EXCAVATIONS AT KOMMOS (CRETE) DURING 1982–1983

(Plates 49-60)

Summary

With the operations during 1982–1983, major excavation of the Middle Minoan houses on the hillside was terminated. In the area of the Greek Sanctuary to the south, the major east—west Minoan road, presumably leading from Kommos on the Libyan Sea to the inland palatial center of Phaistos and further, was traced some 60 more meters inland. Bordering the road on the south are Late Minoan buildings which share an ashlar façade of unusually monumental proportions. The first found, "J", lies next to the sea and may be related in function to the activities of the adjacent harbor; perhaps half of the building has been lost to the sea. East of J is "T", which is at least 50 meters long (east to west). Although the over-all plan of T has yet to be revealed, we know that on the north side it consisted of a long colonnade facing south upon a large paved court. The proportions and layout of the two buildings suggest that they were both civic in character.

URING 1982, our longest season (29 June—15 September), only two trenches (47, 48) were excavated and those at the end of the summer (9–30 August). A major effort

¹ The excavation is being conducted by the University of Toronto and the Royal Ontario Museum under the auspices of the American School of Classical Studies at Athens, with the cooperation of the Greek Archaeological Service. Financial support during the two-year period was provided by the Social Sciences and Humanities Research Council of Canada (Grants 82-0042-X1, -X2), by an anonymous donor through the University of Toronto, and by the Royal Ontario Museum as well as the SCM Corporation of New York. Keuffel and Esser of Canada, Inc. provided office equipment, and Kodak Canada, Ltd. supplied the requisite film.

Full-time staff during 1982 (*) and 1983 (+) consisted of the Director, University of Toronto and the Royal Ontario Museum; Professor Philip Betancourt (*+), Temple University; Professor Maria C. Shaw (*+), Scarborough College, University of Toronto; Professor Livingston V. Watrous (*+), the State University of New York at Buffalo; Professor James C. Wright (*+), Bryn Mawr College. Also present were the following former or present students at the University of Toronto: Giuliana Bianco (+), excavation architect and artist, Lucia Nixon (*), now University of Cambridge, Julia Pfaff (*), Jacqueline Phillips (+), Steven Shubert (*+), and Janet Tenody (+). M. Shaw and Shubert worked as trenchmasters, as did Elizabeth Fisher (+), University of Minnesota, Guy Hedreen (+), Bryn Mawr College, and Elizabeth McGowan (+), Institute of Fine Arts, New York University. George Beladakis was again foreman of workmen from Pitsidia.

Major contributions were made during the summers by Katherine A. Schwab (*), Institute of Fine Arts, New York University, and Deborah Harlan (+), University of Pennsylvania, both in cataloguing and management of the work- and storerooms. Peter Callaghan (*+), the British Museum, dealt with Iron Age pottery, while Betancourt, Watrous, and Dr. Barbara Hayden (+), University of Pennsylvania, worked with Minoan pottery. Dr. Harriet Blitzer (*+) studied bone, metal, and stone tools; David Reese (*), bone and shell; Mary Dabney (*+), Columbia University, loomweights and other artifacts. McGowan (*) and Tenody (+) helped as assistant cataloguers. Harlan (*), Hedreen (*), Pfaff (*), Phillips (+), and Eric Silverman (+), College Year Abroad, drew pottery profiles. Joseph Clarke (*+) made object drawings. Catherine Sease (*+), formerly the Metropolitan Museum of Art, and Lynn Grant (+), London Institute of Archaeology, both worked in conservation, Taylor Dabney (*) and Timothy DeVinney (+) in photography. During both years, Phillips worked as Kommos Research Assistant in Toronto.

Periods of study in Pitsidia when excavation was not taking place were spent in 1982 by Dr. Blitzer and Professor Watrous, as well as by Professors Jennifer and Thomas Shay and, in 1983, by Professor Wright.

Mary Betancourt's (*) legendary shopping missions to Mires were invaluable; John Betancourt (*) and Alexander and Robin Shaw (*+) gave help at intervals.

To all the above, and to many others, I am deeply indebted.

Figures 1 and 3-6 for this report were made by Giuliana Bianco, Figures 2 and 6 by Joseph W. Shaw

was undertaken during the study season to update our records (e.g. cataloguing) and to prepare material, especially pottery, for study and publication.² During the 1982/83 academic year as Special Research Fellow at the American School, the author also visited Crete; the small bronze relief of Pegasos (part of a buckle?) in Plate 50:e was noticed on a walk in the area of Survey Site 19³ at Kommos. The 1983 season was a normal excavation season (20 June—16 August), although, as in 1982, somewhat restricted in duration by the conditions of the permit.⁴

THE HILLTOP (Trench 47B; Pl. 50:a-c)

In order to prepare the Minoan houses at the top of the northern hill for publication, the southwestern corner of Court 2, in front of the House of the Press, was cleared, revealing a slab platform upon which had probably once rested the large mortar found lying on its side near by (Pl. 50:a; for location, see *Kommos*, 1978, fig. 2c). In the northwestern corner of the same court a sounding was made to clarify aspects of the chronology of the immediate area. The sounding (3.40 m. east—west by 2.70 m. north—south) penetrated almost a meter down to expose a small room (Pl. 50:b) of Middle Minoan (MM) III date set into what appeared to be a pocket in the bedrock. This room is probably only one of a number that extend below the upper Late Minoan (LM) I–III house remains. Within the very soft fill below the hard-packed court floor was MM III—LM IA material including a large terracotta lamp with stand (Pl. 50:c), a nippled ewer (C 6138), and a partially preserved Kamares cup with exquisite floral decoration (C 6127).

THE CENTRAL HILLSIDE

(Trenches 48A and A1; Fig. 1, Pls. 49:b, c, 51:a-e)

During past seasons we had cleared on the Central Hillside a portion of a north-south road (MM-LM) as well as a house with six or more rooms (LM I—LM III) on the east side of

and Giuliana Bianco. Object photographs are by Taylor Dabney and Timothy DeVinney, except Plate 54:f by Catherine Sease; site photographs are by the author, except Plate 60:e by John Gifford.

² For preliminary reports see Hesperia 46, 1977, pp. 199–240 (= Kommos, 1976); 47, 1978, pp. 111–170 (= Kommos, 1977); 48, 1979, pp. 145–173 (= Kommos, 1978); 49, 1980, pp. 207–250 (= Kommos, 1979); 50, 1981, pp. 211–251 (= Kommos, 1980); 51, 1982, pp. 164–195 (= Kommos, 1981). See also J. W. Shaw, "On the Road, in Crete," Royal Ontario Museum Archaeological Newsletter, no. 207, August 1982 and "A New Colonnade discovered at Kommos," in the same periodical, ser. 2, no. 2, May 1984; idem, "The Development of Minoan Orthostates," AJA 87, 1983, pp. 213–216 and "Minoan Kommos: the Ashlar Town of Ancient Crete," Rotunda 17.1, 1984, pp. 24–33; idem with H. Blitzer, "Stone Weight Anchors from Kommos, Crete," IJNA 12, 1983, pp. 91–100; and M. C. Shaw, "Two Cups with Incised Decoration from Kommos, Crete," AJA 87, 1983, pp. 443–452. J. W. Shaw, "A 'Palatial' Stoa at Kommos" is forthcoming in the Acta of the conference of the Swedish School of Archaeology in Athens concerning Minoan palaces.

The following special abbreviation will be used:

MAMAT = J. W. Shaw, Minoan Architecture: Materials and Techniques (ASAtene 33, 1971), Rome 1973 "Kouloura", southeast of Pitsidia.

⁴ Study for publication could still continue, however. At present we are planning three volumes:

I The Kommos Region and the Minoan Hilltop and Hillside Houses

II The Minoan Pottery

III The Southern Hillside: The Minoan Buildings and the Greek Sanctuary

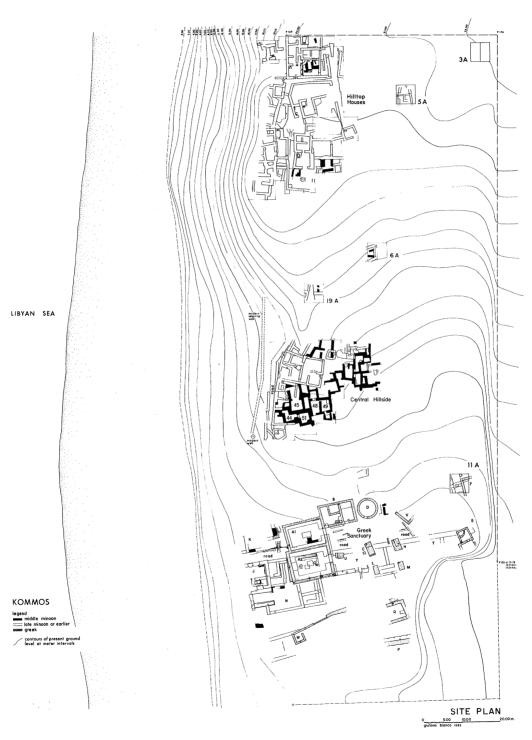


Fig. 1. Kommos, general site plan, 1983

the road and entered from it. A small outbuilding northeast of the house may have been connected with an LM III house, much eroded, further east. These LM structures had been built upon a warren of MM rooms which has in our past reports been dubbed "The House of the Rhyta". The indications were that the rooms continued on all sides. Excavation to the north was restricted, however, by superposed LM buildings, while erosion of the steep eastern slope had destroyed many floors and walls. On the south, however, we were free to excavate since the fill was deep and, aside from a few superficial LM III walls, there was no evidence of post-MM III use.

Two trenches (48A and A1) were excavated east of Room 44 and along the southern borders of Rooms 45, 46, 48, and 49 (cf. Kommos, 1981, pp. 170-175, fig. 3); the results significantly improved our understanding of the character of the MM rooms as well as the spread of MM (and LM) occupation on this part of the hillside. We found, for instance, that corridorlike Room 44 connected on the east with new Room 51 (Fig. 1, Pl. 51:a) which measures 2.24 m. (east-west) by 2.58 m. (north-south). Entrance to 51 seems to have been from the west only, for there is, perhaps curiously, no evidence for doorways on other sides. Room 51 was found to have had two dirt floors. On the upper was an MM III pottery deposit (Pl. 51:b, c) under wall collapse probably precipitated by an earthquake which, as we have suggested in the past, destroyed the MM III buildings at Kommos. Once more as in other rooms of this "house" we found a rhyton (C 6045, alabastron shaped), but the majority of the vessels (bridge-spouted jars, set upside down; cups; a tripod cooking pot) were more definitely domestic in nature.⁵ Save for a number of large sherds, few objects were found on the lower, MM II-III floor, but there was a small jug of Middle Cypriot III ware (Pl. 49:b, c) that is the oldest non-Cretan find at Kommos and one of the earliest Cypriot imports reported up to now from the area of the Aegean. The jug is approximately two-thirds complete, with a height of 0.13 m. and maximum diameter of 0.087 m. It may be assigned, Professor Betancourt has noted, to White Painted IV Ware, specifically the Cross Line Style. The domestic nature of the jug's context at Kommos is not surprising, for there are numerous instances of imported Cypriot pottery found in connection with the Minoan houses, e.g. the Shaved-ware jug in Plate 50:d, but usually only sherds rather than entire vessels, and the contexts are generally Late Minoan.

East of Room 51 we found the southern wall of Rooms 48 and 49, as we had hoped. The two rooms interconnected at the south end of their common wall; at a later point the doorway was blocked. Room 49 had also connected with the still unexcavated Room 50 on the east; the doorway there is also blocked. Both 48 and 49, we found, had doorways on the south, that from 48 opening out onto a fine slab pavement (Pl. 51:e), no doubt a pleasant spot that could have been used during sunny but chilly winter days. The door from 49 opened onto a partly enclosed (roofed?) space that was bordered on the east and west by

⁵ For the use of such rhyta see now Robert Koehl, "The Function of Aegean Bronze Age Rhyta," pp. 179–187 in Sanctuaries and Cults in the Aegean Bronze Age, Robin Hägg and Nanno Marinatos, edd., Stockholm 1981.

⁶ See Paul Åstrom, The Swedish Cyprus Expedition, IV, 1B, The Middle Cypriot Bronze Age, Lund 1972, pp. 63-66. For other Cypriot finds from Kommos see Kommos, 1981, p. 193, note 86. For another early Cypriot import, from an MMI-IIB context, see now H. W. Catling and A. MacGillivray, "An Early Cypriot III Vase from the Palace at Knossos," BSA 78, 1983, pp. 1-8.

partition walls, but further excavation on the south is needed before we can understand its exact nature. Just outside the doorway (Pl. 51:d) was a group of conical cups, a minature pitharaki, a lug-handled bowl, a flat clay disk, and other clay objects, perhaps fallen from a wall cupboard during the collapse of the house walls.

Further study of these room groups will be necessary before they can be understood properly. At the moment, however, there is no evidence in the immediate area to show that we are dealing with a building with two storeys, its basement rooms reached by trap doors and ladders, and so it is reasonable to assume that the doorways discovered between the rooms and court probably indicate the only means of circulation. These doorways, along with the double walls found, suggest that we are dealing with a group of rooms that are agglutinative in nature, added on to a core as circumstances made necessary or possible. One suggestion is that Rooms 42, 45, and 46 were first built next to the road, then 44 and 51 were added, and afterwards 48 and 49 were built south of 47 and 25. The lack of walls to the south also shows that this particular room group did not expand further, although another group may begin not far away. Although a brief trial may be made in the future, major excavation in the immediate area is unlikely since the southern border of the MM rooms has been located. We did not find any indication here of an east–west road used during any period. It appears that the Minoan settlement was always restricted at this point, the denser building occurring to the north during MM and LM periods.

THE LOWER HILLSIDE

(Figs. 1-6, Pl. 52:a)

During the years 1977–1980 our investigation of this area in the southern part of the expropriated property was confined largely to the upper, Iron Age levels of the Greek Sanctuary. Thus the photographs taken then of the area (e.g. Kommos, 1980, pl. 49:b) show better than now its appearance during Late Hellenistic times, for now we have excavated below court level in places. During 1980, however, we also initiated major excavation of Bronze Age buildings west of the temples, a process accelerated in 1981 by the complete exposure of what remains of Building J⁷ and by the discovery of the important east–west road leading, presumably, from inland Phaistos to this place on the shore of the Libyan Sea. During the same year, most of the remaining sanctuary structures were cleared.

For some years, accordingly, trenches in the southern area were usually set in with a view to the upper, later, Greek remains. Now that these have generally been dealt with,

⁷ The structures on the south have been labeled with letters of the English alphabet in the order in which they have been found. This practice started when, in 1977, we began to uncover entire buildings which had been covered gradually with sand during the last days and after the desertion of the Greek Sanctuary. Up to now we have assigned letters A through W, with the exception of G, I, O, and S. I and O were not used because they might be confused with roman or arabic numerals. G was used in 1977 for a room to the south of A (cf. *Kommos*, 1977, fig. 7 on p. 130), but later it became clear that the room could be considered a structural part of Building A and was then labeled A2 (or, as far as its role in the sanctuary was concerned, "Temple C"). S has been used to refer to two LM III rooms, one of which runs under Temple C on the south (*Kommos*, 1981, fig. 5 on p. 176). It appears now, however, that the rooms can be included under the general designation "N", formerly reserved for a single room further west. "R", used for a wall found below S, is now being applied as well to a slightly earlier room against which R abuts on the north.

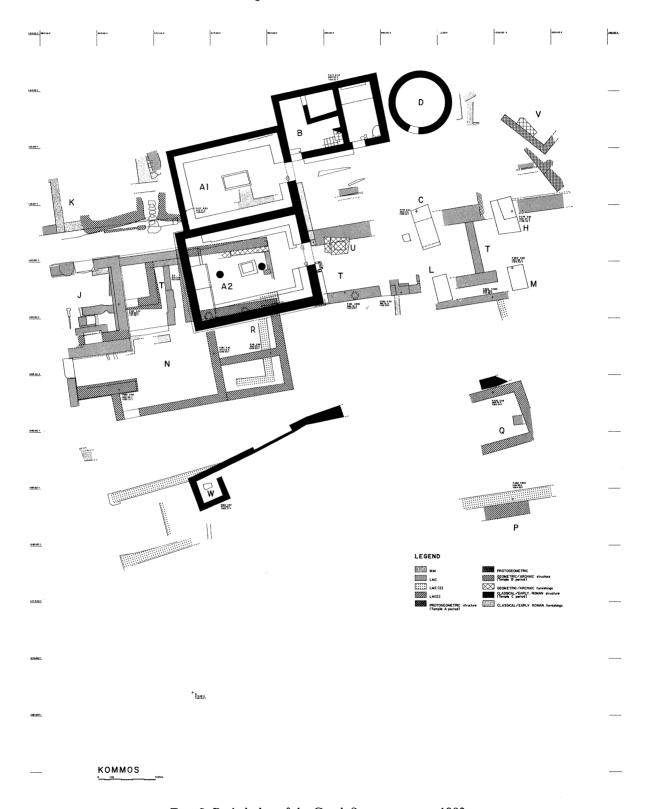


Fig. 2. Period plan of the Greek Sanctuary area, 1983

however, trenches are laid out in such a way as to intercept specific Minoan strata, although care is also taken not to endanger superposed sanctuary structures. Our general goal in this regard is to excavate and consolidate in such a way that Temple C and part of Temple B will remain visible at their higher levels, protected on the west and south by a high retaining wall (Pl. 56:c). To the east, within the sanctuary court, later structures will be supported at the same time that parts of the Minoan building at the lower level will be cleared. At present we expect that two excavation seasons could complete the project undertaken here at Kommos in 1976.

Buildings J and T

The North Façade and the Road (Trenches 47A, 53A, 54A and A2; Figs. 2-4, Pls. 53-55)

In 1981 a trench north and east of Minoan Building J exposed a wide, worn slab pavement bordered on the north by a drain and, on the south, by J's monumental façade (Kommos, 1981, pp. 175–182). On the line of this façade as it continues to the east is a uniquely constructed wall, composed partly of orthostate slabs, that formed the northern façade of an adjoining building which we have dubbed "T". It was clear then that although both T and J were of LM I date, T was somewhat later than J, although how much later still remained to be decided. The crucial evidence for this architectural sequence was T's westernmost orthostate block, which rests upon J's krepidoma. Major questions that could not be answered at the time were whether the "road" was really a road (rather than a paved court) and the size, plan, and nature of T.

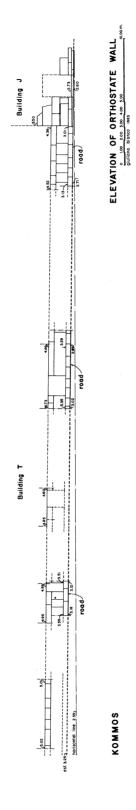
T's northern façade had already partly emerged east of the later temples, immediately below and to either side of a large rectangular altar (U) in front of Temple B,9 and, although still associated with Iron Age pottery in its upper and then only exposed courses, was clearly Minoan (Pl. 53:a). Further excavation in depth was begun in 1982 (Trench 47) and led to the discovery of more Greek remains down to the bottom of the Protogeometric level at + 3.31 m. This level corresponded to the point at which T's ashlar façade of enormous blocks was already almost entirely exposed and a layer of nearly pure sand, with a scattering of LM III sherds, gradually replaced the later accumulation. Within this sand there were a few small stones, a few blocks, a large painted bull's leg (C 6060) of terracotta and, remarkably, a partial cranium of a young human (Bo 45; Pl. 53:b) without any related bones near by. It is worth noting that this meager find constitutes the most complete remains of a human discovered up to now in the Kommos town, an area that was eschewed for burial, as was Minoan custom.

The section of road uncovered in front of the temples (Figs. 3, 4, Pl. 53:f) is about five meters long and is 2.60 m. wide, including the channel of the drain (0.28 m. wide, 0.40 m. deep) that borders it on the north, where there is a rough, slab-built retaining wall holding back a fill of earth, MM rubble, and sherds. The irregular limestone slabs of the pavement vary in size, one of the larger ones being 0.80×0.88 m. None of them was removed in order to inspect its setting, yet the slabs must lie not far above bedrock if one judges from the

⁸ AJA 87, 1983, p. 214, ill. 1.

⁹ The reader is reminded that Temples A, B, and C are phases of Building A2 (see Fig. 2).





situation further west where some slabs were missing. Throughout, the road's pavement slopes down from east to west and from south to north, so as to maximize the runoff of rain water toward the sea.

The section of the wall exposed east of the temples (Pl. 53:f) is in some ways even more massive than that exposed in 1981 on the west. Being further inland and therefore less exposed to the sea and the winds, it is much better preserved. Moreover, the eastern section was protected by later leveling operations east of the temples. The same krepidoma (ca. 0.15 m. wide and 0.30-0.40 m. high) supports the wall along the north and, in the central part of this stretch of the façade (Fig. 3, Pl. 53:f), an enormous rectangular slab (1.40 m. high by 1.52 m. wide by 0.34 m. [average] thick). As found (Fig. 5, Pl. 53:d) this block had jammed between wall blocks on either side after the superstructure that had originally held it in place had collapsed. 10 The superstructure, at least the portion at this part of the long façade, may have fallen to the south within Room 16 (where much stone was found): few wall blocks were recovered directly north of the wall with the exception of a single squared block upon the pavement of the road and another, much larger block, tumbled in the sandy fill at krepidoma level (both visible at rear in Plate 53:f). The latter probably belonged to the upper part of the wall where there is a gap at the appropriate spot.¹¹ If a mass of superstructure had collapsed above the road surface, then it must have been retrieved for re-use or to keep the roadway open.

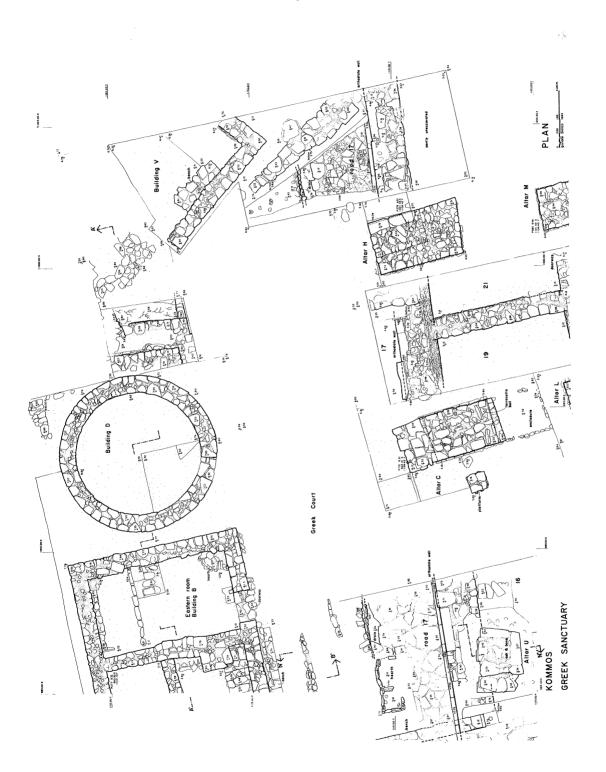
During 1983, when it had become clear that both the road and the monumental façade of T continued eastward beyond the temples, we followed them with trenches along their line, but at only one point could precious excavation time be spared in order to excavate down to the road surface. South of the wall in the first trench we began there, between the later Greek Altars C and H (Pl. 54:b), excavation continued down within two rooms (below, pp. 264–269). Of the four orthostates of the wall found here, one tilts north away from the façade, and it is most likely a slab that is the full height of the wall, with its base resting

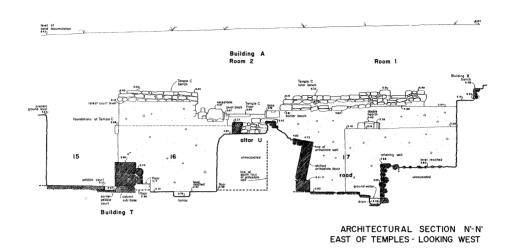
¹⁰ This slab was originally found leaning out to the north (Fig. 5) but was later replaced (Pl. 53:f) with some effort through the help of Mr. Alekos Papadakis of the Archaeological Museum of Herakleion.

¹¹ The block may not have fallen by itself. In the fill here there are no blocks of a superstructure that could have dragged it down when they collapsed to the north. Moreover, the visible end of the block is significantly further west than it would have been if it had fallen down directly from the top of the wall. At the moment I suspect that the block came to rest in its present position during the Protogeometric period, for it is upon LM III fill and within a PG context. It is possible, although the evidence is only circumstantial at the moment, that the block was pried out of its original position and dragged westward at a time when the Minoan road was still partly open and Temple A was being constructed.

Since the road surface then was considerably lower (+3.31 m.) than the first floor of Temple A (+4.19 m.) to the south, it is possible that the block was the first of three steps which led one up out of the "trench" formed by the road, to the platform of collapsed rubble upon which Temple A was erected. At the same time the Minoan wall of orthostates was being used as a base for the northern wall of Temple A, a circumstance vaguely suspected when we first excavated the northeastern corner of the early temples (Kommos, 1980, p. 237, note 81) but now certain. At that time we had noted that the northern wall of A went at one point below its earliest floor level, a phenomenon that one would not expect with such a rough structure unless the wall were actually earlier and in re-use. The levels of the still theoretical approach from the north would be +3.31 m., the top of the fill on the road during the Protogeometric period; +3.76 m., the top of the first step (the larger block in the fill in Plate 53:f); at ca. +4.00 m., the top of a second step still to be found; +4.25 m., the top of the first course of the orthostate wall (here, step three); finally, +4.19 m., the level of the court in front of Temple A.







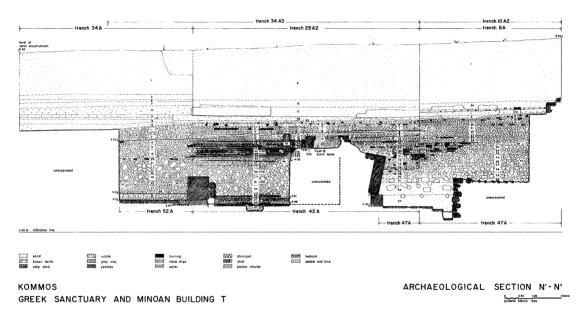


Fig. 5. Architectural and stratigraphic sections of the area east of the Greek temples, looking west

on the krepidoma, as that in Plate 53:f (left). To judge from the tilt of the southern face, the entire wall at this point may lean out over the road as the result of earthquake or of stresses brought about during the building's collapse. A niche, or possibly a window, in the façade (Pl. 54:b, upper left) has not yet been cleared (see below, p. 264). A superficial north—south wall of Archaic date was found in the eastern part of the trench (Pl. 54:a, background).

The second section of the façade exposed for ca. 3.70 m. east of the altars in Trench 54A is of particularly handsome construction (Pl. 55:a-c). One of the blocks is equal to the full height of the wall (1.38 m.), while the others conform to the height of either the first (0.98 m.) or second (0.40 m.) course. One block bears what may be interpreted as a

"mason's mark", a simple cross 0.14 m. high and 0.12 m. wide, engraved roughly into the face of the block (Pl. 55:b). This is the only such mark found so far on the Kommos site, but the same one is known from other Minoan sites. ¹² Such marks are thought to have served to consecrate buildings or perhaps to have identified the group(s) of workmen who originally quarried the blocks, carried them to the building site, or set them in place in the walls. ¹³ At this point the Minoan road is 2.55 m. wide, with the drain along its northern side (0.40 m. wide) cut into what appears to be bedrock (identification is difficult because of the level of the ground water there). As elsewhere the road is paved with limestone slabs and bordered on the north by a low retaining wall of rough stones holding back MM fill. The surface above the level of T's krepidoma seems to have been exposed during much of the early Iron Age. Unlike the situation west of the temples, however, there was no accumulation of blocks above the road. Moreover, a deep layer of sand such as that found further west was not encountered, perhaps owing to the fact that the distance to the shore is greater here.

If we proceed eastward, the next section of the wall with orthostates, 5.65 m. long, consists of a series of seven blocks, all about 0.44 m. tall, forming the upper course of the wall (Pl. 55:f). Beyond this point, Building E, of Late Hellenistic or Early Roman date, prevented us from following the Minoan wall further. To excavate on the other side of E, however, will be difficult because the property line of the excavation lies only some 12 meters beyond the end of that part of the wall already uncovered. Complicating matters are the six-meter-high sand scarp and tall metal fence set upon it: these must first be removed before excavation of the dirt levels below can commence.

As partially excavated, the wall with orthostates is now at least 50 meters long from the northeast corner of Building J to the end of the easternmost trench (Trench 54A2). T's and J's common ashlar façade must have been over 70 meters long at one time, an impressive sight for anyone arriving at or departing from the Kommos area by sea.

While the T/J façade might be said to enclose a series of rooms and court with a common function, the masonry styles of the two buildings nevertheless differ significantly in both scale and concept, showing that they were not designed as a unit. The façade of J approximates isodomic construction with its unusually high, almost equal courses; it has a krepidoma of two steps. T, however, has a single high krepidoma block the top of which is level with the upper step of J's socle. The builders of T did this partly so that T, somewhat later than J, could use the same level for the bottom of the lowest course of the wall of orthostates: the westernmost block actually sits upon the step of J's base course. This being done, however, no effort was made to align the upper courses of ashlar masonry with those of J, for in T there were apparently only two ashlar courses which served as a base for the wall's superstructure. This base, 1.76–1.77 m. in height, was set so as to slope down evenly

¹² For instance, at Knossos (A. Evans, *The Palace of Minos at Knossos*, II, London 1928, p. 327, in the south wing of the palace); at near-by Phaistos (L. Pernier and L. Banti, *Il palazzo minoico di Festòs* II, Rome 1951, p. 26, fig. 7, on blocks alongside the stairway leading down to the entrance of the Late Palace), or at Mallia (O. Pelon, *Le palais de Malia* V, ii, Paris 1980, p. 205 [Études crétoises XXV, 1980], on the incurved altar in Room XVIII, 1, as well as on the south side of the pillar in "granary" No. 2). These references were provided by M. C. Shaw.

¹³ For a summary see MAMAT, pp. 109–111.

some 0.36 m. over the length of the wall that we have uncovered so far (Fig. 3). Many of the ashlar blocks of T, unlike those of J, are cut more like slabs and are set on edge.

Generally, there are two courses in this wall, the first varying from 0.93 m. to 0.94 m., the second from 0.42 m. to 0.44 m. high. Originally it seemed to us that the block the height of two wall courses (Pl. 53:f, left) was a fluke, but now it is clear that the placing of such blocks in the wall was the architect's concept, an idea carried out consistently in order to add to the stylish appearance of the wall but also probably to strengthen it. So far we do not see a pattern in the placement of these high blocks. They do not seem to be set at specific intervals, for instance, nor do they seem to be related to room features in the interior of the building.

Was there an entrance through the façade from the road, as there is in Building J to the west? Possibly, but although there are a few places where such an entrance might be unrecoverable (e.g., below the temples immediately west of Altar C, or east of where we have excavated), we are inclined to believe that T was closed off to direct entry from the road and that, instead, the great court (below, p. 271) could only have been approached from the west, certainly via Building J, or from the south or east.¹⁴

The thickness of the walls of T and the amount of stone found fallen within the rooms south of the façade certainly can support an argument for a second storey (as in J to the west), but additional evidence, especially stairs, must be forthcoming for the case to be a convincing one. Another basic query concerns the manner in which the orthostate façade was carried up above the ashlar courses discovered so far. At this point in our investigation we have noted, for instance, that along the top of the wall east of the temples there is visible a ledge ca. 0.26 m. wide and 0.20 m. high, 15 between the rubble packing of the wall's interior and the northern face of the ashlar wall (e.g. that in Pl. 54:a). Under normal circumstances in other orthostate construction in Crete 16 one would expect that a heavy wooden beam would have been set there and that it would have been attached at intervals to the tops of the blocks by means of wooden tenons set into the beams and anchored into square mortises cut into the stone.

Although no such mortises have been found, the possibility that wooden beams were set on this ledge is strengthened by the presence of plaster, perhaps used to protect the wood from moisture, found in between stones now lying upon this ledge at one point (Pl. 53:e). Presumably the blocks to the right in the illustration had fallen from the wall on the south. If we assume that there was a horizontal timber, its chief function would have been to serve as a base for vertical beams set at intervals. These, in turn, would have supported a half-timber framework within which was set the exterior masonry. Blocks within such frameworks were probably like those found fallen in dense masses within the rooms themselves or visible in the interior walls. If the blocks were of finely squared ashlar, like that found

¹⁴ There is also the question of whether T is really two or more buildings rather than only one. Perhaps we have, for instance, missed the adjoining corners of buildings that share the same ashlar façade. This is most doubtful, however, for not only does the façade seem to be consistent unit, but the plan of T south of the façade, despite the problems of interpretation, belongs to that of a single structure.

¹⁵ West of the temples rubble masonry of probable LM III date was found set evenly along the edge of the ashlar façade (*AJA* 87, 1983, pl. 31, fig. 2).

¹⁶ *MAMAT*, pp. 83–92.

immediately upon the Minoan road shown in Plate 53:f, few have survived as abandoned or as built into later structures.

The Interior Rooms and the Court of Building T (Trenches 50A and A1, 51A and A1, 52A, 53A and A1, 54A and A2a; Figs. 2, 6a-6d; Pls. 54:b-f, 55:f, 56:f, 57:a-e)

Excavation south of T's ashlar façade has begun to expose a series of rooms east of a stoa which faces south upon a large paved court. Further east, beyond Greek Altar H and below alternating layers of sand and earth above a clayish, silty layer with Archaic Greek pottery, a north–south cross wall (Figs. 1, 6a–6d, between Rooms 23 and 24; Pl. 55:f, at a), 0.90 m. wide, was cleared; the stone debris starting at its top is associated with Minoan sherds. Owing to the restricted size of the trench and limited excavation time, only the top of the wall was explored. It is to be noted that this wall is not bonded to the façade of T and that it has, for no reason now clear, a more carefully built face on its eastern side.

This north—south wall has the same relationship to T's northern wall as the wall found between the Greek altars in Trench 53A (Pl. 54:b). The latter also appeared just below Greek levels and was surrounded by masses of stone that had tumbled within the rooms. As we had found in Space 16 to the west, within Trench 42A, removal of this rubble became a major project: each block was lifted out of the trench, to be sent eventually to our stone pile on the northeast, a ready source of wall-building material during the recent excavation seasons.

Above the tops of the walls were LM III sherds, an indication that the area was exposed at this level in that period, but below the wall tops there was no pottery later than LM I, suggesting that this eastern part of Building T had collapsed and been abandoned then or not long afterwards. The walls stand preserved two meters high and were surrounded by dense accumulations of fallen stone which continued down to floor level, except possibly to the north of the wall of orthostates, above the Minoan road, where we did not excavate deeply. Here the northern wall (T's façade) tilts, really bows out to the north, probably as a result of the building's collapse. The wall contained a niche, perhaps a window, visible in Plate 54:b, upper left, on the west, some 0.65 m. high as preserved, its sill ca. 1.64 m. above floor level. The common south wall of Rooms 19 and 21 here is marked in its eleventh course of the southern face with a series of at least three gaps that may have functioned as sockets. The twelfth course of the northern façade of the same wall has at least two gaps which, if they were sockets for scaffolding, indicate a practice that is unusual in Bronze Age Aegean architecture but one commonly reported from later periods, especially Roman. Clear traces of a break in the southern wall, no doubt a doorway, were found in the eastern room ca. 1.02 m. from its southwest corner.

The eastern room (Room 21) contained few artifacts save an occasional conical cup, or a bowl, a few pieces of soapstone, and many charcoal bits in the stony fill, all of which could have come from the upper walls and ceiling or roof of the room. That there had been a ceiling in the area is probable, for (as in the fill of Building J to the west) there were dozens of large chunks of plaster here, many with concave forms created, presumably, when moist

plaster was set upon ceiling beams; 17 some 8.5 kg. of plaster were recovered. The floor of the room, at +3.15 m., is of hard clay (lepidha) with a few bluish seapebbles.

The western room (Room 19), with the same north-south dimension of 4.58 m., was also quite filled with tumbled blocks, but from about a meter above the floor and continuing down to it was a thick earth layer containing more carbon, burnt sherds, and anomalous reddish brown clay lumps which may have derived from mud bricks that formed the upper walls, a construction technique common in all areas of Minoan Crete with the exception of the sites in the Messara. It is probable that the burning took place before the earth was brought into Building T, perhaps for use in an upper floor. We collected from within the fill some 52 kg. of plaster lumps, six times as much as in Room 21. Although the excavated portion of Room 19 is larger than that of Room 21, it is still difficult to account for the disproportionate distribution unless one posits that at least some of the lumps originated outside T.¹⁸

Scattered upon the floor, in no apparent order (Pl. 54:c, d) were a fragment of a stone anchor (S 1544) and a motley group of pottery, with conical, straight-sided, and bell-shaped cups predominating. Some of the conical cups were burned on their interiors, suggesting that they were used as lamps. Other shapes represented, although in fragments, were bowls, tripod cooking vessels, and an oval-mouthed amphora. Two fragmentary imported vessels were also catalogued, one (C 6632) part of an LM I closed vessel and the other (C 6654) a probable stirrup jar that is Knossian. The latter is of particular interest, for part of it joined a fragment from Trench 42A/8:67 to the west, from the floor level of Room 19. This join implies that, as suspected by us earlier, there is a doorway in the wall separating Rooms 19 and 16 (Fig. 4), one which we may never see since it lies directly below the two western altars of the Greek Sanctuary.

Upon the floor of Room 19 but also found¹⁹ in the fill above it and in the Minoan levels south, east, and west of the area where the Greek temples were later built were a number of clay "slabs" (Pl. 54:d, C 6725 and Pl. 56:f), some of which once belonged to large basins

¹⁷ Cf., MAMAT, p. 155 and fig. 186; similar plaster lumps had been found earlier within the filling of Building J. See also the following note here.

18 Presumably the earth found immediately above the floor, continuing up for somewhat less than a meter, reflects the composition of the "covering structure" above the room. If at this point T had only one storey and the flat earthen roof collapsed into the rooms below, then one would expect the roof composition above these two adjoining rooms to be fairly uniform, reflecting the earth dumped and then smoothed out upon a partitionless surface. The visible differences in the fill within the rooms described in the text, however, cannot be attributed to pure chance. First, it does not seem that the burnt earth indicates burning within the room but, rather, that the burning took place elsewhere before the earth fill was brought in with the specific intention of covering Room 19. The most reasonable explanation of the situation, I think, is that the north–south cross wall continued above the "covering structure", and thus the earth brought in from various sources would not tend to become uniformly mixed. The composition of the fill in the lower rooms, therefore, can imply the presence of separate upper rooms and, in this case, a second storey here for Building T.

¹⁹ Specifically, from Trenches 37A, 50A, and 51A on the southwest, 34A2 and 44A on the south, and 42A, 52A, and 53A on the east. Fragments are also reported from the area of the Minoan Hilltop houses (Trenches 15A, 24A, and 30A2) where they possibly reflect home industrial activity. Within T, the greater number (some 31 kg.) came from Trench 53A, beginning from about 1.50 m. above the floor. Only a fifth as much came from Trench 52A, immediately to the west.

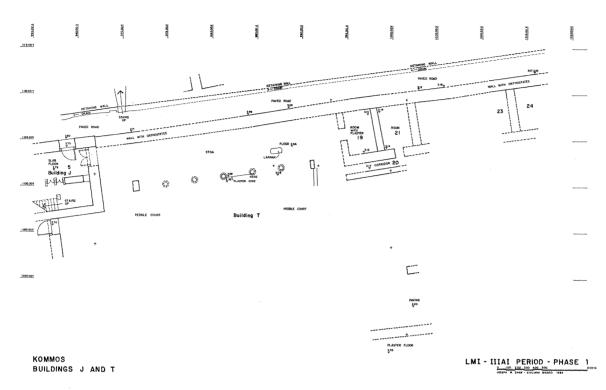


Fig. 6a. Conjectural plan of Minoan Buildings J and T: LM I-IIIA1, Phase 1

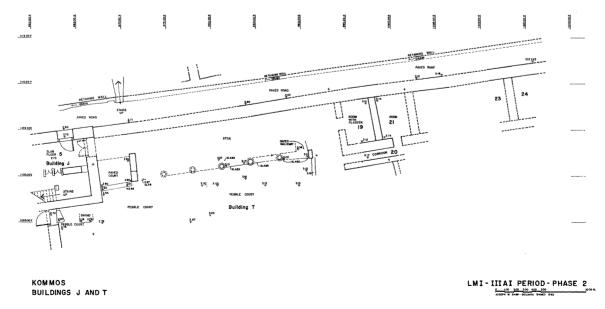


Fig. 6b. Conjectural plan of Minoan Buildings J and T: LM I-IIIA1, Phase 2

LM IIIA2-IIIB PHASE

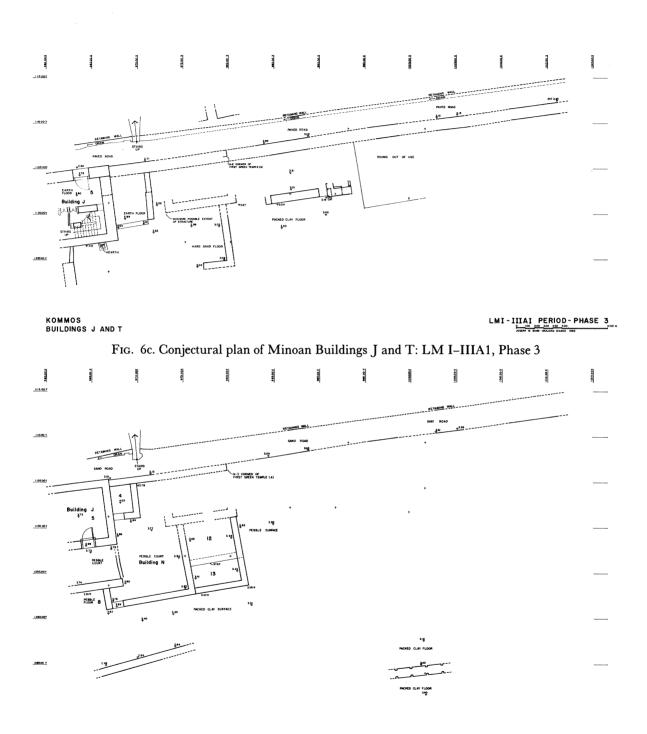


Fig. 6d. Conjectural plan of Minoan Buildings J and T: LM IIIA2-IIIB

KOMMOS BUILDINGS J AND N with low side walls, possibly spouted. The basins were open, with a flat, round base and a slightly convex, low wall rising to a flat or slightly rounded rim; the height of the only complete profile (C 6468; Pl. 56:f) is 0.168 m.²⁰ Four distinct fabrics were noted. The basins have diameters ranging from 0.60 m. to 0.70 m. and are characterized by a buff slip used regularly on their interior, like that used on coarse red cooking ware; some of them (e.g. C 6729) were probably spouted. Some of these thick terracotta fragments, however, are from slabs, the possible function of which might be as hearths (some 10 of the 160 recovered have traces of burning) or, more probably, lids for the basins, a view supported by the corresponding diameter between basins and slabs. Possible uses for the basins include, again, as hearths (the interior of four are burnt) or as basins/vats for household or industrial purposes such as the production of oil, wine, or the dyeing of goods. The fragmentary nature and scattered distribution of the pieces do not now suggest that the pieces reflect work carried out within Building T but, rather, activity in the area, probably near by, from which T's builders brought roof, floor, and, perhaps, wall material. They could even be from the site of T, which was leveled before building began.

The walls of both rooms were plastered. Alongside the bases of each of the east-west walls were accumulations of thin, extremely crumbly bits of plaster painted orange red. On the southern wall and continuing at a high level behind the end of the north-south dividing wall, the plaster was still preserved in situ, indicating that the interior was plastered before the partition wall was set in place. The building of the partition wall after the east-west walls may indicate that the former represents an addition to the main structure; perhaps Rooms 19 and 21 were a single space at one time.

Lying in a multi-colored, layered heap alongside the mid-point of the partition wall in Room 19 were fragments of an attractive fresco (Pl. 54:e, f); this is the second time that high quality, painted stucco work has been found in association with Building T.²¹ These fragments of hard, white plaster with a highly polished surface were painted between string lines with a series of successive bands in a four-color scheme (black, blue, red, white). As worked out,²² the sequence of colors was slightly less than 0.30 m. high. Such bands are common in LM I, where they serve as frames for pictorial paintings,²³ but none of the fragments found in the room so far is marked by designs. The bands may have formed a decorative frieze, perhaps placed at the level of the door lintel. Less than two meters of the frieze was recovered; there is no clear explanation why the remainder of the frieze was not found if it was placed, as we presume, on the western face of the partition wall, where it would have been visible through a doorway from the stoa.

South of Rooms 19 and 21 is an east-west corridor (Room 20), 0.96 m. wide, which allowed one to enter Room 21 via its doorway and, also, to gain access to any rooms to the

²⁰ A special study of these fragments, upon which this account is based, was prepared by Dr. Barbara Hayden.

²¹ For those in Room 11 to the west, see Kommos, 1981, p. 182.

²² As in Plate 54:f, from the top: black, blue, black, white, red, white, red, white, red, white, red, white. Non-joining black and other bands were also found.

²³ The frieze of bands at Kommos in unusually wide. For an impressively wide banded frame in Late Bronze I, with a similar arrangement and colors, see that of the Sea Daffodil frieze at Thera (Spyridon Marinatos, *Excavations at Thera* V, Athens 1972, color plate E).

northeast. The floor of the corridor is of the same steel-gray *lepidha* already described. Upon it were a few pieces of blue-painted stucco. Excavation must still clarify the significance of the southern wall of the corridor, however, for we noted during the last days of excavation that the corridor seemed unusually narrow and the wall rather thin, in comparison to Building T's general proportions. It is possible, therefore, that this wall is a later addition, certainly a later north-south wall was built up against its southern face (Fig. 6b), with its base set on rubble above the *lepidha* floor and its only constructed face on the east, an area still unexplored. To the west and south of the corridor we excavated an upper floor, with much earth and charcoal and a great deal of fragmentary LM pottery of which some (e.g. C 6515) was of LM II style; the latest datable sherd is C 6911, a bowl fragment with a floral motive, of LM II—LM IIIA1 date, matching the use levels found immediately to the north and west in connection with the colonnade and pebble court.

The Stoa and Court

Wherever the fill was relatively shallow at Kommos, as on the hilltop, we have been able to learn rather quickly about the relative size and character of the Minoan buildings. On the south, however, the original thickness of the covering sand (up to eight meters), the priority given to the upper, Iron Age remains, and the depth of stratified earth fill above the LM I buildings (usually over two meters), as well as the very scale of those buildings, slowed up our comprehension of the Minoan levels. Only now can we partially understand their form, development, and use through time, as suggested tentatively here in Figures 6a–6d.

In 1980, for instance, when we found a large Minoan column base in situ,²⁴ we could see that it had been set next to or within a pebble court but could not connect it with any building. Its nature and orientation would elude us for a number of years. Then, when we were in the process of constructing a supporting wall below the southern foundations of Temple C, we discovered that the base was the central one of an extensive colonnade. At the time we found that a series of slabs extended from the column base to the east (Pl. 57:a, d). An overzealous workman next found what we soon recognized to be a disklike column base, much battered, below the end of an ashlar wall (Pls. 57:a, right, 57:e at a). Assuming that the two bases belonged to the same structure and that an axis of that structure had been discovered, we then extended a parallel line to the west and excavated at the intercolumniation interval of 3.27 m., finding not a disk-shaped base but, rather, the mushroom-shaped foundation upon which a disk-shaped base had once been set (Pl. 56:c, e, behind the rectangular gap left in the modern supporting wall).

The establishment of this line had a number of consequences. It seemed likely, for instance, that the colonnade belonged with the façade of Building T, which paralleled it on the north. It was clear immediately that the long, curving ashlar wall on the east, set along the line of the colonnade, did not belong to the original period of T's construction (Fig. 2), as we had first assumed (see p. 272 below).²⁵ The same was true, of course, for the ashlar wall blocks resting upon one of the bases (Pl. 57:e at b): they are probably later than the wall

²⁴ Kommos, 1980, p. 224, pl. 55:b, d.

²⁵ Kommos, 1981, p. 182. Shown here on Figure 2 between the temples and Altar L.

adjoining them on the east. It was understood that the earlier *lepidha* floor in Space 16 on the west was the original floor of the room. We were also led to reconsider circumstances of the first column base found, which had once been thought to rest upon an earlier base. It is more likely that the lower base here should be considered an unusual kind of "subbase" upon which the disk-shaped base was set.²⁶

Further clarification came when we could excavate east of Trench 34A2 and due south of Trench 42.²⁷ There, once the later earth levels belonging to the sanctuary were removed, the remainder of the curving ashlar wall mentioned above (Pl. 57:f, left) was exposed as well as a high, roughly built rubble wall with a number of periods of construction. These walls and their associated floors all postdate the construction and presumed use of the original Building T.

The earliest feature of this area of T is a north-south wall (Figs. 2, 6a, Pls. 57:b, foreground, 57:f, right), the top of which borders the pebble court on the east. This wall probably has no structural relationship to T, being a survival from the MM building known to have been leveled when T was built. The wall lies almost directly south of a large ashlar block (Fig. 6a, east of row of column bases, Pl. 57:f at e) that I believe belongs to T's original period and served as a base for a pier of wooden framework, with ashlar blocks bound in between horizontal and vertical beams, which continued up to cornice level.²⁸

Contemporary with the pier is the first column base on the east (Fig. 5, left, Pl. 57:b at a), which we found at the projected 3.27 m. interval when we made a small sounding next to and below the ashlar wall. Only the "subbase" (at + 3.10 m.) was found, however, but part of its disklike base is most likely that which appeared next to the ashlar wall (Pl. 57:b, f, at b), where it had been discarded when the ashlar wall was built roughly on the line of the colonnade. The next two columns of the series, to the west, have already been discussed above. The final, fifth column base remains hypothetical, for its presumed location was too far below the southwestern corner of Temple C to probe for it without endangering the later remains. Next in the line of the colonnade, on the west, is a pier, ²⁹ corresponding to the pier just described on the east.

The level of the stoa's original floor, of hard-packed *lepidha*, is +2.98 m. at the two points the floor has been reached, one just west of the temples (in Space 10) and the other east of them (in Space 16). If there was an early doorway, now obscured, connecting Building J and the stoa (characteristic wear marks on J's slab floor suggest a door with two leaves), one stepped up about 0.25 m. when entering the stoa, the floor of which was apparently extremely uniform. Further east, one also probably stepped up in order to enter Rooms 19, 20, and 21, the floors of which average about 0.15 m. higher than that of the stoa. Only an area two meters square was cleared within Space 16. Into the floor (or on a floor

²⁶ Like that shown in *MAMAT*, fig. 143 on p. 118, which, however, may not have had another base set upon it. The function of the "subbase" is paralleled at other sites (e.g., *ibid.*, fig. 151 [Phaistos, along the western side of the Central Court], and fig. 152 [Knossos, the East Hall]).

²⁷ Kommos, 1981, pl. 54:b.

²⁸ The construction would be like that in MAMAT, pp. 166–175. The use of this block is sure, even though it lacks the characteristic mortises for wooden tenons and seems a bit small. It is possible that it is set upon a still undetected column base or "subbase" belonging to the original stoa.

²⁹ Kommos, 1980, pl. 52:a, also in re-use there.

not reached, further down) had been set a large rectangular basin of terracotta.³⁰ Rather like a larnax or tub, the basin is 1.26 m. long by 0.60 m. wide, with its walls preserved 0.16 m. high. Its interior lay at +2.76 m., just below the level of the water table. The larnax (C 4976), which was left *in situ*, contained MM pottery (e.g., C 4461, an alabastron-shaped rhyton, and C 4465, a tumbler). Upon the small area of floor, cleared at a time when we thought it predated the major LM I construction in the area, were MM and a few LM I sherds, including a cup fragment of probable LM IB style.

The levels of the stoa area are most clearly shown in Figure 5, where the larnax and original floor appear. The same illustration shows, further left, how the subbase of the column lies directly below the later ashlar wall. Further south, one can also see the pebble court in section. Two phases of the court are indicated. The earlier, at + 2.97 m., is made up of a mixture of varieties of small, water-worn sea pebbles mixed with lime, called *chali-kasvetos* locally, and is found elsewhere at Kommos (e.g. the court with the bench on the Hilltop) and throughout Minoan Crete.³¹ When the first court was laid down, its northern edge was plastered, actually curving up alongside the thickness of the *lepidha* floor (as in Pl. 57:d) where, not far from the drip-line of the roof, it probably served to prevent water from seeping through to the stoa's interior.

The upper, later layer, with its top at +3.12 m. (Fig. 5), is simply a thick strew of pebbles, as those in Plate 58:a. The corresponding higher floor level on the interior may be represented here by the layer of slabs, at +3.10 m., which some might term a stylobate, between the two columns in Plate 57:a. There was also a rather neat portion of slab pavement exposed in the interior of the stoa, just northwest of its single eastern pier (Fig. 6b, Pl. 57:c). At approximately the same time a paved court³² was added at the western end of the stoa, and the line of the western pier may have been extended to the north.

The general proportions of the LM I pebble court are still unknown but should be established with another season's work. The east—west measurement, from J to the "MM" wall, south of the eastern pier base, is 23.55 m. To be added to this, for a total of 28.75 m., is 5.20 m., the distance from the southeast corner of J west to the north—south portion of the ashlar façade with the entranceway onto the court. Regarding north—south measurements, on the northeast we have exposed only that portion shown in Plate 57:f. On the southwest, where we have excavated extensively, the court was at least 11.60 m. long; so far we have not found its southern border. During the court's second phase it sloped down to the southwest, toward the sea, from +3.13 m. to +2.75 m. or less, so that the area could be drained. The pebble mixture used was so dense that it is doubtful if ordinary erosion could affect it significantly; the slope noted above was probably more or less the same then as now.

Thus the stoa, with two initial periods of use (Figs. 6a and 6b), separated Building J from apparently extensive eastern rooms. As we presently understand its appearance, it was single storeyed, although there is some evidence suggesting a possible second floor (see footnote 18 above). It had a line of five columns with a pier at each end. The lower column diameter can be estimated as 0.45 m. (0.06 m. less than that of the base). The columns may

³⁰ Kommos, 1981, pl. 55:d. The larnax is of an MM type (cf. BSA 77, 1982, p. 182, fig. 2a).

³¹ *MAMAT*, pp. 218–221.

³² Kommos, 1980, pl. 53:a, b.

have been 3.20 m. high, with a floor-to-ceiling height of perhaps 3.80 m. or so.³³ From east to west the stoa was 27.15 m. long (wall to wall); it was 5.20 m. deep (southern edge of column base to southern face of northern façade).

The Re-use of Building T (Figs. 6b-6d)

Major changes soon took place within Building T. First, perhaps following destruction of much of T and J after an earthquake, there was a limitation in use. Many of the eastern rooms (certainly Rooms 20-21) were abandoned as they were, filled with tumbled blocks from the walls and masses of earth from the ceiling. The construction of new interior spaces within the stoa area began perhaps not long afterward. Thus, its eastern section is blocked by a roughly built, east-west wall (Pl. 57:b, f) of which the lower two courses were constructed of re-used blocks. In shape these blocks (such as that in Plate 57:f at g, which may have served once as a windowsill) are like those found in connection with I rather than with T, and, indeed, we already knew of such blocks, associated with LM I sherds, tumbled to the east of J.³⁴ At the beginning of this re-use of the area, it is likely that the upper pebblecourt level served as the exterior court surface. The interior, however, was raised by some 0.22 m. (to level +3.21), in order to reduce dampness, by bringing in an accumulation of LM I debris that was capped by a layer of lepidha clay. Probably at some later date, earth accumulated on the court was capped with clay as well, making the two levels roughly the same. A shallow stone basin was set outside the southeastern doorway; another layer of earth accumulated later, bringing the court level up to +3.28-3.33 m., even higher than the floor on the interior (the level of this last court surface is shown in Plate 57:f).

The new east—west ashlar wall was set on the line of the colonnade, of which one of the disklike bases was discarded to the south (see p. 269 above). While a portion of the colonnade could no longer have been standing then, the wall ends due east of a disk-shaped base still in position (Pl. 57:e); only later was the wall extended to cover this base. Could the column have still been standing on its base after the construction of the ashlar wall? Perhaps, for there is an analogous situation in the construction to the west where they seem to have intentionally avoided covering the column bases. There, a wall corner, part of Building R (Pl. 57:a at a), constructed of re-used ashlar blocks, rests upon a surface at +3.27 m. (Fig. 6c), significantly higher than the base of the ashlar wall on the southeast (+3.03 m.). The wall corner is the only original exposed part of that particular structure,

³³ The height of Minoan columns is extremely difficult to estimate accurately, partially because the best comparative material is usually not architecture in situ but, rather, small pictorial depictions or later, Mainland reliefs (MAMAT, p. 146, note 1). At Kommos, where the one completely preserved disk-shaped upper base is 0.51 m. in diameter, the lower part of the round wooden shaft would have been about 0.45 m. in diameter. Its height, judging from estimates of column height in the Domestic Quarter at Knossos and in the West Wing at Kato Zakros, would have been five to eight times the lower diameter, or 2.25 m. to 3.60 m. as a range. The unusually wide intercolumniation (3.27 m.) of Building T, less than those in the Propylaia of the Knossos and Phaistos palaces but larger than most Minoan intercolumniations, along with the monumental proportions of T's orthostate façade, prompts one to choose a height of 3.20 m. or so. The ceiling-to-floor height could have been, therefore, 3.80 m. or more (0.23 m., height of base, plus 3.20 m., height of column, plus at least 0.40 m. for architrave and first ceiling beams). To this one would add at least 0.50 m., the thickness of the earth floor or roof, in order to have floor-to-floor or floor-to-roof height.

³⁴ Some are shown in *Kommos*, 1980, pl. 54:f.

and it lies so deeply buried below the later temples that we may never see more. It does represent a building set within the line of the colonnade and could well have been set adjacent to the columns, on the north, in order to take advantage of a roof still in place. We do not know the size of the structure (a calculated guess is made in Figure 6c), but it is likely, because of the level it is built on, that it is contemporary with the small addition to the ashlar wall set right upon the line of the colonnade. Why that addition was made remains a problem. Was the column originally there replaced by a pillar? Or, since we do not know if a north–south wall terminated here, perhaps such a wall was built then, closing off what was intended to be a private area to the east.

From the foregoing, it is clear that our Figure 6c compresses a complex and still poorly understood series of changes around and within a stoa that is at least partially destroyed, after rooms on the east have already gone out of use. We may sum up as follows:

- 1) An ashlar wall was built on the line of the colonnade (Fig. 6c, north of packed clay floor), creating a protected interior space on the north. On the east it was separated by a doorway, 0.90 m. wide, from the eastern pier. The level of the entrance was raised at a later date by the addition of a few stones. Outside the doorway, on the east, was set a shallow stone basin (Pl. 57:b, f, at d). The interior floor level was raised while that to the south remained the same. Later, the line of the wall was extended with course rubble construction, and perhaps the doorway was blocked.
- 2) At about the same time that the east-west ashlar wall was extended to the east, a small room (R),³⁵ also with ashlar walls and set at a somewhat higher level, was built to the west (Fig. 6c, north of hard sand floor). It was set within the line of the stoa, implying that perhaps the columns there were still in position. Still later, a rough wall of re-used blocks was extended out to the south above a layer of sand that had accumulated on the court. Activity within Building J may have been minimal during this period.

While the architectural/stratigraphic sequence of these occurrences can be followed to some extent, certain substantive questions concerning the use of the area remain almost unanswerable. This is partly due to an apparent lack of substantial LM I–II–IIIA1 floor deposits in the areas discussed, re-emphasizing the generally non-violent nature of the transitions that seem to occur on the site. Also, however, we have so far sampled few of the interiors. R, below the temples, cannot be investigated further, but there is no hint, e.g. via bits of a votive strew, that its interior contains surprises. The one floor partially cleared to the east, in Trench 42A, was marked by patches of burning. Above it were scattered MM and LM I cup fragments, stone tools (chiefly cobbles) and bits of plaster, as well as pieces of crucibles used for bronzeworking. The last (C 4423, C4424, and C 5148) belong either to the debris from the collapsed walls or, in conjunction with the burning on the floor, indicate that at this level (ca. + 3.21) Room 16 was used for bronzeworking.

Other problems are connected with relative ceramic datings of related levels that are so close in actual dating years. This applies especially to Phases 1–3 (Figs. 6a–6c). The problems are brought about partly by predictable stylistic overlappings, something to be expected in a period of a hundred and fifty years or so (mid-LM I through early LM IIIA1),

³⁵ See footnote 6 above. The corner of the room is shown in Figure 2 just north of the south wall of Temple C.

even during such a brilliant period of innovation and change in shape and decoration as this was. A contributing factor is the gradual understanding, only recent, of the evolution of MM III—LM IIIA1 pottery in the Messara during this period, a study that will require years to mature. While it is safe, for instance, to date the construction of J and T to an early period of LM I,³⁶ and it is probable that the eastern rooms (19–21) were abandoned during LM I, we cannot yet be sure that these rooms were deserted as early as LM IA,³⁷ shortly after the ashlar buildings were built above the leveled stubs of their MM predecessors.

Problems of definition arise also when one tries to position within ceramic periods the LM I–IIIA1 re-uses of the stoa area. The upper floor of Space 16 at + 3.21m., for instance, which had LM I sherds on it, might be attributed exclusively to that period. But only a moderate area of the floor was cleared, and there is a suspicion that it may be related in use to what appears to be a dump of LM IB–II style found below similar levels (from + 3.36 m. down) southeast of the stoa's pier here.³⁸ Concerning Building R on the west, which along with its late L-shaped appendage to the south appears stratigraphically to be the latest of the re-uses at this level, our original broader dating of it to LM I–IIIA1 should probably be reduced now to LM II–IIIA1.³⁹

LM III Remodeling and Construction on the West

Building J, also constructed in LM I, seems to have undergone interior changes (e.g. in the direction of its stairway) during that period.⁴⁰ There followed a time of at least partial desertion when fill with LM I–II pottery accumulated around and within it and when blocks from its walls lay scattered about to the east, perhaps when the stoa was in re-use. Then, and it is difficult to know if there was a significant hiatus, during or at the end of LM IIIA1 a major building initiative took place with the renovation of Building J.⁴¹ By this time all areas directly east of J had gone out of use, some probably having been filled in.

Thus was constructed "Building N", a designation that we have now adopted for the group of rooms clustered about a court (Fig. 6d).⁴² The form of the western part we have already described⁴³ in connection with the re-use of Building J, when the entire ground

³⁶ Kommos, 1980, p. 220. This should be verified on the east, however.

³⁷ As suggested by the preliminary analysis of the pottery from Room 19. The first phase of Space 16 (the first LM floor in the stoa) had, for instance, a cup of possibly LM IB style, while a sherd on the same floor joined the stirrup jar from Room 19 shown in Plate 54:d.

 $^{^{38}}$ This dump will be studied in more detail in the near future. Pails 52A/4:44, 45 and 53A1/3:70, 74 contained a variety of cups and bowls, as well as jars, datable to LM I, LM II, and LM II–IIIA1. It lies just east of the pebble-court surface, above (at + 3.28 m.) what may be a floor level, rather burnt in places.

³⁹ Kommos, 1981, p. 183, note 51. LM I seems less possible now.

⁴⁰ For the history of Building J, see *Kommos*, 1979, pp. 239–241, esp. p. 242, note 80; also *Kommos*, 1980, pp. 218–224, 245.

⁴¹ The date for the renovation of Building J, after LM IIIA1 pottery was already in use on the site, probably during LM IIIA2 (*Kommos*, 1980, p. 222, note 37), marks the beginning of the final use of this immediate area during the Bronze Age.

⁴² See footnote 7 (p. 255 above). The designation "N" was originally applied to what had appeared to be a separate building south of J when major sand clearing of the site was taking place (*Kommos*, 1979, fig. 1 and p. 239). Now it is clear the "N" is best applied to the entire series of rooms of LM III date in this area, including "S"; the designation "S" has been discontinued.

⁴³ Kommos, 1980, p. 222.

level of the area was raised by about a meter and exterior surfaces were covered with a layer of sea pebbles like those used in the earlier LM I court levels (Pl. 58:a). There was already some accumulation upon the LM I court, chiefly rubble and fallen blocks, but the builders also brought in a substantial amount of fill. Presumably the change is connected with an attempt to raise the floor levels above the point where erosion from rain water, or from the sea on the west, could cause structural damage. This may be the reason for first building the walls directly upon the LM I court; there is no evidence here for foundation trenches. The interior of J, in the meantime, was reduced in size, and an enclosed court was created by building a wall to the south. Apparently almost the entire eastern wall of J was redone from floor level up and a platform constructed for a small room, 4, on the east. Found scattered upon J's upper floor was an array of various types of vessels, along with others abandoned upon J's threshold and in Space 7 to the south.

During 1983, a series of large, adjoining trenches was laid out southwest of the temples (Trenches 50A and A1, 51A and A1), in the area shown in Plate 52:b. Special priority was given to the work here because of the yearly danger of erosion during the winter's rainy season (December through March, generally) when the accumulated water rushes down the hillside. The slope on the west, exposed during earlier sand-clearing operations, was gradually being worn down, and the lower levels on the slope's edge were becoming archaeologically contaminated. In order to retard this ongoing process we had temporarily recovered the slope with sand. This sand was first removed, and the contaminated strip and upper levels were excavated separately.

This work completed the excavation of Minoan Building N and Greek Building W. In the case of N (Fig. 6d and Pl. 52:b) we cleared down to the top of the LM III court and discovered its limits on the south. In particular, we exposed the southern wall of Space 7 (Pl. 58:c) which had been built on a sort of platform set directly upon the LM I pebble court that extends throughout the area; almost all the walls in Plate 52:b must be thought of as accretions upon that original large open area south of Building J and the stoa. The south wall of N extended to the original western border of the LM I court which at the only point preserved (Pls. 58:c, far left, 52:b at a) is a handsome north–south ashlar façade belonging to the southern room of Building J. The LM III wall is made up of a combination of slabs and re-used ashlar blocks.

The court of N (Space 6) was entered from the south through a doorway where the threshold block $(0.93 \times 0.67 \text{ m.})$ is not large enough to fill the opening, and gaps of 0.20-0.30 m. on either side probably once contained the lower door framing. We can note that the east—west wall north of the entrance has been extended further than would be concomitant with simple passage into the court. The walls have been arranged so that someone passing outside, or even entering, could not see easily into the court (6) or its more secluded western section (7) south of the larger covered space (5). No traces of a pivot block were found in the doorway.

The southern and eastern limits of the court are clearly indicated in Figure 6d. What is uncertain is whether the eastern walls of Rooms 12 and 13 extended all the way to the orthostate wall or abutted against a western extension of Building R of which, unfortunately, only the southeastern corner is visible under the Greek remains (Pl. 57:a at a).

As far as we know, during its first stage N consisted of one medium-sized room (5), one very small one (4), and a court (6 and 7). The interior north-south dimensions of this court range from 12.60 m. (west) to 12.25 m. (east), the east-west dimensions being 6.70 m. (north) and 12.15 m. (south). Later, a rough north-south wall of field stones, only a course high, was added (Fig. 6d and Kommos, 1981, fig. 6, lower left) to separate 6, a working area, from 7, perhaps to prevent rain water from flowing into 7 from 6. A more major addition was made on the east in the meantime: Rooms 12 and 13 (and no doubt, another further north) were added alongside N's eastern wall.⁴⁴ In their first form their floors were at differing levels (in Rooms 12 from +3.68 to +3.73 m.; in the southern room, 13, which was lower, +3.57 to +3.48 m.). Their wall quality is inferior to that of N itself, and while the southernmost wall is set directly upon the earlier pebble court, the new north-south wall sits partially upon earlier fill. It is not clear how one would enter the rooms from N, for there are no doorways in the western wall. Also curious is the fact that the floor levels here are significantly below that of the court adjoining the rooms on the west (at +3.84 m.), and yet there is no trace of a doorway or step in connection with their common cross wall (top at + 3.75 m.). For the moment the only reasonable solution, still, is to suppose that the entrance into the new rooms was through the northernmost room, although access by means of trapdoor(s) through the roof is still possible. The latest sherds found on the floors of this first phase are LM IIIA1 in date, with the exception of one possible LM IIIA2 sherd (C 4141).

During its second stage of use (not shown in Fig. 6d), the common cross wall was partly dismantled, and the entire floor in 12 and 13 was elevated to +3.92 m., substantially higher than N's pebble pavement. Despite the size of the interior (5.20 m. east—west by 5.40 m. [minimum] north—south) there are no signs of interior supports. The floor is clearly marked by burning in a number of places but like its predecessor was found almost empty. The latest sherds found on the upper floor are LM IIIA2–B, as are those from the packing below the hard earth floor. After the building's abandonment many of its wall blocks collapsed into its interior.

Upon that part of N's court cleared in 1983 we found a scatter of LM III pottery, including fragments from pots already known from J or the court. There were, for instance, new joins for C 2469, a pithos with painted decoration of papyri and palm trees in a style reminiscent of Palace Style; parts of it had been found earlier within and outside J. Along the southeastern edge of the court was a thick scatter of pottery (Pl. 58:e) mixed in with a layer of gray-green clay with reddish streaks. Parts of ladles, kylikes, and basins, among other shapes, were recovered. Two sherds (kylix C 5139 and stirrup jar C 2470) also joined others from the floor of Room 5. These examples and other LM IIIB pottery from the immediate area strengthen the ceramic context of the latest phase of the partial re-use of Building J or, more accurately, Building N.

The southern wall of N's courtyard must have been a rather high one (2.50 m.?), to judge from the collapsed pile of stone encountered south of it upon the upper of the two surfaces shown, partly excavated, south of the wall in Plate 52:b. Further to the south and

⁴⁴ The following account is an edited version of that given in *Kommos*, 1981, p. 185, with changes introduced to reflect our later realization, when N's court was cleared on the southeast, that Rooms 12 and 13 can definitely be shown to postdate the original LM III construction.

extending up to the wall on the far right in the photograph (cf. Fig. 6d, lower left), there was a series of surfaces above the LM I pebble court, of which the top one is shown in Plate 52:b (at and south of "8"). These surfaces, sloping down to the southwest, show the dramatic effects of erosion in this part of the site over the centuries. Immediately south of the LM IIIB rubble tumble mentioned above, for instance, and on the west, there was a three-sided slab enclosure, 0.43×0.43 m., with its open side on the southwest. It did not appear to be a hearth but, rather, another of those curious, still unexplained Archaic Greek structures reported earlier in connection with Temple B⁴⁶ and associated here, some distance *below* the LM IIIB level, with a mixture of Iron Age and LM III pottery.

Because of the erosion, which carried Archaic Greek material down to the level of the LM I court, we cannot be sure of the appearance of the immediate area when N was first built. It is likely, though, that there was a gentle slope leading up to N's threshold at the entrance into the enclosed court.⁴⁷ The role of the east—west wall on the south (Pl. 52:b, extreme right) remains to be explained. Certainly it is Minoan, and it may have served as the southern border of the LM I court. On the other hand it may be of LM III date and have served then as a retaining wall for the new level established on the north; a more regular southern face strengthens the latter possibility. If it was a retaining wall it probably joined a north—south wall on the west, later destroyed by the sea.

Throughout the area south of N and north of the east—west wall mentioned above were sloping layers of burnt earth and fragmentary pottery occasionally separated by lenses of sand accumulation. The lower sand layers can be dated to the hiatus between the abandonment of N and the partial resettlement during the Protogeometric period, while those further up were deposited in Hellenistic/Roman times, even during the period when the sanctuary was in use. Much of the pottery, whether of Minoan or Iron Age date, was probably dump from either N or the temples, some of it no doubt brought to fill gullies created by torrents of runoff water during the rainy season.

Of the Bronze Age pottery we have now recovered a few sherds (Pl. 58:f) that are later than most of our LM IIIB wares. C 6737 is from a deep bowl, with double axes (?) set in panels; C 6709 is also a deep bowl, with hatched diamonds set in panels.⁴⁸ Both were found directly above the pebble court in the western part of the area. Together they extend the

⁴⁵ This impermeable layer prevented erosion beyond this point. A section, visible in the lower right-hand corner of Plate 52:b, was made through it into the LM I pebble court, which is at +2.64 m., about 0.10 m. below its level in Space 7 to the north and 0.40 m. below the northeastern corner of the LM I court, east of the stoa. The pebble court, as exposed in the section excavated and north of the wall, was 0.20 m. thick, thicker than at any other point noted in the area, probably indicating that very special care was given to the court at this point by the Minoans. As one studies this area as well as the slopes intentionally created for drainage, it becomes clear that the pebble surface was made particularly thick, and thus extremely dense, in order to form a pavement that would resist erosion in this area where accumulated water from the east would inevitably flow during torrential rains. Preliminary investigations to the south of the wall do not show that the LM I pebble pavement continued, but, rather, that a lower, burnt surface (at +2.20 m.) begins. This may be the southern terminus of the LM I court, at least on the west, but future investigation must confirm this speculation.

⁴⁶ Kommos, 1981, p. 189 and note 73.

⁴⁷ *Ibid.*, p. 185.

⁴⁸ For the latter cf. BSA 60, 1965, p. 322, figs. 3 and 4, which represent, as Professor Watrous has informed me, the last phase of reoccupation at the palace at Phaistos (see also L. Pernier, "Scavi della missione italiana a Phaestos," MonAnt 12, 1902, figs. 45–55 and pl. VIII:4).

chronological range of our pottery without, however, indicating frequent use of the site during late LM IIIB or in IIIC. Certainly of more importance in our understanding of the dynamics of the site, however, is the continuing recognition of imported Italian wares, many dark burnished, which come from the latest use levels of Building N and dumps to the north (Pl. 58:b), as well as from contexts connected with the Minoan houses to the north (Pl. 58:d). We have identified so far some 30 examples of types most commonly associated now with sites in Southern Italy and Sicily.⁴⁹ While most are from LM IIIA2-B contexts, some (e.g., C 2923, C 4936, C 4937, C 5268) are from LM IIIA1 contexts. These vases seem at first impression to be similar, but in fact they differ considerably among themselves: some are handmade, some wheelmade, and their fabrics vary. Some may be local Cretan imitations. Shapes represented are bowls (a bowl on a stand, an open bowl, one with a thickened rim), a cup, a possible dish, a jar with triangular rim, a handmade jug, as well as a number of collared jugs. Their range in relative date on the Kommos site, their variety and widespread distribution there are most intriguing, for it is clear that their presence does not indicate a single incident but, rather, a sustained contact, probably one reflecting trade rather than settlement, in the same manner as the Bronze Age Cypriot and Canaanite wares also found on the Kommos site.

The Iron Age material from this extensive area south and southwest of the Greek temples consists chiefly of pottery dumped out of the various temples, although there is the occasional, usually broken offering such as a faïence bowl of "Egyptian Blue" (F 35) or a bronze fibula (B 254) from the time of Temple B, and a fragment of a limestone base molding (S 1538) that probably once belonged to a perirrhanterion base of Temple C heritage, similar to S 653 found within that temple. Among the terracotta objects were a number of bulls' legs, of which a pair was found lying directly upon N's easternmost wall (Pl. 56:b, d). This type of figurine has a long history at Kommos, the position of this particular example providing another indication that the Minoan walls were still exposed during the Protogeometric period. Also common were fragments from Phoenician transport amphorae associated with late Temple A and, particularly, with early Temple B. These strengthen the argument developed in earlier reports that the Phoenicians played an active role at Kommos. So many of these fragments have been found that we no longer catalogue the sherds separately but, rather, note their provenience and then place them in a general container.

The various Levantine types represented must await the thorough study they deserve. A preliminary investigation of those in Plate 60:a, however, confirms that they are of an exclusively Levantine shape common ca. 850–300 B.C. in the Phoenician area. Almost all the examples reported come from sites in northern Palestine and Lebanon, with only a few from Cyprus. Of this particular type none have been reported, apparently, from the

⁴⁹ Cf. Kommos, 1981, p. 193, note 86. See also B. P. Hallager, "A New Social Class in Late Bronze Age Crete: Foreign Traders at Khania," Minoan Society, O. Krzyszkowska and L. Nixon, edd., Bristol 1983, pp. 111–119. The account here represents Professor Watrous' observations made with the help of Professor V. La Rosa, E. Fisher, and Chiara Bellardelli. Note that C 4936 (Kommos, 1981, pl. 50:d) has now been classified as Italian rather than Cypriot ware. The jug (C 847) in Plate 58:d, as well as C 731 and C 848 in Plate 58:b are from the Hilltop. C 6710 and C 6721 are from the slope south of Building N.
⁵⁰ Kommos, 1980, p. 251.

Aegean.⁵¹ It remains to be established, of course, whether we also have represented on the site a variety of wares of Levantine type originating in the East, West, or both, for we know that at the time when the Phoenicians came to Kommos they were passing back and forth between their homeland and the western colonies.⁵² There might even be local imitations.

The majority of the pottery at Kommos was local, of course. Most is quite fragmentary, and even now at the beginning of our study of it we have recognized joins between these fragments and others from both outside and inside the temples, together confirming the specific origins of the dumps. Four examples will suffice: C 2503, an amphoroid krater, has joins between fragments from a trench on the south (51A1) and trenches on the west of the temples (27B, 37A, 43A). C 3068, part of a neck-handled krater, has joining fragments found in trenches on the south (51A), east (42A) and within Temple B (33C). Pithos C 4134 has joining fragments found both south (50A, 51A, 51A1) and north of the temples (44B). Protogeometric B bell-krater C 6062, whose sherds come from trenches to the south (51A, 51A1) and northeast (47A), also had a join with a fragment from within Temple A (33C).

THE IRON AGE LEVELS

The stratification within the south-central area consisted, where clearest, of seven basic levels of deposition: 1) LM I (probably above MM); 2) LM IIIA2–B; 3) Protogeometric; 4) 7th century; 5) 4th century; 6) Hellenistic; 7) 1st century B.C. The Bronze Age architectural remains have already been described, as well as some of the characteristic features of the Bronze and Iron Age pottery (see pp. 274–279 above). Curiously, there were no Iron Age buildings immediately south of the temples at any time.⁵³ Further to the south, however, we identified a new building, "W". Two of its walls had been partially visible since the time that the sand had been cleared away a few years earlier. W sits partially upon the Minoan wall seen in Plate 52:b (right; see also Fig. 2) and is probably contemporary with

⁵² Dr. Robert Koehl, who has worked with the Phoenician pottery from Sarepta, is of the opinion that some of our "Levantine" ware is really more like that from Punic North Africa.

⁵¹ I am grateful to Professor J. Holladay of the Department of Near Eastern Studies, University of Toronto, for pointing out that the sherds in Plate 60:a represent a type of storage jar well known from post-900 B.C. at Hazor, Megiddo, Tyre, and elsewhere. A specific type reference is Type 2 in A. G. Sagona, "Levantine Storage Jars of the 13th to 4th Century B.C.," *OpusAth* XIV, 1982, pp. 74–110. Of the 13 types listed there, only 3 examples of individual vessels are reported from the Aegean (2 from Bodrum, 1 from Ialysos). Examples of Type 2 are almost exclusively from sites in northern Palestine and southern Lebanon, the home of the Phoenicians: from Al Mina, Ashdod, Ashkelon, Athlit, Bethshan, Gezer, Hazor, Megiddo, Sarepta, Sidon, and Tyre, with only 2 examples from Cyprus. Present evidence suggests, therefore, that the Kommos vessels came originally from the Phoenician homeland, rather than from Cyprus. The time range given by Sagona for his Type 2, ca. 850–300 B.C., is significant as well, for our examples at Kommos stop appearing in any number (a few are in later contexts) at a mid-point in Temple B's career (ca. 700 B.C.), after the tri-pillar shrine in Temple B has been obscured and Eastern influence has waned at Kommos and in Crete in general. This disappearance of a ware that was not used generally throughout the Aegean before or after this time supports the view that the original carriers of the ware were the Phoenicians themselves.

⁵³ A large limestone block, 0.95 m. × 0.95 m. × 0.34 m., was found resting on an early Iron Age level, just south of the temples. Presumably it was dragged here from a Minoan building exposed in an eroded scarp, perhaps for use in Temple B. The block may originally have been an orthostate, for it has dimensions suspiciously like those of the orthostates in the western end of Building T.

Temple C, built in the 4th century B.C., although W could be later. Its plan has the form of a reversed "P". Its northern wall (in its first phase) was twice as long as necessary, extending out to the east where it ends at a solid wall-end reinforced with two large ashlar blocks. Later it was extended even further by a thin retaining wall linking W with a thick but poorly built, late (Hellenistic?) retaining wall that may continue as far as Building Q.

Building W is rather well built, with a narrow entrance on the northeast, 0.56 m. wide, and with interior dimensions of 1.88 m. (east-west) by 2.12 m. (north-south). Near its southeastern corner it had a construction visible in Plate 59:a that could have functioned as a drain, 0.15 m. wide at the bottom and 0.30 m. high, with a slab at the bottom sloping down to the east. At a later point in its use a series of slabs was set along its eastern face, one of them effectively blocking the "drain". Still later (Pl. 59:c) a layer of burnt sand, laid upon a hard-packed clay surface, raised the ground level and covered the slabs. Possibly at the same time a few stones were placed in the entrance, perhaps to prevent water from entering the interior, perhaps to form a neat border for the now elevated outside surface. There is no sign of a threshold block.

The interior of W is most curious: a single re-used ashlar block (0.48 m. \times 0.70 m. \times 0.28 m.), perhaps Minoan in origin, was set at an angle and off center, with a number of stone slabs arranged roughly around it. The appearance is rather like a table with seats about it, but with hardly room for one's knees. The table/seat explanation may be correct, but in Plate 59:a one can see that the central block rests upon another, similarly aligned and projecting up just above floor level, a circumstance that weakens the likelihood that the "pillar's" position represents secondary use. All indications are that we have reached the floor level in the room. Below it we have noted, and will investigate further, still unexplained indications of burning. Unfortunately there were no small finds which might serve to identify the building's function.

W's role in the sanctuary (its position near the temples requires, I think, a connection) may be explained by the manner in which its north wall discreetly closes off a direct view of the temple. Could the reason be piety and this be a place for rites of purification? Or was modesty a concern? Or could the ashlar block be for butchering? Perhaps W served as a custodian's hut, but it seems to be rather small and far from a sanctuary without a temenos wall; also, Building B which is directly on the court could have served that purpose admirably. A more bizarre explanation, assuming that the two ashlar blocks in the interior belong to the original structure, is that they helped support a stairway leading up, so that W may have functioned as a watchtower, or as a landmark for pilgrims arriving by sea.

As noted above, the line of the northern wall of W continues east in the form of a late, probably Hellenistic, retaining wall. The latter may reappear (Fig. 2, Pl. 59:f, extreme left) set next to the northern wall of Building Q. Built upon Q's wall after it had gone out of use, and against the southern side of the retaining wall, was a slab enclosure (Pl. 59:f, extreme left, and Pl. 59:b). The enclosure contained ash, bone, and burnt grape pips, as well as a miniature votive lekane (C 6700) dating to the 1st century B.C. Two more lekanai were found in the near-by sand. This enclosure, 0.65 m. (north-south) by 0.44 m. (east-west), resembles and probably functioned rather like the one built against the façade

of Temple C,⁵⁴ to one's left when entering the temple. Both were probably small pits (bothroi?) for offerings. Why was the newly found one set outside the retaining wall here? One possibility is that there was near here, possibly to the east, an entrance through the retaining wall; offerings could have been made as people approached the sanctuary area.

Building Q (Pl. 59:f), identified in 1980 when part of its southern wall was exposed,⁵⁵ is made up a variety of re-used blocks, many Minoan, and even though the walls are relatively thick (0.80 m. average), their masonry suggests haste and lack of care, except on the east where a series of Minoan blocks form part of the façade. The building was 3.80 m. wide on the interior (north–south) and most likely had its entrance on the west since there is no opening in any of the three walls exposed so far. It was probably built in the 7th century B.C., and so is contemporary with a late phase of Temple B. Its floor, at approximately +4.39 m., was hardly discernible save for a small paved area, ca. 1.00×1.30 m., on the northwest, which contained small fragments of bronze and iron, limpets, a bone tool, stone tools, and pumice. Some type of industry seems to have been going on here, but that work as well as the use of Building Q may have been cut short when, toward the end of the 6th century B.C., the Archaic sanctuary became less frequented.

Below the floor of Q was a small deposit of knucklebones and an iron rod, as well as fragments of Phoenician amphorae which are probably part of a dump that continues below the building and to the south. Below this, in turn, and on the final day of excavation, appeared the well-built end of an ashlar wall (Pl. 59:f at a, Pl. 59:e), 0.80 m. thick, that probably belonged to an LM I structure and may well be connected with Building T to the north.

North of Q and east of the temples, a series of trenches exposed Greek levels. All the trenches revealed, not far below the upper court surface, a layer of stone working chips sloping gently from north to south and becoming more disparate as the distance from the temples increased. It is probable that the sanctuary court was the chief assembly area for the limestone blocks used in Temple C. Pottery found within and below the chips tends to substantiate the construction date (4th century B.C.) proposed by us in the past. In lower levels, Trench 52A (Fig. 5, bottom left, Pl. 57:b) completed excavation of the Geometric-Orientalizing dump south of the temples, recovering a few votive items such as a bronze cauldron handle (B 252) and a chisel tip (B 251), as well as a terracotta bull (C 6350). To the north, in Trench 47A that exposed the orthostate façade of Building T (Fig. 5, top right, Pl. 53:a), we found that the channel of the Minoan road had remained open during the early Iron Age, with the result that the Protogeometric level begins at +3.27 m., only about 0.40 m. above the slabs of the road. A large painted bull's leg of terracotta (C 6060) appeared, among the first of a type that would continue (as those in Pl. 56:b, d) to be offered throughout the history of the sanctuary. The leg is made in the form of a tapering hollow tube with a base which looks like the mouth of a narrow-necked jar and compares best with LM IIIC sculpture of bulls and centaurs from the shrine at near-by Hagia Triada.⁵⁶

⁵⁴ Kommos, 1980, p. 226 and pl. 55:f.

⁵⁵ *Ibid.*, p. 242.

⁵⁶ Herakleion Museum Case 143; cf. MonAnt 12, 1902, fig. 54, from Phaistos.

For over 200 years, from the time that Temple A was established in the 10th century up to the time that Altar U was built in connection with Temple B (8th–7th century B.C.), the road hollow remained a convenient dumping ground for refuse from the temples. The Protogeometric pottery deposit, partly excavated in 1981,⁵⁷ was particularly rich. Perhaps many of the vessels in Plate 60:c were from a votive dump marking the end of Temple A, a clean-up before Temple B was built. From that time or slightly later were two animal horns (Bo 44), Triton Trumpet shell fragments (Sh 5), as well as a bronze dress pin (B 230), shield or disk (B 234), and needle (B 240). Quite a few votive animal figurines were also uncovered: bulls C 6054 and C 6085, horses C 6056 and C 6116, as well as a series of small terracotta wheels upon which some of the horses would "ride", as in Plate 60:d.

After the Minoan orthostate wall was covered by debris, dumping continued, forming thin horizontal lenses in section as seen in Figure 5, rather like the more extensive deposits on the south. Then, with the building of Altar U on the south, there was also constructed an unusual double hearth (Pl. 53:a at a, Pl. 53:c) some 2.70 m. north of U, at a level of + 5.23 m., and sloping up slightly to the north. The hearths and U diverge widely in their general orientation, the former being closer to that of Temple B. Although parts of the hearth are missing and its double form is unprecedented at least at Kommos, its construction of slabs set on edge is known from late Temple B as well as in Room A1 to the north. 58 The double hearth itself is 2.00 m. (east-west) by 0.85 m. (north-south); the interior of the better preserved western compartment measures 0.75 m. (east-west) by 0.85 m. (northsouth) and was ca. 0.20 m. deep. In the western compartment there was a good deal of ash. The eastern department contained no ash, but there was much alongside it to the east and numerous limpets along its northern side; had it just been cleaned out? There was little evidence for animal sacrifice; Altar U to the south probably served that function. Perhaps this hearth was chiefly for cooking, at a time when the cult at Kommos was particularly active and numerous visitors came to the sanctuary.

Above the Archaic levels of Temple B began the thick stone-chip level from Temple C's construction. Above the chips, in turn, were the multiple layers of the sanctuary court. From the excavation of these court levels we learned that the benches in the corner of the court, that alongside Room A1 and that south of Building B (Fig. 2), were installed as late as the 1st century after Christ.

Between Altars C and H and below C's layer of stone chips there was little of note, except a bit of poorly constructed north–south wall of the Archaic period (late Temple B period), visible in Plate 54:a, upper left. LM III pottery, which characterizes the latest Bronze Age levels, blended to LM I as soon as we began excavating below T's wall tops. Northeast of Altar H we were more fortunate with the discovery of a new building, Building V (Fig. 2, Pl. 55:a). It so far consists, however, only of two walls and an open north side, which suggests that it may be an enclosure, possibly a court, with a rough retaining wall on the south. Connected with it were a few roof tiles. There were two floors, a lower one, quite burnt, at +6.22 m., and an upper one, at +6.47 m., which had upon it mendable vessels

⁵⁷ Kommos, 1981, p. 188 and pl. 55:c.

⁵⁸ Kommos, 1978, pl. 57:e; 1980, pl. 56:c.

C 6703, a cup, and C 6704, a skyphos. These vessels and others found just outside V on the west confirm that the building was both built and used during the 7th century B.C.

South of Building V and beginning from the same 7th-century level at +5.67 m., we found a curious pit that was apparently used as a forge for the softening of iron. The pit (Pl. 55:d, e) was carefully cleared in stages and eventually removed in four large pieces together with the compact earth surrounding it (Pl. 55:e). All material from it was taken to Pitsidia for study and storage. The pit was irregular in shape, ca. 0.31–0.33 m. in diameter at the top and about as deep. Around the interior there were here and there lumps and thin sections of slag, the latter exhibiting a laminated effect. At one point on the east the upper edge was missing and a channel about 0.27 m. wide was noted, this perhaps being for the insertion of the end of the bellows or a tuyère in order to increase the heat. The contents of the pit, a limelike, whitish layer at the top and dark fill further down with bits of iron, were excavated and kept in their entirety in a series of seven labeled bags. The earth surrounding the pit was scorched orange red and was very hard.

The future study of this small forging pit and the bits of iron and slag found near it will be of some interest to students of early Cretan metalworking technology, for it is probably the only one of its kind reported from Crete, and yet at the same time it may be representative of many secondary working areas where ingots, formed elsewhere, were softened for shaping into tools, weapons, etc.⁵⁹ There may be religious implications as well, for the situation reminds one of metalworking in earlier sanctuaries in the Levant, for instance at Kition in Cyprus, as well as of local gods associated with metalworking. There was Hephaistos, of course, the god who was a lame smith and, confined to Crete itself, Talos, the bronze guardian of Crete who is said to have heated himself red hot and then clasped his enemies in his embrace, grinning fiercely. Also connected with the working of iron at Kommos, from just to the west (at + 5.30 m., not far from Altar C), comes an entire iron ingot (Pl. 60:b) or "bloom", as well as a number of fragments of others and numerous lumps of slag. We now know why these ingots were found so far away from Temple B: they are probably remains of work that was actually taking place to the east rather than to the west, 60 further suggesting that metalworking was a real concern of those residing near the sanctuary, although how the activity was related to the cult and whether year-round work is indicated remain to be considered. It is also worth inquiring why metalworking seems particularly active during the 7th century in connection with a late phase of Temple B.

The bottom of the forging pit was some distance to the north of and about 0.40 m. higher than the Minoan orthostate wall. South of this wall and above the tumble of blocks filling the interior rooms of Minoan Building T, the Iron Age material stops just above the wall tops (see p. 281 above). North of the wall, however, we found Iron Age fill down to about a meter above the slabs of the Minoan road (at ca. +4.12 m.), after penetrating a

⁵⁹ One imagines an arrangement like that found at Carthage (4th/3rd century B.C.), as in R. F. Tylecote, "From Pot Bellows to Tuyeres," *Levant* 13, 1981, pp. 107–118, esp. fig. 10, p. 113 (as in the section only, since a double bellows is involved there). We are grateful to Professors Robert Maddin, James Muhly, and Tamara Stech of the University of Pennsylvania for their preliminary inspection of this pit during their brief visit to Crete in August of 1983.

⁶⁰ Kommos, 1981, p. 191, pl. 56:b (as found).

thick layer of earthy silt which was probably the result of accumulation washed down from the neighboring hillside.

THE DEVELOPMENT OF THE LOWER HILLSIDE AREA

While our general view of longevity and change in the area of Minoan Building T remains largely the same, ⁶¹ the past two seasons of work have added important nuances to our understanding. This is particularly true in the case of Building T which, along with J, has turned out to be enormous, beyond any concept of domestic architecture known in Crete and, however the term may be defined, certainly "civic" or "public" in nature. Also, with the discovery of the colonnade, the form of at least the northern and central parts of the building is recognizable. As a direct consequence, the re-uses of T have come into much clearer focus. Particularly clear is the plan of Building N.

As tentatively shown in Figures 6a–6d, the re-use of the stoa area (LM I–II) followed upon the disuse, perhaps after an earthquake, of the eastern rooms. The stoa area, in turn, was abandoned in favor of Building N, built on a raised level on the west and partially incorporating certain walls of J and T (LM IIIA1 [earliest]—LM IIIA2 [latest] through LM IIIB). The use of N coincides with a time when Italian ware, found increasingly in many LM IIIA2–B contexts at the site, suggests interconnections between Crete and the west that were hardly suspected a few years ago. The presence of people in the area after N was deserted and before Temple A was built is now suggested by a few LM IIIB–C sherds (Pl. 58:f). Present negative evidence, on the basis of the pottery, suggests that N was deserted ca. 1250 B.C., although passers-by occasionally came, and that the area was not used regularly again until ca. 1050 B.C., which is the earliest date one can propose at this time for the founding of Temple A. A hiatus of two centuries can be proposed now, reducing the previous estimate by a century.

We have little to add to our understanding of Temple A save that it seems to have been frequented by Phoenician visitors, beginning a tradition that was to affect profoundly the form of the shrine erected in the interior of Temple B. After these transients ceased to ply the routes between Tyre and Carthage, during Phase 2 of Temple B, 63 a new double hearth was added northeast of the temple, and not long afterward, Building V was constructed on the east. This is a period when ironworking was practiced in the court of the sanctuary and one which terminated with the partial desertion of the site not long after Building Q was built on the south, before Temple C was constructed in the 4th century B.C. C was accompanied by the building of W, a curious structure that invites speculative interpretation because of its unusual form and position.

⁶¹ For the earlier estimate see *Kommos*, 1980, pp. 243–244.

⁶² See also *Kommos*, 1980, p. 244 and note 102, where the possibility of Sub-Minoan pottery at the site is discussed in connection with C 3257, a cup found on the floor of Temple A. Among the latest estimates for the periods concerned are LM IIIB (1300–1200 B.c.), LM IIIC (1200–1075 B.c.), and Sub-Minoan (1075–970 B.c.), for which see A. Kanta, *The Late Minoan III Period in Crete: A Survey of Sites, Pottery, and their Distribution*, Göteborg 1980 [SIMA LVIII], p. 5.

⁶³ Kommos, 1981, p. 187, fig. 8.

THE HISTORICAL CONTEXT

During the past few years of excavation we have come to realize some of the potential contributions that study of the Greek temples and their contexts may make to our understanding of architectural development and ritual activity in Crete or, for that matter, to relative ceramic development during the Iron Age in south-central Crete. There is also the unusual, apparently Phoenician, contribution made to the character of Temple B.

The complex nature of the stratigraphy has slowed our analysis of the Minoan remains. Of these, our first major encounter was with Building J next to the shore. Next came the discovery of the east—west Minoan avenue connecting shore and inland towns. Now, after the 1983 season, we are in a position to realize that Kommos possessed an ashlar building, T, constructed on a scale nothing short of surprising when we consider its occurrence within a town that we continue to think of as otherwise modest in size and pretentions.

We are not yet in a position to understand T, but it is nevertheless worthwhile to explore briefly here some of the considerations that its discovery introduces. From an architectural point of view, for instance, we now know that T combines stoa and court with, on the east, rooms continuing the line of the stoa. It is also apparent that combining the stoa or portico form with other rooms was the usual approach up to the end of LM I and that it was not until LM III that the freestanding stoa was a more normal form. In the former period one finds the combined form at ossuaries (e.g., at Chrysolakkos at Mallia), as well as alongside portions of the central courts at Kato Zakros (on the north and northeast), Mallia (especially alongside the northern border), and Phaistos (on the west). At Mallia and Phaistos alternating columns and square pillars were sometimes preferred to a single line of columns. Usually the verandas formed by the column or column-pier combination served a double purpose: as shelter from sun and rain but also as an approach to rooms behind. On entering T from the pebble court, however, while one could walk eastward (and perhaps westward) into other rooms, there was only the road behind the back wall of the stoa, and it appears that there was not even a doorway leading directly to it.

Building J has large proportions, but T's are immense, with its mammoth orthostate blocks larger than those used in some of the palaces, and the unusually wide, if not daring, intercolumniation of 3.27 m. in the stoa. ⁶⁶ As such, T dwarfs the Minoan houses north of it.

⁶⁴ The history of the stoa form in Minoan Crete has been traced recently by B. J. Hayden ("The Derivation and Architectural Context of Cretan Bronze Age Stoas," *Archaeological News* 11, 1982, pp. 1–7. See also J. McEnroe, *Minoan House and Town Arrangement*, diss. University of Toronto, 1979, pp. 272–280. The form of colonnades in Minoan architecture is discussed in J. W. Graham, *The Palaces of Crete*, Princeton 1962, pp. 190–197.

65 All the stoas in palaces communicate with rooms to the rear. An exception to the general trend is the small LM I stoa with five square pillars flanking Piazzale 10 at Hagia Triada. This form, but with columns instead of pillars, occurs later at Hagia Triada (Building F-G) and also at Tylissos (Hayden, op.cit., preceding note).

⁶⁶ This unusual span, perhaps suggesting bravado rather than skill, may be an indication of poor planning, for the longer the span the more vulnerable the structure becomes, especially to earthquakes. Other possible structural weaknesses of Building T: 1) the north–south walls on the east are not bonded; 2) if our understanding of the use of wooden beams above the second ashlar course of T's northern façade is correct, then the beams were not secured to the blocks by means of wooden dowels, the usual method. This must have weakened the structure. Also, when the weight of the upper walls was no longer upon the orthostate slabs (the upper walls

Furthermore, it contrasts so strongly with the LM houses known at Kommos that its relative splendor of proportion and of building material suggests that it is not representative of the community where it has been set. Aside from a few pier-and-door-partition bases, for instance, squared ashlar blocks are unknown in the Kommos houses. It is difficult, therefore, not to relate T to another aspect of its position, namely to the harbor front and the road leading inland from there. Evidence for this use of the sea has already been summarized, but has been recently reinforced by the discovery of another, even finer stone-weight anchor of Bronze Age type (Pl. 60:e), found halfway between the shore and the small islet, Papadoplaka, in some eight meters of water. Thus it is probably reasonable to think of T as a public or civic building representing not so much the economic resources of its surrounding community but, rather, that of the general area of the western Messara, presumably as the result of a decision made at Phaistos. The project in this case was the embellishment of the chief entryway by sea to south-central Crete, for Kommos most likely had a broader function than simply as the *epineion* of Phaistos.

Presumably, the stoa was designed to provide shelter for groups of people from the sun and from inclement winter weather. It seems, also, to have had a close relationship with Building J on the west, a structure that does not appear to be for domestic use and can best be understood as one built as an adjunct to a busy harbor. The other known element in the arrangement is the group of rooms on the east. Their rather regular plan and apparent lack of fancy appointment certainly suggest that we are dealing with rooms designed for storage, but this speculation must be tempered by the results of future excavation.

Aside from providing us with an insight into the character of the LM I harbor front, T also provides us with evidence for a series of uses (Figs. 6a–6d). First the eastern rooms were abandoned. Not long afterward the colonnade was blocked up in re-use; then Building N was constructed on a higher level to the west. The relative times and characters of these uses are, of course, crucial to their interpretation, but our evidence is little and so far incomplete. For instance, while an LM I date for the abandonment of the eastern rooms is sure, if we should propose that this happend *ca.* 1500 B.c., before the end of LM I, then a large part of T must have been in ruins when the Phaistos and Messara cultures were flourishing. If so, would not T have been rebuilt? Concerning the re-use of the area behind the colonnade, we know that the time range here is LM I–II,⁶⁸ but it is difficult to be more specific until the pottery sample is complete. If this re-use were during LM II, then the picture of a site continuing in use, without a burnt destruction, would be quite consistent with the view already developed in connection with the houses to the north.⁶⁹ Building N was constructed after a massive filling operation in Late Minoan IIIA1 or early IIIA2, its

had probably fallen to the south, within T), the few blocks that were the height of the entire wall, balancing on a pointed edge rather than one that had been broadly squared, leaned outward to the north.

⁶⁷ See footnote 2 (p. 252 above) and *Kommos*, 1981, pp. 192–194.

⁶⁸ Pottery of LM I and LM II styles characterize the re-use of the stoa area (footnote 35, p. 273 above). LM II material (e.g. C 2878) occurs just above the LM I pebble floor, on the west, in Space 7.

⁶⁹ The pattern first appeared upon the excavation of the LM I–II dump on the hillside (*Kommos*, 1976, pp. 231–233, 239; 1977, pp. 165–170).

snug, neat rooms and court not unlike those of certain of the Hilltop houses.⁷⁰ But the lack of stone tools in N, as well as the normal furnishings we have come to expect in LM III households (e.g., hearths, potstands, slab enclosures, and slab seats), and the character of its pottery suggest that N may have had a more specialized function, perhaps one connected with the near-by sea and the great east—west road, a road that was apparently still kept clear until the desertion of the settlement.⁷¹

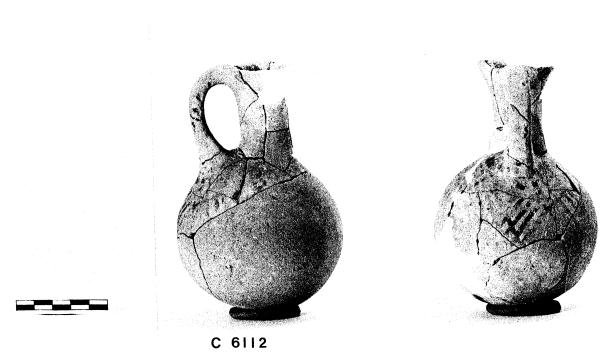
University of Toronto Department of Fine Art Toronto, Ontario, M5S 1A1 JOSEPH W. SHAW

⁷⁰ Specifically, the Oblique Building and the House of the Press (*Kommos*, 1978, pp. 150–151, figs. 2b and 2c).

⁷¹ A review of the latest pottery found directly on the road, from west to east: Trench 43A (LM IIIB); Trench 47A (LM IIIA); Trench 54A (LM IIIB).

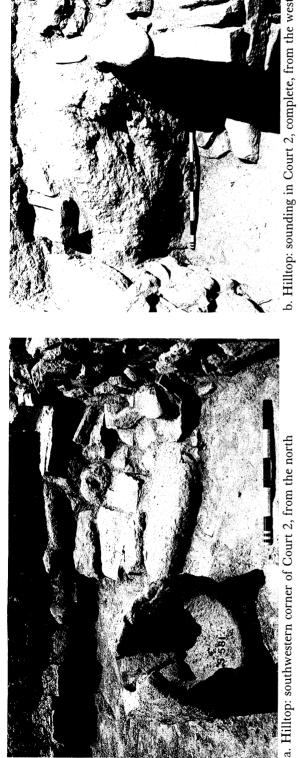


a. Kommos site from the south (1983)



b and c. Cypriot jug from MM floor of Room 51, Hillside

Joseph W. Shaw: Excavations at Kommos (Crete) during 1982–1983



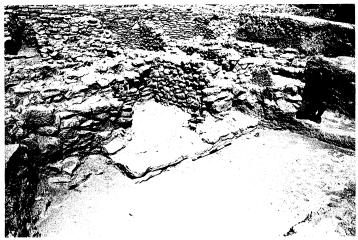


d. White Shaved jug from the North House

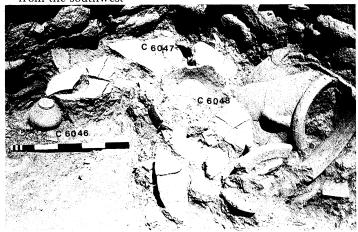


c. Hilltop: Minoan lamp in sounding in Court 2

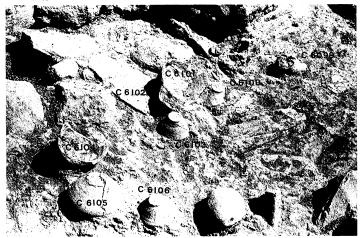
JOSEPH W. SHAW: EXCAVATIONS AT KOMMOS (CRETE) DURING 1982-1983



a. Central Hillside: southern border of MM rooms on the west, from the southwest



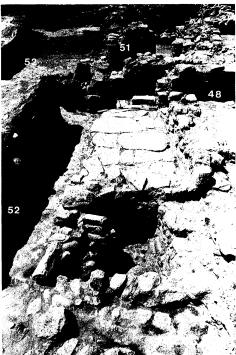
c. Central Hillside: detail of pottery deposit, Room 51, from the south



d. Central Hillside: pottery outside Room 49, from the southwest



b. Central Hillside: pottery deposit in MM Room 51, from the west



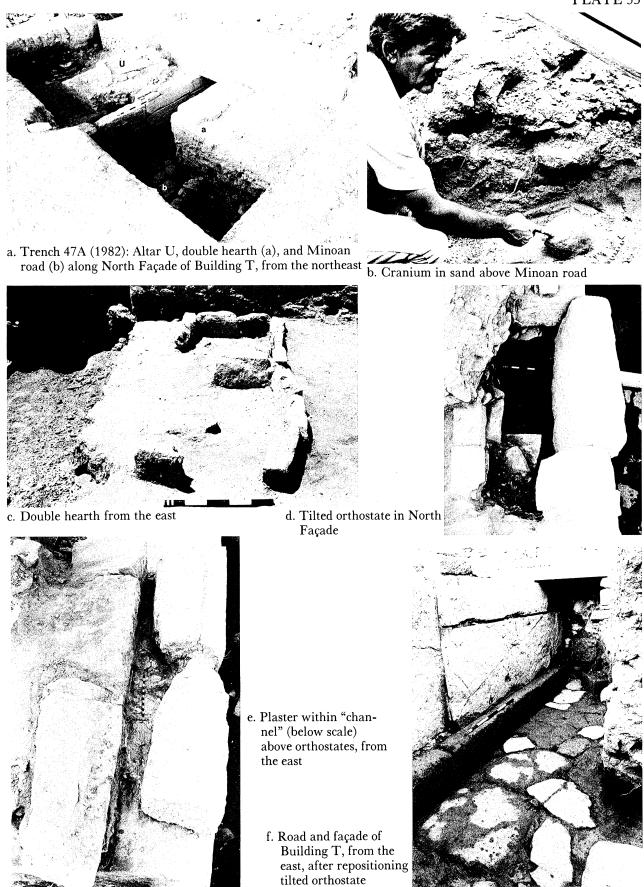
e. Central Hillside: southern border of MM rooms on the east, with court of slabs, from the east



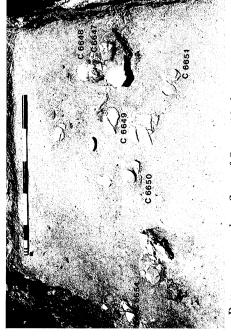
a. Southern area from the southwest



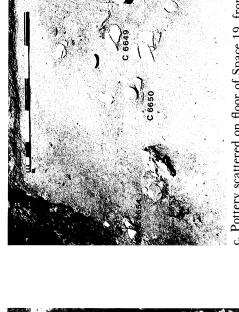
Joseph W. Shaw: Excavations at Kommos (Crete) during 1982–1983



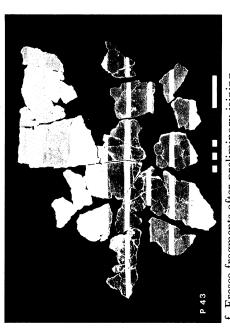
Joseph W. Shaw: Excavations at Kommos (Crete) during 1982–1983



c. Pottery scattered on floor of Space 19, from the south



b. Trench 53A from the south



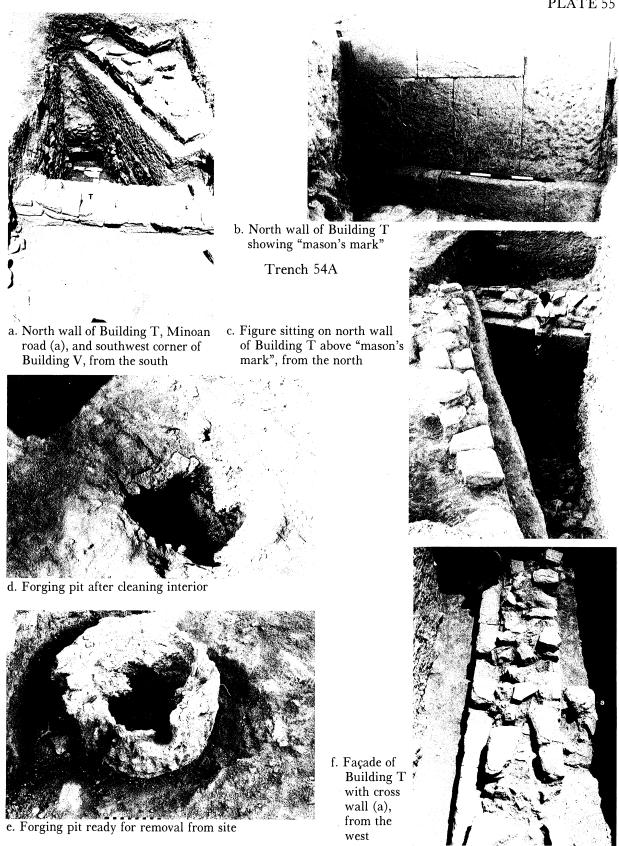
d. Selection of objects from floor of Space 19

f. Fresco fragments after preliminary joining



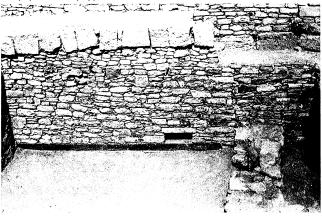
above floor of Space 19, from e. Fresco fragments as found the east

JOSEPH W. SHAW: EXCAVATIONS AT KOMMOS (CRETE) DURING 1982-1983

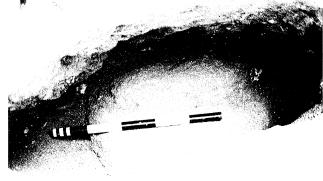




a. Retaining wall built to support foundations of Temples B (B) and C (C), from the west



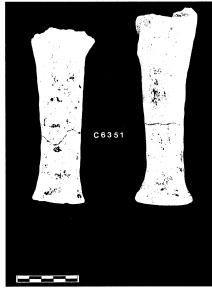
c. Retaining wall to support foundations of Temples B and C, from the south. Subbase for column base is behind "window" at base of wall



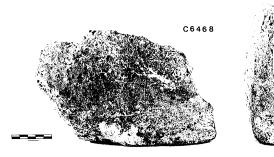
e. Subbase for column base. See c above



b. Terracotta legs of bull figurine C 6351 on eastern wall of Building S, from the south



d. Legs of bull figurine shown above



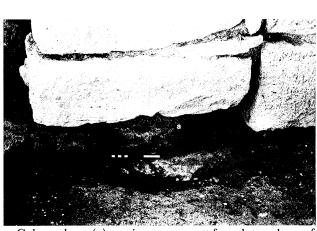
f. Possible vat fragment from above floor in Space 19



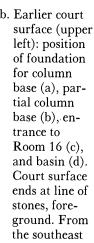
a. Column base (left), "stylobate", and ashlar wall (right) of later phase of Building T, from the south

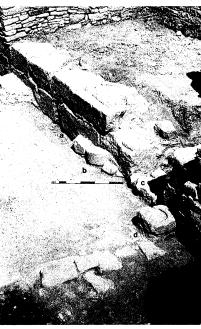


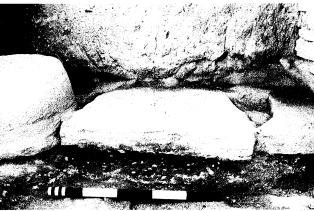
c. Slab pavement of eastern part of stoa, from the south



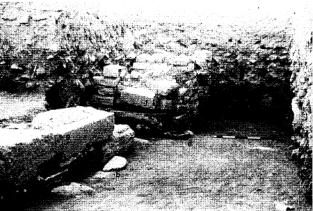
e. Column base (a) serving as support for a later phase of Building T, from the south



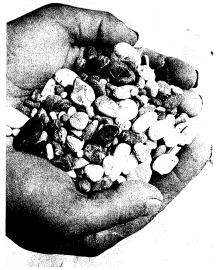




d. Plastering on line of "stylobate", from the south



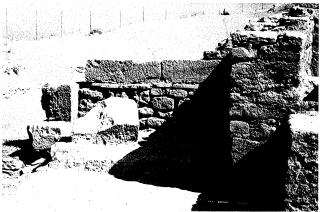
f. Upper, later court surface (foreground), from the southwest: partial column base (b), entrance to Room 16 (c), basin (d), and pier (e). Court surface ends at line of meter stick



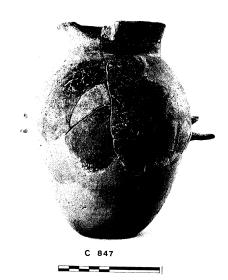
C6721 C6721 C731

 b. Burnished sherds, probably from Italy (C 6710 and C 6721 from deposit above LM III pebble court, Space 6)

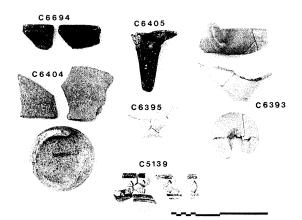
a. Pebbles used for Minoan court



c. Northern and eastern walls of Space 8, from the south



d. Burnished Italian jug from Hilltop houses



e. Fragmentary pottery deposit from above LM III pebble court (Space 6), 1983



f. LM IIIB-C sherds from Trench 50A in southwestern part of site



a. Earlier floor level of Building W, from the east



b. Enclosure next to northern wall of Building Q



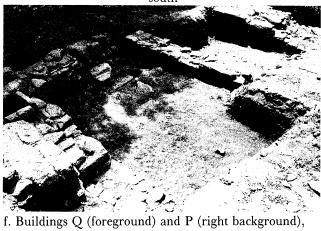
c. Later phase of Building W, from the east



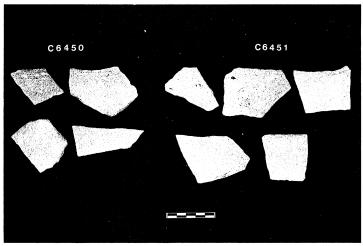
d. Buildings P and Q, from the



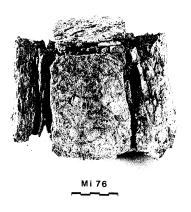
e. Minoan "anta" below eastern wall of Building Q



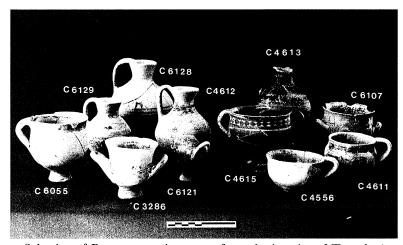
from the northwest



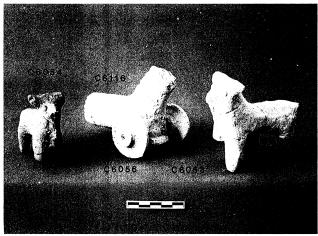
a. Characteristic fragments from necks of two Phoenician amphorae from dump southwest of Greek temples



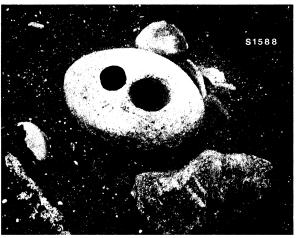
b. Ingot or "bloom" from Archaic strew east of Temple B



c. Selection of Protogeometric pottery from the interior of Temple A or early Temple B and from their exterior dumps



d. Terracotta animal figurines from temple dump north of Minoan Building ${\bf T}$



e. Limestone anchor as discovered midway between Building J and the Papadoplaka islet. Black object is camera lens cap