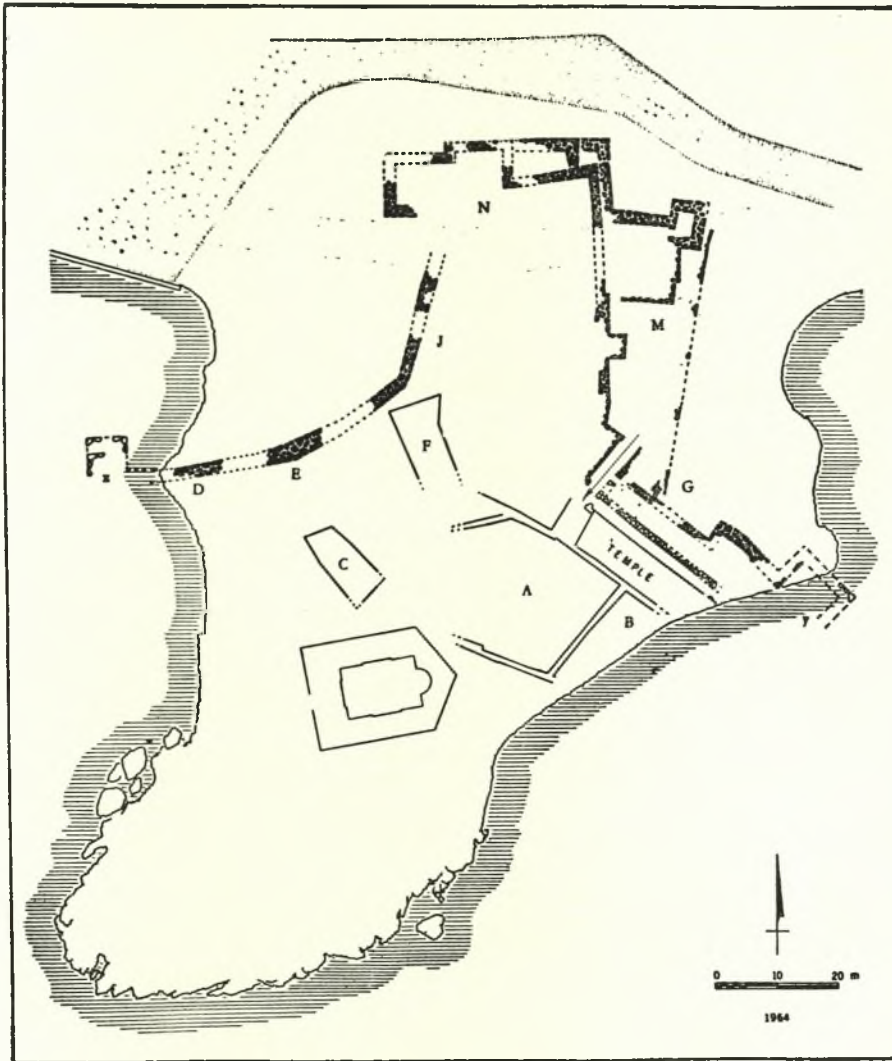


## EXCAVATIONS AT AYIA IRINI IN KEA

Archaeological investigations and studies in the region of Ayia Irini on the great harbor of the island, conducted under the auspices of the

ful acknowledgement for continuing support and assistance is made to the Greek Archaeological Service, the Ephor Mr. Zapheiropoulos and his assistant Miss E. Lazaridou, the officials and citizens of the island, the Michalinos



Plan 1. Promontory of Ayia Irini, Kea

American School of Classical Studies at Athens, were resumed and carried forward from early in May to the beginning of August, 1964.<sup>1</sup> Grate-

1. For accounts of the preceding campaign see *Hesperia*, XXXIII 1964; 'Αρχαιολογικόν Δελτίον, XVIII, 1963; 'Επετηρίς τῆς Ἑταιρείας Κυκλαδικῶν Μελετῶν, III (1963). A brief notice of the work of 1964 has appeared in *Archaeology*, XVII, 1964.

Company, and the Director and staff of the American School.

#### The Fortifications

The size and elaborate character of the defensive works at Ayia Irini were revealed further in 1964, especially along the northern and

eastern sides of the site (Plan 1). In Area N, where the native rock rises and ancient deposits are relatively thin, nearly all the remnants of the wall have now been uncovered and it is clear that two or more periods of construction are represented. This fact is even more evident in the northeastern area, where the lines of the circuit turn southward: a continuous system of walls on the west of our Area M (Pl. 661 a) is the earlier, while the north-east tower and adjoining structures are later additions. A straight line of wall further east in Area M, which was traced in 1963 and seemed possibly to be a part of the fortifications (*Hesperia*, XXXIII (1964), p. 318), must now be recognized as a retaining wall, built to support a broad terrace after the defensive circuit had been demolished and given up altogether.

Precise dating of these architectural stages will have to await the detailed study of pottery and objects associated with the walls. At present it appears probable that the whole complex system is to be assigned to a period before the time of Mycenaean dominion, the first phase being not later than the time of Middle Minoan III and the northeast tower perhaps corresponding with, or leading to, the important development of the site in Late Minoan I. Rooms in the northern part of Area M have yielded not only potsherds but a bronze dagger and many pieces of frescoes (Pl. 661 b - c) that had fallen from upper storeys. Outside the fortifications and clearly later, some deposits of Mycenaean III B pottery have been discovered.

Following the line of the earlier enclosure southward, we came in 1964 upon a broad passageway (Pl. 662 a) that led through the walls to a small rectangular *plateia* behind the Temple. This was probably the chief gate of the settlement. The passage had continued to be used down to Graeco-Roman times, but in its original form it must go back at least to the Late Bronze Age. The entrance is marked by an arrow in Plan 1. To the southeast the fortifications run onward through Area G in an irregular course to the present shoreline, and stones still visible under water indicate that there may have been a tower at the place marked y on the plan (corresponding with Tower x on the west). Excavation of this region has only begun.

Just inside the main gateway a road branched

off at right angles, running southeastward along the side of the Temple. It was approached through a carefully constructed portal with a big stone threshold (near the point of the arrow on the plan). One guesses that a continuation of the street ran northwestward from the *plateia*, but this is not certain.

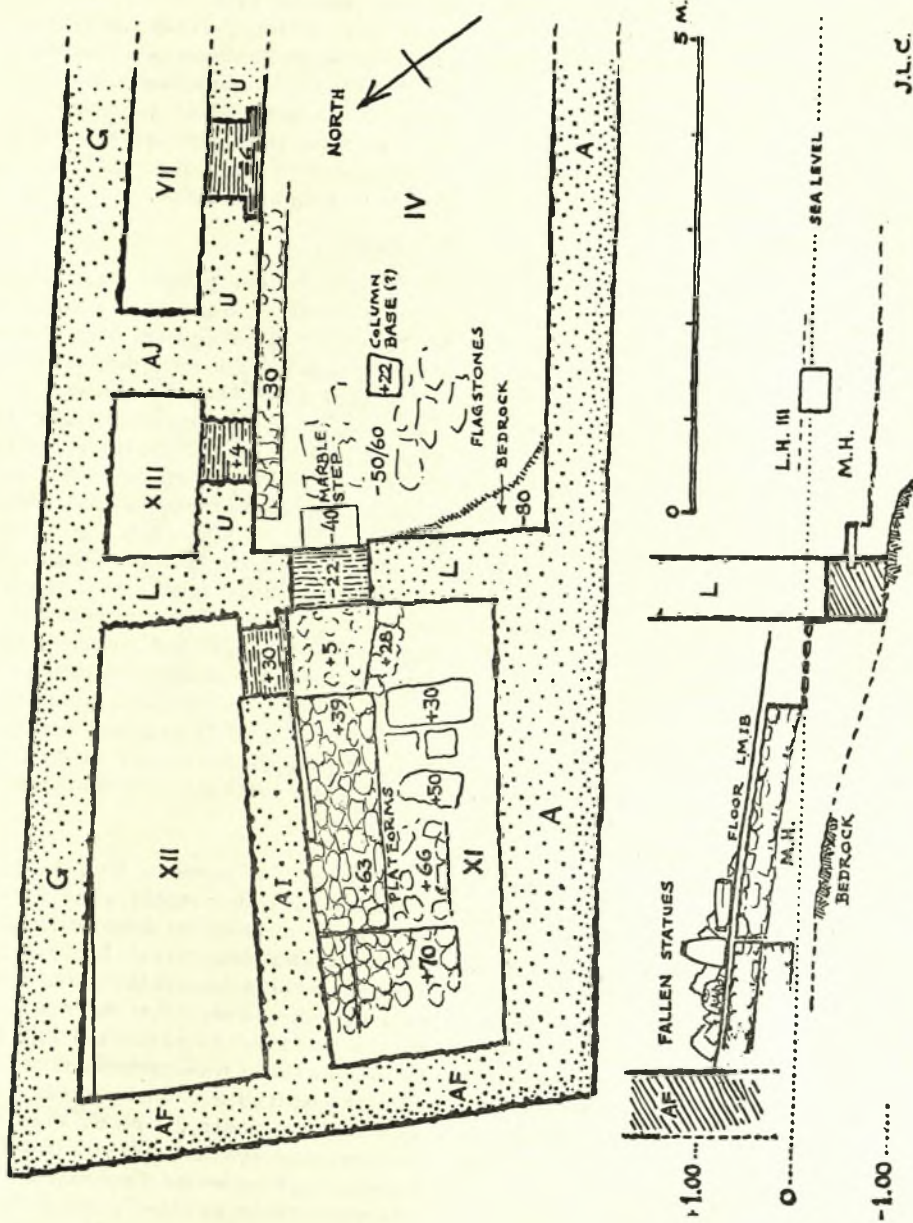
### The Temple

At the end of May water-level in the bay was a bit lower than usual and we took the occasion to test strata below the floors in parts of Rooms IV, XI, and XIII (Plan 2). Water flowed in quickly, finding passage through the loose masonry of the walls, but a small pumping engine reduced the level and made it possible for workmen to dig out the mud in arbitrary horizontal cuts.

The walls of the Temple were found to be bedded deeper than we had previously supposed. In part, at least, Walls A and L rest firmly on bedrock (Pl. 662 c), some 0.80 to 0.90 m. below the modern sea-level (our datum zero). Several of the door-ways have solid stone thresholds, at varying heights but all apparently belonging to an early stage of the building. In Room IV there are remains of a flagstone paving at levels between -0.50 and -0.60 m. From this floor one approached the door to Room XI by a step of fine white marble (Pl. 662 d) (surface at -0.40 m.). The threshold was 0.18 m. higher and thence another rise took one to a small landing at +0.05 m. inside the adyton. Here one could turn to the left and step up again into the interior of Room XI or to the right and enter Room XII. The space in Room XI was largely occupied by stone platforms.

All these structures lie below the floor-level of Room XI on which the many fragments of terracotta statues were found in 1963 (Plan 2). This was a firm floor, made of a thick layer of clay, which at that time we took to be part of the original building. As reported then (e.g., *Hesperia*, XXXIII (1964) p. 327), pottery found in the debris with the sculpture was of styles not later than L. M. IB, a few pieces being perhaps a little earlier; but small soundings below the floor, which produced Middle Helladic sherds, had led us to think that the underlying deposits were unrelated to the Temple.

The investigations of 1964 make a revision



Plan 2. The Temple of Ayia Irini, Kea (Plan and Section)



necessary. The lower part of Room XI with its platforms and its stepped entranceway was very probably a religious shrine from the beginning, and we see now that these structures go back at least to the Middle Bronze Age — a time when gray Minyan and Matt-painted wares were imported from the mainland, before the period of Late Helladic and Late Minoan styles. Whether there were still more ancient religious associations in this place, possibly even in the Early Bronze Age, can probably not be determined. In any case, the architectural history of the building cannot be wholly understood at the present stage of the investigation.

A few nondescript fragments of the big terracotta figures were found near the doorway between Rooms IV and XI, a little below the levels reached in 1963 but not in pure M.H. contexts. In Room IV it has not been possible to find a floor corresponding with the L.M. IB level of Room XI; almost certainly it was dug away during a remodelling of the central part of the Temple in Mycenaean times (L.H. III) after the great earthquake. It was probably in this period that a rough stone base was set in the floor of Room IV, presumably to hold a wooden column (see Pl. 2). In the earth and debris from +0.25 m., where excavation began in 1964, down to the water-level (zero), there were sherds of Mycenaean III A and III B pots, a few tiny scraps of gold, two bronze blades, some beads, and parts of several small terracotta figurines (Pl. n 662 b).

During the season of 1964 all the hundreds of fragments of statues (Pl. 663 a - c) from the Temple were sorted according to type and to finding-place by Mrs. Ervin, who drafted an extensive catalogue of them and made observations on the technique of their manufacture. A number of new joins were discovered and, among other facts, it was noted that a few faint traces of coloring matter, red and ochre, are visible on certain pieces.

#### Graves on the promontory of Ayia Irini

Further indication of the importance of the town in the Middle Bronze Age is provided by cemeteries that were found in 1964 just outside the walls in Areas J and M. Only a few graves were uncovered; others probably exist. Those cleared are small stone cists and burial *pithoi*, all used for children. The richest, a cist

grave in Area M (Pl. 664 a), was that of a girl about twelve years old. As offerings it held seven vases, fragments of a gold diadem, and beads of gold, carnelian, and amethyst, which we reconstituted as a necklace (Pl. 664 b). None of the pottery discovered in either cemetery is later than M.M. III, and most of it seems to be earlier.

#### Inscriptions

From the western part of Area N came three documents: a fragment of a baked clay tablet with one incised sign and traces of others, a terracotta lamp with three signs on its rim, and a rough lentoid roundel with signs on either side. One of the signs on the lamp finds no close parallel, but all the others are from the Linear A syllabary (cf. the incised monogram on a sherd recovered in 1963, *Hesperia*, XXXIII, 1964, pp. 325 - 326). The *plateia* inside the main gateway near the Temple yielded another inscribed piece, with characters not in Linear A but of a form possibly related to Cypro-Minoan. Elsewhere we have found a dozen or more bases of pots with simple marks of the sort known at Phylakopi, Aegina, Eleusis, Lerna, and other contemporary settlements. Thus the evidence for literacy at Ayia Irini, though not yet conclusive, is moderately strong.

#### Area A

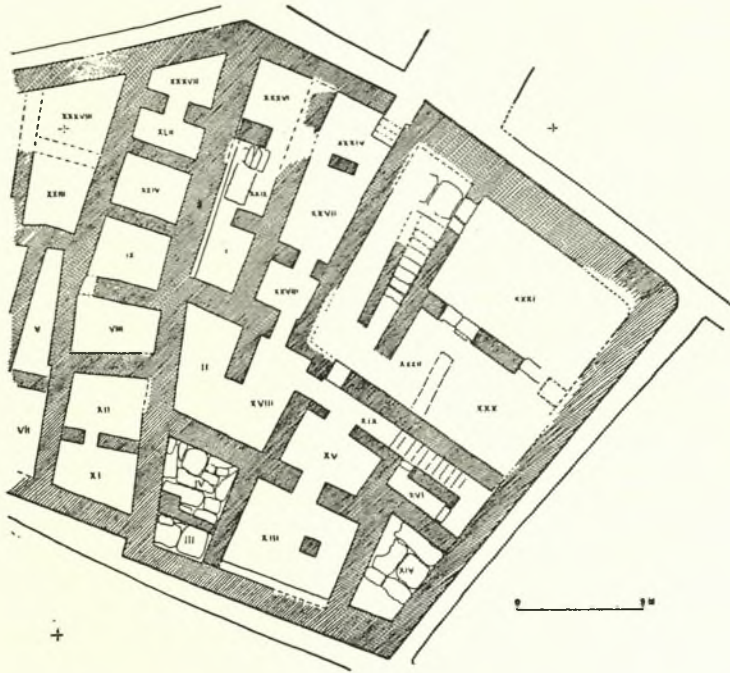
The complex of rooms in Area A, exposed successively in each campaign since 1960, appears now to make up one single establishment, which we have come to call House A (Pl. 664 c). In 1964 several of the northern rooms were cleared, and only the western side still remains untouched (Pl. n 1 and 3). There are narrow streets with covered drains on all sides excavated so far. On the north, two of these converge under the *plateia* whence the drainage may have been carried out below the main roadway toward the northeast.

Deep soundings in many parts of Area A have shown that it was thickly occupied in the Early and Middle Bronze Ages. Just when House A began to assume its monumental character has not yet been determined; clearly it was not all built at one time. Some of the older architectural elements were examined this year far below the level of the latest floor in Room XXX. They go back to an early phase of L.M./L.H. I, or possibly still earlier

and represent successive alterations of the building. Their remains had all been covered over by the time of the final occupation.

During the season Miss Milburn, Olivia James Fellow of the Archaeological Institute of America, made a catalogue and a thorough study of the pottery from Room I (*Hesperia*,

been studied in detail. Much of it is local, and it includes some imported pieces like those from House A. A few others, however, are decorated with spiral ornaments that belong clearly to the repertoire of Mycenaean III A. A similar occurrence of earlier and later styles was observed in the pottery from House (P1.



Plan 3. The complex of rooms in Area A

XXXIII, 1964, p. 324). More than 30 vases from this remarkable group have now been inventoried. They include many pieces imported from Crete and the mainland, none of which are later than L.M. IB or L.H. II.

#### Houses F and C

House F (see Plan 1) is made up of a series of rooms, each occupying the full width of the building. The three northernmost were cleared in 1964, and there is at least one more to be found at the south. These are basement rooms, like those of Houses C and A, and they were filled with debris from above when House F was destroyed by earthquakes. Room I, at the north, was a separate compartment, approached by a descending staircase. Rooms II and III are connected to each other by a doorway.

The pottery from these rooms has not yet

665 a) which also was recorded fully this year by Miss Milburn. We are not sure how these facts are to be explained. It seems unlikely that pottery of III A reached Kea before the earthquake which destroyed the major parts of House A, since none of it was found there; nor can we suppose that Houses C and F were built after that earthquake. Therefore one is led to guess that the basements of these two buildings were partly cleared and reused in a reconstruction, perhaps at the beginning of the fourteenth century, and that they were demolished again by still another earthquake in Mycenaean III A. This problem remains to be solved.

#### Figured stele

An important discovery was made this year when a modern stone *mandra* wall was being

removed from the north edge of Area J. Among the stones were some fragments of marble, a few of which showed traces of use. The foreman, D. Papaioannou observed one especially, part of a flat slab with an incised drawing on one side (P.L. 665 b). It is of white island marble, 0.035 to 0.038 m. thick, measuring 0.17 m. by 0.28 m. The fairly straight vertical edge at the left is probably original, though worn; that at the top may possibly be original. The front surface is moderately smooth, slightly incrustated. On it is preserved a linear representation of the head of a warrior facing to the right, wearing a helmet with curving pointed cheekpiece and waving plume. The eye and the profile in front of it, i.e. the curve from the forehead to the bridge of the nose, are preserved; the nose itself and the mouth and chin have been lost. Outlines of the back of the head and neck are visible. The helmet rises in three tiers to a rounded conical top, where the plume springs from an ovoid boss. No traces of color are preserved.

One scarcely doubts that this is a Mycenaean soldier, portrayed standing erect with head held back in formal military posture. The full height of such a figure may be calculated roughly, but why and when the slab was cut are quite uncertain. No very close parallels are known but comparisons with frescoes, stelae, and small figures, from Crete as well as the mainland, may yield some clues. This detailed study will be undertaken later. Meanwhile the writer retains a strong impression that the soldier is a Mycenaean Greek, not Minoan, and that his presence in Kea would be more understandable in the later period, when III A pottery was imported than in the preceding stage when the inhabitants were so firmly associated with Crete in commerce and culture.

#### A watchtower on the coast

The view from Ayia Irini toward the shipping lanes on the north is blocked by a line of hills. These protect the site and the anchorage from the Meltemi, but interfere with observation. A maritime people needed advance notice of approaching ships, whether friendly or hostile, and it was probably for this purpose that a square structure, about 13 m. on a side, was built on the top of a rounded hill to the north-west. This height is now called by some local people the *Troullos* (or «*Tourlos*») of *Treis*

*Ammoudiés* (or «*Treis Boukes*»), a small triple bay just below it. It commands a fine view of the whole channel, from Sounion to Euboea, and is in clear sight and easy signalling distance from Ayia Irini. Stone foundations of the square building or enclosure can be seen. At its center are traces of a circular structure, about 5 m. in diameter, and next to this a modern cairn. Only a few potsherds were found, all apparently of the familiar local coarse ware, including bits of conical cups, characteristic of the L. M. IB period. Nearby are some outcroppings which may possibly mark the places of graves.

#### Kephala

The early site on this headland (*Hesperia*, XXXIII (1964) pp. 314-317) was reexamined in 1964 by J. E. Coleman, who has undertaken to study and publish the settlement and cemetery. We had supposed that all the remaining graves had been found in preceding seasons, but in the course of cleaning the ground just above, to the north of the cleft, a few others were observed. A close and more extensive survey of the ridge, higher on the promontory, showed furthermore that the settlement was bigger than had been thought, and although very little now remains of the houses anywhere (P.L. 665 c), it will probably be useful to make some additional soundings.

#### Conservation

At Ayia Irini the ancient walls in general are thick and well-built, of flat stones, and they stand firm after excavation. This is fortunate, since the houses with their deep basements, corridors, and staircases will make an interesting and instructive showing for visitors when the archaeological investigation has been completed and paths through the town have been laid out. In some places, however, the walls have been damaged severely by earthquakes or by the digging of pits in modern times when attempts were made to plant orchards on the promontory. In 1964 we began a program of improvements and conservation. Many of our workmen, local farmers, are good practical masons, and in using the same materials as the ancients they can make strong, unobtrusive repairs and buttresses. These additions so closely resemble the originals that one might soon forget which parts were new. Therefore we have



made a practice of marking each stone of every repair with whitewash and photographing each such addition for the permanent record ( P l. 666 a ). The whitewash will of course disappear shortly in the winter rains. In no case have we made restorations where doubt existed about the form of the original structure.

This year also, a guard house was built ( P l. 666 b - c ), near the storehouses and overlook-

ing the site, and a night watch-man was appointed.

So many objects have now been collected that we have decided to suspend excavation for one year and devote the season of 1965 to study and classification, which will be carried on chiefly in the workrooms. Thereafter, a considerable amount of further excavation will be required.

JOHN L. CASKEY

✱

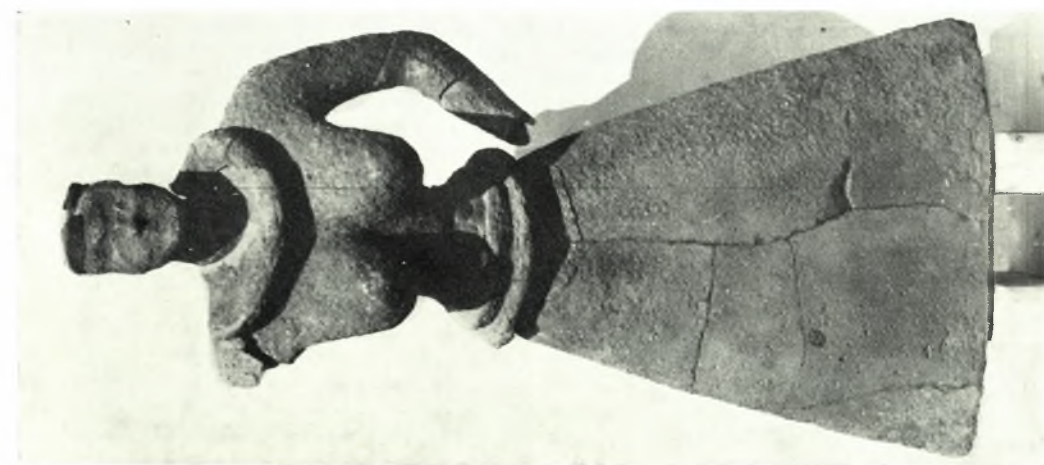
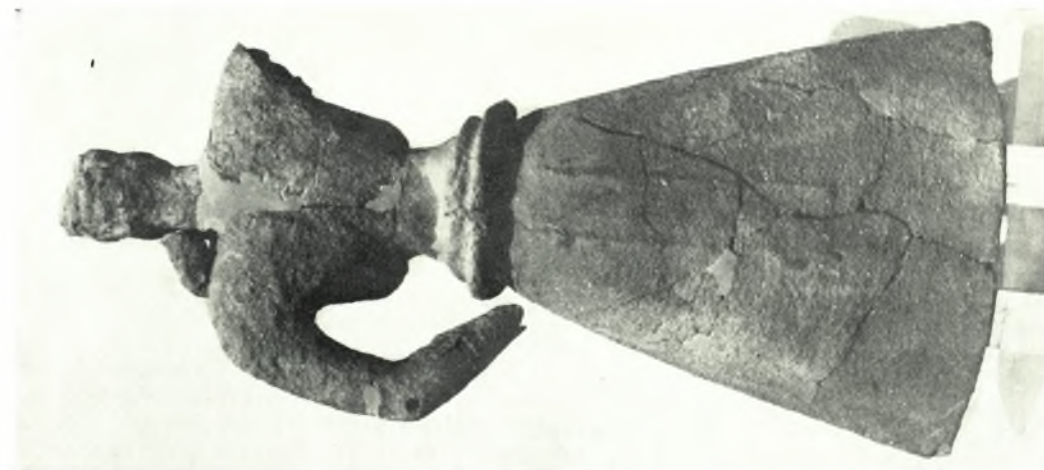


Kea. Ayia Irini : a. The earlier fortifications and projecting tower, in Area M, b-c. Fragments of fresco from rooms near northeast tower





Kea. Ayia Irini : a. Main entrance to the town, b. Terracotta figurine ( K4. II ), from the Temple, Room IV, c. The Temple. Western corner of Room IV. Walls based on bedrock, d. The Temple. Entrance to the Adyton from Room IV



Κεα, Αγία Ιρίνη : α - c. Statue from the Temple ( K3.611 )

J. CASKEY





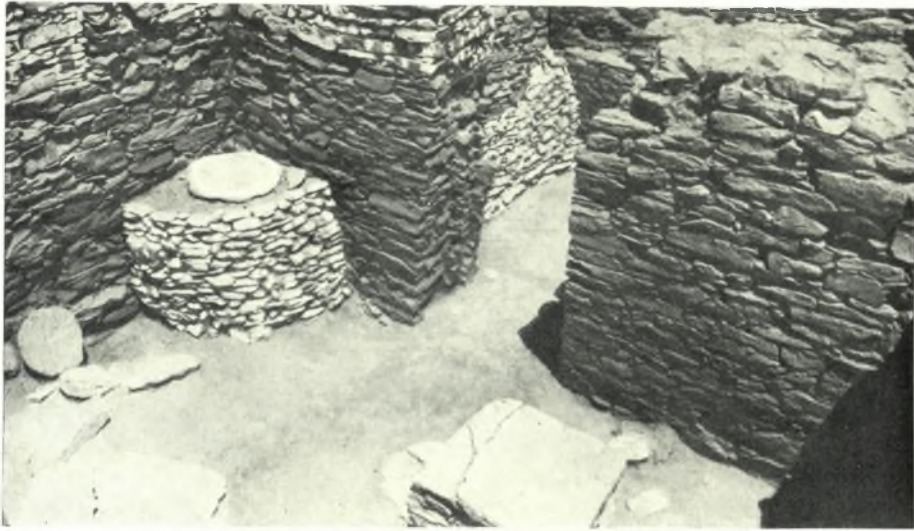
Kea. Ayia Irini : a. Grave 16, b. K4.225. Necklace reconstituted from beads found in Grave 16,  
c. Area, from north-northeast

J. CASKEY





Kea. a. Ayia Irini, K. 2287. Kylix from House C. Myc. IIIa, b. Ayia Irini, K4.94. Fragment of marble slab, Ca 0,17 x 0,28 m. Head of Mycenaean Warrior, c. Kephala, Remains of house walls



Kea. Ayia Irini : a. Rooms XIII and XV. Repairs and buttresses, marked with whitewash, b. Guardhouse and workrooms, from the South, c. View from east window of guardhouse towards the new road built by the excavators in 1963 - 1964. This is the public road from Vourkari and Korissia

J. CASKEY