

EXCAVATIONS AT MOCHLOS, 1989

(PLATES 89–104)

THE MOCHLOS EXCAVATION PROJECT involves the cleaning and excavation of a number of related sites on the island of Mochlos and its adjacent coastal plain, located just east of the Bay of Mirabello in eastern Crete. The island appears to have been connected to the plain at one time by a narrow isthmus and the area to have formed, as it still does, a geographical unit, stretching about five kilometers along the coast and isolated from the interior of Crete by the Ornos mountains (Fig. 1). The project, organized as a joint Greek-American excavation under the direction of the authors, began in the summer of 1989.¹ It continues the cleaning and survey operations that the authors conducted in the 1970's and early 1980's but is the first systematic excavation on the island since the original excavations by Richard B. Seager in 1908.²

THE HISTORY OF EXCAVATION

The area has been explored by several archaeologists, beginning with Seager, whose work on the island is well known, largely because of the important Prepalatial cemetery that he exposed on the western side of the island with its treasure hoards of gold jewelry, seals, and stone vases. He also found contemporary settlement remains along the south coast of the

¹ The 1989 excavation was carried out by the University of North Carolina at Greensboro (UNCG) and the Archaeological Institute of Crete under the auspices of the American School of Classical Studies in Athens. We are indebted to the Greek Archaeological Service for granting the excavation permit.

Financial support was provided by a matching grant from the National Endowment for the Humanities, awarded for 1989–1992 (Grant No. RO-219232-89), and by the Institute for Aegean Prehistory, the University of North Carolina at Greensboro, and private donors.

The staff consisted of the authors as directors; Professor Julie Hansen (Boston University), who set up the water-sieving system and began a study of botanical remains; Professor Mary Kay Sandford (UNCG), who studied skeletal remains from the cemetery; Helen Kingsley, conservator; Susan Springer (Metropolitan Museum of Art), main registrar; Margaret Reid (Guilford Technical Community College), project artist; and Professor Arnold Doren (UNCG), photographer. Other scholars who spent a shorter time at the excavation include Professor Jeffrey Patton (UNCG), who was responsible for laying out the trenches on the island and for beginning the photogrammetry for the project; Dr. Mary Ellen Soles (North Carolina Museum of Art), cataloguer; Dr. David Reese (Field Museum of Natural History), who began a study of faunal remains; Professor John Gifford (University of Miami at Coral Gables), who began a study of the geology of the area and searched for underwater remains; and Dr. Natalia Poulou, who began her study of the Byzantine pottery. The excavation also profited from the valuable advice of Professor Philip Betancourt (Temple University) on matters dealing with Minoan pottery.

The following students also participated: Tom Brogan and Natalia Vogeikoff, both from Bryn Mawr College; Kevin Baldwin, University of Minnesota; Evi Sikla, University of Athens; Hara Thliveri, University of Ioannina; Marina Skourou, University of Cincinnati; Brian Shelburne, Florida State University; Paige Vinson, Dayton Joline, Shelagh Hamilton, and Nan Ward, all from UNCG.

The authors have also published a preliminary report of the 1989 excavation in Davaras and Soles 1992.

² For Seager's excavations, see Seager 1909 and Seager 1912.

For more recent work by Davaras and Soles, see Davaras 1977a, p. 654; Davaras 1977b, pp. 585–586; Davaras 1974; Davaras 1975; Davaras 1984, pp. 376–378; Soles 1978; Soles 1992.

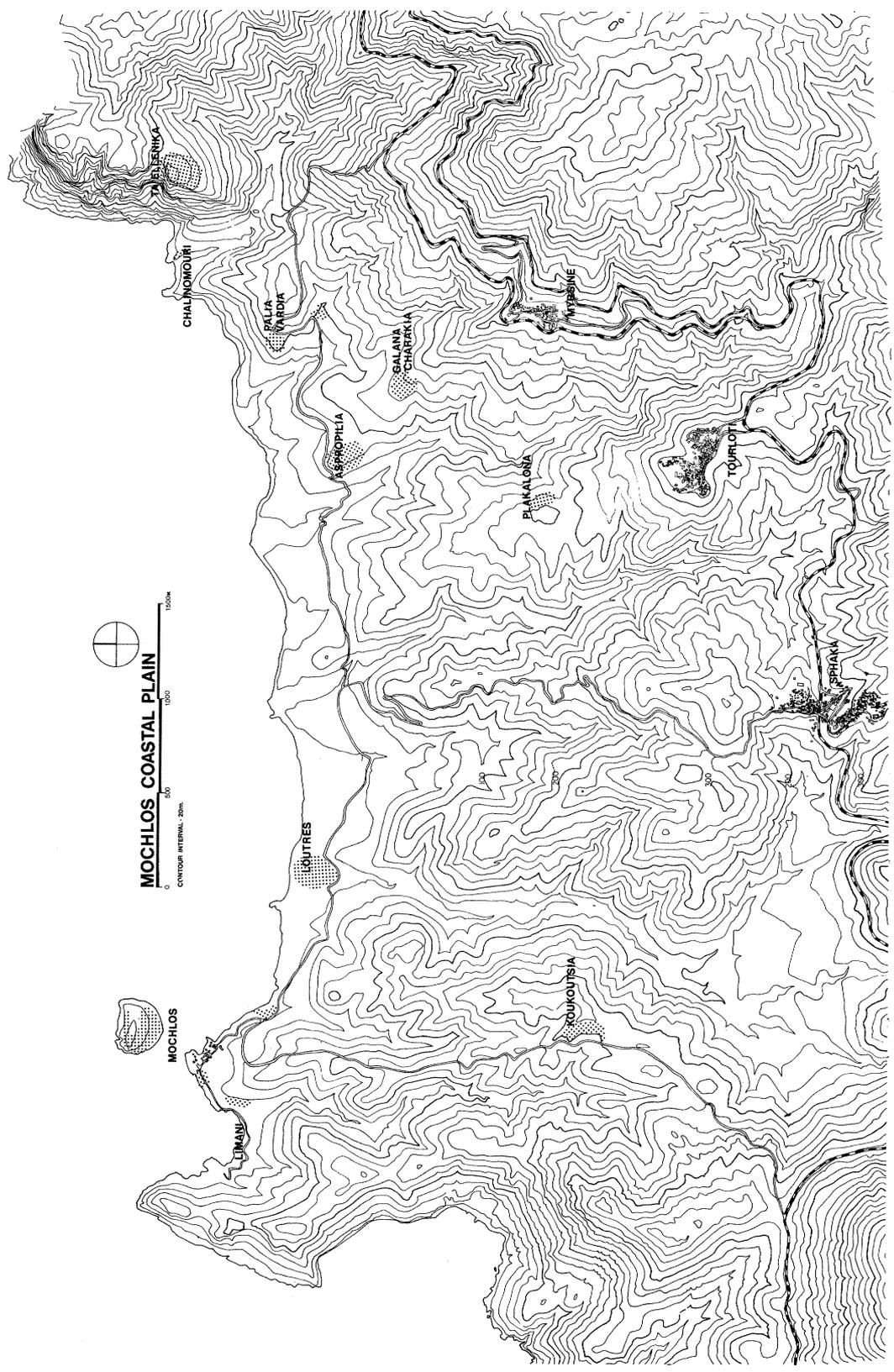


Fig. 1. The Mochlos coastal plain



FIG. 2. Topographic map of the island of Mochlos (Frederick Hemans *et al.*)

island and excavated parts of an extensive Neopalatial settlement, along with settlement remains of the Mycenaean, Roman, and Early Byzantine periods (Fig. 2).

No further work was done in the area until the 1950's when Nicholas Platon, then Director of Antiquities in Crete and Director of the Heraklion Museum, carried out rescue operations and small trial excavations along the coastal plain opposite Mochlos. In 1955 he excavated a round tholos tomb, of a type normally found in the Mesara in southern Crete, at Galana Charakia, a short distance below Myrsini. It held pottery of the EM III, MM IA, and MM IB phases.³ He also reported Minoan buildings of uncertain character at Chalinomouri at the eastern end of the plain and at Palia Vardia, also below Myrsini.⁴ He excavated an important cemetery of Mycenaean chamber tombs at Aspropilia and reported still other chamber tombs at Plakalona and Keratidi. Athanasia Kanta has since studied the finds from Aspropilia and dated the pottery to the LM IIIA, IIIB, and IIIC phases.⁵ At the same time, in 1955, John Leatham and Sinclair Hood carried out underwater exploration along the coast between Mochlos and Crete.⁶ They discovered a Roman fish tank along the Cretan coast which provided evidence for a rise in sea level of 1–2 meters since the Roman period, good support for Seager's suggestion that the island and plain were connected by a low isthmus during the Bronze Age.

In 1971, 1972, and 1976, Davaras, Director of Antiquities in eastern Crete and Director of the Agios Nikolaos Museum, and Soles, working under the auspices of the American School of Classical Studies, returned to the island to clean and better document the Prepalatial cemetery that Seager had excavated. Tombs that Seager had excavated were identified, and a few additional tombs were uncovered. A map of the island was drawn up with the aid of a team of architects from Cornell University, led by Frederick Hemans, and actual-state plans for all the tombs were also completed. Work on the island and plain continued in later years. In 1978 Davaras discovered a LM III sarcophagus at Koukoutsia where Platon had earlier reported Mycenaean pottery;⁷ in 1979 and the early 1980's, Soles undertook a study of the settlement remains on the island and the sandstone quarry on the coast opposite, reexamined the sites that Platon had reported on the plain in the 1950's, and located several new sites.⁸ In 1986 Nikos Papadakis, then acting Ephor of Antiquities in eastern Crete, excavated a series of nine Mycenaean chamber tombs exposed by bulldozer directly behind the village of Mochlos.⁹

As a result of these efforts carried out by several archaeologists at different times during the last eighty years, about twenty-five sites, representing the whole Bronze Age from EM I to LM IIIC and covering parts of the Greek, Roman, and Byzantine periods, have been documented on the island and its neighboring coastal plain, and it has been possible to construct a provisional outline of occupation in the area over a 5000-year period.

³ Platon 1959, pp. 373–374; for the date, see Warren 1969, p. 195, note 2.

⁴ Platon 1959, p. 388.

⁵ Platon 1959, pp. 372–373, 388–389; Kanta 1980, pp. 163–173.

⁶ Leatham and Hood 1958/1959, pp. 273–275.

⁷ Davaras 1986, p. 393.

⁸ Soles 1983.

⁹ Catling 1986/1987, p. 58; Papadakis 1990, p. 228.

THE HISTORY OF THE AREA

THE MINOAN SEQUENCE¹⁰

It is not clear how early the first settlers arrived on Mochlos. Seager reported remains of their settlement along the south coast and western terrace of the island¹¹ and dated these remains to the EM I period, but other scholars have suggested more recently that these remains should be dated to the Final Neolithic, when a number of sites seem to have been settled in eastern Crete.¹² In either case the settlement appears to have been small; it may also have been relatively short-lived since the burnished Pyrgos ware and the painted wares that follow the Neolithic pottery sequence and characterize EM I elsewhere seem to be absent from these earliest deposits.

Only at the beginning of the EM II phase does substantial occupation on the island begin, when a large migration into eastern Crete led to the establishment of many new settlements. The settlers are thought to have come from central Crete and may have been prompted to move eastwards because of overcrowding or as a result of conflict between the different cultures in the northern and southern parts of the island.¹³ Mochlos offered several attractions to these newcomers, chief of which were the natural harbor that would have been formed by its isthmus and the rich agricultural plain that lay across from the island on Crete. Through the EM II and EM III phases of the Prepalatial period, a span of 600–800 years, Mochlos flourished as a major center of population in Crete. Many scholars have stressed its importance during these formative years of Minoan civilization; and Mochlos has become a model site for the study of the cultural processes involved in the emergence of civilization.¹⁴ The island was a center for new industries such as the manufacture of gold jewelry, stone vases, and faïence; it was an important trading center, sending its ships throughout the Aegean and perhaps serving as a gateway for goods coming to Crete from the Near East. It is also one of the few sites of the period to show convincing evidence for a hierarchical social structure.

A sharp decrease in the number of burials in the Prepalatial cemetery during the MM IA phase at the end of the Prepalatial period suggests a time of retrenchment at Mochlos when its population may have declined and its activities become narrower in scope. This period is also marked by the arrival of another group of settlers in the area, who buried their dead in the round tholos tomb about three kilometers to the east at Galana Charakia, and who apparently belonged to the Mesara culture of southern Crete. It is unclear why or how they came to the plain of Mochlos and what the relations between the new settlers and the older inhabitants of the area were.

¹⁰ In describing broad periods of Minoan chronology, the authors have adopted the system suggested by Platon (1971, p. 325), according to which "Prepalatial" refers to the EM I, EM II, EM III, and MM IA pottery phases, "Protopalatial" or "Old Palace" to the MM IB and MM II phases, and "Neopalatial" or "New Palace" to the MM III, LM IA, and LM IB phases.

¹¹ Seager 1909, p. 278; 1912, pp. 7, 42, 92–94, fig. 48.

¹² Vagnetti and Belli 1978, p. 137; Zois 1973, p. 104.

¹³ Warren 1972, p. 268; Soles 1988, p. 60.

¹⁴ Branigan 1970, *passim*; Branigan 1991; Renfrew 1972, pp. 93–96, 378; Warren 1975, pp. 57–60 *passim*; Cherry 1984, p. 31; Soles 1988.

The next major occupation on the island belongs to the New Palace period, when a small town grew up along its south coast and some of the tombs in the old cemetery were reused. The size of the town is unclear, but it did not appear to play so important a role in Minoan Crete as the Prepalatial settlement. Some pottery was imported to the site from Knossos, but its chief contacts were probably with Gournia, the site of a small palace and redistribution center, and a stone quarry was opened at this time, on the adjacent plain across from the island, to provide ashlar masonry for the construction of Gournia's palace.¹⁵ The occupants of the town were active elsewhere on the plain; the traces of walls reported by Seager,¹⁶ still visible today by the fishing village that has grown up opposite the island, and other sites such as Chalinomouri at the eastern end of the plain may date to this period. The town was destroyed by fire at the end of the LM IB phase, and Seager, finding the remains of human bones in the destruction levels, believed that an enemy attack was responsible for its destruction.

THE MYCENAEAN SEQUENCE¹⁷

After a gap of several decades, settlers returned during the Mycenaean period. Seager thought there might have been an isolated house of this period on the site of the Minoan settlement but published no evidence for it.¹⁸ Papadakis's recent excavation of LM III chamber tombs directly across from the island, however, suggests that he may have been correct. Large numbers of chamber tombs have also been located two to three kilometers to the east of the island at Aspropilia, Plakalona, and Keratidi. They lie close to one another in the foothills that rise along the edge of the plain and suggest the location of other homesteads or even a larger settlement set back from the coast on one of the low hills along the plain. Twelve of the tombs at Aspropilia have been excavated and a sufficiently large amount of material uncovered to demonstrate that the area had been reoccupied by the LM IIIA period, if not earlier, and that it continued to be occupied into the LM IIIC phase, by which time many sites in Crete had been abandoned. The LM III finds are of extremely fine quality, and Kanta has suggested that the settlement along this part of the coast, below Myrsini, maintained its own pottery workshop and remained in touch with mainland Greece.¹⁹

LATER PERIODS

After the collapse of Mycenaean civilization, the area appears to have been abandoned. Only at the end of the Geometric period and in the Orientalizing period was a small settlement located on a mountain top at the eastern end of the plain at Lenika. Its occupants enjoyed a commanding view over the plain but may have ventured down from their heights only rarely. It was not until the Roman period that a site so close to the sea was again considered safe for occupation. Coins of Hadrian, Diocletian, and Constantine have been found

¹⁵ Soles 1991.

¹⁶ Seager 1909, p. 274.

¹⁷ The term "Mycenaean" rather than "Postpalatial" is used here because it is not clear yet exactly when reoccupation began at Mochlos after the LM IB destruction. It is not used to suggest that Mycenaean Greeks actually settled at Mochlos, although that may prove to be the case, but refers simply to the period of Mycenaean ascendancy in the Aegean.

¹⁸ Seager 1909, p. 275.

¹⁹ Kanta 1980, pp. 290, 314.

on the island and near the fish tanks on the opposite shore, and by the 2nd century after Christ, if not earlier, Mochlos was again the site of a small settlement. The last period of sizable occupation belongs to the Early Byzantine period, perhaps, as Seager suggested,²⁰ sometime before the Saracen invasion of A.D. 825, when a fortification with wall and tower was built on the summit of the island and one small town was located beneath it and another across from the island at Loutres.

THE CURRENT EXCAVATIONS

The Mochlos Project, then, is concerned with the history of occupation on the island and plain over a 4000-year period. It focuses on the Bronze Age, however, since the area seems to have been most influential at that time and the large number and variety of Minoan and Mycenaean remains provide an opportunity to explore a greater variety of research questions. The excavation has four general goals, all designed to test the accuracy of the historical outline suggested here and to provide additional details: (1) to continue excavation on the island of Mochlos in order to obtain a detailed stratigraphic sequence of occupation through the whole Bronze Age; (2) to continue excavation on the island in the area of the Prepalatial cemetery and so to uncover an entire cemetery of the 3rd millennium B.C.; (3) to continue cleaning and excavation on the island in the area of the Bronze Age settlement in order to uncover a partial plan of the Prepalatial town and as complete a plan as possible of the Late Minoan town; and (4) to clean and investigate sites on the adjacent plain in order to establish the relationship, especially in the Bronze Age, between the settlement on the island and sites in the plain.²¹

As the excavation proceeds, a number of related studies are also being carried out. These include a geological study of island and plain, aimed at producing a geological map of the area, which will also include sediment and soil studies to provide information on the deposition of soils, the nature of land available through different periods, and on changes in the coastline. An intensive, systematic water-sieving program is also being employed to aid in the recovery of botanical and faunal remains, including marine material. Other studies begun in 1989 include a study of the skeletal remains from the cemetery and a comprehensive study of the stone tools from the excavation. In the future, the excavation plans also to undertake a program of photogrammetry in order to produce three-dimensional computer-generated reconstructions of stratigraphy and architecture. It also plans a remote-sensing operation along the plain to locate additional archaeological remains.

²⁰ Seager 1909, pp. 275–276.

²¹ The authors are using an excavation methodology adapted from that used by the current excavation at Kavousi and would like to express their indebtedness to the directors of the Kavousi excavation, Leslie P. Day, Geraldine C. Gesell, and William D. E. Coulson. The island has been divided into areas 50 meters square, labeled from A to F north–south and 1 to 7 east–west, and each area, labeled A1, B2, etc., has its own grid of 5 × 5-meter squares, containing as many as 100 possible trenches. Each trench is given its own number, beginning with 100 in the southwest corner of the 50 × 50-meter area and ending with 10,000 in the northeast corner. Baulks 1 meter wide are normally left on the north and east sides of each trench so that the actual trench dug is 4 meters square. Every feature encountered in the course of excavation is dug separately and given a locus number which is added to the trench number. The first feature encountered in Area C2, Trench 900, for example, is numbered 901, the second 902, etc. All finds within any one locus are then identified by locus number, and all special finds, given an inventory number, are also entered in a computer program. Two interchangeable programs are maintained: one for finds and another for loci.

The 1989 excavations were carried out over a nine-week period in June and July with a study session continuing in August. A total of 20 trenches were opened on the island, and remains of five different chronological periods were uncovered.

PREPALATIAL PERIOD

The Cemetery (Fig. 3)

Seager excavated two areas of the Prepalatial Cemetery, the West Terrace (Tombs I–VI) and the Main Slope (Tombs VII–XXII), and exposed about twenty-five tombs, which were relocated, identified, and studied in the cleaning that the authors carried out in the 1970's.²² Seager left a third area of the cemetery untouched; it lies on the south slope adjacent to and east of the area that he excavated. Like the area to the west, it is neatly bounded on the north, west, and east by rock outcroppings; it is unclear how far it extended to the south, but it appears to have covered an area of at least 1500 sq. m. Two tombs (H and Θ), both plundered, were excavated in the area in 1976; two others (K and I) appear to have been partially excavated by some unknown person. They are small houselike tombs similar to those that Seager excavated on the Main Slope. Early Minoan pottery scattered on the surface and traces of walls indicated the existence of more tombs in the area. Accordingly, the area was gridded in preparation for further excavation. Six trenches were opened (Area C2, Trenches 900, 1000; Area D2, Trenches 8700, 8800, 9700, 9800), and remains of four tombs were exposed along with part of a building that was probably used in the funerary ritual.

Tomb Λ (Area C2, Trenches 900, 1000)

Tomb Λ is the largest of the tombs, rivaling those on the West Terrace in size (Fig. 4); because of its size and its location high up on the south slope, isolated above the other tombs in this area, it was hoped that it might contain elite burials like the tombs on the West Terrace.²³ Unfortunately, it was destroyed all along its south side, and practically all its skeletal material was missing. The tomb was not without some architectural interest, however, since it contained a smaller and earlier tomb at its west end (Pl. 89:a) and a pit with an earlier cremation at its east (Pl. 89:b). In its remarkable breadth, stretching *ca.* 6.84 m. east–west, it appears to have been designed to enclose these two earlier tombs. The cremation pit, which actually extends underneath the east wall of the tomb to a depth of *ca.* 0.30 m., was filled with a fine, gray ash containing small bits of carbon. It held EM IIA pottery sherds, including fragments of incised pyxides of fine, gray ware (P 52–56; Pl. 90:a), and tiny bone fragments, some blackened by fire, others bleached white. The bones have not been studied in the laboratory yet, but Mary Sandford, who excavated the pit, believes that they could be human. If so, the pit would be an extraordinary find, since the earliest cremation burial known until now dates to the MM III period and cremation burials are, as a rule, rare in Minoan civilization.²⁴ The pit has not been completely excavated yet, but because no sign of burning has been found on the surrounding bedrock and because the bone

²² See note 2 above.

²³ Soles 1988.

²⁴ Davaras 1973, p. 162.

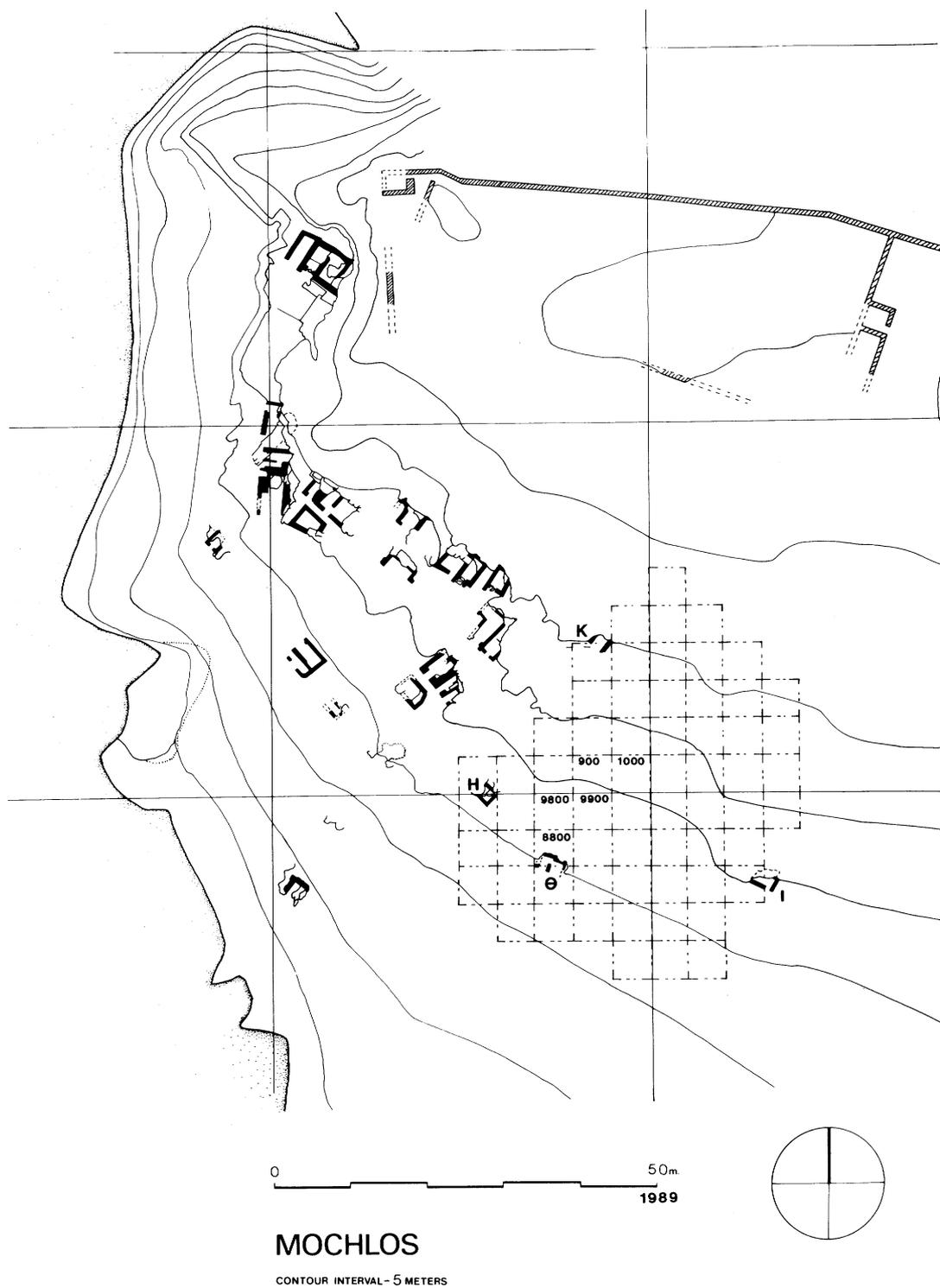
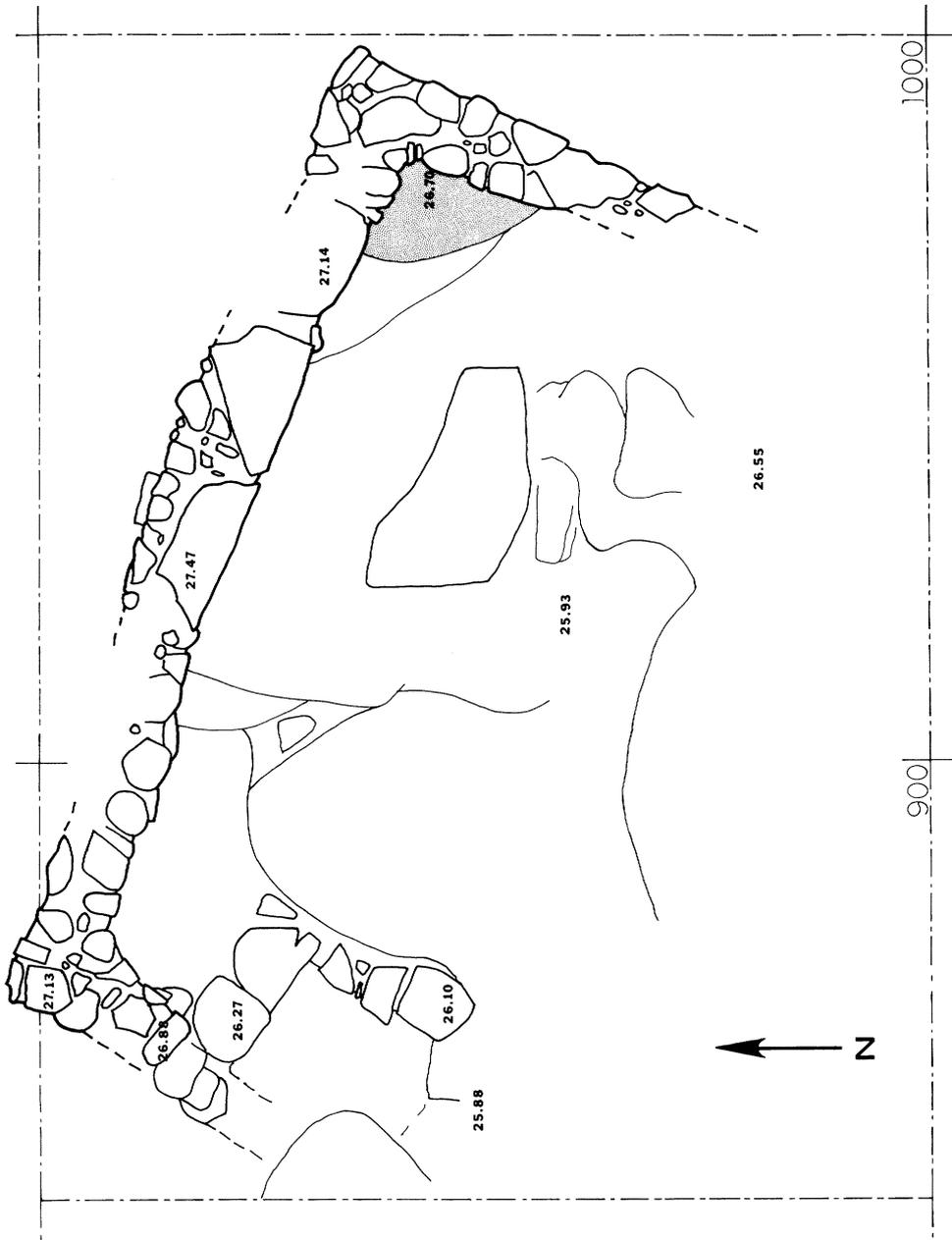


FIG. 3. Trenches in the Prepalatial cemetery, 1989



MOCHLOS: TOMB A

FIG. 4. Plan of Tomb A

and carbon remains are small and fragmentary, the actual cremation appears to have occurred elsewhere: after the fire was extinguished, the remaining ash was shoveled up and deposited in the pit. The small tomb on the west lies *ca.* 0.40 m. below the base of the west wall of Tomb A; only the lower course of the west, north, and east walls survives. The tomb consisted of a small one-room structure measuring *ca.* 1 × 1.10 m. on the inside. Its south wall was destroyed, and remains from the tomb, including substantial parts of three jugs (P 70–72) and fragments of a triton shell (Sh 1), had spilled out towards the south.

The interior of Tomb A was badly disturbed, and it was probably plundered on several occasions in the past. A modern iron nail was found in the earth along with scattered pottery fragments of EM II, EM III, and MM I date. The MM I pottery included a very few fragments of black-painted, wheelmade, carinated cups that should be MM IB. A few fragmentary human bones, including parts of a tibia and femur, were also uncovered. In this context, in the western half of the tomb where most of the finds were concentrated, a cylinder seal of hematite imported from northern Syria was found (S 6, Fig. 5, Pl. 90:b–d). It portrays a god seated on a throne, holding an alabastron in his right hand; a man approaches him holding a huge hare as an offering in his left hand and raising his right in a sign of adoration. In the sky above, between the two figures, the cosmic star and crescent moon appear. On the reverse, two rows of worshippers appear separated by a guilloche: a row of men above, a row of women below. There are many parallels for these motifs in Syrian cylinder seals of the Classic 1 phase, which is dated between 1850 and 1720 B.C.²⁵ Unlike many cylinder seals found in the Aegean, which circulate for centuries before their final deposition, this seal cannot



FIG. 5. Drawing of cylinder seal S 6 (Margaret Reid). Scale 3:1

²⁵ For the date, see Teissier 1984, pp. 72–76, and for a similar scene, no. 456, pp. 234–235. A further study of this seal, with a catalogue of all cylinder seals found in the Aegean, has been prepared for publication elsewhere.

have been used for a great number of years before it reached Tomb A. The latest pottery in the tomb should date to the 19th century B.C., and the seal must have been buried in the tomb before this pottery went out of use at the end of the century.

Area D2, Trenches 8700, 8800, 9700, 9800 (Fig. 3)

Three structures were exposed in these trenches. All contained fragments of bone, as well as EM II potsherds, but only one, a small one-room building labeled M, can be safely identified as a tomb. The other two had unusual features that suggest that they may have served other functions. N, a small rectangular structure built directly above Tomb Θ, contained a large deposit of obsidian located in a natural rock cavity at its western end (Pl. 91:a). The deposit of obsidian weighed 10.09 kg. and included cores, parallel-sided and crested blades, burins, and retouched flakes (CS 1; Pl. 91:b). Few of the pieces were in good condition, and the deposit looked very much like a dump of unwanted material, although it is unclear why it should have been placed in a built structure in the cemetery area.²⁶

Building Ξ is the best-preserved building yet found in this area of the cemetery (Pl. 92); its south wall, bedded on a large outcropping of rock at the west and buttressed on the exterior by large rocks at its base, stands to a height of *ca.* 1.07 m. A staircase of four steps leads down from the entrance at the southwest corner into the building. Only the southern section has been excavated; a large number of fragmentary dark-burnished plates, including many with holes along their rims, were found inside, but the function of the building is unclear. It may have a parallel, however, in Building 21 in the Phourni Cemetery at Archanes, a building that also has a staircase leading from ground level outside down to the interior floor level. This building was used as a storage place for offerings made in the cemetery as late as the LM IIIB phase but contained Prepalatial pottery as well and may have been built much earlier.²⁷ Two kernoi were also found in this part of the cemetery (GS 13, 14; Pl. 93:a); frequently found in other cemeteries, where they were probably used as offering tables, they are the first reported at Mochlos.²⁸

The Settlement (Fig. 6)

In addition to those of the cemetery, substantial remains of the Prepalatial settlement were also reported by Seager;²⁹ Mochlos is rare among Prepalatial sites in having both cemetery and settlement remains. The latter were not described by Seager, however, and one of the goals of the project is to recover more information about the Prepalatial settlement, including evidence both for the nature and extent of its plan³⁰ and for social ranking of the sort suggested by the cemetery.

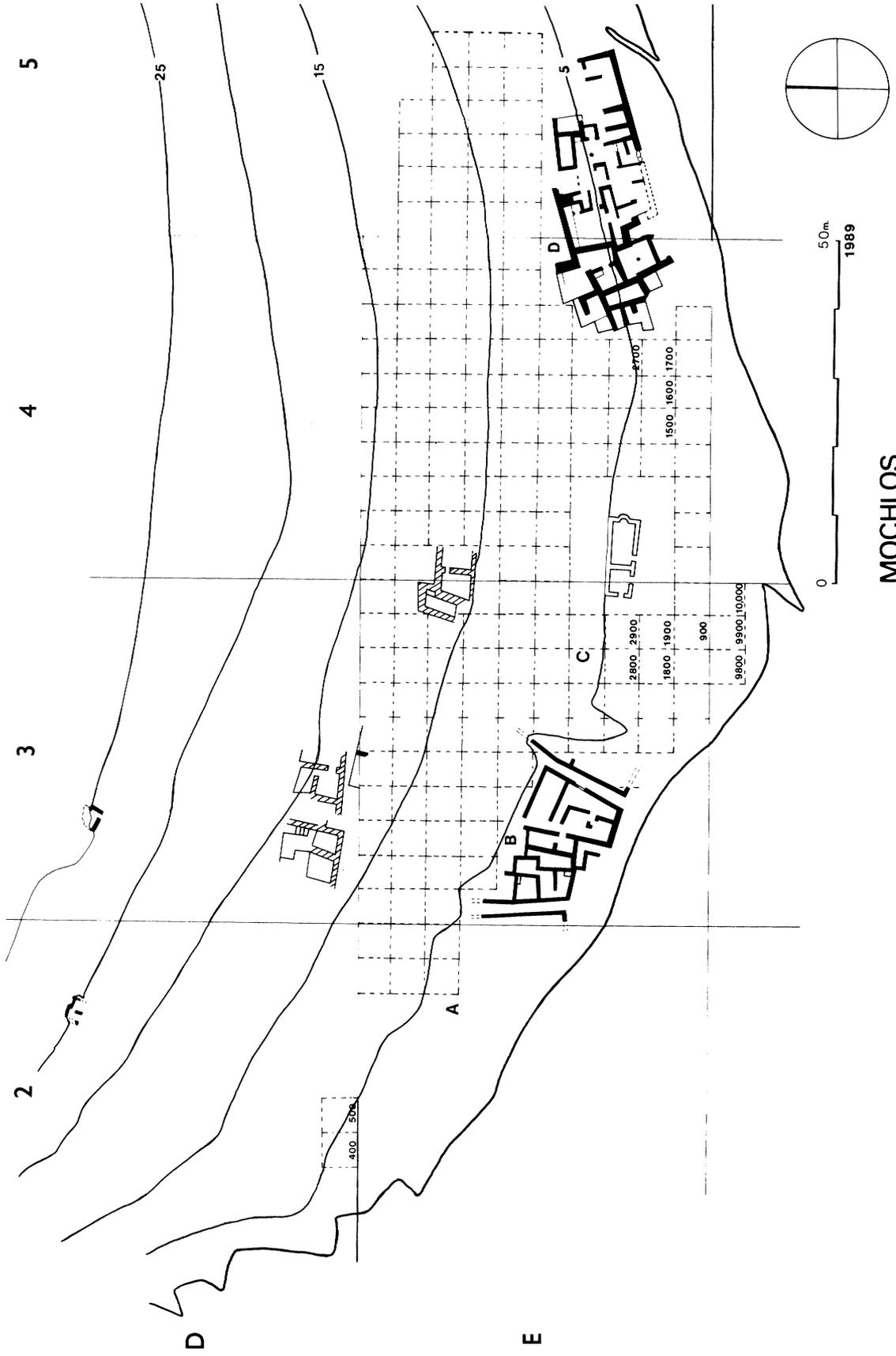
²⁶ Note, however, that large quantities of fragmentary obsidian blades and waste material are also reported in Prepalatial tombs in the Phourni Cemetery at Archanes and also in rock clefts where they are thought to have been dumped after the cleaning of nearby tombs (Sakellarakis 1976a, Sakellarakis 1976b, p. 391).

²⁷ Sakellarakis 1982a, pp. 55–56; Sakellarakis 1982b.

²⁸ For a bibliography of these stones, with other examples from cemeteries, see Soles 1992, pp. 221–223.

²⁹ Seager 1909, pp. 278–279, 283–284, 291–292.

³⁰ Todd Whitelaw has recently estimated the size of the Prepalatial settlement at “0.8 hectares (about ten times the size of Myrtos)” and suggested that it held “a minimum of 55 houses and a population of between 220 and 330” (Whitelaw 1983, pp. 338–339, fig. 72F). The problem with these estimates is that the north–south extent of the settlement area and the density of occupation within this area are unknown. It may not have been so densely occupied as Myrtos or Gournia, as Whitelaw assumes. The number of tombs in the



MOCHLOS

FIG. 6. Trenches in the settlement area, 1989

The most extensive remains reported by Seager are located in what he described as Block A of the later settlement, lying to the west of the modern chapel of Agios Nikolaos. Here later occupation cut through Late Minoan remains and exposed several rooms of EM II and EM III date. This area was badly overgrown and partly reburied when work began in 1989. Cleaning operations were begun to permit a study of the area and the drawing of architectural remains; this work will continue in future seasons. Remains of two other Prepalatial structures were located, one in Area F3, Trench 10,000 (Seager's Block C), which was excavated, and another in Area E4, Trench 700 (Seager's Block D), not yet excavated. It is too early to draw any conclusions about the settlement as a whole, but these remains indicate that it stretched at least 125 meters along the south coast of the island.

Area F3, Trench 10,000 (Fig. 7)

A Prepalatial house was uncovered directly beneath a LM I street in the southern half of this trench; the upper surfaces of its walls were being reused as cobbles in the street. Two rooms have been uncovered. The house is destroyed along its south side by beach erosion and overlain on west and east by the façades of LM I houses (Pl. 93:b); it was probably much larger than the part that has been exposed. The eastern room appears to be the earlier part of the house; five different floors were excavated here at elevations of 1.44–1.20 m. above sea level. In the four uppermost floors, walls were built along the east and south sides of the room, enclosing a space *ca.* 0.70 × 1 m. with a narrow opening, *ca.* 0.30 m. wide, at the southeast corner. Two floors were distinguished in the western room at elevations of +1.47–1.22 m.; the lower of these was roughly paved with cobbles. This room is the larger of the two; it extends *ca.* 2.40 m. from east to west, where it is overlain by the threshold stone of the later house, and probably continues farther in this direction. The greatest concentration of finds came from the uppermost floor in the eastern room, where as many as eighteen stone tools were counted, including hammer stones, fishing weights, and obsidian blades. Pieces of mud brick and numerous small nodules of white plaster that probably belonged to the walls of the building were found in both rooms. Most of the pottery from this house, including a number of plate fragments, is dark-brown burnished ware, a type of pottery popular at Mochlos throughout the Prepalatial period. No painted pottery was found inside the house, although EM II and EM III sherds were found in the street that runs alongside to its north and the house was used during these phases of the Prepalatial period, if not earlier.³¹

OLD PALACE PERIOD

One goal of the project is to discover what happened to the Prepalatial settlement and what, if any, remains are on the island from the Old Palace period. There seems to have been a sharp decrease in the number of burials in the Prepalatial cemetery during the MM IA phase at the end of the Prepalatial period, and none of the pottery that Seager published from the tombs can be dated to the following MM IB phase. The cleaning of

cemetery might give a better idea of population size if it could be assumed that they were being used simultaneously, i.e., all tombs with EM IIB pottery were in use at the same time. In this case a cemetery of 30 family tombs would suggest a population of 150 to 200.

³¹ During a visit to the site in 1992, Peter Day and David Wilson examined the pottery from this house and identified one sherd from the lowest floor in the east room as the rim fragment of an EM IB goblet.

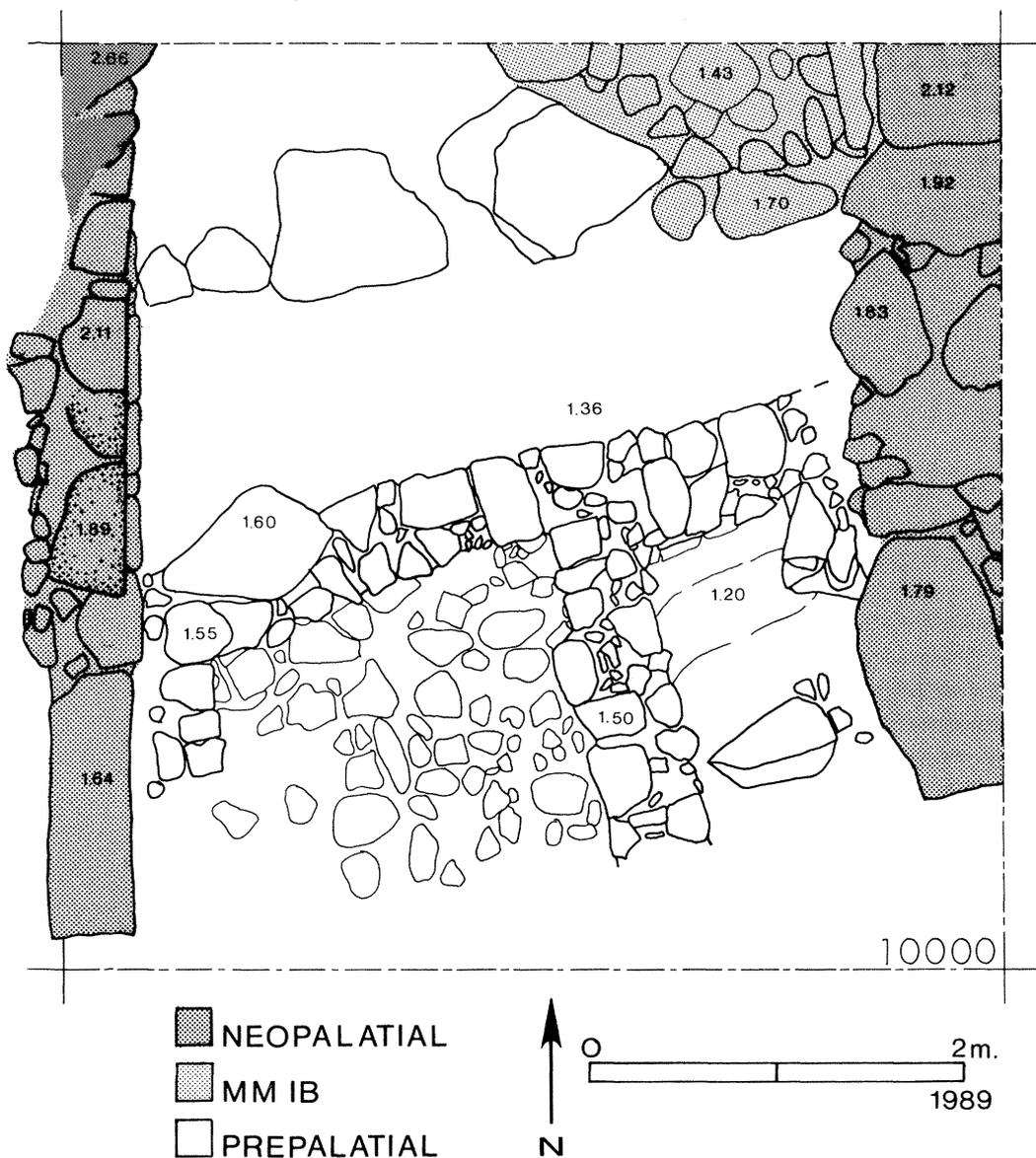


FIG. 7. Prepalatial house: Area F3, Trench 10,000

these tombs in the 1970's also failed to produce MM IB/II pottery. The settlement appears to have fallen into decline and to have suffered a drop in population. Betancourt, however, has identified some MM IB pottery among the MM I wares that Seager published from the settlement,³² and the handful of MM IB pottery and the cylinder seal found this year in Tomb A indicate that the island was not abandoned.

³² Betancourt (1985, p. 79) cites "a deposit below House D" (Seager 1909, pp. 290–293, fig. 13 upper row); Walberg (1983, p. 130), on the other hand, is not so sure, identifying one of these vases (Seager 1909, fig. 13.2)

Area F3, Trench 10,000 (Fig. 7)

In 1989 some MM IB/II pottery was found mixed with pottery of several periods in the fill beneath the floors of rooms in Area E4, Trenches 1700 and 2700 (Fig. 6), but the main evidence for the settlement in the Old Palace period was found in Area F3, Trench 10,000. A semicircular hearth was found in the northeast corner of this trench, beneath a LM I street level (Pl. 93:c, d). It was crudely built with stones laid in an irregular circle forming an opening *ca.* 0.70 m. wide. The interior of the hearth was made of small stones lined with a yellowish clay, creating a pit *ca.* 0.25 m. deep. A clay loomweight (C 10) was found in the lining of the pit, apparently part of the construction. The pit was filled with ashy soil containing small bits of carbon; a small piece of bronze slag was also found in it, and a larger piece, *ca.* 0.07 m. long, was found outside to the west. Located outside, in the open air without any associated architecture, the hearth may have been used as part of a smelting operation. It is securely dated to the Old Palace period by associated fragments of black, wheelmade, carinated cups (P 234).

NEW PALACE PERIOD

Seager excavated four blocks of LM I houses along the south coast of the island, Blocks A, B, and C lying to the west of the chapel of Agios Nikolaos, and Block D to its east (Fig. 6). He provided a description and plan only of the easternmost house in Block D,³³ however, and left much of the site unexcavated. As a result, one of the primary goals of the project is to gain a clearer picture of the settlement as it appeared in the New Palace period. If time permits, it should be possible to uncover the overall plan of the settlement and to ascertain whether or not it possessed a manor house or villa of the sort that Hood has postulated for all Minoan settlements.³⁴

Seager's Blocks B and D were investigated during the earlier survey work carried out on the island.³⁵ Block B, which Seager described as a single large house, was entered by a doorway from the street that ran along its eastern façade. Block D contained three houses, as Seager noted: the large house that he described at the east end of the block, publishing a partial plan,³⁶ another house almost square in plan at the west end, and a third house built between the two, using their western and eastern walls for its own. None of these houses was completely excavated by Seager, and during 1989 work began on the cleaning and final excavation of the westernmost house in Block D, as reported below.

A grid was established over the unexcavated area around Seager's blocks, and fourteen trenches were opened here, exposing parts of two streets and at least four houses. One of these houses was located just to the west of Seager's Block A, where two trenches were opened in 1989 along the western shoreline in order to ascertain the westernmost limits of the settlement.

as MM IA and another (Seager 1909, fig. 13.4) as "an early example of the angular, two-handled cup" which "becomes slightly more frequent" in MM IB.

³³ Seager 1909, pp. 293–301, fig. 14.

³⁴ Hood 1983.

³⁵ For Block B, see Soles 1978, pp. 12–13, fig. 12; for Block D, Soles 1974.

³⁶ See note 33 above.

Area D2, Trenches 400, 500 (Fig. 6, Pl. 94:a)

Two LM I walls were exposed just beneath ground level, running north–south and parallel to each other, with a narrow paved corridor between. They appear to belong to internal walls of a large house, the southern and western parts of which have been totally destroyed by beach erosion. The layout and relation of the rooms to the east and west are as yet unclear, but an interesting find came from each room. A triton shell (Sh 2) was found in the eastern room, in a perfect state of preservation. David Reese, who examined it, suggested that it may have been used as a ladle since the hole at its base was too small for it to have served as a rhyton. In the western room the upper portion of a subadult skeleton was uncovered (Pl. 94:b). The skeleton was found in an upright position with the skull fallen forward over the chest and its two arms crossed in front. Remains from the waist down were missing. Its incomplete state of preservation suggests that it was intrusive and may have slid down the slope to its final position.

Areas E3 and F3: Block C (Figs. 8, 9)

Seager's Block C had not been examined during earlier survey work on the island because it was largely reburied, partly by Seager's own dump, which lay along the western side of the Block. Two houses, both already excavated in part, and two streets were exposed here.

House C.2 (Area E3, Trench 2800)

The southeast corner of a large house was uncovered in the northern half of Trench 2800. Its south wall had already been partly exposed by Seager, who dug a large pit along its outer, south side (Pl. 95:a). Early Byzantine remains were found at surface level along the eastern side of the trench, and an Early Byzantine wall had been built directly on top of the eastern wall of the Minoan house. The area was covered with Byzantine roof tiles which appeared to belong to the house, and it was probably for this reason that Seager decided not to excavate any further here. While the area to the north and west is unexcavated, the house, which we have labeled House C.2,³⁷ may extend all the way to the street exposed by Seager separating Blocks B and C (Fig. 6), in which case the wall running along the eastern side of this street may form the western façade of the house; this would make the house approximately 18 m. wide east–west. It is unclear how far the house extended up the slope to the north, but the southwest part of the house probably stretched all the way to the modern shore. The south wall of the room exposed in Trench 2800 stands to a height of 1.76 m., and the lower story of the house appears to be intact.

Five strata were uncovered in the excavation of the southeast room in Trench 2800. The first consisted of fallen wall debris which was scattered across the whole room (Pl. 95:b). Some schist slabs were mixed with this debris, and some were found beneath it with deposits of crushed schist, all of which probably belonged to the roof. The remains of a large pithos (P 22) were found in the southwest corner of the room at an elevation of +3.90 m. Two loom weights (C 18, 19) were also found at this level with a collection of LM IB pot sherds. These

³⁷ Seager did not designate houses by number, only by blocks.

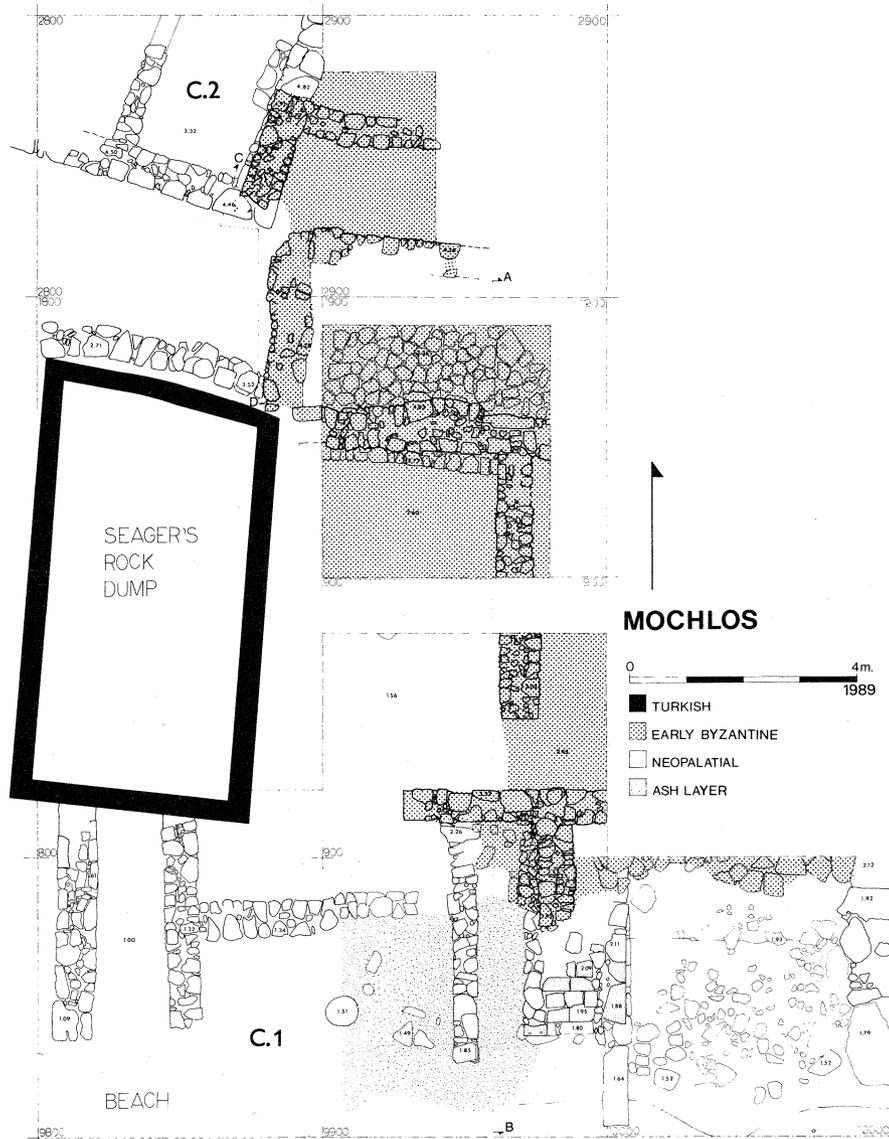


FIG. 8. Plan of Block C: Area E3, Trenches 900, 1800, 1900, 2800, 2900; Area F3, Trenches 9800, 9900, 10,000

finds lay *ca.* 0.40 m. above the next underlying floor and so must have belonged to an upper or second-story floor; first the floor with the pithos collapsed, and then the roof and walls fell in on top of it. The uppermost ground-story floor was found at an elevation of +3.56–3.39 m.; a low stone bench rested on this floor along the eastern wall of the room (Pl. 95:c, d).³⁸ The floor had been plastered, and LM IB pot sherds were scattered across it. A lower earth floor was found at an elevation of +3.39–3.29 m. Over 1,550 pot sherds, also

³⁸ Size of bench *ca.* 1.12 m. long by 0.34–0.38 m. wide by 0.14 m. high.

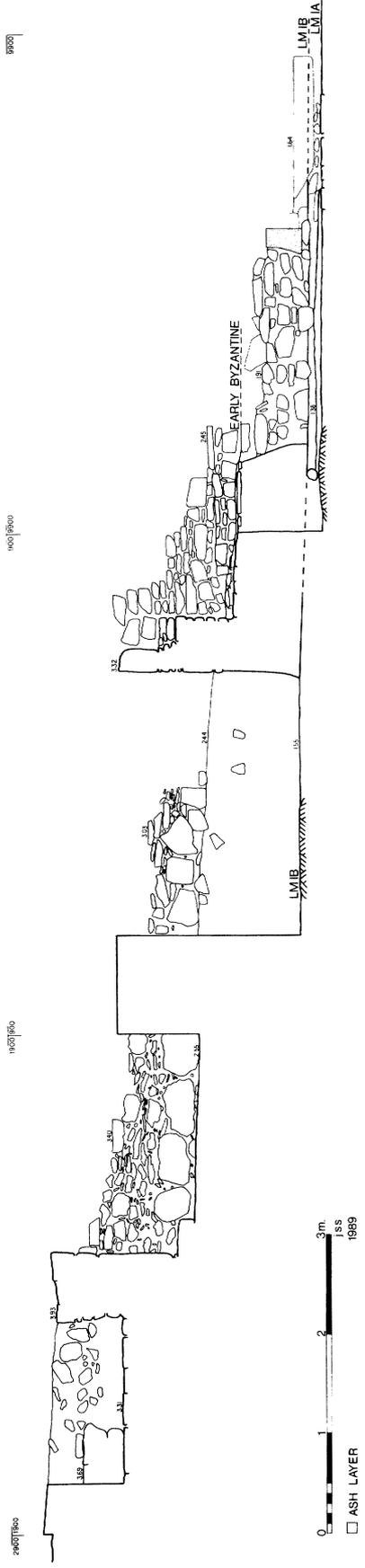


Fig. 9. Block C, Section A-B: Area E3, Trenches 900, 1900, 2900; Area F3, Trench 9900

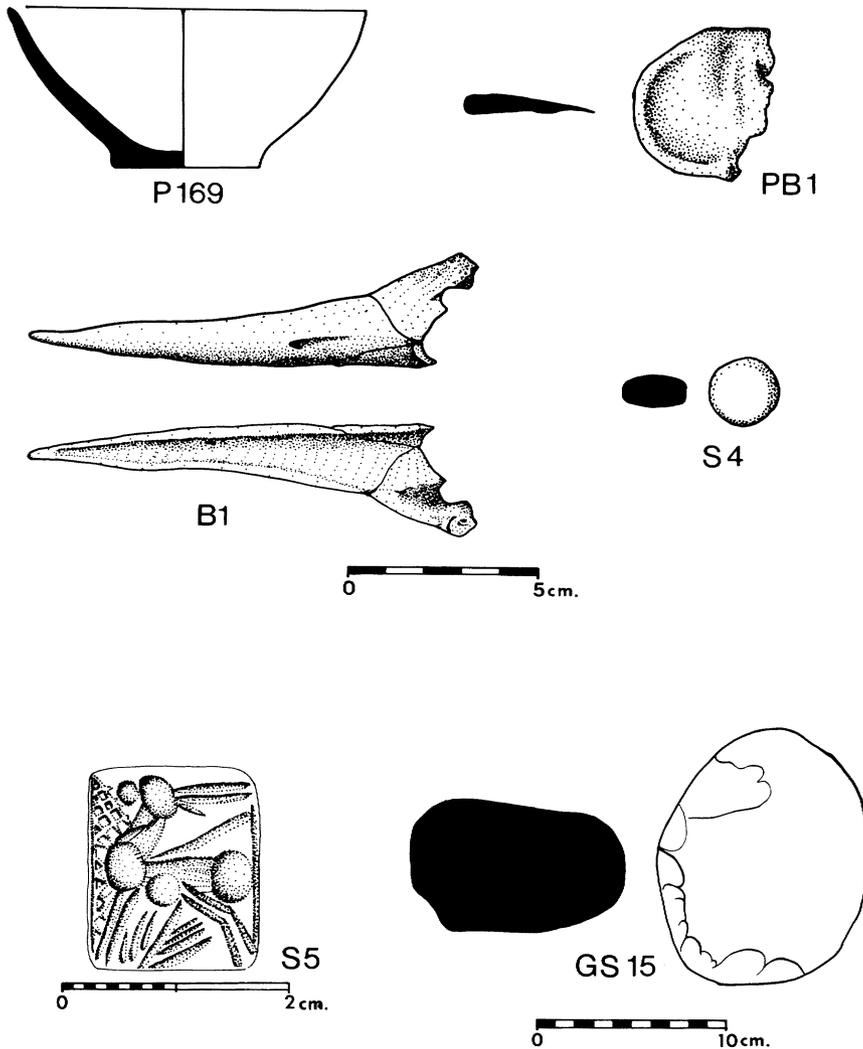


FIG. 10. Finds from House C.2, Room 1 (Margaret Reid)

of LM IB date, were collected here (e.g., P 23–29; Pl. 96:b). Other finds included an intact conical cup (P 169; Fig. 10) and a bone awl (B 1; Fig. 10, Pl. 96:c), both lying alongside the bench, a lead weight (Pb 1; Fig. 10, Pl. 96:c), stone tool (GS 15; Fig. 10), and two seals, all in the southern half of the room. One of the seals, a round disk of dark purple stone, was polished smooth but left blank and unpierced (S 4; Fig. 10); the other, a cushion or flattened cylinder of gray-green serpentine, was carved with the figure of a hunted agrimi (wild goat) with a spear or arrow in his back (S 5; Fig. 10, Pl. 96:a). The hatching to the left of the seal, in front of the agrimi, may indicate a net, in which case the agrimi has been driven into the net and shot in the back. A small bush grows in the field between his legs. There is still considerable earth fill beneath this floor, and earlier floors will probably be uncovered in the room.

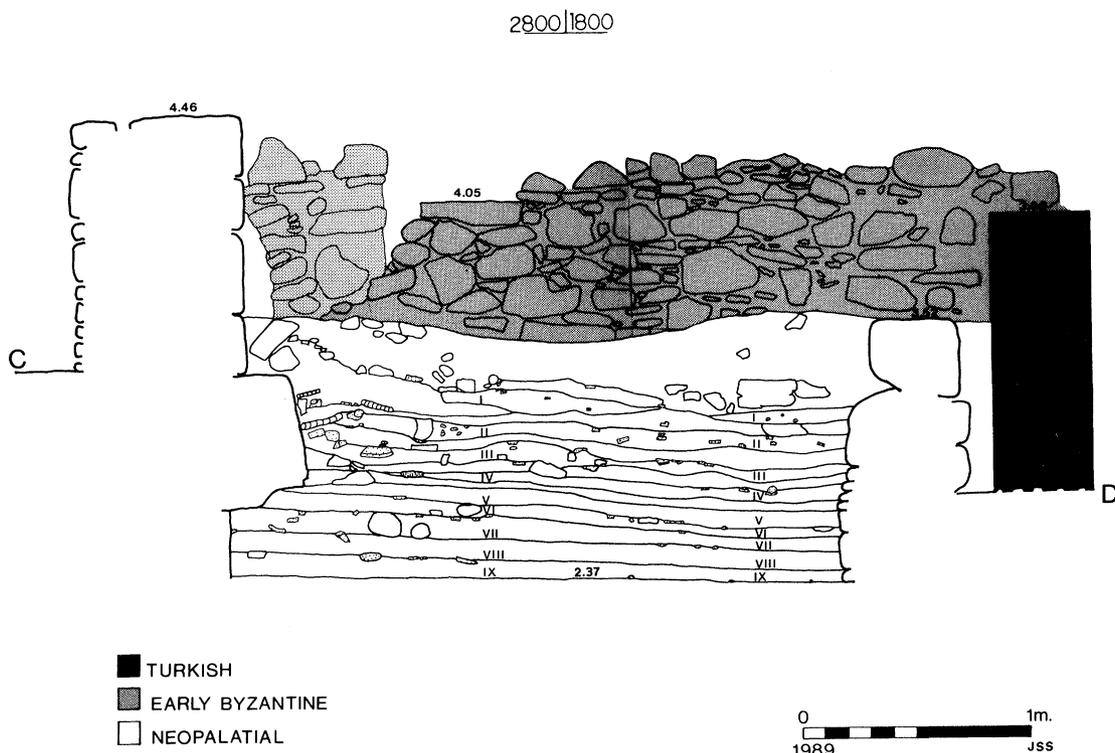


FIG. 11. Block C: Section C-D: Area E3, Trenches 1800, 2800

A doorway, still blocked with earth, is located across from the bench in the western wall; it leads to a second room which has not yet been excavated (Pl. 96:d).

Area E3, Trenches 1800, 2800 (Fig. 11, Pl. 97:a)

The area to the south of House C.2 is bordered by a wall, lying 2.35–2.80 m. to its south along the northern side of Trench 1800 (Fig. 8). The wall is not straight but curves at its east end towards the south; along its inner, north side, it shows signs of frequent rebuilding that often produced an irregular face unlike the outer, south side, which was more carefully finished with an even, vertical face. The wall is probably to be identified, therefore, as a retaining wall that supported, at least in later stages of its use, the accumulated earth to its north in front of House C.2. The space between appears to have formed an open area or perhaps part of a road leading up from the shore along the front of the house. In the course of its use, a great amount of material was dumped in the area, some perhaps thrown from the adjacent house, some dropped by passersby. As a result, the area displayed remarkable stratigraphy. In 1989 ten successive floors were uncovered here at elevations of +3.32–2.34 m.; more remain beneath. The upper five (I–V) consisted of successive layers of light-brown earth on top of crushed purple schist and are contemporary with the adjacent House C.2. The layer of purple schist probably represents the remains of paving, while the light-brown earth above represents material that accumulated before the surface was repaved.

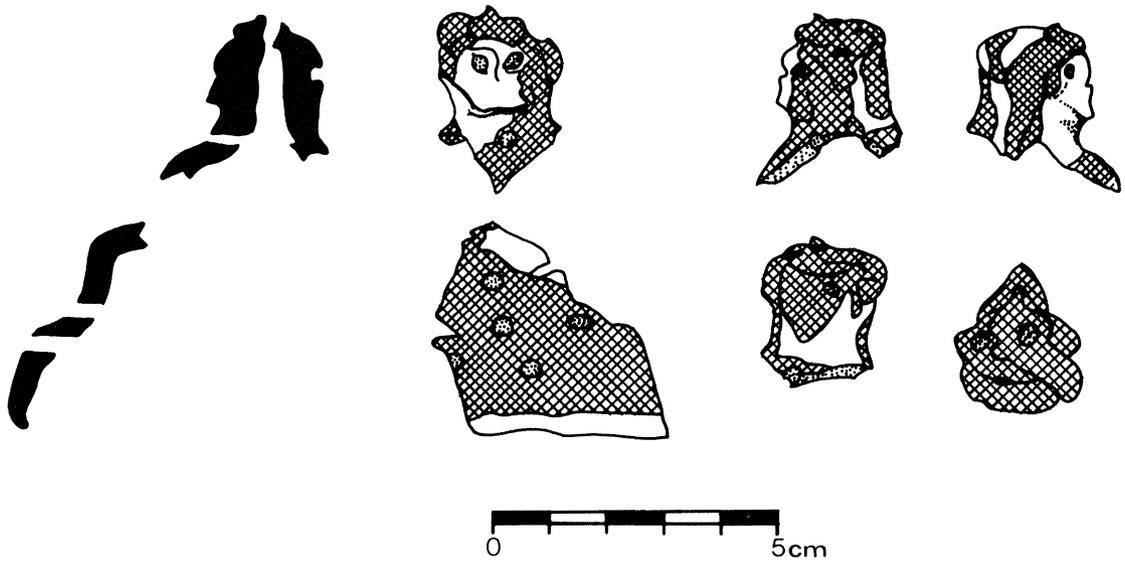


FIG. 12. Female figurine from Area E3, Trenches 1800, 2800, Floor VI, C 4 (Margaret Reid)

The lower floors (VI–X) show no signs of paving; they extend beneath the base of the south façade of House C.2 and predate the house. The uppermost floors contain LM IB potsherds; Levels III, IV, and V contain pure LM IA material; Level VI is primarily LM IA; by Level VII, MM III potsherds start to become more common; and in Levels IX and X, MM III sherds start to dominate. The retaining wall was probably built in the MM III phase, perhaps to serve a different function, and the levels still to be excavated may yet produce a closed MM III deposit. Most of the material found here consisted of animal bones, stone tools, and potsherds, along with a few complete vases (e.g., P 246; Pl. 97:b). Among the most interesting finds was a female figurine from Level VI (C 4; Fig. 12, Pl. 97:c). Crudely modeled, her arms and torso missing, she wears a flounced skirt and must have stood *ca.* 0.06 m. high. Her face and the hem of her skirt were reserved, while the rest of her was painted with a red-brown slip and pierced with holes. A lock of hair was separately applied to the top of her head.

House C.1 (Area E3, Trench 900; Area F3, Trenches 9800, 9900, 10,000)

Along the coast to the south, the excavations uncovered another house, which we have identified as House C.1, that had already been partly exposed by Seager (Figs. 6, 8, 9). It lay on the eastern side of Block C and was noted briefly by Seager in his 1909 report.³⁹ Seager believed that the eastern façade of the house had been rebuilt in ashlar by later Roman settlers, but the 1989 excavations demonstrated that later settlers built only on top of the house, *ca.* 0.70 m. above the earlier Minoan floor level, and while they probably destroyed the upper portion of walls belonging to the ground floor, they did not reach the

³⁹ Seager 1909, p. 284.

bottom of those walls and could not therefore have rebuilt them from the ground up as Seager suggested.

The house is entered from the east over a large, flat threshold slab of gray-green limestone, measuring *ca.* $1.40 \times 0.45 \times 0.19$ m., lying at the southwest corner of Trench 10,000 (Fig. 8); the slab had already been exposed by Seager and was clearly visible on the site (Pl. 98:a). The wall to the south of the threshold is destroyed and missing, as is the entire south side of the house, as a result of beach erosion. The façade was constructed partly in ashlar, probably on both sides of the doorway, although only the two blocks of ashlar to the north of the threshold still lie *in situ*, set back with the rest of the wall on a low projecting plinth. The north jamb of the doorway was also ashlar; the block was found a short distance to the northeast, where it had been displaced at the time of Seager's excavations or reused by later settlers. The ashlar masonry is canonical Minoan work, with only the top, bottom, and outer surfaces of stones dressed flat, and it is impossible to mistake it for Roman construction as Seager did. It is all calcareous sandstone and comes from the quarry located diagonally across from the island, just to the east of the modern village.⁴⁰ In date it is contemporary with the ashlar masonry found in the remodeled house reported by Seager in Block D and with that reported in the House of the Pillars at Pseira;⁴¹ these represent the earliest use of ashlar at both sites and provide a date for the opening of the quarry.

The doorway provides access to a small vestibule, immediately to the right of which stood a U-shaped staircase (Trench 9900; Pl. 98:b, c, d). The five lower steps in the eastern cage of the staircase are constructed from sandstone blocks, and although they have collapsed backwards, they are still fairly well preserved. A later Byzantine wall runs down the middle of the staircase today and was probably responsible for displacing the remaining stone steps in the eastern cage; the return of the staircase on the west, on the other hand, was probably constructed in wood, and the space underneath could have served as a small closet. The wall that divides the two parts of the staircase ends at the south in an ashlar block with two small rectangular mortise holes for the support of wooden timbers in its superstructure.

The vestibule leads through an opening at the west, across from the entrance to the house, into a large rectangular room with a round column base. The room measures *ca.* 4.44 m. east–west, and if the column base were placed in the center, as is normally the case, the room would measure nearly 3 meters north–south. Several paving slabs belonging to the floor were found still *in situ* in the eastern half of the room at an elevation of +1.49 m. The western half of the room (indeed, the whole of Trench 9800) had been excavated by Seager to bedrock, and the walls located here were visible at ground level when the 1989 excavations began. To the west of the room with the column lies a narrow, rectangular room, 1.14–1.36 m. wide, which might have served as a storeroom. Its outer, western wall is wider than other walls in the house and may mark the outer, western façade of the house. The area immediately to the north of the room with the column had also been excavated by Seager, but farther to the north in Trench 900 (Area E3), an undisturbed floor was uncovered just above bedrock at an elevation of +1.56–1.45 m. This floor belongs to a large room

⁴⁰ Soles 1983, pp. 33–46.

⁴¹ Seager 1909, pp. 293–301, figs. 14–16; Betancourt and Davaras 1988, p. 211.

in the same house, the boundaries of which have not yet been exposed on the north and east, but it seems to have been entered from the northeast corner of the room with the column, over a collapsed section of the wall running between the two rooms. The room contained a small, natural hole in the bedrock, located at floor level alongside the north baulk of Trench 900. The hole was full of ash from various fires and also held two tripod feet of a cooking vessel: it had been used as a hearth for cooking. A rounded, sandstone mortar (GS 1) was also found in the room, together with various stone tools, conical cups (P 12, 13), and a clay sealing with a geometric design (C 1). The room clearly functioned as a kitchen. A moderate amount of LM I pottery was found on the floor of this room and on the floor in the eastern, previously undug half of the room with the column; some fragments from the two areas joined or belonged to the same vase. Two or three sherds belong to the Marine style, including one fragment of a closed vase preserving two tentacles of an argonaut, which has been identified as a Knossian import (P 4–6; Pl. 99:a).⁴² Other fragments belong to the LM IB standard tradition, including the upper part of a strainer and a one-handed, collared jug that is the most completely preserved piece (P 10, 14; Fig. 13, Pl. 99:b),⁴³ and the house itself in its last period of use is securely dated to the LM IB period.

A thick and extensive layer of volcanic ash or tephra was uncovered immediately beneath the LM IB floor at an elevation of +1.38–1.29 m. in part of the house (Pl. 99:c). It was located throughout the eastern half of the room with the column, extended beneath its eastern wall into the western cage of the staircase (Pl. 100:a) and the northwest corner of the vestibule, and appears to continue beneath the eastern cage of the staircase where it has not yet been exposed. It covers an area of *ca.* 7.5 sq. m. and averages *ca.* 0.05 m. in depth, rising in places to 0.10 m.; in one spot, where a foundation hole was dug in the ash to lay the column base, it forms a mound as much as 0.20 m. high (Pl. 100:b). Originally the tephra must have covered a larger area to the west, where it was removed by Seager without comment, and to the south, where it was removed by beach erosion. The tephra was as soft and powdery as the day it fell, and it must have fallen into the open area to the east of the house as well, where it would have been eroded away almost immediately by wind and rain. It was preserved beneath the floor of the house only because rebuilding here began immediately or very soon afterwards. The discovery of this tephra was reported to the Third International Thera Congress in September 1989, and soon thereafter a sample of the tephra was sent for analysis to Charles Vitaliano, who has now identified it as Thera tephra of the “Minoan” eruption.⁴⁴

⁴² This sherd was identified as an import by Philip Betancourt.

⁴³ The decoration on this jug has good parallels on some LM IB vases from Palaikastro; see Bosanquet and Dawkins 1923, pp. 58, 59, figs. 45, 46.

⁴⁴ Soles and Davaras 1990.

Vitaliano’s report, dated 3/9/90, reads as follows: “I’ve done enough work on the packet from Mochlos to convince me that the tephra is indeed derived from Thera and the product of the ‘Minoan’ eruption. Microscopic study shows the presence of volcanic glass: refractive index (r.i.) = 1.5091 ± 0.0002 , pumice grains of similar (r.i.), plagioclase (large 2V), sanidine, orthopyroxene, clinopyroxene, carbonate iron ore and apatite. These products are also present in the ‘Minoan’ tephra from Thera or Santorini.”

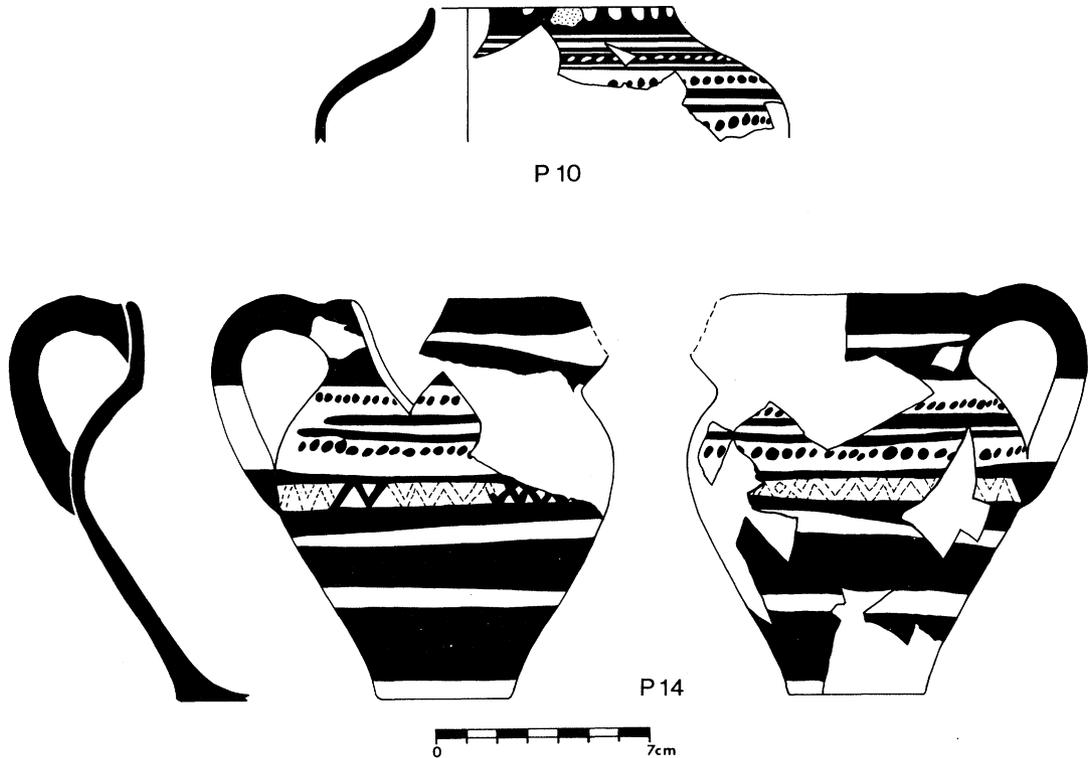


FIG. 13. LM IB jug P 14 and fragment of LM IB strainer P 10 from House C.1 (Margaret Reid)

Most of the tephra layer was removed in the 1989 excavation, and paving slabs were found immediately beneath it in the room with the column base and in the entrance vestibule. At one point just to the east of the column base, a hole *ca.* 0.22 m. in diameter and 0.25 m. deep was made in the paving slabs and lined with small stones and white plaster. LM IA pottery was found on this pavement (P 15–21), most of it concentrated in and around the plastered hole, including the remains of a one-handed cup with a row of white dots around its rim (P 15; Pl. 100:c) and a ewer lavishly decorated with added red and white paint, which has a close parallel in shape in a ewer from the LM IA settlement on Thera (P 21; Fig. 14, Pl. 100:d).⁴⁵ It seems likely that an open area existed here in the LM IA period, which allowed the ash to accumulate as it did; only after the eruption was this part of the house closed in, when the column was erected and the house was extended to the east with a new façade and the entrance with the U-shaped staircase. When this rebuilding occurred, the tephra was used as a bedding for the new floor level, forming a lens between the LM IA pavement beneath and the LM IB floor above. The layout of the original house is unclear: the foundations of the two westernmost walls lay at a lower level than those of the new east façade and staircase and probably belonged to it; the wall running along the north

⁴⁵ *Thera* VI, p. 32, pl. 74:a, left.

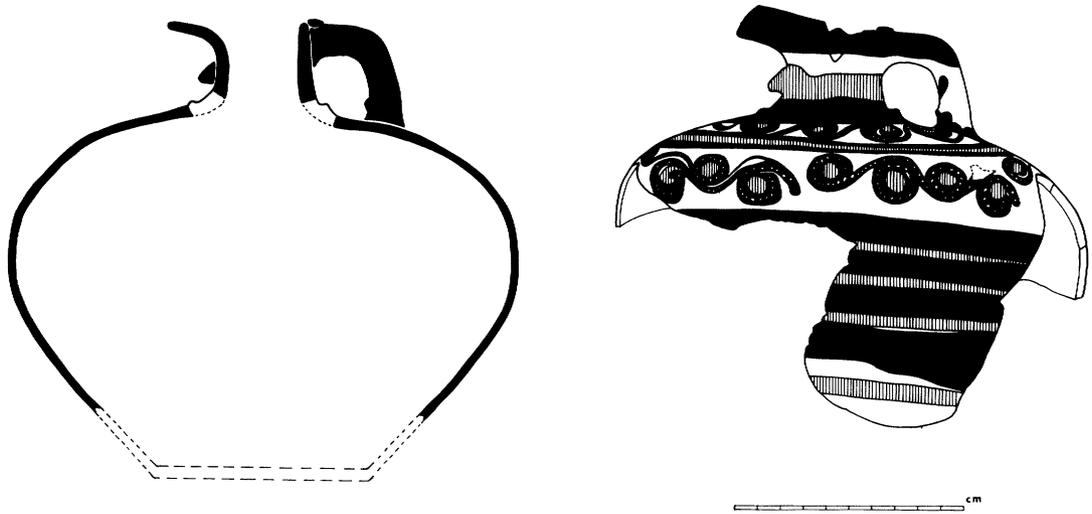


FIG. 14. LM IA ewer P 21 from beneath floor of House C.1 (Margaret Reid)

side of the room with the column also probably belonged to the original plan. The eastern part of the latter wall shows some signs of damage: its stones have been pushed out of line with the rest of the wall and were reused as part of the paving for the IB floor level. The earlier house, then, appears to have suffered some damage at the time the tephra fell, and this would have been the reason for the rebuilding and introduction of ashlar on the east.

The location of the tephra, sandwiched between the LM IA and LM IB floors, suggests that the eruption of the volcano on Thera occurred towards the end of the LM IA pottery style, not later at the end of the IB period as Marinatos believed and probably not earlier within the LM IA period as others have argued more recently.⁴⁶ If this is correct (and some confirmation has been reported from similar findings at Pseira, Kos, and Rhodes) and if the eruption occurred as early as 1620 B.C.,⁴⁷ then the LM IB period which marked the floruit of Minoan civilization was a much longer period than previously thought.

Area F3, Trench 10,000 (Figs. 6, 8)

A large open area nearly 4 meters wide lay to the east of House C.1. A LM I level was uncovered here beneath several Byzantine levels, at an elevation of +1.52–1.95 m., which corresponds to the level of the stone threshold leading into House C.1 (see p. 435 above). This area was paved with stone slabs, stepped at two levels, and appears to have formed a plateia or square, wider than the streets exposed by Seager on either side of Block B (Fig. 6); it opened to the south towards the isthmus to the coastal plain. Another LM I structure with

⁴⁶ Marinatos 1939; for a date within the LM IA period, see Davis and Cherry 1984; Warren and Hankey 1989, pp. 138–144, 214–215; and Warren 1990/1991.

⁴⁷ For the evidence from Pseira, see now Betancourt *et al.* 1990; for Kos and Rhodes, see now Marketou 1990.

An absolute date in the 17th century B.C. remains a subject of some dispute; see the review of evidence compiled by Warren 1990/1991, especially the bibliography collected in note 22.

a large flat threshold lay along its eastern side directly across from House C.1; its northern side has not yet been exposed. A stone lamp of serpentine was found in the plateia alongside the façade of House C.1 (S 2; Pl. 101:a), perhaps dropped from an upper floor of the house, and another seal was found nearby. The seal is a four-sided prism of steatite with yellow patches (S 4; Pl. 101:b). One of its rectangular faces is decorated with a ship with a high prow, five oars or paddles, a mast, and two stays; a curved line, perhaps a branch, is located in the stern. The other faces of the prism are undecorated except for small dots along the edges.

Block D (Fig. 6)

Seager excavated three areas to the east of the church of Agios Nikolaos: a great L-shaped trench, which lay immediately to the east; a series of three LM I houses, lying in a row to the east of this trench; and a “cutting about twenty meters farther up the slope” above these houses where a number of small LM I rooms were exposed.⁴⁸ He provided this description of the area: “Here the houses were all of large size, with massive outer walls, and showed by the presence of central column bases in some of the rooms that they possessed important upper floors.”⁴⁹ The first house east of the church was separated from the second “by a very heavy wall”⁵⁰ and had been partially destroyed during the Roman period so that “Roman walls” were found “lying in the actual L.M. I level.”⁵¹ The second house “ceased to be occupied in the early part of L.M. I” when it was “badly cut into by the big house D . . . in which it was partly incorporated.”⁵² He provided a plan and detailed description only for the third house. These houses were identified and drawn during the earlier survey of the island, and while their relation to one another was clear, it was not clear how they were related to the rooms uncovered in Seager’s great trench to their west or to the rooms excavated in the cutting above them. Accordingly, cleaning operations were begun in this area, and four trenches were also opened to the west of these houses in Area E4, Trenches 1500, 1600, 1700, and 2700, the latter three actually located in Seager’s great trench (Fig. 15).

Seager’s trench extends *ca.* 12 m. east–west along the coast and *ca.* 16 m. north–south along the west side of the houses exposed in Block D. Six to 10 m. wide, at the north it cut 6 m. into the slope of the island (Pl. 101:e). Seager exposed a series of small rooms in this trench, and while the results of the cleaning were inconclusive, these rooms appear to belong to what he identified as the destroyed area of the first house with “Roman walls lying in the actual L.M. I level.” Trench 1500 was opened to the west of Seager’s excavation in the hope of making some sense of these rooms, and part of the west façade of an LM I house was uncovered lying along the east side of a paved street (Pl. 101:c). The street, *ca.* 2.04–2.25 m. wide, flanked by LM I walls on each side, runs parallel to the streets that run north–south between Blocks A and B and Blocks B and C and forms a third street that may have separated Blocks C and D. The house façade on the east side of this street is oriented differently

⁴⁸ Seager 1909, p. 303.

⁴⁹ *Ibid.*, p. 288.

⁵⁰ *Ibid.*, p. 290.

⁵¹ *Ibid.*, p. 288.

⁵² *Ibid.*, p. 290.

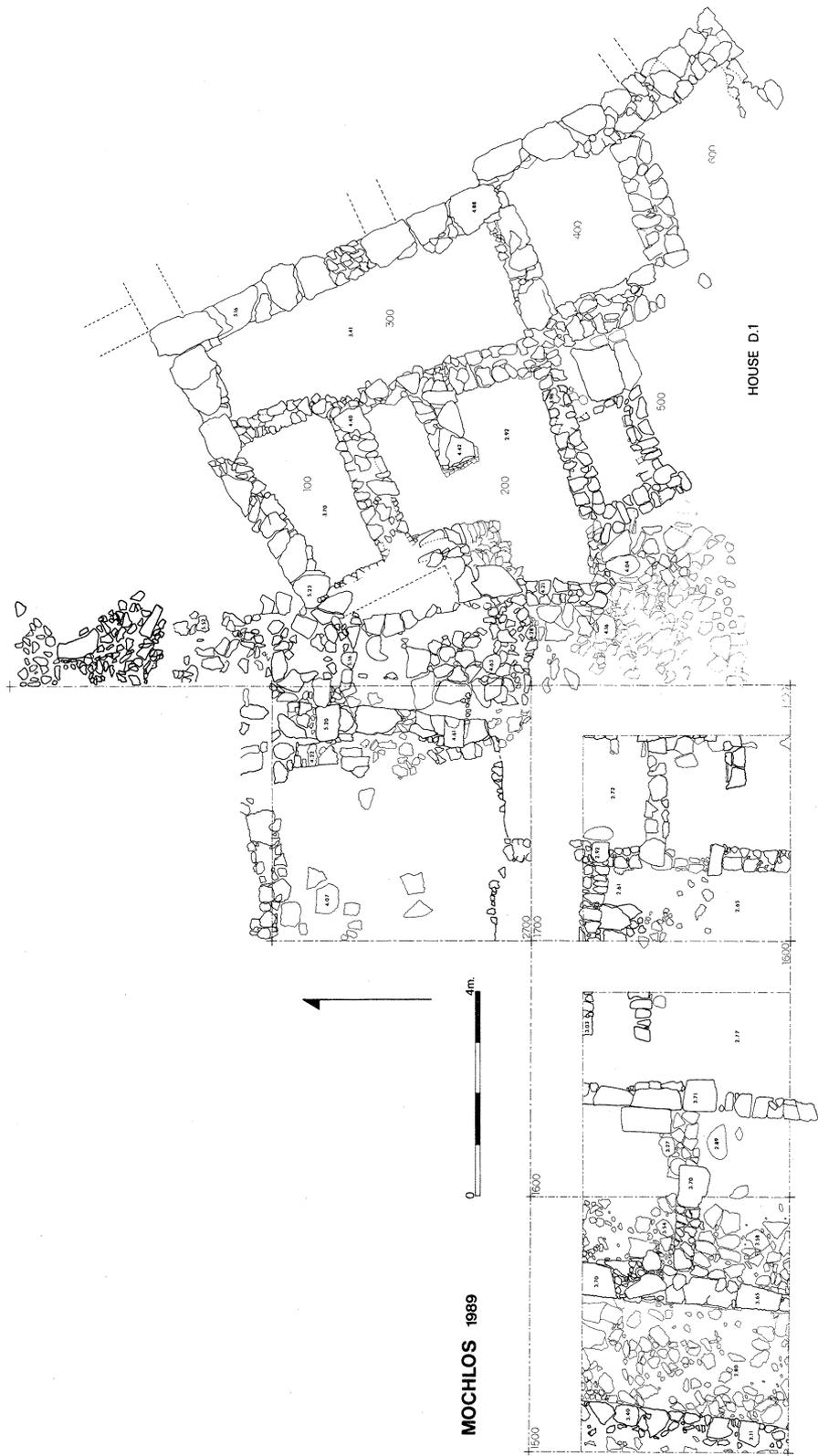


FIG. 15. Plan of Block D: Area E4, Trenches 1500, 1600, 1700, 2700, and House D.1

than the walls of the large LM I house that Seager describes to its east (D.1), running nearly north–south while those of the other house run northwest–southeast at an angle; the façade clearly belongs to a fourth house in Block D that stood to the west of Seager’s first house. What Seager described as the first house in the Block apparently consisted of two houses; the one to the west that was badly destroyed by “Roman” occupation and one next to it on the east with “a very heavy wall” forming its east façade. The east façade of the more western house (D.4), running with the same orientation as the west façade, seems to have been exposed along the east side of Trench 2700, making the original house here *ca.* 11.20 m. wide. It was badly destroyed, as Seager noted, by later occupants who may have reused the west façade but rebuilt most of the interior. They also reused large sandstone blocks of Minoan ashlar, some of which had fallen from the facade into the street while others were used in interior walls in Trench 1600.

House D.1 (Fig. 15, Pl. 101:d)

The LM house lying alongside D.4 to the east is the first of the three large houses “with massive walls” that Seager described in Block D. It is indeed a large, rectangular house with massive outer walls on its north and east, which has been cut into by later walls on its west and partly destroyed by beach erosion along its south. Its eastern wall is *ca.* 12.52 m. long, and while its southern end is badly damaged, the wall probably did not extend much farther to the south and so marks the original north–south length of the house; it is built of large blocks of stone and preserved to a height of *ca.* 2.40 m. at its north end, the northeast corner of the house. The north wall is intact, measuring *ca.* 6.66 m. in length. Only the northern part of the western wall is preserved.

Seager excavated the five rooms in the northern and eastern part of the house (100–400, 600; Fig. 15) and reported finding them “quite empty” except for a LM IB ovoid rhyton, probably an import from Knossos, of which he published a drawing,⁵³ and three LM I vases, including “two small ewers and a squat amphora” decorated with “the familiar wreath pattern.”⁵⁴ He also excavated beneath the LM I floors of the house and found “many fragments” of EM II, EM III, and MM I pottery as well as a model of a clay boat⁵⁵ and an unfinished stone vase.

The eastern half of the house had been drawn in the earlier survey of the island. The goal of the 1989 excavations was to undertake a general cleaning and uncover its western and southern façades. The five rooms Seager excavated were cleared, and in two rooms, 100 and 600, excavations were begun beneath the LM I floor level in the hope of finding additional Prepalatial remains. Nothing was found in Room 100 at the northwest corner of the house, and it was clear that this was one of the areas where Seager had already dug to virgin earth. In Room 600, on the other hand, at the southeast corner of the house, excavation began to uncover a deposit of earlier pottery, probably MM III in date,⁵⁶ which is located

⁵³ *Ibid.*, p. 288, fig. 12.

⁵⁴ *Ibid.*, p. 290.

⁵⁵ *Ibid.*, pp. 279, 290, fig. 2.2.

⁵⁶ Only a small part of this deposit was excavated.

immediately beneath the later floor level and belongs to the construction period of the house. Several complete vases were found here, including a large, undecorated jar with rim spout, two horizontal handles, and a knob on the shoulder opposite the spout (P 211; Pl. 102:a).

The great surprise in the cleaning of this house was the discovery that the southern half of its western façade had been destroyed and dismantled and that a new retaining wall was built here, somewhat to the west of the line of the original wall and running in a more truly north–south direction, in order to support a roughly cobbled street that ran up the western side of the house. The southwest room of the house, Room 500, was also reoccupied, perhaps at the same time, and walls and a two-stepped platform were built along the north side of the room well above the original LM I floor level. The small room created at the northwest side of the area contained a deposit of conical cups (P 213, 214) and an undecorated tripod jar with trefoil mouth, its feet missing (P 215; Pl. 102:b).

MYCENAEAN (Fig. 15; Pl. 102:c)

The cobbled street noted above is located in the space between the two LM I houses in the western part of Block D. It is supported on fill which is retained partly by the earlier façades of these houses and partly by a contemporary wall at its southeast where the earlier wall of House D.1 was destroyed. It runs up the slope of the island and actually rests on top of the LM I wall at the northwest corner of House D.1, *ca.* 1.53 m. above the original Minoan floor level in Room 100. In places its paving stones are neatly laid, and four steps are clearly distinguished, but for the most part its stones are crudely placed; the road resembles the old *kaldirim* roads still to be found in the Greek countryside today. Several deposits of smashed LM III pottery were found on top of the pavement (e.g., P 223; Pl. 102:d, e), and the road belongs to the reoccupation for which Seager also reported evidence.⁵⁷ To date it has been traced a distance of about 15 meters, and one of the objectives of the 1990 season will be to follow the road up the hill to see where it leads.

EARLY BYZANTINE

Seager reported an Early Byzantine fortification on top of the island and suggested that it belonged to the early 9th century after Christ when “the Saracenic pirates first made their appearance in Cretan waters.”⁵⁸ The fortification was drawn and described briefly in the earlier survey of the island (Fig. 2),⁵⁹ and Byzantine settlement remains and an extensive Byzantine cemetery were also identified across from the island at Loutres. It was thought that the settlement had probably shifted from the island to the coast opposite at this time because the rising sea level had cut the island off and severely limited its usefulness as a port. Seager failed to report any Byzantine settlement remains on the island itself. The 1989 excavations, however, determined that much of what Seager described as “Roman” on the island was in fact Early Byzantine and that there were extensive remains of settlement located on the island also at this time.

⁵⁷ Seager 1909, p. 275.

⁵⁸ Seager 1909, pp. 275–276.

⁵⁹ Soles 1978, p. 15, figs. 3, 16.

Area E3, Trenches 2900, 1900, 900; Area F3, Trenches 9900, 10,000 (Figs. 8, 9)

The main Byzantine remains were found just west of the church of Agios Nikolaos, immediately above the LM I remains along the eastern side of Block C where Seager reported rebuilding "by the Roman settlers."⁶⁰ Here parts of five rooms belonging to a substantial building oriented north-south were uncovered. The northwest corner of the building was exposed, along with parts of its north and west façades, and although the southern limits of the building were partly destroyed by erosion, interior walls to the south indicate a north-south length of over 12 meters. While most of the western part of the building was excavated, the eastern part remains unexcavated, and its width is therefore unclear.

Rooms 1 and 2 exposed in Trench 1900 exhibit some interesting architectural features. Room 1, which is *ca.* 2.54 m. wide (north-south), located at the northwest corner of the building, was carefully paved with flat cobbles, one of which shows signs of hammering, as if it had been used as a quern (Pl. 103:a). Room 2, which lies at a slightly lower level to its south, is a long rectangular room, measuring *ca.* 5.80 m. north-south, which was entered through a doorway *ca.* 1.32 m. wide at its southeast corner. It was an important room in the house, perhaps the main living room, and was paved with white plaster and provided with a low bench along its north wall (Pl. 103:b). Only the northeast corner of Room 3 was preserved, exposed in Trenches 900 and 9900, sitting on top of the staircase return in the LM IB House C.1; this room was paved with slabs of green schist, and a low stone bench stood against its east wall.

Large numbers of shattered terracotta roof tiles were found throughout the house; one large tile, still complete, was found on the floor of Room 2. Most of these fragments belong to flat tiles although some appear to be curved; some are also decorated with incised curving lines. The roof of the house may therefore have been gabled with the curved tiles running along the apex of the roof and the decorated tiles perhaps along its eaves. Two large amphoras (P 37, 38; Pl. 104:a), which date the house to the 7th and 8th centuries after Christ, fragments of cooking pots (P 35, 36), bronze fishhooks (CA 6, 7), and clay loomweights (C 2, 3) were found in the house and suggest its domestic character.

Finally, there is also some evidence for Late Byzantine reoccupation in the 13th century. Poorly built walls were found here and there, usually set against the Early Byzantine walls, delimiting smaller spaces; glazed pottery, including some sgraffito ware with incised fish (P 30-34; Pl. 104:b, c), and bronze Venetian coins (CA 2-5) were associated with these walls.

CONCLUSION

In its first season, the Mochlos Excavation Project documented seven different periods of occupation on the island, many of them in well-stratified contexts, clarified much that Seager had reported from his excavation, and made considerable progress toward achieving its goals. It also continued its examination of sites on the adjacent coastal plain that might have been connected in one way or another with the Bronze Age occupation on the island and targeted two of these sites, one at Palia Vardia, another adjacent to the modern village of Mochlos, for excavation in 1990.

⁶⁰ Seager 1909, p. 284.

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COSTIS DAVARAS

ARCHAEOLOGICAL INSTITUTE OF CRETE
The Museum
Agios Nikolaos, Crete



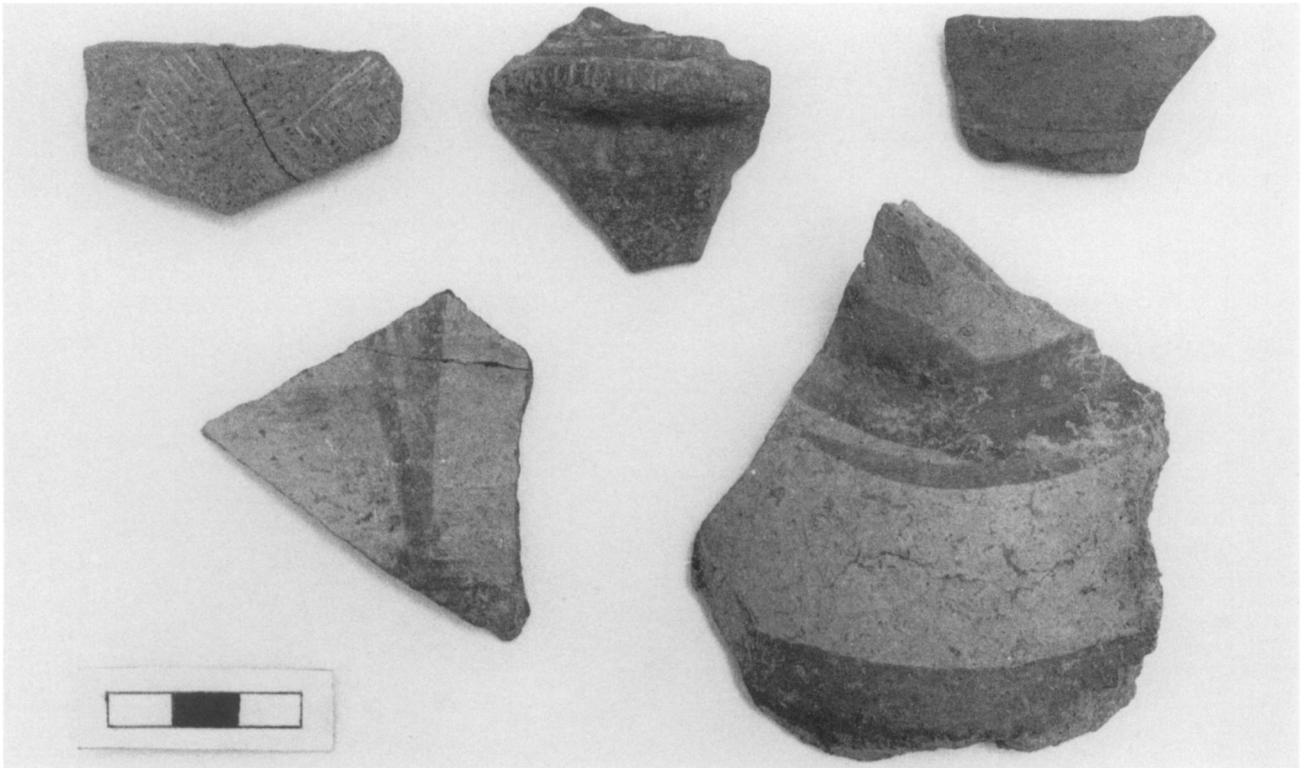
a. Earlier tomb in foreground, from west (Area C2, Trenches 900, 1000)



b. Cremation pit from west (Area C2, Trenches 900, 1000)

Tomb A

PLATE 90



a. EM II potsherds P 52-56 from cremation pit



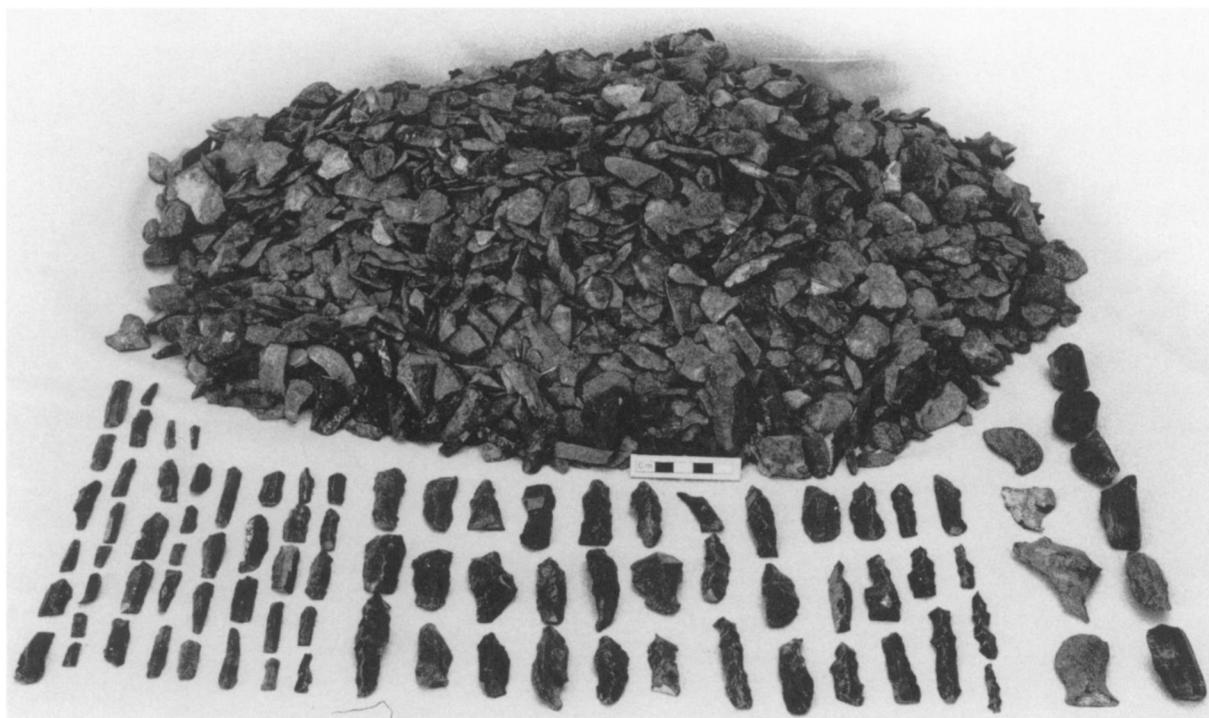
b-d. Cylinder seal S 6

Tomb A

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a. Obsidian pile from south (Area D2, Trench 8800)



b. Obsidian pile CS 1

Tomb N



b. Stairs from east



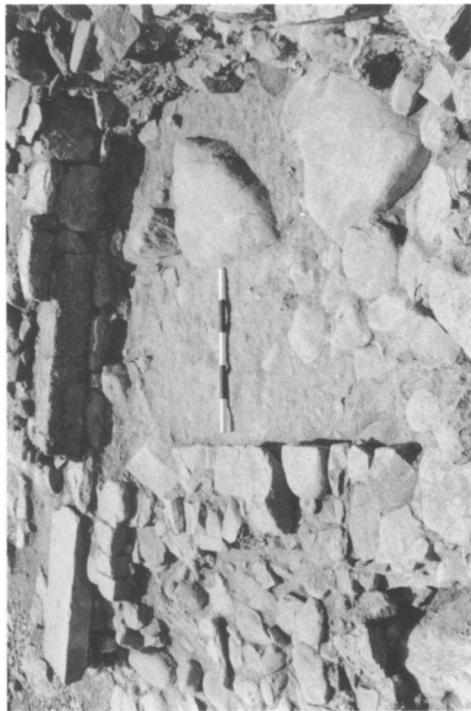
a. Stairs from west

Building III

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a. Kernos GS 13 from cemetery



b. Prepalatial house and street from east (Area F3, Trench 10,000)



c. Protopalatial hearth in corner of room, from west (Area F3, Trench 10,000)



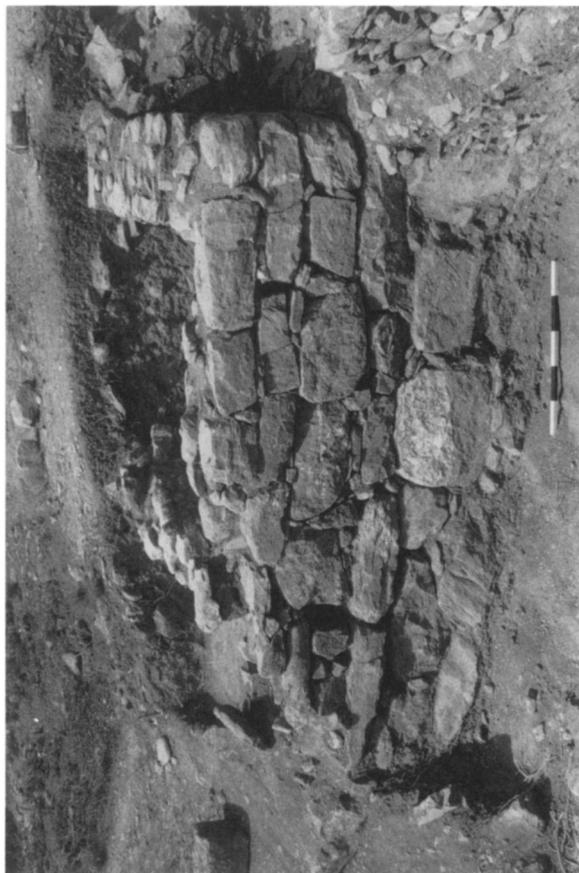
d. Protopalatial hearth from west (Area F3, Trench 10,000)



a. Area D2, Trenches 400, 500, from northeast



b. Skeleton of subadult (Area D2, Trench 500)



a. South façade from south (Area E3, Trench 2800)



b. Room 1, collapsed wall debris from north (Area E3, Trench 2800)



c. Room 1 after excavation, from north (Area E3, Trench 2800)



d. Room 1: bench from west (Area E3, Trench 2800)

House C.2

JEFFREY S. SOLES AND COSTIS DAVARAS: EXCAVATIONS AT MOCHLOS, 1989



a. Seal S 5



c. Bone awl and lead weight, B 1, Pb 1

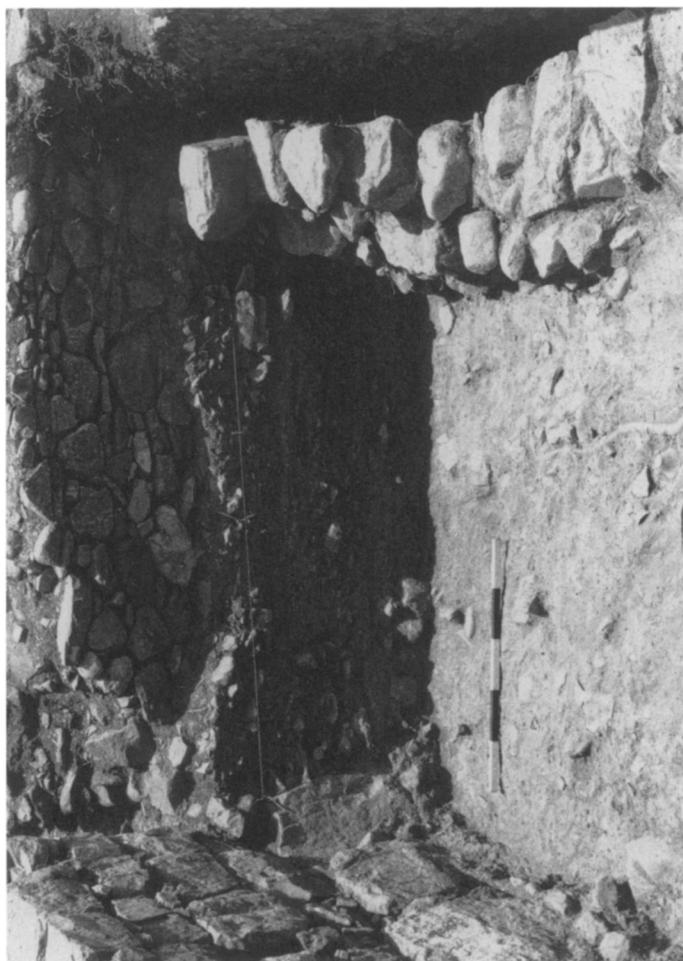
House C.2, Room 1



b. LM I potsherds P 23-29 from floor

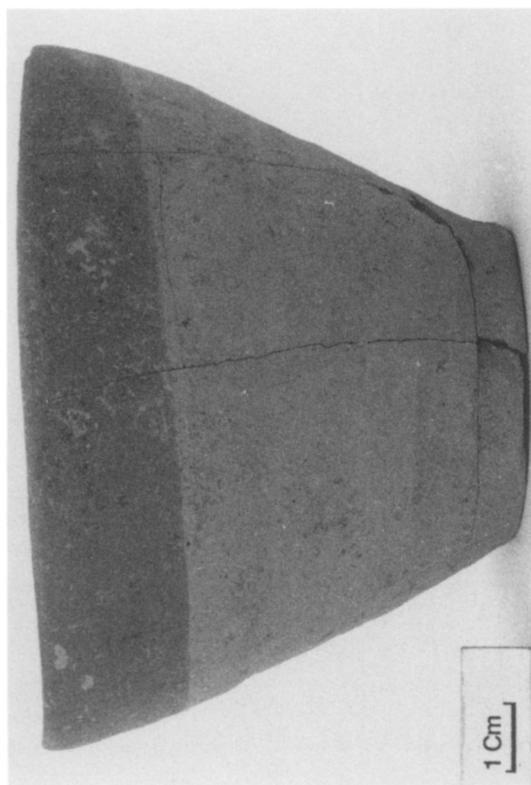


d. Unexcavated doorway in west wall, from east (Area E3, Trench 2800)

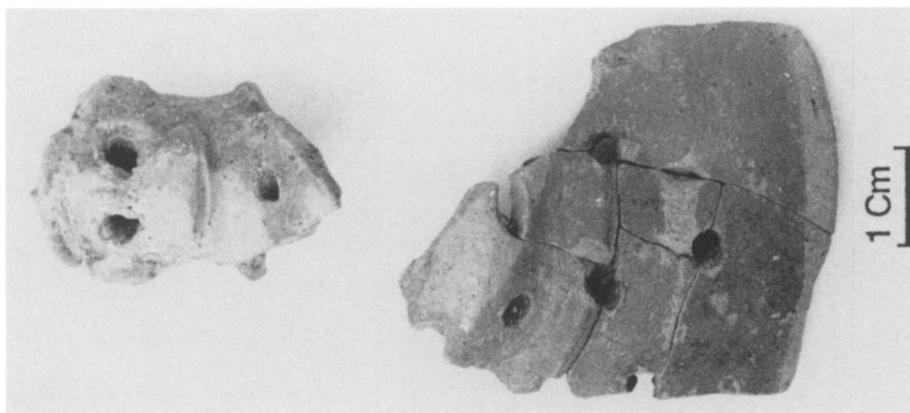


a. View from west

Area E3, Trenches 1800, 2800



b. Cup from Floor VIII, P 246



c. Figurine C 4 from Floor VI



a. East façade from east (Area F3, Trench 10,000)



b. Staircase from south (Area F3, Trench 9900)

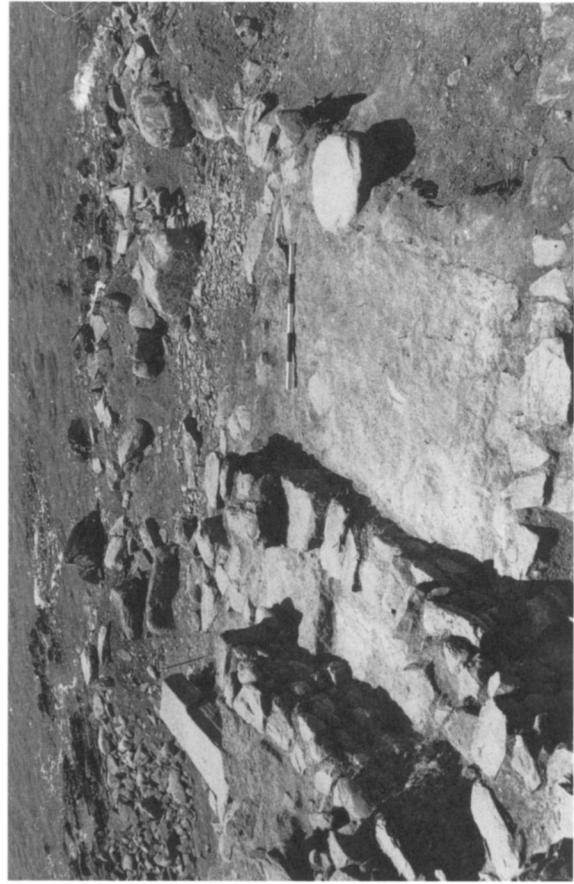


c, d. View from south (Area F3, Trenches 9800, 9900)



House C.1

a. LM IB marine-style sherds P 4-6



House C.1

c. Tephra beneath LM IB floor, from north (Area F3, Trenches 9800, 9900)



b. LM IB jug P 14



b. Room with column, tephra in section, from east (Area F3, Trench 9900)



a. Tephra beneath return of staircase, from north (Area F3, Trench 9900)



c. LM IA cup fragment P 15



d. LM IA ewer P 21

House C.1



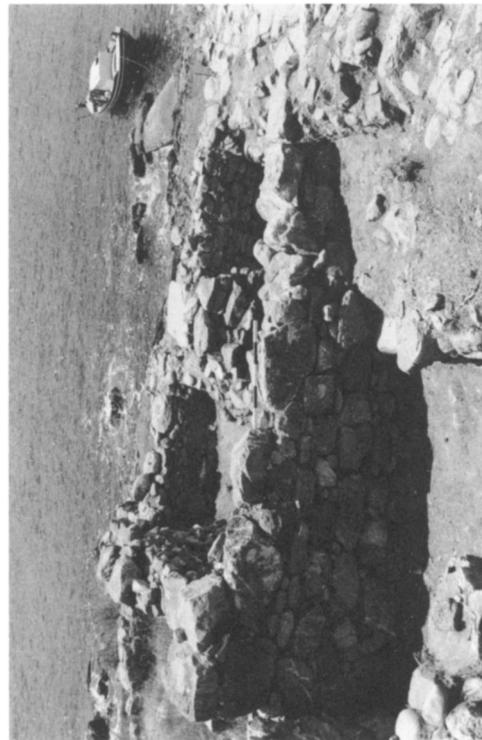
c. LM I street from south (Area E4, Trench 1500)



b. Four-sided seal S 1 from LM I street (Area F3, Trench 10,000)



a. Serpentine lamp S 2 from LM I street (Area F3, Trench 10,000)



d. Block D, House 1, north façade from north (Area E4)



e. Seager's Great Trench from north (Area E4, Trenches 1600, 1700, 2700)

PLATE 102



a. House D.1:
two-handled
jar P 211 from
beneath floor
in Room 400



b. House D.1: tripod jug P 215 from beneath
floor in Room 500



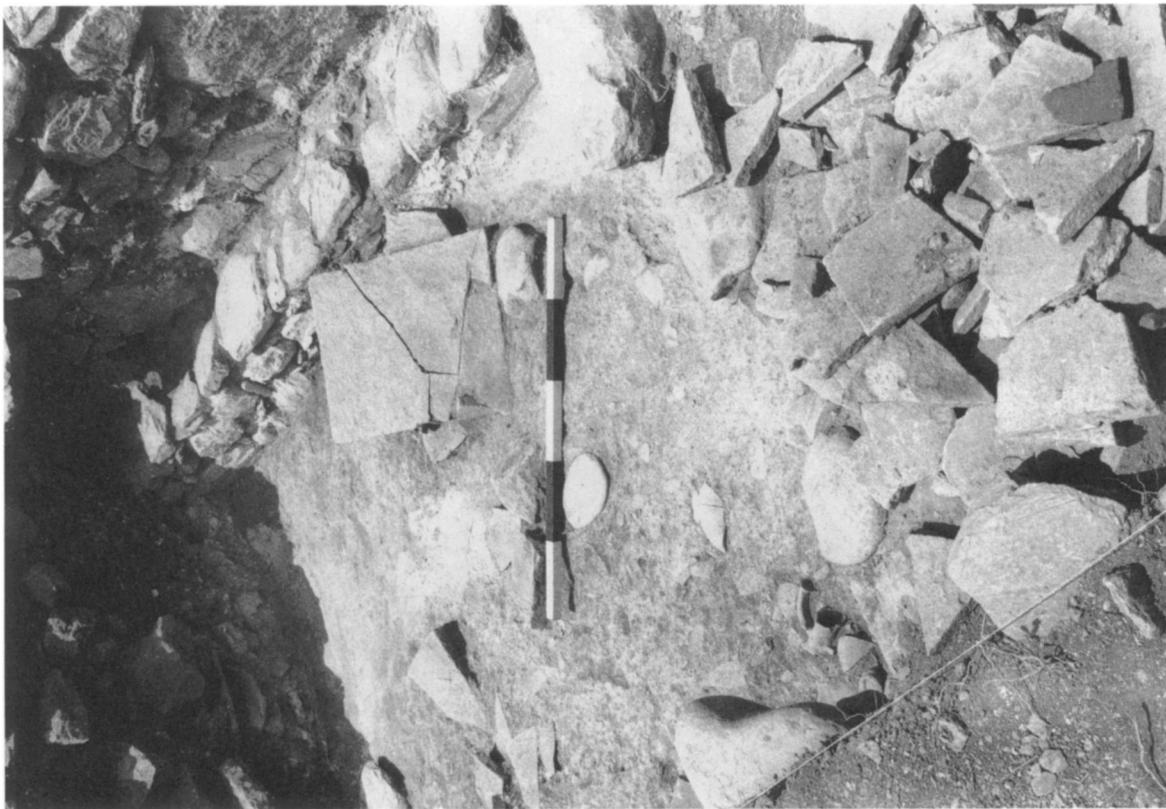
c. LM III road above west façade of House D.1, from north (Area E4)



d, e. LM III cup P 223 from road



a. Room 1: paved floor and broken amphora at lower left, from east
(Area E3, Trench 2900)



b. Room 2: bench and roof tiles, from southeast (Area E3, Trench 1900)

Byzantine House I

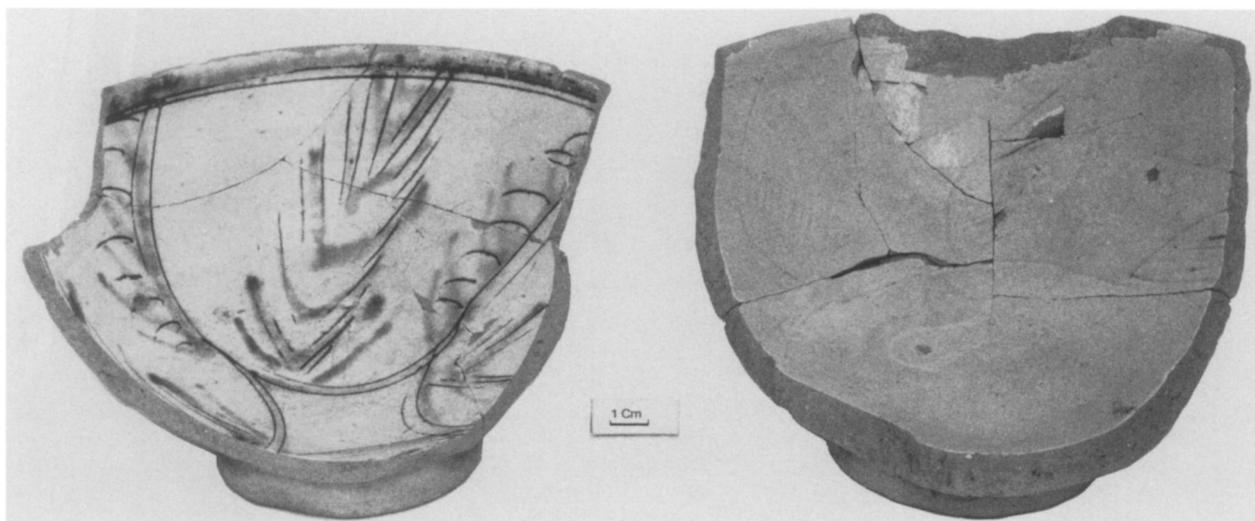
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a. Byzantine House I, Room 1: early Byzantine amphora P 38



b. 13th-century Byzantine bowls P 30, P 31



c. 13th-century Byzantine bowls P 32, P 34