

# THE EARLY HELLADIC PERIOD IN THE ARGOLID

(PLATES 69-70)

THE principal divisions of the Bronze Age in northeastern Peloponnesos were first clearly recognized at Korakou. Early, Middle, and Late Helladic periods were distinguished on the basis of stratigraphy, and the account of the excavations, which was published in 1921, provided a documented framework of relative chronology. During the succeeding generation this was applied and expanded as further investigations were carried on in Corinthia and the Argolid, as well as in districts of closely related culture, Arcadia, Attica, Boeotia, and Phocis, within a radius of a hundred kilometers.<sup>1</sup> More recently, in the years 1952 to 1958, another excavation was undertaken at the early site beside the Lernaean spring, with the purpose of furnishing, if possible, a more precise definition of the main periods and their subdivisions, the general sequence of which was already known.<sup>2</sup> Lerna proved to be

<sup>1</sup> Comprehensive reports of the principal excavations that have bearing on the subject of this paper are referred to with the following abbreviations:

*Aghios Kosmas*: G. E. Mylonas, *Aghios Kosmas, An Early Bronze Age Settlement and Cemetery in Attica*, Princeton, 1959 (excavations of 1930-1931 and 1951).

*Asea*: E. J. Holmberg, *The Swedish Excavations at Asea in Arcadia*, Lund, 1944 (excavations of 1936-1938).

*Asine*: O. Frödin and A. Persson, *Asine, Results of the Swedish Excavations, 1922-1930*, Stockholm, 1938.

*Eutresis*: Hetty Goldman, *Excavations at Eutresis in Boeotia*, Cambridge, Mass., 1931 (excavations of 1924-1927).

*Korakou*: C. W. Blegen, *Korakou, a Prehistoric Settlement near Corinth*, Boston and New York, 1921 (excavations of 1915-1916).

*Orchomenos, I*: H. Bulle, *Orchomenos, I, Die älteren Ansiedlungsschichten*, in *Abhandlungen der K. Bayer. Akad. der Wiss.*, I Kl., XXIV Bd., II Abt., Munich, 1907 (early excavations of Schliemann and de Ridder; excavations of 1903, 1905).

*Orchomenos, II*: E. Kunze, *Orchomenos, II, Die neolithische Keramik*, in *Abhandlungen der Bayer. Akad. der Wiss.*, Phil.-hist. Abt., Neue Folge, 5, Munich, 1931 (materials from earlier excavations and supplementary soundings of 1929).

*Orchomenos, III*: E. Kunze, *Orchomenos, III, Die Keramik der frühen Bronzezeit*, in *Abhandlungen der Bayer. Akad. der Wiss.*, Phil.-hist. Abt., Neue Folge, 8, Munich, 1934.

*Tiryns, III*: K. Müller, *Tiryns, Die Ergebnisse der Ausgrabungen des Instituts, III, Die Architektur der Burg und des Palastes*, Augsburg, 1930.

*Tiryns, IV*: K. Müller, *Tiryns, Die Ergebnisse der Ausgrabungen des Instituts, IV, Die Urfernk Keramik*, Munich, 1938.

*Zygouries*: C. W. Blegen, *Zygouries, A Prehistoric Settlement in the Valley of Cleonae*, Cambridge, Mass., 1928 (excavations of 1921-1922).

<sup>2</sup> Preliminary reports of the campaigns are here abbreviated:

1952-53: J. L. Caskey, "Excavations at Lerna, 1952-1953," *Hesperia*, XXIII, 1954, pp. 3-30.

remarkably rich in its yield of objects and information, particularly in the successive phases of the Early Bronze Age. By no means all the questions are answered, but certain features of this period now stand out more clearly than before. In the following pages I propose to review only a few of these features, noting where and in what relationships they may be observed but limiting the inquiry to a small area and to facts which I believe to be ascertainable.

For convenience the entire sequence of layers at Lerna has been divided chronologically into seven groups: I, the most ancient Neolithic settlement; II, a more advanced stage of Neolithic culture, which was followed probably by a late Neolithic stage and then, almost certainly, by a period when the site was uninhabited; III, an Early Helladic settlement and citadel; IV, a late stage of the Early Helladic period; V, a characteristic Middle Helladic town; VI, the period of the royal shaft graves at Mycenae; VII, the later Mycenaean settlement (1957, pp. 143-144). Here we are concerned principally with Periods III and IV.

### PERIOD III AT LERNA

The first houses of Lerna III were built on a mound of debris that had grown up over a long period of occupation in Neolithic times. This was a new settlement, and its remains give no evidence whatsoever of an overlapping or gradual merging with survivals of the preceding age. In parts of the hill there are indeed masses of earth that contain great quantities of Neolithic potsherds with varying admixtures of Early Helladic glazed wares, a fact which puzzled the excavators until the mixed deposits could be isolated. From the start we were warned, however, by the fact that no traces of walls or floors could be found in these deposits and that joins could not be made between the sherds in spite of long and patient effort in the mending rooms. Ultimately it became evident that none of this debris was in its original place. The Early Helladic inhabitants, some time after their first arrival, had levelled the upper surface of the hill, filling hollows and dumping much of the debris over the crest along the south side, and perhaps elsewhere, in order to make a larger and better ordered space for their houses.

1954: *Hesperia*, XXIV, 1955, pp. 25-49.

1955: *Hesperia*, XXV, 1956, pp. 147-173.

1956: *Hesperia*, XXVI, 1957, pp. 142-162.

1957: *Hesperia*, XXVII, 1958, pp. 125-144.

1958: *Hesperia*, XXVIII, 1959, pp. 202-207.

Other illustrated reports and notices are listed in 1952-53, notes 6 and 9; 1954, note 2; 1955, note 2; 1957, note 1. Also: M. C. Heath, "Early Helladic Clay Sealings from the House of the Tiles at Lerna," *Hesperia*, XXVII, 1958, pp. 81-121; and further notices, some illustrated, in *A.J.A.*, LXII, 1958, pp. 221, 222; LXIII, 1959, p. 187; LXIV, 1960, p. 183; *Archaeological Reports for 1958*, Hellenic Society and Brit. School Athens, 1959, p. 7; *B.C.H.*, LXXXII, 1958, pp. 708-713; LXXXIII, 1959, pp. 617-618.

Of other Neolithic settlements in the Argolid very little is known as yet. Sherds of glazed ware like that of Lerna II (e.g. 1957, pl. 37, d-f) have been found at Mycenae, Tiryns, Prosymna, and Berbati, but without a succession of house floors.<sup>3</sup> A cave at Nemea yielded pottery of the earlier Neolithic type called Rainbow ware but not any evidence of later occupation. Zygouries and Korakou were apparently not inhabited before the Bronze Age. At Gonia,<sup>4</sup> however, trial trenches did touch certain areas where sherds of Neolithic and Early Helladic wares were present at the same levels, and a mixture appears also at Corinth. Asea in Arcadia has a similar mixed layer.

Further north, the round buildings near the Mycenaean tholos tomb at Orchomenos were for many years thought to be of Neolithic date, until E. Kunze corrected the error by showing that they belonged rather to the Early Helladic period and that the associated stratum with a preponderance of Neolithic sherds had been brought in as a filling. Recent supplementary investigations at Eutresis<sup>5</sup> have shown that there too a true Neolithic settlement preceded the arrival of the Helladic people, and that the slight mixture which had been observed at the level of transition is in fact to be accounted for by the activities of the new settlers who dug and filled to make the surface even.

Lerna, Eutresis, and Orchomenos suggest, then, that these Early Helladic folk had an orderly turn of mind, preferring horizontal plots for their houses, and that the labor required seemed to them worth expending. If grading was indeed a frequent practice of theirs, the mixed deposits that have sometimes been cited as evidence for a chronological overlapping may perhaps be explained more simply as signs of tidiness. The trial pits at Gonia were small and, as the excavator stated, could not give a whole picture of the strata. At Corinth water-borne debris is common, and constant reoccupation has caused repeated disturbance of early remains; and upon the rocky hilltop of Asea the thin accumulations were also subject to confusion by erosion and human activity. Levelling in Early Helladic times may have been responsible in part for the mixture observed at all these places.

A second argument sometimes adduced to prove continuity between Neolithic and Early Helladic is the use of glaze (*urfirnis*) on pottery of both periods. There is indeed a similarity in the techniques, although anyone who handles the sherds at an excavation learns quickly to distinguish the two varieties. But a growing body of evidence suggests that these varieties are in fact quite unrelated as they appear in Greece.

The former class of glazed ware is characteristic of Lerna II and of contempo-

<sup>3</sup> *Tiryns*, IV, pp. 5-6; C. W. Blegen, *Prosymna*, p. 371 (Class B, I, a). Sherds from Mycenae were shown me by Mr. Papadimitriou; those from Berbati by Mr. Åkerström.

<sup>4</sup> C. W. Blegen, *Metr. Mus. Studies*, III, 1930-1931, pp. 64-66.

<sup>5</sup> Above, pp. 126-167.

rary settlements at other sites. The next occupants, we believe, were a people whose houses have been swept away<sup>6</sup> but who certainly used pottery of different fabrics, some of which bore patterns in dull paint (1958, pp. 204-205). These wares, which would appear to mark a late Neolithic stage, occur at Prosymna and Tiryns and plentifully in Corinthia, as well as in central Greece. They are still without firm stratigraphical context, but would seem for a time to have supplanted the Neolithic glazed wares. Then in the initial phases of the Early Helladic period, as attested at many sites (though not at Lerna), there follows a time when red slipped and polished pottery holds sway, and only after that is the process of glazing rediscovered or reintroduced (Pl. 69, a; *Zygouries*, pl. VIII). The possibility of some telescoping in this succession must be admitted at the present stage of our knowledge, but it appears exceedingly unlikely that the Early Helladic users of glaze can have had any contact whatever with their Neolithic precursors.

Lerna fails us momentarily in this interval. None of the typical red burnished ware (Blegen's class A II) that appears in Early Helladic I at Korakou, Zygouries, and Asine, and in great abundance at Eutresis, has been recognized with certainty at this site. The chance that every trace of a stratum containing such pottery might have been obliterated is too remote to be seriously considered. We conclude therefore that Lerna remained uninhabited for a time at the beginning of the Early Bronze Age.

Lerna III, on the other hand, was a very flourishing settlement indeed. There are, we believe, a few traces of its first phase of occupation, which was followed by levelling operations and the dumping of the debris mentioned above. Next in succession came at least six architectural phases that are represented by remains of superposed buildings. These "phases" mark not merely repairs or remodellings; wholly new structures were laid out in each case on new lines. From this sequence it is not to be inferred, of course, that the whole settlement was demolished and reconstructed six times. Some of the buildings lasted more years than others; older and newer stood at times side by side. But in at least one observable series there were six in succession, and this must imply that the period was of long duration.

The buildings were solidly constructed and many of them were large. One belonging to the middle phases of the period, Building BG (1958, pp. 202-204), was nearly 12 m. wide and its walls were over a meter thick. About 17 m. of its length could be measured; the north end has not been excavated. The House of the Tiles (1955, pp. 162-166), which was the latest building of Lerna III, is also about 12 m. wide and is 25 m. long, having walls slightly less than a meter thick. Only one other structure yet known in the Argolid or elsewhere in Early Helladic Greece, namely the great tholos at Tiryns, is comparable to these in scale; it is even bigger, having a diameter of nearly 28 m. Across the Aegean there is another parallel, the central

<sup>6</sup> Evidence is cited in connection with reports of late Neolithic graves, 1957, p. 137, and 1958, p. 205.

megaron of Troy II, which is about 13 m. in width, the walls being 1.40 m. to 1.45 m. thick. Dörpfeld restored the length of Megaron IIA as 36 m. on grounds of probability, pointing out that the minimum possible was around 27.50 m., while the maximum was almost unlimited.

Rectangular terracotta plaques, moderately rough in texture, and a certain number of slabs of schist were used to cover the roof of the House of the Tiles (1952-53, pl. 5). Schist was used also on the earlier building, BG. Tiles of fine texture have been found in association with some of the smaller houses of the middle phases of Lerna III. All these coverings were laid, we suppose, in beddings of clay on roofs with an appreciable, but not a steep, pitch. The tholos at Tiryns was tiled with terracotta plaques and presumably had a low-pitched conical roof. Tiles of the same kind were found at Asine in the debris of an Early Helladic building the plan of which was not ascertained. The House of the Tiles at Lerna and the tiled buildings at Tiryns and Asine were destroyed by fire.

Another major feature of the Third Settlement at Lerna, surprising at its discovery, is the system of fortifications (1957, pls. 33-34). This consists of a double ring of walls, with gates and towers: a very powerful protection to the inhabitants, whose possessions must have been valuable enough to attract covetous eyes and therefore to warrant defense on a monumental and costly scale. We know not what sort of material objects these possessions were; something valuable was kept in sealed containers,<sup>7</sup> but no gold or other intrinsically precious commodities have been found in the course of the excavations. On the other hand, the rich land of Argos was itself always worth defending.

Pottery in great quantities has been recovered from the various strata of Lerna III. It is generally of types already well known and provides a reliable index of relationships with other settlements in the district. In some respects the Lerna collection is of exceptional value, since it comprises many whole pots and several large groups of pots from single "closed" deposits. Complete vessels, whether broken or not, are rarely displaced from their proper stratigraphical context, whereas sherds may move upward in surprising numbers, and a few percolate downward, as one building operation follows another.

Wares coated thickly with glaze, red, brown, or black, which usually has an iridescent sheen and often tends to flake (Pl. 69, a), occur principally in the earlier phases of the Third Settlement at Lerna; thinner glaze, less carefully applied, is characteristic of the later phases, when plain uncoated vessels are also found in proportionately greater numbers (e.g. 1955, pl. 46). Fine yellow-slipped and mottled ware seems similarly to decrease at the very end of the period. This sequence corresponds with that observed at other well-stratified sites.

<sup>7</sup> M. C. Heath, *Hesperia*, XXVII, 1958, pp. 81 ff.

The repertory of common shapes is also familiar. Bowls of medium size with incurving rims, sometimes with flat bottoms but more frequently with ring bases, and generally coated with glaze of good quality, occur in the earlier strata. Smaller saucers, of both shallow and deep varieties, tend gradually to replace the bowls and are found in astonishing profusion (Fig. 1, A-E).<sup>8</sup> Undoubtedly the deeper type served often as a drinking cup; its form fits the grasp very handily. Rims of saucers are frequently coated with glaze to offer a smooth surface to the lips of the drinker. Occasionally a broad cross is painted on the interior of the shallow ones (Pl. 69, d; *Zygouries*, fig. 69); this device has been cited as a parallel to the red crosses of Troy V, but for chronological reasons the similarity must, I think, be considered fortuitous.<sup>9</sup>

Lerna III is the time of the sauceboat, which does not appear in any other period at this site. It is a remarkable vessel: impractical in shape, one might say if the people had not in practice used it so extensively, imaginative, perky, bringing a smile to us in our ignorance. Whatever the mode of its use may have been, the sauceboat is a sort of hallmark of this stage of the Early Helladic period. At Lerna four variations of the shape occur (Fig. 1): (I) low broad bowl with low spout, (II) hemispherical bowl with rising spout, (III) deep semicylindrical bowl with high spout, (IV) dumpy bowl with stubby spout. Type I is the earliest, and finds parallels in the Cyclades.<sup>10</sup> Types II and III are coeval and well-nigh universal. Type IV occurs in the last phase, that of the House of the Tiles, and is exactly paralleled at Tiryns.<sup>11</sup> This chronological development is worth attention but it may prove not to be widely applicable, for local variations were probably the normal rule.

Askoid shapes are common in Lerna III: the so-called askos itself, with a wide mouth (1955, pl. 46, e), the askoid jug with a restricted neck (like *Tiryns*, IV, fig. 11), and the lentoid or askoid flask with a small neck, spout, and short handle (1952-53, pl. 11, a). Contemporary examples are plentiful at other sites. The earliest here is a rather coarse scoop-like vessel with incised linear decoration (1958, pl. 41, e). The askos is one of the few shapes for which there are also earlier and later parallels: in the Early Neolithic period (specifically at Nemea), with which there can be no real contact whatever, and in Period IV at Lerna, which will be mentioned below.

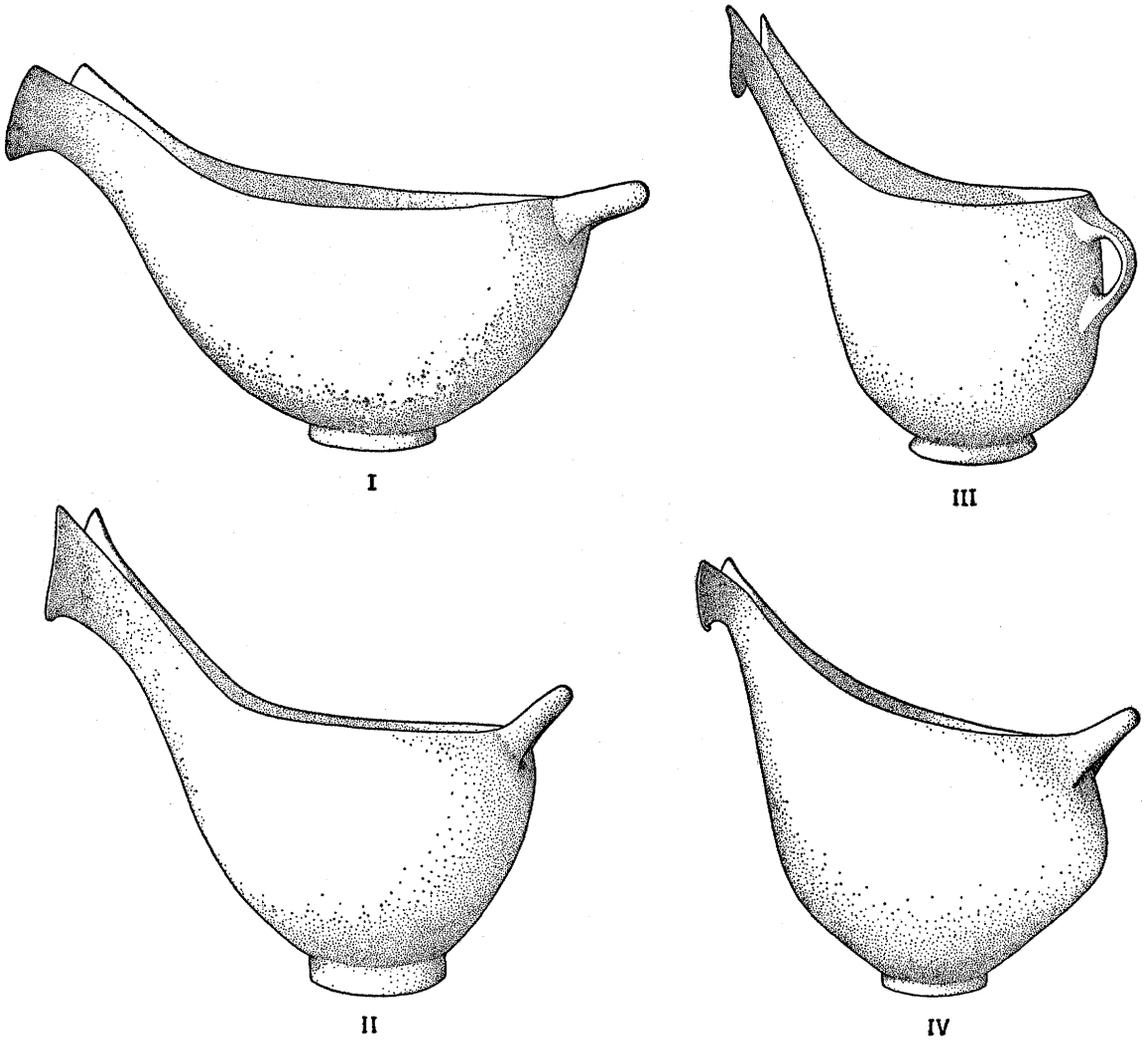
Other obviously characteristic shapes that occur in Lerna III and are exemplified at many sites in the region under consideration include jugs with high or low spouts, the lip cut square (1954, pl. 21, d; 1955, pl. 46, d); broad open basins of supremely

<sup>8</sup> A parallel change occurred at Eutresis; above, p. 165.

<sup>9</sup> Blegen, Caskey, Rawson, *Troy*, II, pp. 227, 250-251. The crosses do not occur in E.H. III at Eutresis. Lerna III is appreciably earlier than Troy V; see below.

<sup>10</sup> Tsountas, *Ἐφ. Ἀρχ.*, 1899, pl. 9, 8; Zervos, *L'Art des Cyclades*, fig. 190. A fragment probably from a sauceboat of this type was found in Lesbos, W. Lamb, *Thermi*, p. 91, fig. 32, 521.

<sup>11</sup> *Tiryns*, IV, pls. III, 4, IV, 1-4. Cf. *Asine*, fig. 162, 4.



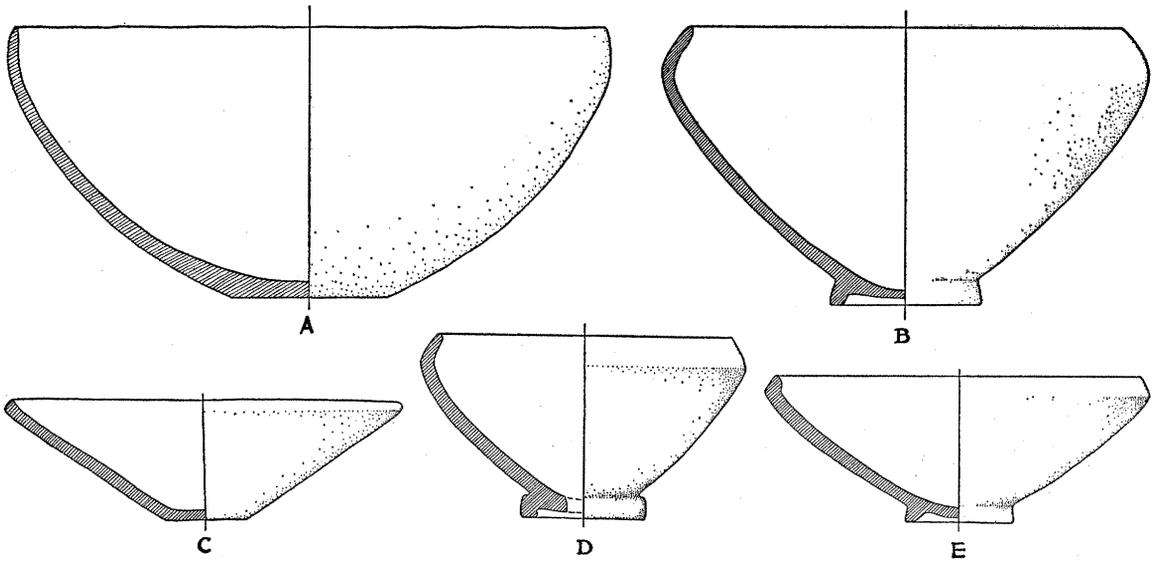
I

III

II

IV

Sauceboats. Lerna III (E. H. II)



A

B

C

D

E

Bowls and Saucers. Lerna III (E. H. II)

FIG. 1.

*Drawings by Davina Huxley.*

practical form (1955, pl. 46, g); big rounded jars with handles at the sides, and hydrias of the same shape with a vertical handle added from rim to shoulder (1955, pl. 46, i, j); small squat pyxides, nearly lentoid in form (1958, pl. 41, f); and very big pithoi. The curves of the swelling bodies of jars and hydrias have an elastic quality that can scarcely be defined in words but is exceedingly typical and, if I am not deceived, is a manifestation of the potter's taste and technique at this period only (*Tiryns*, IV, pl. XI).

Decoration is scarce on this pottery. There are a few instances of incised and impressed patterns in Lerna III, and of these a handful, found in the early strata, seem certainly to have been imported from the Cyclades or copied from Cycladic models (Pl. 69, e; 1957, pl. 35, d-f). Strikingly similar pieces, again few in number, have been found at Asea, Asine, Aghios Kosmas, and Eutresis.<sup>12</sup> Painted patterns occur also. Two lentoid flasks of fine quality bear designs in dull red-brown paint (1952-53, pl. 11, a). Other vessels, saucers, an askos, unmistakable fragments of sauceboats, and perhaps a score of sherds besides these, have patterns in glossy dark paint on a light ground (Pl. 69, b, c). Light-on-dark is very rare indeed.

None of these painted wares are closely akin to the corresponding class in Period IV. Thanks to the very large collection of pots of the latter group that could be assembled at Lerna we are now able to recognize pieces of the two different types with considerable confidence, provided the fragments are of reasonable size. K. Müller correctly made the same basic distinction at Tiryns, although working with a much smaller body of material. The origin of the early painted class that appears in Lerna III is not yet known, but in my opinion a connection is to be found in the Aegean islands. Glaze-painted wares from Early Cycladic tombs in Syros, for example, are decidedly similar in technique, and fragments of patterned sauceboats at Lerna and Aghios Kosmas find an immediate parallel in a well-known whole example from Naxos.<sup>13</sup>

A jar bearing multiple imprints of a seal<sup>14</sup> was found by Tsountas on the Acropolis of Chalandriani in Syros, where a remarkable decorated gold band and a fragmentary Trojan *depas amphikypellon* also came to light. The stratigraphical relationship of these objects was not recorded in the publication and probably could not be determined at the time of the excavation. They now take on an added interest, particularly in view of the resemblance, in plan at least, between the systems of fortifications at Chalandriani and at Lerna (1957, pp. 132-136). Jars with similar seal-impressions have been found in Lerna III and at Asine and Zygouries. Much more numerous are

<sup>12</sup> *Asea*, fig. 87; *Asine*, fig. 171 (the context is E.H. II, not E.H. III; see below); *Aghios Kosmas*, figs. 145, 146, 159, 160; *Eutresis*, fig. 145.

<sup>13</sup> Zervos, *L'Art des Cyclades*, fig. 152.

<sup>14</sup> Εφ. Ἀρχ., 1899, pl. 9, 15; Zervos, *L'Art des Cyclades*, fig. 101.

the clay sealings that come from the House of the Tiles<sup>15</sup> and from two somewhat earlier closed groups at Lerna, which now supplement the small group previously known at Asine. All these together display a great variety of linear designs within a rigidly limited range. It seems to me not impossible that the round stamp seals here exemplified may share a common origin with those that decorated the jars and "frying pans" of the Cyclades. There are indeed also resemblances, frequently noted, to seal-patterns found in Crete and generally assigned to Early Minoan III or Middle Minoan I. Some degree of relationship is probable. It does not follow, however, that the examples on the mainland necessarily were derived from Cretan prototypes; and, as will become apparent, D. Levi's recent proposal to associate the Lerna sealings with those of the First Palace at Phaistos meets a solid chronological obstacle.

A form of decoration related both technically and esthetically to that of the stamp seals is seen on the raised bands which surrounded many of the pithoi and on the rims of some large flat pans in the time of Lerna III. Continuous patterns were impressed upon the bands with cylinder seals of comparatively rough type, quite probably made of wood. The technique was used extensively in the Argolid, as shown by fragments at Asine, Tiryns, and Zygouries. By a rather remarkable chance, lengths of bands bearing the imprint of the same seal—and therefore proved to have been made within a very short space of years, possibly even of months or weeks—have been found at Zygouries, Tiryns, and Lerna.<sup>16</sup>

The burning of the House of the Tiles marked the end of Period III, and marked it very clearly indeed, both historically and archaeologically. This was the end of an era at Lerna. The debris of the destruction can be distinguished with certainty from the remains of the succeeding settlements that grew up thereafter over the site of the palace. In the fairly extensive area which was excavated there were, strangely, no other buildings of any kind that could be assigned to the time of the House of the Tiles. At that stage even the fortification walls had been demolished and covered with earth. This fact, taken with the unfinished condition of certain elements within the building, makes it seem probable that the House of the Tiles was under construction or reconstruction and that the whole citadel was perhaps being reorganized architecturally at the very moment when it came to a violent end.

The place of the great building was then set aside through the forming of a low round tumulus over its ruins (1955, p. 165; 1956, pl. 45, b). For some time thereafter nobody encroached upon this mysteriously sacred area.

#### PERIOD IV AT LERNA

Lerna IV began as a quite new settlement. It was an establishment of another

<sup>15</sup> M. C. Heath, *op. cit.* (note 2).

<sup>16</sup> Zygouries, fig. 114, 6; Tiryns, IV, pl. XIX; Lerna, 1958, pl. 42, c-e.

kind, and the differences from its predecessor are more obvious than the similarities. This was not a fortress and not a seat of central authority but a quite ordinary town, perhaps at first not more than a small village. It had nonetheless certain definable characteristics, which may be reviewed here in outline.

The first building erected—among those revealed by excavation—was an apsidal structure, lightly put together of perishable materials. Its curved end was toward the west, so placed that it overlay the eastern end of the House of the Tiles and just touched the circle of the tumulus. It was not small as houses of the time go, its length being fully 12 m. and its width possibly as much as 7 m. A light partition divided the apse from the principal room.

Houses similar in plan were built throughout Period IV, in at least five successive architectural phases. Normally they were moderately substantial buildings with stone socles and walls of crude brick, intended for permanent use. The largest, assignable to the fourth phase, was nearly 15 m. long and had a circular hearth in the center of the main room, as had several others (1955, pl. 41, d). By no means all the houses were apsidal. Quite as many were oblong, insofar as could be ascertained from the remains and the walls; when found they often had long gaps where stones had been taken out for reuse and the original plans of some were impossible to determine. The houses usually had two or three rooms, and regularly were free-standing although the lanes between them were often very narrow. Walls ran in crooked lines and, though again we allow for dilapidation, the masonry seems not very carefully wrought. Seen beside the well-preserved remains of the House of the Tiles they looked decidedly inferior.

A characteristic feature of Settlement IV is the ubiquitous bothroi. Small pits appear at Lerna in all periods from the early Neolithic onward. Some, lined with clay, must have served first as cool places for storage; almost all, lined or unlined, were used ultimately for the disposal of rubbish. But of a total around 425 nearly 280 belonged to Lerna IV. They were discovered everywhere, and required extreme vigilance and patience on the part of the excavators; many eluded us for a time; some few may have been overlooked altogether. Scarcely any of these bothroi were lined. Most were roughly cylindrical, usually between 0.60 m. and 1 m. in diameter and the same in depth, though extremes and irregularities occurred. They contained waste material, animal bones, sometimes burnt matter, potsherds and often large parts of whole pots.

Bothroi have been found at almost all early sites. The existence of a few of them in any period is to be expected anywhere. At Lerna the great profusion of them in Period IV is noteworthy and perhaps significant; certainly it is a distinguishing feature in this one place. The possibility of their being especially common throughout the Argolid at this particular stage of the Early Helladic period is worth observing,

but to cite bothroi as evidence for close synchronisms with other regions would not be warranted.<sup>17</sup>

The pottery of Lerna IV exhibits a strikingly new range of wares, shapes, and patterns. Almost all the vessels are still made by hand, as they were without exception in Period III, but a very few show spiral whorls at the bottom, inside, and parallel grooves on the rim and shoulder, that are too regular to be accounted for by any device other than a potter's wheel (Pl. 70, a-i). It may have been a crude version of the mechanism, so clumsy that at first it seemed to most people a worthless innovation. But its use increases toward the end of the period.

This is obviously an important development in the economic history of Lerna, from the archaeological point of view, for if the potter's wheel was known at this site one must assume that it was known equally at other places in the Argolid. Where the knowledge came from, and just what relations existed with other wheel-users, cannot yet be determined. Fairly rapid rotation is evident in the flaring bowls of Troy from Phase II b onward, long before the time of Lerna IV. Use of the "fast wheel" is established in Crete in Middle Minoan I b, a period which appears to be later than Lerna IV. The subject seems to me to be full of uncertainties, and in recording the introduction of the wheel at this site I would emphasize that the marks are rare in Period IV and that they appear almost exclusively in a class of gray pots, exceedingly seldom in the other wares that are described below.

Most conspicuous among the wares is a light-colored fabric with linear patterns in dark paint, Blegen's Early Helladic Class C I (A and B), now very well known at many sites.<sup>18</sup> It was found in large quantities at Lerna and about 80 of the pots were made up with little restoration. None of it was found in the preceding layer. It belongs exclusively to Lerna IV, except insofar as it may have influenced the potters of the succeeding period. Shapes represented in this ware are the characteristic two-handled tankards, small cups, small bowls or wide cups with outturned rim, large bowls or basins, jugs, and a multitude of jars, principally those with rounded body and narrow flaring neck. Very often the underbody is wholly coated and the shoulder is reserved as a ground for the pattern, an apportionment of space which recurs from time to time throughout the history of pottery making. Also notable is the tendency to decorate the inner side of the rims. The paint must be classed as a glaze; it may be glossy but ordinarily it is fairly dull. (Examples from Lerna are figured in 1952-53, pl. 10, b; 1954, pl. 21, h, i; 1955, pl. 45, a-e.)

The corresponding style with colors reversed, light patterns painted on a dark glaze-coated ground (the "Aghia Marina style"), is well attested but relatively scarce in Lerna IV.

<sup>17</sup> The proliferation of bothroi in Phase II d at Troy is a parallel but unrelated phenomenon.

<sup>18</sup> E.g. *Tiryns*, IV, pls. XXVI-XXXIII. This class of pottery is the subject of a study that is being prepared by W. P. Donovan of The Florida State University.

A coating made probably of the same dark substance was applied to the whole surface of numerous other pots, chiefly jars, in a very casual manner (Pl. 69, f, g). The biscuit of these vessels is usually rough and porous, and the coating was added, one supposes, to seal them. It was smeared on in a characteristic fashion, and we propose to use Sir John Myres' expressive term "Smear Ware" for this class alone, although with him it denoted also some of the glazed ware of the earlier period (our Lerna III).

A third and different class is coated with a true slip, often quite thick, and well burnished. The pots, the great majority of which are two-handled bowls with out-turned rim, are fired black or gray-brown or red-brown in varying degrees.

The uncoated wares include some fine and moderately fine buff varieties and classes of coarse fabrics that may be divided into moderately fine burnished ware (cups, tankards, two-handled bowls) and rough very uneven ware with slight burnishing (cups and open jars, almost always with knobs on the shoulder). Vessels shaped like goblets, but sometimes pierced like strainers, occur in coarse and semicoarse ware (1952-53, pl. 10, a; 1955, pl. 43, d; cf. *Zygouries*, figs. 116, 117).

In general the shapes, like the wares, of all these vessels show a marked difference from those characteristic in Lerna III. There are no sauceboats, no small saucers, no jugs or hydrias of the earlier kind, no lentoid pyxides. A few askoid jugs probably look back to the earlier tradition, and it is possible to see a connection between the jar shapes, though in Lerna IV these are certainly altered, now lacking the springy contours that distinguished their predecessors. The prevalence of totally new shapes is still more striking: the tankard, the one-handled cup, and what we have chosen to call the "Ouzo Cup" (after the shape of the glass in which the popular aperitif is normally served at Greek kaffeneia), a small handleless cylindrical vessel with splaying rim. Perhaps an Argive form, it has been found also at Tiryns and Berbati. At Lerna it was used extensively in the early phases of Period IV (1954, pl. 21, e-g; *Tiryns*, IV, fig. 9).

The two-handled bowls deserve special attention. They are very common indeed throughout the period and the variations in shape are only minor (Pl. 70, i; 1952-53, pl. 9, a, c; 1955, pl. 43, e; 1956, pl. 42, f). Hundreds, if not thousands, of examples are represented by fragments found on the floors and in the bothroi; dozens have been restored and inventoried. Many are coated with slip, reddish brown or gray-black. A few, on the other hand, are light gray, and of these some are wheelmade. Since the name Minyan is attached so generally to the class of pottery that marks the fully recognized Middle Helladic period, and since these gray bowls are found at Lerna in unmistakable association with the patterned ware of Period IV that is equally recognized as a mark of the Early Helladic period, I have some hesitation in calling the gray ware Minyan. But after examining all the pieces of this pottery and comparing it with the gray fabric of, for example, ring-stemmed goblets (which reflect the

very essence of Middle Helladic technique), I am unable to make any distinction. The necessary conclusion, it seems to me, is that this *ware* was introduced at Lerna, in a very limited range of *shapes*, soon after the reestablishment of the settlement around the ruins of the House of the Tiles and many generations before the appearance of Matt-painted ware.

Bowls of this shape continued to be made in early phases of Lerna V, when the gray ware may be called Minyan without raising a question. An example was found at Korakou. Fragments are reported from Asine, where they are assigned to "Middle Helladic I."

Imported pottery is not common in Lerna IV. The most notable piece is the Trojan jar with winglike attachments that was found in the first preliminary campaign in a deposit which we assign to a late stage of the fourth period (1952-53, pl. 11, b). It has a plain cylindrical neck of the kind that held a face-lid, but no lids of that sort were discovered at Lerna. The fabric could well be that of Troy IV, but assignment by style has been shown to be uncertain for many of the vessels of Trojan Settlements II-IV. The discovery of an Early Helladic patterned fragment in a context probably of Troy IV (*Troy*, II, fig. 170, 10; fig. 185, EH 704) supports our opinion that that settlement was contemporary, in part at least, with Lerna IV.

It is perhaps not too fanciful to guess that the bizarre shape of the Trojan pot might appeal to the taste of a seafaring traveller from Lerna. There were jars of strange shape at home, including a remarkable three-spouted vessel (1955, pl. 43, f) and other high-necked, gaudily decorated jars which characterize the later phases of Lerna IV (Pl. 70, j). These often have as one element of their adornment plastic ridges slashed obliquely to imitate twisted ropes, a common feature in this period (Pl. 69, h; cf. 1955, pl. 44, c).

The miscellaneous objects of Lerna IV, other than pottery, also show differences from those of the preceding period.<sup>19</sup> Among the pieces of distinctly new type are small anchor-shaped objects of terracotta (1955, pl. 47, 1-p; 1956, pl. 42, e) which find parallels not only in the Argolid but much farther afield. A bone object with hemispherical bosses found at Lerna in association with a few sherds of gray Minyan ware and therefore assigned by us in 1953 to the first Middle Helladic stratum, is now seen to belong more probably to a late phase of Period IV.<sup>20</sup>

<sup>19</sup> A detailed study of the miscellaneous objects of Lerna IV and Lerna V is being made by Miss E. L. Courtney.

<sup>20</sup> 1952-53, p. 22, pl. 9, g. The Trojan, Sicilian, and Maltese parallels are surveyed by J. D. Evans in *Antiquity*, XXX, 1956, pp. 80-93. Another example has been found near Altamura in southern Italy, F. Biancofiore, *Bull. di Paletnologia Italiana*, LXVI, 1957, pp. 19-40.

## THE TRANSITION TO PERIOD V

There is no break in the sequence between the settlements called Lerna IV and Lerna V, no general layer of burnt debris, no sign of other catastrophe. The architectural succession continues with apsidal and oblong buildings, and from the appearance of their plans and masonry alone the excavator could not distinguish one period from another. A change undoubtedly occurred, however. It appears most obviously in certain classes of pottery.

As an example of the gradual transition one may note the evidence observed in one of the medium-sized apsidal houses, D in Area A (1954, pp. 30-32). This was rebuilt at least once and had a number of floor levels. On the first was found pottery of types assignable exclusively to Period IV. On the second and subsequent floors, following the reconstruction, there were sherds and one restorable pot of Matt-painted ware (1952-53, pl. 9, b), a sign that "Lerna V" had begun. Here the new style appeared one day in the lifetime of a single household, unaccompanied by havoc. In familiar terms, one might even picture a housewife going to a local shop and acquiring some pieces of newfangled crockery to embellish her newly remodelled house. One would like to know the comments of her kinsfolk; the words may have been humorous, sarcastic, or chiding, but certainly not revolutionary.

Matt-painted ware begins then suddenly, in the form well-known to students of archaeology since the days of Furtwängler and Loeschke, and, with the lustrous class mentioned below, replaces the patterned ware of the preceding period. Gray Minyan ware occurs in much greater quantities than in its embryonic stage in Lerna IV. The thickly slipped version, Argive Minyan ware, makes its first appearance, occurring almost exclusively in characteristic broad bowls with horizontally fluted shoulders and swinging festoons of incised lines (1952-53, pl. 7, c). This ware is normally black or near-black but sometimes gray, brown, or reddish.

Still another new class of pottery is a hard, gritty, handmade ware of light color that is decorated usually with patterns in genuinely lustrous dark paint. This fabric deserves close attention. Fragments were found at Asine and recorded in the publication (*Asine*, pp. 274-275), but seem to have been rare or missing altogether at other sites. At Lerna they are abundant. Owing to the extremely brittle quality of the hard biscuit, pots were shattered and the pieces widely dispersed. Relatively few could be wholly restored, but there is now a representative collection. The commonest shape is that of a two-handled jar, an example of which, decorated in the rarer light-on-dark technique, is illustrated in 1954, pl. 17, e. A large vessel with a short collar-neck is figured herewith (Pl. 70, k).

With these standard local, or localized, wares, are also relatively many examples of imported pottery. In the first stratum of Settlement V one finds a conical "duck vase" of Cycladic origin (1956, pl. 42, d), a series of small handmade flasks with

incised decoration from some region not yet surely determined (1956, pl. 40, d, f), and a dozen or more fragments of pots from Crete, the greater number of which are assignable with considerable certainty to Middle Minoan Ia (e.g. 1955, pl. 43, c).<sup>21</sup> Most of the latter are small sherds, some of which might possibly have percolated down from higher strata (where Minoan wares continue to occur); there is no reason, however, to suppose that any of them came up from below, since not a single fragment of this type of pottery was found in any secure stratum of Lerna IV. In addition to the pieces surely imported from Crete, several large whole pots from the first stratum of Period V show Minoan characteristics and were made either at an unidentified Minoan center or at Lerna in close imitation of Minoan prototypes.

The ceramic evidence of change is strongly supplemented by the sudden appearance of intramural graves in Lerna V. Very few infants' skeletons were found in contexts that might be assigned to Period IV; in V the custom of burying the dead under the floors and between the houses was nearly universal. The graves are of the usual Middle Helladic types: plain inhumations, stone cist graves with or without cover slabs, and urn burials for a few of the small children.<sup>22</sup> Funeral gifts were not plentiful.

### RELATIVE CHRONOLOGY

Three successive but distinct phases of the Early Helladic period are best known at Eutresis in Boeotia. There, to name only the most obviously characteristic features of the pottery, E.H. I is marked by red and brown burnished vessels, chiefly rounded bowls; E.H. II produces glazed ware, sauceboats, askoi, and little saucers; E.H. III is the time of patterned ware, tankards, and bowls with outturned rims. Transitions and survivals can be recognized, but in general the types are sharply set off from each other.

In the Peloponnesos corresponding stages may be seen. Lerna was apparently not inhabited in the first of the three phases. Remains of the second, on the other hand, are very extensively represented. They make up the whole series of architectural levels in what we call Period III, ending with the destruction of the House of the Tiles. Lerna IV belongs entirely to the third principal phase of the Early Helladic age.

The tripartite scheme has been employed frequently in the past; properly, to identify three successive strata at any single site, but leading sometimes to confusion when, for example, the "Early Helladic III" of one place was assumed to be con-

<sup>21</sup> I would record thanks particularly to M. S. F. Hood, D. Levi, and N. Platon, for examining the Minoan pottery from Lerna and giving me the benefit of their experienced judgment about its provenience and date.

<sup>22</sup> Cf. Wace and Blegen, "Middle Helladic Tombs," *Symbolae Osloenses*, IX, 1930, pp. 28-37. The skeletal material from Lerna is being studied by J. L. Angel of the Jefferson Medical College, Philadelphia.

temporary with a settlement so designated at another.<sup>23</sup> The stratification of Lerna, unencumbered by big constructions of later ages and clarified by an abundant yield of objects, permits us now to define two of the stages with much greater confidence, having shown in what ways the sequences in northeastern Peloponnesos correspond with the full series at Eutresis. I would propose that the terms Early Helladic I, II, and III be used henceforth in this sense only.

The characteristics of Early Helladic II are remarkably homogeneous and can be recognized at many sites. Tiryns, insofar as the stratification could be observed below mighty structures of the Mycenaean period, produced E.H. II pottery in the time of the tholos—a building which, as we have noted, was roofed with tiles and was burned, like its counterpart across the bay in Lerna. Architectural remains of this period have not been found extensively at Corinth but it is probably significant that whereas sauceboats occur there plentifully, patterned ware of Early Helladic III is lacking (see above, p. 250). The latest houses of the early settlement at Aghios Kosmas in Attica had pottery of Early Helladic II and were destroyed by fire.

This burnt stratum at Aghios Kosmas has been assigned to Early Helladic III, the “very end of the Early Helladic period,” by Mylonas. His conclusion was quite reasonable in the light of information previously known from fully published sites, but in accordance with the present analysis it should be modified. The destruction occurred at the close of Early Helladic II.

The representative group of houses at Zygouries, excavated in 1921 and 1922, yielded very large quantities of pottery and other objects like those which are now paralleled in Lerna III. Burnt debris indicated clearly how the houses had been destroyed. All this stratum lay immediately below the modern surface; walls had been disturbed by ploughing in recent times. Later construction existed elsewhere at the site but had been lost in the area of these houses. Earlier E.H. strata were tested only in soundings. The burnt level was third in chronological succession and in consequence has long been taken as typical of the general phase Early Helladic III. In the scheme here proposed it must be assigned to Early Helladic II. The few sherds of patterned ware that were found below the floors of the burnt houses belong presumably to the relatively rare early class that has been recognized at Tiryns and Lerna. A small number of patterned vessels and fragments, representing types that occur at Lerna only in Period IV (E.H. III), must, I suppose, have reached the level of the burnt rooms through the intrusion of bothroi or through one of the operations of cutting or levelling that Blegen perceived and recorded (*Zygouries*, pp. 3, 4).

At Asine, similarly, the successive strata were graded and cut down repeatedly in antiquity, and in many places the remaining deposits were thin at the time of

<sup>23</sup> The danger inherent in such assumptions has been pointed out by C. W. Blegen, *B.S.A.*, XLVI, 1951, p. 21; E. Kunze, *Orchomenos*, III, p. 11; A. J. B. Wace, *Historia*, II, 1953/4, p. 81.

excavation. A few deep accumulations were found and tested, however, in trial trenches. Burnished wares of Early Helladic I were recovered at the bottom. The next levels contained sauceboats and other vessels typical of Early Helladic II. At the top of the latter series were remains of a house that had been burned, and its debris held tiles like those of Tiryns and Lerna. The excavators called this level Early Helladic III, noting the features similar to those of Zygouries. It should now be recognized, I think, as a characteristic settlement of Early Helladic II. All the pottery from the "bothros on the pre-Mycenaean terrace" and with a few exceptions all that from "House R on Terrace III" is of types that occur exclusively in Period III at Lerna. Seal impressions on a jar from this group and various other clay sealings at Asine correspond closely with those of Lerna III. They belong to the repertory of Early Helladic II. One fragmentary jug with painted decoration, recorded in the group from House R (*Asine*, fig. 160, 5), is certainly later than E.H. II, and three undecorated pots (*ibid.*, 6-8) are very probably later. Their presence is to be accounted for presumably by another one of those intrusions that cannot be detected in the course of the digging.

Violent destruction appears then to have occurred about the same time at Lerna, Tiryns, Asine, Zygouries, Aghios Kosmas, and perhaps at Corinth. Stratigraphical evidence for this period is inadequate at Asea, Prosymna, and Mycenae. At Korakou burnt debris was seen at the top of the Early Helladic layer but is not reported as overlying the E.H. II stratum in particular; the lower deposits of this settlement were tested in relatively small soundings which gave little information about architectural remains. In central Greece, Eutresis provides clear evidence of a sequence of events different from that at Lerna: burning at the end of E.H. III but not at the end of E.H. II. General destruction by fire is not recorded in this period at Orchomenos.

Fires occurred locally, consuming one or more houses, in most of the periods at almost all sites, and caution is required in drawing conclusions of wide application from a layer of ashes, especially at places where archaeological excavation was restricted to small areas. Returning again to Lerna, however, one is struck by the burning of the House of the Tiles, by the quite extraordinary respect paid to its ruins, and by the wholly different character of the settlement that succeeded. Taken together these factors surely imply deliberate warlike action, and a reoccupation of the site by people of a different material culture, if not of a wholly different ethnical stock. And events of such moment at one site in the Argolid justify a very careful scrutiny of the evidence at others.

The data cited in the foregoing account suggest strongly, I think, that a foreign invasion created widespread havoc in this region and brought to an end the bright flowering of human society which has left its traces in the material remains of the second Early Helladic period.

Who the destroyers were, whence they came, and how far they spread at this time are questions to be answered after facts now available have been studied further and much more information has been gathered from systematic excavation. It is not to be supposed in any case that all communities in the district were wiped out. Korakou, for example, may have escaped violence altogether, although its prominent position at the head of the Gulf of Corinth must have left it exposed to rapid subjection by any new dominant element of population. Beyond the mountain barrier to the north one must assume, in the light of present knowledge, that the change occurred more gradually.

The new people established themselves firmly at Lerna, where Settlement IV appears to have maintained itself continuously during the space of at least five or six generations, or quite possibly longer. At other places in the district groups of the same people lived similar lives. Their presence is attested by large quantities of characteristic pottery at Tiryns and elsewhere; but detailed stratigraphical evidence of the continuity of occupation has been revealed up to now at Lerna only.

Then came another impulse, presumably again from abroad, this time fully establishing the well-known features of Middle Helladic culture. Until recently we have believed that these features appeared in the Argolid after a period of violence; that they came in the van of a destroying force. Now, however, the picture is altered. Lerna was not sacked at the end of Period IV; and as one looks again at the other sites it is clear that various assumptions about them need modification. Elements that have been taken exclusively as marks of the Middle Bronze Age, gray ware of Minyan character and the potter's wheel for example, are now seen to have origins in the chronological period of Early Helladic III. K. Müller was unable to find a clear break between Early Helladic and Middle Helladic at Tiryns. Destruction of Asine, Zygouries, and Aghios Kosmas at the end of Early Helladic III is no longer attested if the relative dating outlined above is valid. There was indeed a layer of ashes over debris of E.H. III at Korakou and, correspondingly, at Eutresis; elsewhere the evidence of disaster at this time is exceedingly meager.

It would be premature, and not within the scope of this paper, to discuss the questions of race and migration that are implicit in the proposals here advanced. Belief that the Middle Helladic people were ancestors of the "Mycenaeans," and hence of the later Greeks, is not affected. The question is, rather, whether the people of Early Helladic III may not have been closely akin to the Middle Helladics and thus also of direct or indirect parentage to the Mycenaean Greeks. Pre-Greek place names, the significance of which has been carefully considered by Blegen and others,<sup>24</sup> would seem in any case to belong with the cultural stage which we here call Early Helladic II.

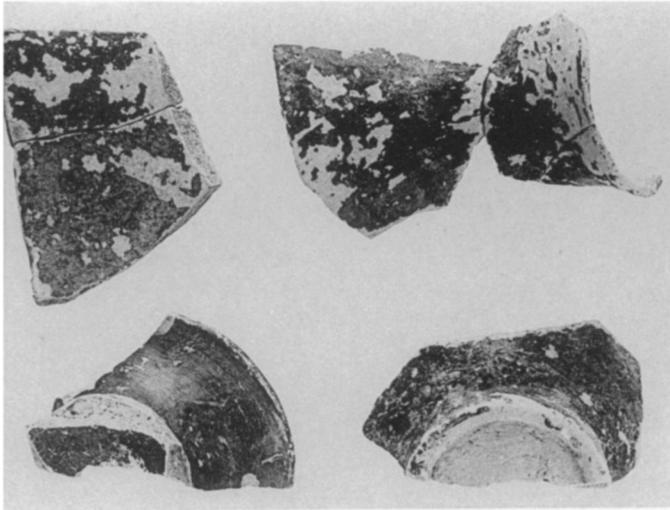
Although the transition from Early Helladic III to Middle Helladic appears

<sup>24</sup> Haley and Blegen, "The Coming of the Greeks," *A.J.A.*, XXXII, 1928, pp. 141-154.

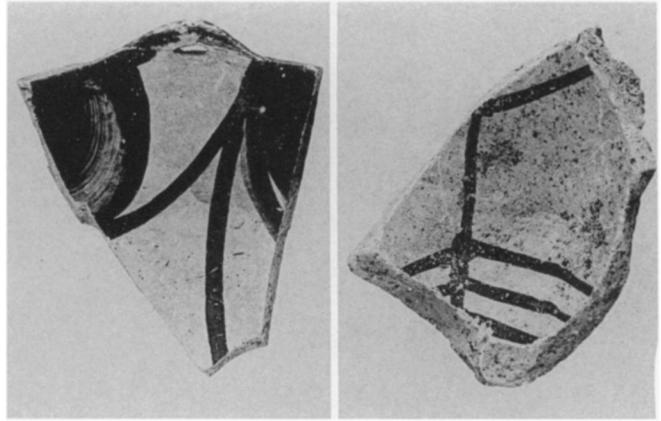
now to have been accomplished at many places without extreme violence, the changes that did occur must not be underestimated. The new burial customs undoubtedly reflect a change in outlook. Commercial activity, attested by the very marked influx of imported objects at the beginning of Lerna V, seems certainly to have expanded with sudden vigor. Pottery of the earliest Middle Minoan styles, contemporary with the first great surge of palace-building in Crete, now makes its appearance on the mainland. Small handmade flasks containing some precious substance find their way to Lerna from a distant region, perhaps far in the north. There is a revival of trade with the Cyclades. In the area of the islands much more information is needed, but it seems reasonable to suppose that the transition from the first to the second architectural period at Phylakopi is parallel to, and roughly contemporary with, the change from Period IV to Period V at Lerna. Phylakopi I (excluding the few remnants of the much earlier "Pelos culture") may well prove to have been coeval with Lerna IV; the sauceboat and other features of the preceding stage are missing from both. The second main period at the Melian site, with its importation of Middle Minoan and Middle Helladic wares and the exportation of its own distinctive products, then follows in chronological sequence as a counterpart of Lerna V.

JOHN L. CASKEY

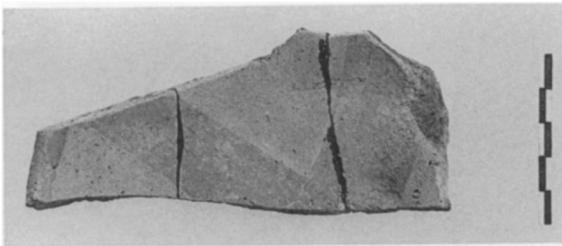
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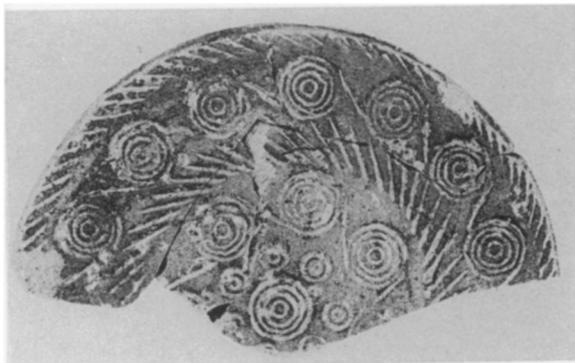
a. Red Glazed Ware. Lerna III (E. H. II)



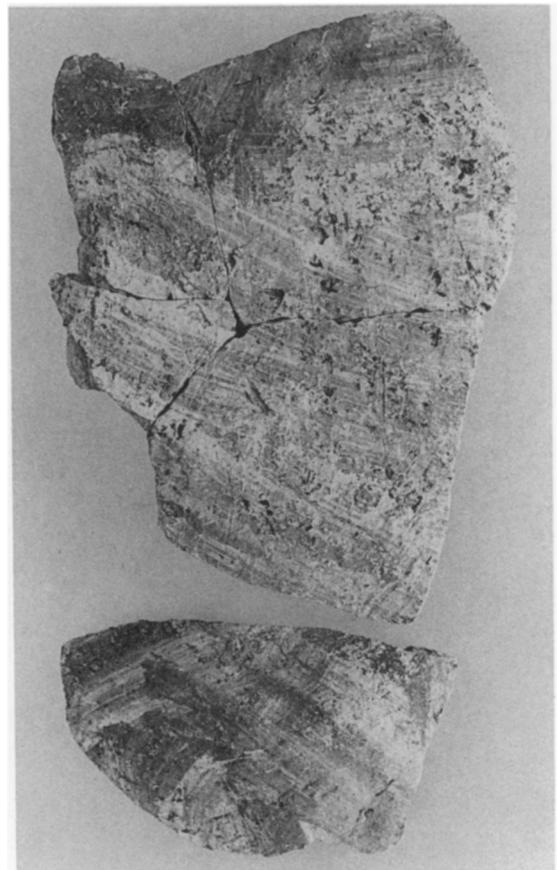
b-c. Patterned Ware. Lerna III (E. H. II)



d. Saucer with Cross. Lerna III (E. H. II)



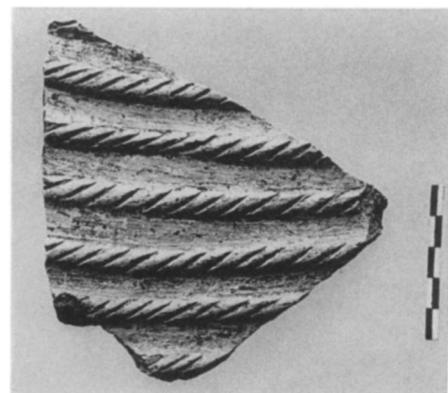
e. Lid with Stamped Pattern. Lerna III (E. H. II)



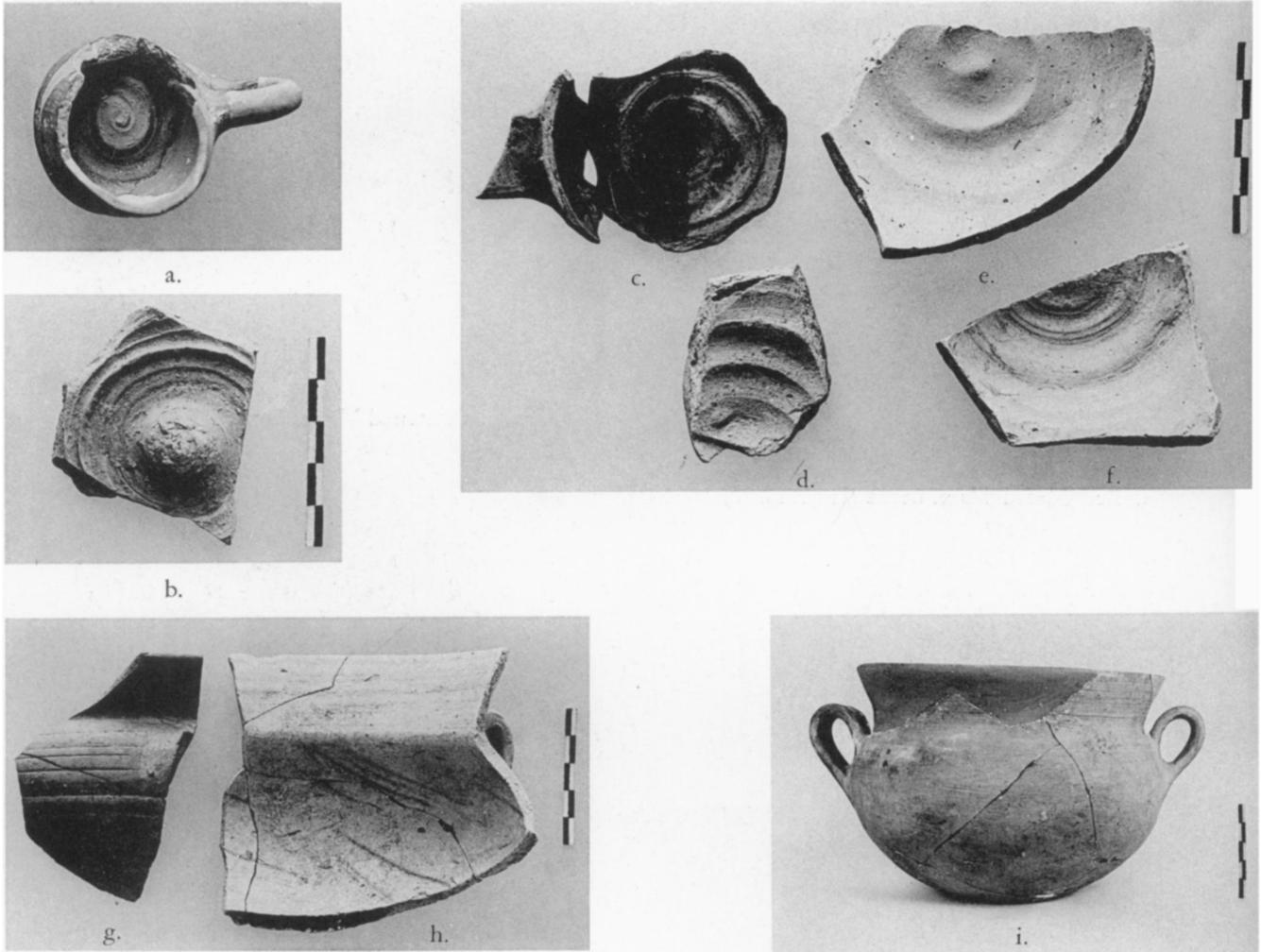
g. Smear Ware. Lerna IV (E. H. III)



f. Jar in Smear Ware. Lerna IV (E. H. III)



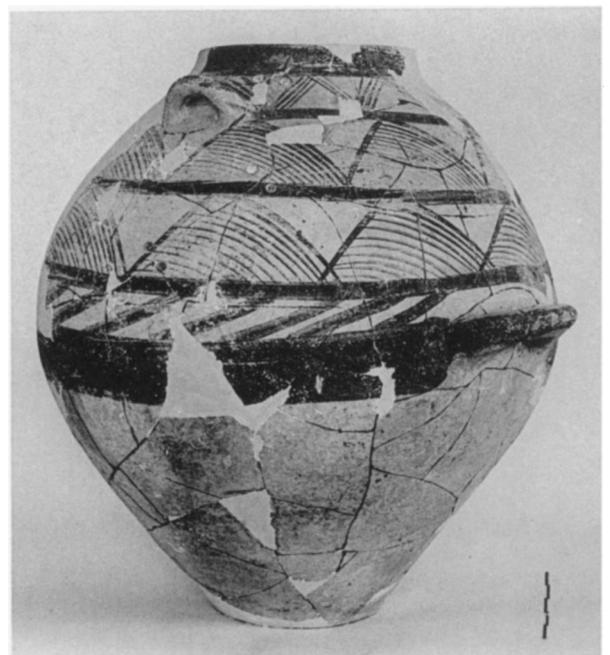
h. Rope Pattern. Lerna IV (E. H. III)



a.-i. Wheelmade Pottery. Lerna IV (E. H. III)



j. Large Jar. Lerna IV (E. H. III) (Water Color by Piet de Jong)



k. Jar with Pattern in Lustrous Paint. Lerna V (M. H.)