrics and work out sequences for the various shapes; also to study the style of their decoration and to analyse the finds stratigraphically. A good deal of progress has been made, but much work remains to be done and the views expressed below are tentative.

## A. The coarse wares

#### 1. Pithoi

Fragments of pithoi were abundant in the excavated area, but were concentrated particularly in rooms with benches—H18, H19, H26-H27, and H28—often on or apparently fallen from benches.<sup>3</sup> Fragments of pithoi also occurred not infrequently in above-floor fill. It is possible that they became mixed with such fill by being dislodged from a position inside a room by the roof collapse, but it is equally possible that some pithoi were stored on the roof. One such instance is inv. 1011, the upper body and neck of an extremely large piece found in the fill above the floor of H17. Its lower body and foot have not yet been located and certainly did not occur in or on the floor of H17 itself. A further concentration of pithos fragments was found in the open area square H9075 (immediately to the north of the temple), which may have been a dump (see also below p. 55).

While most of the pithoi so far excavated are undecorated, there is a good number of pieces decorated with impression, incision, relief, or a combination of these.<sup>4</sup>

(a) With impressed decoration Impressed decoration, found mostly in combination with incision, normally occurs on raised bands which run horizontally around the pot. The width of these bands varies, presumably according to the size of the pot and their position

<sup>&</sup>lt;sup>1</sup> See above, Chapter VII, p. 37.

<sup>&</sup>lt;sup>2</sup> It should be noted that these numbers will not correspond to those of the catalogue to be published after the termination of the excavation; metal, stone, and terracotta objects have been numbered in the same series.

<sup>&</sup>lt;sup>3</sup> Fig. 18 shows fragments of the base of the relief pithos inv. 148 in the bench of storeroom H26.

Impression occurs only on pithoi and pieces with similarly thick fabric, such as stands. Incision is found widely on both pithoi and small pots, but on pithoi usually in combination with impression (with the exception of the ubiquitous rope-pattern). Relief is almost entirely confined to pithoi, the exception being plastic work on a class of grey thin-walled juglets.

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on it; they are mostly between 4 cm. and 7 cm. There are also parts of plain bands, possibly from the backs of pots. The impressions are usually square or triangular.

Typical for the decoration of pithoi in this category are fragments inv. 837 and inv. 646, the former decorated with squares, the latter with triangles (Figs 22 and 23). The instruments used for making these impressions seem to have been more or less standard. Some pithoi combine impressed decoration with incised pattern (inv. 919, Fig. 24). The fabric is usually a lively brick-red.

Another motif is that of the reversed pyramid, which appears on a number of pots, characterized by the care and smoothness of the finish and the neatness of the impression. An example is inv. 934 (Fig. 25). Pyramidal impressions do not seem to have always been made with an instrument with a pyramidal end, but with the corner of a square-sectioned stick applied sideways into the clay; in some of the larger impressions, a bump is visible along one side of the impression (Fig. 25). As a motif, pyramidal impression is almost as popular as squares and triangles.

Of a total of some forty-two pithos fragments with impressed decoration, only two have designs other than squares, triangles or pyramids. One, inv. 1093, decorated with impressed circles on a raised band, was found on the ground surface outside the area of the settlement, on the north slope. (At other sites, circles seem to become popular in the seventh century.) The other, inv. 834 (Fig. 26), is a rim and neck fragment decorated with three incised lines and an elaborate guilloche. Although the surface is not well-preserved, it seems likely that the impression was made with a roller. As may be observed with the material from Xombourgo in Tenos, this is a technique introduced in the seventh century for figures as well as designs, a date which the pattern of our fragment might also suggest. Our piece was found over room H20 (H7585 2C3), a deposit above the roof fill which was disturbed by a plough-line running from somewhere near the temple; therefore it may well have originated from there. It is noteworthy that in the adjoining square H8090 1, to the east of room H20, the foot of a late sixth-century Attic krater (inv. 836) was discovered, which must also have found its way across from the temple. All the other material mentioned above is dated by its context to the later part of the eighth century BC.

- (b) With incised decoration Incised decoration normally occurs in combination with impression, as on the fragment inv. 919 (Fig. 24) and on the fragment inv. 542 (Fig. 27). The patterns are normally composed of straight lines.<sup>5</sup>
- (c) With rope-patterns Rope-patterns are a very common form of pithos decoration. They usually consist of a narrow relief band applied to the surface of the vase which is slashed or chopped on the diagonal. The cuts are often wide and different from pure incisions due perhaps to the use of tools with blunted edges. A rope-pattern combined with both impression and incision occurs on the fragment inv. 919 (Fig. 24).
- (d) With relief decoration Relief decoration belongs properly to pithoi. The fabric is generally distinctive and usually a brownish red, which is strikingly different from the normal

<sup>&</sup>lt;sup>5</sup> There is one exception, inv. 330, which has simply a crude wavy line incised on a raised band.

rich brick-red of the pithoi decorated with impression or the sandy red of most plain pithoi. As one might expect, the surface also is more carefully finished. The decoration is applied, not raised, and can be linear, figurative, or a combination of both.

Frequent elements of linear decoration are concentric squares (inv. 904 and inv. 928) and spirals (inv. 133, Fig. 29), zigzags and particularly hooked zigzags; also curvilinear designs, of which the most prominent is that with double wavy line, which we propose to call 'omega pattern', and which can be seen best on inv. 148 (Fig. 28). Because of the small size of the fragments, the figurative decoration in most cases cannot be made out with any degree of certainty; the majority so far have been surface finds, and so are worn. Inv. 133 (Fig. 29) has a representation of a row-dance, 928 part of what may be a warrior, 61 and 904 an animal that may be a horse, 946 an unidentified animal, 7 what may be a centaur (Fig. 30).

The most impressive linear relief decoration appears on a number of well-preserved fragments of the pithos inv. 148 mentioned above, parts of which were found still remaining in the bench of H26 (Fig. 28). It is decorated with bands of hooked zigzag and omega patterns, with simple wavy lines on the handles. No attempt has been made so far to restore the vase as there are good reasons to believe that more fragments of it will be unearthed later.

The most interesting figured piece is the fragment inv. 133 (Fig. 29), the surface of which is divided into two registers by three thin lines of rope-pattern. The upper register is decorated with a spiral and two knobs, the lower with parts of two figures performing a row-dance. The left figure seems to have a sword hanging from his waist. The bodies of the figures (but not their heads) are outlined with impressed dots; similarly outlined are the spiral and one of the knobs. It is possible that this patterning, which here clearly has a decorative function, arose out of a method that was technically useful in bonding the applied relief more firmly to the background. Such dot-outlines also occur on a fragment with concentric squares and very frequently on the relief pithoi of Tenos.

In this section should also be mentioned parts of two elaborate fretwork handles of a pithos (inv. 1000, from room H27) of which one, the right, is illustrated here (Fig. 31). They are constructed in a fine but rather friable pale brown to red fabric, in some ways not unlike that of the relief pithoi. The decoration is confined to the visible front; the side has merely double lines by the edges, while the back is completely undecorated. Another handle is much more simple (inv. 449, from room H26, Fig. 32). Only the filling from between the handle proper and the neck remains; it consists of cubes in a reddish fabric. Such handles can have had no function other than a purely decorative one, and it is worth noting that these are the only examples so far found.

(e) Without decoration Many pithos rims, bases and body fragments have been found, and all rims and bases have been inventoried with a view to a thorough classification. It is worth

<sup>&</sup>lt;sup>6</sup> However, the fragments inv. 749 and inv. 650 are reddish, and inv. 603 is of a plum-red colour with a cracking surface. The last two are from a significant context, and inv. 749 is close to inv. 650 stylistically. All seem to be earlier: see below, p. 55.

<sup>&</sup>lt;sup>7</sup> It was found in the stone-pile in unit H28, H6575 5.

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noting at this stage that there is so far no evidence of pointed pithos bases at Zagora. The rims tend to fall into fairly distinct groups by shape, and these groupings largely coincide with distinctions made by fabric. The differences of fabric are due not so much to differences in the clay itself as to the variation in the type and proportion of the additives used, and this would be a matter for the personal taste and experience of the potter. At the same time, smaller pithoi tend to have fewer inclusions than large ones—as one might well expect. The quality of production is generally very high.

Several examples show clear evidence of the use of coils in the construction, particularly in the upper part of the pot. The most obvious instance is inv. 1011 (Fig. 33), the upper wall, neck and rim of an extremely large pithos in sandy red fabric. The diameter of the rim is approximately 0.715m. and its circumference is almost completely preserved. The drawing attempts to show the arrangement of the coils. They are roughly an inch square and were firmly pressed into position with the thumbs. A surface coating was then added, and this has tended to break away, just as the wall of the pithos has broken along the lines of the coils. Some of the smaller pithoi suggest that the bodies of these pots were constructed with flat slabs which have notched joins, while the neck and rim were constructed with coils (see inv. 922, Fig. 34, where however only the upper part of the pot is shown).

The stratigraphical dating of these large pithoi is likely to be difficult, since, being more expensive than smaller, more ordinary vessels, and set permanently in corners and in benches, they probably had a far longer life. Again, parts of broken pithoi that had been discarded as storage vessels may still have been used for other purposes for a considerable time, just as nowadays necks and rims of pots are used on the island as stands, or their bodies on the roofs of houses as chimney-pots. Further, since few pithos fragments of any size have been found below the level of the last floors, one might suppose that broken pieces of such pots were too large and inconvenient to be pressed into the floor and were therefore taken outside the houses and scattered or dumped. The peculiar concentration of fragmentary pottery and especially pithoi immediately to the north of the temple in H9075 suggests that such a dump existed there.

In spite of the difficulties which the study of pithoi presents, one may suggest on the basis of stratification that the appearance of the fabric of later pithoi is different from that of earlier ones. Earlier pithoi are often of a plum-red colour with a patchy, uneven surface that tends to break up; later ones are usually brick- or sandy-red (brownish in the case of the relief pithoi), with a firm, even surface. Three examples of the 'early' type were mentioned above (note 6). Two of them inv. 650 and inv. 603 (the latter is Fig. 37), are from the floor of room H23 and should be dated by their context to the time of transition from Middle to Late Geometric; the third, inv. 749, was found in the roof fill in room H20.

Pithoi were fashioned individually and fired individually, so that fragments belonging to the same pot can be easily detected. Since stylistic analysis seems to be possible, further

<sup>&</sup>lt;sup>8</sup> It is not possible to say with certainty whether pithoi were used as chimney-pots in Zagora, although a few fragments had much blackening inside. On such questions see also D. A. Amyx, Hesperia, 27 (1958), 168ff.

<sup>•</sup> See also above, pp. 53-4.

research could lead to interesting results both within the immediate context of Zagora and in terms of potters travelling from island to island.<sup>10</sup>

### 2. Chytrai

The name has been given by analogy with the similar shape of the Classical period.<sup>11</sup> It is the most readily detectable shape amongst the thinner coarse vessels, with a rounded body tending towards ovoid, a wide round mouth and a flat base; there is a single broad flat handle extending from lip to belly, usually quite close to the neck. The fabric is normally rough sandy and of a mid-brown colour, although it can run through to a grey-black. All chytrai seem to be hand-made and few, if any, are of different fabric. The shape seems to be reported also from Lefkandi, in Euboea where, according to the interim reports, it is found somewhat earlier than at Zagora.<sup>12</sup> The function of the chytrai as cooking-pots is clear from evidence of burning about the lower wall and base and, to judge by their frequency and the relative lack of other types, they were the principal cooking-pots employed by the Zagoritans.<sup>13</sup> Of five well-preserved examples, two are from room H20 (inv. 46, Fig. 36, and inv. 1085, H7585 7), and one each from rooms H18, H19, and H28 (respectively, inv. 1080, H7590 12; inv. 186, H7085 4; inv. 1077, H7075 5C2). Other finds from these rooms confirm that the chytrai serve as a useful guide to a room's character or function and the incidence of benches in these rooms is to be noted.

## 3. Other small pots

Of the same fabric as the chytrai is a handle fragment of a lebes from room H19. The diameter of its rim is uncertain but it may have been as great as 37 cm.<sup>14</sup>

There are clearly several smaller shapes of the same red fabric as the pithoi and therefore probably of local manufacture; a good example is the wheel-made stamnoid jar, inv. 168 (Fig. 35) from the NW part of unit H21 (H7080 3C/F). Of a deeper and less sandy red fabric are the thin-walled pot inv. 458 from room H19 (H7590 20A-21A), the lugged bowl inv. 200 + 1008 from room H19 (H7080 10) and the fragments of two small round 'tables of offerings' [inv. 242 + 690, H8085 2B3, 2C3 (Fig. 38) and inv. 342, H7575 8B, H21]. Each of these 'tables' had three triangular feet and a flat, slightly concave upper surface.

<sup>10</sup> During a brief visit to the Tenos Museum, it was noticed that there could well be some correspondence between Zagora and Tenos material. The fabric of the Tenos relief pithoi was rather paler than that of the Zagora relief fabric and the clay had different inclusions. With the exception of one large restored pithos with geometric designs, the eighth-century material in Tenos is infrequent and fragmentary; most pithoi there date from the seventh century.

<sup>&</sup>lt;sup>11</sup> Cf. Brian A. Sparkes and Lucy Talcott, Pots and Pans of Classical Athens (Princeton 1958), Figs 42 and 44.

<sup>12</sup> Lefkandi, p. 27.

<sup>&</sup>lt;sup>13</sup> Another smaller type has a heavy flat base of much smaller diameter, e.g. inv. 789 from H7590 11, unit H18. There is no evidence so far of round-bottomed chytrai.

<sup>&</sup>lt;sup>14</sup> Inv. 187, H7085 4. A general idea of the shape may be gained from the seventh-century example from Taranto: *Annuario*, n.s. Vols 21-2, 1959-60, 30. Also later is the lebes from Ialysos: *Cl. Rhodos* III, 89 tomb LIII, 3. There is an undated but perhaps seventh-century example from Thera: *Thera* II, 36, Fig. 112, and Fig. 231, Fig. 428d.

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They have signs of burning on the underside. Their shapes recall the tables of offerings found in the Palace of Nestor (*Palace of Nestor*, Fig. 271, Nos 10-11 and Fig. 272, Nos 4-5).

Also related to pithoi in the nature and thickness of their fabric (and to some extent in their decoration) are a number of heavy cooking stands. Two, from room D16, are decorated with horizontal incised lines. <sup>15</sup> Another fragment from a stand or strainer, inv. 929, from the surface deposit in H9075, has impressed triangles and incision in the crosspiece. There are also a few tripod stands of a thinner fabric (e.g. inv. 692, H8085 2B3, room H22), and also a fragment with painted decoration (see below).

The thin-walled fragments discussed under 2. and 3. are of a wide variety of fabrics. A fine example is the upper part of the jug, inv. 44 (H8090 4C), from the area to the east of H20, with small incised lines at the top of the shoulder. Many other examples have incised patterns. These are mainly composed of simple straight lines (inv. 17, Fig. 39), although one fragment from by the base of a handle has what seems to be a bird (inv. 575, H8075 Str.A3, room H23, Fig. 40).

### 4. Coarse fabric with paint

Some fabrics, which one may reasonably classify as coarse, have painted decoration with or without slip. The most prominent types are some necks (mostly of hydriai) in a dark red fabric with smooth finish or in a grey-black fabric with slip. An example of the latter is shown in Fig. 43.<sup>16</sup> One could also mention here a fragment of a fenestrated stand (inv. 319, from near the threshold of room H28, H7075 5C2). The fabric is reddish and gritty; the paint is black.

Of extremely thin red coarse fabric is a group of cups which seems to belong mainly to the lower excavated levels. Because of their fragility, their state of preservation is often poor and few have been inventoried. They are, however, quite common and one might speculate that they were made locally. Examples are inv. 486 (H7580 13K, unit H21; fragment of the upper wall and rim), inv. 794 (H7595 5C, room H18; fragment of the upper wall and rim) and inv. 479 (H7580 13D, 13N, unit H21; various fragments of the body, handle and rim). The last gives a general idea of the shape. There is some range in the system of decoration. Most have a black wash applied directly over the clay—e.g. 479 and 486—but some have evidence of a white-cream slip with painted decoration over it. The only reasonably well-preserved example of the latter category is 794, which has red paint applied over the slip. It is not yet clear whether these variations have any chronological significance.

### B. The fine wares<sup>17</sup>

The 1967 excavation produced a large quantity of material in a wide range of fabrics. Only a small selection is mentioned here.

<sup>&</sup>lt;sup>15</sup> Inv. 860, D7505 8B and inv. 863, D7005 12E.

<sup>&</sup>lt;sup>16</sup> Inv. 33, H7590 7G3, room H18. Several such necks were found standing on floors without any apparent body. They had presumably served as stands.

<sup>&</sup>lt;sup>17</sup> In our study of the fine wares we were greatly helped by two visits to Andros by Mr J. N. Coldstream for which we are most grateful.

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It has not proved possible so far to identify a purely local Andriot production of fine wares<sup>18</sup> but imports from Attica, Corinth, and Euboea are often more easily detectable; also it should be taken into account that, since in most cases only the upper layers of the floors have been excavated, the picture given below may be changed considerably as a result of further excavation down to bedrock. Most fragments identified with reasonable certainty as Attic seem to be Middle Geometric<sup>19</sup> and early LG I, a feature of other island sites also. Although the importation of Corinthian pottery started with Middle Geometric<sup>20</sup> Corinthian fragments are more frequent in the later part of the eighth century.<sup>21</sup> There is a good deal of Corinthian influence to be seen amongst the later eighth-century material in general, especially the drinking vessels. Euboean occurs in both Middle and Late Geometric, but the Late Geometric imports are more numerous (e.g. invs 292, 606, 612). Indeed as one might expect from the geographic relationship of the two islands, Euboean accounts for a good proportion of all imports. Of the other island fabrics 'Parian' is among the most prominent, especially with plates, and it should be mentioned that there is at least one Cretan pot.

One of the earliest inventoried pieces (MG I) is inv. 574 (Figs 41 and 42, H8075 Str.A3) and may be Attic. It has a little boss near the top and probably comes from a lekythos similar to Cambridge GR.2.1943.<sup>22</sup> The painted designs which are not well preserved consist of hatched maeanders at the top and a multiple zigzag pattern below with vertical bars on the apices. The zigzag pattern is framed by three horizontal lines above and three others below. Another possible Attic import is inv. 801 (H7590 11Y, Fig. 45) from an open vase, possibly a krater. The painted decoration includes a vertical dotted outline lozenge chain and two columns of Ms.

Undoubtedly Attic is the fragment inv. 781 (H7590 10, Fig. 46) which includes part of the lip and body of a flat pyxis dating from the MG II period and decorated with a vertical chevron pattern in a horizontal panel and horizontal lines above and below.

Among the Corinthian pottery may be mentioned three joining fragments of an MG II skyphos (inv. 1, H8075 7G, Fig. 44) with a horizontal chevron pattern framed by three horizontal lines above and below and groups of verticals on either side. Fragments of several similar skyphoi have been found.

The most common imported fabric is Euboean. We mention two Late Geometric figured pieces. The first (inv. 282, H7080 3B, Fig. 49) consists of two groups of joining fragments from a krater, one showing a grazing horse to the right. Beneath the barrel of the horse there are two filling ornaments, one of which is a bird with a down-turned tail. The second work is a large krater, inv. 416 (H9075, H8575, H9080, H8580). A great number of fragments of this vase are preserved and were found in separate deposits in room H23, in the square H9075 behind the temple and in the north-eastern part of the courtyard H21 (see

<sup>&</sup>lt;sup>18</sup> Coldstream, pp. 164ff.

<sup>&</sup>lt;sup>19</sup> Inv. 574 (Fig. 41) seems to be MG I while most of the other Attic fragments seem to be MG II (e.g. invs 781, 938, 578). On the question of Attic influence on the northern Cyclades during the Middle Geometric period see Coldstream, p. 165.

<sup>&</sup>lt;sup>20</sup> The fragments invs 487 and 780 may be Corinthian and as early as MG II.

<sup>&</sup>lt;sup>21</sup> E.g. invs 493, 960, 926, 1015, 251.

<sup>22</sup> Coldstream, Plate 3, m.

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pp. 46 and 52). Figs 47-8 show a few joining fragments from it. The paint is mid-brown to black over a cream slip, but the surface is for the most part very worn. The decoration on the illustrated fragments is in two registers. In the middle of the upper register there is a single-horse chariot driven by a charioteer and preceded and followed by a warrior carrying a round shield and two spears. Between the fore and hind legs of the horse a third diminutive warrior is represented similarly armed. In the lower register there are two partly preserved figures from a procession of horsemen.

As may well be expected pots of the various Cycladic fabrics are numerous; few will be mentioned here. Among the most readily identifiable are a good number of 'Parian' plates, many of which were found in H22. One (inv. 137 + 696, H8085 2C + 2D3) is illustrated in Fig. 50. Its decoration recalls that of the plates published in *Délos* XV, Plate xxxiii. The clay is orange and seems to be covered with a thin wash.<sup>23</sup> Fig. 51 illustrates three joining fragments of a 'Parian' LG krater (inv. 429, H6585 9). The decoration, which is characteristic, was in panels.<sup>24</sup> One of these is preserved, with concentric circles in the centre and four large dots in the corners. The panel is flanked on the right by long thin vertical strokes. The fragment inv. 468 (H7580 15, Fig. 52) probably comes from an MG II amphora; the decoration, possibly from a panel, consists of what seems to be a solid outlined triangle with vertical lines on the sides. The better preserved kantharos inv. 115 (H7085 11B, Fig. 53) is Late Geometric; it has a continuous hatched maeander pattern on one side and hatched triangles (?) on the other.

Figure 54 is an example from a group of Corinthianizing kotylai (inv. 154, H7585 7E, 7C3). All members of the group are in very close imitation of Corinthian in both potting and painting and continue to follow Corinthian trends over a number of years; they should provide useful criteria for dating. The clay is pinkish buff, sometimes rather orange; it is smooth, well-levigated and without mica. A cream slip covers the upper half of the wall and the paint is dark brown. The decoration resembles that of the Corinthian skyphos inv. 1 (Fig. 44), but is of inferior quality and is poorly preserved. Of much more strongly orange fabric and with black paint is the skyphos inv. 450 (H7590 21A, Fig. 55). The skyphos 358 in the Museum of Classical Archaeology, Cambridge, is very similar and should be from the same workshop. Possibly Cycladic and not Corinthian may be the jug inv. 138 (H7590 7A, Fig. 56). The clay is a cream-buff turning to green and the decoration consists of horizontal lines between two broad dark-painted bands over which runs a white wavy line, now mostly worn away. Worth mentioning also is the one-handled cup inv. 307 (H7075 5A), Late Geometric by its context. It is representative of a fairly common series but has the added distinction of bearing an incised sketch of a head. The paint on this, as on the others of its class, has almost completely worn away, but it seems to have covered the vase in an all-over wash. A useful context date is provided for the hydria fragments inv. 1092 (H7585 9). They were found just within one of the two thresholds of H28 on the final floor. The vase must have been in almost new condition when deposited, and from its situation and the state of preservation of the fragments, it must also have been broken in the very last days of the room's, and perhaps the settlement's, use.

<sup>&</sup>lt;sup>23</sup> Cf. Coldstream, p. 176, Plate 38, h and j.

<sup>&</sup>lt;sup>24</sup> For other examples with similar decoration see Coldstream, p. 176.

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Most of the earlier painted vases are MG II, although there are clearly a few MG I fragments. The earliest of these may be inv. 574, which we have already discussed and which may date from slightly before 800 BC. With this should also be mentioned two pieces of closed vases, probably amphorae, with Protogeometric decoration: inv. 472 (H7580 15, Fig. 57), which consists of four joining fragments and recalls the amphora found in one of the two graves discovered outside the settlement in 1899, and inv. 236 (H7590 13, Fig. 58) (see p. 10). Both are decorated with concentric circles. These two pieces may be earlier than most of the pottery found in 1967, but since they do not come from a purely Protogeometric layer and inv. 472 was certainly found in a Middle Geometric context, they may belong to the sub-Protogeometric trend in the Cyclades of the Middle Geometric period.

<sup>&</sup>lt;sup>25</sup> Inv. 439 (MG I ?), inv. 445 (MG I ?), inv. 448.

<sup>&</sup>lt;sup>26</sup> PGP, Plates 16, 150.

<sup>&</sup>lt;sup>27</sup> Inv. 472 comes from the same deposit as inv. 468 (see p. 59).

<sup>&</sup>lt;sup>28</sup> Coldstream, p. 330.

## IX Small finds other than pots

### ALEXANDER CAMBITOGLOU and J. R. GREEN

The 1967 excavation yielded few objects other than pots and this suggests that the most precious possessions of the inhabitants, at least in the excavated area, were removed before the settlement was abandoned.

Among the stone objects, one should mention a number of large schist pithos lids, but also some little ones obviously used for small-size vases. Worth mentioning also are several querns (e.g. inv. 1018), a few pounders (e.g. inv. 1061, H7585 7C), a disc (inv. 57), as well as two loomweights (inv. 59 and inv. 1054, Figs 59 and 60).

In addition there is a good number of clay loomweights and spindle-whorls. Among the latter, we mention only one, inv. 134, H7590 7B3 (Fig. 61), the shape of which recalls a truncated cone. The body is decorated alternately with horizontal ribs and painted lines and the flat top with a painted wheel. Generally speaking, our spindle-whorl resembles some classical types found in the Athenian Agora, although the proportions are different.

Of the few metal objects, the most important is the iron fibula inv. 35, H7590 702 (Fig. 62). The pin, the catch-plate and the spring are lost; only the bow is preserved but is considerably corroded. A terminus ante quem for it is established by the pottery context in which it was found and which seems to be not earlier than the last quarter of the eighth century.

<sup>&</sup>lt;sup>1</sup> Brian A. Sparkes and Lucy Talcott, Pots and Pans of Classical Athens, Fig. 57.

<sup>&</sup>lt;sup>2</sup> See also the early examples published in Hesperia 30 (1961), Plate 30, 56a-d.

### X Conclusions

The discoveries of the 1967 excavation at Zagora suggest at present that the settlement flourished in the eighth century and more especially during the second half of it. None of the pots found in architectural units could be dated much later than 700 BC. The date of the temple itself is at present uncertain and may be later, since it resembles closely the Emporio temple dating from the sixth century, and since Dr Zapheiropoulos reported the finding in 1960 of Attic black-figure sherds in front of it.

The architectural finds of the 1960 and 1967 excavations are very important because, although only a small part of the fortified area has been explored so far, there are already clear indications of a consistent plan of a settlement dating from the Greek Early Iron Age about which our knowledge is still very inadequate. The buildings discovered to date include, in addition to the temple and a number of ordinary houses, an important house in the southern complex with room H19 as its centre and, so far, without parallel in the Geometric period. On the whole the quality of the buildings, especially of the temple, is exceptionally high.

Although the pottery as expected is mostly fragmentary, it forms already an important collection, which will eventually help considerably in the study of fine and coarse wares in the Cyclades.

Further excavation will aim at continuing and expanding the exploration of the southern and northern complexes, at investigating the floor and foundation of the temple as well as its surrounding area, at studying the density and character of the buildings in other parts of the settlement and at investigating the fortification wall.

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- 46 Inv. 781 Fragment of an Attic pyxis
- 47 Inv. 416 Part of a Euboean krater
- 48 Inv. 416 Drawing of the pot illustrated in Fig. 47 (R. R. Darling)
- 49 Inv. 282 Fragments of a Euboean krater

- 50 Inv. 137 + 696 Late Geometric plate of the 'Parian' school
- 51 Inv. 429 Fragments of a 'Parian' vase
- 52 Inv. 468 Fragment of a Middle Geometric vase
- 53 Inv. 115 Cycladic kantharos
- 54 Inv. 154 Corinthianizing Cycladic kotyle
- 55 Inv. 450 Skyphos with bird on either side
- 56 Inv. 138 Jug decorated with horizontal lines and bands
- 57 Inv. 472 Fragment of amphora with Protogeometric decoration
- 58 Inv. 236 Fragment of skyphos or krater with Protogeometric decoration
- 59 Inv. 59 Stone loomweight
- 60 Inv. 1054 Stone loomweight
- 61 Inv 134 Spindle-whorl
- 62 Inv. 35 Iron fibula



Fig. 1



Fig. 2



Fig. 3

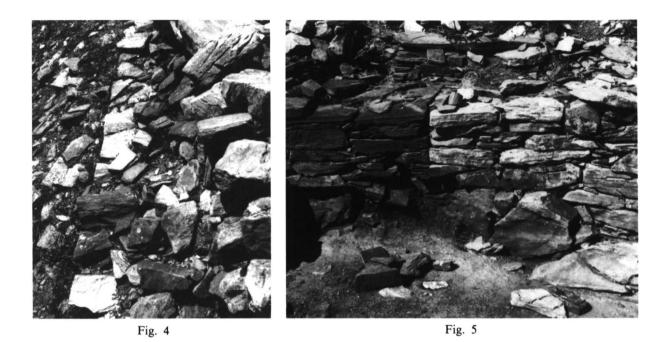








Fig. 7





Fig. 8 Fig. 9





Fig. 10 Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15

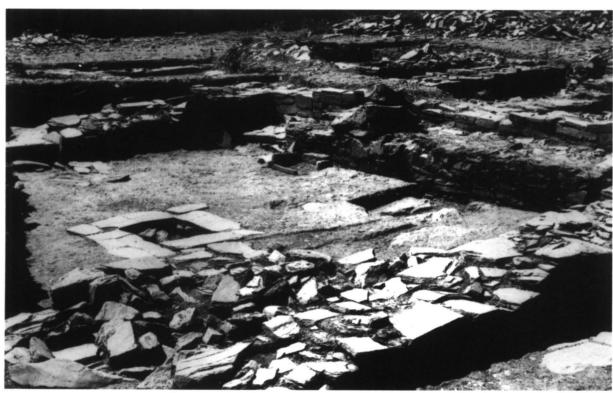


Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20

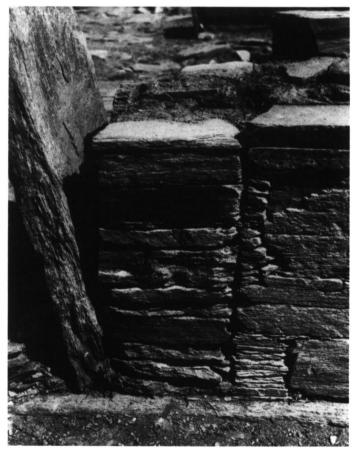


Fig. 21

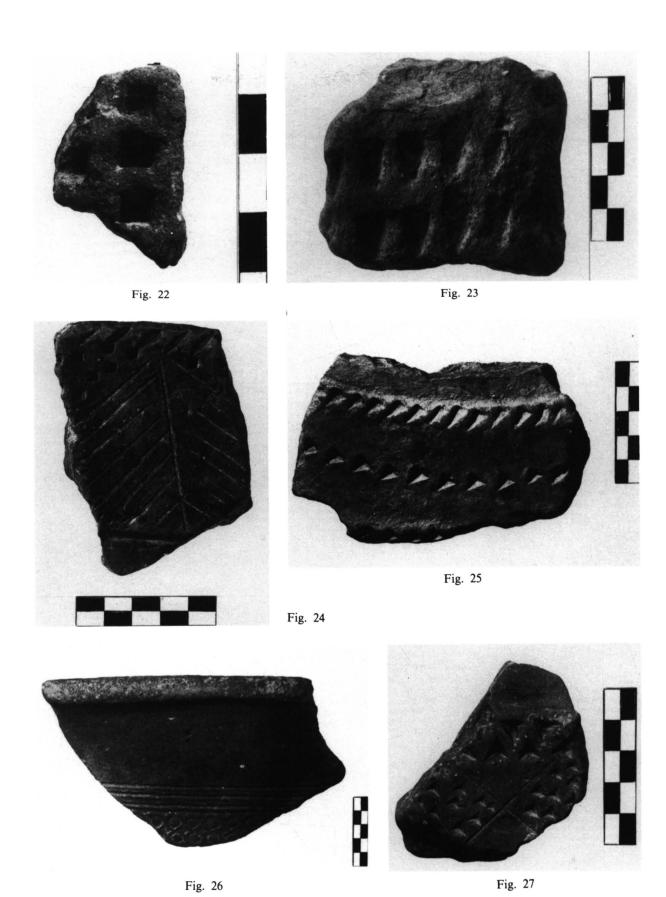


Fig. 26



Fig. 28

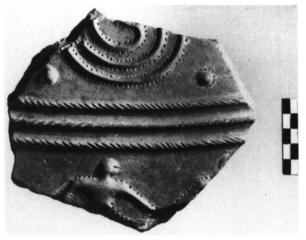


Fig. 29



Fig. 30

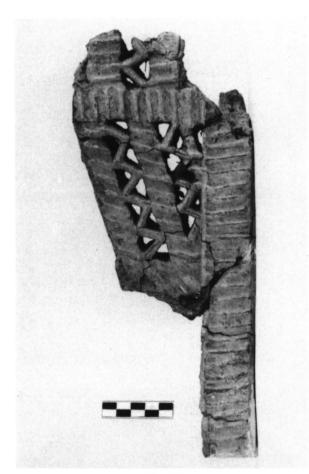


Fig. 31

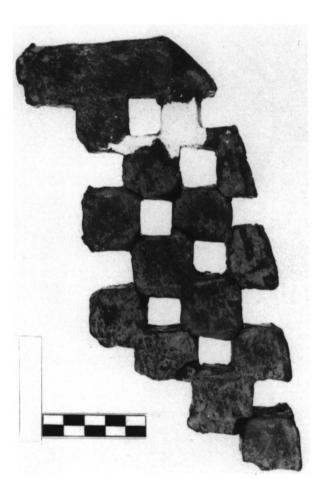
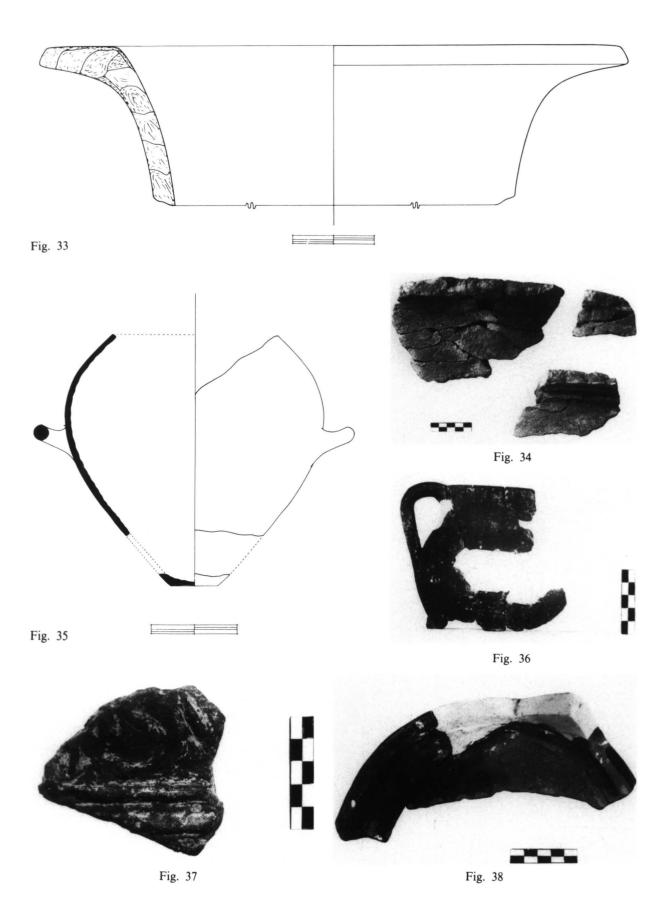


Fig. 32





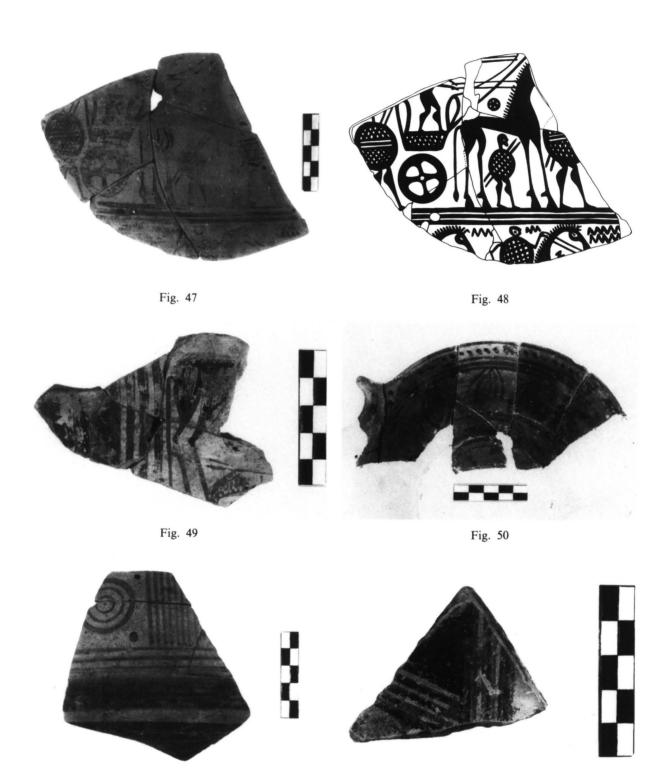


Fig. 51 Fig. 52



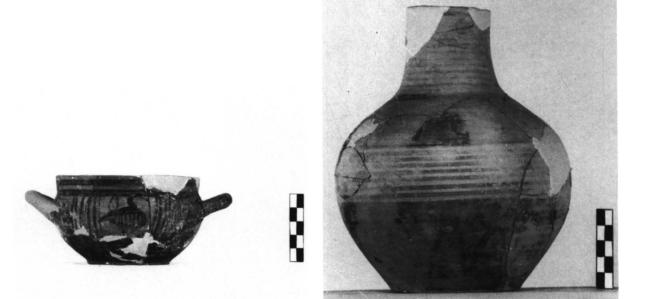
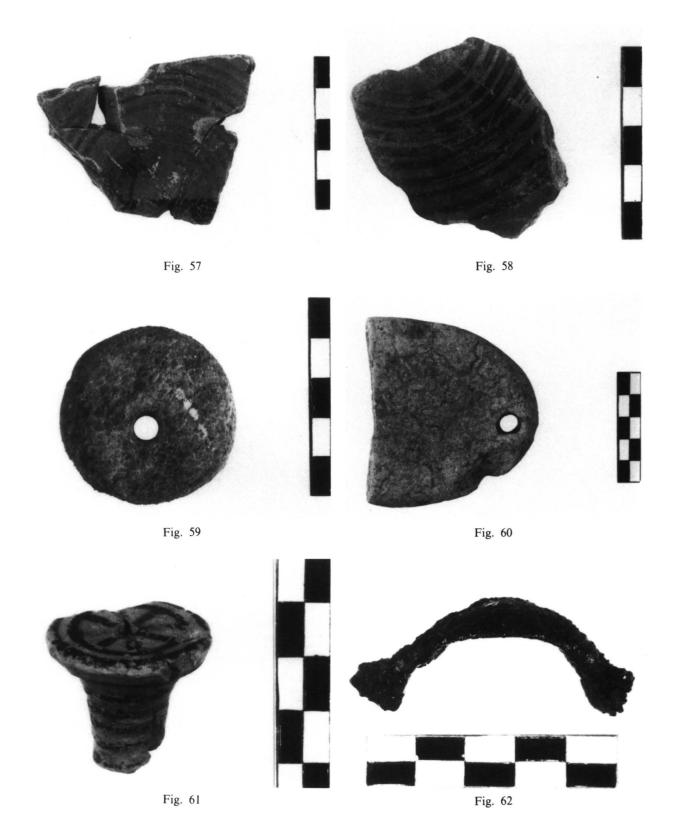
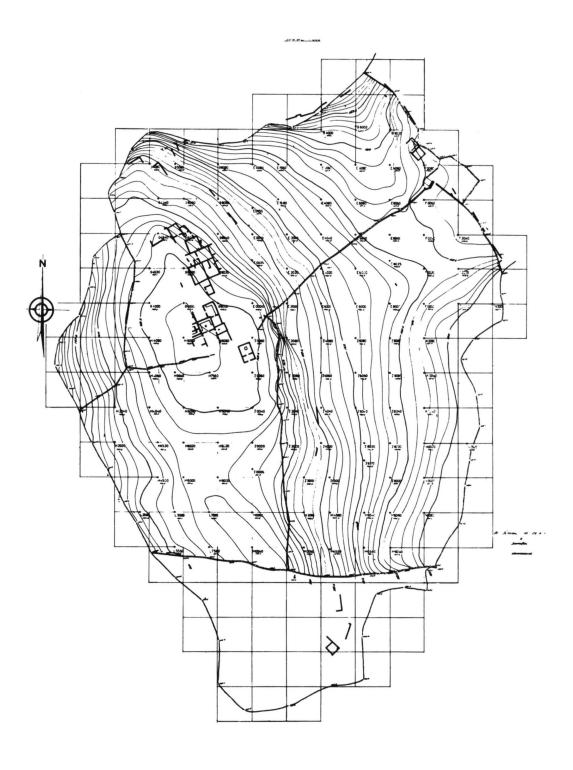


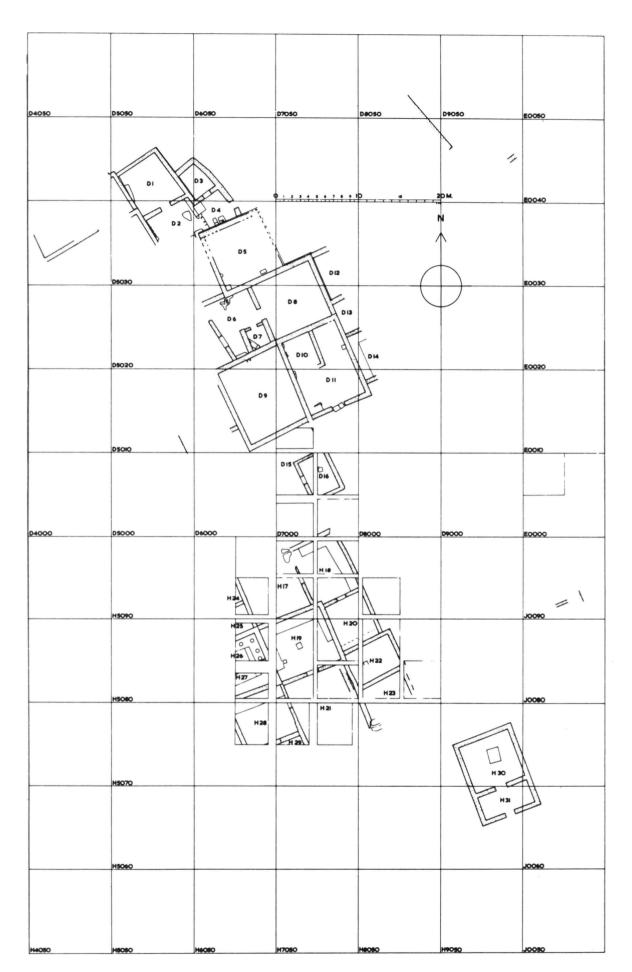
Fig. 55

Fig. 56

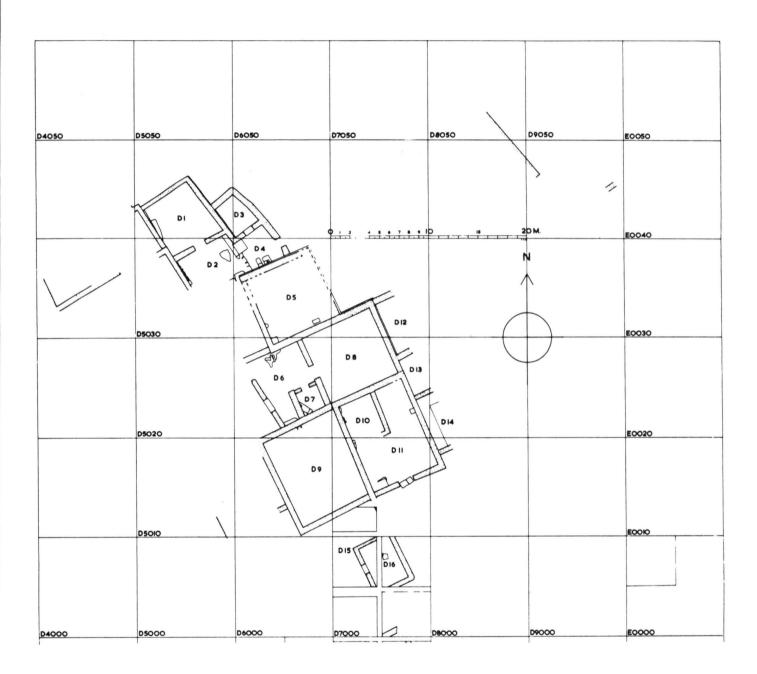


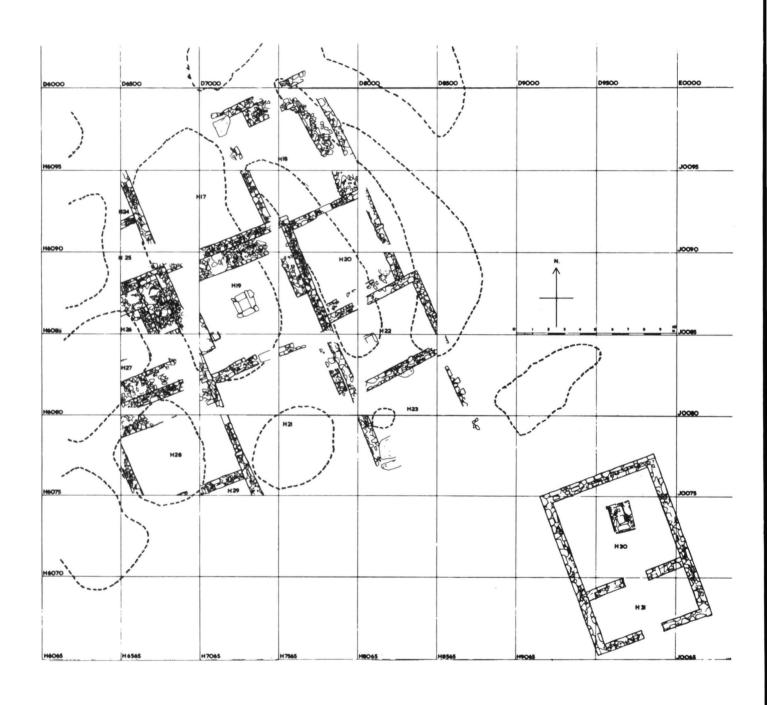
## **PLANS**



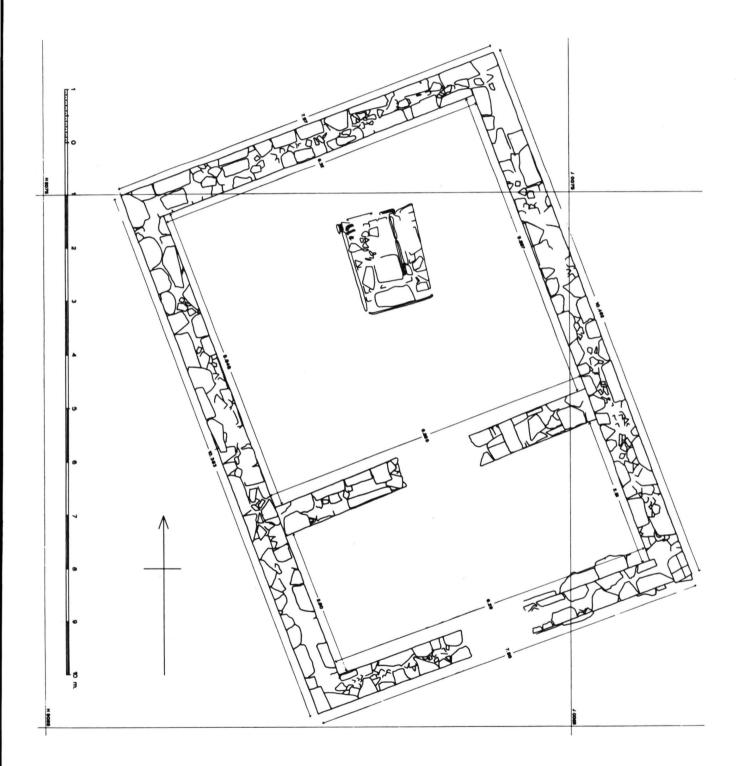


II Plan of the units excavated in 1960 and 1967.





IV Stone by stone plan of units H17-H31. The interrupted lines indicate the stone piles and their relation to the buildings.



V Stone by stone plan of the temple.

### **ERRATA**

- P. 10, paragraph 2, lines 1-2: Read "c. 340 m." instead of "39 m.", "c. 240 m." instead of "17 m.", and "5.15 m." instead of "5 m.".
- P. 45, paragraph 2: The object inv. 134, fig. 61, identified as a spindle-whorl, must be the knob of a pyxis lid.
- P. 48, paragraph 2, lines 3-4: The fretwork handle of a pithos inv. 1000 was not found in Room H19 but in Room H27 (see p. 54, paragraph 5 and Zagora 2, 263.
- P. 51, paragraph 3, line 3: The pithos handle inv. 449 was not found in Room H26 but in Room H25.
- P. 54, paragraph 4: The pithos fragment inv. 133, fig. 29, belongs to the same pot as the fragment inv. M121 (A. Cambitoglou et al., Guide to the Finds from the Excavations of the Geometric Town at Zagora, Archaeological Museum Andros, 1981 (repr. 1991), cat. no. 50).
- P. 58, paragraph 4, line 5: Omit "H8580".
- P. 59, paragraph 1, line 1: Read "50" instead of "52".

#### **NOTE**

Since the writing of Zagora 1 the authors changed their views about a number of questions:

- 1. About the use of benches (p. 26, paragraph 1) see now Zagora 2, 154.
- 2. About roof spans (p. 27, paragraph 5) see now Zagora 2, 147-149.
- 3. About the house plan referred to as "rectangle within rectangle" (p. 29, paragraph 4) see now Zagora 2, 158.
- 4. About the question of assigning rooms to houses and more particularly the views expressed on pp. 30-31 see now Zagora 2, 154-158.

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ΤΩΝ Α. CAMBITOGLOU - J.J. COULTON J. BIRMINGHAM - J.R. GREEN
ΑΡ. 105 ΤΗΣ ΒΙΒΛΙΟΘΗΚΗΣ
ΤΗΣ ΕΝ ΑΘΗΝΑΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗΣ ΕΤΑΙΡΕΙΑΣ
ΤΥΠΩΘΗΚΕ ΣΕ ΔΕΥΤΕΡΗ ΕΚΔΟΣΗ ΤΟ 1992
ΣΤΙΣ ΓΡΑΦΙΚΕΣ ΤΕΧΝΕΣ
Ε. ΜΠΟΥΛΟΥΚΟΣ - Α. ΛΟΓΟΘΕΤΗΣ
ΦΩΤΟΜΑΡΑ 54 ΝΕΟΣ ΚΟΣΜΟΣ