

EXCAVATIONS AT LERNA, 1957

(PLATES 30-40)

THE present series of campaigns at Lerna, conducted annually since 1952 by the American School of Classical Studies, was concluded in the summer of 1957.¹ A limited amount of new digging was carried out in order to verify or correct certain of our earlier observations, and an important section of the Early Helladic fortifications was discovered and cleared. Concurrently, steps were taken to preserve a number of the architectural remains throughout the excavated area and, through a modest amount of restoration, to make them more readily comprehensible. Preliminary work began on June 20, excavation occupied the six weeks from July 1 to August 10, and the program of conservation was completed by stages, continuing into October.²

In this season's work we again enjoyed the cooperation of the Ephor, Mr. Verdelis, and of Miss E. Protonotariou, Epimeletria, who came frequently from her post in Nauplia to lend assistance and advice. Special thanks are due also to the French School for the loan of their portable photographic tower and to colleagues of the Agora Excavations for many services. A grant by the American Philosophical

¹ Preliminary reports and illustrated notices of discoveries during the previous two years have appeared in *Hesperia*, XXV, 1956, pp. 147-173 (with references to earlier reports, p. 147, n. 2); XXV, 1956, pp. 175-177; XXVI, 1957, pp. 142-162; *B.C.H.*, LXXX, 1956, pp. 266-270; LXXXI, 1957, pp. 538-543; *J.H.S.*, LXXVI, 1956, Suppl. pp. 12-13; LXXVII, 1957, Suppl. pp. 9-12; *A.J.A.*, LXI, 1957, pp. 182-183; *I.L.N.*, 12 Jan. 1957, pp. 68-71.

² Excavation was supervised throughout the campaign by Mrs. Caskey and Miss Martha Heath and for a fortnight by William Donovan. Lloyd Cotsen came from America for the summer to serve a fourth term as field architect. J. L. Caskey had general charge of the activities. Several other colleagues visited the site and lent valuable assistance. Professor J. L. Angel stayed with us for a week in the course of his anthropological studies; Miss Alison Frantz came to Lerna and took an important series of photographs of the site; Colin Edmonson, Secretary of the School, made repeated trips from Athens and relieved the Director of many pressing duties. A force of 20 to 25 workmen was employed, with Evangelos Lekkas as foreman. Andreas Totsikas supervised the domestic establishment at Myloi, where the staff was housed as in preceding seasons.

Throughout the year 1956-57, between campaigns in the field, there was continuous activity in the workrooms of the Corinth museum where the material from Lerna is temporarily housed. Each of the excavators recorded and classified the pottery and other objects recovered from the area of which he had been in charge, while the cleaning, mending, and restoring was carried out by George Kachros and his assistants, Spyros Marinos, Nikos Didaskalou, and Sotiris Maras. A special word of recognition is owed to Miss Elizabeth Courtney, Fellow of the School, for assuming the burden of organizing and supervising the greater part of this work, arranging the collections, and maintaining the inventories and other records. In these tasks she had the collaboration of Mrs. William Eliot and of George Bass. Miss Helen Besi generously assisted in working on the pottery, and Miss Davina Best (now Mrs. George Huxley), a member of the British School, made an extensive series of profile drawings. Before excavation was resumed in 1957, the inventory of pottery numbered 1357 pieces, that of miscellaneous objects 3806.

Society enabled Miss Heath to take part in the summer's campaign and to continue her study of Early Helladic sealings. During the current academic year she holds a fellowship of the American Association of University Women.

EXCAVATION

MIDDLE HELLADIC AND FINAL EARLY HELLADIC LAYERS

A short balk of earth, 1.50 m. wide, was left standing between Areas BD and BE in 1956 (Square F 6; *Hesperia*, XXVI, 1957, p. 144, fig. 1) in order to expose samples of the stratification for observation on either side (Pl. 32, b). Having served its purpose, this projection was taken down in 1957 and the northern border of the excavated area was thus left straight and unbroken. Digging in this section, which we labelled BF, was supervised by William Donovan.

Between the surface, 7.45 m. to 7.65 m. A.T., and the tumulus and debris of the House of the Tiles (*Hesperia*, XXV, 1956, pp. 164-165), remains assignable to nine building periods were observable in deposits having a total depth of 2.30 m. The sequence corresponded with that recorded previously in the areas to east and west, and provided a useful stratigraphical review of the whole region. At the top there was evidence of late intrusions, then walls of successive Middle Helladic houses, most of which showed signs of burning and yielded fragments of clay roofing that had been solidified in the fires. The east side of one rectangular room was well preserved (Pl. 32, a). The socles of its walls had irregular orthostates at the bottom and flat slabs laid horizontally at the top to receive the superstructure of clay or crude bricks. Successive earthen floors in the room showed that it had been occupied over a considerable period of time.

A street ran north and south through this region, following very nearly the same lines through various successive phases from the time when the latest types of Early Helladic pottery were plentiful until the Middle Helladic styles were well established.

Walls and floors assignable to the settlement that succeeded the destruction of the House of the Tiles were found around 5.20 m. to 5:50 m. A.T., sloping downward toward the northeast, away from the higher ground of the tumulus. Here, as elsewhere at this level, many bothroi were associated with the houses. There were also numerous small irregular structures of yellow clay, with shallow depressions and low barrier walls, the purpose of which has not yet been explained. Below the debris of these houses we came upon some of the rounded stones that made up the border of the tumulus, and under these in turn vast numbers of broken tiles in the ruins of the fallen palace.

A few additional stones of the ring were uncovered west of section BF when excavation was resumed in Area BD (*Hesperia*, XXVI, 1957, p. 152). Remains of

the final Early Helladic phases were investigated here and in Area BC, west of the House of the Tiles, the various deposits being removed until the original ground-level outside the building was exposed. Miss Heath was in charge of the work in this sector, with collaboration by J. L. Caskey for a limited period at the start. Further structures of yellow clay, including the rest of a massive complex noted in 1954 (*Hesperia*, XXIV, 1955, p. 36), were revealed in strata immediately succeeding the tumulus, outside its precinct. The first house walls that passed over the ring of stones are to be dated a little later.

The floor of Building BC. 15 (Fig. 1) was tested again in several places. It yielded a good amount of broken pottery, especially at the south end, where a small cross-wall came to light, but not a sherd of Minyan ware or other fabrics of the Middle Helladic period, only "Smear ware" and fragments of coarse jars and pithoi. We conclude therefore that this large apsidal building, lying 0.50 m. to 0.80 m. higher than the House of the Tiles, must be assigned to the latest phase of the Early Bronze Age.

Short trenches were dug in the northeastern part of the main area to test the strata immediately north of House M and beneath the floor of Room AR (Fig. 1). Early stages of the Middle Helladic occupation were represented by the objects found here. A pit grave containing two skeletons, presumably assignable to one of the later phases, was discovered directly under AR.

THE HOUSE OF THE TILES

The Early Helladic palace received much of our attention throughout the campaign of 1957. All the remains of the great structure, which had been excavated section by section and then covered at the end of each season with a protective sheathing of stones and earth, were completely exposed for the first time this year. The clearing was a long task, full of anxiety on more than one occasion when unseasonable rainstorms came up suddenly in the latter part of June. Clay, crude brick, and plastered surfaces would have been damaged irreparably in a few moments at those times had it not been for speedy action on the part of the architect and the foreman, who saved the vulnerable parts of the walls by improvising a cover with strips of tarpaper.

After a thorough cleaning and scraping the whole building was remeasured, a new plan was drawn, many details were recorded, and a series of photographs was taken. General views from different angles are presented here on Plates 30 and 31 and further details on Plate 39, a and b.

Most of the remaining mass of fallen debris which we had left in place in Room XII (*Hesperia*, XXV, 1956, p. 166, fig. 5) was cut away in order that this principal room might appear to better advantage, but two small pinnacles were preserved to show the bricks, clay, and broken tiles as they lay. On the newly cleared part of the floor we found a mass of lead, melted in the fire, and further traces of burnt timbers.

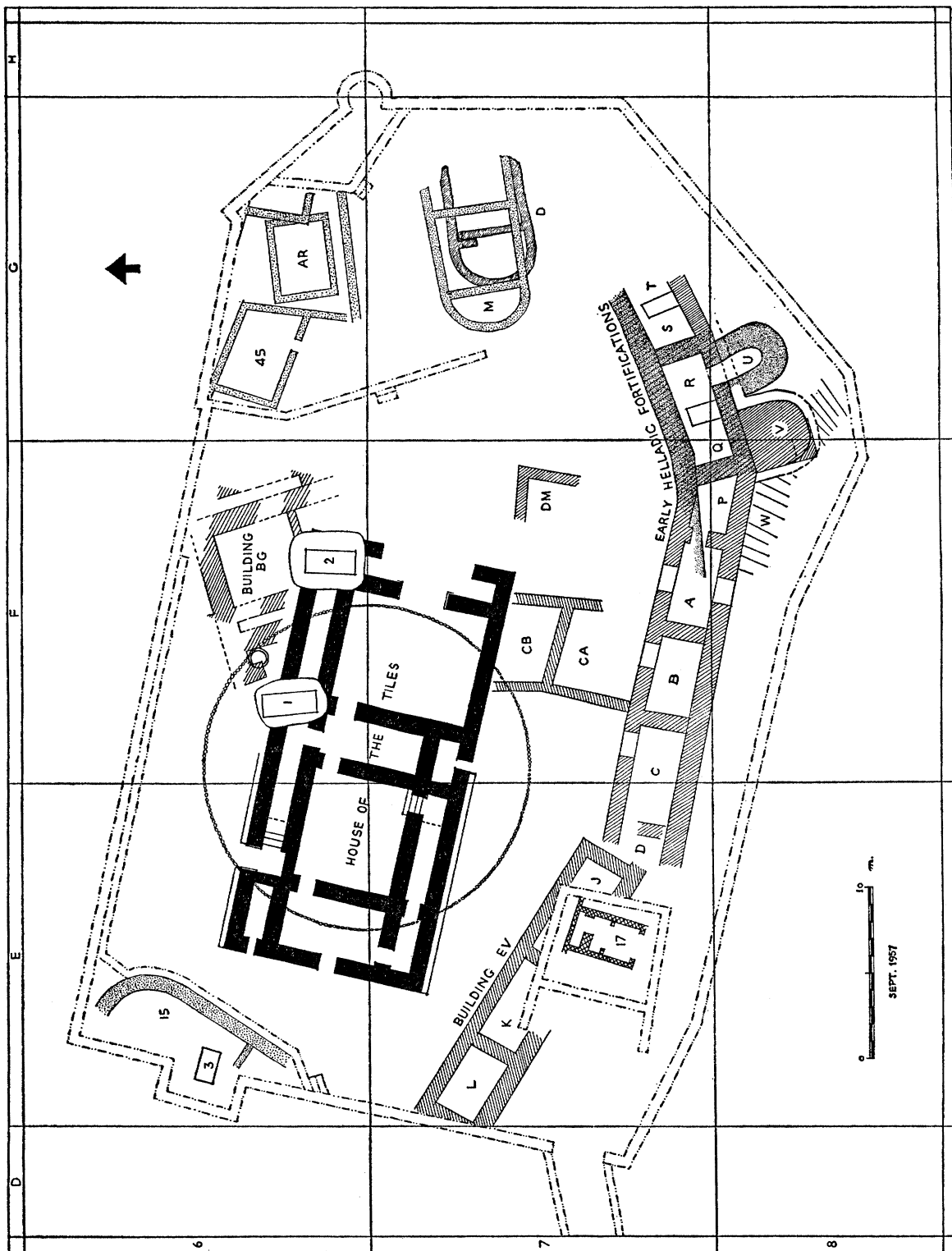


FIG. 1. Lerna, 1957. Plan of Buildings in the principal area of excavation. Modern Enclosure and Retaining Walls shown in broken and dotted lines. House 17, Neolithic; A-D, J-L, P-T, Compartments in Early Helladic Defensive System; U, V, Towers; W, Stairway; BG, CA, CB, DM, Early Helladic Buildings preceding the House of the Tiles; Building 15, late E.H.; Houses 45, AR, M, D, Middle Hellenic; 3, late M.H. Grave; 1, 2, Shaft Graves, late M.H. and L.H. I. (Survey by L. E. Cotsen; drawing revised by Aliki Bikaki.)

The two corridors, III and IX, were also examined with care in a search for further information about the staircases. Soft pockets, possibly marking the position of wooden uprights, and the base of a brick platform were discovered in the southern corridor west of the stair landing. Evidence in the northern passage was inconclusive.

A thorough re-examination of all the wall surfaces within the building brought out an interesting fact. Differences had been obvious from the time when the various parts of the building were uncovered, the walls in some of the western rooms showing a surface that had been deliberately corrugated with a comb-like instrument³ whereas the north vestibule, II, had smooth walls and Room XII a fine hard plaster that resembled stucco. In a few places where these smoother finishings had crumbled or flaked off we were able this year to distinguish traces of the combed layer underneath. The corrugated surface, we now believe, was nowhere designed to be left exposed; it presents an interesting and not unpleasing pattern but for practical purposes it is much too friable. Therefore one must conclude that Rooms V-VII, and probably all the north and south corridors (III-IV, VIII-IX), were unfinished at the time of the destruction. That being the case, was the whole building undergoing a periodic re-decoration, or had it never reached completion, being only at an advanced stage of construction, when the catastrophe overtook it? Various bits of evidence make the latter explanation seem not improbable, but further study of the related problems is needed before we undertake to reconstruct its history.

EARLY PHASES OF THE EARLY HELLADIC SETTLEMENT

Strata antedating the House of the Tiles were found this year in seven limited areas of excavation: trenches in the western section, Squares E 6-7; sounding-pits BD and BE north of the palace in Squares E 6 and F 6 respectively and AP in the northwestern part of Square G 7; two long trenches, HTN and HTS, that bordered the north and south walls of the palace; and a somewhat larger space to the southeast, around the junction of Squares F-G 7-8. Only the last of these provided a comprehensive view of an architectural complex, which will be described in a separate section below.

In the smaller pits and trenches, which were excavated by Mrs. Caskey and Miss Heath, there was abundant evidence of long-continued occupation in the earlier stage of the Early Helladic settlement. The deposits were not exceedingly deep, nor were all the strata preserved continuously. They could not be precisely equated and correlated from one sounding to another, since grading and levelling at various times had taken away the remains of one or more phases. But the walls encountered were big, some belonging certainly to monumental buildings, and the fact that the ground had been specially prepared for them testifies to more than ordinary care and planning.

³ *Hesperia*, XXIII, 1954, p. 25, pl. 4, c; XXIV, 1955, p. 39.

Large structures assignable to two phases immediately preceding the House of the Tiles were noted in Area BC but could not be investigated since they extend westward beyond the limits of our operations. Pit BD and the western end of Trench HTN yielded evidence of two to four Early Helladic phases between the level of the palace and the top of undisturbed Neolithic deposits. More substantial remains came to light in Pit BE and the eastern end of HTN. Immediately below the palace level one stratum had been largely obliterated, but under it there was a complex of massive walls, 0.80 m. to 1.20 m. in thickness, aligned in a different direction from that of their successors and apparently representing a huge building that had itself gone through two or three stages of alteration or reconstruction. The position of these big stone walls is shown in Figure 1 with the designation BG. They are socles that once held superstructures of crude brick. The earliest are based in footing trenches that were cut into the underlying Neolithic layer; and the first floors lie in some places directly upon the pure Neolithic deposits. It seems almost certain that debris, including probably a good many remains of the initial Early Helladic phases, was cleared away to make room for this important structure.

In one of the rooms of Building BG, crossed by Trench HTN, Miss Heath came upon a remarkable vessel of baked clay, approximately circular in shape and 1.15 m. in diameter. It had been broken and pieces had been lost in later building operations, but the greater part lay in situ (Pl. 32, c, d). This was a stationary object, probably constructed on the spot and hardened by the fires that were lighted in it. All the exposed surface was smoothed, but the under surface shows the rough irregularities of the bedding on which it was fashioned. Surrounded by a broad rim that bears a decorative pattern of many incised zigzag lines, it has a floor that is flat at the sides but recessed in the center. The cavity is shaped like an hourglass or the head of a great double axe, narrow at the mid-section and spreading at either end, one slightly broader than the other. Bordering the edge of the depression is a band of impressed triangles. When found, the whole interior was packed and incrustated with fine gray and white ash.

But for the central hollow, this vessel resembles certain of the flat-rimmed "baking pans" that have been observed at other Early Helladic sites.⁴ Fragments of many similar pans, decorated and plain, some apparently round, some irregular in outline, have come to light in the House of the Tiles and in earlier strata at Lerna. The elaborate form of the present example suggests that it served more than a purely utilitarian purpose. We suppose that it may have been a ceremonial hearth, perhaps the center of some domestic religious observance, the place where fire was kept continuously alive. The fragments were removed from the ground and are being incorporated in a complete reconstruction of the vessel, the missing parts being filled out in plaster.

⁴ C. W. Blegen, *Zygouries*, pp. 121-122, fig. 114, Nos. 1, 3, 4; H. Goldman, *Eutresis*, pp. 18-19, fig. 16, pp. 106-109; O. Frödin and A. Persson, *Asine*, p. 231.

Trench HTS, excavated by Miss Heath along the south side of the House of the Tiles, yielded remains of six Early Helladic strata below the debris and ground level of the palace. In two of these phases streets crossed the area. They were irregularly paved with pebbles and larger stones, and a well-constructed channel, presumably for drainage, ran in the center of one of them. In five of the strata there were walls of buildings, the largest of which, corresponding probably in date to Building BG in Square F 6, appeared in the earlier phases. Bothroi, including a remarkably deep one lined with red clay, were also found in association with these lower strata. Thus Trench HTS, although too narrow to give a comprehensive view of architectural remains, provides useful confirmation of the sequences observed further southward and southeastward in Areas J and G (*Hesperia*, XXV, 1956, pp. 166-169). The various stages of building in this region followed one another without interval. Walls were demolished and debris was certainly cleared away on numerous occasions, so that the strata are now thin, but not so many have been altogether obliterated as in the area north of the palace.

Further evidence of this long succession of building periods in the early stages of the Early Helladic settlement was furnished by the sounding called AP in Square G 7 northwest of House M (Fig. 1), excavated by Mrs. Caskey. The pit, aligned roughly north and south, was just over four meters long and two meters wide. Five Early Helladic phases were represented, one exceptionally big wall having stood through two or three of them. The various strata here were irregular. At the south end of the pit the sequence was clearly discernible and pure Neolithic deposits were found below the first Early Helladic, around 2.35 m. A.T. On the north, however, a tremendous mass of mixed filling went down at least to 0.65 m. A.T., where we reached standing water and had to stop digging.

The deep probings that have now been made in various parts of the site give some indication of the configuration when the Early Helladic settlers first established themselves. Trench C in Square E 5 produced Early Helladic pottery down to 2.05 m. A.T., where excavation was stopped in 1952 (*Hesperia*, XXIII, 1954, p. 20). In Area D (Square H 5) we encountered only Early Helladic remains at water level, 0.75 m. A.T. (*Hesperia*, XXV, 1956, p. 152). Debris of habitations continued still lower, but very little if any of the Neolithic settlement can have extended that far eastward. In the northern part of our main area, Squares E-F 6, there was a relatively high plateau or ridge running east and west, made up of unmixed Neolithic deposits, which we have found around 4.45 m. and 4.10 m. A.T. in Areas BD and BE. South of this, under the House of the Tiles (*Hesperia*, XXVI, 1957, p. 153) and eastward through our Pit AP, there seems to have been a deep gully which the Early Helladic newcomers, not immediately but probably soon after their arrival, filled with earth and stones that they took from some other part of the site. This, we believe, is the only reasonable explanation that can be given of the tremendously deep mass of mixed

and unstratified filling, containing principally Neolithic pottery but a few sherds of the older Early Helladic fabrics, which we have encountered along this line. Moving further south again, one finds another east-west ridge in Area J (Square E 7), where Neolithic remains lay intact as high as 4.30 m. A.T.; and beyond this another sharp drop, presumably the edge of the area inhabited in the Stone Age, where again the Early Helladic people increased the area of level ground by dumping great masses of debris over the side of the earlier bank (*Hesperia*, XXVI, 1957, p. 155, fig. 5, stratum 14).

Pottery and other objects from the oldest Early Helladic deposits are now being studied. Clearly this was one period of gradual unbroken development, down to the age of the House of the Tiles, and there are no sudden changes in the types of domestic equipment used, but even a preliminary inspection reveals certain differences. In the earliest strata we find more examples of red-slipped ware, the surface tending to split off, as at Zygouries;⁵ iridescent black glaze ("Early Helladic *urfirnis*") of good quality is used on many vessels and is more thickly applied than in subsequent phases; medium-sized bowls with rims canted inwards occur more frequently than the later small bowls and plain saucers; bodies of sauceboats are broad and open, their spouts tending to be shorter and more nearly horizontal than in the subsequent stage of development.⁶ Pots with painted patterns are very rare. A few fragments of incised and burnished vessels, probably Early Cycladic lids or "frying pans," were discovered in the lowest Early Helladic strata this year (Pl. 35, d-f).⁷

EARLY HELLADIC FORTIFICATIONS

Long narrow buildings, called provisionally G and EV, have been described in foregoing reports as they emerged bit by bit during the annual campaigns of excavation.⁸ It was noted that they bordered the southern edge of the inhabited area and that they were assignable to phases of the Early Helladic establishment preceding the House of the Tiles. We surmised that they might be parts of a system of outworks surrounding the entire site, but we were not inclined to believe that they were designed for military purposes.

A further segment of the circuit, extending eastward from Building G and bending toward the north, was uncovered in 1957 by Mrs. Caskey. This greatly

⁵ C. W. Blegen *Zygouries*, pp. 77-78, pl. V (Class A II).

⁶ Cf. sauceboats from the Cyclades, e. g. those found by Tsountas in Syros, *Ἐφ. Ἀρχ.*, 1899, pl. 9, nos. 8, 9 (the former well illustrated in C. Zervos, *L'Art des Cyclades*, fig. 190). A pertinent summary of the typology is given by Esther Smith, *Hesperia*, XXIV, 1955, pp. 145-146.

⁷ d. Inv. L. 1386; L. of sherd 0.055. Red burnished ware.

e. Inv. L. 1443; L. of sherd 0.07. Brown slipped ware.

f. Inv. L. 1448; H. 0.041. Dark gray ware, probably slipped.

⁸ *Hesperia*, XXIII, 1954, p. 27; XXIV, 1955, pp. 41-46; XXV, 1956, p. 167; XXVI, 1957, pp. 153-156.

strengthens the probability that buildings of the same kind did in fact form a complete ring; but—still more important—the new stretch of walls was found to have projecting towers, the purpose of which can only have been to defend the place against attack by enemies. Therefore we must revise our former conjectures and recognize that Lerna at this time was a fortified citadel.

The newly excavated section of the complex appears on the plan, Figure 1, around the adjoining corners of Squares F-G 7-8. Two walls, labelled AZ and BA when they were found in trial trenches in 1956 (*Hesperia*, XXVI, 1957, p. 144, fig. 1), are now seen to be continuations of the north and south walls of Building G. The space between them is about two meters in width and is divided by cross walls into compartments, which were used as living quarters (Pl. 33, a). Retaining the former designations A, B, C, and D for the rooms in Building G, we are labelling the new ones P, Q, R, S, and T. The partition walls between P and Q and between R and S are early parts of the structure. They run straight across, completely closing the units. Spur walls between Q and R and between S and T, which are later additions, join the main south wall but leave narrow passageways at the north. A part of the north wall in its earliest form, which in the later stages fell out of use and was covered over, is seen extending in a line slightly south of west through Room P and into Room A. South of Room R and connected with it by a doorway is a hollow tower, U (Pl. 34, a, b). Just west of this, south of Room Q, there is a second tower, V, which succeeded the former after one of the reconstructions. A flight of steps, W, composed of overlapping flagstones, rises from the plain, passes under the corner of Tower V, and runs in a northwesterly direction up toward the entrance gateway in Room A (Pl. 34, c).

All this building and rebuilding obviously occupied a long period of time, coeval undoubtedly with many of the architectural phases that have been distinguished in various parts of the settlement. Further study of the evidence may make it possible to correlate these stages with considerable accuracy. The building of enclosure walls probably began quite early in the Early Helladic occupation; it is certain that the last version of the fortifications in this series was demolished before—perhaps only just before and in conjunction with—the erection of the House of the Tiles. In the present report we can give only a brief summary of our preliminary observations.

In the first stage there was apparently a single wall with a good outer face toward the south. This is represented by the remains that have been found under Rooms A and P and running thence eastward some 12 m. to the end of the area excavated. No further parts have been recognized west of the place where the wall gives out irregularly in Room A. It is built of stone and its northern face is uneven. Clearly it was a retaining wall, at least in its lower courses, designed to bound and support a raised terrace on the north. The superstructure, none of which has been preserved, was probably made of crude brick.

The next phase is marked by the addition of a rectangular projection, Room Q-R, and the horseshoe-shaped tower U. These seem certainly to have been built at the same time. The stone socles of the oblong room are bonded with those of the tower, the masonry throughout showing a distinctive herringbone pattern. The upper parts of the walls of Room Q-R were of crude brick, several courses of which have been preserved in place (Pl. 33, b). This phase ended in a fire, which hardened the bricks and presumably accounts for the number of whole pots that were hastily abandoned on the floor. Among the latter are numerous small saucers, a bowl with a low pedestal-foot, coated streakily with a creamy wash ⁹ (Pl. 35, b), a sauceboat, an askos, one large and one small jug, a large closed jar, and fragments of a big basin and a broad low pan. A jug ¹⁰ (Pl. 35, c) lay inside Tower U. A squat jar ¹¹ (Pl. 35, a), found somewhat higher in the debris, may belong to this phase or to the occupation that followed the reconstruction.

In these early stages the stairway was installed, passing the flank of the rounded tower. It is a fine piece of masonry, carefully constructed and scarcely less than monumental in character (Pl. 34, d). Presumably it led to a gateway that now no longer exists; several of the flagstones partly underlie the south wall of Rooms P and A, which must therefore have been built later.

Construction of this outer, southern, wall and perhaps the whole western extension with its compartments A-B-C-D may be assigned provisionally to the third phase. Tower U was demolished, its walls were taken down, and the doorway to the inner room was blocked. Evidently the tower had been badly damaged. Some of its stones were left lying where they had fallen (Pl. 33, a, lower left). It is not clear what useful purpose had been served by the narrow open space inside; hollow towers are usually provided with loopholes for the shooting of arrows or other missiles, but here the walls are so thick and the interior so cramped that one could scarcely draw a bow or aim a shot. The new tower, V, was in any case differently constructed, having a massive podium of solid stone masonry.

This second tower, clearly later than U and later than the stairway which now went out of use, itself passed through several stages of alteration. At first it seems to have been rectangular, projecting 2.50 m. southward from the curtain wall; a part of the original face is visible through an opening among the stones on the west side and its position is indicated by a broken line on our plan. Then the podium, still rectangular, was extended some 1.30 m. outward. The shape of the superstructure at that time cannot be determined. We suppose that it too was angular. In its next phase, however, the outer end of the tower was rounded, and at some time thereafter,

⁹ Inv. L. 1434; H. 0.143, D. 0.198.

¹⁰ Inv. L. 1430; H. 0.169, D. body 0.149.

¹¹ Inv. L. 1400; H. 0.178, D. 0.265.

perhaps immediately, a bolster of stones was laid about its foot and along the base of the curtain eastward (Fig. 1; Pl. 34, a).

The straight line of the main wall ran west from Tower V past the gateway in Room A and onward for a considerable distance. The remains die out at Room D, where the Early Helladic ground-level was higher and the stones were more easily removed for re-use in later buildings. Still farther westward in the same direction, however, great masses of burnt ruins, again at a lower level, were observed in 1956 (*Hesperia*, XXVI, 1957, p. 156). Little could be made of them at the time, but the few lines of masonry that could be seen in place correspond well enough with the orientation of the south curtain (Building G) and we are now inclined to believe that they represent another tower, contemporary with Tower V. Some disaster overtook it, and instead of rebuilding on the same place the architects chose to draw the whole line of the wall inwards onto higher and firmer ground. This latest segment of the fortifications is what we have called Building EV, with its compartments J, K, and L (Fig. 1).

Returning to the complex at the southeast, one finds that alterations were made here too in the fourth and final stage. Damage had occurred; several pots found in the debris may be assignable to this period. In the reconstruction the spurs between Q and R and between S and T were added. It is not certain whether the older partitions between P and Q and between R and S were renewed or dispensed with. In the final years of this architectural phase, when Houses CA, CB, and DM were built (Fig. 1), the inner wall of the circuit, north of Q, R, S, and T, seems to have been omitted. A paving of small pebbles was there found covering the old foundations.

We have been fortunate in discovering this extensive part of the fortifications and in coming upon elements that are well preserved. Many of the stone foundations and socles remain in place and even some of the crude brick walls have survived in remarkable fashion. The real superstructure, on the other hand, has of course disappeared, and there is no positive and conclusive evidence on which to base a reconstruction. But the ground plan and the obvious nature of the building limit the possibilities. One cannot be far wrong in assuming that both inner and outer walls were carried up to an imposing height, perhaps six or eight meters or even more, and topped with a platform and a parapet for the use of the defenders. There may have been one or two intermediate floors between the ground-level and the upper platform, providing barrack rooms for the garrison and ample space for storage.

These are the largest, and very nearly the only, fortifications of the Early Bronze Age that have yet come to light on the Greek mainland.¹² Closer parallels are found in

¹² Lower courses of walls that served for defense were discovered by D. Theocharis at Rafina and Askitarío in Attica, *Πρακτικά*, 1953, pp. 105-107, 111; 1954, p. 106; *Έργον τῆς Ἀρχαιολογικῆς Ἑταιρείας*, 1954, p. 13; 1955, pp. 30-31.

the islands: at Aegina,¹³ at Lemnos,¹⁴ and particularly at Chalandriani in Syros and on the hill of Agios Andreas in Siphnos, where Tsountas found double walls with towers.¹⁵ The circuit walls of Troy I and Troy II are also comparable, though different in plan.¹⁶

THE NEOLITHIC STRATA

The space available for investigation of the most ancient settlements has been successively reduced by the discovery of buildings, some monumental in size, some interesting as examples of other architectural types, which required preservation as permanent exhibits. Fortunately a fairly large area in Square E 7, excavated in 1955 and 1956,¹⁷ provided an unencumbered view of Neolithic habitations through many stages and yielded a plentiful sample of stratified material. Since this section fell just at the edge of the mound, however, there remained a possibility that one phase or another might not be represented. Therefore in 1957 three additional deep soundings were made farther north, nearer to the topographical center of the site. Miss Heath excavated Pit BD (Square E 6) to virgin soil and observed Neolithic remains in the adjoining Trench HTN, while Mrs. Caskey tested all the strata a little further east in Pits BE and AP (Squares F 6 and G 7).

Neolithic deposits were found in Pit BD at a maximum height of 4.45 m. A.T. There were no house walls, a fact that may be accounted for by the activity of the Early Helladic builders who evidently levelled the existing ground in various places, as noted above. Shafts of two clay-lined bothroi or storage pits were discovered, and near them the lower part of a plump female figurine with striped decoration¹⁸ (Pl. 36, d, e). The hands rested originally high on the front of the thighs; the arms therefore were presumably free of the body and bent at the elbows.

In Trench HTN only a few meters away the skeleton of a young woman was found in a pit grave at the top of the Neolithic deposits, here around 4.10 m. A.T. The body had been laid on its right side, head to the east; the legs were drawn up, the left arm lay across the waist, and the right arm was doubled against the shoulder. The skull rested on a stone. Beyond it were two bowls set upright, one of plain red clay

¹³ G. Welter, *Aigina*, pp. 8-9 and fig. 9.

¹⁴ D. Levi, *Bollettino d'Arte*, 1952, p. 342, figs. 36, 37; also *Arch. Anz.*, 1935, col. 234; 1936, cols. 154-155, figs. 14, 15; 1937, cols. 167 ff., fig. 18; *B.C.H.*, LVIII, 1934, pp. 263-265; LIX, 1935, pp. 295-297, figs. 48, 49.

¹⁵ 'Εφ. 'Αρχ., 1899, cols. 115-134. The lighter wall outside the rounded towers at Chalandriani, shown in fig. 32, corresponds remarkably, in relative position, to our Wall AW (*Hesperia*, XXVI, 1957, p. 144, fig. 1), which was built long after the early fortifications had been destroyed and buried.

¹⁶ C. W. Blegen, *Troy I*, pp. 145 ff., 188 ff.; W. Dörpfeld, *Troja und Ilion*, I, pp. 52-80.

¹⁷ Area JA-JB, *Hesperia*, XXV, 1956, pp. 170-171; XXVI, 1957, pp. 154-160.

¹⁸ Inv. L 7.46; H. pres. 0.065.

with flat bottom and vertical rim¹⁹ (Pl. 37, a), the other dark gray-brown with rounded shoulder and outturned rim, well burnished²⁰ (Pl. 37, b). A trial pit dug in 1954 at the west end of this grave had yielded another bowl at precisely the same level, undoubtedly an offering that had been laid at the feet.²¹ It is larger (Pl. 8, c), having a body like the first but also a distinct base of some sort, now lost, and on the outer surface of the plain reddish-brown biscuit there are remains of a thick white sugary incrustation, over which are faint traces of deep red paint. All three bowls have single horizontally-pierced lugs. They are of types not closely paralleled in the Lerna collections, but with affinities to the Neolithic repertory. The grave is presumably to be assigned to a late Neolithic phase, having belonged to a level of occupation that was cut away in Early Helladic times. Associated perhaps with the same late phase are a few sherds of black burnished ware with incised patterns, white-filled, that come from the highest Neolithic levels (Pl. 36, a-c).

The next five strata in Pit BD, each marked by house walls and numerous floors on which deposits had accumulated (e. g. Pl. 32, e), could be assigned to the same general stage as the upper eight strata in Area J. They have a total thickness of some two meters. The houses appear to have been small. They were repaired, altered, and reconstructed from time to time; in some places it was found convenient to use part of an old wall as the foundation for a new one. The pottery, here as elsewhere, comprises a large amount of red-brown glazed ware, a smaller amount of red slipped ware which occurs principally but not exclusively in the earlier phases, and many pieces with rectilinear patterns. These designs are painted, similarly, with glaze or slip²² and a development in the style and quality of decoration is discernible (Pl. 36, f-h).

The characteristic glazed ware of the upper strata is illustrated by fragments of a fine big carinated bowl, its orange-red coating rubbed on in a manner that produces a brilliant variety of tones²³ (Pl. 38 c), a darker brown piriform jar with lugs set low

¹⁹ Inv. L. 1394; H. 0.106, D. 0.152.

²⁰ Inv. L. 1445; H. 0.103, D. 0.172.

²¹ Inv. L. 545; H. pres. 0.163, D. 0.228. Base missing.

²² The word glaze ("Neolithic *urfirmis*") is here used to describe a substance that produces a naturally lustrous surface without supplementary burnishing, while the word slip is used for coatings, usually thicker, that appear moderately or quite dull wherever the surface is unburnished. Technical analyses have not been made, and this arbitrary application of the terms, though practical and acceptable in archaeological jargon, is admittedly lacking in precision. The two types of coating are not always easy to distinguish: a few pots appear to have glaze on the inside and slip on the outside, and (very rarely) the coating on the exterior looks like glaze in one place and like slip in another. Presumably the chemical composition of the substance, which we take to have been a solution of refined clay, is essentially the same throughout, and the changes came about in the firing. But the results were not left to chance. Kilns could be controlled, and most of the firings undoubtedly turned out as the potters intended.

²³ Inv. L. 1392; D. estimated 0.41.

on the body ²⁴ (Pl. 38, d), and part of a very large pedestal or stand with a pattern of small bosses that were formed by pressing a fine pointed implement into the clay from the inner side when it was still quite soft ²⁵ (Pl. 38, e, f). Three complete or nearly complete jars, of shapes represented previously by fragments only, were found successively at greater depths in Pit BD (Pl. 37, d-f).²⁶ These also belong to the red-brown glazed class. They have full swelling bodies and collar-necks; two have similar collar-like bases. Vertical tubular lugs appear on one, small horizontal lugs, pierced vertically, on another.

The earliest house in Pit BD belonged to the period of red glazed and slipped pottery. It had narrow walls with stone socles and a yellow clay floor at a level around 2 m. A.T. Just below this, the deposits were of a different character. A few stones appeared but there were no walls; the earth was full of black carbonized matter, and the relatively scanty pottery comprised chiefly Rainbow ware and moderately coarse spongy fabrics. Virgin soil was found in some places around 1.30 m. A.T. Elsewhere it had been cut down to and below the present water level, 0.66 m. A.T. The irregular hollows were too small to be interpreted as floors of huts; we suppose rather that here, as in the region observed farther south, the earliest Neolithic inhabitants scooped out the sticky red natural clay and used it in building their shelters; perhaps also for making their pots.

A grave was found in the upper part of the early Neolithic layer, its floor at 1.63 m. A.T. The shape of the pit could not be seen, owing to the softness of the damp earth, but this was obviously a simple inhumation. The skeleton was that of a child about five years old, lying on its right side with head to the northeast, legs drawn up and hands before the face. Near the head lay a hemispherical black burnished bowl ²⁷ (Pl. 38, a).

The sounding in Area BE (Square F 6), where parts of the huge Early Helladic building BG came to light, was also carried down through the Neolithic strata to virgin soil. The sequence was similar to that noted in Pit BD. Uncontaminated Neolithic deposits were found in some places as high as 4.10 m. A.T.; in Early Helladic times the ground-level in this region seems to have been reduced by grading rather than being built up by filling, and therefore the layer of mixed dump scarcely occurs. At least five building periods were represented by house walls with stone socles, floors, and accumulations of debris, at levels between 4.10 m. and 1.80 m. A.T. Red and yellow

²⁴ Inv. L. 1391; H. pres. 0.178.

²⁵ Inv. L. 1450; H. pres. 0.183.

²⁶ d. Inv. L. 1362; H. 0.182, D. 0.235. Level 3.40 m. A.T.

e. Inv. L. 1381; H. 0.203, D. 0.241. Level 3.20 m. A.T.

f. Inv. L. 1385; H. 0.268, D. 0.29. Level 2.30 m. A.T.

²⁷ Inv. L. 1384; H. 0.084, D. 0.118. Cf. S. S. Weinberg, "Remains from Prehistoric Corinth," *Hesperia*, VI, 1937, p. 496, fig. 6.

clay was used extensively in the houses for lining the floors and the storage pits. In or beside one of the buildings there was a small yellow platform with scalloped edges and a neat circular hole in the middle, perhaps for holding an upright post. The pottery associated with these phases comprised glazed and slipped wares and the corresponding wares with painted patterns.

Below 1.80 m. A.T. no further walls were discovered in Pit BE. For one meter there were strata of black, gray, brown, and reddish-brown earth containing loose stones and patches of ash or other carbonized matter. The pottery was of early Neolithic fabrics, Rainbow and brown spongy wares, with very few pieces bearing painted patterns. In the lowest stratum, on virgin soil, and in the three small pits that had been dug in it down to the present water level, there were some animal bones but almost no sherds.

The third of this season's deep soundings, AP, presented a different stratigraphical picture. At its north end, near the northwest corner of Square G 7, the pit revealed a section of the great gully that had been filled with a mixture of small stones and earth in an early phase of the Early Helladic occupation. In the southern part of the pit, however, successive strata were discernible: earth showing some disturbance from 3.25 m. down to 2.35 m. A.T., then uncontaminated Neolithic remains down to water level, where we were forced to stop digging without reaching virgin soil. At least three phases were clearly marked by superposed walls, laid out in straight lines, each with stone socles, the earliest being over 0.50 m. thick and standing to a height of five courses. Pottery of the very early types was found on floors associated with the two lowest sets of walls, around 0.90 m. and 1.50 m. A.T. respectively, and even the third level, about 2.20 m. A.T., may be assignable to the early Neolithic stage. Thus we find for the first time secure evidence that substantial rectangular houses, not merely temporary shelters, were characteristic of the most ancient settlement at Lerna.

Plain implements of bone and stone were recovered from these deposits. Most of the pottery is badly shattered; the sherds represent chiefly bowls with rounded profiles. The third stratum yielded a considerable part of the bottom and lower sides of a large vessel the inner surface of which was deeply scored vertically and horizontally with a sharp instrument while the clay was soft²⁸ (Pl. 38, b). Fragments of similar vessels occur not infrequently in the Neolithic layers. The floor of these pots usually shows signs of wear by some grinding action.

CONSERVATION

In order to preserve the architectural remains that have been exposed and to leave the site in a state intelligible to students and visitors, the following measures were taken in 1957.

²⁸ Inv. L. 1451. H. pres. 0.175; max. D. pres. 0.355. Cf. *Hesperia*, XXVI, 1957, pl. 48, e.

Walls of dry-stone masonry were constructed all around the excavated area and topped with a coping of cement. These serve as retaining walls against the banks of earth, which stood to a height of some three meters along the north and on the south-east. Similar terraces were also made within the area wherever necessary. Much of the deep excavation on the southwest, where Neolithic layers had been dug in 1956, was refilled, but a large pit was left open with its banks secured in order to show the walls of Neolithic house 17 (Pl. 39, c). Below the filling of earth, west of this house, we deposited a thick layer of loose stones to draw off the rainwater that falls into the pit. Retaining walls were built to hold up an apsidal structure (15) and a Middle Helladic tomb (3) in the northwest corner of the area (Pl. 39, d), and two others to form successive terraces around the Middle Helladic houses toward the northeast. These walls help the eye to distinguish the different levels which mark the chronological stages of the settlement.

Most of the ancient buildings exist in plan only, stone socles of the walls being still in place but the crude brick superstructure having disappeared. In some cases the socles have also been lost in part and the remnants are difficult to understand. To clarify the lines of these buildings we undertook to fill out certain walls, using stones like those of the original building but reconstructing only to the length and height, usually one or two courses, that were attested by unmistakable evidence (Pl. 39, c). This modest restoration has greatly improved the general appearance and has helped to strengthen the original parts of the buildings. The tops of the walls have been pointed with cement to hold the stones in place; as the cement was applied it was dusted immediately with dry earth to give it a suitable color. In a few places where crude bricks are standing, protective copings have been constructed of modern roof tiles (Pl. 40, a).

The most difficult problem of conservation was presented by the House of the Tiles. Its walls and stairways had been saved by our protective sheathing (mentioned above) and no appreciable deterioration had occurred since they were first cleared, but some of the facings were in danger of disintegration (Pl. 39, a). Wherever the wall itself provided a sound backing of stone or hardened brick, we solidified the surface by filling the cracks and hollows with plaster of paris, which was then colored to harmonize with the rest of the wall. In other places the wall itself has crumbled behind the surface, and there more elaborate methods of conservation will be required.

Parts of the building, particularly at the east, had been demolished by later intrusions. Where this had occurred we restored the outer walls in stone approximately to the height of the original socle; gaps in the interior partitions were filled or reconstructed with fragments of the ancient tiles that had been recovered in the debris (Pl. 39, b). Wooden sheathings are to be fitted at the jambs of the three doorways, A, H, and P, where frames of that sort originally stood. In the case of

the two Mycenaean shaft graves that cut through the north-central and northeastern parts of the House of the Tiles, we chose to restore as much as possible of the Early Helladic walls, leaving the graves themselves intact but encroaching somewhat upon the area of their shafts.

These measures alone would obviously not suffice to preserve the remains of the building. A roof was required to give protection from the rain and an enclosure to keep people and animals from touching the delicate surfaces. After much study of the problem in collaboration with the Departments of Antiquities and Reconstruction it was agreed that the shelter should be as simple as possible, having open sides with wire mesh through which the antiquities could be seen, and that it should be built in reinforced concrete, tinted with earth colors like the museum at Corinth. Further requirements were that it be capable of withstanding the earthquakes that are felt occasionally in the Argolid, as well as the violent whirling winds that blow from Arcadia every summer (*Hesperia*, XXIII, 1954, p. 30), and that it require a minimum of maintenance. We are most grateful to Professors Orlandos and Marinatos and their departments for advice and assistance in solving these problems, and to the Greek Ministry of Education for a substantial contribution toward the cost of the construction.

The shelter was designed by Dr. Paul Mylonas, who also personally supervised the building operations. The work was done under contract by the firm of Gouliamos, Skandalis, and Nikolopoulos, who began on August 3 and completed the principal elements of the structure on August 29. It consists of a roof about 18 m. by 31 m. in area, pitching slightly to north and south from a central ridge, supported on either side of the ancient palace by rows of six vertical pillars. The clear span from north to south is 14 m., there being no internal supports. The bases of the pillars in each row are fastened about one meter below ground-level to a long continuous footing of reinforced concrete which binds them together and distributes the total weight. Trenches HTN and HTS, described above, were laid out specifically to receive these footings. Around the building, from pillar to pillar, there is a light barrier wall and, about 2.50 m. above ground-level, a broad horizontal beam which suggests a division into two storeys (Pl. 39, d; Pl. 40, a, b). The space between is to be closed with wire screening. Platforms outside the barrier wall will permit visitors to look down into the interior from a slight elevation.

The excavated area and a pathway, 3 m. wide and about 100 m. long leading in from the highroad (Pl. 40, b), were purchased on August 20 from the owners of the property, Messrs. George and Panayotis Kotsiopoulos. We take pleasure once again in expressing appreciation of the understanding and cooperative attitude which they have shown toward this excavation from its inception.

A few minor tasks remain to be accomplished during the coming year. The whole archaeological area is to be fenced and the wire grilles will be installed in the

shelter. For further protection of the crude bricks and plaster in the House of the Tiles it will probably be necessary to devise solid panels that may be set into three of the openings on the north and south flanks during stormy seasons, since in spite of the broad over-hanging eaves some fine spray of rain is blown in through the open sides. The problem of drainage is also difficult, and can best be met after the practical experience of a winter season. A few trees, shrubs, and vines, native and appropriate to the region, are now being set out in order to soften the outlines of the area and to provide a pleasing background. For advice about the selection and placing of the plants we are indebted to Mr. Ralph Griswold.

CONCLUSION

Six seasons of digging have provided much information about the early site at Lerna and a very rich yield of material objects. The principal purpose of the undertaking, a methodical examination of all the stages of human occupation in their chronological sequence, has now been achieved in large measure. Unexpected discoveries of monumental buildings of the Early Bronze Age, of early Mycenaean shaft graves, and many other single features of special interest have from time to time required extensions in the original plan and scope of the excavation. Ultimately the investigations spread over a not inconsiderable area. Yet the greater part of the mound still lies untouched; topographical questions remain unanswered, exploration of the surrounding territory has scarcely been begun, and new discoveries are undoubtedly close at hand awaiting further search. It is not easy in these circumstances to resist the temptation to continue. Nevertheless, having reached as good a stopping-place as is ever found at any excavation of this kind, we intend at present to forego additional work in the field and to devote all available resources to the analysis and publication of the information already collected. The task will require several years to accomplish.

Of all the material recovered, relatively few pieces have intrinsic interest or independent significance; the greater part will therefore be treated in a single comprehensive report, where the interrelationships and the course of development can best be shown. Topics of special interest that may usefully be observed as units, like the first closed group of Early Helladic sealings which has been studied by Miss Heath (above, pp. 00-00), will be treated in separate articles whenever this is practicable.

At the present writing (February, 1958), Miss Heath is continuing her work on the seals and related elements of decoration, e. g. the plastic bands on contemporary pithoi, and is making an analysis of Early Helladic pottery antedating the House of the Tiles. William Donovan is collaborating in the study of pottery with painted decoration that occurs at Lerna just after the destruction of the palace. Wallace McLeod, Fellow of the School, has taken up the study, begun earlier by Mrs. Helen V. Buck, of graffiti on pots of the Middle Bronze Age; some of the signs in this

series are apparently identical with characters in Linear A script. Mrs. McLeod is preparing catalogues of the later Mycenaean groups. The human skeletal material has all been examined and recorded by Professor J. L. Angel of the Jefferson Medical College. Dr. Nils-Gustaf Gejvall of Stockholm has agreed to study the very large collection of animal bones that has been stratigraphically assembled. Dr. Thea Elizabeth Haevernich of the Römisch-Germanisches Zentralmuseum in Mainz examined the glass beads, found principally in late Middle Helladic and Mycenaean graves, and her colleague, Dr. Maria Hopf, has kindly offered to inspect the sizable group of botanical specimens that has been recovered from all the principal layers.

In the series of preliminary reports on the annual campaigns in the field an effort has been made to present a factual account of the discoveries, without commentary but with close attention to the light that they may shed upon the relative chronology of the settlements. Members of the staff having been preoccupied with other duties during much of each year, our study of Lerna has not yet reached the point where attempts at more general interpretation of the evidence would be profitable. The main divisions of the stratigraphical sequence are, however, reasonably clear, and the present report may close with a brief summary of the successive periods, mentioning a few of their most obvious characteristics. Seven main stages can be distinguished, from the remote beginnings in the Stone Age down to the Mycenaean period. Some are sharply set off, others merge gradually with each other and become individually recognizable only after a somewhat hazy process of development has intervened. The periods of transition will be examined hereafter with particular care. Provisionally meanwhile, the sequence may be described as follows:

1. An early Neolithic layer, resting on virgin soil. It is made up of many successive strata and has a maximum total thickness in some places of nearly two meters. Straight house walls with stone socles occur. Pit graves have been found near the top of this layer. The characteristic pottery comprises Rainbow ware, plain black burnished ware, and spongy coarse ware; painted patterns are rare. Obsidian is plentiful.

2. A second Neolithic layer, possibly representing a distinct stage of habitation, comprises as many as eight building levels and deposits fully two meters in thickness. Each stratum contains walls of rectangular houses; the rooms are normally very small. Large quantities of very fine red-slipped and glazed wares and many pieces with painted patterns occur; a development in the styles is discernible. In the uppermost stratum are a few sherds of black burnished ware with incised decoration and a few with patterns in dull paint. One grave was found in the earth of the highest stratum. Stone tools and terracotta female figurines occur throughout the period; metals were not in use.

3. The great Early Helladic settlement, superseding the Neolithic after a distinct break. Grading and filling took place in one of the early phases, but apparently not the first. There was a succession of at least six architectural stages, some with monu-

mental rectangular buildings, culminating in the House of the Tiles. Elaborate and powerful fortifications surrounded the inhabited area, which was a citadel and the seat of administrative authority. The use of copper and lead was known, and technical resources were highly developed. Styles of pottery were maintained in general throughout the period but change and development occurred. Sauceboats and askoi are plentiful. Early Cycladic wares are found particularly in the initial phases. Terra-cotta figurines of animals occur. No graves have been discovered. The period ended with the destruction of the House of the Tiles by fire. Its site was thereafter marked by an artificial tumulus.

4. A late stage of the Early Helladic period, comprising three or four building phases. The houses at first are small and irregular, then larger and more substantial; both straight and curving walls appear. The pottery is different from that of the preceding period: askoid shapes survive, the tankard and two-handled bowl are introduced, sauceboats no longer occur; the characteristic fabrics include wares with painted patterns (dark-on-light predominating), slipped wares, "Smear ware," and very crude burnished ware. An imported Trojan jar was found. Some Cycladic pieces and the first Minoan imports are probably to be assigned to the end of the period. Conical and anchor-shaped objects (figurines?) appear. A few infant burials have been found in this settlement. There is no recognizable break to set it off from the next.

5. The main body of the Middle Helladic settlement. Houses are of moderate size, both apsidal and rectangular. At first Early Helladic elements survive. Gray Minyan ware is introduced in moderate quantities; Matt-painted and glaze-painted pottery follow shortly. Middle Minoan wares and influences appear at an early stage, when foreign pots from the north, probably the Balkans, are also imported. Cycladic and Aeginetan wares occur. The dead were buried in cist and pit graves within the settlement. This is a long period with many successive building levels, in which signs of burning are not common. Its end is not distinguished by any interruption.

6. A period represented by the two royal shaft graves, a few smaller graves, and scattered remains of habitation deposits on the site. No walls were discovered that could be assigned to this period. Fine pottery of developed Middle Helladic styles and Late Helladic I is characteristic; Cycladic influence persists.

7. The Mycenaean period. Pottery of Late Helladic II occurs in small quantities. Houses and pottery of Late Helladic III A and III B have been found in a limited area; wares of III C are not surely attested. Cist and pit graves of Middle Helladic types continue to be used.

Evidence of the end of the Bronze Age and of human activity on the site thereafter has been lost by the erosion of the mound. Graves, well shafts, and a few other remains indicate that the place was utilized in one way or another throughout antiquity.

JOHN L. CASKEY



Principal Area of Excavation from Northwest, with House of the Tiles exposed, July 1957. (Photograph by Alison Frantz.)

JOHN L. CASKEY: EXCAVATIONS AT LERNA, 1957.



a. House of the Tiles from West. (Photograph by Alison Frantz.)

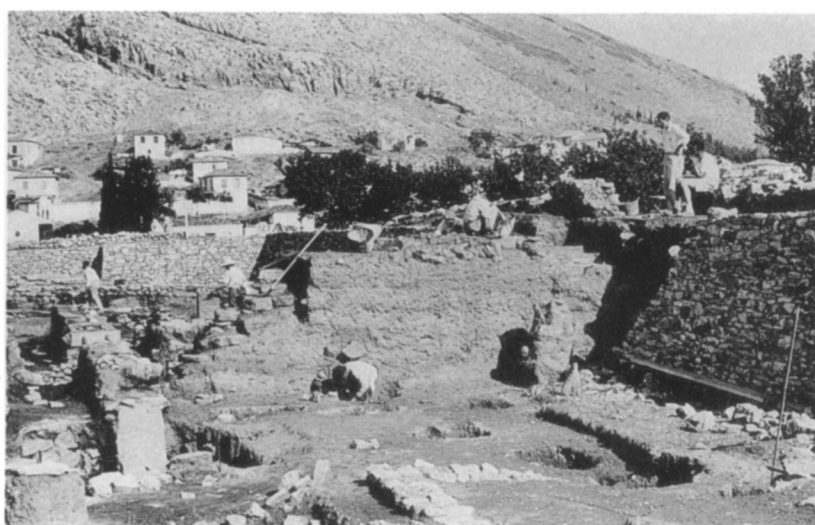


b. Excavated Area from East. Part of Early Helladic Defensive System exposed, at left; House of the Tiles at right. (Photograph by Alison Frantz.)

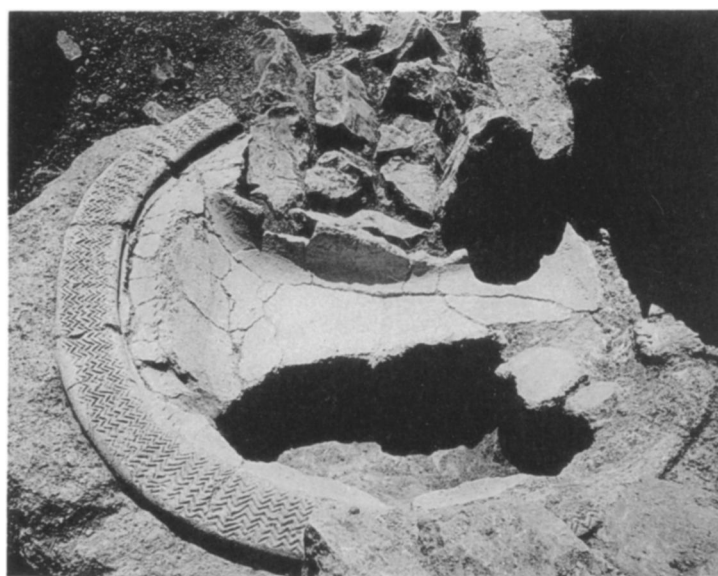
JOHN L. CASKEY: EXCAVATIONS AT LERNA, 1957.



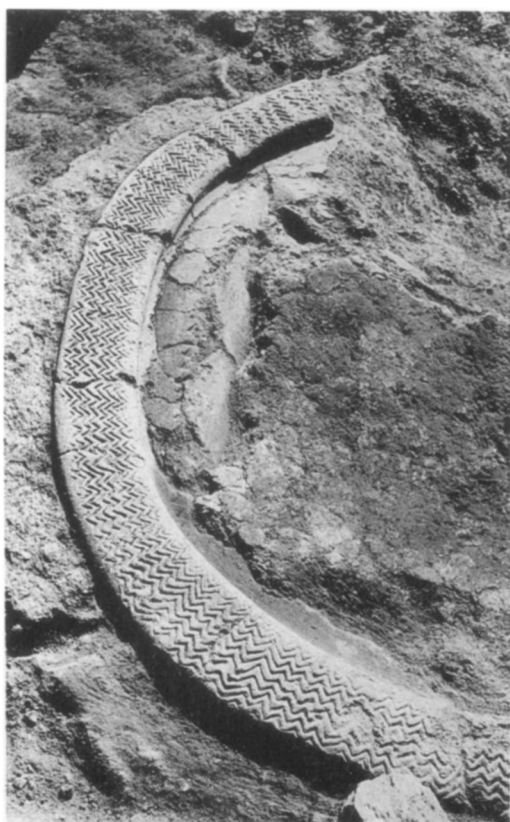
a. Area BF. Part of Middle Helladic House.



b. Excavation of Area BF. From Southeast.



d. Remains of Early Helladic Hearth cleared of Deposits.



c. Trench HTN. Rim of Early Helladic Hearth. Interior full of Ashes.



e. Pit BD. Neolithic Wall, Jar, and Bothros.

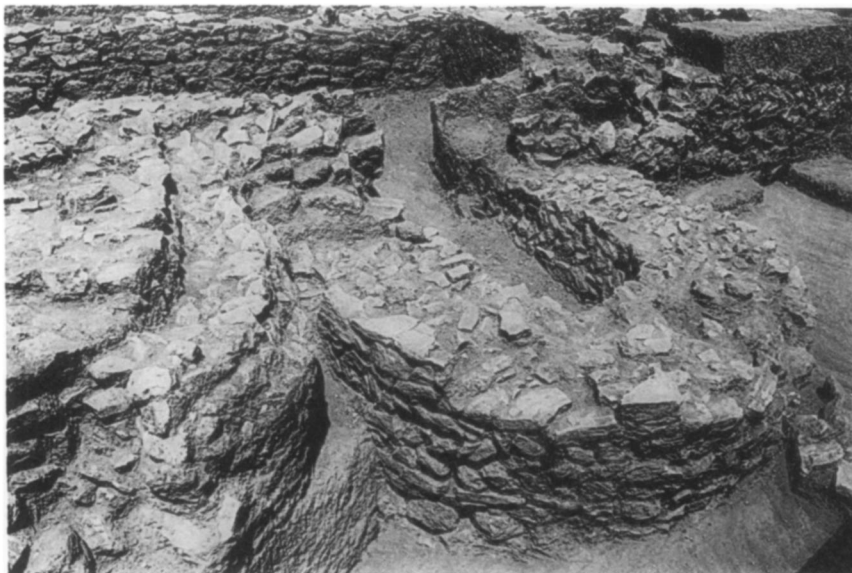


a. Squares F-G 7-8. Part of Early Helladic Defensive System with projecting Towers, from Northeast.

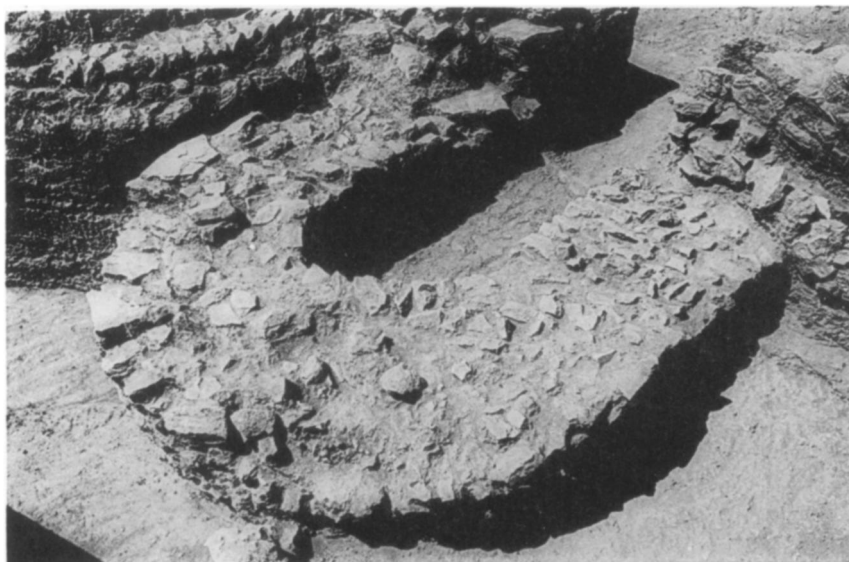


b. Partition Wall between Compartments P and Q.
Crude Bricks in place above Socle of Herringbone Masonry.

JOHN L. CASKEY: EXCAVATIONS AT LERNA, 1957.



a. Tower U from Southwest. Tower V at left.



b. Tower U from Southeast.



c. Stairway W partly covered by Corner of Tower V, from Southeast.



d. Upper Steps of Stairway W from Southeast.



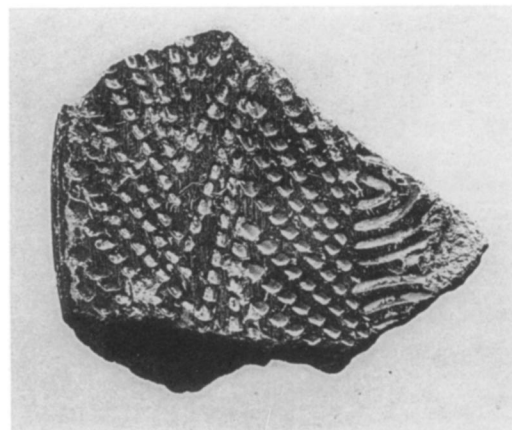
a. Squat jar from Compartment Q-R (1:3).



b. Bowl from Compartment Q-R (1:3).



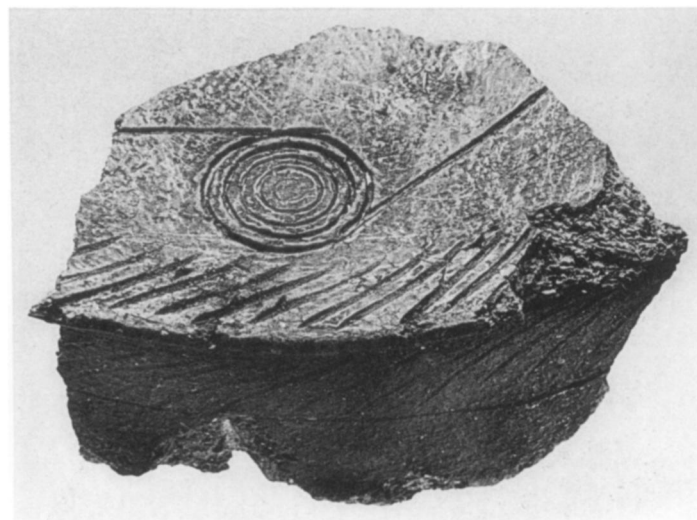
c. Jug from Tower U (1:3).



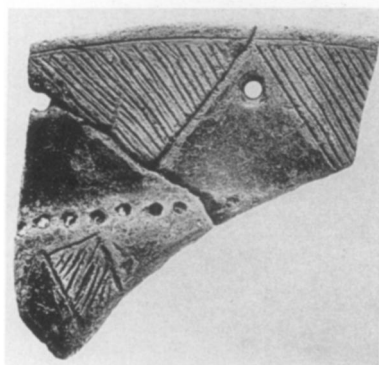
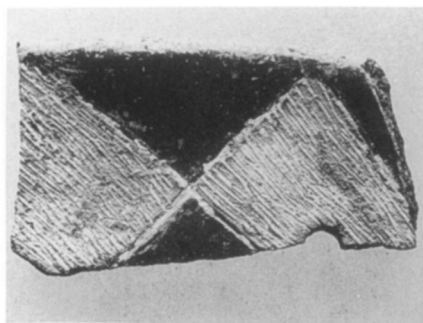
d. Sherd with Incised Pattern (1:1).



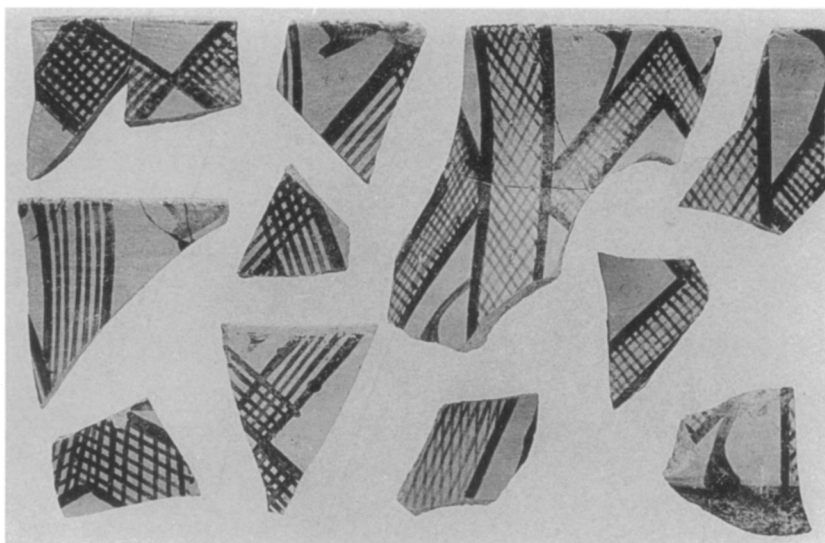
e. Sherd with Stamped Spirals (1:1).



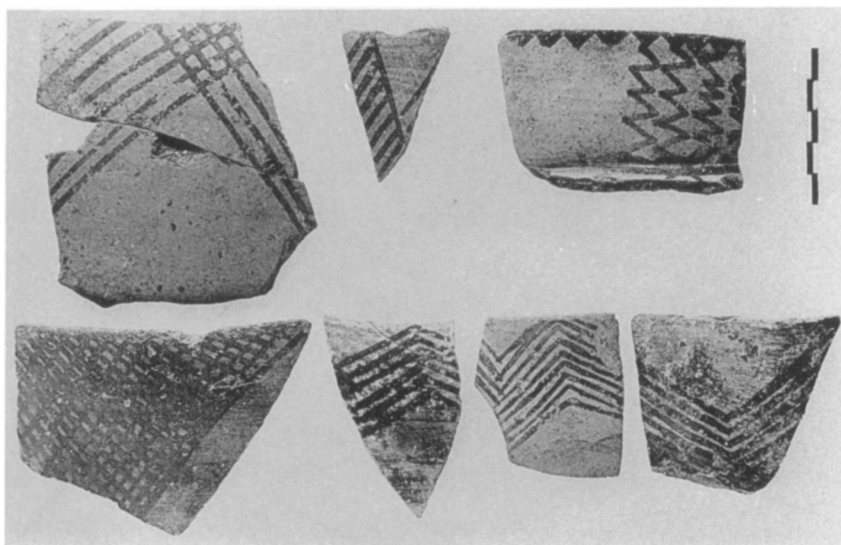
f. Fragment of Lid with Stamped and Incised Patterns (1:1).
Sherds d-f from earliest E.H. Deposits.



a-c. Late Neolithic incised Black Ware (1:1).



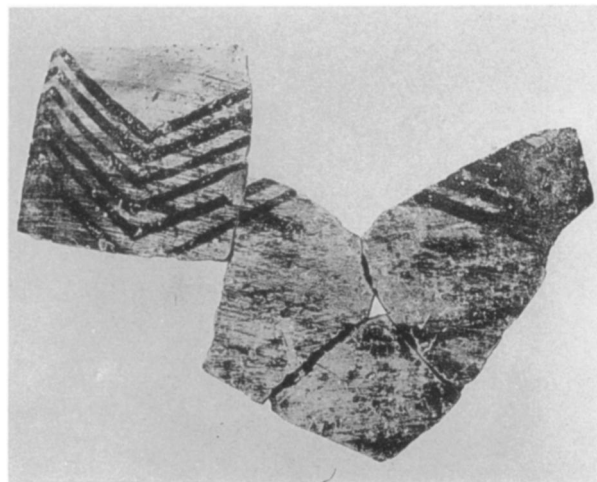
f. Neolithic Patterned Ware, later Fine Style (1:2).



g. Neolithic Patterned Ware, Earlier Style.



d, e. Fragment of Neolithic Terracotta Figurine, front and back (1:1).



h. Neolithic Patterned Ware, Earlier Style (3:5).



a. Red Bowl from late Neolithic Grave HTN.1 (1:2).



d. Neolithic Jar with tubular Lugs from Pit BD (1:3).



b. Dark Gray-brown Burnished Bowl from Grave HTN.1 (1:2).



e. Neolithic Jar with small Ledge-lugs from Pit BD (1:3).



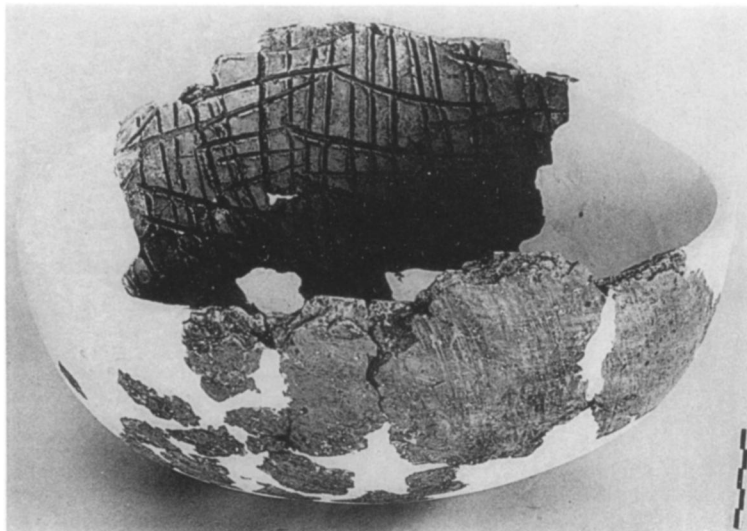
c. Bowl with White Incrustation and traces of Red Paint, probably from Grave HTN.1. Foot missing (1:3).



f. Neolithic Globular Jar from Pit BD (1:4).



a. Early Neolithic Black Burnished Bowl from Grave in Pit BD (1:2).



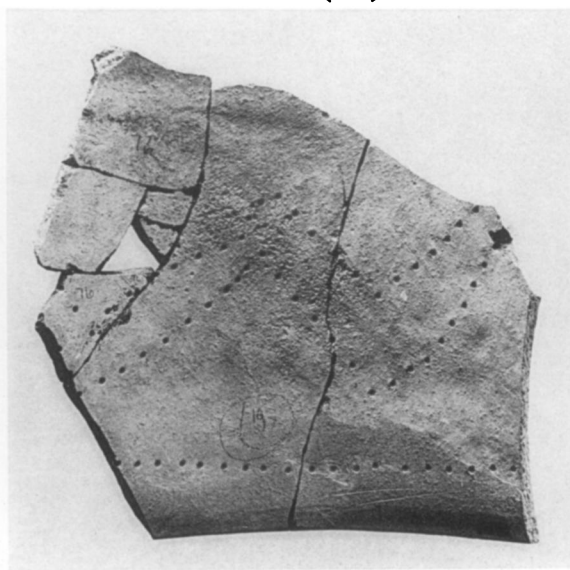
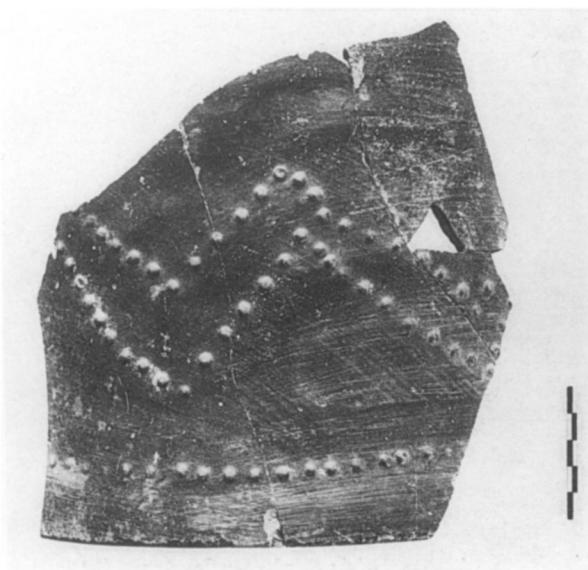
b. Fragment of Jar with deep Scoring on Interior from Early Stratum in Pit AP.



c. Fragment of large Carinated Bowl from Trench HTN (2:5).



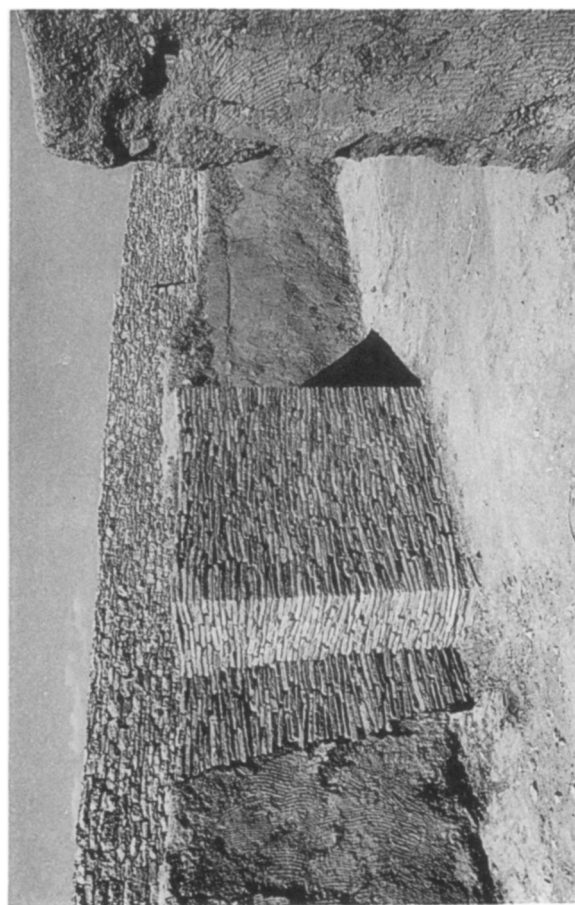
d. Fragment of Piriform Jar from Trench HTN (2:5).



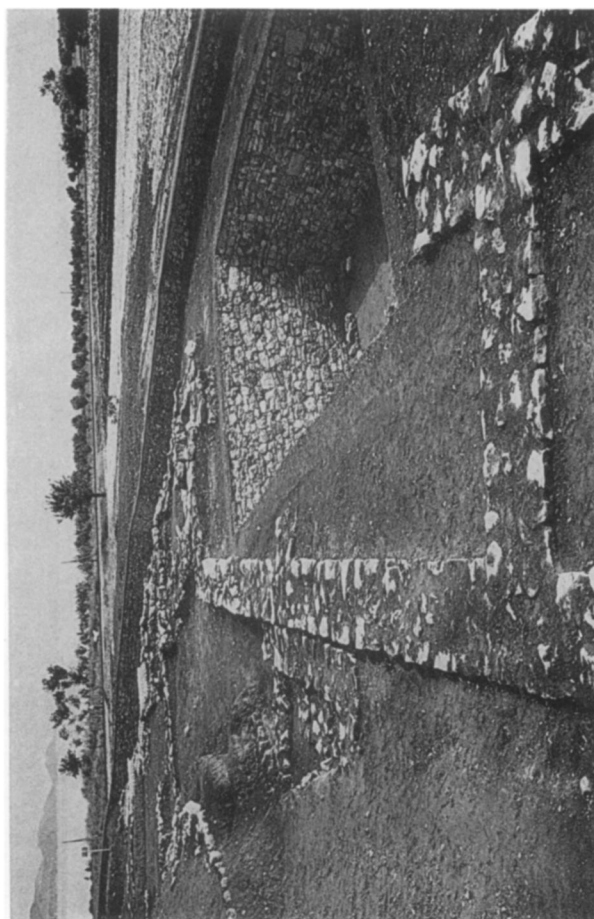
e, f. Fragment of high Pedestal or Stand from Trench HTN. Exterior and Interior.



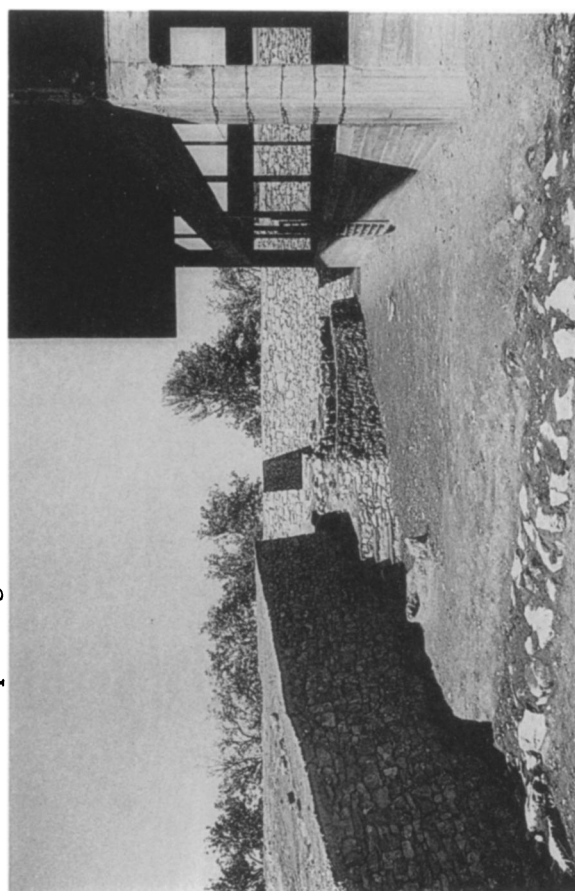
a. House of the Tiles. West Wall of Room XII from Southeast.



b. House of the Tiles. North Jamb of Door H partly rebuilt with Fragments of Roof Tiles. Enclosure Wall in background. From Southwest.



c. Socles of Early Helladic Fortification Walls partly rebuilt. Neolithic House 17 in pit at right. From Northwest.



d. Northwestern Corner of Excavated Area with Retaining Walls, from South. Shelter over House of the Tiles at right.

JOHN L. CASKEY: EXCAVATIONS AT LERNA, 1957.



a. Shelter over House of the Tiles from Southeast. Protective Copings over Crude Brick Walls in foreground.



b. View of Site from Southwest, September 1957.



c. Myloi and Mt. Pontinos from the Sea.