

EXCAVATIONS AT LERNA: 1956

(PLATES 38-49)

EXCAVATION of the pre-classical settlement at Lerna was resumed by the American School on May 23 and continued to July 12, 1956.¹ In this fifth campaign Neolithic strata were investigated in the southern part of the mound, areas were cleared to the west and north of the House of the Tiles, a broad trench was dug northeastward from the region of House M to Area D (Fig. 1), and subsidiary testing was carried out at several places where further information was required. The general program of digging, laid out four years ago with the intention of testing all the layers and exposing representative buildings of the various periods, has now reached its concluding stage. A plan of conservation has been drawn up, and some of the initial work was carried out this year.

Recording and preliminary study of the material had again occupied much of the time between campaigns. Mr. Cotsen, who spent the year in Greece, coördinated the many architectural plans, transferring hundreds of individual drawings to a series of large sheets that show all the remains by consecutive levels. Miss Courtney and Mrs. Eliot maintained the inventories of pottery and miscellaneous objects. In the museum workrooms at Corinth each of the excavators sorted and made notes on the sherds that had been found in the area under his supervision, while the mending and restoring was done by George Kachros and Nikos Didaskalou. Mrs. Cotsen painted the plaster restorations of all the pots inventoried during the first four seasons. George Bass made a preliminary analysis of a large class of two-handled bowls from the uppermost Early Helladic and first Middle Helladic strata; William Donovan assisted by working out a complex and ill-preserved pattern on one of the remarkable big jars of the same chronological stage; and Piet de Jong advanced our study of the pottery by completing another series of drawings and paintings in water color.

In the following account of work in the field attention is directed principally to

¹ The excavation staff comprised Mrs. J. L. Caskey, Miss E. L. Courtney, Fulbright Scholar, and Mrs. C. W. J. Eliot, who had all taken part in previous campaigns, and George F. Bass, holding a Woodrow Wilson National Fellowship. Miss E. Protonotariou, Epimeletria of Antiquities in the district, was with us during most of the season and in the time at her disposal supervised excavation in limited areas. Lloyd E. Cotsen, member of the School in 1955-56, again served as architect and surveyor. J. L. Caskey was Field Director and took the photographs. Mrs. Cotsen cleaned and cared for the objects found day by day. William Eliot lent support on frequent visits from Athens, and Miss Daphne Phylactopoulou gave invaluable help during the final days of the campaign. Evangelos Lekkas was foreman, directing a force that reached a maximum of 36, and Andreas Totsikas cooked for the staff and supervised the domestic establishment. As in preceding years, we were comfortably quartered in several of the small houses on the south edge of the village of Myloi, overlooking the site.

materials and features of the site first observed or recognized in 1956, while much additional material of types noticed in earlier reports, though ultimately of equal importance, is here temporarily passed over. Description of the work is by areas of excavation, in sequence generally from the later layers to the earlier.

TRENCHES DB.1 AND DC.1

Investigations in the scarp of the railway cutting on the eastern side of the mound were supervised by Miss Protonotariou. The bank had been scraped and summarily tested in 1955 (*Hesperia*, XXV, 1956, p. 153). This year's digging yielded interesting results, though scarcely bearing out the former observations.

Scarp DB had produced a few fine sherds of early Mycenaean wares which suggested that there might have been a large grave or other intrusion in this region. A section of the bank about 4 m. long was therefore excavated (DB.1, Fig. 1) from the surface at 6.25 m. A.T. to a depth of 2.50 m. In it were found parts of house walls and floors representing six building levels; the topmost appeared to be of Late Helladic date with some disturbances from Classical times, the others Middle Helladic. A child's grave at 5.33 m. A.T. was assignable to one of the latest phases; a grave of an adult was found at the earliest level reached; but no tomb came to light that could account for the fine pottery which had clung to the bank. If such a tomb once existed it must have lain immediately to the east and have been removed when the railway was constructed. The most interesting topographical feature revealed in Trench DB.1 was a pebble paving, apparently a section of a road about 1.70 m. wide that descended from the settlement eastward toward the seashore. Its surface was around 4.17 m. A.T., a level assignable to an early phase of the Middle Helladic period. A layer 0.15 m. thick of small water-worn pebbles made up the paving; under them was a thin sprinkling of fine gravel, and under that in turn another layer, 0.25 to 0.30 m. thick, of stones the size of a man's fist.

In the scarp labelled DC, south of Area D, winter rains had exposed a bit of rough masonry with interstices among the stones that indicated a hollow structure within. Here too, consequently, it seemed worth making a test, and a section 5 m. long was opened in the bank (DC.1, Fig. 1). The surface was at a level around 5.75 m. A.T. House walls were found in place at the north end and in the west bank of our cutting, and a few patches of habitation deposits were noted, but in most places the ground appeared to be disturbed. The reason soon became apparent as four graves came to light, well constructed, neatly placed, and all at approximately the same depth, suggesting that they belonged to a single burial plot.

Two of these graves, oriented north and south, lay side by side in the northern part of DC.1. The first, on the east, was long and relatively narrow (1.73 m. by 0.54-0.58 m.). The walls, 0.40 m. high, were built of medium-sized stones, the floor

was composed of pebbles and clay, and the top was covered by four large slabs. This grave contained three adult skeletons. One, presumably the latest, lay extended on its back, head to the north, hands between the thighs. The second, lying with head to

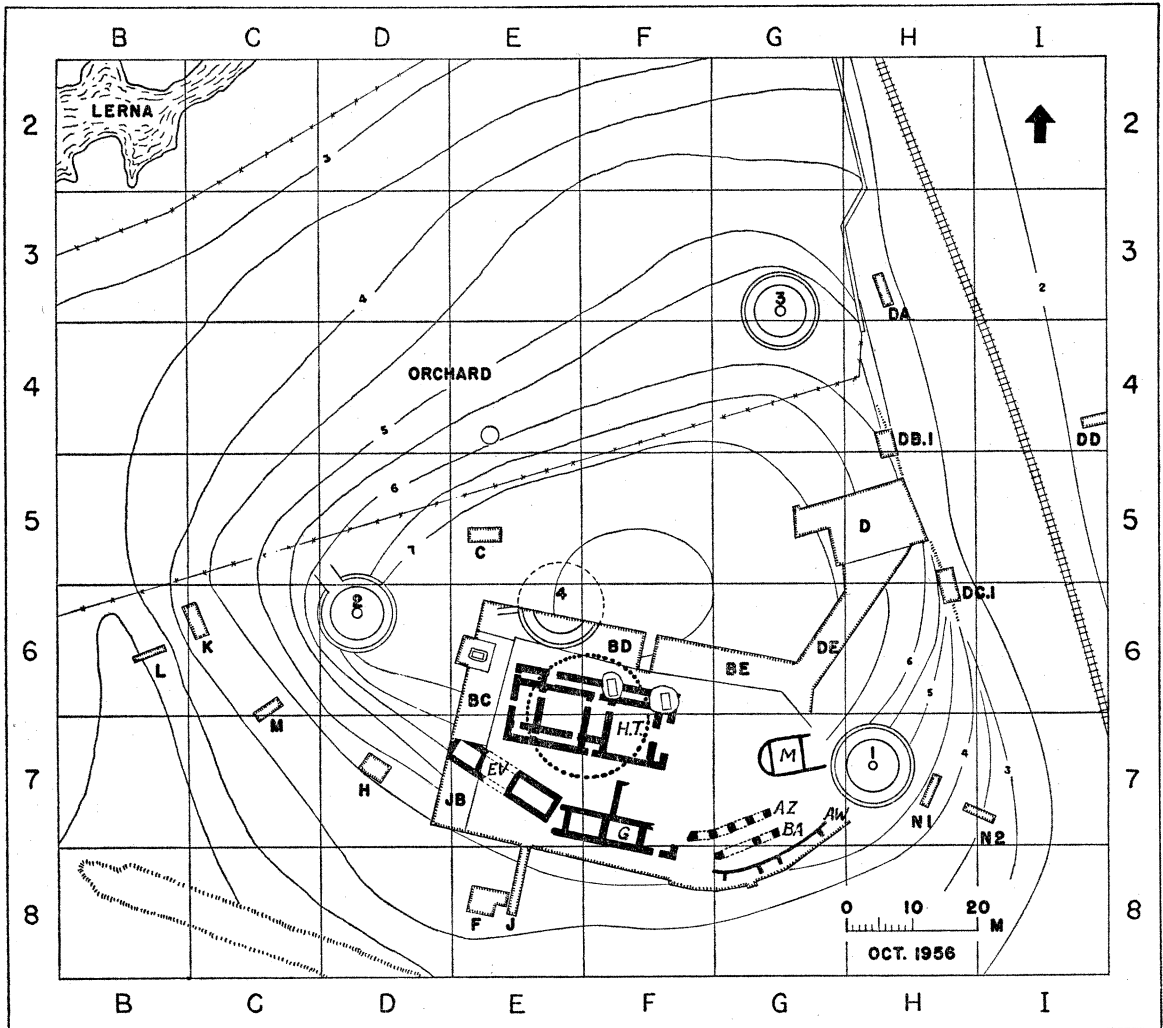


FIG. 1. Topographical Plan of the Site at Lerna. (Revised, 1956, by L. E. Cotsen and C. W. J. Eliot.)

the south, was pressed against the east wall of the grave. The bones of the third were gathered together in the southeastern part. A Matt-painted jug of advanced type lay between the second and third skulls, and a bronze pin was found in the northeast corner. The second grave was a cist, its ends and sides each made of a single great block of stone, tightly closed by two huge cover slabs (Pl. 39, e). The space inside,

nearly empty, was 1.36 m. long by 0.58-0.60 m. wide and 0.45 m. high. Lying on the pebble floor were the remains of a child's skeleton on its back, head to the north, arms along the sides, right leg bent at the knee. As funeral offerings there were a bronze bead and six small vases, placed near the head: a stemmed cup, a jug, and a two-handled jar in plain buff ware mottled pink; a two-handled goblet of heavy red-slipped fabric (Pl. 39, h); a flat-bottomed cup with pattern in red paint (Pl. 39, g); and a spouted jar with two upright handles, decorated in black paint with added white (Pl. 39, f). These vessels are assignable to the same period as the two shaft graves at Lerna, the transition from Middle Helladic to Late Helladic I.

Grave 3 lay just south of the first two and was oriented east-west. It had stone walls, a pebble floor, and cover slabs, but had been damaged by the railway cutting and was found quite empty. Only a corner of the fourth grave was exposed in the area of our trench. It was a cist of irregular shape, 0.69 m. long from north to south, 0.51 m. wide at the north end, 0.42 m. at the south. Thin slabs made up the sides, which were 0.49 to 0.52 m. high. The floor was of yellow clay. The skeleton, evidently that of a child, had almost entirely dissolved. In the grave were a feeding bottle, bearing a ripple pattern in brown-black paint and added lines and dots in white (Pl. 39, i), and 17 beads, comprising seven of crystal, five of carnelian, one of steatite, and four of paste.

At the end of the season the excavated areas in DB and DC were enclosed by a retaining wall and refilled.

AREAS D AND DE

The long series of building levels and habitation deposits that had been recorded in the excavation of the south-central region and in Area D on the eastern flank of the mound² remained isolated from each other until this year. In order to link them together and to examine the sequence of strata between the two, we opened a trench 5 m. wide running northeastward from the corner of the main area in Square G6 to the south side of Area D in Square H5. This broad cut, known as Area DE (Fig. 1; Pl. 38, a, b), was excavated under the supervision of Mrs. Caskey. Following the stratigraphy was exceptionally difficult just here because the ground had been disturbed repeatedly by burials in the Middle Helladic period, but the successive deposits were distinguishable and could ultimately be correlated with various known points at either end.

Until all the pottery has been mended and instances of joins between one area and another have been recorded, conclusions about the relative chronology must remain tentative. In its general lines, however, the sequence may be described as follows. The surface layers in Area DE (around 6.30 m. A.T. at the north, 6.80 m. at the

² *Hesperia*, XXIII, 1954, pp. 6-11; XXIV, 1955, pp. 27-30; XXV, 1956, pp. 148-153.

south) yielded disturbed remains of the Classical settlement and then traces of the Mycenaean occupation. A small jug with spirals in red paint (Pl. 39, a), typical of Late Helladic III A, is to be associated with this period. Slightly earlier was a small cist grave with upright marker at one end (Pl. 39, c, d.). It contained skeletons of three very young children, two together at a lower level and one above, and five small pots. Four of these, an open cup, a stemmed goblet (Pl. 39, b), and two miniature jugs (*J.L.N.*, 12 Jan. 1957, p. 71, fig. 24), are of fine quality, assignable to Late Helladic II; the fifth is a cup of inferior fabric, probably somewhat later in date, that may have been added at the time of the final burial.

Elsewhere in the area there were large irregular hollows filled with rubbish, yielding many sherds of the earliest Mycenaean phases (L.H. I), contemporary with the shaft graves that had been found near by in 1954 and 1955.

Strata with recognizable remains of houses and streets began to appear at no great depth below the surface. These were all assignable to the Middle Helladic period. They were removed level by level to a total depth of nearly two meters. No general breaks in the sequence were observed; the evidence indicated rather that there had been a continuous progression of habitations, the houses being built, repaired, altered, and replaced from time to time. By counting each of the significant changes in plan it was possible to distinguish nine successive architectural phases throughout the length of the trench, each partially overlapping one or more of the others. These arbitrary divisions provide a convenient framework for reference, and a few examples of the correlations that they provide may be given here.

The topmost Middle Helladic stratum in DE is contemporary with some of the latest deposits found in Area BE (described below) but later than any preserved in Area D. The third stratum encountered in DE corresponds with the latest Middle Helladic remains in D and with one of the stages of House 100 in BE. House R in Area D and, probably, the final occupation of House M in Area A may be equated with the fourth stratum from the top in DE. The characteristic pottery of this stage comprises developed Gray Minyan ware (including ring-stemmed goblets), black and brown Argive Minyan ware, Matt-painted ware, and many pieces of light-colored handmade ware bearing patterns in lustrous black or red-brown paint, often with supplementary touches in white. One blade of a terracotta axe head with incised patterns on either face, presumably restorable as a double axe (Fig. 2), was found in a street of this phase.

The sixth and seventh Middle Helladic building levels in DE (counted again in descending order) were found to be contemporary with one of the large houses in Area D, a part of which, Room AH,³ had been cleared in 1953. The second and perhaps the third rebuilding of House M in Area A ⁴ belong also to this time. Terra-

³ *Hesperia*, XXIII, 1954, p. 10.

⁴ *Ibid.*, pp. 14-16.

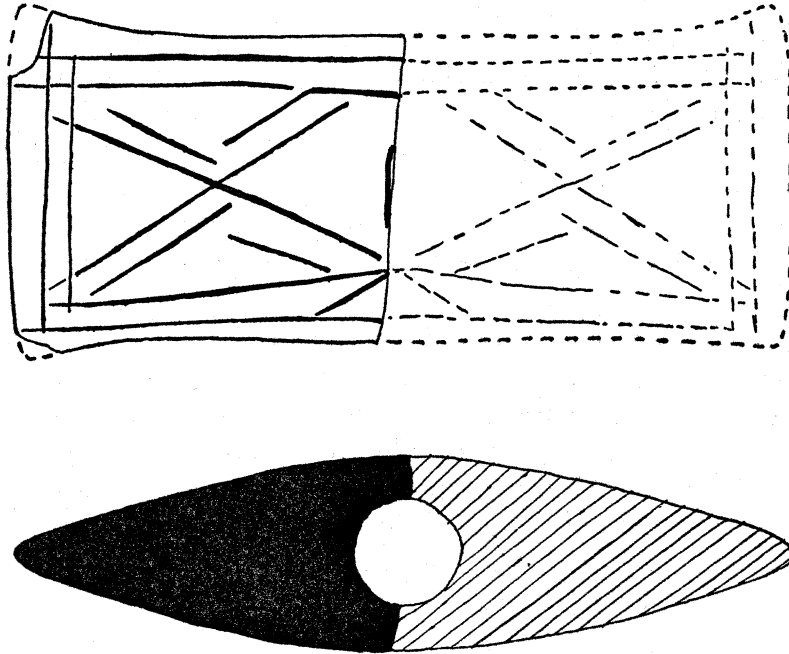


FIG. 2. Terracotta Axe Head from Middle Helladic Stratum, Area DE.
(Restored Drawing by Aliki Halepa Bikaki.)

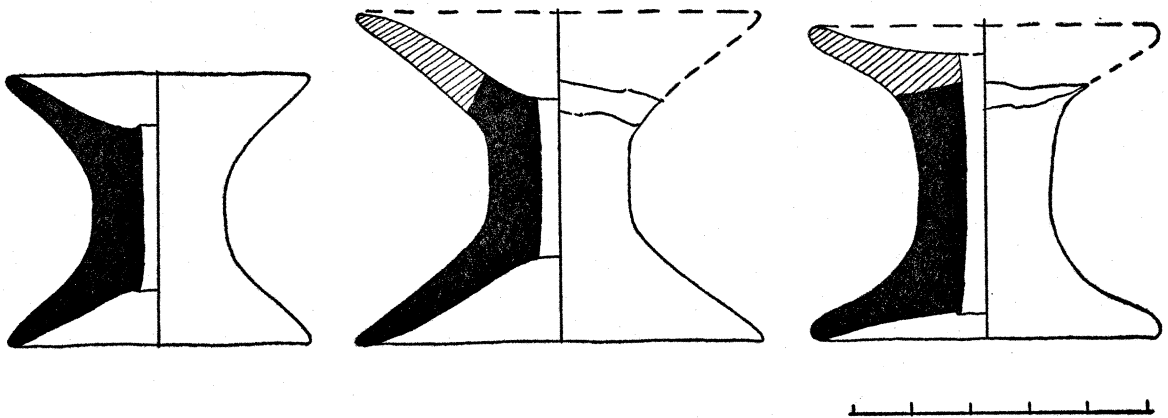


FIG. 3. Middle Helladic Terracotta Spools. (Drawing by Aliki Halepa Bikaki.)

cotta spools with flaring ends occur at this stage in considerable numbers (Fig. 3). The seventh stratum yielded a bronze pin, its head consisting of a spherical bulb, transversely pierced, surmounted by a fine little crouching bird (Pl. 42, b).

Next earlier in the trench were architectural phases that could be equated chronologically with House BD and House BJ of Area D⁵ and with the first period of House M and the final occupation of House D in Area A.⁶ The earliest buildings reached in the southern sector of DE were seen, furthermore, to be just one phase later than Room 45 in BE, which belonged to the same complex as House 98 A and could therefore be placed securely in the sequence of buildings over the east end of the House of the Tiles.

Seventy burials were found among the houses in Area DE, all but five being assignable to the Middle Helladic period. Only sixteen of the skeletons were of adult stature. Thirty-seven burials were simple inhumations; thirty were in cist graves, which were built usually of upright slabs of stone but occasionally of bricks or a combination of brick and stone; two, in the earlier strata, were urn-burials (*I.L.N.*, 12 Jan. 1957, p. 71, fig. 22); one child's bones lay under the ruins of a house, perhaps left there after a disastrous accident. Only a few of the graves held offerings, which consisted of a vase or two (e. g. Pl. 43, d, f), beads or earrings, a spool, or a spindle whorl of terracotta.

At the end of the season Areas D and DE were filled in with earth from the excavations.

AREA BE

Area BE, a strip 21 m. long and 5 m. to 5.50 m. wide in Squares F-G6 (Fig. 1), was excavated under the supervision of Mr. Bass. Adjoining Area DE on the east and running westward to the debris of the House of the Tiles, this ground provided a valuable opportunity to extend and correlate our observations of the Middle Helladic and latest Early Helladic strata.

Below the present surface, where there were traces of the Classical and later settlements and a pithos burial that may be assignable to the Geometric Age, remains of six habitation levels with numerous sub-phases were recorded. The first four yielded pottery of Middle Helladic types (e. g. Pl. 43, e). The uppermost was marked by houses in ruinous condition. Next came a fairly pretentious building, House 100, which had been remodelled and extended at least twice during the period of its occupation. At its east end, where the ground sloped downward, it had a terraced entranceway not unlike some of the approaches of houses on steep terrain in the village of Myloi today. In the central axis there was a carefully built hearth and a post-hole that had held a wooden column. Twelve graves, chiefly of infants, were found in this stratum.

⁵ *Hesperia*, XXIV, 1955, p. 28.

⁶ *Ibid.*, pp. 30-32.

Remains of houses, some with apsidal ends, were preserved in the next earlier level, but much of the area was here occupied by graves. One of these, BE.30, held five skeletons, laid side by side with heads to the west (Pl. 40, a). Among the offerings was a small Matt-painted jar of unusual shape (Pl. 40, b) and a plain stone pestle, narrowing at the middle, of the type found usually in Early Helladic contexts.

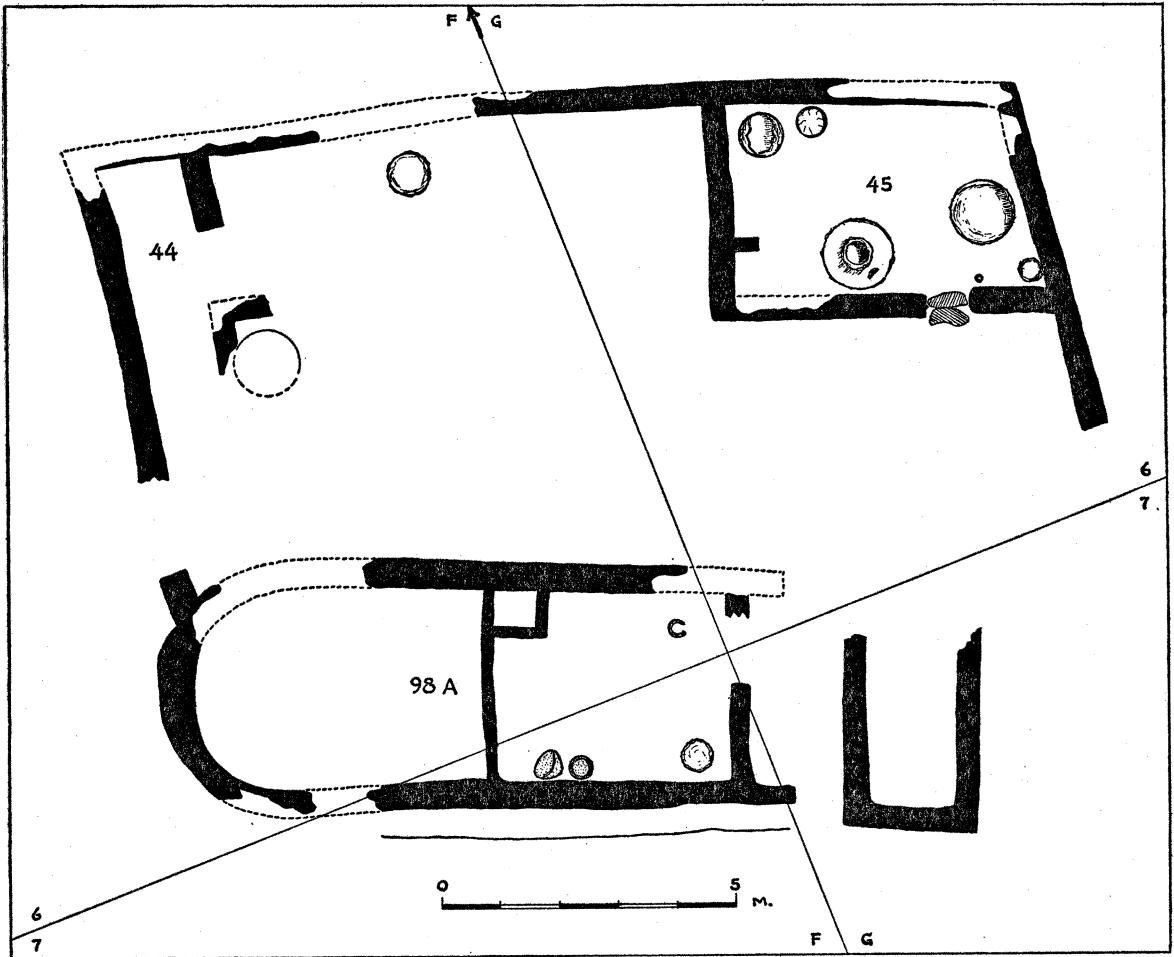


FIG. 4. Plan of House-Complex. Early Phase of Middle Helladic Settlement.

Remains of burnt buildings, covered deeply in many places by heaps of fallen debris, were encountered in the fourth general stratum. When the ruins had been cleared it became evident that these buildings were contemporary with and closely related to the adjoining apsidal house, 98A, which had been discovered in 1955 (*Hesperia*, XXV, 1956, p. 159). The principal walls constitute a large enclosure to the north of this house, as indicated on the combined plan, Figure 4. A road paved

with gravel ran east and west through the middle of this complex. Room 44 in the northwest corner appears to have been set aside as a kitchen. Here were a circular hearth, protected and supported by an L-shaped barrier of stones, and a small space shut in by a spur-wall, where a number of whole pots were recovered beneath the wreckage. Near by was a pithos, set into the ground. The northeast corner of the enclosure was walled in to form a storehouse, Room 45 (Pl. 40, c). This was entered from the south by a doorway with two stone steps that led down to the interior. Impressions of two upright timbers that had formed the left-hand jamb were clearly visible, and the pivot stone for the doorpost on the right was still in place. Inside the room there was a very large pithos, nearly complete, and the lower parts of four others were embedded in the ground. A number of small pots lay in the debris. The floor of trodden earth sloped irregularly downward from the walls to a low point near the center of the room (5.40 m. A.T.). At the end of the season we made an effort to preserve some features of Room 45 by cementing the stone socles of the walls and the inner surfaces of the pithoi, applying a coat of plaster to the crude brick, and restoring the lower part of the doorway (Pl. 40, e).

The pottery recovered from Rooms 44 and 45 resembles that found in House 98A. It comprises cups, bowls, and jars in gray, brownish, and yellowish Minyan ware; Matt-painted vessels; handmade jars of good fabric with coatings or linear designs in dark lustrous glaze, occasionally with added decoration in white; dark slipped and burnished wares; plain wares; coarse knobbed jars and pithoi. These fabrics are, for the most part, of well-known types that occur throughout the early strata of the Middle Helladic settlement at Lerna. To them must now be added a further variety. Room 44 produced a small handmade flask, black but for a patch that had fired reddish-brown, well burnished and decorated with an incised pattern of lines, dots, and big spirals⁷ (Pl. 40, d). From Room 45 came a comparable vessel in leather-brown clay, its rim lost in antiquity and the neck ground down to keep it serviceable⁸ (Pl. 40, f). The hatched triangles on the shoulder of the latter make a pattern like that which occurs on a smaller flask of the same shape, found a year earlier in House 98A (*Hesperia*, XXV, 1956, pl. 43, b); and still other examples of these vessels can be recognized in the fragmentary material from this complex of buildings. All have pairs of holes on opposite sides of the neck for cords or thongs by which they were suspended. The ware, the shape, and the style of decoration are foreign to this region of the Peloponnesos, and leave no doubt that we have here a group of imported pots. The closest parallels appear to be in the central Balkans. Dr. M. Garašanin of Belgrade, who saw much of the material in our workrooms, informed us that it resembled—or indeed duplicated—certain pots that he had found in deposits of Period Ia at Bubanj, near Niš. It is too early to speculate about the chronological

⁷ Inv. L. 1050; H. 0.138.

⁸ Inv. L. 932; H. 0.127.

implications of this discovery, or about the routes and means of communication with a region so remote from Lerna, but the evidence of contact with a northern and non-Aegean culture appears to be secure.

Under Room 44 and the adjoining area were strata associated with the big apsidal buildings that had been excavated in 1955 (*Hesperia*, XXV, 1956, p. 160). Circular hearths, built of clay and floored with potsherds or flat pebbles, occurred at this level with pottery of late Early Helladic types (e. g. the black slipped bowl, Pl. 42, f), as in other parts of the site. Around 5.10 m. A.T. there was a complex of walls, partitions, channels and clay-lined hollows that suggested an industrial establishment of some sort. Immediately below this, at the western end of the area, lay the debris of the House of the Tiles.

AREAS BD AND BC

Area BD, north of the House of the Tiles in Squares E-F6 (Fig. 1), was 25 m. long and 4.90 m. to 5.80 m. wide. Excavation was conducted here in order to disengage the side of the big building and at the same time to provide a further sampling of the strata near the center of the mound (Pl. 41, a). When the level had been reduced sufficiently, digging was extended into Area BC (*Hesperia*, XXV, 1956, pp. 154, 157). Work in these two large sectors was supervised by Miss Courtney.

A concrete gun-emplacement of World War II, No. 4 on the general plan, impeded the investigation for a time. Both the circular structure and an adjoining passageway or dugout that ran out toward the west had cut through many of the ancient deposits, but by good luck had not obliterated any buildings of major importance.

At the eastern end of Area BD, where the surface was highest (ca. 7.85 m. A.T.), it was possible to find a relatively undisturbed sequence of strata. At the top there were remains of the classical settlement, including great quantities of broken roof tiles and some pottery, two well shafts, and several rows of rough stones set on edge, running east and west, like others observed previously in Area D (*Hesperia*, XXIII, 1954, p. 7). No Mycenaean layer was found. The next stratum, and the three below it, were clearly assignable on the evidence of the pottery to the Middle Helladic period. House floors around 6.50 m. to 6.70 m. A.T. yielded, among other vessels, a large pithoid jar in Matt-painted ware and a Matt-painted bowl with a pedestal-base on which rings were drawn in imitation, presumably, of the ridged stems of Minyan (Lianokladi) goblets⁹ (Pl. 42, a). In this stratum also was found a group of bronze implements comprising two daggers¹⁰ and a chisel¹¹ (Pl. 42, c).

⁹ Inv. L. 993; H. 0.205.

¹⁰ Inv. L6.30; L. pres. 0.248.

Inv. L6.32; L. pres. 0.145; L. of rivet 0.0095.

¹¹ Inv. L6.31; L. 0.11.

Walls with courses of rounded, elongated stones—the so-called “potato masonry”—were characteristic of the next earlier building levels. This style of construction is found throughout the site in the early phases of the Middle Helladic settlement, for example in the walls of Rooms 44 and 45 and the houses immediately succeeding in Areas BE and DE, in those of House D (Area A), and at corresponding levels in Area D.¹² Minyan, Matt-painted, lustrous painted, and burnished coarse wares occurred in this context. Here also was found a conical vessel of Cycladic type, a “duck vase,” thinly coated with reddish brown glaze over a light gray biscuit (Pl. 42, d).

More than a score of Middle Helladic burials, in stone cists and simple pit graves, were discovered this year in Areas BD and BC. Only a few of them contained offerings. Two unusual pots lay next to an adult skeleton in BD.19, a cist grave at the western end of the area (Pl. 41, d): one, a jug-like vessel with perforations in the base and a wide inner flange that nearly closes the aperture of the mouth; the other an elegant pitcher in light grayish buff ware with neck drawn back and long spout rising vertically.¹³ The latter is an imported Cycladic piece, probably from Melos. Grave BD.19 must be assigned to a late phase of the Middle Helladic settlement; disturbance of the ground above the shaft made precise dating impossible.

A massive curving wall, BC.15, which had appeared in 1955, was investigated further (Pl. 41, c, e). Habitation deposits, and pithoi embedded in a floor on its west side, indicated that it may have been a house wall; if so, this was an exceptionally large building, extending westward beyond the limits of our excavation. It belongs to the time of transition from Early Helladic to Middle Helladic. Curving walls of much smaller size were found near by in two levels antedating Wall BC.15, and all the pottery associated with them was of Early Helladic types. A group of anchor-shaped objects of terracotta, one of which is illustrated on Plate 42, e,¹⁴ came to light at the eastern end of Area BD, just above the debris of the House of the Tiles.

About thirty rounded stones, bordering the northern edge of the tumulus that had been formed over the ruins of the House of the Tiles,¹⁵ were uncovered this year in Area BD (Pl. 41, b; Pl. 44, a). They are laid end to end in a continuous curving line, completing the circle on that side. The position of the circle is indicated on the general plan, Figure 1, and in greater detail on Plate 45, b. A wall of one of the first houses to encroach upon the precinct is seen in the photograph, Plate 41, b, crossing the row of rounded stones.

¹² *Hesperia*, XXIV, 1955, p. 29.

¹³ *Archaeology*, IX, 1956, p. 219; *I.L.N.*, 12 Jan. 1957, p. 70, fig. 6.

¹⁴ Inv. L6.80; H. 0.082, W. 0.107. Cf. examples found previously, *Hesperia*, XXV, 1956, pl. 47, 1-p.

¹⁵ *Hesperia*, XXV, 1956, p. 165.

SOUTH-CENTRAL AREA

The House of the Tiles

Part of the heap of fallen debris in Room XII,¹⁶ left in place in 1955, was examined and removed this year with the hope that further information about the structure and collapse of the building might be obtained. It was observed that almost all the fragments of tiles lay on the upper surface of the debris (Pl. 44, b). Under them, red bricks and yellow clay rested in a confused and distorted mass to a depth of more than one meter over the floor. A few pieces of burnt wood were noted in this debris and were saved for analysis. There was a shallow depression in the floor itself, near the middle of the room, but no column base or other evidence of internal supports was discovered. Fragments of a deep bowl in plain brown ware were found in the black ashy deposit just over the yellow clay pavement.

A perspective drawing of the ground floor of the House of the Tiles, showing the walls restored to a uniform height of 1 m., was made by Mr. Cotsen in 1956 and is reproduced on Plate 45, a. Some details of the eastern front of the building (at the left in the drawing) remain uncertain, namely the size of the entrance, the termination of the long corridor, which was obliterated at this end by Shaft Grave 2, and the length of the clay bench at the foot of the wall. Evidence for the rest of the elements is certain, however, and the various parts of the building are here seen in correct proportion.

Under the supervision of Miss Protonotariou a trench 1.50 m. wide was excavated through the floor of Room VI (Pl. 44, c). This ran north and south, continuing the line of Trench J. It revealed four Early Helladic building levels antedating the House of the Tiles, each with walls and floors, corresponding in general with the sequences observed further south but running deeper. The earliest of them was recorded around 2.20 m. A.T. Stony filling, containing much Neolithic pottery, as well as some Early Helladic, appeared in parts of the trench. At the south end an infant's skeleton was encountered in firm and apparently undisturbed earth, with Neolithic sherds, at 2.05 m. A.T. Masses of small stones and black earth, rather loosely packed, ran down into a hollow in the central part of the trench, where standing water was reached at 0.73 m. A.T.

Southeastern slope

Area AA in Squares G7-8, south of House M, had produced relatively little material of interest when excavated in 1955¹⁷ and it was decided to refill most of this region with earth and return it to cultivation. Before doing this, however, we sank a trial trench to test the ground at a deeper level, and came unexpectedly upon the

¹⁶ *Ibid.*, p. 166, fig. 5.

¹⁷ *Ibid.*, pp. 160-161.

tops of two big stone walls, more than one meter thick and solidly constructed. They were found, furthermore, to be standing to a height around two meters. Other exploratory trenches revealed that these walls, AZ and BA, continued in a southwesterly direction, roughly parallel with the lighter wall, AW, which had been exposed previously (Fig. 1). Pottery associated with them indicated that they belonged to an early stage of the Early Helladic settlement. A filling of stones against the north side of AZ suggested that this was a retaining wall. Both may be parts of a general system that enclosed the whole inhabited area of the site before the time of the House of the Tiles. They require further investigation.

AREA JA-JB

Area JA, a rectangular space in Square E7 south of the House of the Tiles and west of the line of Trench J, was excavated in 1955 to the topmost undisturbed remains of the Neolithic settlement.¹⁸ In 1956 a further section, JB (Fig. 1), immediately west of JA, was dug to the same level, and a large part of the combined area was then investigated stratum by stratum down to virgin soil (Fig. 5; Pl. 46, a). Mrs. Eliot was in charge of the work in this sector throughout both seasons.

Middle Helladic graves were found near the surface in Area JB.¹⁹ All were aligned northeast-southwest. One was a cist made of flat slabs of stone, broad for its length (1.03 m. by 1.28 m.). It contained three skeletons, the first two apparently pushed aside to make room for the third. Another grave held one skeleton and, near the skull, a two-handled cup. The grave labelled J.4 was made up of two parts, an earlier burial toward the southwest and a later, at a level some 0.30 m. higher, overlapping the first and extending a little further northeastwards. With the earlier skeleton were a bronze blade (probably a razor), an Argive Minyan cup (Pl. 43, a), and a jug and fragments of a cup in Matt-painted ware (Pl. 43, b); over the ribs of the upper skeleton lay part of a two-handled cup. About half of an imported Middle Minoan spouted jar with upright handles on either side (Pl. 43, c) came from the earth between the two levels and should be assigned to the earlier. The skeletons in all these graves rested on pebble floors. In one case, as occasionally noted in other Middle Helladic graves at Lerna, pebbles seem also to have been strewn over the body.

The sequence of Early Helladic strata in Area JB was found to correspond with that observed previously in JA and further east. Remains of one or two habitation levels were in place above the debris of the House of the Tiles (Fig. 5, Nos. 2, 3). The ground level associated with that building could be traced, rising slightly toward the south and west. Below it were remains of at least three, and probably four, earlier phases. In one of these, parts of massive stone foundations and broad footing trenches

¹⁸ *Ibid.*, p. 149, fig. 1; p. 166, fig. 5; pl. 42, b, and p. 170.

¹⁹ E. g. Fig. 5, No. 9. Cf. the grave in Trench H near by, *Hesperia*, XXIII, 1954, pp. 20-21.

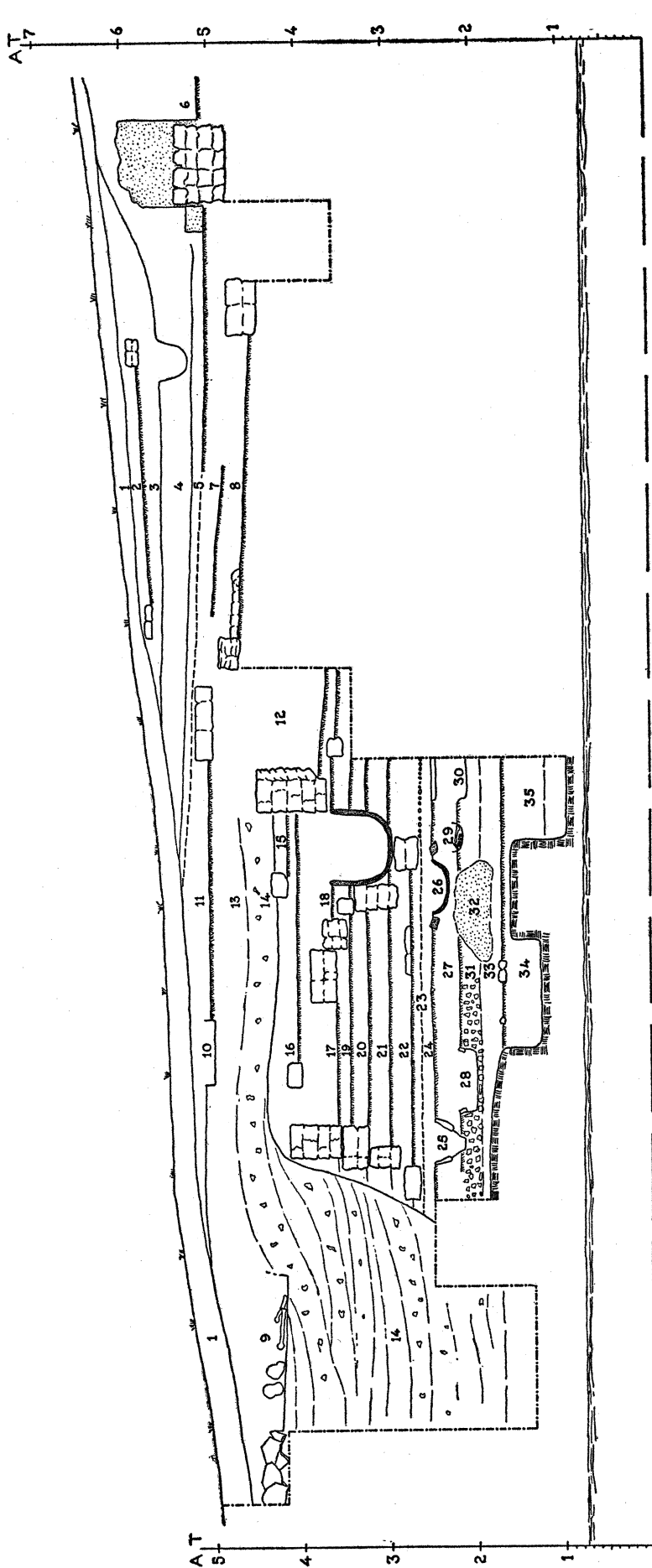


FIG. 5. Square E7. Diagrammatic Section of Stratification in Area JA-JB, as Seen from East. (Drawn by C. W. J. Eliot.)

1. Disturbed earth.
2. Early Helladic building.
3. Gray habitation deposits; bothros.
4. Burnt debris from House of the Tiles.
5. Ground level, House of the Tiles.
6. South wall and floor, House of the Tiles.
7. Early Helladic floor.
8. Early Helladic building.
9. Middle Helladic grave.
10. Footing trench.
11. Building EV.
12. Early Helladic building.
13. Brown earth.
14. Mixed filling; stones, gravel, clay, Early Helladic and Neolithic pottery.
15. Neolithic floor; latest phase preserved.
- 16-22. Floors of successive Neolithic houses.
23. Layer of pebbles dividing later from earlier Neolithic series.
24. Early Neolithic ground level or floor.
25. Stone-lined bothros.
26. Clay-lined bothros.
27. Ground level or floor.
28. Stone-rimmed bothros.
29. Grave J. 7.
30. Bothros.
31. Habitation level; small stones.
32. Burnt bricks and clay.
33. Ground level or floor.
- 34-35. Large pits in virgin soil. (Elsewhere in the area similar pits reached 0.60 m. A.T., below the present level of ground water.)

from which the stones had been removed (Fig. 5, No. 10) gave the plan of two rooms, aligned lengthwise with Building EV, found in 1955. Evidently this was one long structure bordering the edge of the settlement, like Building G. Its position is shown in Figure 1. Somewhat lower there was another big wall, in herringbone masonry, and, still earlier, a complex of irregular walls extending down to the underlying Neolithic deposits (Fig. 5, No. 12).

These remains of successive buildings were concentrated in the northern part of the area. To the southwest, just beyond the edge of the early terrace, there was a tremendous mass of burnt debris running down the steep slope. It was made up of black and gray ash, earth scorched red and white, loose stones and great bodies of calcined matter fused solid. Clearly the debris from a severe conflagration, it resembled the heaps of burnt ruins at one or another of the great Mycenaean sites. Yet the stratigraphical position and ceramic evidence show conclusively that it belonged to an early phase of the Early Helladic settlement, almost certainly preceding the House of the Tiles. An older building, it seems, must have suffered a similar catastrophe.

A layer of mixed filling (Fig. 5, No. 14), noted in previous campaigns,²⁰ was again found to divide the Early Helladic remains from the Neolithic. In this region on the south flank of the mound, the only one yet investigated extensively at this critical level, there has been no evidence of continuity or overlapping of the two cultural periods, but rather a distinct break between them.

Undisturbed Neolithic deposits were encountered in JB, as in JA, around 4.30 m. A.T. Along the south side and on a line curving northward at the west end of the area the strata plunged steeply downward, showing that this was the edge of the horizontal terrain. All the earth beyond the crest had fallen or had been dumped there at a later time, and during the digging it was carefully isolated from the certified strata. The Neolithic layer as a whole varied from 3 m. to 3.75 m. in thickness, resting on a very uneven bedding of virgin soil. The habitation deposits fell into two series, an upper and a lower, roughly equal in thickness and separated from each other by a line of division around 2.70 m. A.T.

The succession of Neolithic strata is illustrated diagrammatically in Figure 5. The upper series comprises eight building levels, each marked by house walls, floors (Nos. 15-22), and fallen debris. A remarkably regular alternation of colors was observable in the earth as it was dug, dark gray and black habitation deposits being succeeded by strata of brownish or brick-red clay that had once made up the body of the walls and had been spread out after they had collapsed. The stone socles in many instances stood one above another, the later builders having used the remains of an earlier wall as a sound bedding. At times a large part of the debris from a

²⁰ *Hesperia*, XXIII, 1954, p. 28; XXIV, 1955, p. 46; XXV, 1956, pp. 169-170.

preceding phase was cleared away altogether and the new walls and floors were installed almost immediately upon the place of the old.

Houses were made up of small rooms clustered together, apparently without any ruling plan. Presumably extra rooms were added from time to time as they were needed. The various complexes looked confused and untidy when they first emerged in the course of excavation and the manner of construction, as noted in our report for 1955, appeared to be crude. Unlike the big flat slabs of hard limestone that were generally used in walls of the Early Helladic settlement, quite small irregular pieces of rough breccia, gathered undoubtedly from the lower southeastern slopes of Mt. Pontinos, made up the socles of the Neolithic walls. As more and more of these were uncovered and examined, however, it became evident that the masonry and architectural planning were of better quality than we had first supposed. The lines were straight, almost certainly laid out by means of a string held taut, and the corners were often square and true. The rough surfaces of the breccia are well suited to this sort of construction, in which a great deal of sticky red clay serves to bind the wall together. Some of the partitions, although only 0.25 m. thick, were found standing to a considerable height and even proved difficult to demolish, so firmly were they cemented into a unified mass. Finally, in many of the rooms there were short internal buttresses²¹ that had given extra strength to the walls and, presumably, helped to support ceiling beams and roof. The plan of one of these houses appears in Figure 6 and on Plate 46, b; photographs of others on Plate 47.

The floors of these houses were made of trodden earth and clay. In and among the buildings there were pits, usually lined with a thick coating of red clay (e. g. Fig. 5, pit with floor No. 18). Some were found full of animal bones and broken pottery, having been used ultimately for the disposal of such rubbish, but others contained only an accumulation of earth. It seems probable that all these carefully constructed pits were designed originally for storage of perishable food. A few simple fireplaces were discovered, and there were a great many plain millstones or saddle querns, considerably smaller than those normally used in the Bronze Age. Many of the querns were broken and had been built into the walls of houses.

Several fragments of small stone bowls and saucers came to light in the upper Neolithic strata, and in one house there was a hoard of eleven celts (Pl. 49, b and e). Blades of obsidian and flint were plentiful, as were bone awls. Many of these implements of stone and bone show skilled and careful workmanship.

Quite the finest single object found this year in the Neolithic strata is a terracotta statuette,²² which lay beneath the debris of the third building level encountered (Fig. 5, No. 17; Pl. 49, a). This striking figure has been published in *Hesperia*, XXV,

²¹ Cf. houses at Tsangli, Wace and Thompson, *Prehistoric Thessaly*, figs. 64, 65, and at Otzaki Maghula, V. Milošević, *Arch. Anz.*, 1955, p. 158, fig. 1.

²² Inv. L6.100. H. pres. 0.182.

1956, pp. 175-177, and in the *Illustrated London News* of January 12, 1957, pp. 68-69. Somewhat lower, at the sixth building level from the top (Fig. 5, No. 20), a fragment of another figurine came to light. Only the right leg, hip, and buttock, are preserved ²³

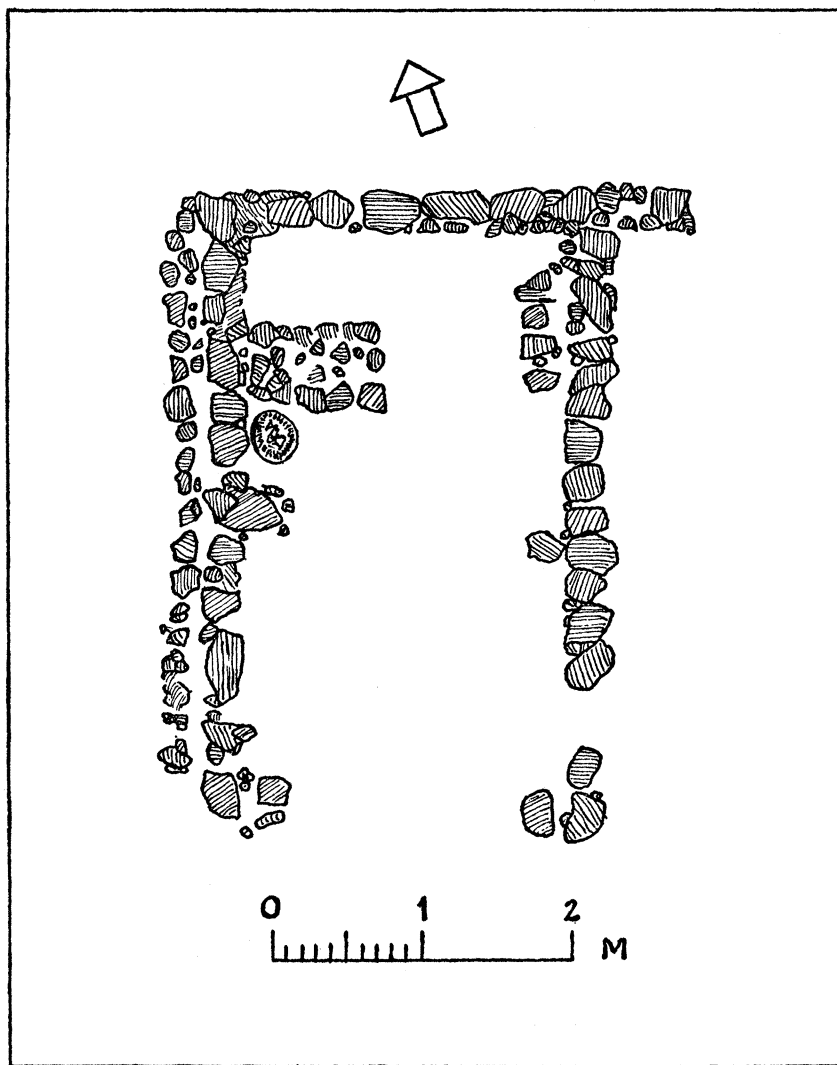


FIG. 6. Plan of Neolithic House.

(Pl. 49, d). These features, in contrast to those of the slightly later statuette, reveal an unlovely steatopygous form and relatively crude modelling.

The pottery recovered from the upper series of strata is in general of excellent quality. The biscuit is usually of fine texture, the walls of the vessels thin and even

²³ Inv. L.6.58. H. pres. 0.12. Leg hollowed. Surface coated with brown glaze.

(though all are fashioned by hand), and the firing is uniform. Exposed surfaces are in many instances coated with a naturally lustrous glaze, fired orange-brown, pinkish, reddish, or nearly black; or the surface may be treated with a thicker slip, usually red-brown but occasionally gray, and thoroughly burnished. Shapes observed include a wide variety of bowls and saucers with plain flat bottoms (e. g. Pl. 48, b) or large cylindrical bases, broad spreading plates, deep bowls or beakers (e. g. Pl. 48, f), and jars of many sorts and sizes. A squat jar or pyxis with collar-like neck and base is illustrated on Plate 48, d. Numerous big open-mouthed vessels were deeply scored with vertical and horizontal grooves on the inner surface; a fragment illustrated on Plate 48, e, shows wear from intensive rubbing near the bottom of the jar.

Although most of the pots in this general category are monochrome, a considerable number were decorated with rectilinear patterns painted in lustrous glaze or diluted slip on a light ground. The squat jar and beaker mentioned above are typical examples. Occasionally the surface of a pot was thinly coated with glaze or slip and lines were then added in the same substance. A small gray-slipped bowl bore a single trident-shaped motive, in paint perhaps originally white but now faded, on one side. Plastic ornaments in the form of small knobs and ridges occur not infrequently.

Altogether different from the usual run of pottery in these later Neolithic strata are two sherds recovered from the topmost level of undisturbed deposits (Pl. 48, a and c). They come from a bowl in buff ware with plain upright rim. On the outer surface are traces of an angular motive, slanting bands or festoons, and a large spiral, drawn in dull purplish paint with narrow bordering lines in black; the interior shows other broad bands, one having a saw-toothed edge. These pieces look out of place among the local fabrics at Lerna and may quite possibly represent an imported pot. The bichrome technique and combination of motives on the exterior suggest a parallel with B3 β Ware in Thessaly, though the saw-toothed pattern is more generally to be associated with the wares of the preceding stage, the so-called Sesklo period (e. g. A3 β Ware).

Five burials of Neolithic times were found in Area JA-JB. The patterned beaker (Pl. 48, f), lying in a stratum corresponding with Figure 5, No. 18, contained tiny bones of an infant. Other human remains were discovered just below the line of division between early and late stages of the settlement. These burials were simple inhumations, leaving little indication of the original limits of the grave pit. We believe they should be assigned to the end of the earlier stage, though it is not impossible that they may belong to the beginning of the later. One skeleton, apparently of a young adolescent, was well preserved and nearly complete, lying on its left side with head to the west and legs contracted (Pl. 49, c). Near it were larger bones of at least one other person. Grave J. 7 (Fig. 5, No. 29) contained parts of the skeleton of a child, and diminutive bones of an infant, probably premature, were found in a pocket of earth at approximately the same level.

The earlier series of habitation levels in JA-JB proved to be of different character from those observed above. A scattering of small pebbles, discovered almost everywhere in the area at a level around 2.75 m. A.T., marked the division (Fig. 5, No. 23). Below this, three or four floors (Fig. 5, Nos. 24, 27, 31, 33) could be distinguished with difficulty. Groups of fallen stones lay here and there, but there were no house walls of the kind seen in the upper strata; nor, in fact, could walls of any sort be recognized with certainty, although irregular masses of clay that appeared throughout the area may perhaps indicate that houses or huts had stood and collapsed here. Small hollows in the ground, filled with soft matter, may once have held vertical wooden supports. Clearer evidence of human activity was furnished by the numerous storage pits or bothroi that came to light (e. g., Fig. 5, Nos. 25, 26, 28, 30).

A continuous bedding of firm red clay, uniform in character, marked the bottom of these deposits. So far as could be determined by a little digging, it contained no stones, pottery, bones, or other signs of habitation, and we concluded that this was virgin soil (elsewhere at the site, wherever we have probed to a comparable depth, we have reached water-level before finding the bottom of habitation debris; further tests will be made). The surface of the red clay was very uneven. In some places it stood as high as 1.80 m. A.T.; in others there were large cavities going down to 0.60 m. A.T., below the level of ground water. At least some of these cavities appeared to be man-made (e. g. Fig. 5, Nos. 34, 35; see also Pl. 46, a). They were irregularly rounded in outline and roughly 0.50 m. to 1.50 m. in width and length. The largest might conceivably have been cut for shelters, but some other explanation is probably to be sought. Clay may have been dug here for use in building or manufacture, and the pits later used for disposal of rubbish. When found they contained animal bones, a few bits of pottery, and much gray carbonized matter.

Objects recovered from the early series of deposits include flat stones pierced for suspension (possibly amulets), blades and chips of flint and obsidian (e. g. Pl. 49, f, g), and bone awls. The pottery is quite different from that of the upper levels. At the time of writing (February, 1957) it has not yet been studied in detail or mended, but even a preliminary inspection shows that the predominant fabric is Rainbow, or Variegated, Ware, and that the red slipped and glazed varieties occurring in the later strata are wholly absent. The fragments of Rainbow Ware are almost all from rounded bowls or jars, normally with plain upright rims, like those known at Corinth and Nemea. A sherd decorated with a pattern of broad lines in bright red, burnished on the surface, is strongly reminiscent of an askoid jug that was also found in the collapsed cave at Nemea. Black burnished ware is present in strata corresponding with Figure 5, Nos. 24 and 27.

SUMMARY

The excavations of 1956 provided a stratigraphical survey of the Neolithic remains at Lerna and new information about the initial phases of the Early Helladic occupation; they revealed further parts of the tumulus over the House of the Tiles, many additional houses and streets in succeeding layers of the Early and Middle Helladic settlements, and an extensive series of graves yielding skeletal material of the Neolithic, Middle Helladic, and Late Helladic periods. Pottery and other objects recovered throughout the site, this year as in preceding campaigns, gave an increasingly valuable index of the cultural sequence, while a number of imported pieces cast further light on early trade relations with Crete, the Cyclades, and, apparently, the central Balkans.

Neolithic deposits, as revealed in Square E7 on the southern edge of the hill, are clearly divided into an earlier and a later series of strata, the former containing Rainbow ware, the latter red-slipped and glazed wares. It is not yet certain whether these represent quite the earliest and latest habitations of the Stone Age at Lerna; other deposits may still await discovery elsewhere in the mound. From the investigations conducted up to now, it appears that there was a distinct break in the occupation of the site at the end of the Neolithic period.

The next continuous series of architectural phases is assignable to the Early Helladic period. It comprises remains of many successive buildings, not a few of which were monumental in character, leading up to and including the palatial House of the Tiles. Monochrome pottery is characteristic of this age, the sauceboat being one of the principal types of vessels.

With the violent destruction of the House of the Tiles came another interruption in the sequence of habitations. Thereafter houses were smaller and much simpler in design; much of the pottery, still of Early Helladic type, was decorated with rectilinear patterns in semilustrous paint; and the sauceboat apparently was dropped altogether from the repertory of shapes. These obvious indications of change, as well as others, which have been confirmed and multiplied by the most recent excavations, lead us to believe that a new group of people took possession of the site at the time of the great catastrophe or immediately afterwards.

There is a deceptive resemblance between the patterned pottery of the upper Neolithic strata and that of the Early Helladic deposits succeeding the House of the Tiles. In both periods vessels were coated completely on the under side of the body, the shoulder being reserved for designs of zigzags and chevrons, or other motives, in dark paint. These similarities have sometimes been taken to indicate a measure of continuity from the Neolithic to the Early Helladic culture, or even a chronological overlapping of the two. Such deductions are not supported, however, by the stratigraphical evidence at Lerna; the two analogous classes of patterned wares occur here

in contexts that are widely separated by an intervening period of long duration and wholly different character.

Investigations in 1956 failed once more to reveal any sharp division between the strata containing late varieties of Early Helladic pottery and those in which Middle Helladic fabrics begin to appear. There is abundant evidence to show that the change took place, but, as stated in previous reports, the transition seems to have been gradual at this site rather than sudden and violent. Further analysis of the problem must be postponed until the architectural phases have been studied again in detail and the very large collection of sherds and miscellaneous objects from the deposits in question has been comprehensively re-examined. These are of great interest, since it was during this period that many of the foreign contacts were established.

The practice of burying the dead under and among the houses of the settlement grew rapidly during the middle and later phases of the Middle Helladic age, continuing at the time of the shaft graves (Late Helladic I) and, to some extent at least, throughout the Mycenaean period. Even in Geometric times there were burials on the site itself, as well as in the cemetery below Mt. Pontinos. More than 130 graves were discovered in 1956, adding appreciably to the already large collection of materials for anthropological study.

It is our intention to limit excavation henceforth, in the present series of campaigns, to a few relatively small areas where the Neolithic layers in particular can be subjected to supplementary testing. The accumulation of material from the later settlements is already far advanced and may properly be suspended until a thorough review has been completed and presented. At the conclusion of the current work in the field an effort will be made to solidify and protect all architectural remains that are left exposed and to render them intelligible to visitors.

In closing this preliminary report I take pleasure in expressing thanks to the colleagues who have supported and participated in the undertaking, especially to Mr. Verdelis and Miss Protonotariou, the archaeological authorities of the district, to our neighbors the French excavators at Argos, and to the staff of the Agora excavations at Athens. A special word of appreciation is owed also to the brothers George and Panayotis Kotsiopoulos for their generous coöperation in allowing us to continue our work on their properties.

JOHN L. CASKEY

AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS



a. Parts of Areas D and DE from North



b. Areas BE and DE from Southwest

JOHN L. CASKEY: EXCAVATIONS AT LERNA, 1956



a. Miniature Jug. L. H. III A (Ca. 1:2)



b. Goblet from Grave DE.1. L. H. II (Ca. 1:2)



c. Grave DE.1 with Cover Slab and Upright Marker in Place



d. Grave DE.1 Opened



e. DC.1, Grave 2 Opened



f.-h. Offerings from DC.1, Grave 2. L. H. I. (1:3)



i. Feeding Bottle from DC.1, Grave 4. L. H. I. (2:3)



a. Grave BE.30 with Five Skeletons and Offerings as Found. Middle Helladic



b. Small Matt-painted Jar from Grave BE.30 (5:8)



c. Area BE. Room 45 from North. Early Phase of Middle Helladic Period



d. Black Burnished Flask from Area BE, Room 44 (2:5)



e. Area BE. Room 45; Doorway with Wooden Jamb Partially Restored



f. Brown Burnished Flask from Area BE, Room 45 (From a Watercolor by Piet de Jong. Ca. 1:2)



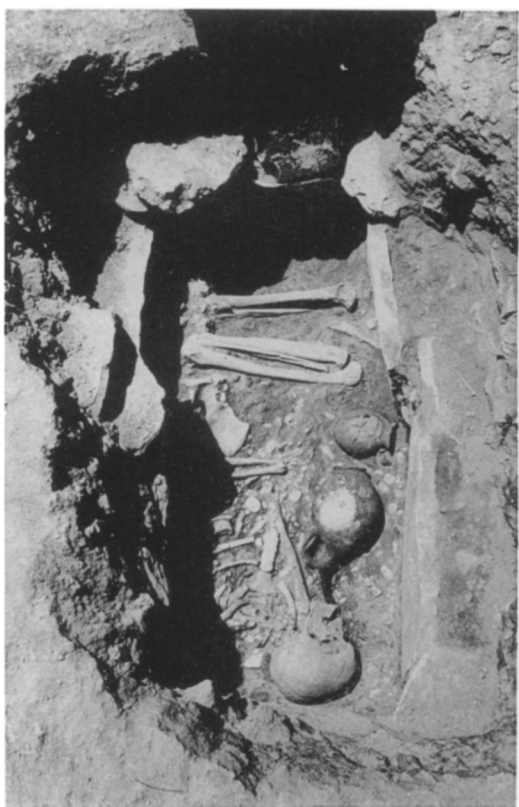
a. Area BD from West-northwest



b. North Edge of Tumulus with Bordering Ring of Stones, from North. House of the Tiles in Background



c. Areas BD (left) and BC (right). Curving Wall of House BC.15 in Foreground. From Northwest



d. Grave BD.19 with Cycladic Jug, as Found



e. Area BC from North. Grave BC.3 in Foreground, House of the Tiles at Left; Area J in Background



a. Matt-painted Bowl with Pedestal-foot (Ca. 2:5)



b. Bronze Pin from Middle Helladic Street (Ca. 7:8)



c. Middle Helladic Dagger Blades and Chisel.



d. Cycladic Vessel (Ca. 1:2)



e. Anchor-shaped Object from Late E. H. Stratum (Ca. 2:5)



f. Black Slipped and Burnished Bowl from Late E. H. Stratum (Ca. 1:2)



a. Minyan Cup from Grave J.4 (1:2)



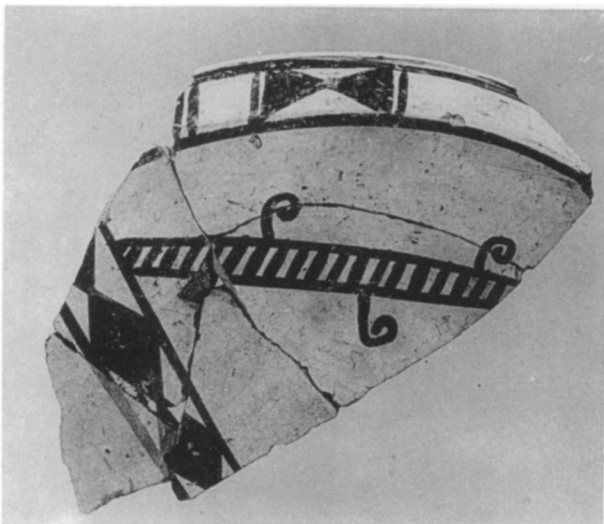
b. Matt-painted cup from Grave J.4 (Ca. 1:2)



c. Fragment of Imported Middle Minoan Jar from Grave J.4 (Ca. 2:5)



d. Miniature Matt-painted Jar from Grave DE.21 (Ca. 3:4)



e. Fragment of Matt-painted Bowl (1:2)



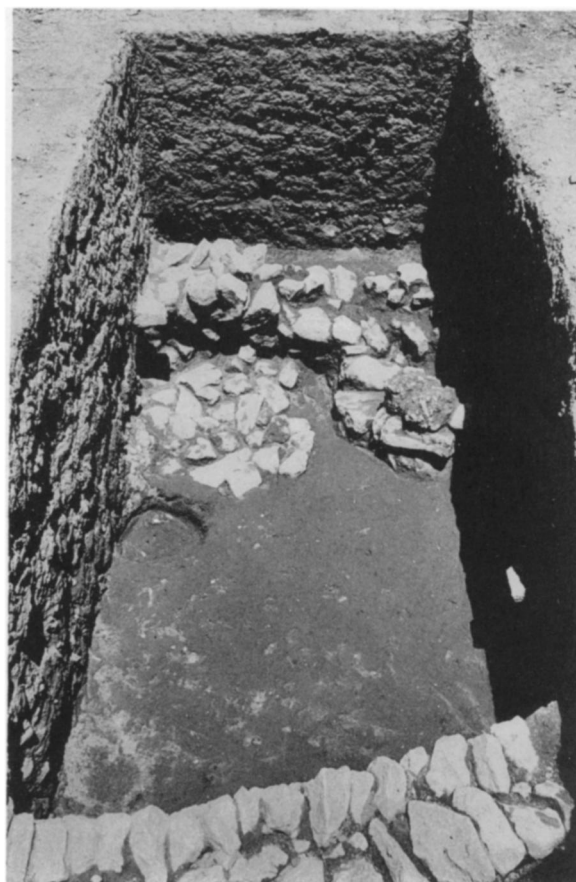
f. Matt-painted Cup from Grave DE.69 (1:2)



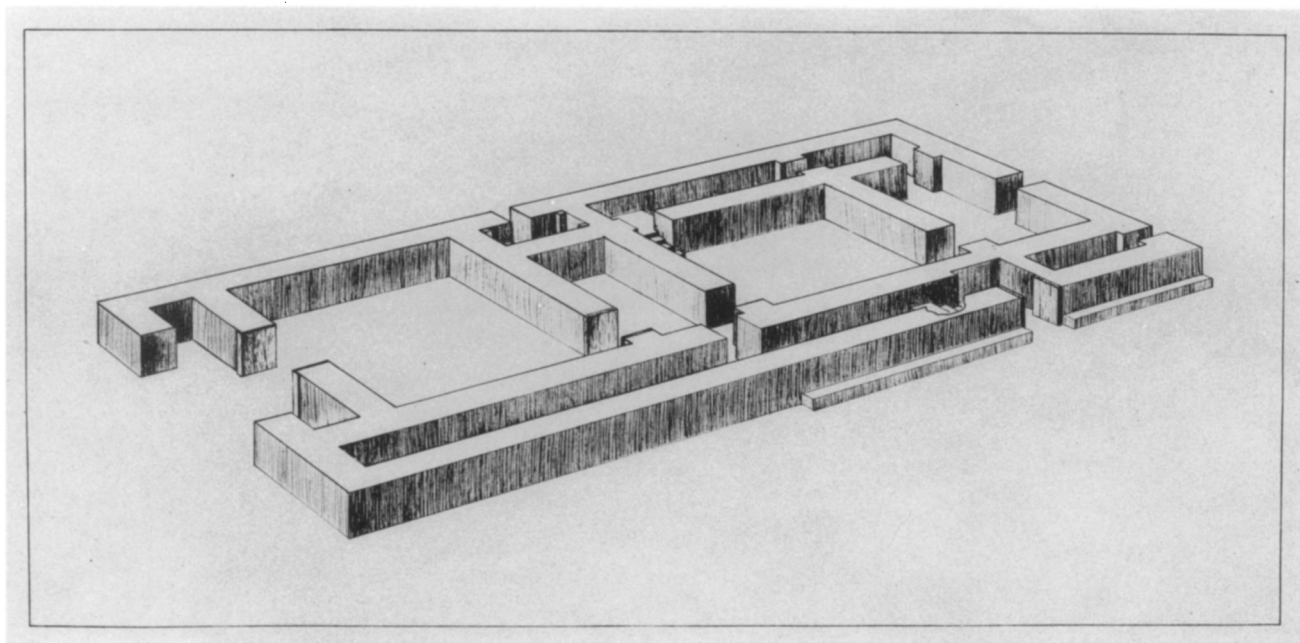
a. House of the Tiles and Surrounding Area from Northwest, 1956. Walls covered with Temporary Sheathing of Stones and Earth. Part of Circle of Stones Bordering Tumulus at Left in Area BD



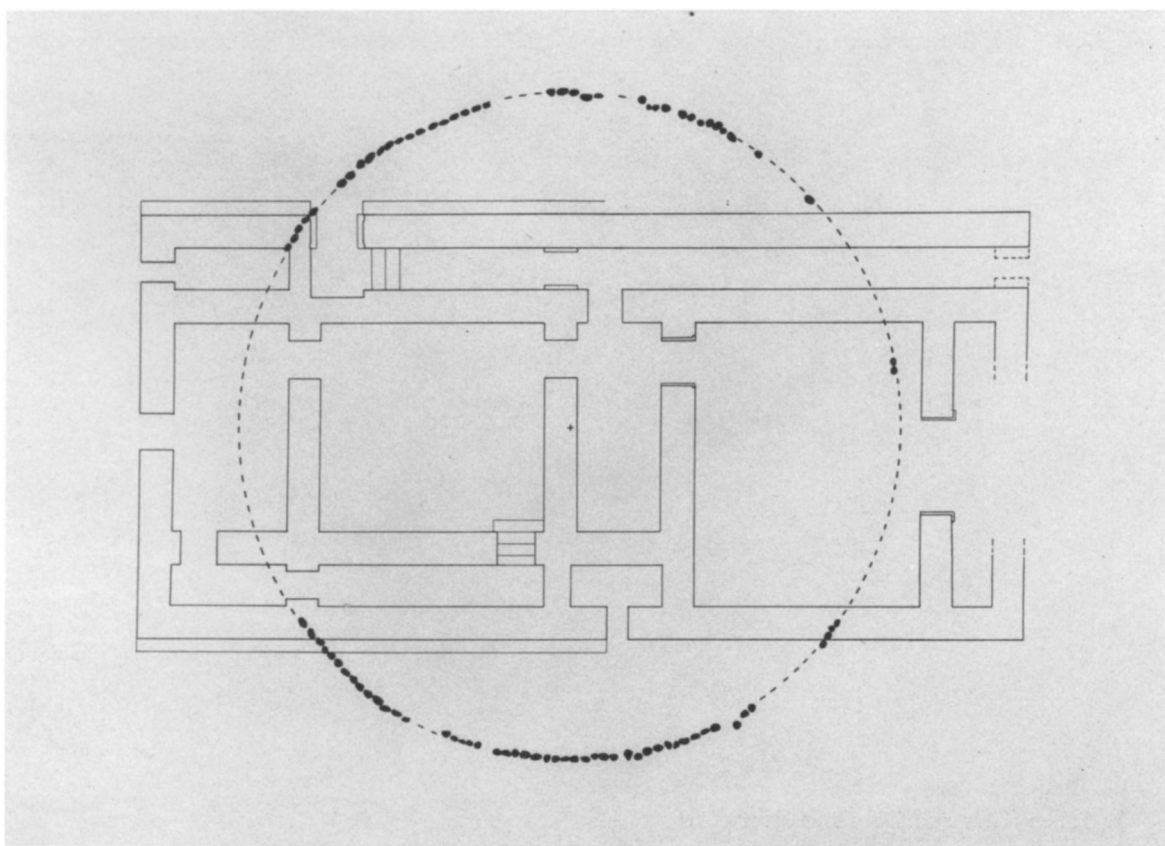
b. Fallen Tiles and Debris in Room XII



c. Early Helladic Walls in Trench below Floor of Room VI



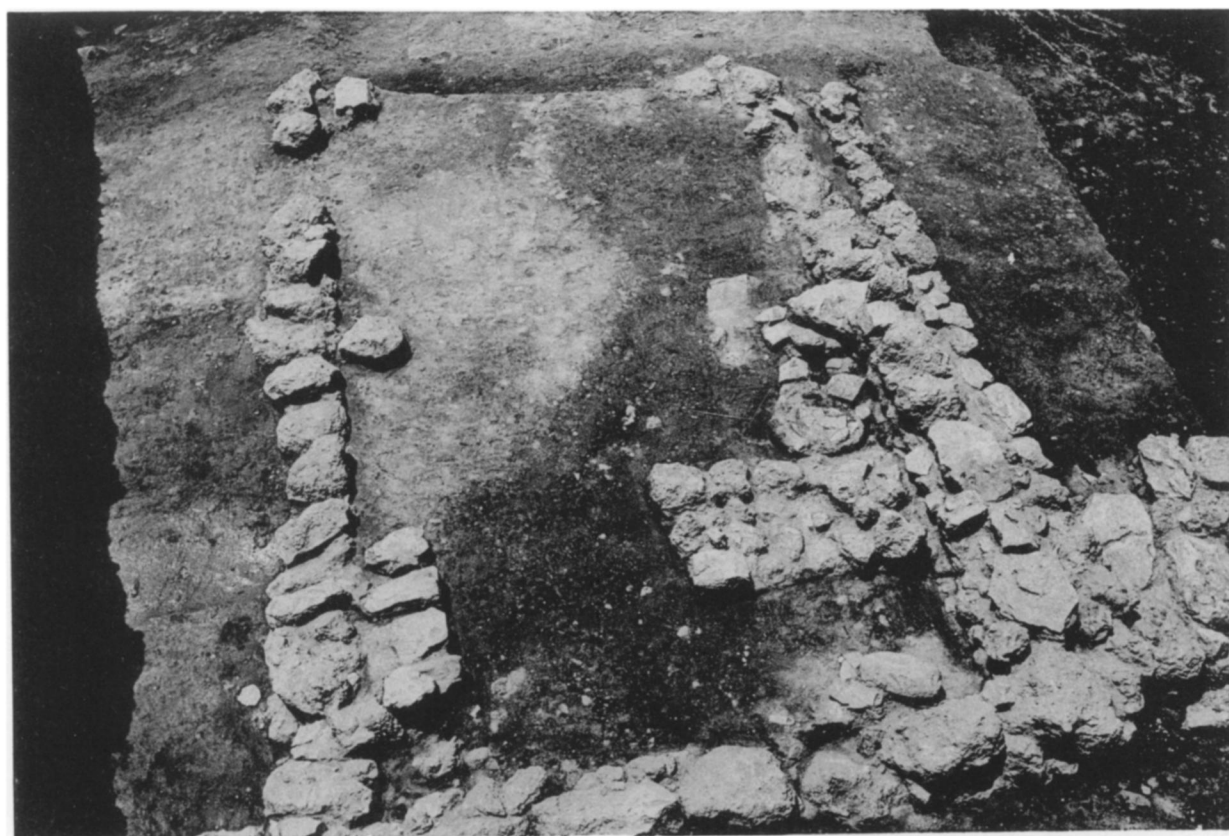
a. Ground Floor of the House of the Tiles as Seen from the Northeast. Tentative Restoration of Walls to a Height of 1 m. (Drawing by Lloyd Cotsen)



b. Restored Plan of the House of the Tiles with Circle of Stones Bordering Superimposed Tumulus. Some Details of the East Façade Uncertain (Drawing by Lloyd Cotsen)



a. Excavation of Neolithic Settlement in Area JA, Square E7, from West



b. Neolithic House in Area JA

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a. Area JB. Room J.16



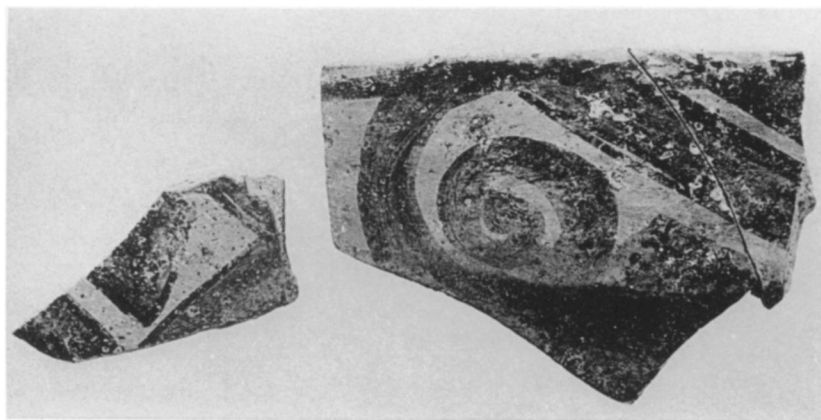
b. Area JA. Room J.12



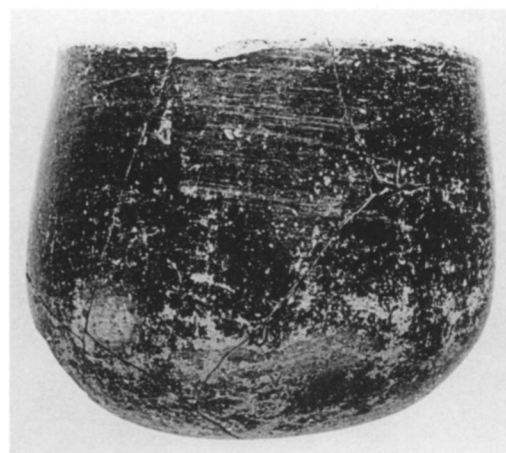
c. Area JA. Rooms of Neolithic Houses



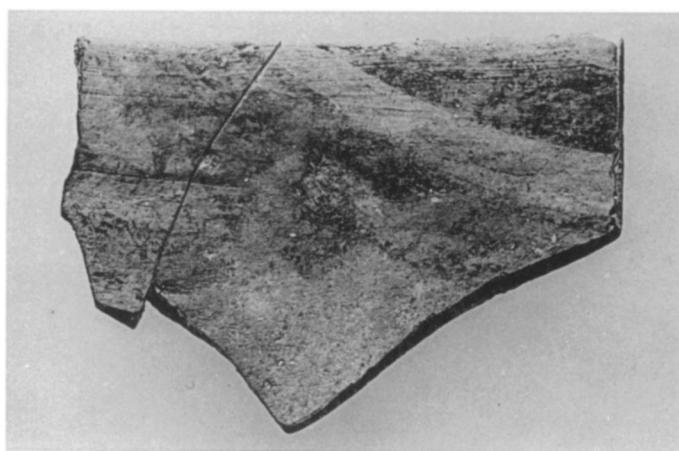
d. Area JA. Rooms of Neolithic Houses



a. Fragments of Bowl with Polychrome Decoration from Late Stratum of Neolithic Deposits in Square E7 (Ca. 2:3)



b. Neolithic Bowl in Red-slipped Ware (3:5)



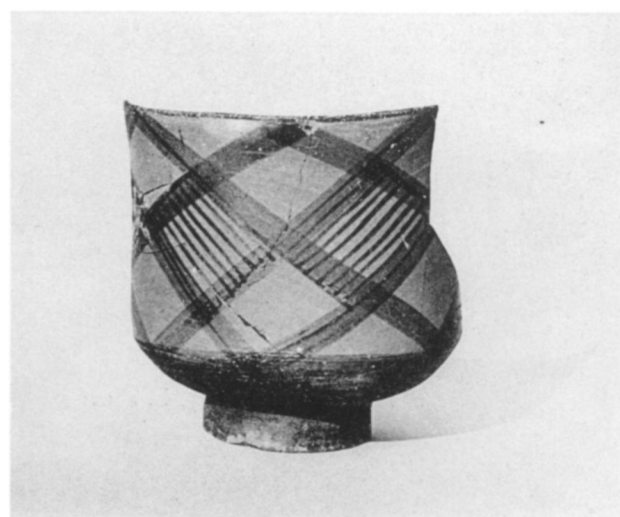
c. Interior of Sherd Shown in a, above



d. Neolithic Jar with Patterns in Red (1:2)



e. Deeply Scored Inner Surface of Large Neolithic Jar (Ca. 1:3)



f. Fragmentary Neolithic Deep Bowl or Beaker with Pattern in Orange-Brown Glaze, Used as Burial Urn (Ca. 3:10)



a. Neolithic Statuette as Found



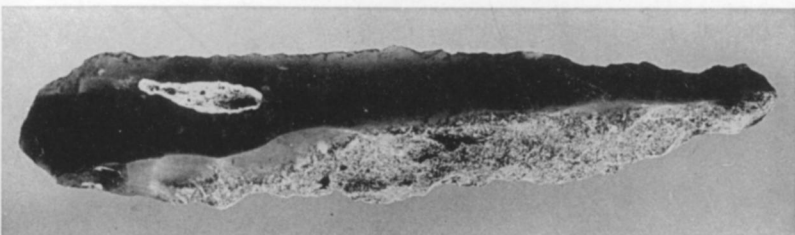
b. Hoard of Neolithic Celts as Found



c. Neolithic Burial



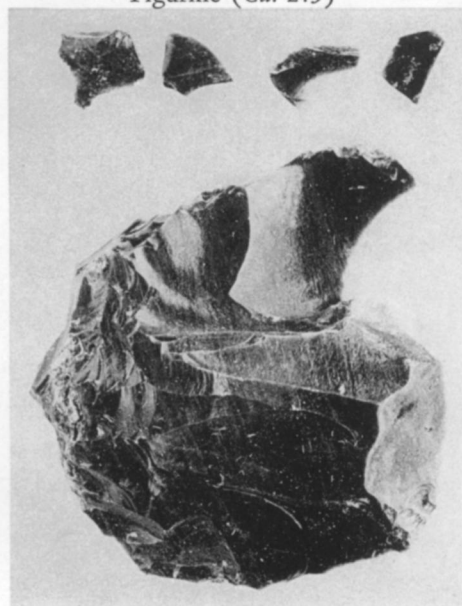
e. Hoard of Celts (*cf.* b, above)



f. Flint Blade from Early Neolithic Stratum (*Ca.* 5:7)



d. Right Hip and Leg of Neolithic Figurine (*Ca.* 2:3)



g. Obsidian Core and Chips from Early Neolithic Stratum (7:10)