## With Gratitude

We are happy to announce that a generous donation by Stephen and Alison Bodurtha has been made to the INSTAP Study Center for East Crete in honor of Dr. David Schiller, Dr. Cornelie Ladd, and Ms. Geraldine Woods of the Horace Mann School in Riverdale, New York, in acknowledgment of their history of inspiring high school students and nurturing in them a love of classical studies.

OB

All of us at the INSTAP Study Center for East Crete would like to thank Henry Davis and Cynthia Harrison, who donated money for the purchase of an Olympus SZ40 microscope for the William D.E. Coulson Conservation Laboratory. The microscope has become an invaluable addition to the lab for our conservators.

CB

If you would like to donate to the Study Center, we would be pleased to accommodate your request. Contact Tom Brogan (tombrogan@instapstudycenter.net) or Elizabeth Shank (elizabethshank@instapstudycenter.net).



Matina Tzari using the new microscope in the Coulson Laboratory. Photo K. Hall.

## STRATIGRAPHIC EXCAVATIONS AT AZORIA IN 2014

Donald C. Haggis and Margaret S. Mook

xcavations at Azoria in 2014 have changed the way that we perceive the structure of the urban center in the 6th century B.C., as well as our understanding of the history of the settlement in the periods before the large-scale renovation of the site at the end of the 7th century. Discontinuous patterns of settlement structure in the Early Iron Age (EIA) are reflections of changes in the broader cultural topography of the Kavousi and Mirabello regions.

The results of the first phase of excavation and especially the work conducted over the past two seasons have demonstrated that Early Iron Age buildings were disturbed, destroyed, or buried at the time of the late 7th-century B.C. rebuilding of the site, a visible horizon of large-scale slope modification and monumental construction. In stratigraphic soundings beneath Archaic levels, we find deeply bedded walls of Late Minoan (LM) IIIC date, constituting the foundations of substantial buildings,

which, because of the terrain and the depth of the foundations, were left largely intact. While LM IIIC pottery is ubiquitous throughout the site in Archaic foundation deposits, good examples of the LM IIIC settlement remains have been found in situ in several trenches (B1200, B1700, B3100, D200, D600) on the west slope of the South Acropolis. Recently excavated examples are in B800 and B5000 (on the southwest slope) where LM IIIC walls and occupation deposits were essentially contained by cobble fill deposits supported by Archaic (late 7th century) spine walls. This pattern of preservation may be related to the efficacy of building on steep terraced slopes as well as the considerable depth of the walls and occupation deposits—logically, the uppermost Early Iron Age levels were destroyed, while deeper walls occasionally survived the renovation.



Figure 1. The Late Minoan IIIC Building (B800) cut by the Archaic Service Building. Photo D. Haggis.



Figure 2. The Late Minoan IIIC Building (B800): southeast corner and floor surface. Photo L. Thompson.

## The Late Minoan IIIC Building (B800)

An excellent example of this pattern of preservation is the Late Minoan IIIC building recovered in B800, which we began to excavate in 2013 (Fig. 1). In 2014, we finished digging to the floor level in the south part of the room, exposing the full extent of the east and south walls and the southeast corner (Fig. 2). To the south, we discovered a segment of wall (measuring 2.5–3.0 m) abutting the south wall at its western end and extending to the south where it is built on and against two large boulders, evidently dislodged bedrock (Fig. 1). It is clear that another room of the building extended out to the west, perhaps conforming to the bedrock terrain. No evidence of a room existed to the north, but this spur wall extending to the south suggests that there was another small room to the south, but given the bedrock shelf exposed in the south scarp of the trench, the room would not have been longer than 3.5 m north—south.

The building thus appears to have extended to the south and west where it was destroyed by the Archaic Service Building (Fig. 1), originally constructed at the end of the 7th century. On the north, south, and east sides, the structure appears to have been built into the natural slope of the hill; soundings, however, demonstrate that the building was constructed into Final Neolithic (FN) occupation layers containing pottery and chert implements. This evidence of FN occupation suggests an extension of the Neolithic settlement above and to the east of B700, B1200, and B1700 where FN architecture and habitation remains were recovered in 2003 and 2004.

The north room is large, though normal for LM IIIC (about 18 m²)—some 6.0 m north—south by 3.0 m wide, though the actual width can only be estimated (Fig. 1). The floor consists of very hard-packed yellowish phyllitic silt, bedded at the southern end by a leveling fill (measuring 10–20 cm deep), that was built above the bottom courses of the south wall. The walls are preserved to about a meter high (3–5 courses) and are constructed with medium- to large-sized boulders on both faces, with smaller cobbles filled in the fabric of the wall. While the function of the space remains uncertain—drinking, cooking, and storage vessel fragments were found on the floor—there is no reason at this point to think that the north room was not part of a house, whose rooms extended to the south and probably up-slope to the east.

# The Late Minoan IIIC Wall and the Peribolos (B5000)

On the southwest slope, immediately above and to the east of the Late Minoan IIIC-Protogeometric (PG) tholos tomb (B3700), we opened a test trench about 5.0 meters long (northsouth) and 2.50 m wide (east-west). The area of the sounding is bordered on the east by the face of a segment of the Archaic spine wall—exposed in the east scarp of B3700—and on the west, by the uppermost eastern wall of the Archaic room B3700.

The *sondage* penetrated the level of the Archaic street, which was contained by the spine wall on the east and the back wall of Archaic rooms B3700 and B3800 (Figs. 3, 4).

Excavation through the Archaic street level exposed layers of packing and Archaic cobble fill (ca. 40–50 cm deep), layered on top of a segment of a substantial Late Minoan IIIC wall, running north–south with the terrace. We did not reach the base of the wall in 2014. One goal of our work in 2015 will be to expand the area of this sounding to the north, south, and east in order to expose as much as possible of the LM IIIC building.

Overlying the Late Minoan IIIC wall, we discovered a peculiar feature: a single line of stones, two courses high, running about 2.0 m north-south and parallel with the LM IIIC wall, but slightly to the east of its east face (Figs. 3, 4). This line of stones curves slightly to the west at its southern end and appears to have been bedded with a row of small slabs of schist. The linear structure is a narrow and slightly curving wall—an enclosure or peribolos-bedded on a layer of red gravelly soil with largish stone inclusions. The matrix of the fill is very loose rocky soil, rather different from the cobble fill above, dating to the 7th century B.C. Unfortunately, there is no well-consolidated surface associated with this feature. At its southern end, the stones of the peribolos are braced by two small boulders, which abut the east face of the LM IIIC wall and rest on the rocky fill at a lower level. These boulders also seem to form a corner of a structure—the edge of a platform that uses the top extant course of the LM IIIC wall but extends in a line to the west, up to or bonding with the back wall of B3700.

The location of the peribolos is interesting. It appears to have been constructed with reference to both the LM IIIC wall and the LM IIIC–PG tholos tomb (Figs. 3–5). That is, it is constructed directly on top of the LM IIIC wall—not utilizing the earlier wall as a foundation, but acknowledging and concealing the LM IIIC building. Furthermore, the peribolos seems to have been placed with reference to the tholos tomb, which was surely a visible monument at the time of construction. The placement and shape of the wall and the platform at its southern edge form a curve that mirrors the approximate curvature of the tomb itself, as if it were centered to conform to the location of the tomb underneath. A possible function of the space shaped by the peribolos is the creation of an offering platform or a small shrine or enclosure for offerings to ancestors.

Whatever the function of this structure, it is certainly contemporary with the construction of the adjacent Early Iron Age—Orientalizing (O) Building, and it antedates the 7th-century construction of the terrace, cobble fill layer, and street (Fig. 5). The peribolos was most likely part of the overall design of the EIA—O Building whose patterns of access and communication seem to have led from north to south, and ultimately into the space in front of the tholos tomb.



Figure 3. B5000 from north: EIA peribolos and LM IIIC wall. Photo L. Thompson.



Figure 4. B5000 from southeast: EIA peribolos and LM IIIC wall. Photo L. Thompson.

### The Early Iron Age to Orientalizing Building

A notable exception to the destruction of EIA buildings during the renovation phase of the late 7th century B.C. is the suite of rooms comprising the EIA–O Building (Fig. 5). In 2006, we had exposed the well-built south facade of a building, along with a deposit of animal bones, ash, and pottery—principally drinking and serving vessels of Late Geometric (LG) and Early Orientalizing (EO) date. Work in 2013 allowed us to identify a core building consisting of a large square room with a central hearth, which was eventually subdivided into two separate rooms (B4100); a back northern room or antechamber (B4400); and a long narrow room with a pottery kiln at its northern end (Fig. 5).

Excavation in 2014 has allowed us to reevaluate the form and function of the building. It now appears that it was much larger

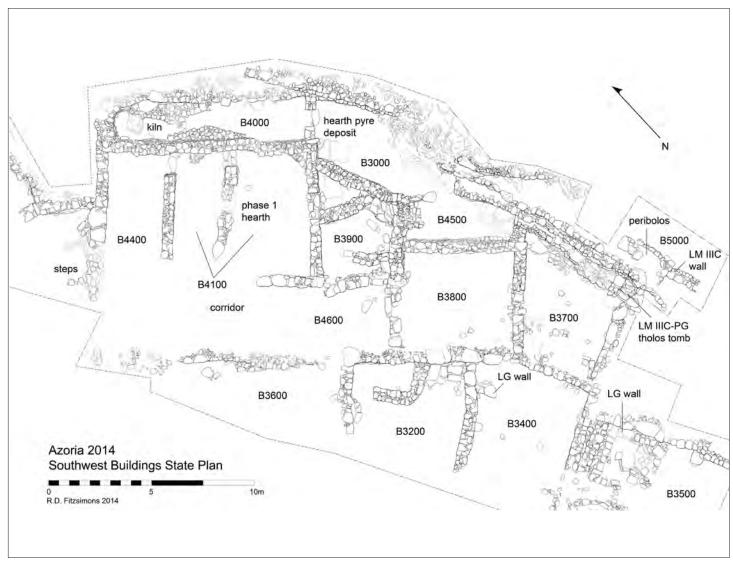


Figure 5. State plan of the Southwest Buildings: EIA-O Building. Drawing R.D. Fitzsimons.

than we thought, incorporating an entrance in the north (B4300) and a corridor (B4600) running along the west side of the main building (B4400 and B4100). The corridor leads south to a sequence of separate rooms in B3900, B3000-B4500, B3800, and B3700 (Fig. 5). The southernmost room, B3700, incorporated the LM IIIC-PG tholos tomb in its southeast corner. The corridor and rooms B3900, B3800, and B3700 continued in use throughout the 6th century B.C., thus obliterating traces of their earlier functions. A sequence of 8th-7th-century floor surfaces was recovered in B3900, B3000, and B4500, confirming the pre-Archaic date of the foundations. Although it looks as if an effort was made to fill the main building with Archaic cobbles at the time that the entire east side of the building was filled to support an Archaic street (B4000-B3000), the walls of the building must have remained visible, and the southernmost rooms, B3800 and B3700, were reintegrated into the Archaic settlement.

The building's main period of use belongs to the 8th and 7th centuries, with an abandonment phase coinciding with the late 7th-century rebuilding of the site. While the evidence of use of 8th-century pottery within the building does not constitute an ante quem or ad quem date for the foundation, given the stratified LG remains in the vicinity (B3500), a LG date is likely for the initial construction of the building.

#### THE MAIN BUILDING

In trench B4100, a series of small *sondages* was excavated for the purpose of studying the chronology and stratigraphy of the surviving floor surfaces recovered and left in situ in 2013, across the east side of the south room of the building (Figs. 5, 6). From this stratigraphic work, it is now clear that the building had a sequence of three distinct occupational phase changes belonging to the 7th century B.C. In the first phase, the south room consisted



Figure 6. B4100: south hall of the main building. Photo D. Haggis.

of a spacious open hall, about 6.0 x 7.0 m in area, with a hard-packed, yellowish-green phyllitic clay floor. An oval clay hearth was centered in the room, roughly on axis with the doorway in the south wall. A doorway in the northeast corner of the room lead up a step into the north or back room of the building, A4400, which had no distinctive features indicating function, though the shape of the room suggests either storage or vestibule space.

In the second phase (Fig. 6), the floor level on the south side of room B4100 was raised significantly (ca. 40 cm), evidently using available LG-EO debris from within the room, as well as considerable phyllitic clay (perhaps roofing material) to form a second surface. The phase 2 surface was well constructed, and there is evidence of the use of small pebbles and rounded to sub-rounded gravel to form a kind of paving. Along with the elevated floor level, a new cross wall was inserted into the room with more space afforded the southern part of the room. Although severely displaced and badly damaged by the subsequent leveling of the structure at the end of the 7th century B.C., the phase 2 cross wall would have created two separate rooms in the space of B4100 with a connecting doorway in the east on line with the door leading north into B4400. The phase 2 floor on the south has a fine pebbled surface, best preserved near the doorway leading to the north room (Fig. 7).

Built directly over the hearth, the placement of this cross wall evidently changed the room's function. This is to say that in its initial phase, the space was designed to be a large open hall with a central hearth—cooking and dining are the likely functions (Figs. 5, 6). Given the size of the space (some 40 m² in area), the quality of construction, and the large central hearth, we might infer a large number of participants and a public function for the building and the room. Preserved on the earliest floor, in the northeast area of the room, was a fragment of an ox skull—the top part of the cranium and the base of the horn cores—possibly a bucranium displayed within the building (Figs. 7, 8).



Figure 7. B4100: northeast corner showing occupation phases. Photo L. Thompson.

In the room's last phase, the floor levels on both north and south sides of the cross wall were raised again—approximately 10 cm on the north side of the room, and about 20 cm on the south. These three floor surfaces, corresponding to distinct architectural changes within the building, may be linked to a neat sequence of three surfaces recovered in a narrow triangular sondage excavated just outside the building in B3900 in 2006. Here, trapped between an Archaic retaining wall and the 7th-century B.C. diagonal wall were a sequence of three well-preserved clay floors, indicating three occupation phases immediately outside the entrance to the main building, and very likely corresponding to formal buildup of floors within the main building. The main goal of our stratigraphic work in 2014 was to understand the use phases and the topography of the area to the south of the main building, and to correlate the stratigraphy with the three floors recovered in B4100 and B3900 with the area to the south.

#### STRATIGRAPHIC SOUNDINGS IN B4500 AND B3000

Work in B4500 revealed a deep level of fill—a layering of phyllitic clay and cobble deposits, some 60–70 cm deep, extending across the space behind B3800 and into B3000 (Figs. 5, 9). The material consists of alternating layers of phyllitic clay, cobbles, gravelly soil, ash, and burned debris identical to that recovered in our original sondage in B3000 in 2006. This material is clearly a deep leveling deposit corresponding to the third phase of occupation in the main building and B3900. Underneath this leveling fill, a sequence of earlier occupation surfaces was recovered, corresponding to the earliest two occupation levels in the main building. The excavation in B4500 also confirmed that the original construction and use of room B3800 are contemporary with the main building to the north.

In the earliest phases of the building, the area of B3900, B3000, and B4500 formed a dog-leg corridor and roofed space extending from the front of B4100 and to the back of B3800 (Fig. 5). The phase 2 floor within B4500 contained a small lekane, a



Figure 8. B4100: ox cranium and horn from phase 1 floor. Photo L. Thompson.

grinding stone, and a quern, suggesting food preparation in this space (Figs. 10–12). In the final phase of the building, the entire area of B4500 and B3000 was filled with the debris mentioned above and retained by the east wall of B3800 and a diagonal wall that supported a raised floor surface providing access to the kiln in B4000 (Fig. 13). It is at the end of this phase that the use of the kiln was eventually discontinued, and B4000 was remodeled with a doorway in the south and an earthen floor surface that extended over a deep fill layer, obscuring the entrance and stoking chamber of the kiln.

Our stratigraphic excavations within the building in 2014 and Rodney Fitzsimons' on-going study of the architecture have resulted in a reevaluation of the plan and history of the EIA–O Building (Fig. 5). It is clear that the main entrance into the building would have been from the north, up a short staircase (B4300), and through a doorway in the north wall of the structure. That door would have led to a long corridor (B4600) running south along the western edge of the main building (B4100, B4400) and leading directly into B3800 as well as into a spacious hall (B3900) in front of the doorway into B4100. This north-to-south



Figure 10. B4500 from east: phase 2 floor with quern and lekane in situ. Photo L. Thompson.



Figure 9. B4500: phases of occupation. Photo D. Haggis.

access and progression within the building as well as the southern aspect of the facade of B4100 would suggest that the focal point of the complex is room B3700 with the tholos tomb built into its southeast corner. That is to say, the visual axis and line of communication from the doorway at the northern end of B4600 extends directly through B3800 and up to the dromos of the tholos tomb in B3700.

# Comments on the LM IIIC and Early Iron Age Stratigraphy

Stratigraphic work at Azoria is presenting us with some interesting patterns. Underlying the Archaic phase (late 7th to early 5th centuries B.C.), two distinct periods of activity have clear architectural and stratigraphic correlates with well-preserved and articulated physical remains. These are the LG periodoften with well-stratified and continuous occupation into the 7th century—and LM IIIC, in which standing architecture and habitation deposits are remarkably well preserved, even if partially destroyed during the Archaic rebuilding. Protogeometric and sub-Protogeometric (9th and early 8th century B.C.) phases, however, remain surprisingly elusive. The final burials in the tholos tomb in B3700 are clear indications of PG activity on the site, while Protogeometric and Geometric pottery, figurines, and other artifacts have been recovered in both Archaic foundation levels, as well as recycled and reused in late Archaic abandonment contexts (Haggis et al. 2007, 276, 293; Haggis and Mook 2011; Haggis et al. 2011, 31-36). Their original use contexts have not yet been found. Interestingly, these periods are well represented on the neighboring site of the Kastro, which is continuously stratified between the LM IIIC and LG periods. Azoria, by way of contrast, surprisingly lacks indications of this continuous occupation.

The missing 10th- and 9th-century buildings could well be the result of the aggressive modification of the terrain in the late 7th century, which certainly involved the removal and disturbance of EIA levels. Alternatively, it could be a condition of the continuous use of buildings and floor surfaces into the LG and EO phases of occupation, in effect obliterating their remains or at least obscuring their visibility. Further, it is possible that the PG-LG settlement at Azoria was not as robustly developed as we have proposed in the past.

Our preconception of the EIA occupation and our working model of settlement development have been based on a number of assumptions. First, on analogy with the Kastro stratigraphy—as well as current models that suggest large-scale nucleation in the 10th and 9th centuries on Crete—we expected Azoria to have a parallel continuous growth and expansion throughout the Early Iron Age, perhaps reaching a peak in size and scale between the 10th and 8th centuries. Second, both the existence of the PG tholos tomb and the remarkable preservation of EIA pottery in Archaic contexts across the site suggested residues of earlier occupation and thus indications of displaced cultural phases. The narrative that we have been constructing for the history of the site, therefore, remains grounded in an essentially evolutionary framework of continuous growth and expansion of settlement, leading to a horizon of reconstruction or renovation which we have characterized as urbanization—the phase transition in the late 7th century that culminated in the construction of the Archaic city

The preliminary evaluation of the results of our work in 2014 is, however, now leading us to visualize more of a discontinuous and uneven structuring of the settlement throughout its history. We are not proposing a gap in the use of the site in the 10th and 9th centuries, only that the kinds of activities and the nature of the occupation may not represent a continuous expansion and growth of the settlement.

So far the best evidence we have for continuous and contiguous settlement in pre-Archaic levels across the excavated area belongs to LM IIIC. Azoria was certainly a large and important primary site in the region, and it was significantly larger than



Figure 11. B4500 phase 2 floor with lekane in situ. Photo L. Thompson.

both the neighboring sites of Vronda and Kastro. The second major phase is represented by a well-preserved transition in the late 8th to early 7th centuries B.C., which may be localized (or at least concentrated) on the peak and slopes of the South Acropolis. Indirect evidence exists of EIA bronze and iron metallurgy, ritual activity, cremation burial, and ultimately the construction of an elaborate, multi-room building which incorporated a Late Minoan IIIC-Early Protogeometric tholos tomb at its southern end. While the function of the building itself requires further study, we can say that it was used for supra-household drinking and dining, given the size of the main room and central hearth in B4100, the predominance of drinking and serving vessels, and the hearth pyre dump from B3000 recovered in 2006. The Cretan hearth temple, house temple, and funerary chapel are probably the most compelling models for the building's function.

The Azoria tholos tomb itself indicates reuse similar to the pattern of mortuary deposition at Vronda and neighboring



Figure 12. B4500 excavation of lekane. Photo L. Thompson.



Figure 13. B4000 kiln, showing three use phases. Photo D. Haggis.

cemeteries at Skala and Skouriasmenos. We wonder if Azoria might have been a focal point in the broader region for burial and post-funerary rituals throughout the EIA—it is likely that the tholos is only one of several tombs on the slope, originally built in LM IIIC, but continuing in use after an abandonment of the settlement in the 11th century. An intensified and perhaps renewed interest in Azoria in the LG period could, in fact, be part of the process of mortuary elaboration that we see at Vronda as well with the continued use of tholoi and the construction of pyres and burial enclosures within the abandoned settlement.

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View of Pacheia Ammos from the Study Center. Photo S. Ferrence.