

# EXCAVATIONS AT KOMMOS (CRETE) DURING 1978

(PLATES 53-58)

## Summary

During our third excavation season at Kommos, in 1978, we concentrated on clearing four Late Minoan (LM) buildings on the hilltop, and one LM house on the hillside. Soundings were made in the Middle Minoan (MM) levels, and the Greek sanctuary to the south was further explored, leading to the discovery of important new structures.

**E**XCAVATION IN 1978<sup>1</sup> (26 June through 25 August) was largely within contexts already partially known from the previous season's work,<sup>2</sup> a major result

<sup>1</sup> The excavation is being carried out by the University of Toronto and the Royal Ontario Museum under the auspices of The American School of Classical Studies at Athens, and with the cooperation of the Greek Antiquities Service. Financial support was provided by the Canada Council (Grants S 76-1232-X2 [for the excavation], 410-77-0565 [for the survey]), the SCM Corporation, and Leon Pomerance (with the cooperation of the Institute of Nautical Archaeology). Kodak, Canada, Ltd., Keuffel and Esser of Canada, and the Polaroid Corporation of America contributed certain items of equipment.

The staff during the third season consisted of the director, the University of Toronto and Royal Ontario Museum; Professor R. Hope Simpson, Queen's University; Professor Philip Betancourt, Temple University; Professor L. Vance Watrous, the State University of New York at Buffalo; Professor Maria C. Shaw, Scarborough College, the University of Toronto; and the following former or present students at the University of Toronto: Giuliana Bianco, our excavation architect; and Dr. Ian Begg, John McEnroe, and Lucia Nixon who worked as trench-masters, the last two also helping before the season began with the foot survey of the Kommos area. Mary Dabney of Columbia University, with the help of Dr. James Wright of Bryn Mawr College, handled the daily problems of cataloguing. Harriet Blitzer Watrous of Indiana University continued the study of the stone tools. Robert K. Vincent, Jr. once more photographed, this time with Fran Vincent's help, the various objects discovered; Danäe Cotsis did this year's series of pottery profiles. Scholars visiting for short periods of time but who made basic contributions were David Reese of the University of Cambridge and Pauline Sheppard of the Winchester Research Unit, both of whom studied some of the bones, the former studying the shells and doing much valuable water-sieving as well; Peter Callaghan, of the British School of Archaeology at Athens, who advised us about the Greek pottery from the sanctuary; Professor John Gifford, of the University of Minnesota, who continued his various geological studies; Professor Jeremy B. Rutter, of Dartmouth College, who took an active part in our various discussions of ceramics and their publication; Professor Peter Warren, of Bristol University, who briefly examined the stone vases. George Beladakis of Pitsidia continued as foreman in charge of some twenty loyal workmen from Pitsidia. We are also obliged to Cathy McEnroe for her help with the mending as well as to Mary Betancourt for her many shopping trips to Mires. It is a pleasure for me to acknowledge my indebtedness to all the above for their hard work and pleasant cooperation.

The plans for this report were prepared by Giuliana Bianco, with object photographs and Pls. 53: a, 56: c by Robert K. Vincent, Jr.; the remaining site photographs were taken by the author.

<sup>2</sup> Our first preliminary report in *Hesperia* 46, 1977, pp. 199-240 (= *Kommos*, 1976) describes the background for the excavation; the same report and that for our second season in *Hesperia* 47, 1978, pp. 111-170 (= *Kommos*, 1977) interpret the discoveries of the first two years. See also

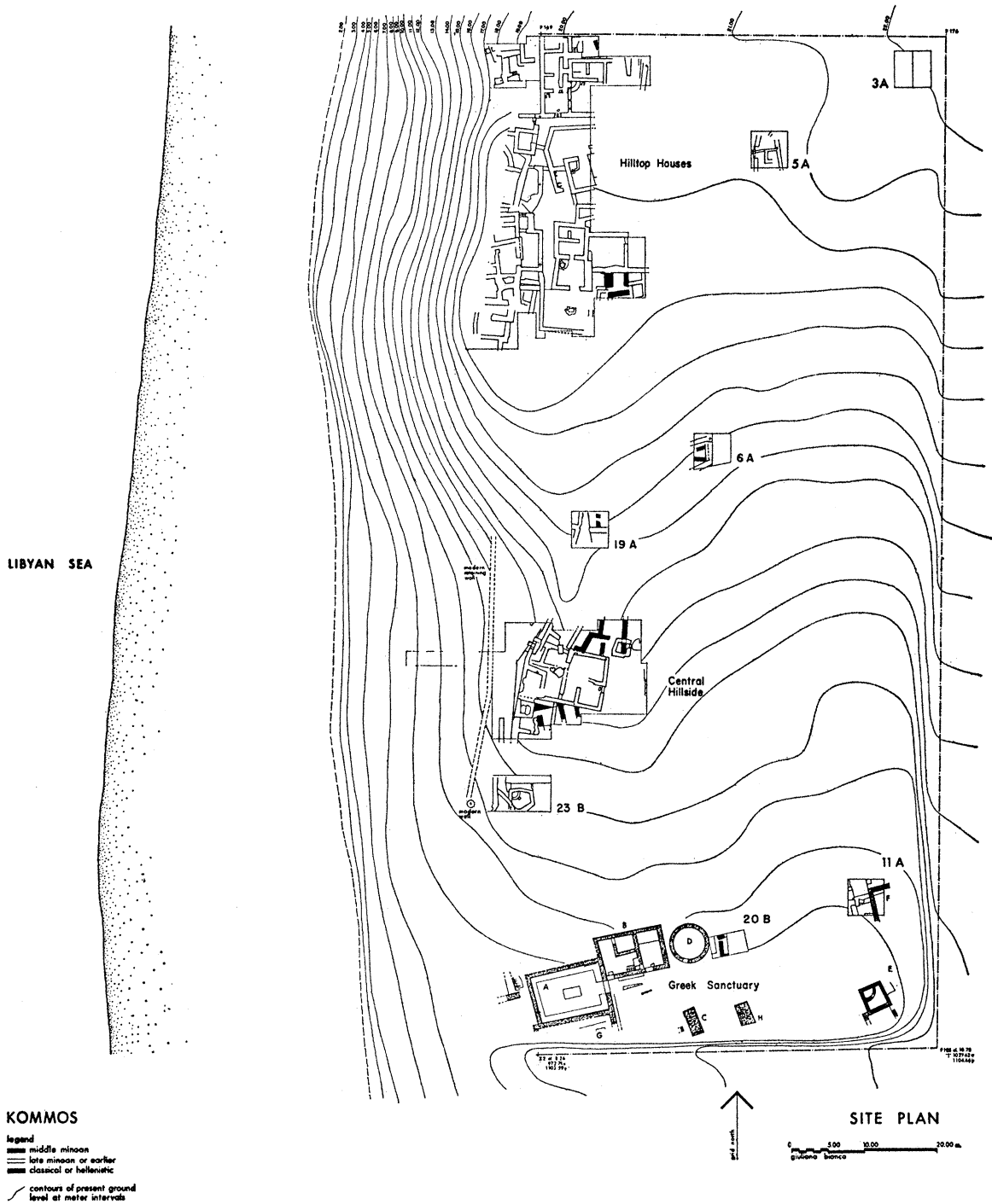


FIG. 1. General site plan after Season III (1978).

being the isolation, this year, of separate Bronze Age buildings which has made it possible to start studying their relationships to one another. Gradually, as open courts and passages are identified, as streets of the Minoan town appear, portions of the town's plan are becoming clear (Fig. 1). In the sanctuary to the south (Fig. 4), the discovery of another altar and, west of it, a large room with a hearth and wall bench emphasize the relatively monumental scale of the layout of the complex and its regional importance.

### THE FOOT SURVEY

From 29 May to 13 July, Professor R. Hope Simpson, with the help of two other staff members, began the now formalized foot survey of the immediate Kommos area, a study begun by the author some years ago. The immediate aim of this work, which has already resulted in the discovery of numerous new sites and the creation of a detailed contour map of the area, is to determine, as well as we can, the settlement distribution pattern during all historic periods. Considerations of land use and the geology of the area are incorporated into this intensive survey work, which should be largely completed after one more season of survey in the field.

### THE HILLTOP HOUSES (Figs. 1, 2a-2c; Pls. 53: b-e, 55: a, c)

During 1976 and 1977 two areas on the hilltop separated from each other by some 20 meters were opened up with a series of trenches. On the north, remains of a large LM I-III house overlying an earlier one of LM I date, and with MM remains further below, had been discovered.<sup>3</sup> South of here substantial portions of two houses, separated by a north-south lane, had appeared.<sup>4</sup> During 1978 almost half our excavation effort at Kommos was concentrated in joining up these two areas in order to further our understanding of the over-all arrangement of the houses, especially those representing the upper level of habitation during the LM I-III periods, a time already so well attested at Kommos.

The result of this intensive investigation has been a broadening of our perspectives to the extent that we can now more easily recognize individual LM III houses, some going back to an earlier period but now remodeled and subdivided into separate units for use by more individuals or families. Lanes and exterior courts are helping to separate these various buildings (Figs. 2a-2c; Pl. 53: c).<sup>5</sup> Four separate buildings

now J. W. Shaw, "Excavations at Kommos, Crete, 1977," *Current Anthropology* 19, 1978, pp. 388-389; also "Excavations at Kommos (1977)," *Temple University Aegean Symposium* 3, 1978, pp. 53-57; and "Major Minoan Settlement and Greek Sanctuary Revealed at Kommos," *Newsletter of the Alumni Association of the American School of Classical Studies at Athens* (ed. E. Whitehead), Fall, 1978. Consult as well the summary reports in *BCH* 101, 1977, pp. 652-656, and M. Caskey, "Newsletter from Greece" in *AJA* 81, 1977, p. 521, and 82, 1978, pp. 352-353.

<sup>3</sup> *Kommos*, 1976, pp. 206-214, fig. 2; *Kommos*, 1977, pp. 114-115, pl. 33: b-d.

<sup>4</sup> *Kommos*, 1976, pp. 214-222, fig. 3; *Kommos*, 1977, pp. 115-120, fig. 3.

<sup>5</sup> Figs. 2a-2c, when copied, can be joined, since they are reproduced here at the same scale. Grid references and / or overlapping structures can be used to achieve the desired results.

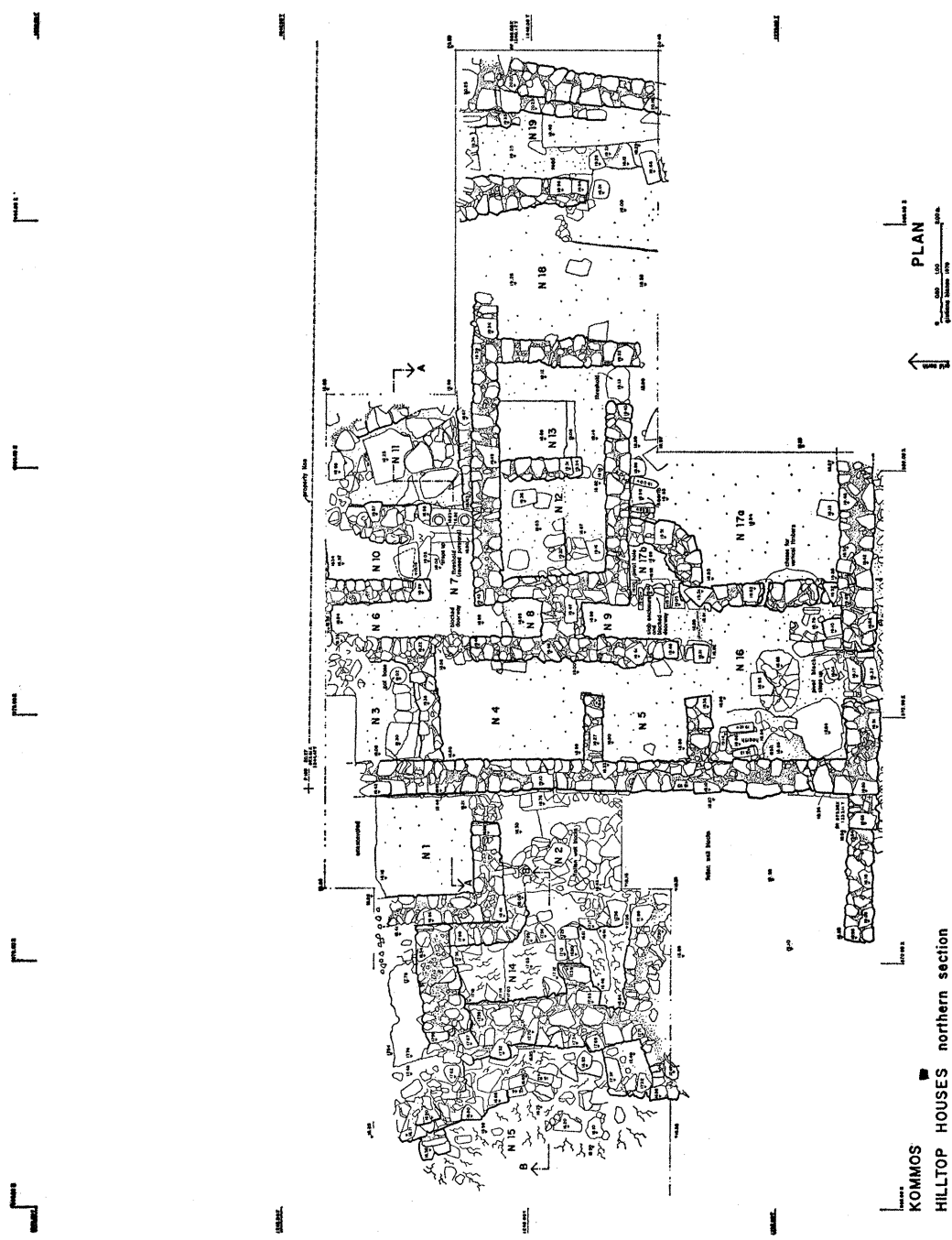


Fig. 2a. Hilltop houses, northern section.

(and related structures) have been sorted out as a result of the above, and all but the eastern parts of three have been defined fairly clearly:

1) A large LM building on the north (the "North House", with "N" Space numbers on Fig. 2a), with some 19 Spaces of which at least 13 are interior rooms, and above which were others in an upper story.

2) In the area most newly excavated between the two trenches, the well-constructed "Oblique Building", with related outbuildings on the west, set essentially at oblique angles to the houses to the north and south ("O" Space numbers of Fig. 2b, some 17 Spaces, many late [LM III] in date).

3) To the south (Fig. 2c), west of Lane 4-7, a series of some 12 Spaces of long and complex structural history, most belonging to an LM III house.

4) East of Lane 4-7, a group of Spaces which may constitute two separate but adjoining dwellings (10-8-5-2, "The House of the Wine Press" and 11-12-22-29, respectively), set north of an area which may have been open and outdoors during LM I-III, but which belonged to an earlier MM house (Spaces 23-28, at a lower level).

*The North House* (Trenches 19B-19B1, 24A. Fig. 2a; Pls. 53: b-d, 55: a)<sup>6</sup>

Except perhaps for the northern limit, this building's four chief façades have now been determined.<sup>7</sup> On the west it was limited by a terrace next to the steep cliff-side, and on the south and east by paved roads O 2 and N 19, respectively.<sup>8</sup> The discovery of a road (N 19) was particularly significant, for it may be the chief north-south passageway in this area. It was used for a long time, for its surface had been renewed at least five times during the LM I-IIIB periods.<sup>9</sup> This road, when more completely excavated, may serve as our eastern limit of extensive excavation in this area, even though it is clear that there are other houses east of here or, for that matter, to the north beyond our property line.

<sup>6</sup> The following descriptions of the hilltop and hill-slope areas at Kommos are, except in a few instances where the contexts are unusual, summary in nature. More detailed description must await further excavation and publication.

<sup>7</sup> The long east-west wall on the north may be in fact the northern façade, but we are so close to the property line here that excavation is difficult.

<sup>8</sup> Road O 2 varies from 1.02 to 1.70 m. wide; Road N 19 is ca. 1.25 m. wide.

<sup>9</sup> While LM IIIB remains the latest period of occupation in the area, an occasional Archaic, Classical Greek, Roman, or Byzantine sherd reminds us that there were passers-by and probably agricultural work here in later times. A forceful reminder of this, representing a period attested so far at Kommos only by occasional sherds from far to the south, was the discovery of a Late Geometric pithos (C 1657, not illustrated here) almost at the level of the top of the wall separating N 19 and N 18, and a bit to the south. This handsome pithos is preserved in fragments that, when joined, will produce almost the entire vessel. It is ca. 0.70 m. high and is decorated with a broad zone divided into four panels by vertical checkerboard borders, each panel containing a pair of concentric circles. Information on ceramic deposits, as in past years, has been drawn generally from the many reports prepared by, and on the advice of, Philip Betancourt and L. Vance Watrous.

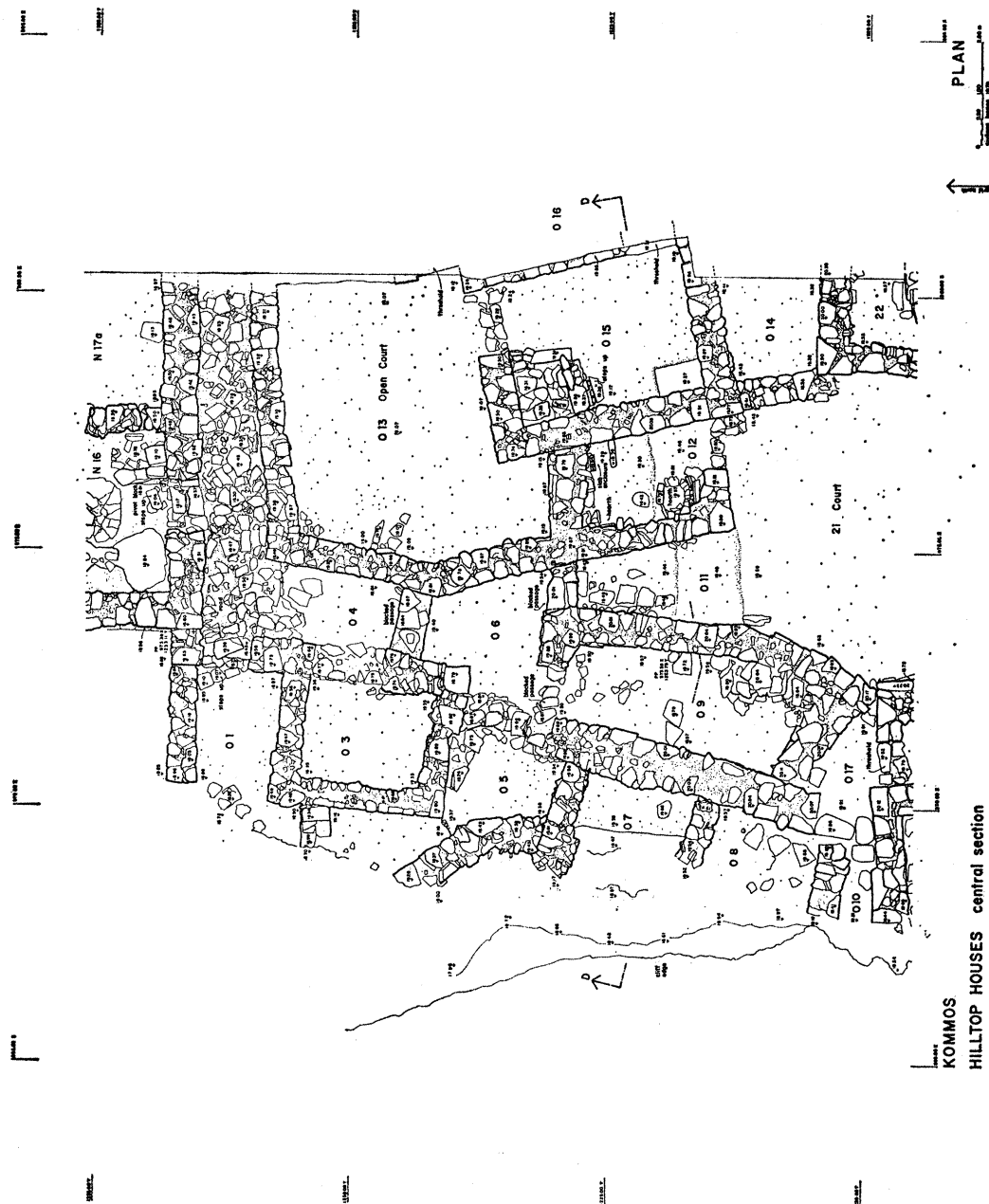


Fig. 2b. Hilltop houses, central section.

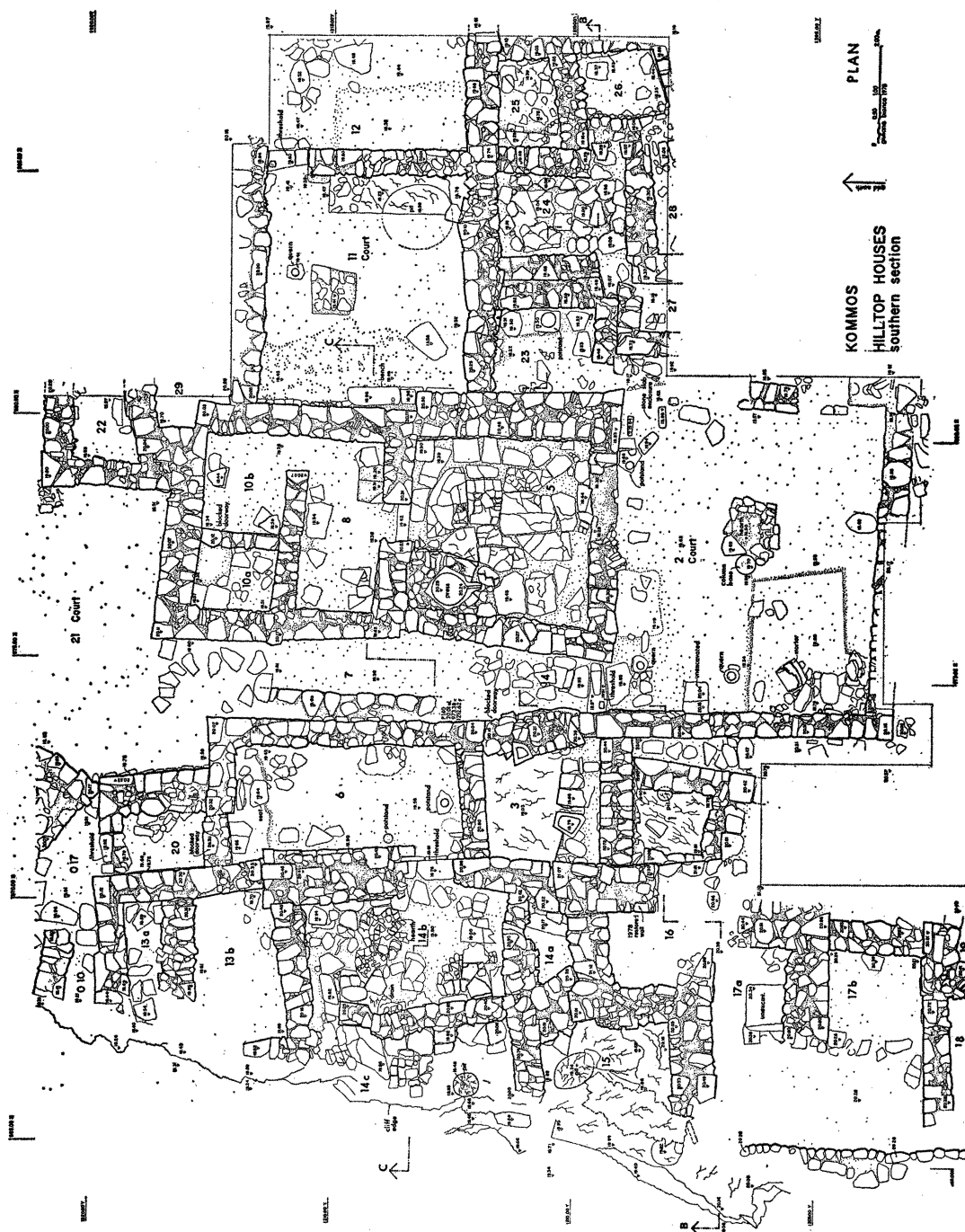


FIG. 2c. Hilltop houses, southern section.

Aside from an additional room on the west (Space N 1), the North House may well prove to be about 12 meters square. Of the areas excavated in 1978 on its interior, Space N 18 (a court during the LM III period?) borders the road. N 13, west of the former, was found almost empty of contents. It led, via a threshold with a step down of *ca.* 0.23 m., to N 17a, which presently appears to be a rather large room about 4.40 m. east-west by 4.25 m. north-south. In the room's north-western corner, along its north wall, we found a hearth consisting of a burnt area lined on two sides with stone slabs.<sup>10</sup> Next to it is a curving wall enclosing the corner of the room (Fig. 2a, Pl. 53: b), blocking off N 17a from N 9, a corridor with which N 17a originally communicated (see below).

West of here, in N 5, little was found save an LM III champagne cup (C 1379). In N 16 to the south was found an ample room with a partially paved floor covered by earth and ash, the latter no doubt having come from the hearth, possibly a partially domed oven, in its northwestern corner. Within the ashy layer was discovered, during sieving operations, a fine seal of rock crystal with engraved designs (S 78 in Pl. 53: d). Part of the southern wall of this room was apparently dismantled at a later stage of use, to provide egress into the road to the south. Thus one could step up directly through a doorway to the east-west *kalderim* outside. This change would seem to be connected with a general restriction of movement within the house, for at about this time the doorway between N 4 and N 7 was also blocked. Moreover, the earlier entrance via N 9 to N 17 was closed off by adding a slab enclosure and, east of it, a semicircular space (N 17b) enclosed by a curving wall. Originally there had been a handsome entrance here with a set of finely cut L-shaped jamb bases on either side of a threshold block (Pl. 53: b).<sup>11</sup> A bit to the south (in N 9) was found another such jamb *in situ*. Thus Spaces N 4-5-16-9, only part of an earlier larger house, seem to have become an independent abode during the LM III period. A historical pattern is emerging from this building, and is attested elsewhere on the site, according to which living quarters were curtailed in the last days of the LM phase and the settlers then abandoned the site, taking with them their valuable belongings.

*The Oblique Building and Associated Structures* (Trenches 19B2, 21B-B1, 25A. Fig. 2b; Pls. 53: c, 55: c)

Up to last season our impression was that the LM buildings on the hilltop were fairly closely oriented to the cardinal points of the compass. The discovery this summer, however, of the "Oblique Building" (Fig. 2b) shows that orientation is

<sup>10</sup> South of here, at *ca.* +19.04 m., about 0.10 m. above the final LM IIIB floor, was discovered the Cypriot White Slip sherd (C 1262 from pail 21) shown here in Pl. 55: a. For imported Cypriot pottery discovered in 1977 see *Kommos*, 1977, pp. 125, 128, pl. 36: e.

<sup>11</sup> Such jambs represent a type of construction popular in the more affluent MM III-LM I structures (J. W. Shaw, *Minoan Architecture: Materials and Techniques*, Rome 1973 [= *Annuario*, n.s. 33, 1971], pp. 150f., fig. 181). Up to this point at Kommos, only re-used jambs had been found (e.g. *Kommos*, 1977, p. 133).



not uniform. This structure, which apparently faced northwest, was fronted on the north side by a large, enclosed court (O 13) extending to just south of the east-west passageway (O 2). Of the main building only one interior room (O 15), that with a hard earthen floor with a few traces of burning, has been excavated, but an entranceway with a fine threshold in this room's southeastern corner and the construction of the façade wall bordering the court on its east, just revealed in the scarp, suggest that it was an important structure in the town. A platform with steps, just on the right as one enters O 15 from O 13, may well have been the base for a wooden stairway leading to an upper floor.

O 14 may be a passageway (over an earlier wall?) leading from the main building to O 12, the last certainly a kitchen. Within O 12 were found two LM III floors, each with its hearth formed of upright slabs and built against the room's western wall. Within the room were discovered fragments of a fine LM IIIB amphora with attenuated octopus decoration (C 1274, Pl. 55:c).<sup>12</sup>

West of here was a series of irregular rooms, many of LM III date, O 3 perhaps being the best built. At the moment we do not seem to have found a separate house here, but, rather, what may be understood as "outbuildings" associated with the Oblique Building and / or with the houses directly to the north or south. These rooms were originally constructed so that a north-south passage (Lane 4-7) was maintained (via O 11-O 6-O 4) to join the east-west street (O 2) on the north, but this passage was closed off with blocking walls later in LM III. Further investigation must be made here, however, before relationships can be clarified and the pre-LM III appearance of the area can be understood.

*Court 2 and the Middle Minoan Storerooms* (Trenches 21A, 21A2. Fig. 2c; Pl. 53: e)

In 1977 we found and partially cleared a court, Space 2, belonging to what we have called the "House of the Wine Press" (Spaces 10-8-5) directly north of it.<sup>13</sup> Now the court is completely excavated (Trench 21A) and we know that the column base discovered there then is actually set in the center of this large space, 5.30 m. north-south and 6.20 m. east-west. Just east of the base were the remains of a hearth, roughly 1.10 m. square and edged by flat slabs. To the northeast we had found in 1977 a slab enclosure and a potstand, as well as some stone tools, with pottery on the court floor indicating an LM IIIB date for its final use. West of the column base was a very thick layer of white earth (*asprochoma*) below which were two querns set in a floor paved with pebbles and lime (*chalikasvestos*). In 1978, south of here, in turn, and at a somewhat higher level, was found a large fragmentary mortar,

<sup>12</sup> Fragments of the same amphora (C 1274, C 1279) were found when fallen stone was removed from the lane further south.

<sup>13</sup> Called formerly the "House of the Fallen Slabs" (*Kommos*, 1977, p. 119 and fig. 3. See also *Kommos*, 1976, p. 220 and fig. 3).

ca. 0.60 m. long, that may have been set on slabs found near by. Not far away were three stone tools.

Certainly the column base indicates that all or part of the court was at one time roofed. At the moment I propose that only the western half, at least toward the end of the court's use, was covered. As preserved, for instance, the rough eastern wall of Court 2 contrasts with the sturdier walls to the west. Also, smoke from the hearth, just east of the column base, could have escaped upwards more easily. Another possible indication of a roof in the western half of the room is the thick layer of white earth, mentioned above, which may well be material, now fallen, originally used to waterproof the roof. However the space may have been covered, it appears to have been a large, most usable area when the house was inhabited, and is comparable with similar courts in other Minoan houses which were central working and social areas.<sup>14</sup>

We next excavated a trench (21A1) in order to explore the area immediately northeast of Court 2, with the hope that we might find the southern limits of Court 11, within which a bench and handsome rhyton (C 19) were discovered in 1976.<sup>15</sup> One result of this work was that we could determine that Court 11 measures approximately 4.10 m. north-south by 4.80 m. east-west, and that its southern wall underwent a series of rebuildings. More important, perhaps, is that this court's relative isolation, without direct access to the "House of the Wine Press" to the west, implies that it did not serve that establishment. Rather, it is reasonable to conclude that Spaces 22-29-11-12 and others still unexcavated (see Fig. 2c) constitute a separate house sharing a common wall with the "House of the Wine Press" just to the west, at least during the final stage in the complex history of this residential unit.

The new trench opened up immediately south of Court 11 and east of Court 2 showed that this area was an exterior one, perhaps functioning as a secondary court, during the LM I-III periods, for there are no structures of this date in much of the area excavated. Much to our surprise, however, we shortly came upon storerooms which had gone out of use in the Middle Minoan period (23, 24, 28) and the study of which is unhindered by any later construction above them. These are contemporary with the western wall of Court 11, which was later re-used at a higher level (see especially Pl. 53: e) in connection with the two residential units described above.

The western wall of Room 23 continues to the north, just as does its floor which goes underneath Court 11, pointing to an earlier date for both the wall and the floor. Room 23 was clearly used as a storage area, with slabs set on the floor where pithoi and other vessels might be placed, especially along the eastern wall (the central slab here has a worked rounded depression probably to fit the base of a vessel). On the

<sup>14</sup> D. J. I. Begg, *Minoan Store-rooms in the Late Bronze Age*, diss. University of Toronto, 1975, Appendix I, p. 196f.

<sup>15</sup> *Kommos*, 1976, pp. 220-222 and fig. 3; pl. 53: b, c. During 1978 the northern wall of this court was uncovered by means of Trench 21A2. A few rim fragments of the same rhyton were found.

last slab to the north had been set a bridge-spouted jar (C 1040) not long before the room was abandoned. Also abandoned at this time was a large, undecorated MM pithos still standing and recalling the type of situation that probably led to the rumor, first circulated by Arthur Evans in 1924, that there might be a *teloneion* or customs house in this immediate area. Actually, as we excavated around and within this large pithos, it turned out that there was another, smaller one (C 1210) set inside it and which will probably mend up to be entire. It would seem that the outer pithos had been broken and the upper half discarded in antiquity. To save space and the trouble of discarding the remainder of the pithos, the inhabitants simply set the smaller pithos inside it. This could even have been done at the time when the eastern wall of 23 was strengthened by an additional wall set alongside it (if Rooms 23 and 24 were originally of the same size, the later wall would be that presently bordering 23 on the east).

The smaller pithos may even have been broken when the room was deserted, for although over 70 finds from this and surrounding rooms were catalogued, the majority of the pottery appears to have been in a fragmentary condition even in antiquity. This is also true of Room 24, where a scatter of vessels, especially cups and jars, was found on the handsome slab floor in no clear order, rather than on the slabs possibly set around three of the walls for such a purpose. A variety of vessels was also found when we cleared a small portion of Room 28.

However we interpret these rooms in the future, it nevertheless is clear that they date in their final use to the end of the MM period, when tortoise-shell ripple designs were being introduced as a departure from the light-on-dark decoration that characterizes much MM fineware decoration. Re-use of certain storeroom spaces seems to have occurred, however, where on the east a later cross-wall splits up what may have once been a single room (25, 26). Finally, the presence of an oblique cross-wall in the southernmost space here (26), with LM III pottery resting on bedrock, suggests that the history of this particular area is rather different from the storerooms just described.

THE CENTRAL HILLSIDE (Trenches 22A-22A3. Fig. 3; Pls. 54: a-f, 55: b, d, g, 56: b)

During the first two seasons here we had partially exposed a house probably built during the early part of the LM I ceramic phase and then occupied through LM IIIB (Fig. 3, Pl. 54: a).<sup>16</sup> It was bordered on the west by a slab-paved road of at least two periods that we now know probably extended southward to connect up with the monumental ramp leading up from the shore.<sup>17</sup> It was not the first building here,

<sup>16</sup> *Kommos*, 1976, pp. 222-235; *Kommos*, 1977, pp. 120-129.

<sup>17</sup> For the ramp, see *ibid.*, p. 147 and pl. 40: c. In 1978 this ramp was cleared further within a very confined area (Trench 23A1) and found to have a possible width of 2.65 m. For the road further north, to which the ramp may well lead, see the description of Trench 23B (below) in the present report.

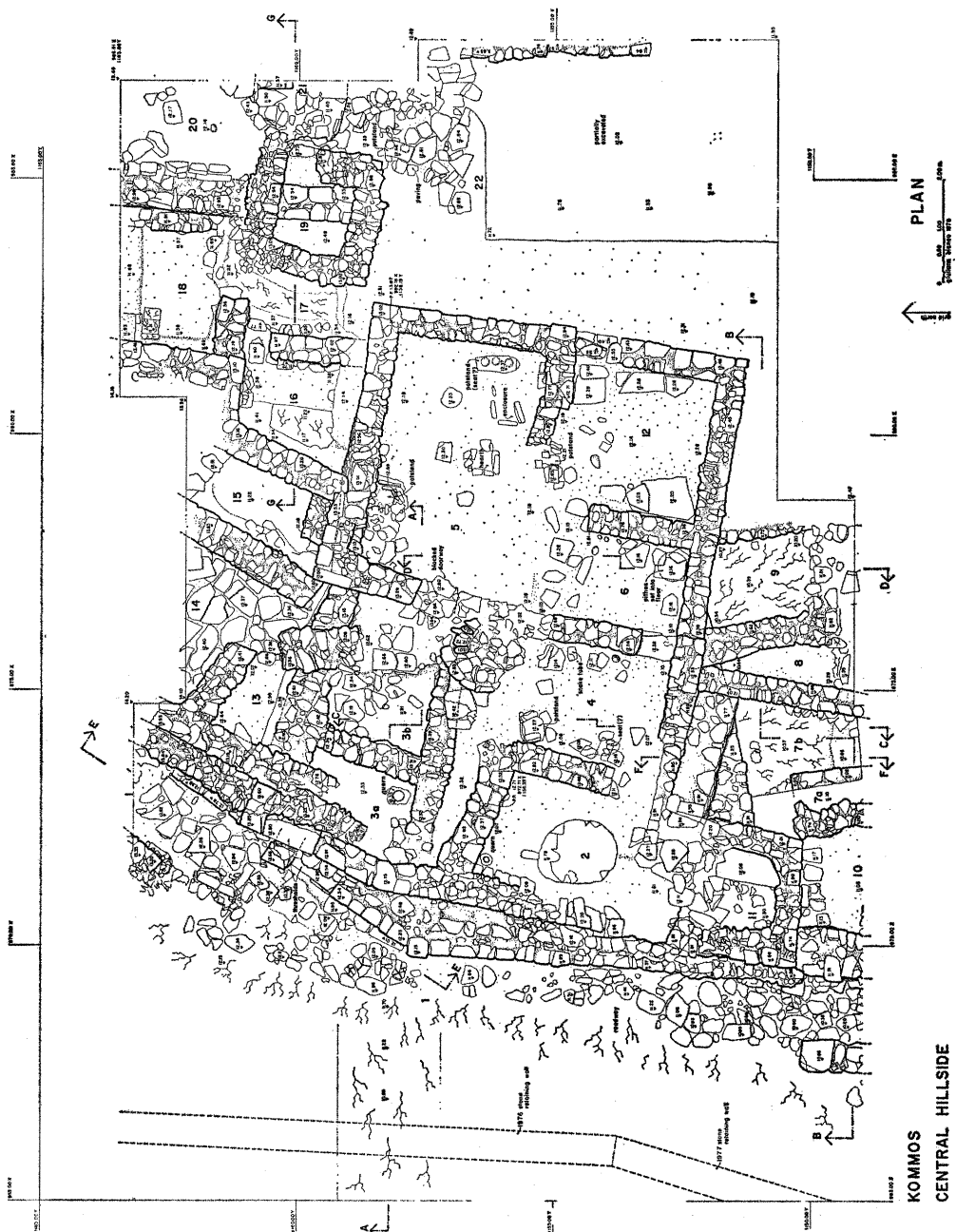


FIG. 3. Central Hillside area.

for below it on the southern and northeastern sides were found well-preserved MM walls extending on all sides.

Our aim during the past season was to uncover, if possible, the remaining rooms of this upper building and then to expand our soundings into the lower MM buildings identified during 1977.<sup>18</sup>

As a result of this season's excavation we were able to determine the eastern limit of the house (Fig. 3) by means of a series of trenches east of Spaces 5 and 12. As things turned out, we had come close in 1977, particularly in Space 12, to finding the southeastern corner, but had not progressed far enough eastwards.<sup>19</sup> It is now clear that we are dealing with a rather well-preserved section of the house consisting of three rooms (6, 12, 5), with 12 possibly being entered through a rough doorway from the east. During LM I, however, the building's main entrance seems to have been via the paved road into Space 3 in the northwest corner of the house. So far, there is no evidence (e.g. stairways) that the house had a second story. Rather, it consisted of seven or more rooms, without a basement, and with a number of small outbuildings constructed during its post-LM I history.

Room 5 (3.05 m. north-south by 4.45 m. east-west) had been partially cleared in 1976, at which time it was suggested by us that it might be a court or roadway, or both, since Space 6, in effect an anteroom to the Domestic Shrine (4) to the west, gave the impression that it may have faced onto an open area. This impression may still have been correct, for 5 may have been partially hypaethral, at least during its latest use in LM IIIB, even though it was enclosed on the north and east by a high exterior wall.

From the point of view of domestic activities, Room 5 (Pl. 54: b) is most interesting, for within it are three enclosures formed by limestone slabs set on edge, a system similar to that used in Rooms 4 and 12 in the same building and occurring in three of the four houses identified on the hilltop to the north.<sup>20</sup> The first enclosure in 5 is in effect a circular, shallow pit with a rough platform adjoining it in the room's northwest corner (Pl. 54: c). Within it was neatly set a cooking pot (C 1179), a tripod cauldron *ca.* 0.282 m. high, with two handles, and of which two of the three legs had been broken off in antiquity.<sup>21</sup> Within it, at the lowest point, were many iridescent wing covers (?) of tiny beetles perhaps once drawn to the pot by its contents. East of here, along the wall and further south, were a number of fragmentary coarse-ware vessels (e.g. a basin, C 1177, Pl. 55: b). To the south, and not far from two slabs that may have served as seats, were two slab enclosures (Pl. 54: b), both of which were probably used for cooking. The interior of that on the west (*ca.* 0.32 by 0.32 m.) was burned red (Munsell color 2.5YR 6/8) and a goblet (C 1204)

<sup>18</sup> *Kommos*, 1977, pp. 127-128.

<sup>19</sup> *Ibid.*, fig. 4.

<sup>20</sup> See above and Pl. 53: b.

<sup>21</sup> Similar to C 45 found in Room 4 to the west, to that found in 23B to the south, and to numerous others found elsewhere on the site.

had been placed in its southwestern corner. To the east, the interior of the second enclosure (*ca.* 0.42 by 0.42 m.) was not as scorched. A thick layer of dark ash between it and the wall to the south suggests that it had been emptied out shortly before the room went out of use. Along the eastern wall is a long, re-used limestone slab with three smooth, rounded depressions in it, very similar to those used now in Pitsidia for supporting round-bottomed water jugs (*stamnostates*).<sup>22</sup> Similar slabs, but with only one or two depressions, have been found in other buildings at Kommos and, like the slab enclosures, are emerging, along with the querns set in the floors, as typical household furnishings from the site.<sup>23</sup>

*The Northeast LM Outbuilding above MM Structures* (Fig. 3; Pl. 54: a)

Our second aim on the hillside was to enlarge the sounding made in 1977 into MM levels northeast of the building just described. Thus three trenches (22A1, 22A2, 22A3) were opened up; but our attempts were partly frustrated on the one hand by limited time (22A3 remains incomplete) and on the other by a constriction of the area that could be excavated because of the appearance of an LM building on an upper level.

This later building (Space 19, Fig. 3, and Pl. 54: a), its relative position perhaps analogous to one recently discovered at Knossos,<sup>24</sup> is a single small, almost square room (interior measurements 1.50 m. north-south by 1.40 m. east-west). Its construction shows that it was built down into a sloping accumulation of MM fill. Although found essentially empty, sherds in its floor and below its threshold on the east (C 1290 for the latter) indicate that it was built and used in LM IIIA/B.

Directly east of and lower than Space 19 is a curious structure, Space 21, only the curving western end of which has been excavated, also used in LM III and set down into MM levels. The walls are made up of large upright slabs set edge-to-edge, a construction technique not found elsewhere at Kommos and certainly unusual in Minoan Crete. One of its walls continues below that of 19, demonstrating that 21 preceded 19 in construction date.

South of Space 21 is a sloping slab pavement on which was found a *stamnostatis*, of the type found in Room 5 (above), but with one circular and one square depression cut into its upper surface.

Spaces 19, 21, and 22 present a problem still to be resolved as to their individual or possible joint functions. It is tempting, for instance, to interpret 22 as an auxiliary area with facilities for washing, with 19 serving as a toilet / changing room and 21, with its floor at least a meter below that of 19, functioning as an adjacent *bothros*

<sup>22</sup> While the analogy does not prove the use, it is nevertheless highly suggestive. Such depressions might also have been used for grinding. For others, see that next to the outbuilding (19) described here; on the hilltop, in Space N 7 in the northernmost building and, south of there, in Spaces 2 and 6 on either side of Corridor 7/4.

<sup>23</sup> *Kommos*, 1977, p. 126.

<sup>24</sup> *BCH* 100, 1976, p. 733, fig. 35: b.

covered then perhaps with branches and earth. Perhaps an industrial function took place here, however, and one can hope that further excavation in 21 may help solve the mystery. It is also unsure with which larger building the group should be associated, for an appropriate LM I-III structure may well lie in the still unexcavated area to the east.

North of here, penetration into the deep and well-preserved levels was possible in a few places. Briefly, in Space 20 on the east we were forced to curtail activities since the same MM wall, on top of which 19 had been set, had split open further north, many of the blocks cascading down to the east in antiquity.<sup>25</sup> To the west it was possible to continue down to bedrock in Spaces 16, 17, and 18. Within 16 (at +12.05 m.), we found a continuation of the MM (post-Kamares) dump of which about half had been removed in 1977 (Pl. 54: d).<sup>26</sup> Below this point, in a thick deposit not far above bedrock, was the remainder of the classical Kamares deposit also sampled in 1977,<sup>27</sup> with a veritable plethora of vessel types that, as far as we can see now, constitute an accumulation over time (Pl. 56: b). It continued in Space 17 to the east as well, where a number of interesting objects came to light. One of these (C 1533, Pls. 54: f, 55: e, f, 56: b) is a partly broken terracotta stand, now 0.141 m. high, painted black with additions in white so as to resemble stone veining. Within what remains of the bowl of the vessel is a series of round, flat discs of clay, much burnt, which suggest that we have here a pedestaled kernos of an unusual variety but in shape comparable to pedestaled lamps from Phaistos.<sup>28</sup> Not far from it, lying within base fragments of a broken pithos, was a fine miniature amphora of veined marble (S 80) of Egyptianizing style (Pl. 55: d).<sup>29</sup> This lay not far above another type of kernos, in this case a stone slab (S 91) with nine depressions set in a circular fashion and with traces of ochre within each.<sup>30</sup>

Fragments of a beautiful, polychrome loop-handled bowl (C 1523), painted inside and out, were also found scattered in the same deposit (Pl. 55: g). This bowl represents the height of MM Kamares style<sup>31</sup> and, along with the aforementioned

<sup>25</sup> When excavation has progressed further east the wall will be reconstructed and we will then be able to continue the sounding.

<sup>26</sup> *Kommos*, 1977, p. 126 (labeled deposit "CD" in 1978). Some 21 objects (Pail 66) were catalogued from here in 1978.

<sup>27</sup> *Ibid.* (labeled deposit "BA" in 1978). The surprising number of 112 objects was catalogued from this deposit in 1978.

<sup>28</sup> As in D. Levi, *Festòs e la civiltà minoica*, Rome 1976, I, pls. 151: e and 186: c.

<sup>29</sup> The jar is of the same high quality as that discovered in the large tholos tomb at Hagia Triadha (P. Warren, *Minoan Stone Vases*, Cambridge 1969, P 358).

<sup>30</sup> A similar kernos slab, S 27, also with nine depressions, was found in 1976. It was on the side of a modern stone-robbers' pit in Room 2 to the southwest of here.

<sup>31</sup> Shallow bowls of this type, with opposite horizontal handles, seem to be restricted to five examples from the first palace at Phaistos (Gisela Walberg, *Kamares, A Study of the Character of Palatial Middle Minoan Pottery*, Boreas, Uppsala Studies in Ancient Mediterranean and Near Eastern Civilizations, VIII, Uppsala 1976, p. 152, Form 51, No. 223). For parallels to the decorative motifs, see *ibid.*, motifs 10, ii, 5 and 11, iv, 12; 11, iv, 9 and 10. Our bowl, therefore, may very well be from a palace workshop at Phaistos.

kernoi and stone vase suggests that this rich area, still only partially explored,<sup>32</sup> must have been an affluent one partially associated with religious activities<sup>33</sup> during the MM period.

*Near-by Soundings* (Trenches 19A and 23B. Fig. 1; Pl. 56: a, c)

Two exploratory trenches were also excavated on the hill slope, that to the north (19A, 5 by 5 m., Pl. 56: a) in order to determine the nature of the stratigraphy and structures just below the crown of the hill.<sup>34</sup> It was also hoped that we might intersect the north-south paved road already partially uncovered along the western edge of the slope to the south.<sup>35</sup>

On the upper level in 19A there was a deep fill of stone and earth adjacent (on the west) to a building of which only two rooms were partially exposed by us. The latter was built after the MM III stylistic phase of ceramic development, and went out of use in LM III, a pattern noted elsewhere on the Kommos site. The aforementioned fill contained a significant deposit of LM I style pottery (some 18,600 sherds); the upper levels of this apparent dump produced a few LM III style sherds.<sup>36, 37</sup> Almost a meter deep, the dump overlay the remains of a house (?) of which three spaces, all just above bedrock and one with a finely plastered floor, were partially cleared. These three spaces may represent two rooms and a court of a house probably built and abandoned in MM III. Only more extensive excavation, however, could clarify the nature of these buildings and the associated dump. We might also conclude that, unless the fill here served as a post-MM surface for the continuation of the roadway mentioned above, the road is probably to be found further to the east, where it may swerve before continuing up onto the hilltop.

The second exploratory trench (Trench 23B, 5 by 8 m., Fig. 1, Pl. 56: c) was set 5 m. south of the excavated area and just northeast of the modern well. Its aim was to investigate the upper level of habitation and if possible to follow the southern

<sup>32</sup> Our interpretation of the architectural sequence here, representing the MM IB/II, MM III (post-Kamarea) periods, as well as a fuller description of the ceramic deposits, will be published at a later date.

<sup>33</sup> A fine terracotta (bull's ?) ear painted in the MM style (C 1241) was also found in the LM/MM fill (Pail 54) above. Such indications of religious activities are also reflected in the later occupation of the area (e.g. the LM III Domestic Shrine in Space 4).

<sup>34</sup> The southeastern corner of the trench was set at grid coordinates 982.31 m. east-west and 1173.66 m. north-south so as to fall about midway between the houses on the hilltop, described at the beginning of this report, and those to the south, just described.

<sup>35</sup> *Kommos*, 1977, pp. 127-128 and fig. 4 (Space 1).

<sup>36</sup> According to L. Vance Watrous, this deposit appears to be somewhat earlier stylistically than the LM I-II dump in Space 7 to the south of here (*Kommos*, 1977, pp. 120-125 and fig. 6; pp. 165-170) and thus constitutes another important aspect of the spectrum of pottery development at Kommos.

<sup>37</sup> A fragment of Cypriot White Slip ware (C 993, shown in Pl. 55: a here), was found far down in the fill (Pail 20, at ca. +14.35 m.) within a Minoan context that is LM I or perhaps a bit later in style.



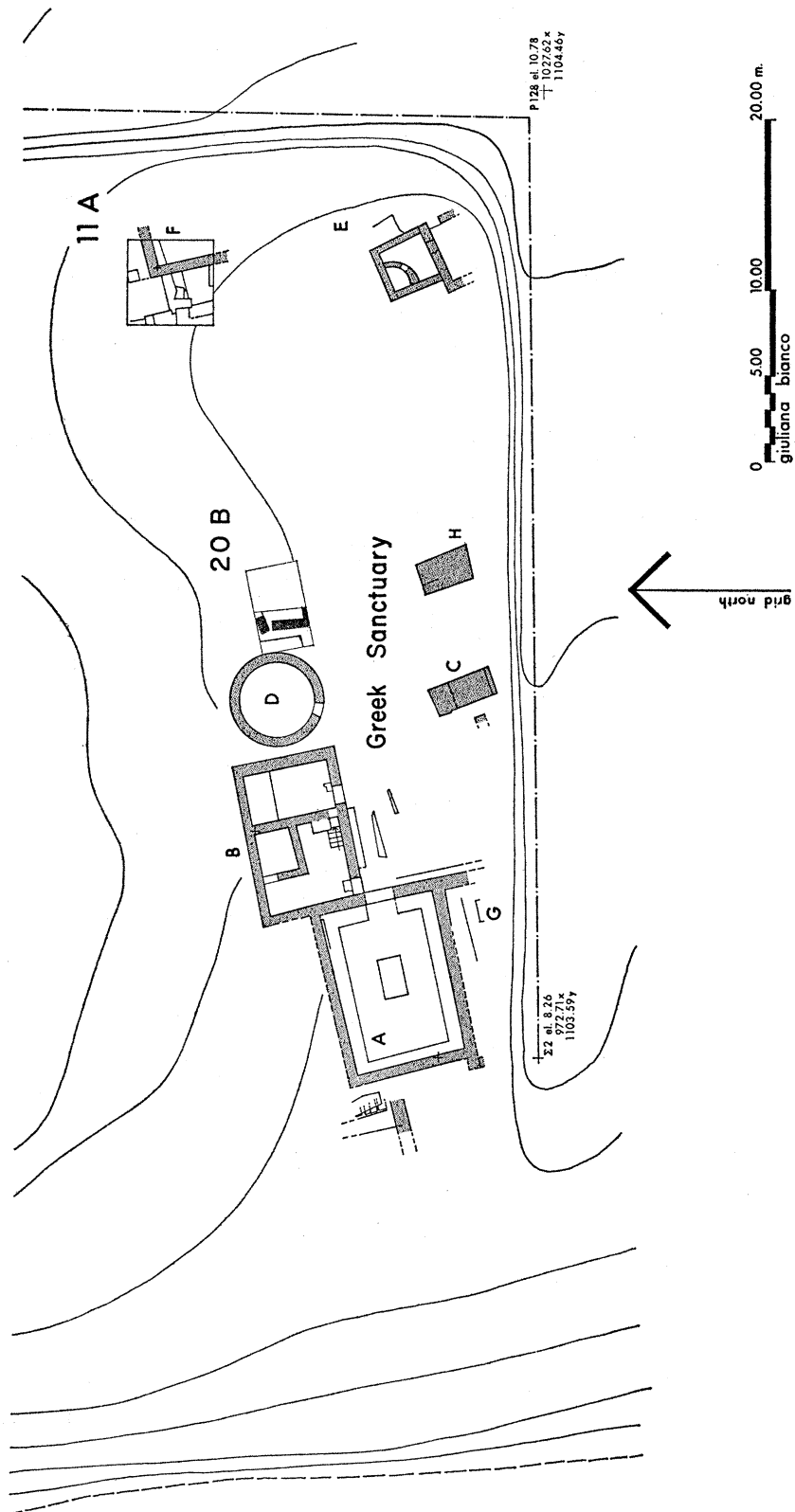


FIG. 4. Greek sanctuary area, general plan.

extension of the paved roadway referred to above. As things turned out, the roadway did appear, although blocked by a superficial LM IIIB wall (a) on the western side of the trench. The position of the road suggests strongly that it continues some 24 meters southward to connect with the stepped ramp discovered there in 1977.<sup>38</sup> East of the road, within the fill of Trench 23B, was discovered a group of fragmentary terracotta molds<sup>39</sup> that appear, before mending and study, to have been used to cast bronze tools. Below the molds was discovered an irregular room (Pl. 56:c) used during LM IIIB. In its northwestern corner was a raised, quarter-circular construction (b), and set upon the actual floor of the room was found, as it had been abandoned, a tripod cooking pot (C 1736, similar to that in Pl. 54:c), its legs broken off in antiquity.

THE LOWER HILLSIDE: THE GREEK BUILDING COMPLEX (THE SANCTUARY) (Figs. 1, 4-6; Pls. 56:d, e, 57:a-f, 58:a-e)

In 1977 over 30,000 cubic meters of sterile sand were removed from the hillside in an effort to expose the top of the prehistoric Minoan strata. In the process of this work some five buildings (Fig. 4: A, B, D, E, F) and an altar (C) were discovered in the southernmost part of the property. These were built upon the prehistoric levels and had been covered over by more than two meters of drifted sand that had accumulated after the time of Christ. A, B, and D were built around the northern and western sides of a large open court within which had been set, perhaps at an earlier date, Altar C. It was explained in last year's report<sup>40</sup> how this complex constitutes an important rural sanctuary of still unclear ascription and with a history of some 275 years of use, *ca.* 425-150 B.C., followed by destruction, pillaging and eventual abandonment. It was also suggested that there may be some connection between this group of buildings and Amyklaion, a town mentioned in an inscription of that period.

*Structure H, The Eastern Altar* (Trench 21B1. Fig. 4, 5; Pls. 57:b, d, 58:d)

During 1978 exploration was continued in the sanctuary with some interesting results. One of the first discoveries was that of another large altar (Structure H, Fig. 5, Pls. 57:b, d, 58:d). Hitherto the altar had been covered by deep sand left below a large tamarisk tree that we had hesitated to remove, some meters west of the first altar (C). After H had been cleared of the overlying sand (Pl. 57:b) it was found to be as sizeable as C, being 1.94/1.96 m. wide and 3.00/3.26 m. long (*versus* 1.60 m. wide and 3.78 m. long for C). It was about 0.80 m. high (*versus* 0.83 m. for C).<sup>41</sup>

<sup>38</sup> *Kommos*, 1977, p. 147 and pl. 40:c.

<sup>39</sup> C 1640, C 1655, C 1656, C 1722, C 1723, C 1735.

<sup>40</sup> *Kommos*, 1977, pp. 129-154.

<sup>41</sup> The height of C here is taken from above the top of its krepidoma, that of H from above the top of its first course. This type of altar would probably be classified as a "low, monumental altar" by Yavis (Constantine Yavis, *Greek Altars, Origins and Typology*, St. Louis, Missouri 1949, no. 47).

It will be recalled that on the south end of C we had the good fortune to discover a terracotta bull, miraculously still *in situ* after so many centuries, constituting a rare instance in which a votive animal figure of some size has been discovered on a Greek altar.<sup>42</sup> Altar H was bare of offerings, but its function was nevertheless suggested by the amount of burnt bones found upon it.<sup>43</sup> Moreover, in the shallow soundings made around its northern half, the number of fragmentary terracotta

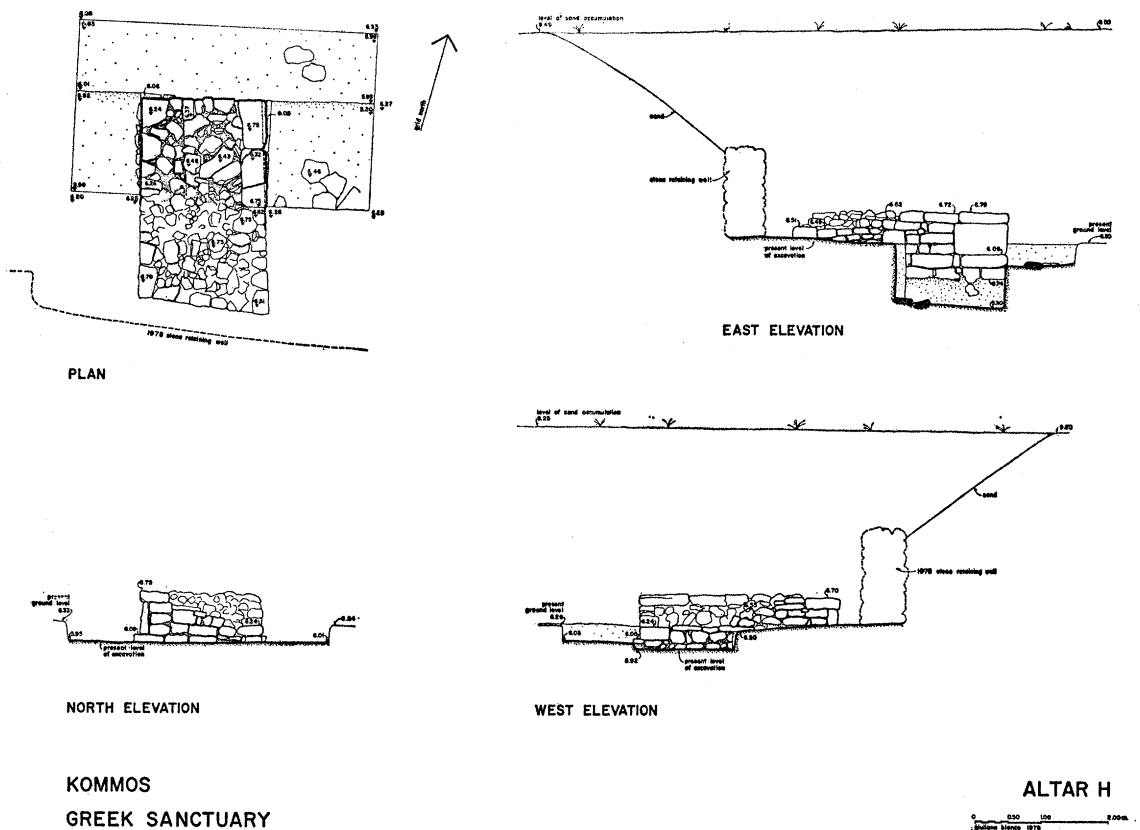


FIG. 5. Eastern altar (H), plan and elevations.

<sup>42</sup> In 1976 the German excavators at Kalapodi (Sanctuary of Artemis Elaphebolia), near Atalanta in Boiotia, discovered an altar covered over by later construction. The "altar" is a large poros orthostate. It was discovered with ashes, and upon it were set a number of dedicatory offerings: a small bronze tripod, iron oboloi, metal bracelets, a silver obol, a small terracotta mask of Artemis (?), and a terracotta "Boiotian" cock (G. Touchais, "Chronique des fouilles," *BCH* 101, 1977, pp. 582-584, figs. 151 and 153-154). A small bronze kouros was discovered set with lead into an outside corner of the block; another statuette (of Artemis?) had been set onto the other, corresponding corner. Concerning the placing of dedicatory offerings on altars, see now D. W. Rupp, "Altars as Funerary Monuments on Attic White Ground Lekythoi," *AJA* (forthcoming).

<sup>43</sup> Some 1200 grams of bones were found on the northern half of H (over 6080 grams had been found on C in 1977). Of some 3,000 bone fragments examined from C, only about 4% are identifiable, according to Pauline Sheppard, and those are chiefly of goats and sheep (a number are from young lambs), with a few pig, cattle, and hare bones.

animal figurines discovered<sup>44</sup> suggests that they had been connected with the altar's use. On analogy with near-by C, and because of the similarity of objects discovered, there seems no doubt that H is an altar as well.

Altar C had three structural phases. Altar H has at least two, for while cleaning its top at the north end we found that its original width here was only 1.33 m., and then it had been increased on the west by an addition of 0.63 m. (visible in Pl. 57: d). Other phases may appear as the excavation continues. In order to ascertain more of the history of this altar, a limited sounding was made along its northern side. Below its foundations (there was no projecting krepidoma, as is the case with C) was early Greek and Minoan pottery above Minoan (?) walls (+5.30 to +5.46 m.), followed by Geometric and Orientalizing sherds (+5.46 to 5.74 m.). At the level of the lowest course of the altar (bottom at +5.74 m.) were found Orientalizing sherds and a Protocorinthian kotyle fragment (C 973) along with a probable 4th-century B.C. cup rim (C 1513), the last perhaps giving us the approximate date for the first stage of the altar, the addition to it having been made subsequently and before the general burning noted elsewhere in the sanctuary.<sup>45</sup>

Altars C and H are separated from each other by some 5.18 m. They are almost parallel. Moreover, a line drawn on the short axis of C (Phase 1) also bisects H. It is difficult not to think of them, therefore, as "twin" altars, and one is tempted to associate them with dual divinities (e. g. Apollo and Artemis). The altars, however, may not have been founded at the same time, for the pottery presently associated with the first phase of C is of the 5th century B.C. whereas that from H is as late as the 4th century B.C. Moreover, although two masons could have built both altars at the same time, the masonry styles are nevertheless substantially different, for that of C (Phase 1) is isodomic and set on a projecting krepidoma,<sup>46</sup> while that of H (Phase 1) is a combination of rough slabs with a single large slab set like an orthostate on its northeastern end (Pl. 58: d).

#### *Building A, Northern Room (Trench 23A. Figs. 4, 6; Pl. 57: e, f)*

During 1977, we identified a large structure, A, which borders the sanctuary's court on the west.<sup>47</sup> We determined then that it was built during the Hellenistic period. Although parts of its eastern and southern walls had been robbed out down to the tops of the foundations, the generally high quality of its construction was nevertheless clear. We did not have the opportunity, however, to explore its interior, for

<sup>44</sup> Hooved animal legs (C 942, C 1032), bulls' ears (?) (C 949, C 1031), animal body fragments (C 987). The legs are similar to those found in connection with Altar C (*Kommos*, 1977, p. 143, pl. 41: c). A fragment of what may be a terracotta relief plaque (C 960), found north of the altar, is also suggestive.

<sup>45</sup> For the study and dating of the Greek pottery from the sanctuary area, I am much indebted to L. Vance Watrous and Peter Callaghan.

<sup>46</sup> Cf. *Kommos*, 1977, pl. 40: e.

<sup>47</sup> *Kommos*, 1977, pp. 140-142.

the inner part then served as a temporary dump for fill and sand removed from other parts of the sanctuary.

The room discovered then has now been completely excavated (Fig. 6, Pl. 57: e, f). It is quite large, being 6.67 m. north-south by 9.57 m. east-west. Except for a short gap for the entrance on the east, its interior is surrounded by benches *ca.*

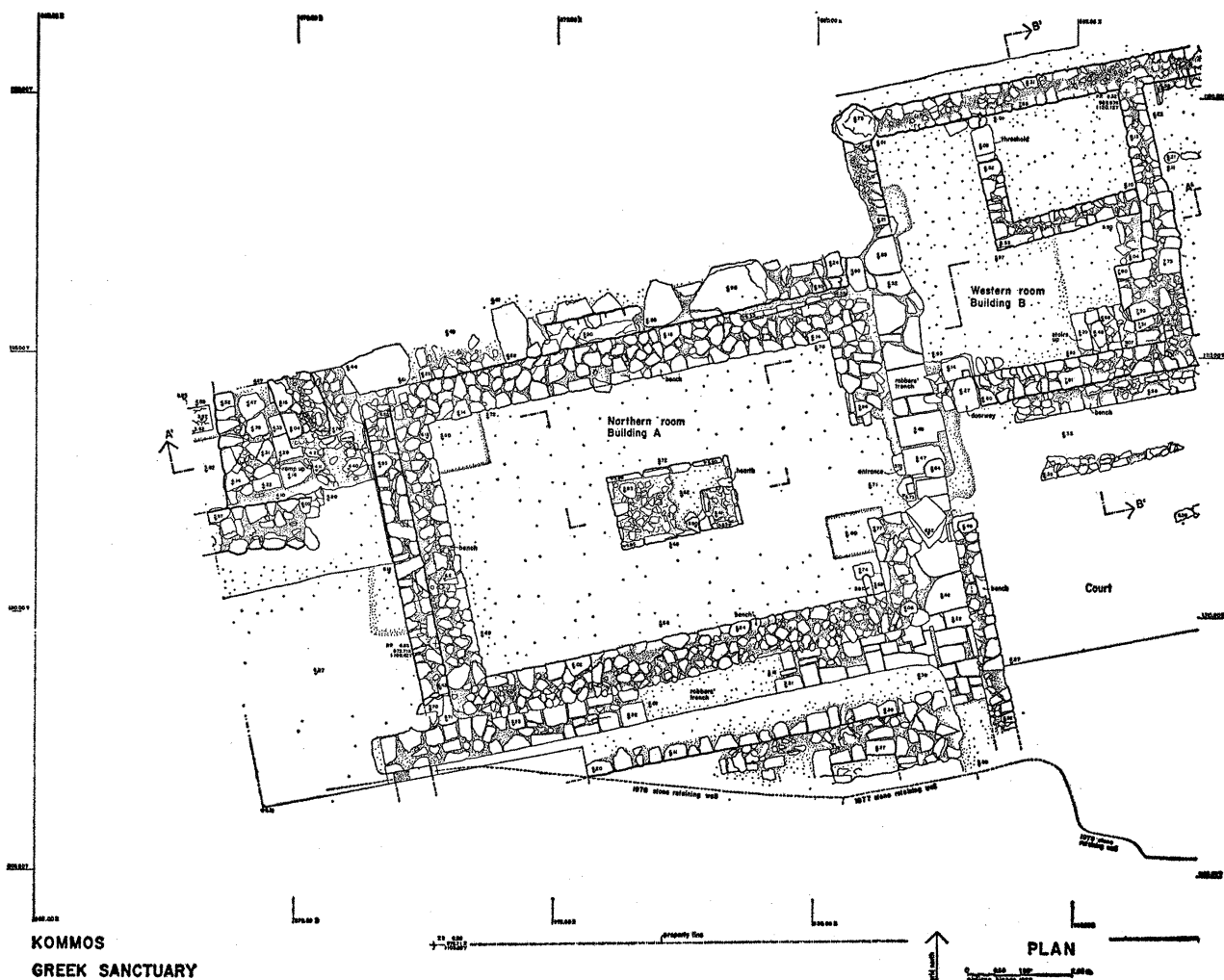


FIG. 6. Greek sanctuary, actual state plan of northern room and surrounding area, Building A.

0.45 m. high and ranging from 0.65 to 0.85 m. wide. The floor is of earth. Set in the approximate center of the room<sup>48</sup> is a well-preserved hearth, *ca.* 1.40 m. north-south by 2.35 m. east-west and elevated 0.20 m. above floor level. Its sides were constructed of stone slabs set on edge. While the interior of the hearth was found quite burnt, during its final use it was filled with rough unburnt stones and earth for a still unknown reason.

<sup>48</sup> The hearth is actually 0.70 m. closer to the eastern bench than to that on the west.

Although the fill from near the floor level on the interior of the room was sieved, the number of objects recovered that could help explain the history of the room and its function was minimal. Of pottery there were many Hellenistic amphora fragments and a few notable sherds (C 1486, lekanis fragment; C 1499, flat-based cup fragment; C 1512, echinus-bowl fragment), generally placing the last use of the room in the range of the 2nd to 1st centuries B.C. A pedestaled lamp (incense burner [?], C 1487) was also catalogued. The significance of a small construction, a vertical slab set on a horizontal one, in the southeast corner of the room, remains unknown.

Areas of the room's floor were very burnt, suggesting that the building may have been destroyed by fire. Layers of black ash were also found in the sand and rubble layer above unburnt floor surface in the northwest corner, suggesting that burning also took place some time after the main structure of the building had been broken or weakened to the point that sand could drift into it.

Although the amphoras mentioned above suggest that drinking may have been going on here (the amphoras could also have held dried or even pickled or salted food), the real clue to the function of the room must lie in the presence of the wall benches. No doubt they were used for sitting, but their generous widths<sup>49</sup> also suggest the possibility of their having served as benches for eating and / or sleeping. In contrast, the benches facing the court, along the southern façade of Building B and the eastern of A, average only 0.45 m. in width and could only be used, therefore, for sitting. The rough surfaces of the benches in A, probably rough even then, could have been covered with softer material (straw, bedding). That this was their intended function is also strongly suggested by the fact that the bench length in the southeastern corner is *ca.* 2.20 m., about the length that one could comfortably stretch out in and somewhat more than the length of certain individual dining couches of the Graeco-Roman period found in Mainland Greece.<sup>50</sup> If we begin with this as a rough unit, the remainder of the room's benches divide up easily into lengths of *ca.* 1.80 to 2.00 m. to accommodate some 14 people.<sup>51</sup> Another individual may have been able to rest

<sup>49</sup> The benches are not all of the same width. On the north, 0.85 m.; on the west, 0.70 m., as on the south; on the east, 0.90 m. wide. While the entrance to the room is on axis, the southern part of the doorway, where the door would swing inwards and against the end of the bench, took up more room than the northern. Thus the southern bench is about 0.50 m. shorter than that on the north here along this eastern wall.

<sup>50</sup> At Isthmia in the Corinthia, for instance, the couches, which were usually separated by short raised platforms, range from 1.60 to 1.80 m. in length. They are 0.85 to 0.97 m. in width, and are 0.27 to 0.30 m. above floor level (Oscar Broneer, *Isthmia*, II, *Topography and Architecture*, Princeton 1973, pp. 34, 38, 40, 45, 53). Those at Corinth in the 4th-century B.C. Sanctuary of Demeter and Kore range in length from 1.63 to 2.27 m. long, with a width of 0.50 to 0.95 m., and are 0.30 to 0.46 m. above the floor (N. Bookidis and Joan E. Fisher, "The Sanctuary of Demeter and Kore on Acrocorinth, Preliminary Report IV: 1969-1970," *Hesperia* 41, 1972, pp. 283-331, *passim*). The floors of the dining rooms at both sites were usually of earth or clay, as is the case in the northern room of Building A at Kommos.

<sup>51</sup> Five on the northern bench, three on the western, four on the southern, two (total) on the eastern benches, giving a total of fourteen.

and / or eat on the hearth space after it had been filled in with stone and earth in its final phase, but then this newly created platform would probably have served more appropriately as a table.

As mentioned earlier, the only entrance to the room was on the east. The northern end of the southern bench here is preserved, so that part of the interval allowed for the doorway is clear. More telling, however, is the discovery *in situ* of the pivot block used for setting the single(?) door that would have opened inwards.<sup>52</sup> The top of this block, with a cutting 0.16 by 0.18 m. wide, was level with the floor on the interior (at +5.73 m.). In order to leave the building one would have stepped up some 0.6 m. to the court via the threshold (now missing) and perhaps with the help of another step.

The roofing of such a large space presents a problem. It seems clear, to begin with, that the space was roofed, for numerous tiles (pan, cover) were found fallen in disarray on the floor in the interior, in all some 17.38 sq. m. of pantiles or about 20% of what would be necessary for a gabled roof over such a large space. The relatively limited number of tiles, along with the confused order in which they were found, suggests that many were removed from the building before it was abandoned,<sup>53</sup> even if we assume that some may still be found north and south of the room. Also found, in the southwestern corner of the room, were a number of fragments from a type of spouted sima, similar to those found in the same area last year. A fragment of a round drain (C 1454) was recovered as well. Despite this positive evidence for a roof, no traces whatsoever of interior supports have yet been found within the room. Could they, then, have been removed (if stone) or burnt (if wood)? Even if so, one would nevertheless expect to find bases upon which they were set. One might even suggest a peristyle arrangement with posts supporting eaves running alongside the benches, but no bases or other arrangements for support have been found there either, nor is there a drain. There is no simple solution to the problem at present.

The north wall is an interesting one from the point of view of construction, for it was made quite wide (1.10 m.) at its base with a thinner wall (0.50 m.) set upon it above the level of the benches. This upper wall stepped down at least three times toward the west as it followed the slope of the hill westward.

The southern wall of the room is largely robbed out so that although its width (0.65 to 0.70 m.) is known,<sup>54</sup> its appearance remains conjectural; it probably looked much like the western wall of the same room. This southern wall also served as the northern wall of a large room to the south, also connected with the sanctuary and

<sup>52</sup> Like the doors in both rooms of Building B northeast of here (*Kommos*, 1977, pls. 38:f and 39:d).

<sup>53</sup> A similar situation pertained in the case of near-by Building B (*Kommos*, 1977, pp. 137-138).

<sup>54</sup> The width can be determined easily by measuring the actual width of the robbers' trench from which the blocks were removed. Found within the southern (east-west) trench was a bit of glass (Mi. 7) which provides us with a date of the 1st century after Christ as the earliest date for the removal of the wall.

part of the same large building.<sup>55</sup> The nature of this southern room cannot yet be determined, but it looks as if it may also have had a wide bench running along its northern wall. While it shares the same north-south (east) wall with the northern room just described, enough excavation has been done in its northwest corner to show that the western wall actually lay further west here, that is, there is a jog of some 0.50 m., which indicates that the still unexplored southern room is larger than the one already discovered to the north, at least in this east-west dimension.

The two altars in the court provide some indirect evidence that the north-south dimension may be larger, too. Since it is clear now that the two altars are earlier than Building A, when A was constructed the entrance to the southern room may have been set in relation to the common east-west axis of the altars. This is naturally speculation, but it raises one's hopes that the alignment of the twin altars may point westward, in effect, to an important part of the sanctuary. Here, also on a line between the southern room and the altars, the priests may well have stood facing the dawn in the east, as did the terracotta bull found on Altar C, making their obeisance to the deities.

*Other Investigations in the Southern Area* (Trenches 20B2, 20B, 20A. Figs. 1, 4; Pls. 56: d, e, 58: a-c, e)

Toward the beginning of the season, a trench (20B2, 7 m. north-south and 2.80 m. east-west) was laid out over the western half of the round building (D) which had been discovered and partially excavated in 1977.<sup>56</sup> The aims were to excavate another quarter of the building's interior and also to uncover the original Greek surface levels on its north and south sides. Inside the building little was found to clarify further the question of its use. The roofing, if any ever existed, remains a problem, for the few rooftiles found within the building were quite fragmentary and do not correspond to the type suitable for a round structure. Excavation directly to the north led to a flat outside area (at ca. +6.83 m.) underlying an accumulation of fill up against which Building B had been constructed (B is later than D). This surface probably corresponded to the original level north of D after the latter had been built.<sup>57</sup> It would be worthwhile in the future to expand further to the north here in case there may be a retaining wall used during an earlier phase of the sanctuary, for it is curious that no trace of what might be termed a *temenos* wall has yet been discovered.

East of the round building, another trench (20B, 3 m. north-south by 5 m. east-west) was laid out with the intention of locating any structure of Greek date that may have been here. No new structures of this time were found, however, although on the west there were a number of large slabs (a pavement?) with an accumulation

<sup>55</sup> This room was referred to as Building G in our previous report, a designation now no longer being used since we are assuredly dealing with a single structure.

<sup>56</sup> *Kommos, 1977*, pp. 134-136.

<sup>57</sup> The two foundation courses were set below this point.



of numerous broken 4th-century B.C. cups upon them. Digging next to the two foundation courses of the round building (bottom at +6.49 m.) was rewarding, nevertheless, for within the fill, which contained sherds chiefly of Archaic and Orientalizing styles, was a 4th-century B.C. sherd (C 1514) which may help indicate the time at which the round building was constructed. This fill may have been brought in from elsewhere to raise the general level.

The western half of this same trench was then continued down as a sounding into underlying prehistoric levels until bedrock was reached over three meters below (at +3.58m.). This sounding turned out to be an extremely fruitful one, for amongst a tangle of confused rubble and confining walls was a great deal of pottery of various types not hitherto found at Kommos in such abundance, and deposited in a fairly clear stratigraphic succession. The ceramic types represented were EM III / MM IA, MM IA / MM IB, MM II and MM III. What appear presently to be two floor deposits (Pl. 56: d, e for a selection of the pottery) were found at *ca.* +5.40 m. (the upper) and *ca.* +4.45 m. (the lower), respectively. A few whole vessels (e. g. C 1161 from the lower deposit, Pl. 58: b) were recovered. Besides the pottery there was a finely painted terracotta head of a woman (C 1156, Pl. 58: a) of a type known from the peak sanctuary at Petsofa in eastern Crete.<sup>58</sup> Terracotta flowers, painted white and no doubt originally used as plastic decoration on Kamares-style vases, are also beginning to appear (Pl. 58: c).

The first trench in the southern area in 1978 (20A, 6.5 m. north-south by 6 m. east-west, Figs. 1, 4, Pl. 58: e) was set out over Building E, discovered but left unexcavated in 1977.<sup>59</sup> As uncovered, the northern room of E is almost square (2.8 m. north-south by 2.68 m. east-west), with walls averaging (except for the southern wall) 0.45 m. thick, and with slab masonry similar to that of Greek buildings D and H. On its northeast side there is a small pavement of slabs, the purpose of which is not clear. The southern wall (a) is the earliest and belongs to an earlier building entered by means of a doorway on the east (b). This earlier structure extends to the southeast under the unexcavated earth and sand accumulation, beyond our present property line.

The only entrance to the square addition described was through a break in its southern wall (a), created simply by removing blocks from the pre-existing wall. The addition appears to be late, perhaps constituting the latest construction on the Kommos site (2nd to 1st centuries B.C.) to judge from the little pottery found on the floor, which was discovered (as in the case in Building B) to have been covered partly by a layer of fallen rooftiles over which a rough, upper floor had been set. At this point a semicircular structure (c) of unknown purpose (an animal's pen?) was built in the room's northwest corner. Originally this compartment could be entered through a narrow gap (d) but the gap was subsequently blocked. Later the addition

<sup>58</sup> For a likeness see J. L. Myres, "Excavations at Palaikastro," *BSA* 9, 1902-1903, pl. XI: 18. They are similar in date (early MM).

<sup>59</sup> *Kommos*, 1977, p. 133.

(and perhaps all of E) was abandoned, perhaps in the 1st century B.C. Unfortunately, too little is yet known about E to suggest its function, but its significant distance from the sanctuary court at least suggests that there may be no direct connection between it and cult activities.

## THE HISTORICAL CONTEXTS

### *Prehistoric Minoan Levels*

As the excavation progresses we are in a fortunate and sometimes exciting position to watch a substantial part of the ancient Minoan town, probably over 20,000 sq. m. in its entirety, emerge. The situation, however, is one in which limited excavation time, the complex methodologies involved, and available finances automatically restrict the amount of investigation that can be achieved on such a large site. Thus we have neither the intention nor the means to expose the entire plan. Yet we can nevertheless determine much of its character in a few places where individual buildings can be excavated completely and their predecessors can be studied in some detail.

At present on the hilltop, for instance, we have identified five houses that should give us an idea of the character of the town at that point. Although earlier MM walls were to some extent re-used, there is evidence of further building both in the LM I and to a lesser degree in the LM III periods. In LM III the "remodeling" consisted mainly of subdividing earlier spaces rather than expanding through independent major building. We do not know when this subdivision began, nor how widespread this practice became, but it is quite evident in certain cases. The area affected mainly as a result of this tendency is that shown in Fig. 2c, to the point that the original house plans are no longer recognizable. Also, because of the abundance of LM III remains, the LM I occupation is at the moment one of the least well represented at Kommos.

It is our hope that future excavation below this upper LM III occupation layer will fill some of this gap, especially in the North House area which we already know overlies a building of earlier but still of LM I date. Further excavation in the MM storerooms south of this house and in the buildings on the hillside may also help to determine what may have brought about their abandonment and provide a series of ceramic sequences which can eventually be correlated.

The question of domestic economy also deserves continuing attention. At the moment, the more abundant LM III remains of the final period of occupation are the most obvious, but evidence from earlier periods is also accumulating. A study of coarse-ware shapes used particularly for cooking is already under way, and analyses of bone, carbonized materials, and shells proceed as well, as does the study of the numerous stone tools often found on floors, sometimes near where they were last used. As these studies proceed, unexpected patterns may emerge. One such pattern is now becoming apparent according to which each house (or dwelling unit) had a court, and perhaps even a garden as in the case of the Oblique Building. Then, unlike earlier

times in Crete when most of the cooking was apparently done on braziers or portable hearths,<sup>60</sup> at Kommos fixed hearths are becoming standard household equipment in LM III houses. In a number of cases (as for instance in the North House, the House of the Wine Press, and the LM house on the Central Hillside), slab enclosures and potstands have appeared not far from the hearths. The significance of these unusual arrangements must be investigated carefully in the future.

### *The Greek Sanctuary*

While recent discoveries have left essentially unchanged the chronological development of the sanctuary proposed earlier,<sup>61</sup> they have enhanced our impression of its complexity and size through the discovery of the new eastern altar (H) and the clearing of the northern room of Building A. The addition of the altar complicates the situation in an interesting way, for now we have two parallel altars presumably used at the same time<sup>62</sup> and perhaps for worship of dual deities. The relation of the altars to one another in plan is also suggestive, for if one bisects the primary stages of each (as we presently understand their structural history) with an east-west line, this line passes on the west to the south of the excavated room in Building A and close to where the entrance to the adjoining room should be.<sup>63</sup> Moreover, measurement indicates that the altars were not laid out on the same axis as the later buildings A and B. It is quite possible, therefore, that altars C and H were originally set in relation to a building west of them, and that Building A replaced it, perhaps even incorporating it into its structure.

The siting of an altar east of a building is common practice in Greek sanctuaries. Of course, the implied line of sight here over the altars is still hypothetical but it may be connected with the off-center orientation of the doorway leading into the round building (D). By such an arrangement a person standing in the center of D could look, not far west of Altar C, to where the officiating priests might have stood during a ceremony.

A large room, sometimes with one or more wall benches and occasionally with a rectangular central hearth, is not unknown in Crete. Examples date from the LM through the Hellenistic periods and are found in temples (LM through Archaic, generally),<sup>64</sup> Hellenistic houses,<sup>65</sup> and what have been identified as Hellenistic pry-

<sup>60</sup> "No built fireplaces for cooking have been found in the service quarters of the palaces or houses." J. W. Graham, *The Palaces of Crete*, Princeton 1962, p. 215.

<sup>61</sup> *Kommos*, 1977, pp. 149-150.

<sup>62</sup> Even if the altars had been founded at different times (see description of H above).

<sup>63</sup> If the entrance were to be at this point, this "southern" room would be considerably larger than the room to the north of it. Much of the property within which the former lies, unfortunately, is presently outside the line of expropriation.

<sup>64</sup> For general references to comparative material on Crete and on the Mainland (much of it earlier), see H. Drerup, *Griechische Baukunst in geometrischer Zeit*, *Archaeologia Homerica* II, Göttingen 1969, esp. pp. 5ff., with plans of the Dreros and Kavousi temples as well as the temple of Hera Limenia at Perachora and that of Apollo Pythios at Asine. Banti also studied structures

taneaia.<sup>66</sup> The combination of a continuous wall bench, however, similar to that at Kommos, with a large built hearth, has so far been reported from only two sites: in the "house" in the northwest court at Phaistos and in the Prytaneion at Lato.

At the former the room is one of five preserved, set about a paved corridor (court?) in the large paved court northeast of the Minoan palace at Phaistos.<sup>67</sup> The room itself is 4.20 m. north-south by 6.20 m. east-west, with a continuous wall bench *ca.* 0.50 m. wide (est.) running around the interior except along the south, where there is a substantial opening for the doorway. A rectangular hearth of slabs, burnt by fire, was set a bit south of the room's longitudinal axis, with bases for wooden columns to the west and east. This room has been interpreted as a house but the presence of a continuous bench may suggest a place of assembly where more people met than those in the average family.

At Lato the room concerned is the western of two large ones, these (and an auxiliary room connected with each) forming what has generally been interpreted as the Prytaneion of the surrounding town of Lato.<sup>68</sup> The room on the west is 6.30/6.40 m. north-south and 8.20/8.35 m. east-west, with what is probably a hearth 1.30 by 1.88/2.00 m. set on axis. Except where there are entrances (on the north and east) there is a stepped bench, *ca.* 1.40 m. wide, around the four sides of the room, upon

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similar to the LM shrine discovered at Hagia Triadha (Luisa Banti, in "I culti minoici e greci di Hagia Triadha [Creta]," *Annuario* 19-21, 1941-1943, esp. pp. 40-48 and fig. 27). A large (6.80 by 12 m.) room, part of an Archaic "house-shrine", with a bench 0.40 m. wide and 0.45 m. high encircling most of the interior, has been found recently by K. Lembessi at Afrati (*Δελτ* 24, 1969, pp. 415-418; 25, 1970, pp. 455-460).

<sup>65</sup> For room plans in houses in some ways comparable to that of the northern room of Building A at Kommos see footnote 67 below (the house in the northwestern court at Phaistos). Also at Phaistos, a Hellenistic house, further south (6.20 by 8.00 m., with a rectangular hearth and very narrow bench, in D. Levi, *Annuario* n.s. 27-28, 1965-1966, p. 381 and fig. 77, also pl. IV; see as well Doro Levi, "Un pithos iscritto da Festòs," *ΚρητΧρον* 21, 1969, pp. 153-176). For hearths that apparently double as altars see Constantine Yavis, *op. cit.* (footnote 41 above), pp. 56-62, 226. These are generally pre-Hellenistic even though the hearth form remains essentially unchanged later, as in the hearths within the Hellenistic houses at Lato (Vanna Hadjimichali, "Recherches à Latô, III, Maisons," *BCH* 95, 1971, pp. 167-222, esp. p. 178, fig. 9 [House D], p. 180, fig. 11 [House E], and hearths in the two Prytaneion houses there, fig. 12, p. 182). See also the impluvium (actually a hearth ?) in a house at Praisos (*BSA* 8, 1901-1902, pl. XI).

<sup>66</sup> Two buildings on Crete have been identified as prytaneia. That excavated by Stylianos Alexiou is at Hagia Pelagia, a large Hellenistic building (*ca.* 15 m. long by 6 m. wide) without interior bench but with three hearths (one of an earlier period) set axially (S. Alexiou in *AAA* 5, 1972, pp. 235f.; *Δελτ* 27, 1972, p. 620; *ΚρητΧρον* 26, 1974, p. 33; *Δελτ* 30, 1975 [forthcoming]). For the Prytaneion at Lato, see footnote 68 below.

<sup>67</sup> *MonAnt* 14, 1904, p. 349, fig. 14; *Bollettino d'Arte* 27-28, 1933-1934, p. 480, fig. 16; Luigi Pernier and Luisa Banti, *Guida degli scavi italiani in Creta*, Rome 1937, p. 64. (The hearth is not indicated in the plans.)

<sup>68</sup> For the Prytaneion at Lato see J. Demargne, "Fouilles à Latô en Crète, 1899-1900 (1)," *BCH* 27, 1903, pp. 206-231 and pl. IV-V (plan). For a detailed reconsideration of the building, with an updated bibliography and new plans and photographs, see Pierre Ducrey and Olivier Picard, "Recherches à Latô, V, Le Prytanée," *BCH* 96, 1972, pp. 567-592. See also now Stephen Miller, *The Prytaneion, Its Function and Architectural Form*, Berkeley 1978.

which some seven or eight diners might recline. As restored, the separate couches would have been some 2.00 to 2.10 m. in length.<sup>69</sup> The structure is now dated to the end of the 4th or beginning of the 3rd century B.C., and may well be the banquet hall (the *hestiatorion*) of the *kosmoi*, the chief magistrates of the town.<sup>70</sup>

Thus the building at Kommos, aside from any superficial contrast afforded by its large size, is part of a Hellenistic tradition of a hearth / bench arrangement which has roots in the more distant past. A basic distinction, however, is that as far as we can tell at the moment, the building at Kommos is not, as are those at Lato and Phaistos, part of a thriving civic center and thus the gatherings within it may have been of a different nature. Its setting at Kommos adjacent to a court with altars certainly has religious undertones. Whether it is a prytaneion or a room of a more strictly religious nature could only be decided when its wider architectural context is better known. Equally rash would be the assumption that here we may have a center for eating communal meals (*syssitia*) provided in the Cretan *andreion* (otherwise *koimeterion*), where unmarried youths and guests would often dine and sleep.<sup>71</sup> If sleeping was involved, however, we might also think in terms of a cult comparable to that of Asklepios. In any case the very scale of the facilities provided suggests that both this room and the sanctuary in general must have been regularly used by large numbers of people, participants in the civic or religious calendars or both. Further consideration and excavation may throw more light on the issue.

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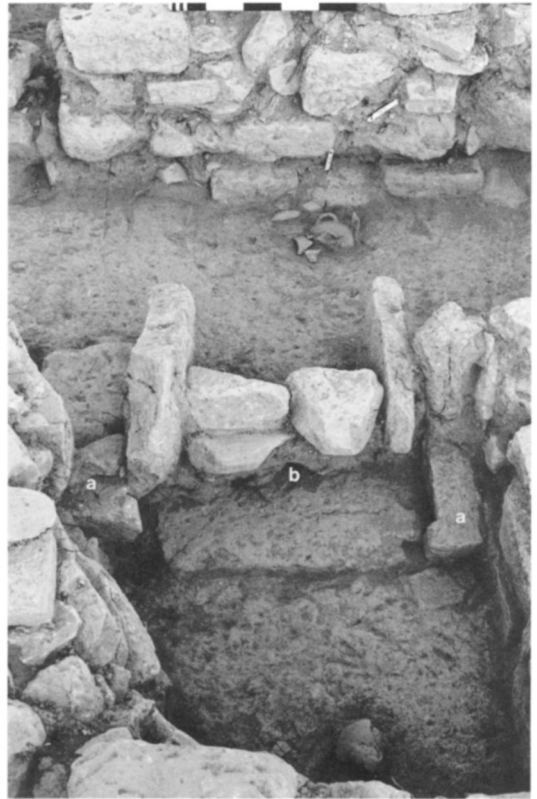
<sup>69</sup> Ducrey and Picard, *op. cit.*, p. 579, note 19. Miller, however, would restore 11 smaller couches (0.85 by 1.85 m.), *op. cit.*, p. 82 and fig. 5.

<sup>70</sup> Ducrey and Picard, *op. cit.* (footnote 68 above), pp. 588-591; also P. Ducrey, "Les édifices civiques de Latô," lecture given at the International Cretological Congress in Herakleion in 1976 (forthcoming).

<sup>71</sup> These institutions are described in some detail in R. F. Willetts, *Aristocratic Society in Ancient Crete*, London 1955, pp. 18ff. and p. 203.



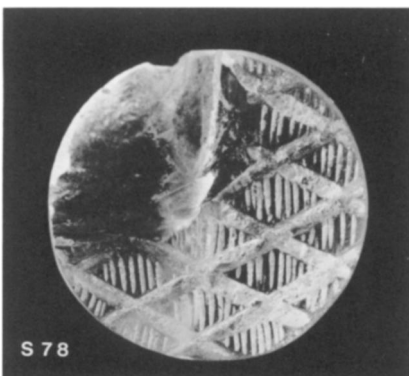
a. General view of site after Season III, from southeast



b. Space N 17b, from east. Slab enclosure set above door-jamb bases (a) and threshold (b)



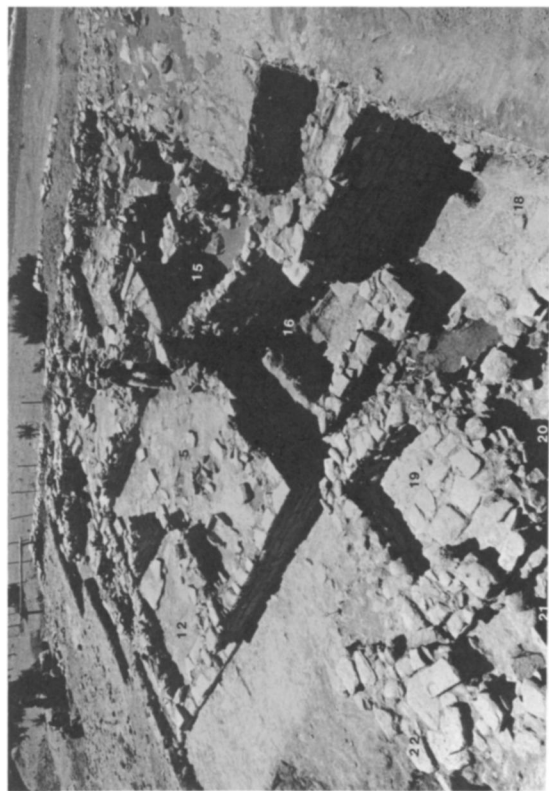
c. View of hilltop from north toward end of Season III



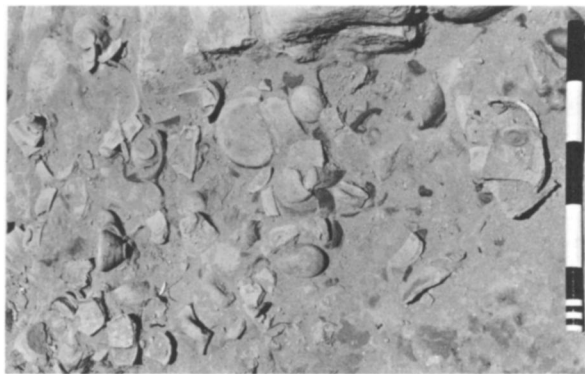
d. Chipped rock-crystal seal, engraved decoration. Space N 16. Scale 2.5:1



e. Middle Minoan storeroom with slab floor, from south. One pithos within another; bridge-spouted vase in corner



a. Central Hillside area from northeast. LM building (center) set over MM structures (right foreground)



d. Portion of post-Kamares deposit, from south. Space 16



e. Cup (C 1530), jug (C 1529), stand (C 1527). Space 17



b. Space 5 in LM building, from northwest. Slab seats (a,b), potstand (c), hearths (d,e)



c. Slab enclosure, cooking pot *in situ*, from west. Space 5

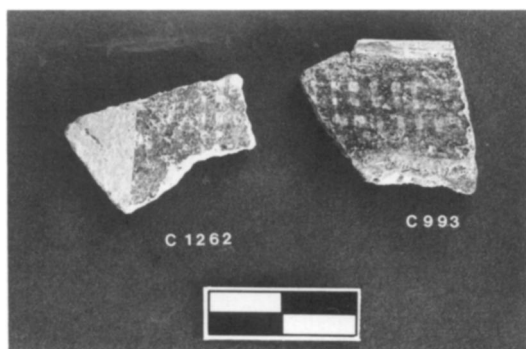


f. Kernos-stand *in situ*, from south. Space 17

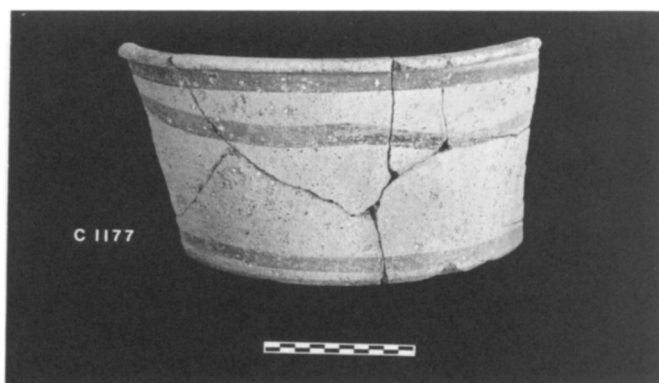
# Central Hillside Area

JOSEPH W. SHAW: EXCAVATIONS AT KOMMOS (CRETE) DURING 1978

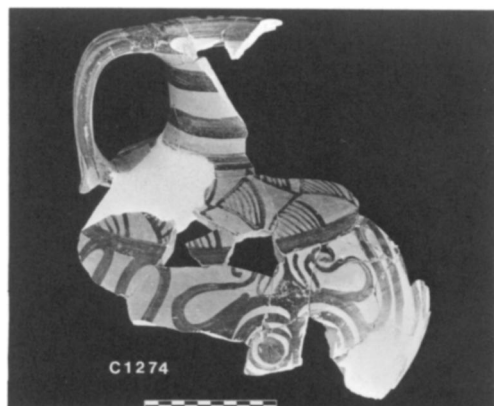




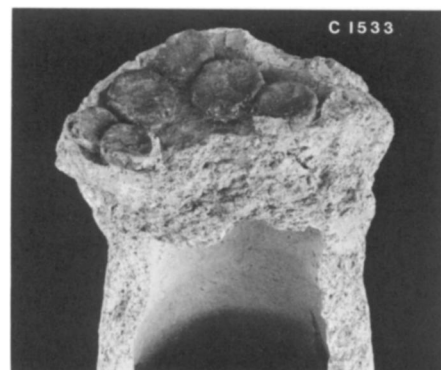
a. Cypriotde White Slip sherds. Trenches 19B and 19A, respectively



b. Fragmentary basin found on floor. Space 5, Central Hillside area



c. LM IIIB amphora with octopus and bivalve decoration. Space O 12, Hilltop houses



d. Stone vase from lower Kamares deposit. Space 17, Central Hillside area

e. Detail of top of fragmentary kernos-stand



f. Kernos-stand. Space 17, Central Hillside area



g. Interior and exterior of Kamares bowl. Space 17, Central Hillside area

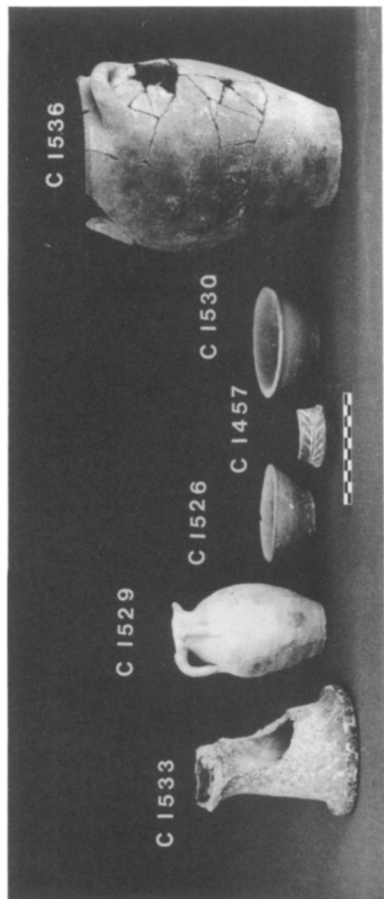




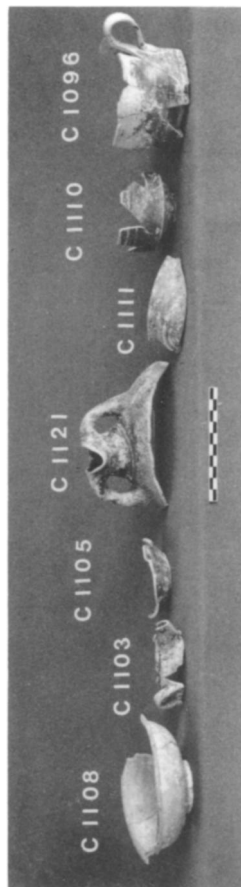
a. Trench 19A from south. MM building (a), upper LM structure (b). Central Hillside area



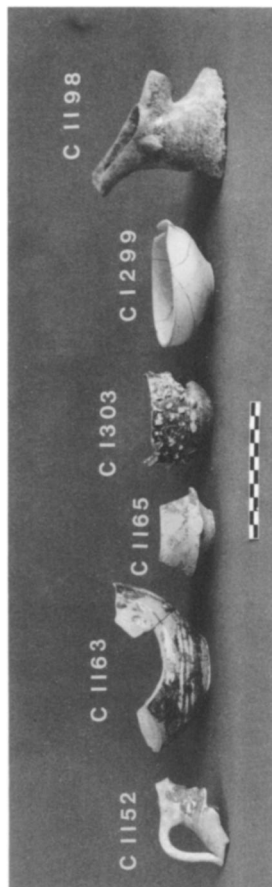
c. Trench 23B from east. Corner platform (b) in LM III room, late wall (a), modern well (c). Central Hillside area



b. Selected items from lower Kamares deposit. Spaces 16 and 17, Central Hillside area



d. Pottery from upper "floor." Sounding east of round building (D)



e. Pottery from lower "floor." Sounding east of round building (D)

Greek Sanctuary

JOSEPH W. SHAW: EXCAVATIONS AT KOMMOS (CRETE) DURING 1978



a. View from east. Modern wall on far left



b. Eastern altar (H) just after sand clearing, from northeast



c. View from northeast. Modern wall in background



e. Hearth, northern room of Building A, from east

### Greek Sanctuary



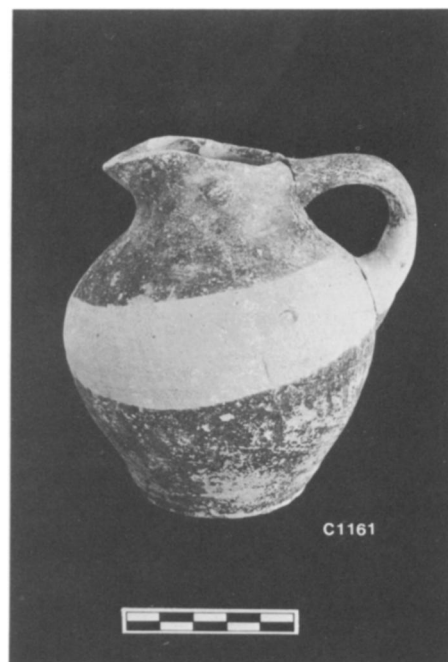
d. Eastern altar (H), northern end, from west



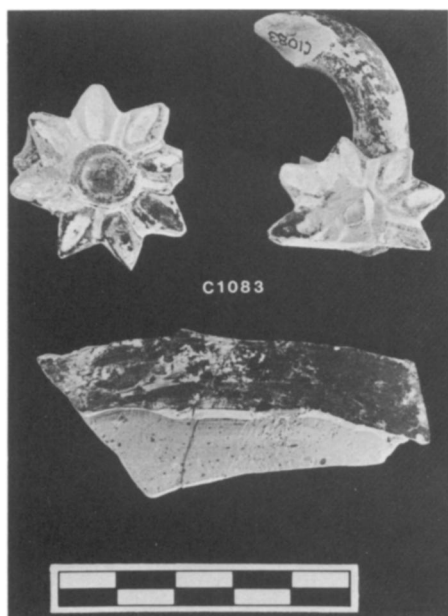
f. Northern room, Building A, from east. Stone packing within hearth and loose slabs around it partially removed



a. Terracotta head of woman. Sounding east of round building (D)



b. Jug. Sounding east of round building (D)



c. Terracotta flowers and rim fragment. Sounding east of round building (D)



d. Eastern altar (H), northern end, from northeast



e. Building E, northern addition, from southeast

# Greek Sanctuary