

EXCAVATIONS AT PSEIRA, 1985 AND 1986

(PLATES 57–71)

THE WORK of the 1985 and 1986 seasons of the Pseira Project was preliminary in nature. Buildings uncovered by the excavations of 1906–1907 were cleaned, small exploratory trenches were excavated in several parts of the settlement, the cemetery was investigated briefly, and a preliminary reconnaissance of Pseira Island was made. The results of these two campaigns are presented here.¹

Pseira is a small island located about two kilometers off the northeast coast of Crete, at the eastern end of the Gulf of Mirabello. It was the site of a Minoan town which began as a small settlement during the Final Neolithic to Early Minoan I period, in the third millennium B.C., and reached its greatest size in Late Minoan IB, a period which ended about 1550 or 1450 B.C. As a result of the partial excavation of the site by Richard B. Seager in 1906–1907,² approximately sixty buildings are exposed or traceable on the ground; this was a substantial community for the Bronze Age period in Crete. Since the settlement is located on an excellent small harbor, and since the island itself furnishes minimal amounts of arable land, it is likely that commerce and fishing played important roles in Pseira's economy.

The Pseira Project was initiated because no detailed and systematic publication of any Minoan settlement in the area of the Gulf of Mirabello had taken place since the publication

¹ The Pseira Project is an American–Greek collaboration (*synergasia*). It is directed by Philip P. Betancourt, Professor at Temple University, and Costis Davaras, Director of the Archaeological Institute of Crete. It is sponsored by Temple University, the Archaeological Institute of Crete, and the Archaeological Society of Crete, under the auspices of the American School of Classical Studies at Athens. Additional financial assistance for 1985 and 1986 was given by the Institute for Aegean Prehistory, the University Museum, University of Pennsylvania, Leon Pomerance, and other donors. The staff included John McEnroe, architect (1985, 1986); Richard Hope Simpson, survey director (1985, 1986); trench supervisors Eleni Banou (1985, 1986), Robert B. Koehl (1985, 1986), Polyxenia Bougia (1986), Georgia Salapata (1986), and Vasilike Zografaki (1986); geophysicists Stavros Papamarinopoulos and Gregori Tsokas (1986); photographer Deidre Pribram (1985, 1986); assistant photographer Michael Betancourt (1986); architectural drafting staff Philip Van Dusen (1985, 1986) and Vicki Lynne Mims (1986); cataloguers Mary Betancourt (1985, 1986) and Catherine McEnroe (1985, 1986); artists Jacke Phillips (1986) and Teresa Howard (1986); archaeobotanist Russel Evjen (1986). Six students from the University of Patras assisted Professors Papamarinopoulos and Tsokas.

Material from these seasons was studied by Jenny Albani (Byzantine architecture), Natalia Poulou (Byzantine pottery and small finds), Paul Goldberg (micromorphology study of earths), Charles Vitaliano (pumice and soils), George Myer (geological samples), William Farrand (geological samples), Glynis Jones (botanical remains), Maria K. Shaw (plaster samples), and David Reese (faunal remains). A preliminary report was published by P. P. Betancourt and C. Davaras, «'Ανασκαφική έρευνα Ψείρας περίοδοι 1985 και 1986», *Ἀμάλθεια* 68–69, 1986, pp. 183–200.

Thanks are extended to Yannis Tzedakis, Director for Prehistoric and Classical Antiquities, Ministry of Culture, and to Nikos Papadakis, Epimeletes and Supervisor for the Ephorate of Eastern Crete, for support for the project.

² R. B. Seager, *Excavations on the Island of Pseira, Crete*, Philadelphia 1910 (= Seager).

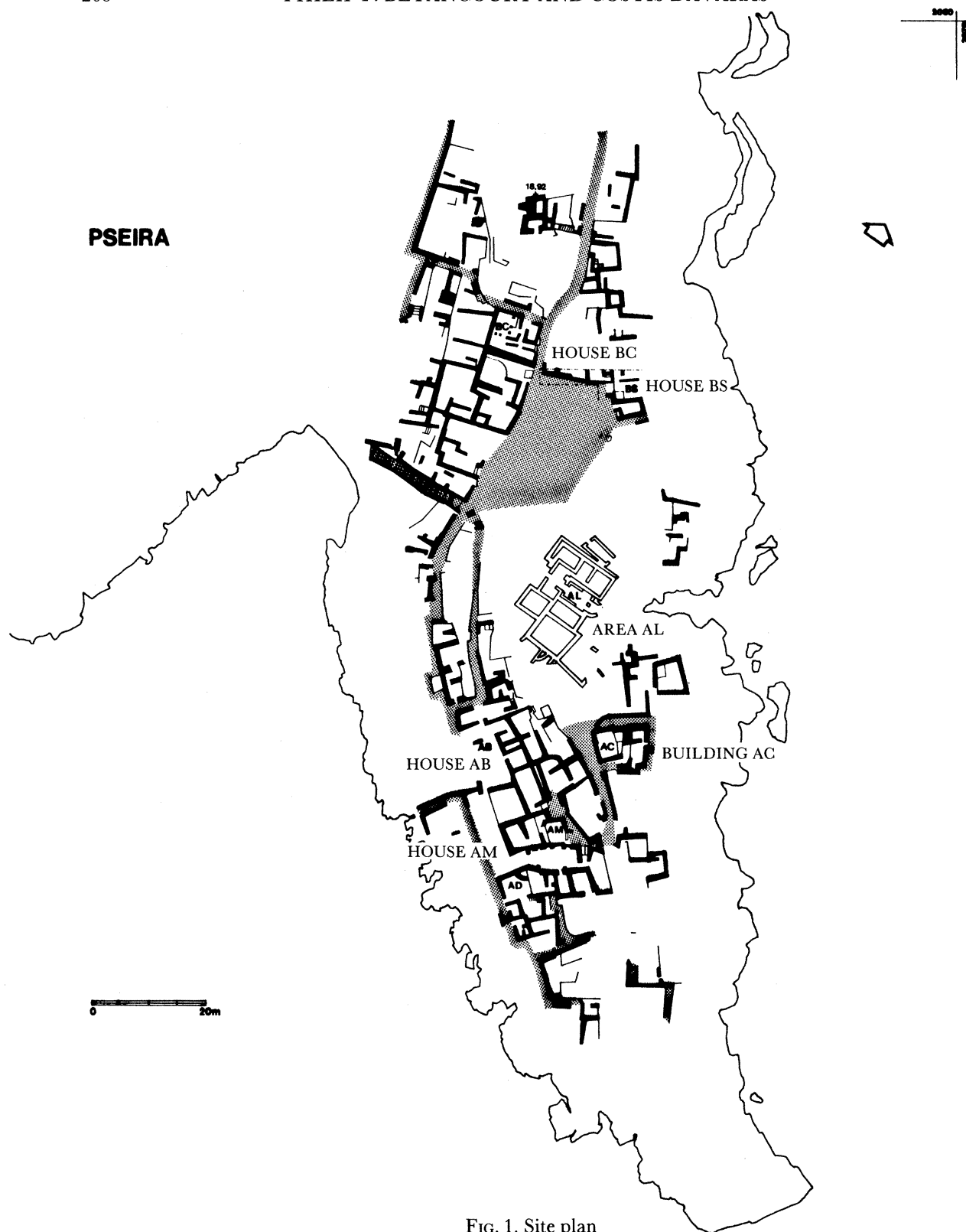


FIG. 1. Site plan

in 1908 of the Hawes archaeological excavations at Gournia.³ It is hoped that the new project, combining survey, archaeological excavation, and other studies, will shed fresh light on this small town in eastern Crete.

Pseira is about two kilometers long. It is uninhabited, and it is no longer used for grazing, a practice that was halted only in recent times. Few trees grow in the barren, rocky landscape. An extensive system of terrace walls indicates that the island was once farmed, but most of its economy was surely based on the small sheltered harbor facing the near-by Cretan coast, one of the few places in northeast Crete where ships could find protection from a northerly wind.

The settlement on Pseira is located on both sides of the harbor, facing southeast, toward Crete (Fig. 1). Although a few houses are on the southwestern side of the harbor, most buildings are located on the main peninsula, a strip of land at the northeastern side of the harbor. When a visitor approaches the Pseira settlement by sea, the most visible architectural feature is the Grand Staircase (Pl. 57), a long flight of steps leading from the tiny beach up into the settlement.

For the purpose of organizing the work of the Project, the town has been divided into four areas. Area A is the tip of the main peninsula, southeast of the Grand Staircase. Area B is the space northwest of the Grand Staircase. Area C is on the northeastern side of the hill southwest of the harbor, facing the anchorage. Area D is the other side of the hill southwest of the harbor, away from the harbor. Within each area, houses or blocks of rooms are given letters, and rooms within blocks are numbered sequentially. Thus, AB 4 is Area A, House B, Room 4, and BC 7 is Area B, House C, Room 7. To the west of Area D, in a small ravine, lies the town cemetery.

The first season of the Project extended from August 12 to August 28, 1985, under a cleaning permit. Most of the work was concentrated in three structures: Seager's House B (House AB); the House of the Pillar Partitions (House BC), and the Shrine (Building AC). These three buildings were almost completely cleaned, revealing many new details of their architecture. Finds were fragmentary, as is to be expected of a cleaning operation, but they added significantly to our knowledge of Pseiran chronology and historical development.

The second season, the first of excavation, extended from July 1 to July 30, 1986. The main goals were a better overall understanding of the settlement and a knowledge of the character of several areas not examined by the early excavators; to achieve these aims test trenches were opened at several locations within the town and in the cemetery area. Trenches were excavated on the highest point of the Pseiran peninsula (Area AL), east of Building AC, at the western edge of the town (House DA), and in several parts of a level area near the center of the Pseiran peninsula (Areas BM, BR, and BS). Work continued in Area A with the cleaning of houses excavated by Richard Seager; Buildings AI, AM, AN, AO, and AP were cleaned. Soundings were made under the floors of House BC and the Shrine. Two small trenches were opened in the cemetery, and a preliminary survey of the entire island by Richard Hope Simpson discovered several architectural features. Magnetometer and resistivity surveys contributed additional information.

³ H. B. Hawes *et al.*, *Gournia*, Philadelphia 1908.

SUMMARY OF THE HISTORY OF THE TOWN

Stray finds of sherds from the Early Bronze Age document the existence of human visitors to Pseira Island as early as the third millennium B.C. In 1985 and 1986, no architecture was excavated from the earliest periods in the town. Sherds from later contexts include many pieces of mottled Vasilike Ware (from EM IIB) and White-on-dark Ware (from EM III), typical of the styles of this part of Crete. The White-on-dark Ware (Pl. 58:a) is of high quality for this pottery. Its surface is covered with a dense, dark slip, and the white linear decoration adheres well to the surface.

The town may have been expanded in the Middle Bronze Age. The MM I Incised Style and many other MM styles are found in small fragments. Plate 58:c illustrates a kantharos with fluted rim and two opposed handles; its decoration of large and small white spots indicates a date in MM IB–II. Only a few traces of Middle Minoan architecture were excavated in 1985 and 1986.

By LM I, the settlement had reached its largest size. At the end of the period, in LM IB, the houses were on both sides of the harbor, with most of them on the peninsula that protected the northeastern side. Three stairways led up from the beach and harbor into the settlement. The largest one (the Grand Staircase, Pl. 57) began at the beach and rose up the hill to a major road junction where it intersected with the main north–south street. Houses were arranged in blocks of irregular shape; they were built mostly of local limestone, either unworked or roughly shaped into blocks. The town consisted of more than sixty buildings, and it may have had as many as seventy-five houses.

A destruction at the end of LM IB ended the main phase of the Minoan period, and the island was probably abandoned for a brief period. After a short reoccupation in LM III, the town was again deserted. Only a few sherds from the first millennium B.C. have been found on the island. A large architectural complex on the top of the main peninsula, in Area A, has often been regarded as Roman. Its investigation in 1986 showed that it is a Byzantine building, probably a monastery, dating from the 6th to 8th centuries after Christ (it is now designated Building AL). The island was again abandoned after this period, and it has not had major habitation since.

THE TOWN SQUARE (THE PLATEIA, AREA BR)

The most dramatic discovery of the 1986 season is one which is crucial to an understanding of the architectural layout of Minoan Pseira. Near the head of the Grand Staircase is a saddle between two higher points on the main peninsula. The area is more level than most other parts of the steep Pseiran hillsides, and an irregular space approximately 16×20 m. in size was kept open in Minoan times. The area is not really a court, if the term is used for a paved open space associated with a single building, and perhaps it may be better termed a town square or plateia, comparable to the communal open spaces within modern Cretan villages.

The Pseiran plateia was surrounded by buildings, but only its west side was excavated by Seager. At the south, toward the tip of the peninsula, the Minoan remains are mostly buried beneath Byzantine structures. In 1986, tests on the east side revealed an unexcavated

Minoan house (House BS). At the north, a line of stones showing above ground allows this part of the plateia to be defined. The terrain of the plateia was not even, and both bedrock and packed earth were used as surfaces for traffic. The open space must have functioned as an important focal point for the community.

On the east side of the plateia was a large flat slab of phyllite, more than a meter across, placed so as to lie flat on the surface of the square (Pl. 58:b). It was used as a "kernos", with two sizes of shallow depressions worked into its upper surface. The depressions do not form any clear pattern, although some of them form roughly circular configurations.

Some of the most important information learned this season came from a very rich pottery dump excavated in the eastern part of the town square. The dump was deposited in post-Classical times, apparently as a result of the building of a church and other structures associated with Byzantine Pseira, but it consisted mostly of Minoan material. From the dump came many fine stone vase fragments, pottery from Early Minoan through Late Minoan times, stone tools, and other objects. Among the many catalogued items from the dump are the kantharos with fluted rim illustrated in Plate 58:c and the stone and clay lids in Plate 59:a.

THE HOUSE OF THE PILLAR PARTITIONS (HOUSE BC)

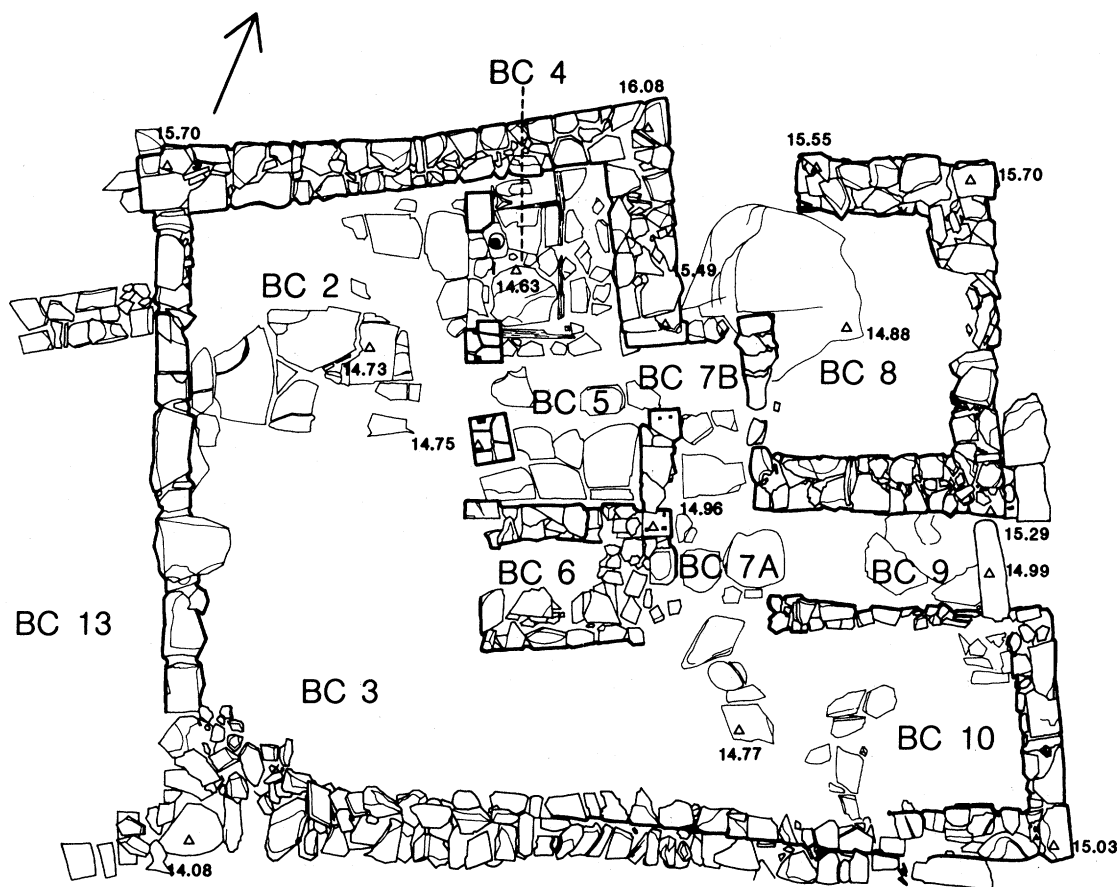
The House of the Pillar Partitions, cleaned in 1985, is one of the finest domestic buildings in eastern Crete. The structure is located in Area B, approached by ascending the Grand Staircase from the Pseiran beach and turning left at the intersection at the head of the stairs. The house lies just beyond the town square, on the left (Pl. 60).

The house is built of limestone blocks and has a plan that is nearly square (Fig. 2). A threshold leads into a narrow paved corridor, BC 9 (Pl. 61:a), which terminates at the foot of a staircase, BC 6 (Pl. 61:b). From here one may turn left into a room that runs along the south and west sides of the house, continue straight ahead up the stairs, or turn right to a small landing in front of what is perhaps a second staircase (BC 7B) leading to BC 8, a room at the northeast corner of the house. The entrance corridor thus provides access to many other parts of the building.

Staircase BC 6 supplies important information for Minoan construction techniques (Pl. 61:b). The bottom step is preserved in stone, and the foundations for two additional stone steps are also preserved. The remaining steps, made of wood, were constructed over a small cupboard that opened the opposite way, into BC 3. A finely cut sandstone block was found at the north side of the lowest stone step, with dowel cuttings in the upper surface to accommodate the wooden members above it. A generally similar block was at the side of BC 7B. The material is not native to Pseira, but deposits occur on the coast of Crete near modern Mochlos, where quarries have been worked from ancient until fairly modern times. Blocks of the same sandstone are also used in the Minoan houses at Mochlos and Gournia.⁴

At the back of the house was a large paved room (BC 2). Pillar-and-door partitions closed off its northeast side (toward the front of the house), setting off two features: an

⁴ For a description of the quarry at Mochlos, with a photograph, see J. S. Soles, "Mochlos. A new look at old excavations: The University Museum's work on Crete," *Expedition* 20, fasc. 2, 1978, p. 14, pl. 15.



THE HOUSE OF THE PILLAR PARTITIONS

FIG. 2. Actual-state plan, House of the Pillar Partitions (House BC)

alcove with a cupboard at the back, below Staircase BC 7B, and a sunken bathtub, BC 4 (Pl. 62:a-d).

The bath is one of the most striking features of the house. It is sunk more than twelve centimeters into the floor, with vertical phyllite slabs on three of its sides. The interior dimensions are slightly irregular, averaging 1.35 m. long by just under one meter wide. A stone drain, made by piercing a block of limestone, allowed water to settle into the substratum of the floor (Pl. 62:c). The opening of the drain has a diameter of 0.16 m. at the top of the block, tapering to an irregular hole *ca.* 0.11 m. in diameter at the bottom of the block. Two benches, at the north and east, completed the bath alcove. Seager reported that Room

BC 2 was divided from BC 3 by two pillars that set off three doorways.⁵ Although they were not found in place, two sandstone pillar-bases were found near by, and one may possibly reconstruct the room with an L-shaped pillar-and-door partition wall across both the east and the south sides of BC 2. With its well-made bath, finely constructed staircases, and interesting sandstone blocks, the house is one of the most notable buildings at Pseira.

A courtyard at the west of the building, BC 13, may have been an outside work area for this house. Finds from this space included stone pestles and a mortar, cooking-pot fragments, and a broken stone bowl or basin made from the same imported sandstone used for the pillar bases in Room BC 2 (cat. no. PS 74).

The finds from the house itself add additional details. A small piece of plaster indicates that at least one room was plastered. Stone tools and coarse pottery fragments provide evidence for a normal domestic economy. Loom weights and a piece of emery were also found. The fine pottery showed that the house was destroyed in LM IB.

In 1986, a sounding was made beneath the floor of Room BC 3. The latest pottery under the floor dated to LM IA, showing that the house was built during LM I. This seems to have been a time of major building at Pseira, and much of the overall look of the community may result from a rebuilding at the end of LM IA.

THE HOUSE OF THE GROOVED STONE (HOUSE BS)

An unexcavated Minoan house was discovered on the northeastern side of the town square, and one room of the building was excavated in 1986. The house (designated BS) is oriented northeast-southwest. The excavated room had an entrance onto the plateia, with a narrow door and a short ramp leading from the low floor level of the room up to the higher level of the square. At the southeast side of the entrance was a rectangular stone with four long, shallow grooves in its upper face. The stone was set on a base, at the northwest side of a bench facing the town square (Pl. 63:a); its purpose is unknown.

The building appears to be a house that was destroyed in LM IB. A cooking pot, a stone mortar, several stone tools, and sherds of LM IB pottery were found in the room excavated in 1986 (Pl. 63:b). The room was at the southeastern side of the house, and a narrow corridor or ramp ran outside the building, farther to the southeast; the other rooms in the house extended to the north and northwest.

SEAGER'S HOUSE B (House AB)

A large, well-built structure which Richard Seager named House B is located in Area A on a series of terraces overlooking the Pseiran harbor (Fig. 3 and Pl. 64:a).⁶ It is reached by turning right at the top of the Grand Staircase and proceeding beyond the first house, designated AA. House AB was built on the slope of the hill, so that rooms on the higher terraces opened on to the roofs of the lower rooms. With the exception of Spaces AB 13, AB 14, AB 17, and AB 18, located on the lower level (where removal of earth would have created an erosion problem), the house was completely cleaned in 1985.

⁵ Seager, p. 12 and plan.

⁶ Seager, pp. 14-15.

The house was built with massive walls of large blocks of limestone, producing a sturdy structure. Exterior walls are more than 0.6 m. thick, and bedrock was incorporated into the construction where possible. The house is oriented northeast–southwest; its main entrance is from a wide lane at the northwest. A threshold with the dimensions 1.06×0.54 m. leads into Room AB 2 (Pl. 65:a), a long room about 4.0 m. (northeast–southwest) by 2.90 m. (northwest–southeast). A cutting northeast of the threshold probably accommodated the door jamb. Room AB 2 gave access to a basement room on the southeast, AB 14–15, and to AB 3, up the slope of the hill. A staircase, AB 6 and AB 5, leads to another basement room (AB 4) which seems to have had no other access. In Room AB 4, Seager found a large jar decorated with bull's heads and double axes (Pl. 65:b).⁷

Rooms AB 7 and AB 9, probably reached from a landing at the top of the Staircase AB 6, were the largest rooms in the house. A small staircase (AB 8) led from AB 7 up the hill to Building AI and to Ridge Road, the main street along the spine of the main peninsula. The largest room in the house, Room AB 9, was paved with phyllite slabs; no evidence was found to indicate whether it was enclosed or open to the sky.

The other rooms, AB 16, 10, 11, and 12, were all basement rooms on a terrace below the floor level of AB 7 and AB 9. Access to them from the important upper rooms could only have been by ladder or stair, although AB 16 and AB 12 could also be reached from the second stories of AB 14–18–13 (or the roof, if there were no second story here). Although AB 12 has a ledge of bedrock along one side (Pl. 64:b), no evidence was found for the “narrow ledge of beach pebbles” which Seager mentioned finding in this room,⁸ a feature which has suggested to some writers that the space was a household shrine.⁹

The latest ceramic sherds from Seager's House B are from LM IB, the period of the main destruction of the site. No evidence was found to indicate the construction date of the houses.

THE SHRINE (BUILDING AC)

Block AC, located on Ridge Road northeast of the main peninsula, contains only a single building (Fig. 4 and Pl. 66:a). Lanes run around the building, but a blocking wall at the northwest limited access (Pl. 67:a) and channeled all traffic moving along Ridge Road to the southwest side of the block. Both architecturally and because of its frescoes, this structure differs substantially from the domestic buildings on Pseira, suggesting the likelihood of a special function within the community.

Seager extensively excavated Building AC, cutting through the floors in some cases and going all the way to bedrock. Although he found the rooms “singularly empty” of finds,¹⁰ he

⁷ Seager, pl. 7.

⁸ Seager, pp. 25–26. A raised ledge of bedrock along one side of this and other rooms on this terrace is irregular, but it could once have been enhanced with the addition of small stones.

⁹ First suggested by Seager, pp. 25–26. The best discussion is by G. C. Gesell, *Town, Palace, and House Cult in Minoan Crete*, Göteborg 1985, p. 132. In the same room Seager found a clay bull's head rhyton and a triton shell with the interior cut out to make a container.

¹⁰ For comments on the common circumstance of finding Minoan shrines empty of objects, see S. Hood, “Minoan Town Shrines?” in *Greece and the Eastern Mediterranean in Ancient History and Prehistory*.

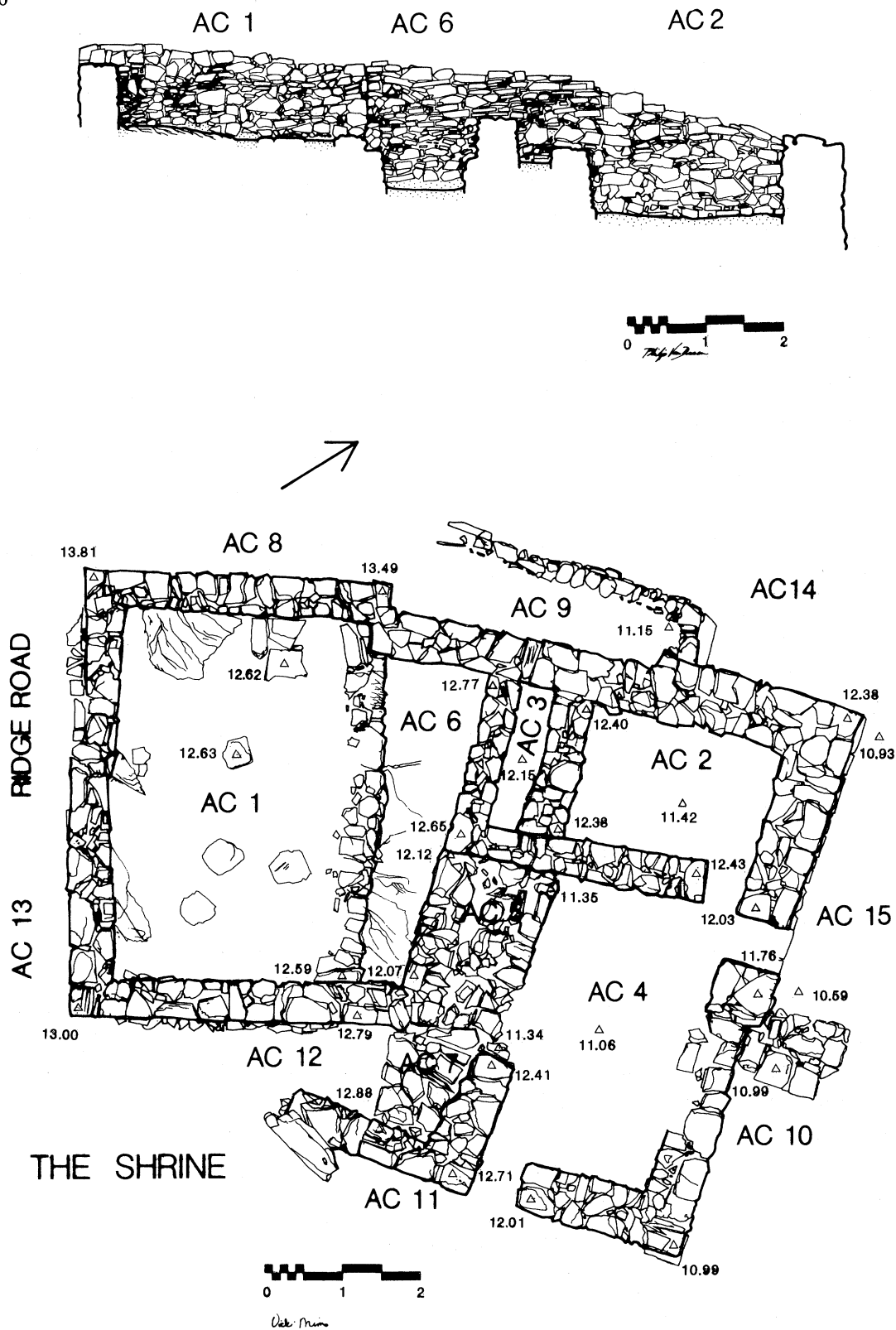


FIG. 4. Actual-state plan and section, Shrine (Building AC)

did find fragments of a relief fresco depicting seated female figures.¹¹ The building was cleaned in 1985, and soundings were made under the floors in 1986.

At least two phases were present. In the first, a retaining wall defined a small terrace or courtyard (AC 9), visible just north of the building (Pl. 67:b). The court created a level area for the predecessor of the later building, but the date of this early terrace is not known. The final remodeling, however, can be well dated. The packing under the structure was examined in two places, Room AC 1 and the roadway outside the main entrance (AC 12), and the pottery from both areas agrees with a construction date at the end of LM IA. The building was destroyed in LM IB.

The structure was approached from the top of the hill by a wide roadway (Ridge Road) that narrowed at the southwest side of the building and made a right-angle turn eastward. Probably the main doorway was at AC 7, on a small lane off Ridge Road (AC 12), necessitating an indirect approach to the entrance and requiring another right-angle turn to the left immediately on entering (Pl. 66:b). The offset entrance was filled with a stone packing below the floor surface, and a large threshold block found in the adjoining lane (AC 11) must surely belong to this entrance (Pl. 67:c).

The entrance provided access to an area that is difficult to interpret, AC 5. Possibly AC 5 was a staircase leading from Room AC 4 on a lower terrace to Room AC 6 higher up the hill (Pl. 68:a, b). This part of the building was extensively excavated by Seager, probably in a search for more of the fresco fragments found in AC 6. The interpretation of AC 6 is also uncertain. It may have been a staircase leading up to rooms above AC 1, the largest space in the complex. An alternative suggestion, offered by Seager and discussed also by Hood,¹² would restore it as a portico for AC 1. This large room ran all the way across the southwest side of the building and had a floor paved with stone slabs.

Room AC 4, on the lower terrace, gave access in four directions: through doors to the north- and southeast; up the stairs to AC 6; and northwest into AC 2, a rectangular room with interior dimensions *ca.* 2.5 × 1.75 m. Room AC 2 had a benchlike structure at the back (Pl. 68:c); the area behind the bench (AC 3) was filled with rubble. Since the stones of the bench itself are built partly within the walls of the room, it is certain that they did not rise so high as the walls themselves. The top of the bench is flat.

To the northeast, the evidence is uncertain as to whether the area of AC 10 was interior or exterior space, but an outside terrace is the most likely interpretation. Although most of the evidence has eroded from the face of the cliff here, the fact that the walls of the house did not continue as side walls suggests that this area was not roofed. Two interesting features were found in AC 10. Two limestone blocks were set up to form a small bench or table, just outside the entrance to AC 4 (Pl. 68:d). Next to the bench was a small rectangular space,

Studies Presented to Fritz Schachermeyr on the Occasion of his Eightieth Birthday, K. F. Kinzl, ed., Berlin/New York 1977, p. 165.

¹¹ Seager, pp. 32–34. The best discussion of the fragments is by B. Kaiser, *Untersuchungen zum minoischen Relief*, Bonn 1976, pp. 299–302. Most recently see R. Hägg, "Pictorial Programmes in Minoan Palaces and Villas?" in *L'iconographie minoenne (BCH Suppl. IX)*, Paris 1985, p. 213.

¹² Hood (footnote 10 above), p. 166.

with its sides lined with phyllite slabs (Pl. 67:d). The space was found filled with broken LM IB pottery. Most of the fragments were of local east Cretan cups, not completely preserved (Fig. 5).

The best parallel for the general arrangement of the building is a MM II shrine excavated at Mallia.¹³ Although the plan of the building at Mallia is less complex, the offset entrance and the indirect access are remarkably similar. In both cases, the offset entrance was on the south side and led into the center of the building, with a single large room on the west and an accommodation for cult functions on the east (one room with a bench and other features at Mallia; a suite of rooms with a terrace at Pseira). With its unusual entrance and arrangement of rooms, a room with a bench at the back, and elaborate relief frescoes, the most likely interpretation of the building is that it was a civic shrine for the Pseiran community.

A sounding under the floor of AC 1 yielded new information on the relation of the Pseiran destruction to the volcanic eruption of Thera. Rounded, waterworn pebbles of pumice were recovered from several locations in the Pseiran town, mostly from LM IB contexts.¹⁴ In Building AC, however, the context was clearly from LM IA. A few waterworn lumps were found in the floor packing for Room AC 1, from the stratum beneath the level of the stone floor slabs. Studies by Charles Vitaliano, of Indiana University, indicated that the pumice was from the LM IA volcanic eruption of Thera (Santorini), on the basis of both the index of refraction and the mineralogical composition.¹⁵

The context of the Thera pumice indicates that it was probably a casual deposition. The floor packing in AC 1 consisted of earth, rough stones, stone tools, sherds, and about ten percent unworked beach cobbles. The pumice was probably brought in with the other beach stones. Most likely it was carried by the sea, washed up on the beaches at Pseira or some near-by site, and then taken up the hill to the Pseiran settlement, finally finding its way into the floor packing. The room was then used for a time before the building was destroyed at the end of LM IB. The conclusion that the Thera eruption predated the Pseiran destruction in LM IB is inescapable.¹⁶

THE HOUSE OF THE THREE BUTTRESSES (HOUSE AM)

House AM (the House of the Three Buttresses) was cleaned in 1986. Five rooms of the building survive, set on the steep slope of the hill southeast of Seager's House B and the

¹³ J.-C. Poursat, "Un sanctuaire du Minoen Moyen II à Mallia," *BCH* 90, 1966, pp. 514–551.

¹⁴ Similar waterworn lumps of pumice have been found at Amnisos, Nirou Chani, and Mallia in probable LM IB contexts: H. Pichler and W. Schiering, "Der spätbronzezeitliche Ausbruch des Thera-Vulkans und seine Auswirkungen auf Kreta," *AA (JdI)* 95 1980, pp. 26–27 and fig. 19.

¹⁵ The best basis for identification is the index of refraction of the volcanic glass, which lies within the range 1.509 ± 0.002 ; see D. Ninkivich and B. C. Heezen, "Santorini Tephra," *Colston Research Society Papers* 17, 1965, pp. 413–452.

¹⁶ This new evidence confirms the conclusions drawn from air-blown pumice found in LM IA contexts in eastern Crete, at Pyrgos and Zakros, that the LM IA pottery at Akrotiri on Thera is contemporary with Minoan LM IA, not with a later period. For a recent summary of the dating see C. G. Dumas, *Thera*, London 1983, pp. 137–139. Air-blown pumice from the Thera eruption was also found in the Shrine at Pseira, from the same level beneath the floor of AC 1 that yielded the waterworn pumice pieces. Air-blown pumice particles were not detected in samples from the same building taken from the early terrace beneath the building or from the LM IB destruction level.

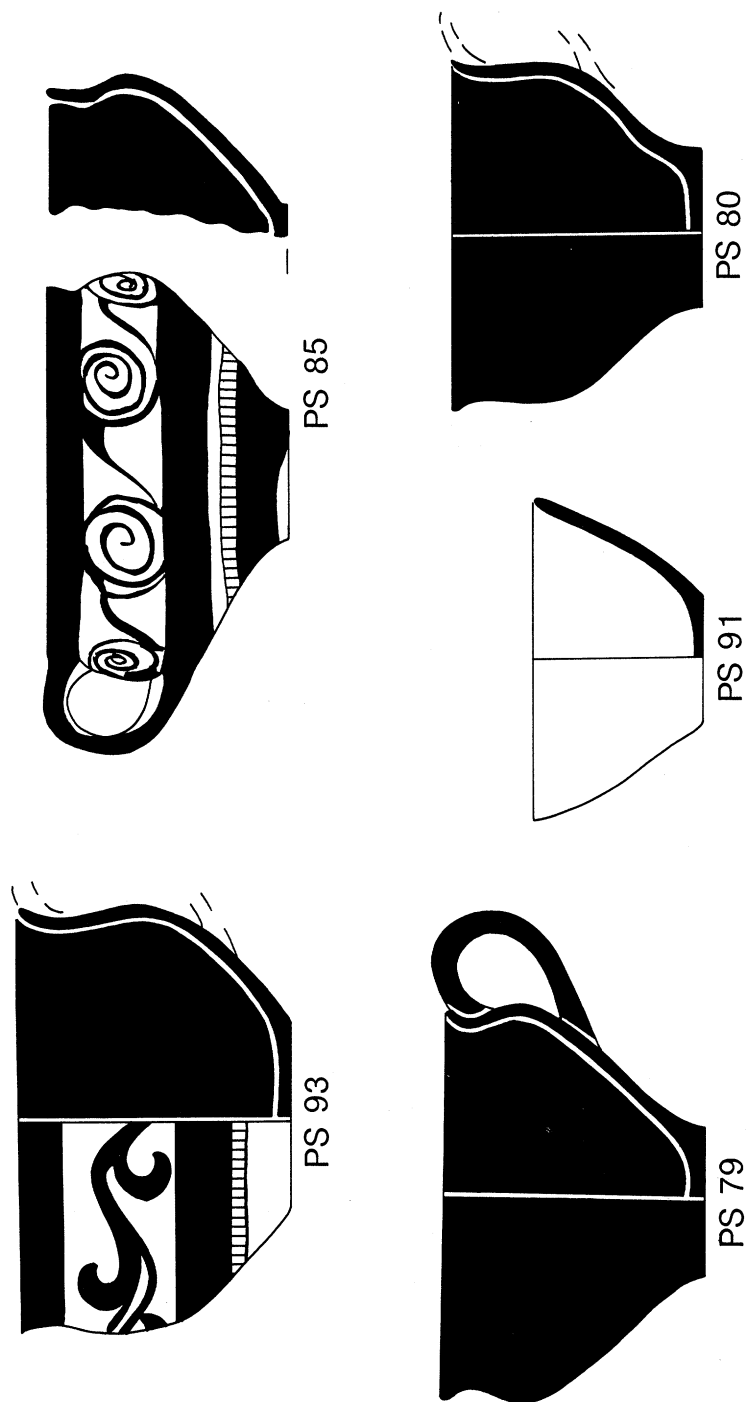


FIG. 5. Objects found in the cist in AC 10. Scale 1:2

exposed at a high level, and no sizeable Minoan structure could be expected beyond the point of House DA. Large walls found in the trench may have been built in LM I or earlier, as they had a fine stonework technique and appear to have functioned as house or retaining walls (Pl. 70:a), but the latest occupation in this area was in LM IIIA:2 to early LM IIIB. House DA had two or more short walls, running up and down the slope to define a living space, which was built up against the large earlier wall. The downhill wall of the house was mostly eroded away.

Only one room was excavated completely in 1986 (Pl. 70:b). On its floor were a champagne cup, a shallow bowl, and other LM IIIA:2 to LM IIIB pottery (Fig. 7). The house must have been small, as a large packing of stones used as a buttress on the slope up the hill (above the excavated room) indicated that it did not continue to the east, and the lay of the land makes it unlikely that additional rooms were at the north or west. At a high level in the rubble of the house was a stone mold for metalworking, made of green chlorite schist, perhaps fallen in from the roof or from an upper story (Fig. 7 and Pl. 59:b). The mold is of the open type, with a shallow cavity on one side. The nature of the objects to be made is uncertain, and perhaps the mold (which is broken) was discarded before it was finished.

THE MINOAN CEMETERY

To the west of Area D is a ravine that divides the Minoan settlement from a sloping hillside. Both the ravine and the hillside were used as a cemetery in Minoan times, with small cave-tombs cut into the sides of the ravine and other burials placed on the hillside. Seager excavated several cave-tombs, but the hillside was unexcavated.

Two small test trenches on the hillside (opened in 1986) uncovered two small funerary clusters from MM I–IIA. Funerary clusters, groups of objects associated with a cemetery but not necessarily placed within a tomb, are not uncommon in Minoan cemeteries and probably represent gifts or offerings. One funerary cluster was found beneath a large stone slab (Pl. 70:c). It included a rounded cup, a rounded bowl, two small stone jugs, a stone bowl, and other vases (Fig. 8). Two flat pieces of bronze were also in the assemblage. In the other cluster (which was eroded and incomplete) were two stone bowls and a stone lid.

THE BYZANTINE REMAINS (AREA AL)

In the 6th century after Christ, an architectural complex of several buildings was constructed on the Pseiran peninsula. Features associated with this phase of Pseiran history include a large building with an attached cistern (Pl. 70:d) and a room functioning as a chapel or small church (Fig. 9 and Pl. 71), some poorly built walls over the site of the Minoan plateia, and at least three villas or farmsteads on Pseira Island.

The church, partly excavated in 1986, is the most interesting Byzantine building that has been investigated. It has a basilica plan, with an apse on the east and a central doorway on the west (Fig. 9). Benches flanking the doorway extend down the sides of the room; they were set off from the area before the apse by a pair of bases set against the walls, apparently supports for wooden pilasters or engaged columns (Pl. 71:a–c). Three freestanding stone bases are in front of the apse (Pl. 71:d). The building was of dry-stone construction, without

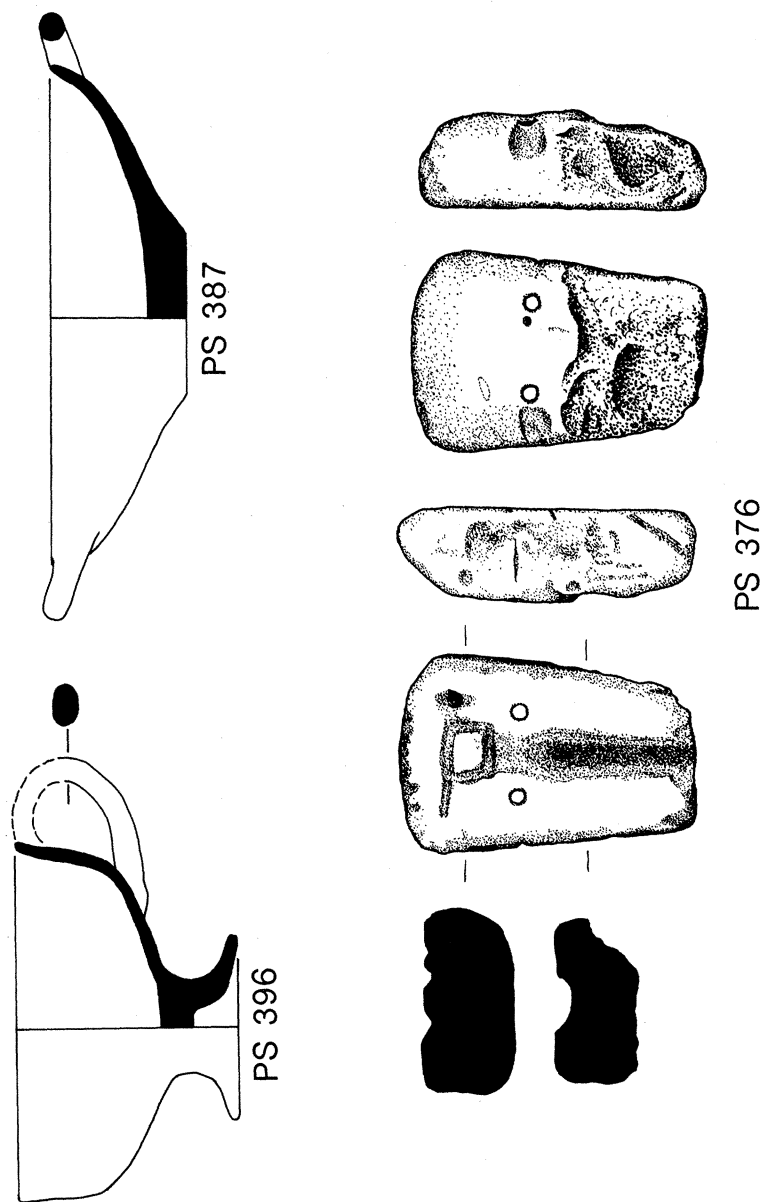


FIG. 7. Selection of objects found in the LM III house (House DA). Scale 1:2

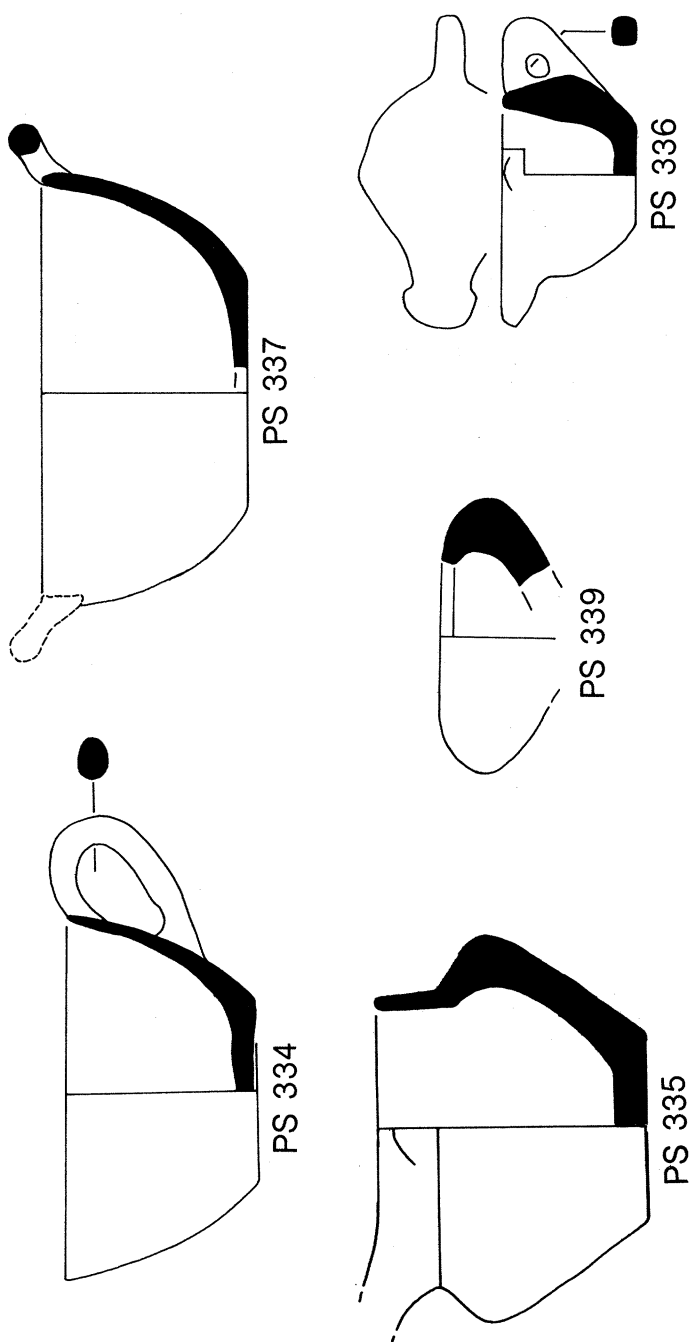


FIG. 8. Selection of objects from a funerary cluster in the Minoan cemetery. Scale 1:2

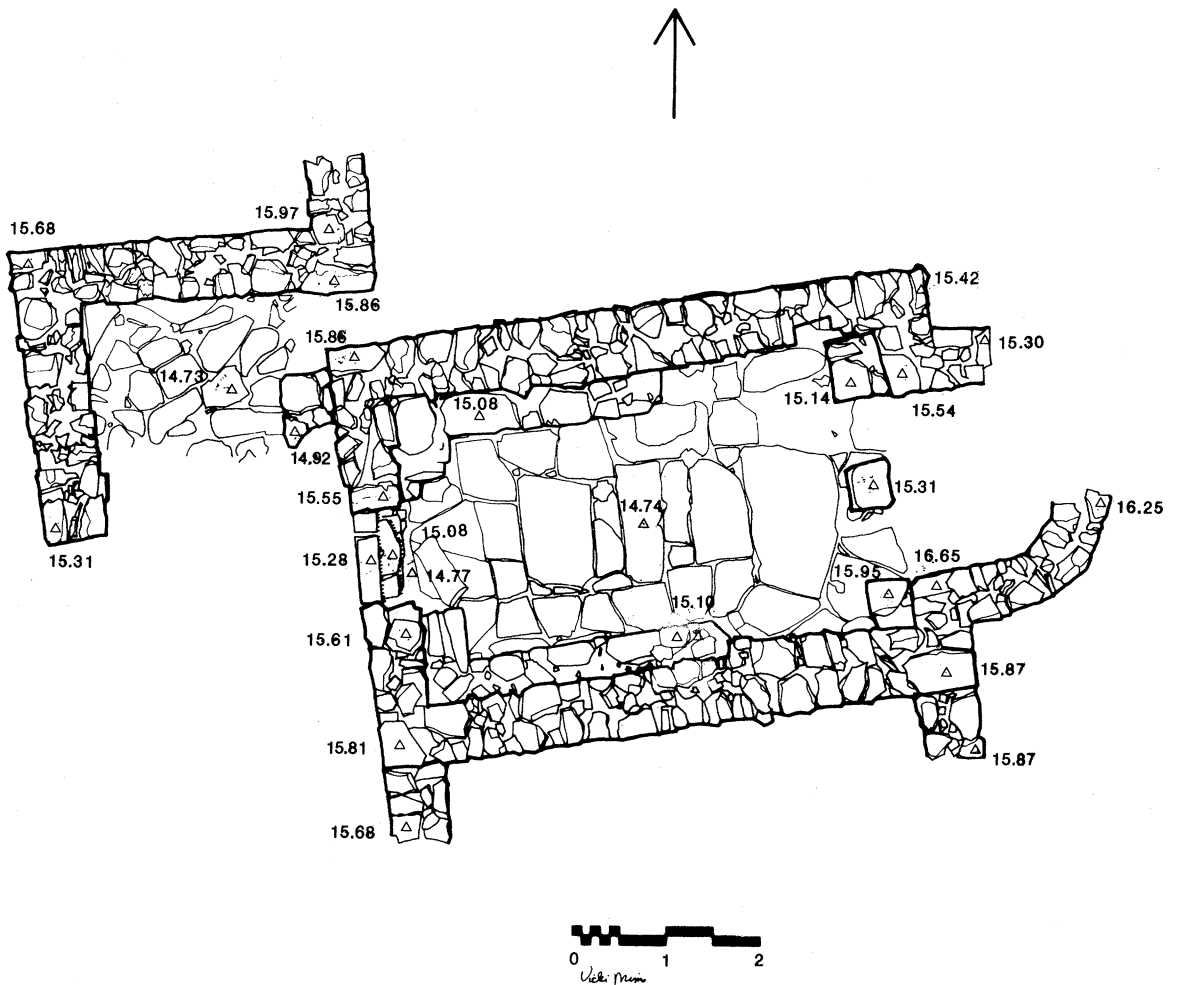


FIG. 9. Actual-state plan of the room in the Byzantine building used as a church or chapel

mortar, mostly of re-used Minoan blocks. Its floor is paved with large slabs. Built into the northern wall near the apse is a small niche (Pl. 71:e). Roof tiles indicate that a tile roof covered at least parts of the building. Traces of plaster were also found, but this feature was seldom well preserved, surviving only in small fragments and in areas that were protected (for example, beneath a stone shelf in the narthex, shown in Plate 71:f). No traces of paint were found.

The chapel is clearly a part of a much larger structure, perhaps a monastery, which had a long and complex history. Grooved Ware and other pottery found on the floor indicate use as early as the 6th century after Christ. In its later phases, the threshold from the narthex into the chapel was raised, and rough stone steps were used to form a stile at the entrance. The latest pottery is from the 8th century.

OTHER INVESTIGATIONS

Additional work at Pseira included investigations of several types. Magnetometer and resistivity surveys were undertaken by a team from the University of Patras, surveying the main Pseiran peninsula. Richard Hope Simpson's preliminary investigation of the island provided him with enough information to plan for a formal survey.

Drawing, photographing, cataloging, and study went on while the excavation was in progress as well as during the last week of each season. Samples were collected for a wide range of analyses. All objects catalogued during the seasons were described, measured, and photographed, and most were drawn. Special studies were made of the pottery, that from the House of the Pillar Partitions by Robert Koehl, and that from the Shrine by Eleni Banou. Samples for botanical and faunal analysis were collected and catalogued.

The small finds indicate the normal activities of a Minoan community. Even though Pseira is today barren and uninhabited, any suggestion that the Minoan settlement was only a small outpost inhabited for a few weeks each year must be regarded as highly unlikely. The finds include obsidian in all stages of tool manufacture, including cores, blades, and waste flakes. Loomweights of several types, fragments of stone bowls, stone tools, bronze bowl fragments, and other artifacts suggest the same household economy found in other east Cretan towns. One warped and overfired jar fragment, probably a waster from a ceramic kiln, raises the possibility that pottery was made on the island. Fragments of charonia shells suggest an industry which made cups from triton shells. Raw material and discarded, partly worked serpentine pieces indicate the manufacture of stone vases. With a sizeable cemetery and a town of many houses, Pseira must have been a substantial and prosperous community.

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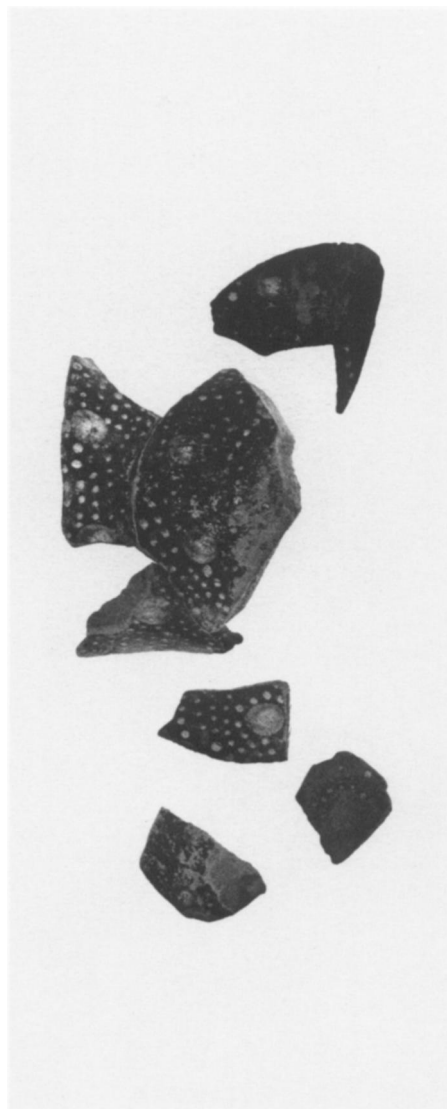


Grand Staircase leading up the hill from the small beach. Area A to right of stairs; Area B to left

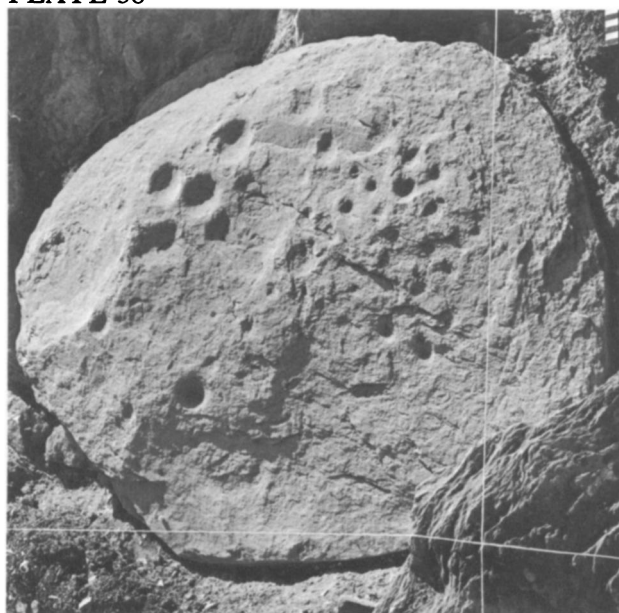
PHILIP P. BETANCOURT AND COSTIS DAVARAS: EXCAVATIONS AT PSEIRA, 1985 AND 1986



a. Sherds of White-on-dark Ware, East Cretan EM III (comparable to Knossian EM III and MM IA). Top row: PS 81, P 174, PS 208. Bottom row: PS 242, PS 243. Scale 1:2



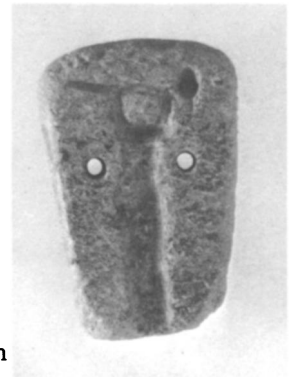
b. Fragments of a kantharos with fluted rim, from MM IB-II, PS 182. Scale 1:2



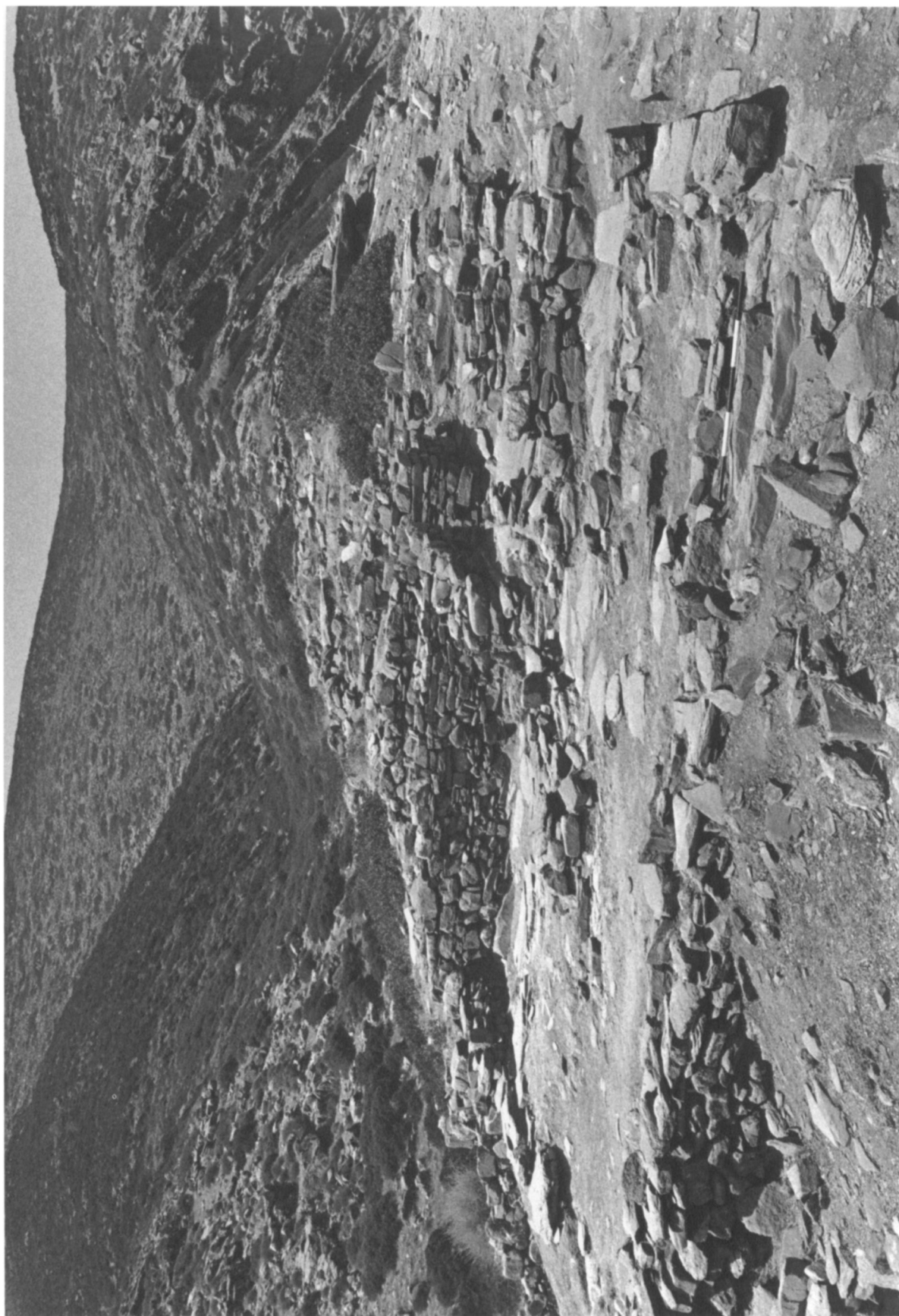
c. Stone kernos from the east side of the town square



a. Two lids from LM I. Left: clay lid, PS 446. Right: serpentine lid, PS 287. Scale 1:2



b. Mold of green chlorite schist found in House DA (PS 376)



General view of the House of the Pillar Partitions (House BC), looking north. Entrance at right

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a. Entrance to the House of the Pillar Partitions and Corridor BC 9, just inside the entrance. Threshold block at top



b. Staircase BC 6 in the House of the Pillar Partitions

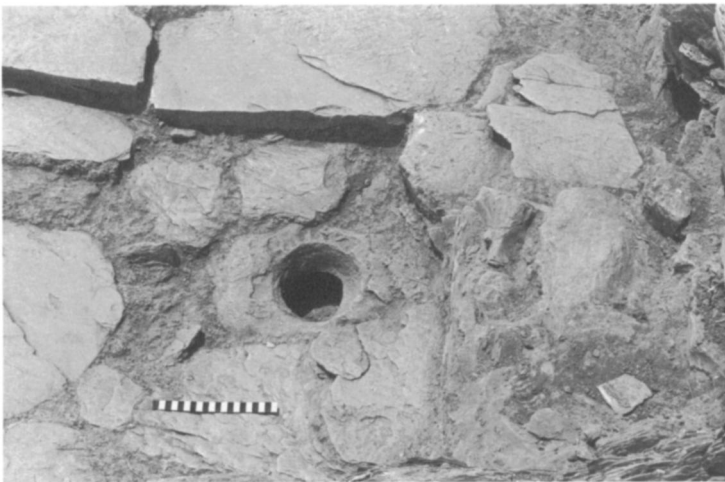
PLATE 62



a. General view of the House of the Pillar Partitions. Sunken bath at upper right



b. Sunken bath (BC 4) and one side of the L-shaped pillar-and-door partition wall



d. Detail of drain in the sunken bath



c. Sunken bath. Low benches flank two sides (left and back of photograph)



a. The House of the Grooved Stone (House BS), showing a bench outside the building, facing the town square. Grooved stone at left of bench



b. Objects from LM IB from the House of the Grooved Stone. Left above: cup fragment, PS 355. Left below: cup fragment, PS 391. Right: shallow bowl, PS 365. Scale 1:2

PLATE 64



a. General view of Seager's House B (House AB), looking south



b. Room AB 12 before cleaning (ledge on northeast side is exposed bedrock)



a. Threshold block at the entrance to Seager's House B



b. Jar found in AB 4 by Richard Seager (Archaeological Museum, Herakleion, no. 5459)

PLATE 66



a. Ridge Road, looking south, with the Shrine (Building AC) on the left



b. General view of the Shrine, looking north. Ridge Road at left; offset entrance at center



a. The Shrine (Building AC). Ridge Road at lower right



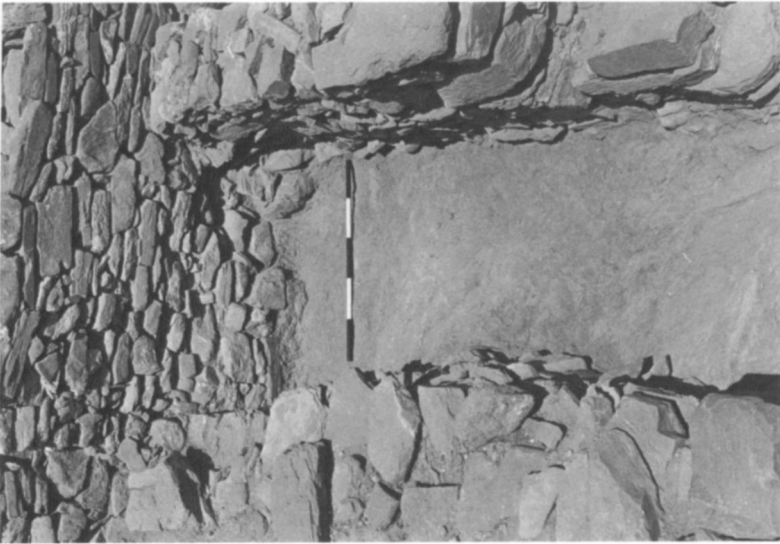
b. Retaining wall for a terrace or platform below the level of the Shrine



c. Threshold block lying near the entrance to the Shrine



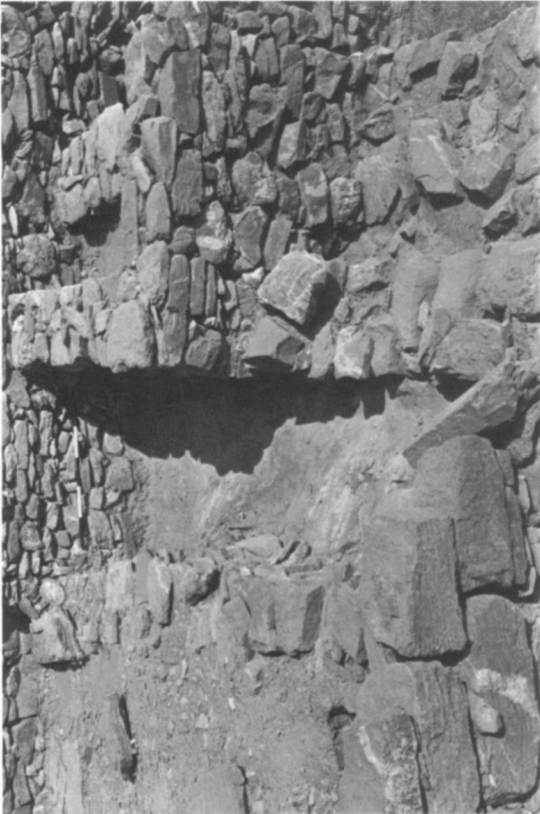
d. Slab-lined cist adjoining the bench or table in AC 10



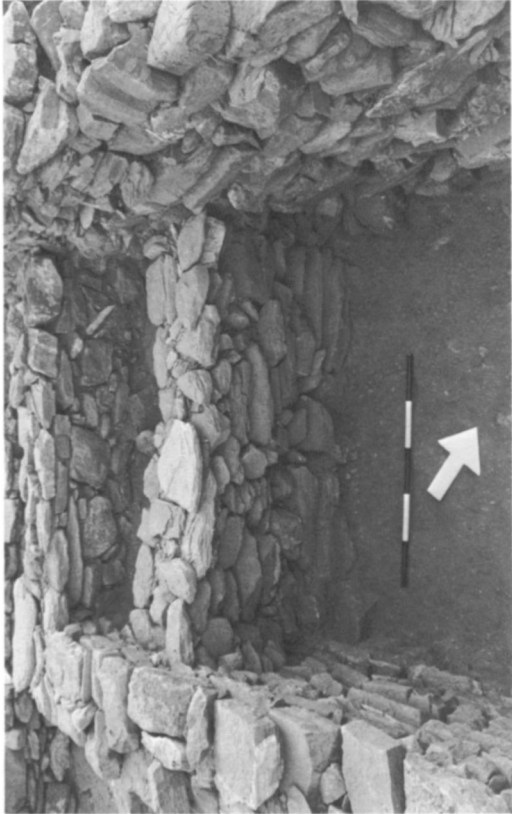
b. Detail of Room AC 6



d. Bench or table in
Space AC 10.
Rectangular cist
at left



a. Room AC 6 where Seager found the fresco fragments



c. Room AC 2 in the Shrine, the bench at the back (arrow points north)



a. Buttresses in the House of the Three Buttresses (House AM; arrow points north)



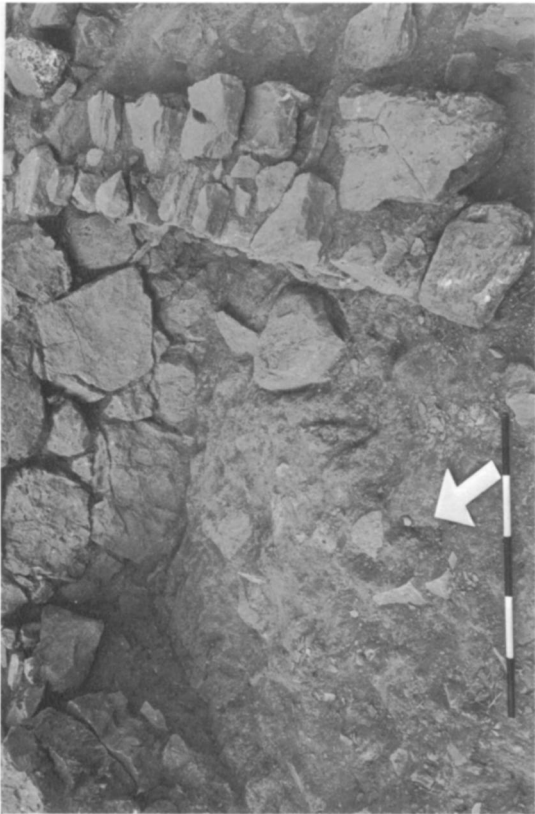
b. Paved space (AM 1) outside the entrance to the House of the Three Buttresses (threshold block at lower left)



c. Entrance to the House of the Three Buttresses (House AM; Room AM 4 is beyond the threshold block; paved area AM 1 at lower left)



a. Large blocks of limestone used in the construction of the back (uphill) wall of House DA



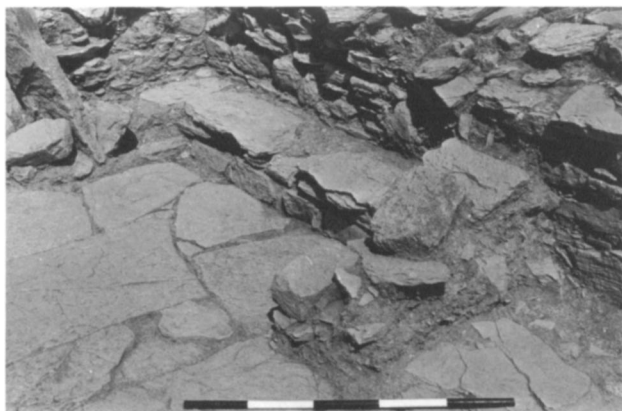
b. LM IIIA:2-IIIIB room in House DA



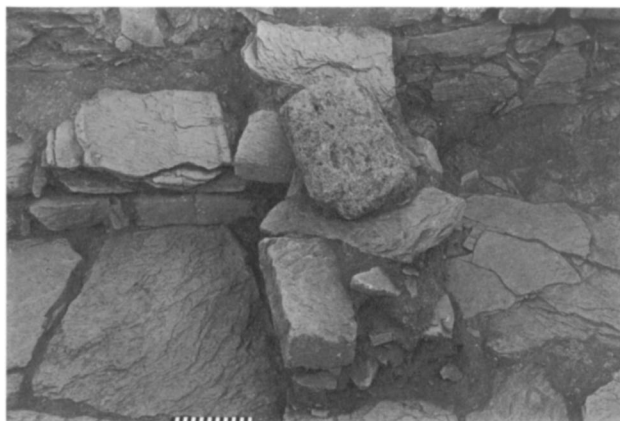
c. Site of a funerary cluster. The large stone slab covered the objects



d. General view of the Byzantine cistern, looking east



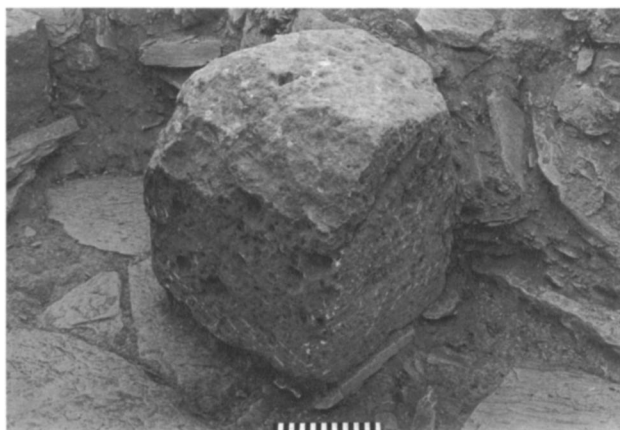
a. General view of the north side of the chapel. Bench along the walls and base tumbled from its original position; rubble below the base



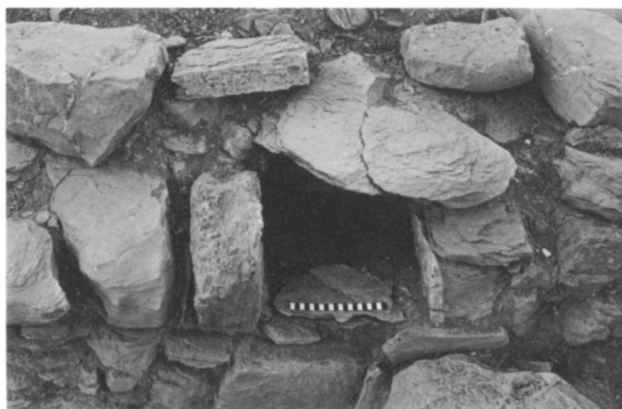
b. Detail of base at the north side of the chapel



c. South side of the chapel. Bench at right of slipped base



d. Stone block dividing the nave from the apse



e. Niche in the north wall of the chapel, near the apse



f. Northwest corner of the narthex: part of the plastered floor beneath a stone shelf built into the wall