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EXCAVATIONS AT AZORIA, 2003–2004, PART 2

The Final Neolithic, Late Prepalatial, and Early Iron Age Occupation

ABSTRACT

This article constitutes the second of two reports on fieldwork conducted at Azoria in eastern Crete during the 2003 and 2004 excavation seasons. Evidence of Final Neolithic and Early Iron Age occupation and traces of Late Prepalatial activity were found underlying the Archaic civic buildings on the South Acropolis, particularly along the southwest terrace. The recovery of substantial Final Neolithic architectural and habitation remains contributes to our understanding of the 4th millennium in eastern Crete. Stratigraphic excavations have also clarified the spatial extent of the settlement from Late Minoan IIIC to the Late Geometric period, and brought to light evidence for the transition from the Early Iron Age to the Archaic period, and the transformation of the site in the 7th century B.C.

INTRODUCTION

Excavations at Azoria in northeastern Crete have been conducted annually since 2002, with a primary goal being to explore the civic center of a small Archaic city occupied from the 7th to the early 5th century B.C. (Fig. 1).[1] Another important part of our study is the examination of earlier occupational strata that might allow us to reconstruct the history of the site, particularly in the Early Iron Age (EIA), and the processes that led to urbanization in the 7th century. The purpose of stratigraphic excavation at Azoria in 2003 and 2004 was to recover and investigate remains of Late Minoan (LM) IIIC–Late Geometric (LG) date (ca. 1200–700 B.C.) in order to determine the extent of EIA occupation, the nature of the stratigraphic transition from the Early Iron Age to the Archaic period, and the physical changes to the site during these periods. Because results of surface survey had indicated continuous occupation from the 12th to the 5th century B.C., we were also interested in characterizing the Archaic response to the EIA landscape, to see how the spatial organization of the site was affected by the development of urban institutions, and how EIA architecture and artifacts were incorporated into a new urban landscape.

1. See Haggis et al. 2004; for the first report on the 2003–2004 excavation seasons, see Haggis et al. 2007.

Our hypotheses were informed by results of past fieldwork and research in EIA Crete that have produced material patterns suggesting conservatism and constancy of habitation,[2] early urbanization,[3] a consciousness of regional identity,[4] and an acute awareness of a Minoan and Dark Age past.[5] Our initial expectations were thus shaped by evidence of stability of settlement and continuity of occupation throughout the Early Iron Age, a gradualist perspective of continuous growth of population and development of regional sociopolitical identities and economic systems.[6] What we have found, however, is an abrupt change in the mid- to late 7th century B.C. involving a radical transformation of the topography of the site. In this report we examine the evidence for this change and its implications derived from stratigraphic excavations at Azoria in 2003 and 2004.

Another aim of the project has been to elucidate the earlier prehistory of the site, especially the Final Neolithic (FN) (ca. 4000–3200 B.C.)[7] and Late Prepalatial (Early Minoan [EM] III–Middle Minoan [MM] IA) (ca. 2300–1900 B.C.)[8] occupational phases suggested by surface survey, and to relate the results of excavation to our picture of settlement history in the broader region of Kavousi and the north Isthmus of Ierapetra. While evidence for Late Prepalatial activity remains frustratingly sparse, though consistently represented, we have successfully exposed parts of the FN settlement. The Final Neolithic is a poorly understood period of Cretan prehistory. In the eastern part of the island, it encompasses an important stage of settlement expansion, if not colonization, and significant changes in settlement patterns throughout the period. Recent scholarship has focused primarily on problems of ceramic chronology, especially at the sites of Knossos and Phaistos,[9] and on the relationship between the FN and EM I periods in central and eastern Crete.[10] Even though ongoing fieldwork is finally establishing the character of EM I and the features that distinguish this ceramic phase from the Final Neolithic,[11] our picture of the FN period in eastern Crete in ceramic and cultural terms is still based on a very limited number of findspots and relatively small and narrowly defined assemblages.[12] Although recent surveys and excavations are gradually filling in the gaps and expanding our understanding of the period,[13] we have yet to establish secure synchronisms across the island or a clear understanding of the configuration of FN settlements. This report on the FN occupation at Azoria is a contribution to this current discussion.

Figure 1 *(opposite)***. Azoria, state plan of the South Acropolis.**
R. D. Fitzsimons and G. Damaskinakis

2. Coulson et al. 1997.

3. Coldstream 1984, 1991; Nowicki 2000, pp. 241–247; cf. Borgna 2003.

4. Haggis 1993a; Wallace 2003.

5. The term Dark Age means the early part of the EIA (ca. 1200–900 B.C.); see Prent 2003; Wallace 2003.

6. The best recent surveys and analyses of the evidence for EIA settlement structure and its social and economic implications are Nowicki 1999b, 2000; Borgna 2003; Prent 2003, 2005; Wallace 2003. For recently published archaeological surveys, see Hayden 2004a, 2004b (Vrokastro); Watrous, Hadzi-Vallianou, and Blitzer 2004 (Mesara); and Haggis 1996b, 2005 (Kavousi).

7. This date range is a modification of Warren and Hankey 1989, pp. 120–121, and Nowicki 2003, pp. 64–65.

8. Warren and Hankey 1989, pp. 124–127, 169.

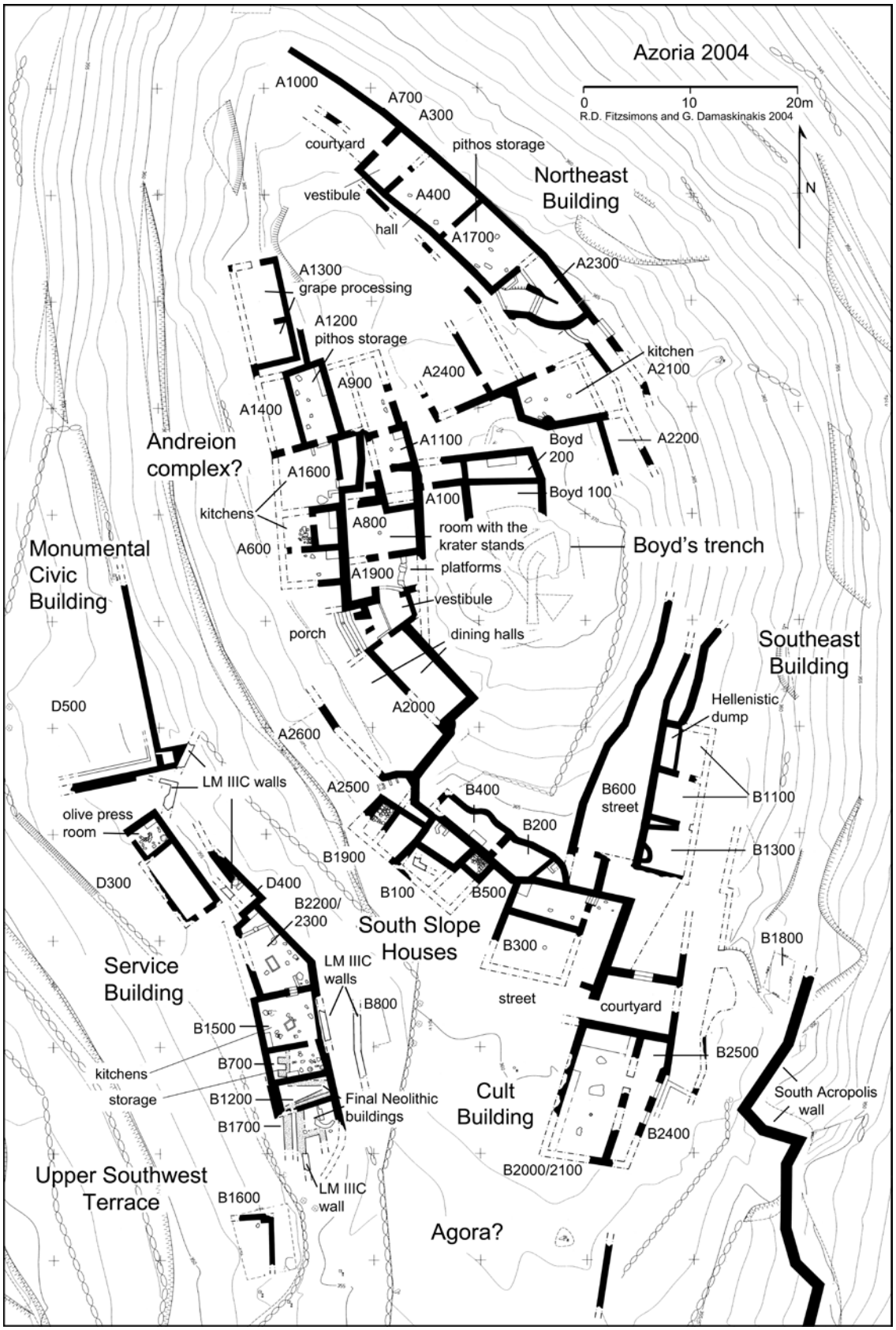
9. Vagnetti 1975; Vagnetti and Belli 1978; Manteli and Evely 1995; Vagnetti 1996; Wilson and Day 2000.

10. Hood 1990; Manteli 1992, 1993; Haggis 1993b, 1996a; Betancourt 1999.

11. Manteli 1993; Haggis 1993b, 1996a; Betancourt 1999; Vokotopoulos 2000; Nowicki 2003; Papadatos 2004.

12. E.g., Pendlebury, Pendlebury, and Money-Coutts 1935–1936; Manteli 1992; Nowicki 1999a.

13. Haggis 1996b; Nowicki 1999a; Vokotopoulos 2000; Hayden 2003; Nowicki 2003.


Azoria 2004
0 10 20m
R.D. Fitzsimons and G. Damaskinakis 2004
N
A1000
A700
A300
courtyard
pithos storage
Northeast Building
vestibule
A400
hall
A1700
A2300
A1300
grape processing
A1200
pithos storage
kitchen A2100
A2400
A900
A1400
Andreion complex?
A1100
Boyd 200
A2200
A1600
kitchens
A100
Boyd 100
A800
room with the krater stands
A600
Boyd's trench
Monumental Civic Building
A1900
platforms
vestibule
porch
dining halls
Southeast Building
D500
A2000
Hellenistic dump
A2600
LM IIIC walls
A2500
B400
B600 street
B1100
olive press room
B200
B1900
B1300
D300
D400
B100
B500
B2200/ 2300
South Slope Houses
B300
B1800
Service Building
LM IIIC walls
B800
street
courtyard
B1500
B2500
kitchens
B700
storage
B1200
Final Neolithic buildings
Cult Building
South Acropolis wall
B1700
B2400
B2000/2100
Upper Southwest Terrace
LM IIIC wall
B1600
Agora?

THE FINAL NEOLITHIC SETTLEMENT

Indications of FN activity, consisting of sherds recovered in bedrock deposits and 7th-century foundation layers, were recognized across the excavated area of the South Acropolis, a spatial distribution suggesting a size of well over 0.40 hectares for the settlement in this period. While indications of surface remains outside of this area are slight, expansion of the excavation sample in subsequent seasons might require us to adjust this size estimate. Stratified FN material was brought to light in soundings in four trenches (B1500, B700, B1200, and B1700) on the southwest terrace where the evidence so far indicates the foundations of three separate buildings covering an area of about 50 m^2 (Figs. 1, 2). The structures underlie the Archaic Service Building and, in some cases, intermediate strata of LM IIIC to Early Orientalizing (EO) date, so our ability to recover a complete plan of the FN architecture is impeded by the need to preserve installations, features, and walls of the 12th to the 5th century B.C. Nonetheless, the exposed remains of the settlement give us an idea of the form of houses and built features, the ceramic, lithic, and faunal assemblages, and the organization of buildings on the site.

The first sondage on the southwest terrace was conducted in 2003 in trench B1200, which corresponds to an Archaic room that appears to have gone out of use before the end of the 7th century, at the time when renovations were evidently made to the Service Building (Figs. 1, 2). Excavation through the clay floor of this room revealed that it was constructed on top of a surface of LM IIIC date. Below this surface, we uncovered a sequence of four FN surfaces associated with at least two architectural phases (Fig. 3). The architecture consists of two walls, the back walls of two separate buildings, one extending north into B700, and the other on the south, forming the north wall of a separate building in B1700 (Fig. 2). The walls are constructed of local dolomite fieldstones (cobbles and small boulders), and there is no obvious use of gray crystalline limestone, or *sideropetra* (Fig. 4). The surfaces preserved between the walls are hard-packed red dolomite clay. The walls run at oblique angles, roughly east to west, apparently converging at the east side of the terrace, creating a rather narrow triangular exterior space or alley between the two buildings. Lenses of green phyllite clay and fragments of schist, perhaps remnants of roofing material from the adjacent buildings, were found throughout the surfaces and their matrices.

Among the finds were a fragment of a bone awl or borer, a stone burnisher, several dark gray metabasite beads, large amounts of pottery, and a number of chert blades, flakes, and production materials. In contrast to the heavily eroded and weathered condition of the unmodified bones from the FN deposits, the awl tip fragment is well preserved, and appears to have been made from a split fragment of a long bone diaphysis (Fig. 5). The object, although broken, exhibits finely rounded and smoothed edges, and a finely sharpened tip. A total of 106 pieces of chipped stone were found throughout the FN levels in B1200, with most materials concentrated in levels representing the primary occupation surfaces. The flat quartzite burnisher is about 7.6 cm long and has pecked and abraded ends (Fig. 6). The wear patterns consist of two distinct facets on either end,

Figure 2. B700, B1200, B1700: state plan of Buildings 1, 2, and 3, dating to the Final Neolithic. R. D. Fitzsimons

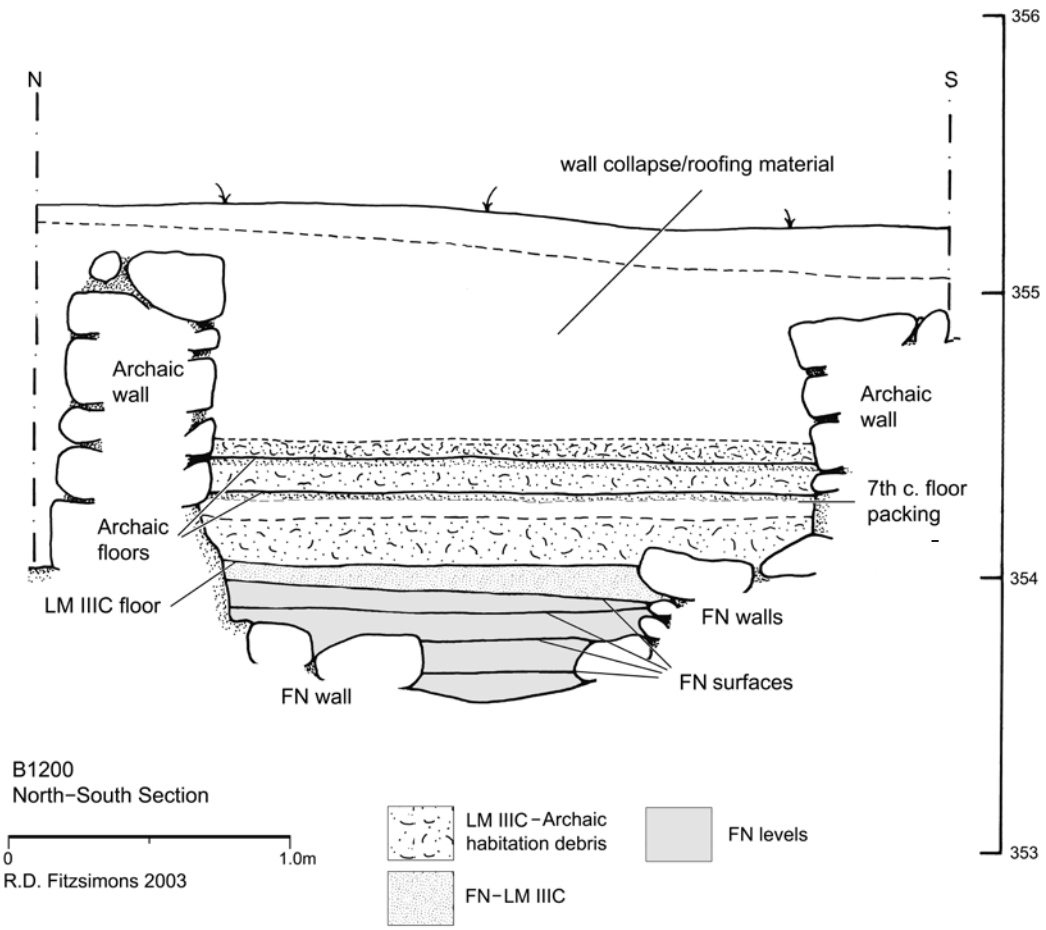


Figure 3. B1200: north–south architectural section. R. D. Fitzsimons

suggesting regular and intensive rubbing motion, consistent with burnishing or abrading. The metabasite beads are extremely small (1.5 mm thick) and disk shaped. The largest is no more than 4 mm in diameter, with the smallest being about 2.5 mm (Fig. 7); the central hole is, on average, 1.5–2.0 mm in diameter.

In 2004, excavation in B1700 and in a sondage along the west side of the neighboring trench B700 exposed more FN walls, allowing us to distinguish parts of three separate buildings. The northernmost FN structure (Fig. 2: Building 1) consists of the north wall in B1200, which runs at an angle underneath the western edge of the Archaic Service Building. In B700, the wall evidently joined a short segment of a return wall that extends northward. Two roughly rectangular platforms were constructed against the west face of this return wall on what must be the exterior of the building (Figs. 2, 8). The platforms (ca. 0.70 × 0.90 m) are made of a layer of tightly packed dolomite cobble- and pebble-sized stones and clay.[14] Five similar platforms were found in FN levels at Nerokourou in western Crete. The Nerokourou platforms, located to the south and east of the FN building, are a bit larger than the two from Azoria, and they have both curved and squared edges. One platform (*piattaforma* 5) was built contiguous to the FN building.[15] At Nerokourou, these paved surfaces evidently occupied

14. The terms pebble and cobble are used in this article as rough indications of stone size.

15. Vagnetti, Christopoulou, and Tzedakis 1989, pp. 18–20.

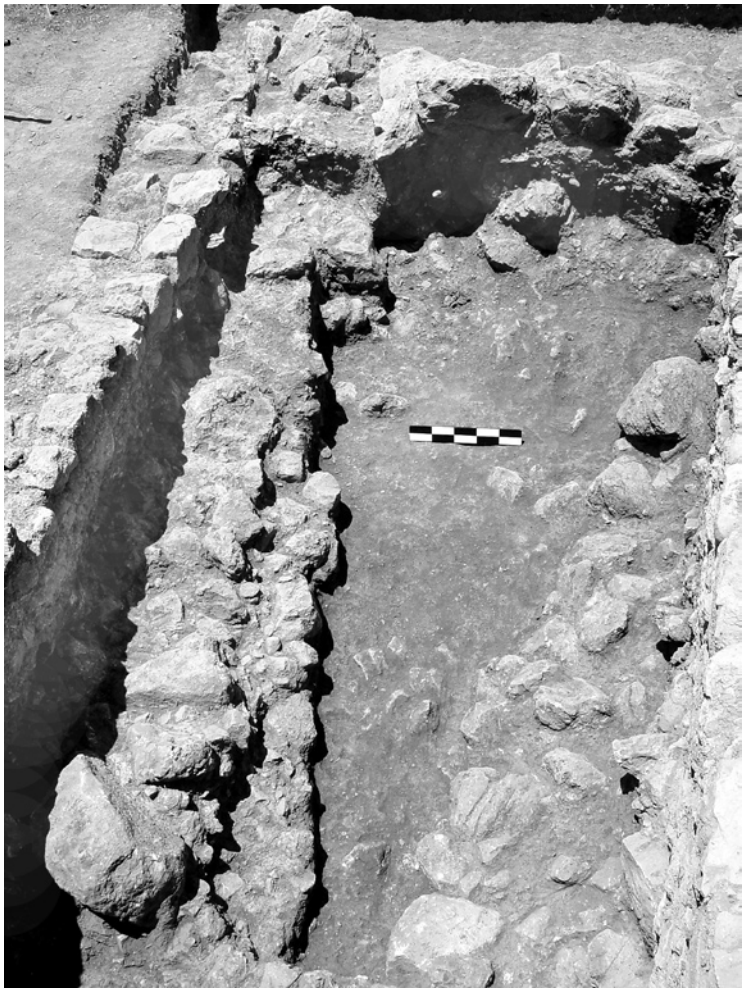


Figure 4 *(right)*. **B1200: FN walls, from the east.** Photo M. S. Mook

Figure 5 *(center)*. **B1200: bone awl.** Scale 2:1. Photo C. Papanikolopoulos

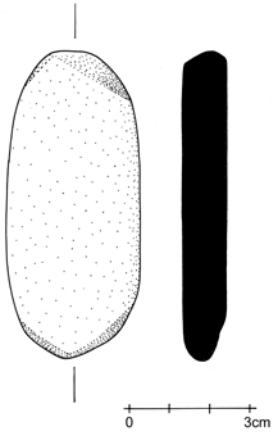


Figure 6 *(below, left)*. **B1200: stone burnisher.** Drawing R. Docsan

Figure 7 *(below, right)*. **B1200: metabasite beads.** Scale 3:1. Photo C. Papanikolopoulos

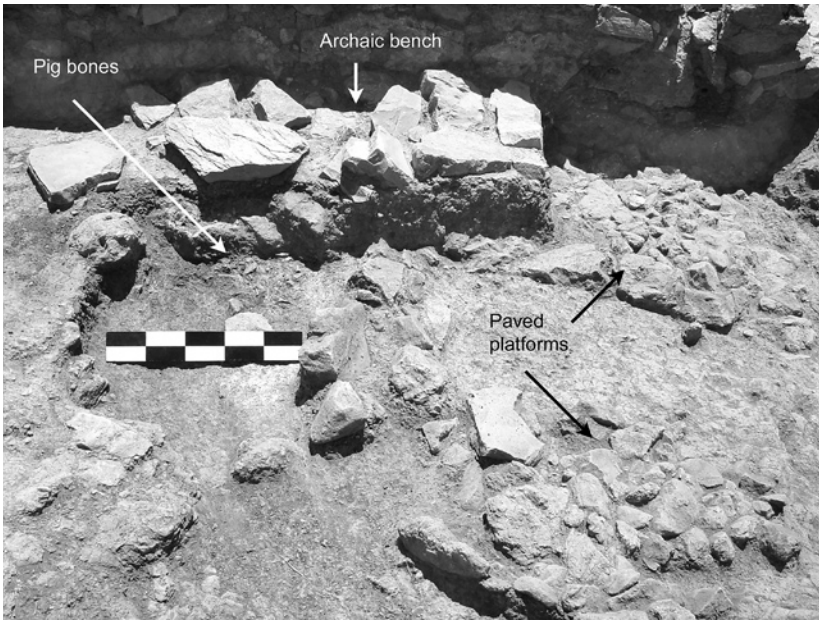


Figure 8. B700: paved platforms and pig bones, from the north. Photo M. S. Mook

exterior space that the excavators associate with food processing, an inference derived from the abundance of cooking wares and "cheese pots" recovered in the southern area.[16] Above these stone platforms at Azoria, we found fragments of a terracotta anthropomorphic figurine (Figs. 9, 10).

The figurine is locally made. The fabric is pink gray in color with a reddish brown outer core and slip, and dense phyllite (schist and mudstone) and quartz inclusions (Fig. 10). Standing about 10.6 cm in height, it has a flat body and one of two stubby, squared legs is preserved. The head has a prominent but broken beaklike nose and simple incision for the mouth, which is placed high on the face below the beak. The eyes are single impressions in the clay with incised lines above and below. A row of short, wide impressions forms a band above the neck, extending around the sides of the head. The plain, pear-shaped form of the lower body lacks anatomical detail and gender-distinguishing characteristics. On both front and back, a series of diagonal incisions extend across the body from the shoulders and sides, forming rough V-shaped patterns above the legs (Fig. 9).

While there is apparently a tendency for LN and FN figurines to be rendered more schematically than their predecessors,[17] the lack of anatomical detail in the Azoria piece may not be merely a matter of style or convention. Rather, the intention may have been to render a human body covered with a *burqa*-like cape or cloak, obscuring the details of arms, hips, breasts, and the transition from head to shoulders; the row of incisions at the neckline may indicate a fringe, necklace, or perhaps the edge of a separate hood or mask. Incision is commonly used throughout the Aegean

16. Vagnetti, Christopoulou, and Tzedakis 1989, pp. 18–19, 87; the excavators connect these paved platforms to similar open-air installations at Knossos (cf. Evans 1964, pp. 154, 158–159, 172–173, figs. 16, 18, 19; Evans 1994, p. 16). For exterior pavements in Neolithic contexts, see the cooking area in square B (phase IIIb) at Achilleion (Winn and Shimabuku 1989, pp. 46–48).

17. Kokkinidou and Nikolaidou 1997, p. 90; cf. examples from Nerokourou (Vagnetti, Christopoulou, and Tzedakis 1989, pp. 71–73) and Knossos (Rethemiotakis 1996b, p. 323, no. 251).

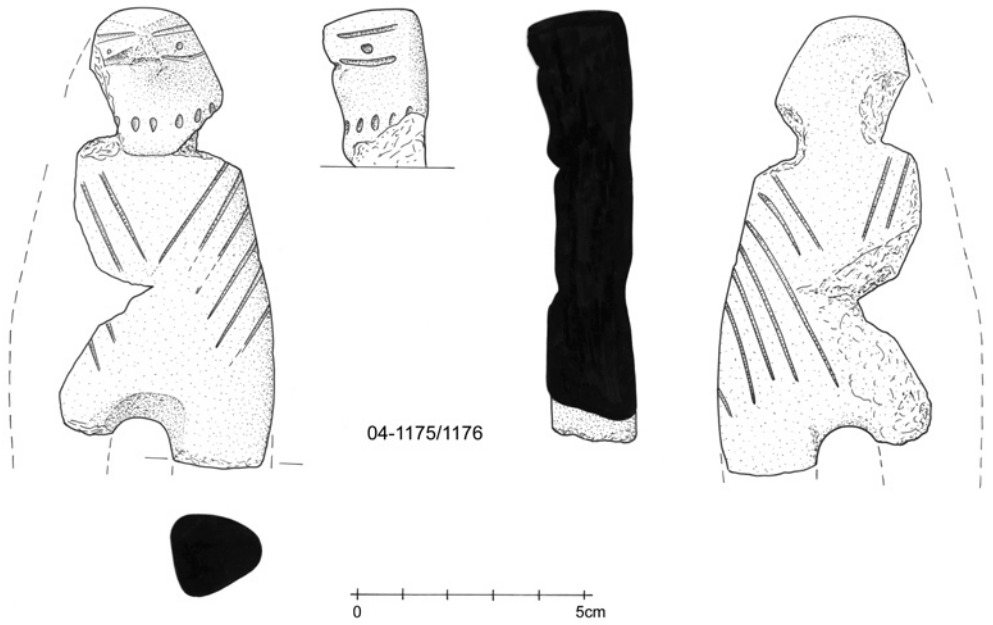


Figure 9. B700: FN figurine.
Drawing R. Docsan

Figure 10. B700: FN figurine. Photo C. Papanikolopoulos

Neolithic as symbols or as an indication of dress and other body ornament, with the V-shaped or chevron pattern a typical indicator of textile patterns or decorative clothing.[18] Alternatively, the Azoria piece has zoomorphic, indeed birdlike, qualities such as the beak nose and incisions for the eyes, and the pointillé at the neckline is suggestive of plumage.[19] The lack of indications of arms and details around the shoulder and neck may also lend itself to this zoomorphic interpretation, although the possibility remains that the sculptor intended to represent a costumed human figure with birdlike dress and ornamentation.

The closest parallel for the surface treatment, especially of the facial features, is the well-known seated steatopygous figurine from nearby Kato Chorio, now in the Giamalakis collection in the Herakleion Museum.[20] The Giamalakis terracotta has the same beaked nose, incised mouth, pupil holes, and incisions around the eyes. Although it also has clearly delineated details of female anatomy, which are entirely lacking in the Azoria example, the incised lines and pointillé are clear indications of dress, features that might serve to link the figurines stylistically.[21] The location of the Azoria figurine, in a presumably exterior space that could have functioned as a domestic work area, is in keeping with other contexts for Neolithic figurines in the Aegean.[22]

18. Gimbutas 1986, pp. 230–237; Marangou 1996, p. 147; Kokkinidou and Nikolaidou 1997, pp. 103–105. For a similar V-shaped pattern (painted), possibly indicating a cape on an Urfirnis torso from Franchthi, see *Franchthi* IX, pp. 22, 71–72; cf. Gimbutas 1989, pp. 184–185.

19. For bird-goddess types, see Gimbutas 1989, pp. 182–185.

20. The specific findspot is unknown, but a location near the Ierapetra Isthmus watershed is likely; see Weinberg 1951, pp. 121–122; Ucko 1968, pp. 297–298; Rethemiotakis 1996a; 1996b, p. 323, no. 250.

21. Ucko 1968, p. 298.

22. Gimbutas 1989, pp. 218–221; Marangou 1996; Kokkinidou and Nikolaidou 1997, pp. 90–91, 101–105.

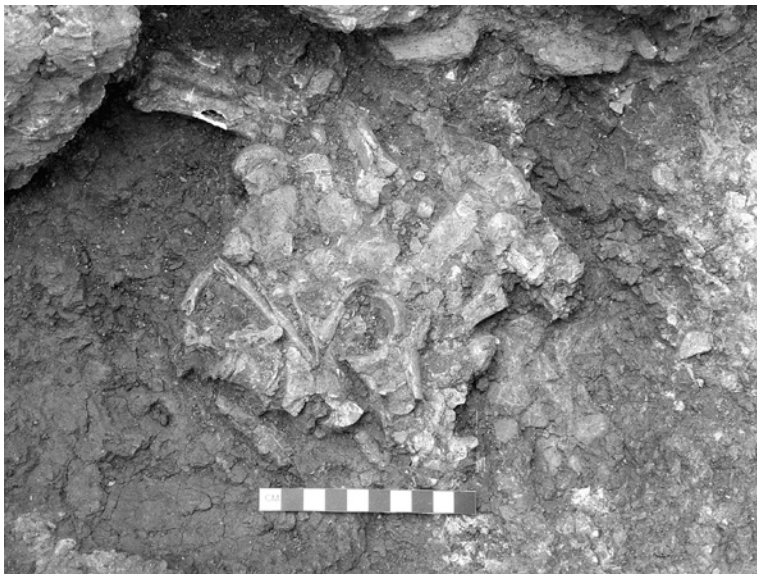


Figure 11. B700: FN pig bones in situ. Photo M. S. Mook

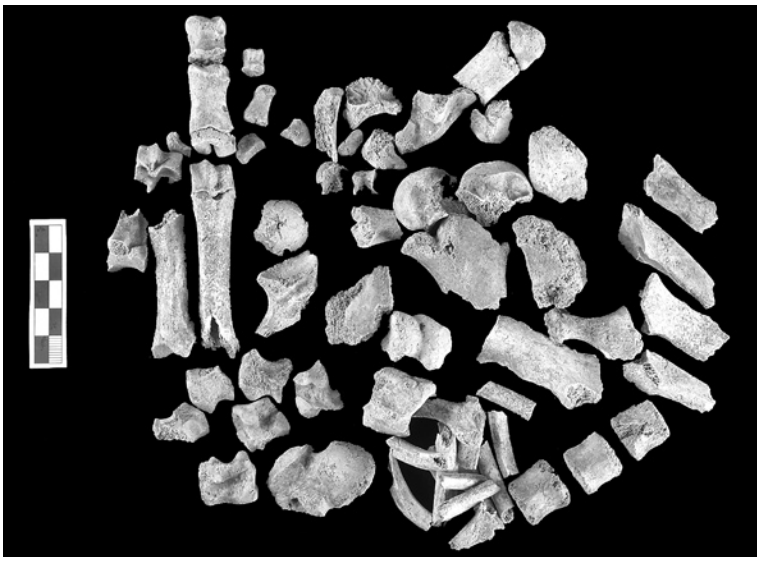


Figure 12. B700: FN pig bones from pot. Photo C. Papanikolopoulos

East of the wall within the interior space of Building 1 was a shallow pit or depression in the floor containing a fragmentary pot full of pig bones (Figs. 2, 8). Neither the bones nor the pot appear to have been burned, but around the vessel were dark, ashy soil and flecks of carbon, suggesting to the excavator the location of a pit hearth (Figs. 11, 12). In the pit were found two black metabasite cylindrical beads, identical to those found in B1200, and a single teardrop-shaped pendant of the same material (Fig. 13). The morphology of the pig bones indicates a single juvenile animal, between 12 and 24 months in age. The presence of a number of articulating limb elements, in addition to vertebrae, strongly suggests that a whole animal was butchered, and then placed in the pot for cooking, with some of the meaty elements finally having been removed for eating (Fig. 12).

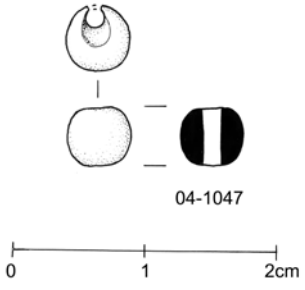


Figure 13. B700: metabasite bead. Drawing R. Docsan

The outlines of Building 2 were recovered in trench B1700 (Figs. 2, 14). The structure is made up of the south FN wall in B1200, which extends

Figure 14. B1700, from the east.
Photo M. S. Mook

underneath the southern edge of the Archaic Service Building, where it meets a wide wall projecting roughly north–south for about 6 m across trench B1700. This wall formed the western limit of a building with two small rectangular rooms. Only the southernmost room was excavated completely in 2004. The eastern wall of Building 2 runs roughly parallel to the western wall and uses identical construction materials and techniques; largely obscured by EIA and Archaic surfaces and installations left in place during excavation on the east side of B1700, only a short (1.5 m) segment was exposed in 2004. Even though the walls were disturbed by erosion on the slope and later reoccupation of the terrace in the Early Iron Age, the foundations are preserved to two courses. The walls in Building 2 are wide (ca. 0.70–0.80 m) and have two faces of large dolomite cobbles and small boulders with pebbles and gravel used to fill the core between the larger stones (Fig. 2, 14). This is an identifiable technique of fieldstone construction observable at FN and EM I–II sites elsewhere on Crete.[23] A well-built cross wall runs between these long segments, forming the north wall for a small rectangular room which is about 1.40 m wide and 2.60 m long.

The FN floor is well preserved in the northern half of the room. In the southern part, the surface was intact, but it was covered over and contaminated by the floor packing associated with a rebuilding of the terrace in LM IIIC. A surviving segment of a LM IIIC wall borders the southern edge of the room; it is constructed directly on top of the FN wall foundations and conforms to their orientation and width. The LM IIIC wall is easy to distinguish from its FN predecessors, because it makes use of much larger and regular gray crystalline limestone and dolomite boulders. The small size of the excavated room in Building 2 makes it appropriate for a storage facility, although stone tools were found above and directly on top of the floor surface. A concentration of chert tools and reduction materials was also recovered from the narrow alley between Buildings 2 and 3, perhaps discarded debris from this room.

23. For a similar construction technique at Nerokourou, see Vagnetti, Christopoulou, and Tzedakis 1989, pp. 15–22, fig. 10; for EM I–II contexts, see Haggis 1996a, pp. 657–659.

Figure 15. B1700: schist work table or platform. Photo C. Papanikolopoulos

An interesting find is a rectangular green schist block, about 6 cm thick with two finished (smoothed) edges, two broken edges, and a slightly concave bottom (Fig. 15). The top has an abraded, circular concavity in the center, and, at one end, a series of 11 pecked depressions (each ca. 0.5–1.0 cm in diameter); the largest depressions cluster in a rough circle about 7–8 cm in diameter. The tool may have been a work table or platform for drilling or knapping.[24]

Building 3 is indicated by a single 3.5 m long wall segment that was recovered on the west side of B1700 (Fig. 2). It runs in a north–south direction parallel to the west wall of Building 2 and apparently continues under the southwest corner of B1200. Another wall, made up of a series of large dolomite boulders, was recovered in 2003 on the outer western edge of B1200. It has the same orientation as the walls in B1700 and appears to connect to the western face of the Building 3 segment, perhaps forming an adjoining room. Excavation of the interior of Building 3 and its neighboring structure in B1200 in 2004 was precluded by the need to maintain the scarp on the west side of the trenches.[25]

The FN remains in B700, B1200, and B1700 indicate three separate structures: Building 1 on the north with the pit hearth and exterior paved platforms, Building 2 on the south, separated from Building 1 by an alley,[26] and Building 3 on the west, represented by a single wall, presumably the eastern edge of a building extending farther to the west. The form of the settlement suggests distinct building units in an open-settlement plan: individual structures separated by alleys and courtyards, a marked contrast to the agglomerative arrangement typical of Bronze Age spatial organization. On the whole, the houses in the excavated area appear to be tightly clustered with rather narrow spaces between buildings rather than party walls, although the courtyard with the paved platforms indicates the possibility of open spaces shared by more than one household or the community.[27] The spaces between buildings have considerable amounts of pottery and chert debris discarded from adjacent rooms and external work areas. Building 2 may have been primarily a production area, indicated by the evidence of an entire reduction sequence for stone tools (from nodule and core to end-products) in B1700. Building 1 in B700, on the other hand, produced finished blades and flakes, implements that were probably in use in a domestic context at the time of abandonment. The paved platforms in B700 remain somewhat of a mystery, although the analogy

24. For anvils in the stone percussion kit, see Evely 1993, pp. 130–132.

25. The excavation of Building 3 continued in 2005.

26. For the basic two-room nucleus of Neolithic structures at Knossos, see Davaras 1996, p. 92.

27. For spatial organization of Neolithic settlements, see Davaras 1996; Kotsakis 1999; Nowicki 2003, esp. pp. 69–71. On the open settlement plan and its relationship to Bronze Age settlement structure, see Haggis 1996a, pp. 658–659.

with Nerokourou suggests that they occupied an exterior space that was used as a general work area.[28] The presence of the anthropomorphized bird-headed figurine (Figs. 9, 10) is of some importance as such figurines have been found in other Neolithic contexts in exterior (as well as interior) spaces associated with food processing.[29] The room to the east of the platforms, with the potted pig bones, evidently functioned as a kitchen or internal food-processing area.

THE FINAL NEOLITHIC POTTERY

Pottery was recovered from all FN contexts along the southwest terrace, with the largest amounts, sufficient to allow meaningful evaluation of fabric and ware types, coming from the alley between Buildings 1 and 2. Trench B1200 yielded a total of 613 sherds of FN date, weighing 3.167 kg.[30] Four basic fabric types were apparent in the assemblage, which includes all the FN pottery recovered from this trench. The fabric types are (1) phyllite-quartzite-based fabrics (470 sherds/2.566 kg), constituting 76.7% of the assemblage by numbers of sherds; (2) granitic-dioritic fabric (135 sherds/0.562 kg), 22%; (3) silver-mica fabric (6 sherds/0.032 kg), 1% of the assemblage; and (4) calcite or marble-tempered fabric (2 sherds/0.007 kg), representing 0.3% of the total number of FN sherds recovered. These fabrics are consistent with types identified in other fabric studies in the region.[31]

Phyllite-quartzite fabrics are the most common at Azoria (Fig. 16), and four subtypes or variants have been identified in the assemblage. The prevalent fabric has red (2.5YR 4/8) to grayish tan (10YR 5/4) to dark brown (7.5YR 3/4) surfaces and sometimes a brown to black core. Gray to red phyllitic inclusions are up to 1.5 mm in size and make up 1%–3% of the surfaces (Fig. 17, top two examples). White to light gray quartz inclusions make up to 3% of the surfaces and are as large as 2.0 mm in size, while another 1%–3% are composed of a creamy white, chalky carbonate, up to 1.0 mm large.[32]

An additional variant includes the phyllite-quartzite type with bluish to greenish gray (N7 to 5Y7/1) fabric and surfaces as well as darker gray (2.5Y 6/0) examples. This color is the result of firing in a reducing atmosphere, sometimes incompletely achieved and resulting in partially gray and partially oxidized red (10R 5/8) surfaces. The inclusion types and frequencies are the same as those in the primary phyllite-quartzite fabric.

Another subgroup of the phyllite-quartzite fabric is similar to the main type but also has numerous fine, white, subrounded to rounded inclusions 0.2 mm in size on 5% of the surfaces. On some examples, the surface inclusions have detached, leaving voids.

Examples of a phyllite-quartzite fabric that appear to include grog were also identified (the grog seems to come from pots of phyllite-quartzite fabric; Fig. 17, bottom).[33] The inclusions are generally coarser (phyllite up to 4.0 mm) and more numerous, representing ca. 10% of the surface matrix; surface cracks and fissures (the result of the grog?) give this fabric a very distinctive appearance.

28. Cf. Vagnetti, Christopoulou, and Tzedakis 1989, pp. 18–19, 87.

29. Kokkinidou and Nikolaidou 1997, pp. 90–91, 101–105.

30. Weights, counts, and fabric groupings are available only for the FN pottery from B1200 at this time. The FN pottery from other trenches has not yet been fully studied.

31. Haggis and Mook 1993; Hayden 2003, 2004b; Moody 2004; Day et al. 2005; Mook 2005.

32. This is similar to fabric 3A from the Vrokastro area (Hayden 2003, p. 405).

33. We thank Peter M. Day for the identification of this subgroup fabric, perhaps related to Vrokastro "clay lump ware" (Hayden 2003, p. 406, fabric 3B2).

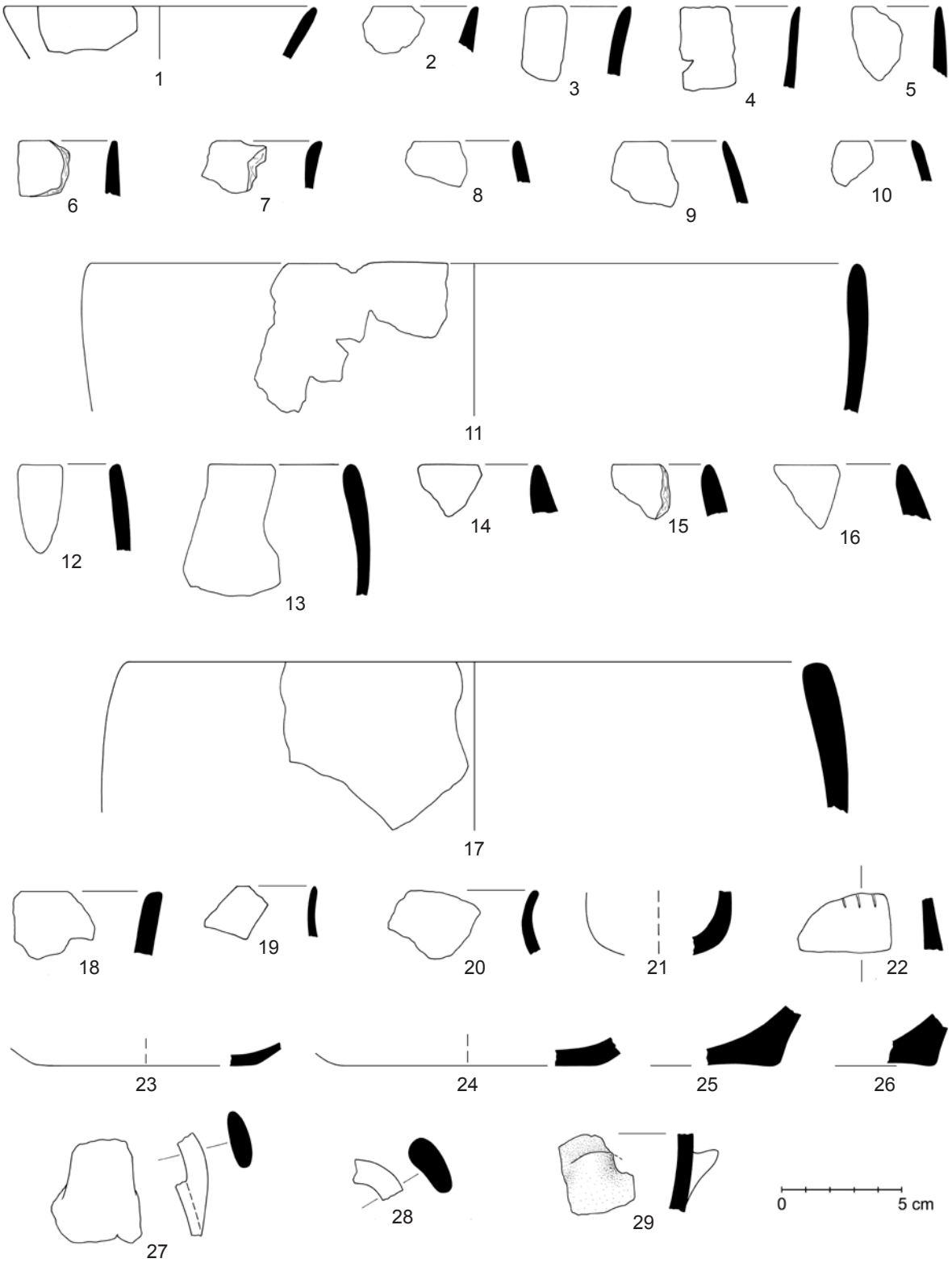


Figure 16. FN pottery: shapes in phyllite-quartzite fabrics. Drawing R. Docsan

Figure 17. FN phyllite-tempered fabrics. Photo C. Papanikolopoulos

The second most common type is a "Mirabello" granodiorite-tempered fabric (Figs. 18–20).[34] The surfaces are brown (5YR 3/3) to orange (5YR 5/6) and frequently mottled black (one example is dark grayish green, 2.5Y 5/4). Cream white to very light gray inclusions are angular to subangular, equidimensional, and up to 2.0 mm in size. These inclusions have a sugary texture and cover as much as 20% of the surfaces. Light gray quartz inclusions up to 1.5 mm in size are found on 3% of the surface areas. Not always apparent and less than 1% of surface areas, distinctive black-and-white rock fragments from the granitic-dioritic series are 0.5–1.0 mm in size. Gold and black mica particles, 0.2–1.0 mm large, were visible on up to 1% of the surfaces and always present; they give the fabric a somewhat glittery appearance in direct sunlight. Elongated chaff or vegetable temper, up to 2.0 mm in size, was evidenced by voids on 1%–3% of surface areas. Worn surfaces have a rough and sandy texture.

Although not well represented, sherds with a silver mica-schist fabric are noteworthy, as they have not previously been identified in contexts earlier than LM IIIC in the Kavousi area.[35] Surfaces vary from red (2.5YR 4/6) to light brown (10YR 5/6), while interiors are sometimes black or gray (10YR 5/2). Ten percent of the surface areas consist of soft, light gray to silver mudstones, up to 3.5 mm in size. Fine, silver, mica-schist particles up to 1.0 mm in size cover 5%–10% of surface areas; occasional mica packets 1.5 mm in size also occur. Subangular, creamy white inclusions up to 1.0 mm in size cover less than 1% of surface areas, as do angular, dark gray rock fragments up to 1.0 mm in size. This fabric is characterized by medium to soft surfaces that have a glittery appearance in the light.

Calcite or marble-tempered fabric is also not well represented in the Azoria FN assemblage thus far (Fig. 21).[36] The examples recovered range from dark brown (7.5YR 3/2) to black. Bright white to light gray inclusions ("marble") cover 5%–10% of surface areas (up to 20% of core),

34. KTS fabric type II (Haggis and Mook 1993, pp. 273, 279–280; Mook 2005, p. 169); Vrokastro Survey GD 1 cooking (Moody 2004, p. 153).

35. Haggis and Mook 1993, p. 277; Mook 2005, pp. 172–173 (KTS fabric type XVI). Heavily micaceous fabrics also become more common during the EIA in the Vrokastro region (Moody 2004, p. 155).

36. Haggis and Mook 1993, p. 275; Hayden 2003, p. 405, fabric 2B; Moody 2004, pp. 151, 153–154; Mook 2005, p. 171 (KTS fabric type IX).

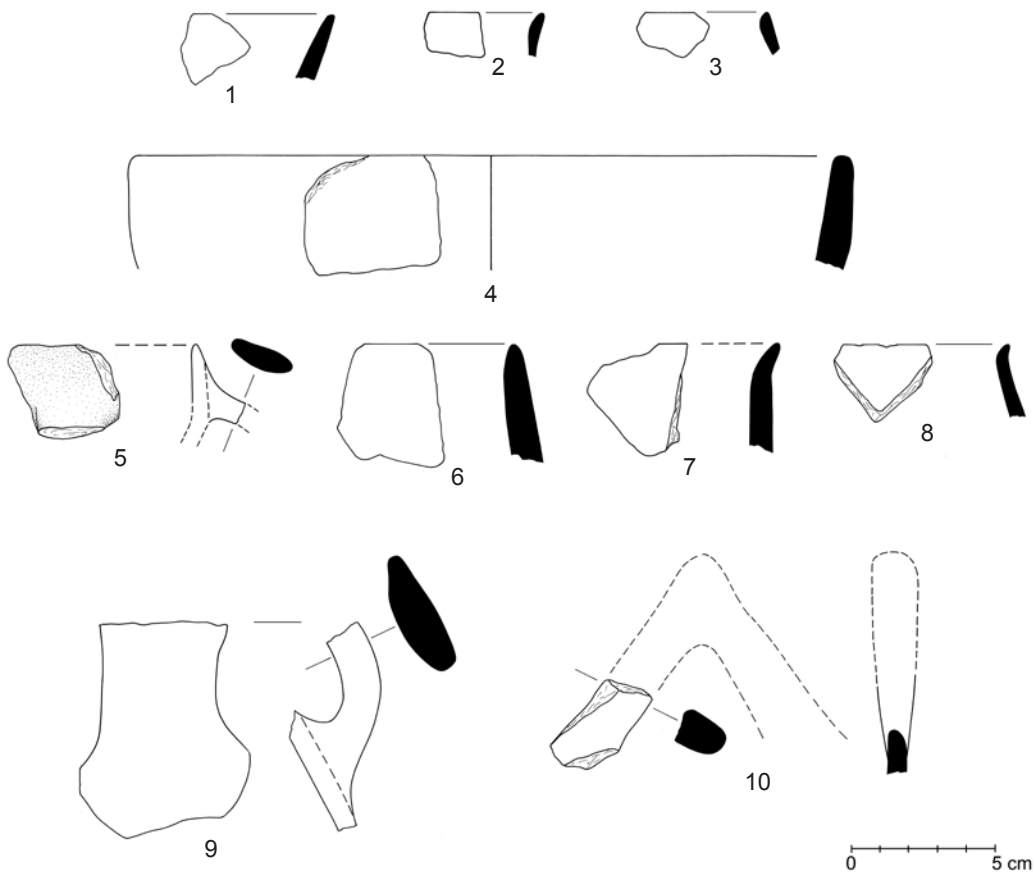


Figure 18. FN pottery: shapes in granodiorite-tempered fabrics. Drawing R. Docsan

are microscopic to 2.0 mm in size, and mostly have an elongated shape. Subangular, spherical, yellow to creamy white inclusions, up to 2.0 mm in size, cover less than 1% of surface areas. Soft red to brown inclusions with an eroded appearance are up to 1.0 mm in size and also cover less than 1% of surfaces.

Although the shapes and wares of the FN pottery are still to be studied and the material is in a very fragmentary state, some general observations can be made. While some vessels with phyllite-based fabrics have burnished surfaces (Fig. 17, top left), more examples of pots with highly burnished, glossy surfaces were found in granodiorite fabrics (Fig. 20). Such burnishing obscures the inclusions and creates rather hard and impermeable surfaces. Unburnished pots tend to have coarser fabric and clear indication of wiped interiors.[37] The majority of sherds belong to bowls of various sizes, including examples with flaring walls and tapering rims (Figs. 16:1–3; 18:1),[38] apparently deeper bowls with vertical walls and tapering rims

37. Unburnished wiped coarse ware is a characteristic feature of Knossos LN stratum I (Furness 1953, pp. 126–128; Manteli and Evely 1995, p. 9), a phase viewed by Nowicki as somewhat earlier than that represented by the settlement at Azoria (Nowicki 2003, p. 53).

38. These bowls are similar to examples from Nerokourou; cf. Vagnetti, Christopoulou, and Tzedakis 1989, p. 31, no. 55, fig. 19:55.

Figure 19. FN granodiorite-tempered fabric: exterior (left), interior (right). Photos C. Papanikolopoulos and M. S. Mook

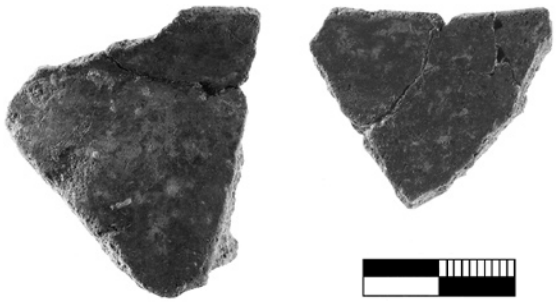


Figure 20. FN granodiorite-tempered fabric: burnished surfaces. Photo C. Papanikolopoulos

Figure 21. FN marble-tempered fabric: exterior (left), interior (right). Photo M. S. Mook

(Fig. 16:4–6),[39] examples having thin walls with internally thickened and slightly everted rims (Figs. 16:7; 18:2), small round ("hemispherical") bowls with thin walls (Figs. 16:8–10; 18:3),[40] larger bowls with a somewhat rounded profile (Fig. 18:4),[41] and bowls with carinated walls (Fig. 18:5).[42] One example of a small, rounded ("hemispherical") bowl or cup with everted rim was also recovered (Fig. 18:8).[43] Larger and deeper open vessels with either vertical (Figs. 16:11; 17, bottom)[44] or, more commonly, slightly

39. Cf. the hemispherical cups in Vagnetti 1975, pp. 64–65, fig. 62:11–17; Vagnetti, Christopoulou, and Tzedakis 1989, p. 29, no. 35, fig. 17:35; Nowicki 2003, p. 19, fig. 4:6, 7. The Azoria vessels are too fragmentary to distinguish between cups and bowls.

40. These bowls are similar to examples from Nerokourou (Vagnetti, Christopoulou, and Tzedakis 1989, p. 47, no. 162, fig. 28:162) and Katalimata (Nowicki 2003, p. 18, fig. 4:15, 16).

41. Cf. Vagnetti, Christopoulou, and Tzedakis 1989, p. 43, nos. 128, 129, fig. 25:128, 129.

42. Cf. Vagnetti, Christopoulou, and Tzedakis 1989, p. 33, nos. 62, 63, fig. 20:62, 63.

43. Cf. Vagnetti 1975, p. 65, figs. 63:4–8, 88:5; Nowicki 2003, pp. 18–19, fig. 4:13.

44. Cf. Vagnetti 1975, pp. 48–50, fig. 57:4, 15.

incurving walls (Figs. 16:12–17; 17, upper left; 18:6)[45] are well represented in the assemblage. Some jars and jugs (Fig. 16:18–20),[46] including examples of jugs with a sharply everted rim (Figs. 18:7; 20),[47] are present, as is a miniature version of a jar with rounded bottom (Fig. 16:21).[48] Body sherds with incised decoration also occur (Fig. 16:22),[49] as do both flat (Fig. 16:23, 24)[50] and slightly concave, articulated (Figs. 16:25, 26; 17, upper right) bases. Also represented is a variety of handle types,[51] including strap handles (Figs. 16:27, 28; 18:9; 19), small lugs (Fig. 16:29)[52], and one example of a wishbone handle (Fig. 18:10).[53]

THE CHIPPED STONE

A sample of the chipped stone found in the FN deposits at Azoria is illustrated in Figures 22–24 and keyed to a catalogue below (pp. 693–695). The assemblage is dominated by a locally available black chert, worked on-site to produce blades and bladelike products using a percussive technique (**7–23**). It also includes a small amount of nonlocal raw materials, including a limited quantity of good-quality red chert (**1–3**). Few modified pieces have been recognized, with the notable exception of three distinctive transverse arrowheads (**5–7**) and two retouched blades (**1**, **3**). While the Azoria assemblage is essentially local with regard to raw materials, its mainstay knapping tradition, a percussive blade technology, arguably forms part of a techno-typological *koine* that embraces not only Crete, but also the Cyclades and the southern Greek mainland. One major point of distinction remains, however, namely that Azoria has thus far failed to produce any obsidian, in stark contrast to most other FN sites in Crete and elsewhere at this time in the southern Aegean.

The FN deposits investigated in 2003–2004 produced 192 pieces of chipped stone, mainly black chert (172 pieces, 89.6%), followed by significantly smaller quantities of gray-blue chert (5), red chert (4), green chert/limestone (4), orange-white chert (2), green-blue chert (2), and

45. Cf. Vagnetti 1975, p. 50, fig. 57:17, 18; Vagnetti, Christopoulou, and Tzedakis 1989, p. 33, nos. 74, 75, fig. 20:74, 75.

46. Cf. Manteli 1992, pp. 107–109, 115–119, figs. 2, 3, 8–10.

47. Cf. Vagnetti, Christopoulou, and Tzedakis 1989, p. 33, nos. 70–72, fig. 20:70–72, and p. 49, no. 172, fig. 28:172; Manteli 1992, p. 118, no. 26, fig. 8.

48. For examples of full-size jars with rounded bottoms, cf. Manteli 1992, pp. 108, 117, nos. 20, 22, figs. 5, 7.

49. Simple incised decoration is also present in the assemblage from Nerokourou (Vagnetti, Christopoulou, and Tzedakis 1989, pp. 68–69) and more elaborate incision is found on vessels from Phaistos (Vagnetti 1975, p. 75, fig. 71).

50. Cf. Nowicki 2003, pp. 16, 19, fig. 4:1–5.

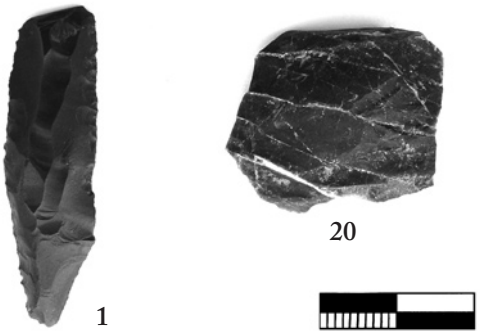
51. See Manteli 1992, pp. 109–110.

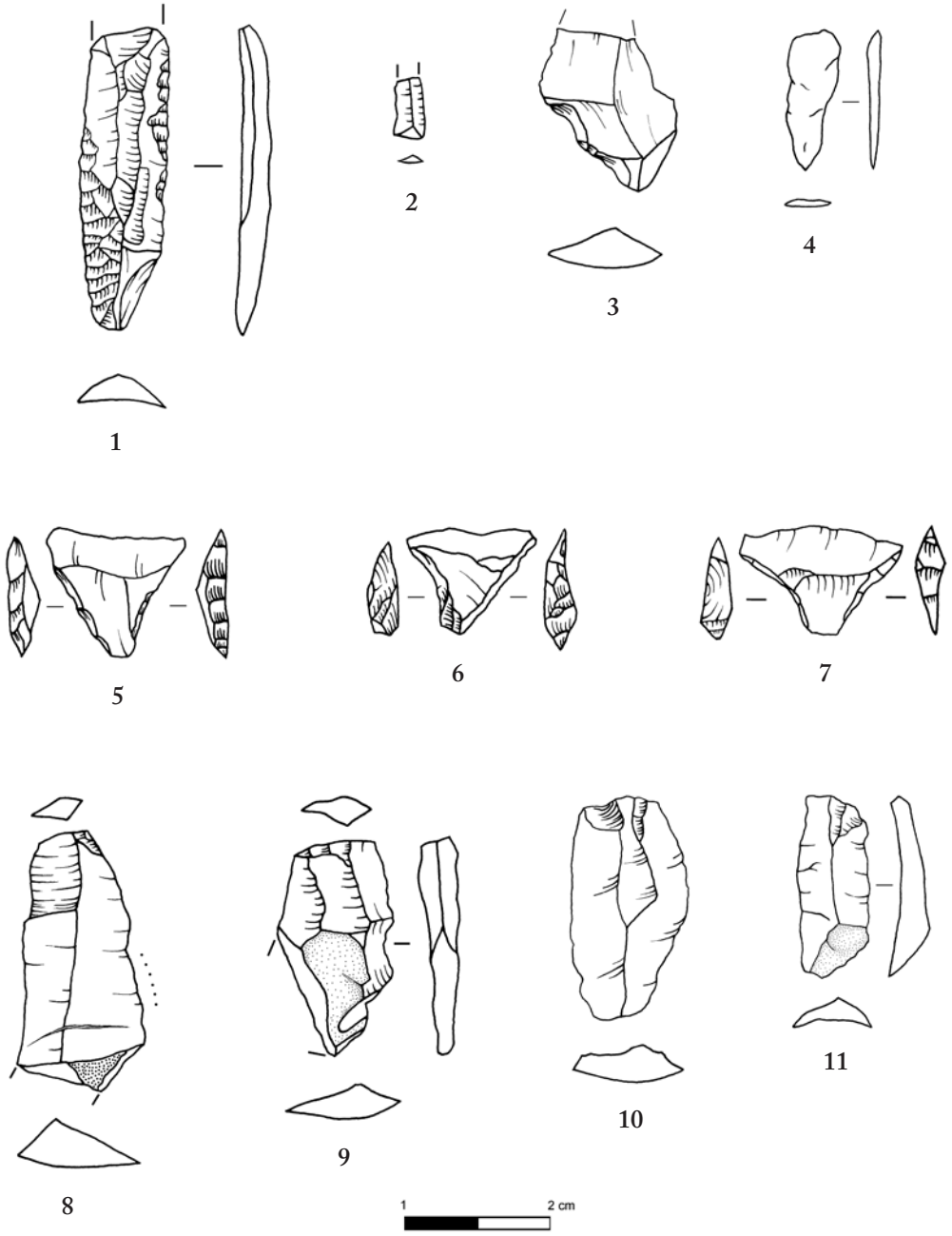
52. Cf. Vagnetti 1975, p. 69, fig. 68:3, 6, 7.

53. Cf. Vagnetti, Christopoulou, and Tzedakis 1989, pp. 41, no. 121, 45, no. 145, figs. 24:121, 26:145. Vagnetti (1996, p. 33) notes that the presence of wishbone handles in FN levels at Nerokourou marks a difference from Knossos, where they are considered type fossils of the Early Neolithic.

Figure 22 *(right)*. **Red chert retouched blade (1) and black chert flake (20).** Photo D. C. Haggis

Figure 23 *(below)*. **Chert blades and arrowheads 1–11.** Drawing M. Milić





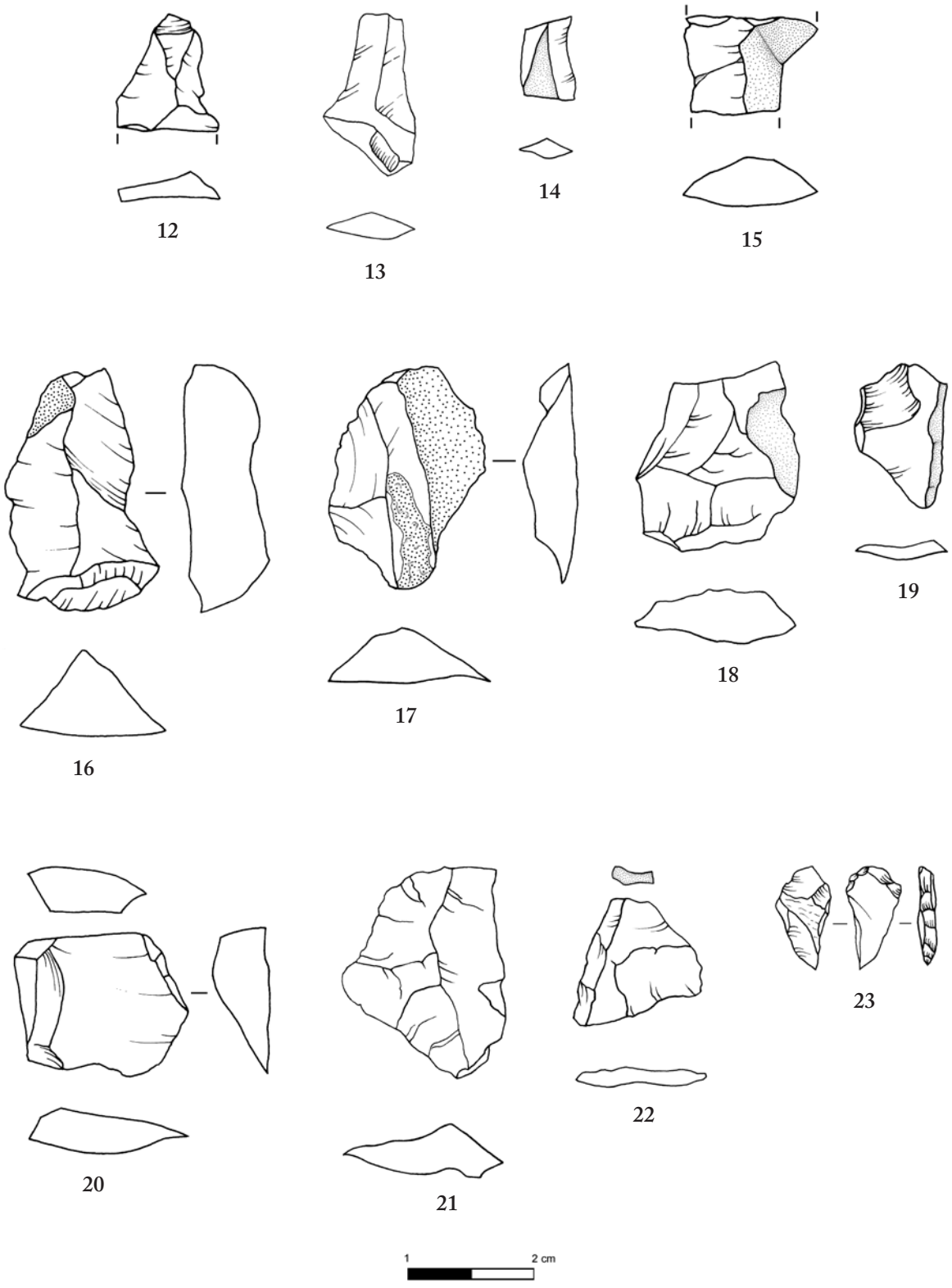


Figure 24. Chert blades and flakes 12–23. Drawing M. Milić

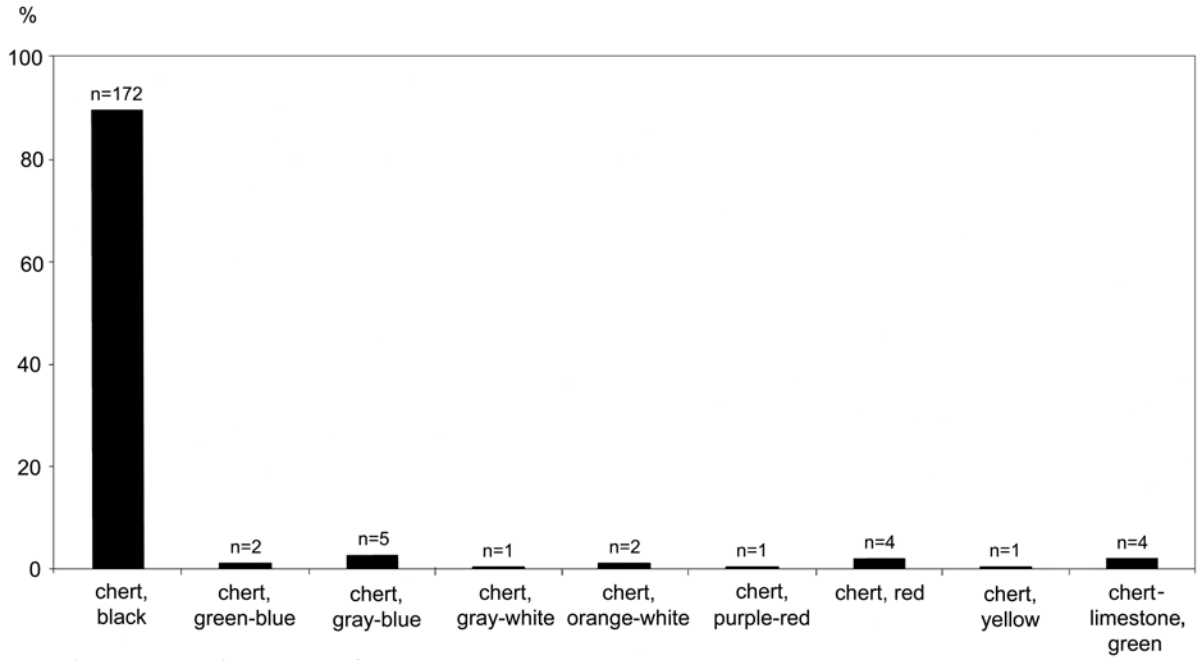


Figure 25. Raw materials represented in the 2003–2004 Azoria chipped stone assemblage (n = 192)

individual pieces of various other colored cherts (Fig. 25). Most of this material is thought to be local, based on its quantity and form, and on the local geology, the exception being the much finer grained red chert that may have been procured from some distance.

Black Chert

The black chert is relatively fine grained, often with white linear intercalcations (**20**; see Fig. 22) and a medium-to-good conchoidal fracture habit. It is a local resource, as nodules of black chert are available in the nearby Thriphti uplands above Azoria; the raw material may indeed occur closer to hand, although no examination of the site's immediate vicinity has yet been undertaken. This particular raw material represents one of a series of cherts that have been documented throughout this limestone-rich area of eastern Crete, from Vrokastro to Myrsini;[54] indeed, any part of the island with a karstic bedrock geology should produce chert of varying quality.[55] For instance, Franchet records the working of locally available gray-blue and gray-yellow limestones in the Trypti and Rouses area ca. 3 km east of Herakleion,[56] while a number of chert sources have been reported by more recent archaeological surveys. These include outcrops in the White Mountains of West Crete, the western Mesara, and the Sphakia region (including the Samaria gorge), where Nixon reports the occurrence of both black and gray cherts, the former in abundance.[57]

The black chert at Azoria was used to make short blades and bladelike flakes (**8–16**), with the presence of nodules, cortical debris, and shatter (the latter recovered primarily from water-sieved residue samples) indicating clearly that the resource was introduced as unmodified raw material and knapped on-site (Fig. 26). Typologically, most of the assemblage can be classified as unmodified flakes (**17–22**); as virtually none of these pieces

54. Cf. Durkin and Lister 1983, pp. 91–96; Haggis 1992, pp. 70–78; Hayden 2003, pp. 374, 386.

55. Cf. Blitzer 2004, p. 510.

56. Franchet 1917, p. 71, quoted by Strasser 1992, p. 20.

57. Moody 1987, p. 8; Nixon et al. 1989, 1990; Watrous et al. 1993, p. 223.

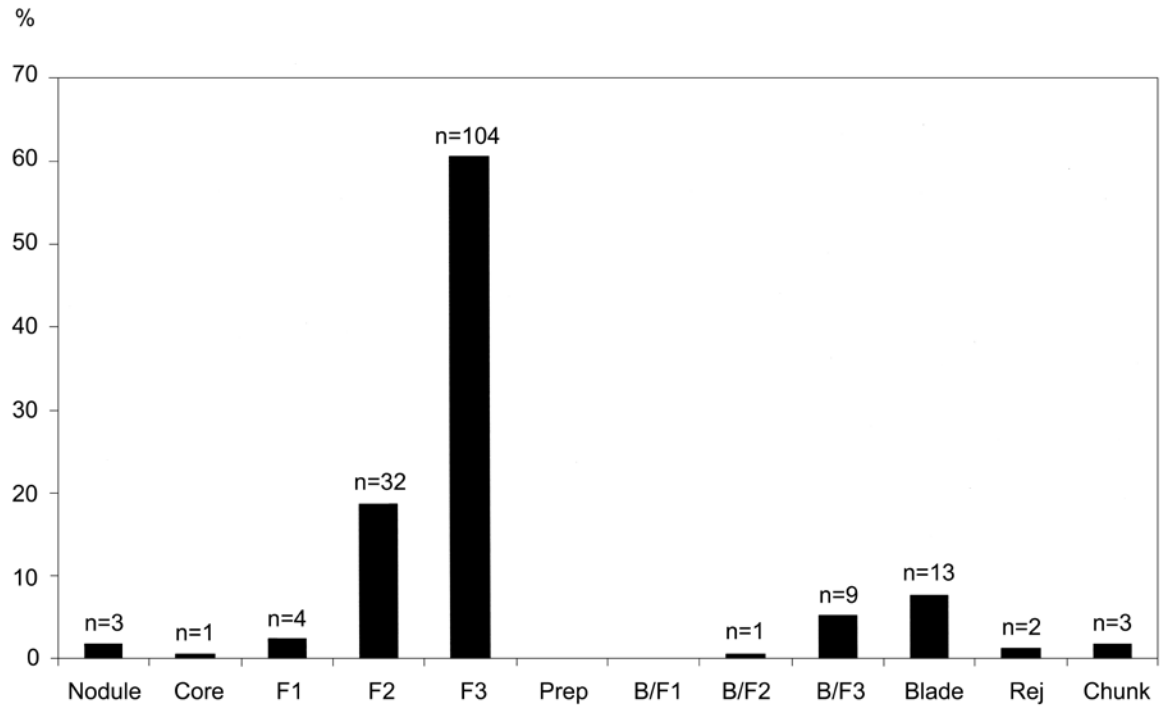


Figure 26. Structure of the Azoria black chert assemblage (n = 172). F1: flake with 80%–100% cortex; F2: flake with 5%–80% cortex; F3: flake with <5% cortex; Prep: preparation piece; B/F1: bladelike flake with 80%–100% cortex; B/F2: bladelike flake with 5%–80% cortex; B/F3: bladelike flake with <5% cortex; Rej: rejuvenation piece.

had been used, however, this material may represent the production debris associated with a somewhat nonintensive reduction strategy. A variety of features indicate that the blades were manufactured by a percussive technique, including the subparallel margins and dorsal ridges, together with the large bulbs of percussion that result from the forceful impact of the flaking tool. A few examples indicate the deliberate removal of a blade's lip by delicate flaking (**8**–**12**), a process that helps to counteract the concavity left in the core's face from the previous removal's bulb of percussion on the ventral surface. The blades were the product of a unipolar technology, that is, knapped from only one core platform that was left unprepared. With a larger sample, it might be possible to distinguish specific stages in the blade manufacturing sequence; at present, however, we have found only one possible primary series blade with remnant cresting scars (**9**). If indeed this does suggest the use of an artificial crest down the core's face to initiate the process of blade removal, it would link the Azoria chipped-stone industry to obsidian blade traditions of the later Neolithic Cyclades and mainland.[58]

While just over half of the black chert blades bore possible or definite traces of use, only one had been modified into a recognizable tool, specifically a "trapeze," or transverse arrowhead (**7**). It was made on the proximal section of a prismatic blade modified by inverse retouch and has traces of use, including step-scars,[59] a form of edge damage related to a percussive function, such as one associates with the impact of a projectile.[60] There are two further examples of trapezes/transverse arrowheads from the Azoria assemblage, one made of a green-blue chert (**5**) and another of a purple-red chert (**6**). These implements and their broader significance are discussed below.

58. Cf. Torrence 1979; Perlès 1984.
59. Cf. Grace 1989, p. 95.
60. Fischer, Hansen, and Rasmussen 1984.

Red Chert

The Azoria assemblage also included four pieces of a much finer grained burgundy red chert (Fig. 25), with a high-quality conchoidal fracture habit, represented by two blades, a bladelike flake, and a noncortical flake. One of the blades was of prismatic form with extremely fine retouch (**1**), while the other can be categorized as an unmodified microblade (**2**). Given their difference in size, it seems likely that these two blades derived from distinct knapping traditions; the regularity of the larger piece might suggest its manufacture using indirect percussion, with the force of the flaking implement being directed via a punch placed on the core's platform.[61] Despite its distinctive form, no parallel for the retouched blade has been found in Neolithic Crete. A bladelike flake had been retouched with two notches to produce a denticulated working edge (**3**).

The Azoria red chert is considered to be an import on the basis of its rarity, quality, and the absence of cortical pieces. One source of red chert is known from the western Mesara at the base of the Phaistos ridge, a raw material that is known to have been exploited by the local population(s) during the later Neolithic period.[62] Quantities of red chert, conceivably from the same source, came from two Prepalatial tholos tombs at Moni Odigitria (dated EM I–MM IA) in the southern Mesara, but most of this material is of poorer quality than the examples from Azoria. There is, however, a retouched blade of a fine-grained red chert from an EM IIA context at the West Court House, Knossos, that provides a close parallel to our material.[63] Nearer to the Azoria region, small amounts of red and red-green chert were found on the Drepani Akrotiri (on the north coast of East Crete between Milatos and Elounda), associated with FN and EM I sherds, though it is uncertain whether these materials were local or imported.[64] An important source and knapping site of black, red, and gray chert is the FN settlement of Goudouras Kastello in southeastern Crete. While the chert outcrops extend from Kastello south to Kastri, the bulk of worked materials are concentrated on the summit of the latter hill.[65]

In truth, the recurrent geological formations that run through the southern Greek mainland and Crete mean that numerous sources of red chert—impossible to discriminate on the basis of visual inspection alone—almost certainly exist. Beyond Crete, large quantities of red cherts and radiolarites have been collected by the Kythera Island Project and the Asea Valley Survey in Arcadia,[66] while a source of red chert has been documented recently in the Argolid near the village of Ayia Eleni, ca. 10 km south of the Asklepios sanctuary at Epidauros.[67]

61. Cf. Inizan, Roche, and Tixier 1992, pp. 59–60.

62. Watrous et al. 1993, p. 223; Blitzer 2004, p. 511.

63. Personal observation.

64. Nowicki 1999a, p. 578.

65. Although Nowicki (2003, p. 27) notes poor-quality chipped stone at Goudouras Kastello, Haggis, during a visit to the site in 1998, observed both natural outcrops and worked materials extending across the top of Kastello down onto the southern slopes of the site as far as Kastri.

66. Carter 2003.

67. Newhard 2001.

Other Materials

The Azoria chipped stone assemblage also included 16 pieces of other cherts (Fig. 25), including five flakes of gray-blue chert, four noncortical flakes of green cherty-limestone (of medium/poor quality), two pieces of orange-white chert (a flake and bladelike flake [**4**]), a bladelike flake of light, semitranslucent yellow chert, two noncortical flakes of green-blue chert, a part-cortical, gray-white chert flake, and a retouched blade of purple-red chert. For the most part, these pieces replicated in form and technology the larger black chert assemblage, dominated by flakes (part- and noncortical) together with four bladelike flakes, two of which had been carefully modified into transverse arrowheads, directly comparable to the aforementioned example in black chert. One was made of a fine-grained green-blue chert, the other of a purple-red chert (less fine grained and darker than the red chert), with oblique abrupt retouch along the proximal and distal truncations, together with a limited amount of inverse modification on the basal tip (**5**, **6**).

At present, it is impossible to tell how many distinct sources are represented by these different colored materials; in all likelihood, many of these pieces are closely related. In due course, it is hoped that more can be said about the origins and modes of consumption of these siliceous resources. It is sufficient at this point, however, merely to highlight their existence in order to remind ourselves that the limestone-rich landscapes that exist throughout the southern Aegean contain numerous sources of flint and chert,[68] whereby one has to reappraise the long-held opinion that obsidian was the dominant raw material for communities in these regions during the Neolithic and Bronze Age.[69] Admittedly these cherts are often of poor quality, certainly in comparison to the flints and radiolarites of northern Greece and the Balkans, but nonetheless for many prehistoric communities in Crete, the southern mainland, and elsewhere, there existed locally available sources of stone that were exploited for the manufacture of chipped stone tools. In Crete alone, handfuls of black, gray-black, gray-blue, and other colored cherts have been noted from sites such as EM I Kalo Chorio, EM I–IIA Poros-Katsambas, EM IIA Knossos (West Court House), MM II and LM III Malia (Quartiers Mu and Nu), and LM III Mochlos.

Production and Use

While the FN deposits at Azoria have thus far generated only a relatively small chipped stone assemblage, a number of preliminary statements can nonetheless be made concerning its form and significance. From the outset, it has been quite clear that the inhabitants of this community were manufacturing the vast majority of their chipped stone tools themselves, knapping on-site raw nodules of the locally available black chert. At present, the greatest quantity of material, together with the clearest evidence for tool manufacture, comes from Building 2 and the open space between Buildings 2 and 3 (trench B1700), which has produced the entire reduction sequence, from nodule and core, via flake debris, to the end-products/blades. In contrast, the Building 1 assemblage (from B700) consists of two blades and a quantity of part- and noncortical flakes, suggesting that the inhabi-

68. E.g., Jacobsen and Van Horn 1974, pp. 305–308; Séfériadès 1983; Moody 1987, p. 8; Blitzer 1992, pp. 713–715; Newhard 2003.

69. Torrence 1986, p. 22.

tants of this structure were only gaining access to ready-made implements and were not knapping in this area.

The FN inhabitants of Azoria employed a percussive technology (possibly direct percussion) involving a limited amount of core preparation, which appears to have resulted in the manufacture of only a few blades or bladelike flakes per core. Apparently most of these end-products (probably together with a quantity of the flake material) were then used without further modification; only three pieces of the local black chert were retouched, including a trapeze (**7**), a flake with simple linear retouch (**23**), and a possible perforator/borer made on the pointed end of a part-cortical flake. Perhaps a little surprisingly, the pieces of chipped stone made from other raw materials essentially replicate the form of those made from black chert, with the exception of the backed and notched blades of red chert (**1**, **3**).

Unfortunately, it is difficult to ascertain precisely what the Azoria chipped stone tools were used for on the basis of macroscopic inspection alone (using a hand lens with 10× magnification), as these cherts offer a far stronger working edge than does obsidian, whereby use-wear will probably only be discerned using microscopy.[70] The assemblage does, however, seem to be dominated by blanks that offer primarily linear edges, such as blades, suitable for longitudinal cutting motions. One might associate these implements with a range of domestic activities, such as the removal of meat from the bone, the cutting of plant materials (with the apparent exception of harvesting cereals), or craftwork such as the shaving or incising of bone, horn, or wood. Conversely, the material from Azoria does not seem to include any tools that offered a strengthened or thick edge suitable for transverse, scraping motions, such as those one would employ for the preparation of skins or for the planing of wood surfaces. While some of these tools were undoubtedly used for cutting meat, it should be noted that we do not have any tools with evidence for significant percussive edge-damage (such as *pièces esquillées*)—that is, nothing that looks like a butchery tool for the separation of joints or the splitting of bone. The assemblage also currently contains only one possible perforator/borer, another tool that one might associate with leather working.

The absence of scrapers and perforators contrasts with what one associates with FN obsidian assemblages on the mainland and the Cyclades (though perhaps not with what one sees in Crete); conceivably such tools were employed at Azoria, but were perhaps made from different materials such as bone. The bone awl (Fig. 5) from the alley between Buildings 1 and 2, mentioned above, is an example of such an implement. One might highlight the lack of notched pieces, with the exception of one purple-red chert blade (**3**), implements that one associates with delicate working of bone, wood, or horn (as spokeshaves)—an absence with potential chronological significance, as these are one of the most common types of retouched tool in subsequent EM obsidian assemblages. Finally, the Azoria assemblage has yet to produce any pieces with macroscopic sickle gloss, suggesting that the harvesting of silica-rich plant materials (such as cereals) was not a task undertaken using these chert implements. It should be noted, however, that chipped stone sickles are also remarkably rare in Bronze Age Crete, in contrast to the mainland and the Cyclades.

70. See Keeley 1980; Grace 1989.

The Chipped Stone Assemblage in Context

Perhaps one of the most striking aspects of the Azoria assemblage is the lack of obsidian. This absence might be anomalous for a number of reasons, however. First, we have come to believe that from the Late Neolithic onward, southern Aegean chipped stone assemblages should be dominated by obsidian (often 90% or more), the alleged result of Cycladic colonization in the 5th millennium, whereby far larger quantities of the Melian raw material were put into circulation than ever before.[71] In the case of Crete, Vagnetti and Belli have stated that in the Final Neolithic "the prevailing raw material for the chipped stone industry is obsidian, the use of flint and chert being very rare."[72] Indeed, the assemblages from Nerokourou, Phaistos, and Kephala-Petras are apparently all made up exclusively of obsidian.[73] In turn, obsidian tends to enjoy its most intense consumption among those communities located on the coastlines that face the Cyclades,[74] with a marked falloff as one moves into the interior, as demonstrated quite clearly in Crete by the results of the Akrotiri peninsula, Vrokastro, Lasithi, Ziros, and Sphakia surveys.[75] In this case, Azoria again appears to provide an exception to the rule, as it has a near-coastal location, but has yet to produce any obsidian.

Although one must be wary of overemphasizing negative data, the lack of obsidian at Azoria deserves comment. The above statements invariably represent a simplification of the archaeological record and in reality one should not talk of the southern Aegean, or even Crete, as a unified socioeconomic entity in the later Neolithic, or at any other period. Similarly, it would be a gross injustice to the data to think of a singular trade in obsidian at any one time, or that a handful of excavated sites might possibly reflect the activities of the contemporary mass. For example, new survey data from the island of Kythera indicate that maritime communities in this part of the southern Aegean enjoyed precious little access to obsidian until perhaps as late as the Early Bronze Age (EBA). Closer to home, a variety of surveys across Crete have produced evidence to suggest that here also, obsidian may not have enjoyed a relatively widespread usage and dominant role until the beginning of the EBA,[76] as for example witnessed at the EM I and EM IIA settlements at Kalo Chorio, Debla, Poros-Katsambas, the West Court House at Knossos, and Myrtos Phournou Koriphi.[77]

With regard to Azoria's specific location, that is, the north coastal plain and its upland hinterland, a number of surveys have provided data that suggest that this area in particular saw very little obsidian in circulation prior to EM I. The Vrokastro Survey has recorded numerous small communities of FN–EM I date, often coastal and with an eye on defense, analogous to Azoria.[78] While distinctions between FN and EM I components are not

71. Torrence 1986, pp. 13–15, 135–136; Perlès 1990, p. 32.
72. Vagnetti and Belli 1978, p. 153.
73. Vagnetti 1973, 1975; Christopoulou 1989; Papadatos 2004.
74. Carter 1999.
75. Watrous 1982, pp. 11, 38–66; Moody 1987, pp. 202–204, 298, fig. 6.4; Nixon et al. 1989, 1990; Hayden, Moody, and Rackham 1992, p. 339; Carter 1998; Hayden 2003, p. 398; Dierckx 2004, p. 50.
76. Cf. Moody 1987, p. 302.
77. Diamond 1974; Warren and Tzedakis 1974; Haggis 1996a; Dimopoulou 1997.
78. Hayden 2003, pp. 380–384; 2004b, pp. 45–46.

always clear, it does appear that the chipped stone assemblages of the earliest sites were dominated by chert, and only in the Early Bronze Age did these populations gain access to obsidian.[79] In turn, the Gournia survey located three FN sites, again occupying high, defensible areas, their associated chipped stone assemblages once more dominated by chert,[80] while the nearby excavations of the FN defensive site of Monastiraki Katalimata, overlooking the Cha gorge on the northern end of the Isthmus of Ierapetra, has also produced a chipped stone industry dominated by chert, though interestingly some obsidian flakes are also mentioned.[81]

One can thus begin to appreciate that within its immediate FN context—in an upland region of East Crete with a coastal aspect—Azoria's chipped stone assemblage appears quite typical. It follows that the obsidian-rich assemblages of Nerokourou, Phaistos, and Kephala-Petras might in fact be the exception rather than the norm in FN Crete; alternatively, these assemblages could be later in date, a chronological pattern that may be locally relevant. The preferential access to obsidian of the north-coast sites of Nerokourou and Kephala-Petras might be a reflection of the sites' locations, two primary points of entry into Crete at a time before sailing vessels were known.[82] Nerokourou might have procured its raw material through a network of exchange that included such well-connected Peloponnesian sites as the Alepotrypa (Diros) cave.[83]

Placing these three Cretan sites within the context of likely contemporary maritime routes further serves to deconstruct Crete's northern coast into intermittent "hot spots" of Aegean connectivity (loci with preferential access to trade winds, currents, landfalls, and harbors), interspersed by large stretches of coast whose inhabitants were unable to access directly off-island resources. These settlers may instead have been reliant upon much more indirect procurement of resources through contact with traders tramping along the northern littoral in their craft (longboats?), or by means of down-the-line exchange from these early nodal communities,[84] through a series of more localized exchange networks.[85] One might wonder if the appearance (and location) of these new, later Neolithic trading communities, with their preferential access to Melian obsidian, is a reflection of an increased level of contact between the islanders and Crete and/or the transportation of larger cargoes of obsidian, the result of new maritime technology—the longboat—and the accompanying prestige accorded those participating in long-distance exchange networks.[86] Once considered an innovation of the Early Bronze Age,[87] the longboat is now known to have a 4th-millennium heritage in the Aegean, as most graphically evidenced by the rock carvings of such craft at the FN site of Strophilas on Andros.[88]

Thus, although Azoria is located near the coast, this section of Crete's northern littoral in the Final Neolithic may have been a trading "desert" of sorts with regard to access to off-island products, whereby its inhabitants had to rely on lesser-quality local cherts to make their tools. Access to the Aegean alone did not necessarily facilitate access to off-island exotica at this time. Instead, the impression is that there were only a handful of well-connected communities in FN Crete, including those around the later sites of Chania and Petras, whose preferential access to off-island exotica may

79. Hayden 2003, p. 386; Dierckx 2004, p. 49.
80. Watrous et al. 2000, p. 474.
81. Nowicki 1999a, p. 575; 2000, p. 96.
82. Agourides 1997, pp. 10–11, fig. 5.
83. Cf. van Andel and Runnels 1988, pp. 236–238.
84. Cf. van Andel and Runnels 1988.
85. Cf. Renfrew 1972, pp. 442–443.
86. Broodbank 1989, 1993.
87. Renfrew 1972, pp. 356–357.
88. *Archaeo News* 2001; Televantou, forthcoming.

have in part been aided by their occupation of points of longboat entry and departure to and from Crete.[89] Two other important sites within this debate are Knossos and Phaistos, which perhaps offer a slightly different perspective on how Cretan FN communities were establishing and maintaining socioeconomic distinction through their exclusive access to nonlocal goods, knowledge, and practices. It would be a mistake to lump Knossos together with other north-coast sites, as its long-term heritage arguably makes this a unique and special community,[90] while the ability of FN Phaistos, an inland community, to procure significant quantities of obsidian indicates clearly that it was not only the north-coast sites that were able to access overseas resources. Social agency must be considered as a driving force behind the circulation and consumption of Melian obsidian in Crete, or elsewhere for that matter. During the Final Neolithic, Phaistos is already a large settlement,[91] distinct from other communities in the Mesara and elsewhere at this time. It is thus considered far from coincidental that while its chipped stone assemblage was dominated by obsidian, nearby contemporary settlements were far more reliant on local siliceous resources, as, for example, at the nearby site B7 at the base of the Phaistos ridge, whose implements were made primarily of chert.[92] Through time the socioeconomic geography of Crete changed, or was modified, in large part due to the introduction of the sail, a technology that allowed the Aegean to be traversed along different routes, opening up new interregional contacts. Thus, while the position of certain communities or locales was strengthened, as at Chania, Petras, and Knossos/Poros-Katsambas, we also witness the emergence of new, obsidian-rich, north-coast "gateway communities" by EB 2 or earlier, not least of which are Malia and Mochlos.[93]

One last significant factor should be considered when attempting to explain the apparent distinction between the Azoria assemblage and that of its north-coast "contemporaries," namely that of chronology. Given that the Final Neolithic of the southern Aegean lasts up to or longer than 1,000 years,[94] there is ample scope to argue that intersite distinctions in FN lithic technology are of chronological rather than geographical or social significance. Despite the duration of this period, archaeologists across the southern Aegean have had little success in subdividing it.[95] Indeed, at times the entire period has remained elusive, as for example at Knossos,[96] or difficult to distinguish from the earliest EBA horizon, evident in the recurrent use of the term "FN–EM I" in Crete.[97] Thus, any distinctions between the Azoria assemblage and those from Nerokourou, Kephala-Petras, or elsewhere must be considered in light of their relative position *within* the FN period.[98]

The preceding discussion has stressed the anomalous nature of Azoria chipped stone in a Cretan FN context; if, however, one shifts the focus from raw material to technology, then it could be argued that its assemblage becomes far more archetypal for the period. While the raw materials exploited by the FN communities of Azoria and Nerokourou were quite distinct, their knappers worked these stones in much the same technological tradition, by manufacturing blades using a percussive technique. Furthermore, a number of the blades illustrated from the West Cretan site have their lips deliberately removed by flaking, a distinctive trait that we also

89. Agourides 1997.

90. Evans 1994, p. 19; Soles 1995; Day and Wilson 2002.

91. Vagnetti 1975; Vagnetti and Belli 1978, pp. 127–128.

92. Watrous et al. 1993, p. 223.

93. Branigan 1991; Carter 1999, 2004.

94. Warren and Hankey 1989, pp. 6–13, 120–121; Manning 1994, p. 225, table 8.1.

95. See, however, French 1972; Sampson 1992, pp. 91–93; Vagnetti 1996; *Franchthi* X, pp. 64–95; Nowicki 2003, pp. 64–65.

96. Evans 1994, p. 19.

97. For examples, see Manning 1995, pp. 35, 42, 45; Betancourt 1999; Nowicki 1999a, p. 576; Watrous 2001, pp. 165–166; Hayden 2003, p. 372.

98. The work of Tomkins (2003) and Papadatos (2004) on the FN–EM I sequences at Knossos and Kephala-Petras is crucial to our understanding of these issues.

witness at Azoria.[99] The Nerokourou assemblage is similarly dominated by flake debris, with end-product blades a minority, as they are at Azoria; in both instances the majority of the blades were left unretouched. Among the small number of modified blades from Nerokourou, one example has retouch along the distal break, but nothing, unfortunately, that provides a true parallel for the Azoria transverse arrowheads.

Taking a broader perspective, one can also view aspects of the Azoria blade industry as forming part of a pan-southern-Aegean FN lithic tradition. One should be careful not to overemphasize the similarities, however, as it has long been known that obsidian percussive blade industries (albeit sometimes alongside pressure-flaked production) are typical both of the FN Cyclades (e.g., Kephala on Kea) and many areas of the southern mainland and Euboia (e.g., the Franchthi, Kitsos, and Skoteini caves).[100] Finally, we wait with interest to see if future publication of other Cretan later Neolithic assemblages provide us with further examples of arrowheads or spearheads, given the contemporary emphasis on such implements in the Cyclades and mainland.[101] The discovery of projectiles at Azoria also might be considered in the context of the numerous upland defensible sites established in FN Crete.[102] This line of inquiry can only help to shift the focus away from seeing points primarily as hunting tools[103] to considering the possibility of corporate violence and internecine warfare, a theme that is relevant in placing the Aegean into a broader European, later Neolithic/Chalcolithic context.[104]

The issues discussed above will no doubt be revisited as future investigation of FN settlement at Azoria generates a larger quantity of chipped stone; it would be unwise at this juncture to try to squeeze any further inferences out of what remains a relatively small assemblage. Whether an increased sample size will serve to clarify matters is debatable, however, for at present, Nerokourou remains the sole FN chipped stone assemblage to be published in any detail from Crete with which to contextualize the data from Azoria.

Catalogue

1 Red chert retouched blade Figs. 22, 23

(03-1143) Dim. 4.18 × 1.23 × 0.36 cm. Distal section of a prismatic blade, with continuous low, invasive, pressure-flaked retouch on the lower left dorsal edge, plus partial shorter retouch and/or use-wear on the upper right margin.

2 Red chert microblade Fig. 23

(03-1115) Dim. 0.82 × 0.47 × 0.10 cm. Distal section of an unmodified prismatic blade.

3 Red chert denticulate Fig. 23

(04-1213) Dim. 2.54 × 1.58 × 0.62 cm. Distal section of a bladelike flake with two notches on left margin.

4 Orange-white chert bladelike flake Fig. 23

(04-1169) Dim. 1.87 × 0.69 × 0.16 cm. Complete noncortical bladelike flake; unused and unmodified.

99. E.g., Christopoulou 1989, p. 76, fig. 56:7, 13, 19, 23, p. 70, fig. 58:80.

100. Torrence 1979; Perlès 1981, 1984, 1994.

101. *Keos* I, p. 5; Perlès 1981, pp. 175–186; Carter and Ydo 1996, pp. 151–152, 164–165.

102. Nowicki 1999a.

103. Evans and Renfrew 1968, p. 58.

104. Keeley 1996; Monks 1997; Chapman 1999; Kokkinidou and Nikolaidou 1999.

5 Green-blue chert transverse arrowhead Fig. 23

(04-1138) Dim. 1.84 × 1.71 × 0.49 cm. Medial section of a blade modified into a trapezoidal form by abrupt inverse retouch on proximal and distal break; use-wear visible on the left edge.

6 Purple-red chert transverse arrowhead Fig. 23

(04-1221) Dim. 1.76 × 1.47 × 0.45 cm. Medial section of a blade modified into a trapezoidal form by abrupt inverse retouch on proximal and distal break; use-wear visible on the long edge.

7 Black chert transverse arrowhead Fig. 23

(03-1204) Dim. 2.31 × 1.51 × 0.48 cm. Proximal section of a blade modified into a trapezoidal form by abrupt inverse retouch on the left shoulder and left distal break; use-wear in the form of step- and snap-scars visible on the right edge.

8 Black chert blade Fig. 23

(03-1141) Dim. 3.57 × 1.75 × 0.67 cm. Proximal section of a blade with lip removed by flaking; 5% remnant cortex and use-wear along right edge.

9 Black chert blade Fig. 23

(B1215.3) Dim. 2.86 × 1.65 × 0.39 cm. Complete part-cortical blade with lip removed by flaking and possible remnant cresting scars down right margin; possible use-wear.

10 Black chert blade Fig. 23

(04-1211) Dim. 3.14 × 1.67 × 0.49 cm. Complete blade with lip removed by flaking and possible use-wear.

11 Black chert blade Fig. 23

(04-1305) Dim. 2.50 × 1.02 × 0.39 cm. Complete part-cortical blade with lip removed by flaking.

12 Black chert blade Fig. 24

(B1217.1) Dim. 1.92 × 1.60 × 0.48 cm. Proximal section of a blade with lip removed by flaking.

13 Black chert blade Fig. 24

(04-1142) Dim. 2.56 × 1.44 × 0.41 cm. Complete part-cortical blade.

14 Black chert blade Fig. 24

(04-1177) Dim. 1.31 × 0.86 × 0.27 cm. Proximal section of a part-cortical blade.

15 Black chert blade Fig. 24

(B1216.2) Dim. 1.46 × 1.86 × 0.7 cm. Medial section of a part-cortical blade.

16 Black chert bladelike flake Fig. 24

(B1217.1) Dim. 3.99 × 2.46 × 1.23 cm. Complete part-cortical bladelike flake with possible use-wear.

17 Black chert flake Fig. 24

(03-1139) Dim. 3.56 × 2.52 × 0.82 cm. Complete part-cortical flake.

18 Black chert flake Fig. 24

(04-1224) Dim. 3.43 × 2.68 × 0.83 cm. Complete part-cortical flake.

19 Black chert flake Fig. 24

(04-1140) Dim. 2.34 × 1.45 × 0.29 cm. Complete part-cortical flake.

20 Black chert flake Figs. 22, 24

(03-1138) Dim. 2.56 × 2.52 × 0.82 cm. Complete noncortical flake.

21 Black chert flake Fig. 24

(04-1141) Dim. 3.54 × 2.57 × 0.78 cm. Complete noncortical flake with possible use-wear.

22 Black chert flake Fig. 24

(04-1179) Dim. 2.21 × 2.11 × 0.48 cm. Complete noncortical flake with possible use-wear.

23 Black chert flake Fig. 24

(04-1306) Dim. 1.08 × 1.52 × 0.32 cm. Complete noncortical flake with inverse retouch along right margin and shoulder and use-wear.

EVIDENCE FOR LATE PREPALATIAL OCCUPATION

Pottery dating to the Late Prepalatial period (EM III–MM IA) was recovered from the southwest corner of the South Acropolis, in an area forming a triangle between A800 in the north, B200 and B400 in the south, and D300 and D400 on the west (Fig. 1). The pottery consists of coarse wares, primarily fragments of cooking vessels and large jars or amphoras with trickle decoration.[105] Other evidence for Late Prepalatial activity includes three stone vessels from A1900, D200, and D300 (Fig. 27). Two rim fragments correspond to Warren's type 6. One is a squat bowl with a thickened and sharply carinated profile (Fig. 27:1; type 6A1)[106] while the other is taller, also thickened at the rim, but with a gently curving profile (Fig. 27:2; type 6B2).[107] A third fragment is the rim of a miniature goblet, Warren's type 29 (Fig. 27:3).[108] The material of all three vessels is black serpentine with intercalations of white and translucent calcium carbonate.[109] The weathered surfaces of the vessels are pitted and yellowish brown in color. The surface of the bowl with the curving profile has a dull, grayish green look and is covered with yellowish brown patches of eroding calcite.

Because the EM III–MM IA material was not derived from stratified deposits, it does not reveal a pattern sufficiently coherent to allow us to define the character of the settlement in this period. Given that the material seems to be confined to an area of ca. 800 m^2 (0.08 ha) in the southwest corner of the South Acropolis, it probably represents the remains of a single

105. Haggis and Mook (1993, pp. 273, 277–278) KTS types II and XX/XXI.

106. Warren 1969, pp. 17–18.

107. Warren 1969, pp. 18–19.

108. Warren 1969, pp. 72–74.

109. For a detailed macroscopic description of the serpentine used in Minoan vases, see Warren 1969, pp. 138–140.

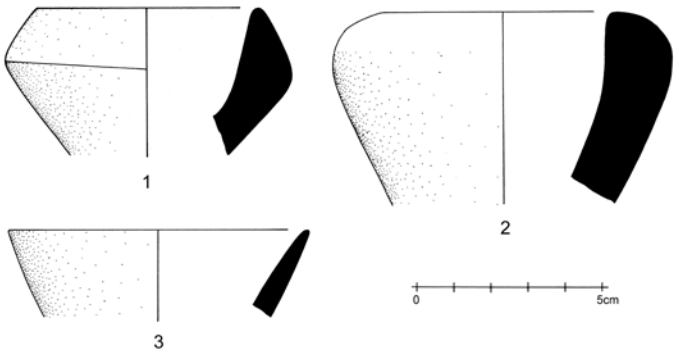


Figure 27. A1900, D200, and D300: Late Prepalatial stone vessels.
Drawing R. Docsan

hamlet. This size is in keeping with the evidence for small settlements of Late Prepalatial date elsewhere in the Kavousi area,[110] and very probably the Azoria settlement was part of a cluster of farmhouses or small hamlets in the area of the north Mount Papoura catchment. The evidence of Late Prepalatial settlement derived from survey in the broader Kavousi region indicates the development of new sites, the exploitation of new resources, and the establishment of patterns of land use and settlement structure that were to continue to develop into the subsequent Protopalatial period. Material patterns are reflected in the formation of site clusters in the coastal hills bordering the Kampos plain at Ayios Antonios and Chordakia, the establishment of the copper smelting site at Chrysokamino,[111] and the expansion of settlement into the mountainous area southeast of Kavousi village at Azoria, Vronda, and Chondrovolakes. Azoria and Vronda are equidistant (ca. 0.5 km) from the center of the catchment at Chondrovolakes, and it is likely that sites within the cluster shared land and water, as well as access to pastoral lands and other resources on the heights of Mount Papoura, which forms the northwestern edge of the Siteia Mountains. Given their proximity, aspect, and small size, the sites are likely to have been interdependent, perhaps settled by related kinship groups who shared economic interests.[112]

EARLY IRON AGE OCCUPATION

Material dating from LM IIIC to the LG period has been recovered in bedrock deposits from across the excavated area of the site, with substantial amounts coming from both the northeast and west slopes of the South Acropolis (see above, Fig. 1).[113] EIA pottery was most commonly recovered in the wall packing (that is, the fill behind spine walls that were built up against the natural or reworked bedrock contours) in both the Northeast Building and the *andreion* complex, suggesting that the entire northern area of the South Acropolis had been occupied continuously from LM IIIC to the Early Orientalizing (EO) period. The south slope has also produced indications of EIA occupation, particularly in the foundation deposits of the south slope houses. A segment of an early wall in B100 belongs to the Early Iron Age,[114] and a recycled LM IIIC pithos was recovered along with its Archaic counterpart in a 6th-century deposit at the northern end of the corridor in B300.[115] The EIA settlement seems to have also extended

110. For class 1 and 2 sites, see Haggis 1999, 2001, 2005.

111. Betancourt et al. 1999; Haggis 2005, pp. 65–69.

112. For the EM III–MM IA pattern of settlement in the Kavousi area, see Haggis 1999, 2002.

113. Haggis et al. 2004, pp. 365–366.

114. Haggis et al. 2004, p. 357.

115. Haggis et al. 2004, pp. 352–354, fig. 8.

onto the wide terrace south of the south slope houses, the area of the putative agora (Fig. 1). Here the evidence comes from the foundation deposit for the Cult Building in B2000/2100, where LM IIIC and EIA pottery was found consistently in the floor packing and bedrock deposits. While Protogeometric to Geometric phases were well represented in all areas of the South Acropolis, a detailed chronology of pre-Archaic occupation is admittedly difficult to reconstruct on the basis of displaced sherds surviving in secondary 7th- and 6th-century building deposits. It is also not surprising that evidence of LM IIIC occupation is identifiable across the excavated area of the site, because sherds of this period are the easiest to recognize on the basis of fabric and surface treatment alone. Individual sherds of Protogeometric, Subprotogeometric, Geometric, and Late Geometric, while recognizable, are also much harder to distinguish exclusively by fabric; usually a diagnostic shape or surface decoration is needed to make a closer attribution.[116] We therefore use the inclusive term "EIA" to indicate any number of phases from LM IIIC to LG. Given the evidence for continuity of habitation (the continuous stratigraphic accumulation and architectural development throughout the Early Iron Age) on the neighboring site of the Kastro,[117] we are reluctant to postulate gaps in the sequence anywhere at Azoria, pending the final study of the pottery. Excavation has confirmed that the EIA settlement extended over the entirety of the South Acropolis, and surface remains suggest a maximum size of ca. 6 ha. The configuration of houses and the organization of the settlement, however, are frequently obscured by the later 7th-century rebuilding, a process that evidently transformed the site's topography without regard to the orientation and physical foundations of the earlier structures.

The best-preserved evidence for EIA activity comes from the southwest terrace (Fig. 28). LM IIIC floor surfaces are preserved in B1200 and B1700 where they were constructed directly on top of the floors and foundations of FN buildings (Figs. 2, 28). These surfaces belonged to rooms that formed part of a series of LM IIIC buildings constructed along the full extent of the southwest terrace. Considerable LM IIIC pottery was also recovered in soundings in the adjacent rooms of the Service Building (B700 and B1500) between FN and Orientalizing–Archaic occupation levels, but the renovations to the terrace in the 7th and 6th centuries B.C. evidently disturbed the EIA phases, obliterating the LM IIIC floors.

In B1700, a short segment of a LM IIIC wall, surviving the Archaic rebuilding, was constructed over the southern end of FN Building 2 (Fig. 2). While there is insufficient evidence to reconstruct the entire room in its LM IIIC phase, excavation revealed a sequence of compacted floor surfaces indicating continuous use of the space throughout the EIA. By the 7th century, the room had been abandoned and subsequently converted into courtyard space that accommodated a semicircular construction containing a dump of animal bones (goat mandibles) in the northeast corner.

Architectural evidence for EIA occupation is extensive along the southwest terrace (Fig. 28). The 7th-century spine wall, serving as the east wall of the Archaic Service Building, retained the fill that supported buildings on the terrace above and to the east. The spine wall in B1500 was constructed up against the foundations of an EIA building or

116. For phasing, nomenclature, and ware groups from LM IIIC–EO, see Mook 2004.

117. Coulson et al. 1997; Mook 2004.

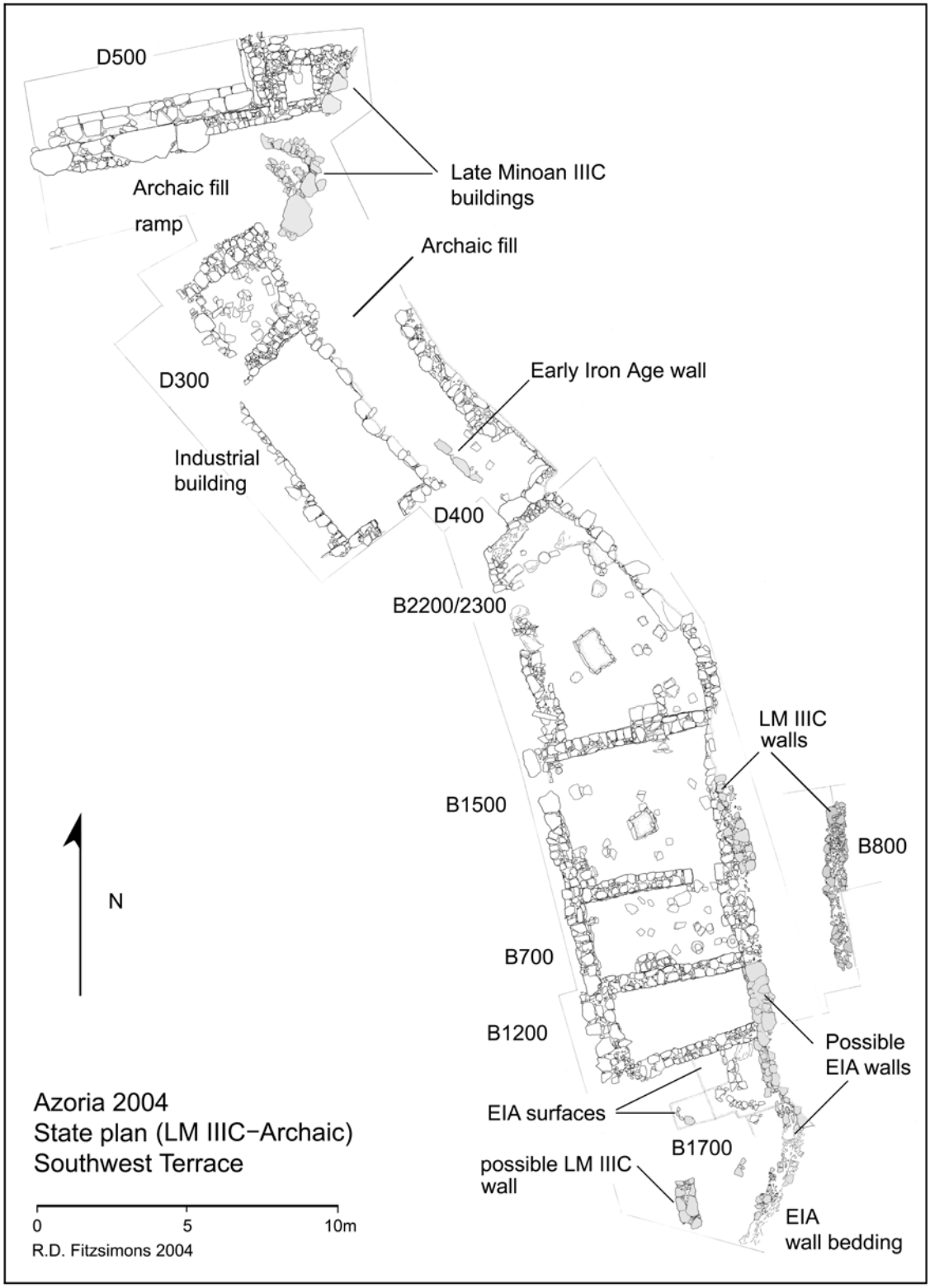


Figure 28. Southwest terrace: state plan showing the location of Early Iron Age buildings. R. D. Fitzsimons

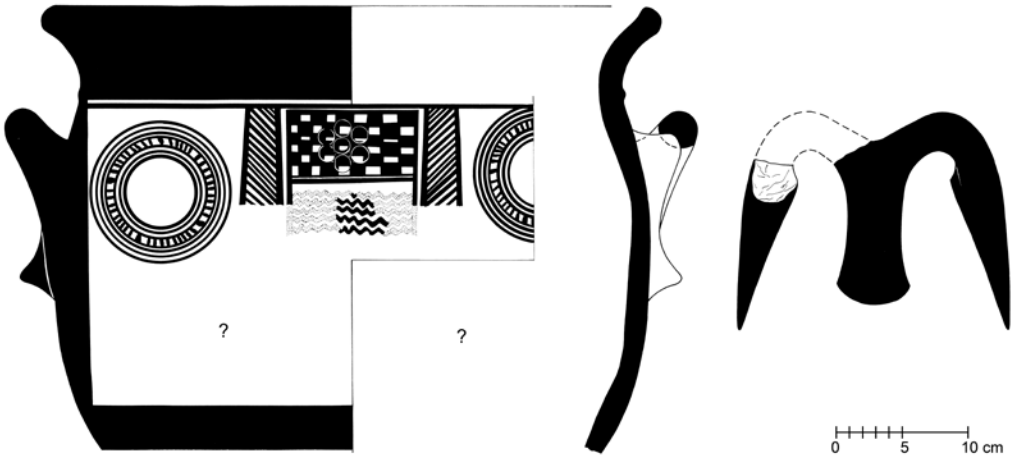


Figure 29. D400: Subprotogeometric–Geometric krater. Drawing R. Docsan

buildings; a 3 m long segment of the LM IIIC wall foundation is preserved above and to the east of B1500, while farther to the east in B800 there is another segment of wall, also of LM IIIC date. Underneath the Archaic storeroom in D400, where the 7th-century floor had eroded at the western edge of the room, excavation exposed a short segment of an EIA wall. Although we have not excavated sufficiently deeply in the area west of D400 to define the wall's foundations or surfaces, the associated pottery dates to LM IIIC and the Subprotogeometric–Geometric and LG periods. Furthermore, on the floor of the small 7th-century storeroom in D400 was a large Subprotogeometric–Geometric krater (Fig. 29), evidently recycled from the adjacent EIA building. Evidence of artifact recycling is apparent in other areas of the site, where EIA objects are retained and reused in Archaic buildings. An obvious example of this phenomenon is the LM IIIC pithos found in the corridor of the east corridor house in B300.[118]

In addition to the Subprotogeometric–Geometric krater in D400, recycled EIA objects were also found in other rooms of the Archaic Service Building. Of some interest are two fragmentary terracotta bovine figurines (Figs. 30, 31). While neither was found in its original EIA context, their presence may be related to activities along this slope in the LM IIIC and Protogeometric (PG) periods. The earlier figurine (Fig. 30:1) comes from a 7th-century floor surface in B1200. While the floor packing for the Archaic building contained a mixture of EO and EIA pottery, the figurine was recovered well above the LM IIIC occupation level, and it probably was displaced, if not intentionally recycled, during EIA and Archaic renovations on the terrace. The bull's head is about 6.6 cm in length, has a long, tapered snout with pierced nostrils, incision for the mouth, and smoothed beadlike projections for the eyes. Both horns are broken from the top of the head. The body is no longer extant, but the broken edge at the back indicates that it was hollow. The fabric, which is fine, bright pink with microscopic red- and gray-phyllite inclusions and pink buff slip, is a LM IIIC type local to the Kavousi region.[119] Traces of lustrous red paint remain on the surface. Decoration consists of circles accentuating the eyes, a blob of paint under the chin, a band behind the horns across the top of the head, and fugitive bands between the horns and eyes, possibly indicating a harness.[120]

118. The pithos is of a style and fabric common at Vronda in LM IIIC; see Haggis et al. 2004, p. 354.

119. Haggis and Mook 1993, pp. 275–276.

120. The painted decoration around the eyes and horns is a LM III feature that continues into the EIA. See Hayden 1991, p. 124; Kourou and Karetsou 1994, p. 87, fig. 7, p. 95, fig. 27, p. 104, fig. 58.

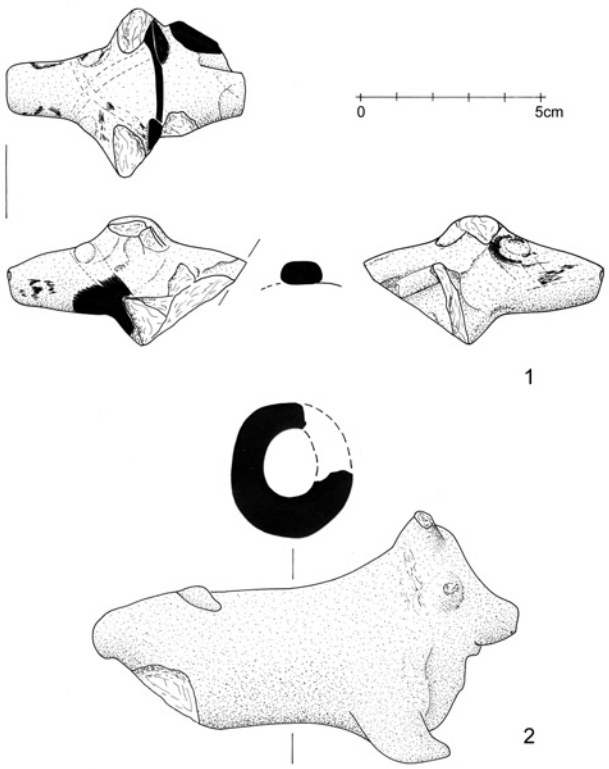


Figure 30. B1200 and B1500: EIA terracotta figurines. Drawing R. Docsan

Figure 31. B1500: EIA bovine figurine. Photos C. Papanikolopoulos

The shape is characteristic of LM IIIC–Subminoan (SM) figurines from Ayia Triada,[121] the rock-shelter sanctuary of Hermes Kranaios at Patsos in western Crete,[122] and in well-stratified LM IIIC contexts at Vronda.[123]

The second figurine (Figs. 30:2; 31) comes from the early-5th-century floor deposit in B1500, and thus represents another example of artifact recycling from EIA–Archaic contexts. It is a handmade bovine with a hollow body of local, coarse, pink clay with rounded and subrounded mudstone and quartz inclusions, and numerous chaff voids. Traces of a dark brown slip are preserved on the front. The head has a short, tapered snout with impressed holes for nostrils, a modeled mouth under the snout, and one

121. Banti 1941–1943, pp. 53–54, figs. 31, 34; D'Agata 1999, pp. 59–61, pls. 27:C1.46, 28:C1.56.

122. Kanta 1980, p. 204, fig. 85:3; Kourou and Karetsou 1994, p. 102, fig. 49, pp. 104–105, figs. 58–60.

123. Gesell, Day, and Coulson 1995, pp. 72–73, 80, pls. 18:b and 22:f; D'Agata 1999, p. 60, pl. 27:C1.53.

preserved short horn. The eyes are separate beads of clay with an impression in the center. A distinctive dewlap extends below the mouth down to the belly at the front, and the short tail curves around the backside, adhering to the side of the body. The preserved length of the piece is 11.85 cm and the height is 6.7 cm from the top of the preserved horn to the bottom of the front legs. The figurine is low and squat in appearance with short, stubby legs that turn forward at the ends. The short legs and horns, tapered snout, pronounced dewlap, and bead eyes are characteristic of PG and Geometric bovines from Olympia and Isthmia,[124] while the overall treatment of the head and tail closely resembles that of examples from PG–PGB contexts associated with Temples A and B at Kommos, and the EIA shrine on the southwest side of the Kastro.[125] The figurine, difficult to date closely on stylistic grounds, fits into a general class of Cretan bovine votives that dominates assemblages on the island from LM IIIC through the Orientalizing period.[126]

Excavation of the fill in the north area of D300 brought to light the corner of a LM IIIC structure sandwiched between the Archaic Monumental Civic Building and northern part of the Service Building (Figs. 1, 28). Its walls are constructed of large dolomite boulders on the east, and two to three courses of cobbles and small boulders on the north. A section of clay floor, a series of pavers, and a small bench (stone platform) were preserved in the corner formed by the walls. A small quern was found on the floor. The room's orientation is noticeably different from that of the surrounding Archaic installations: the walls run obliquely northeast–southwest and southeast–northwest. An extension of the room's megalithic east wall can be traced in a line to the northeast, where three dolomite boulders are visible in D500 behind the Monumental Civic Building. On the south, this megalithic east wall was evidently truncated by the construction of the Archaic building in D300.

The EIA architecture at the northern end of the southwest terrace represents the remains of at least three buildings that were partially destroyed during the construction of the Monumental Civic and Service Buildings. It is clear, however, that in the 6th and 5th centuries, the surviving walls belonging to these early phases would not have been visible. The Archaic builders made a conscious (and structurally unnecessary) effort to obscure the EIA architectural remains that were perhaps inconvenient to destroy (Fig. 28). In order to modify the slope and terrace to accommodate the foundations of the Service Building, the Archaic planners cut into the terrace, destroying or altering the form of an unknown number of earlier structures. What remains of these buildings are wall segments and large amounts of EIA pottery found in the fill forming the packing behind the Archaic walls. The northern and eastern Archaic walls in D300 were evidently built up against the remains of the EIA foundations. An ambitious filling operation involved constructing a wide earthen and rubble ramp between buildings in D300 and D500, and spreading layers of cobbles and gravel on the east between the spine wall and the east wall of the Industrial Building. This transformation of the existing EIA topography effectively covered the extant remains of LM IIIC–LG buildings on the slope, obscuring all but the tops of the dolomite boulders.

124. Heilmeyer 1972, pp. 10–14.

125. Shaw 2000, pp. 137, 176–177; the shrine at Plai tou Kastrou is probably PG–Geometric in date (Boyd 1901, p. 149, pl. 5:g); cf. an example from Ayia Triada dated LM IIIC–SM (Banti 1941–1943, pp. 53–54, fig. 33).

126. Prent (2005, pp. 390–395, 649–650) discusses the Cretan preference for bovine figures and figurines, and the continuation of patterns of votive behavior from the Bronze Age into the Early Archaic period.

THE EARLY IRON AGE POTTERY

The pottery from LM IIIC through the Late Geometric, like that from earlier periods on the site, is rather fragmentary, with surfaces in poor condition. The LM IIIC fine and coarse pottery is the most distinctive and widely represented of the EIA periods on the site and is closely paralleled by the LM IIIC ceramics from the nearby sites of Kastro, Vronda, and Chalasmenos. As is the case with the pottery from the Kastro,[127] the deep bowl is the most frequently represented fine ware shape at Azoria (Fig. 32:1–9, 12–17), although the absence of preserved handles makes it difficult to distinguish deep bowls from cups. Profiles of deep bowls range from fairly straight walled (Fig. 32:2, 3, 5) to slightly flaring (Fig. 32:1, 4, 6–9), sometimes with internally thickened or slightly everted rims. Rim diameters range approximately from 14 to 18 cm. Fabrics tend to be very well levigated and surfaces, where preserved, are generally slipped and polished. The poor state of surface decoration permits little comment, but some examples appear to be coated with a monochrome slip on the interior and exterior (Fig. 32:2, 6),[128] while others preserve vestiges of the characteristic exterior rim band (Fig. 32:3, 5, 8). Some deep bowls may have had interior reserved disks at the bottom and reserved bands near the rim that are no longer identifiable.[129] Bases from deep bowls include some examples of the typically early flat and raised type (Fig. 32:12),[130] but the most common is raised, hollowed, or concave underneath, with a pronounced torus-type foot (Fig. 32:13–17).[131] Deep bowl bases are usually decorated with a band on the exterior (Fig. 32:14–17), and sometimes with a band encircling the underside of the foot (Fig. 32:14, 15, 17). Cups have thus far been identified only by their handles (Fig. 32:10, 11), while a kylix is represented by one banded stem that is partially pierced (Fig. 32:19)[132] and a "champagne cup" or goblet by its preserved stem (Fig. 32:18).[133]

Other LM IIIC vessels include a fragment of a large krater decorated with a spiral motif (Fig. 32:20),[134] fine and medium-coarse lekanes with the characteristic ribbed carination below the rim (Fig. 32:21, 22),[135] and a

127. Mook and Coulson 1997.

128. Because of the poor preservation, apparently monochrome fragments of deep bowls or cups may in fact have belonged to blob-decorated vessels, examples of which are known from the Kastro (Mook and Coulson 1997, pp. 347, 354, figs. 8:25, 11:29, 18:76–80).

129. Deep bowls from the Kastro were decorated with a reserved band on the interior in phases I–II and more commonly in phase III; Mook and Coulson 1997, pp. 345, 359–361.

130. Mook and Coulson 1997, p. 345, phase I.

131. Cf. Day and Snyder 2004, p. 69, fig. 5.6:4–6; Tsipopoulou 2004, p. 120, fig. 8.11:92-10, 92-137, 95-365.

132. Cf. Mook and Coulson 1997, p. 361, fig. 38:168; Day and Snyder 2004, p. 71, fig. 5.11:1, 2, 7.

133. Cf. Mook and Coulson 1997, p. 361, fig. 38:167; Day and Snyder 2004, p. 69, fig. 5.6:2, 3.

134. Cf. Mook and Coulson 1997, p. 357, fig. 32:144, 145.

135. Fig. 30:22 is in a typical LM IIIC medium-coarse fabric from the Kavousi area, KTS type XI (Haggis and Mook 1993, p. 276; Mook 2005, p. 171). Cf. Day, Coulson, and Gesell 1986, p. 372, fig. 8:16, pl. 82:b; Tsipopoulou 2004, p. 120, fig. 8.12:92-68.

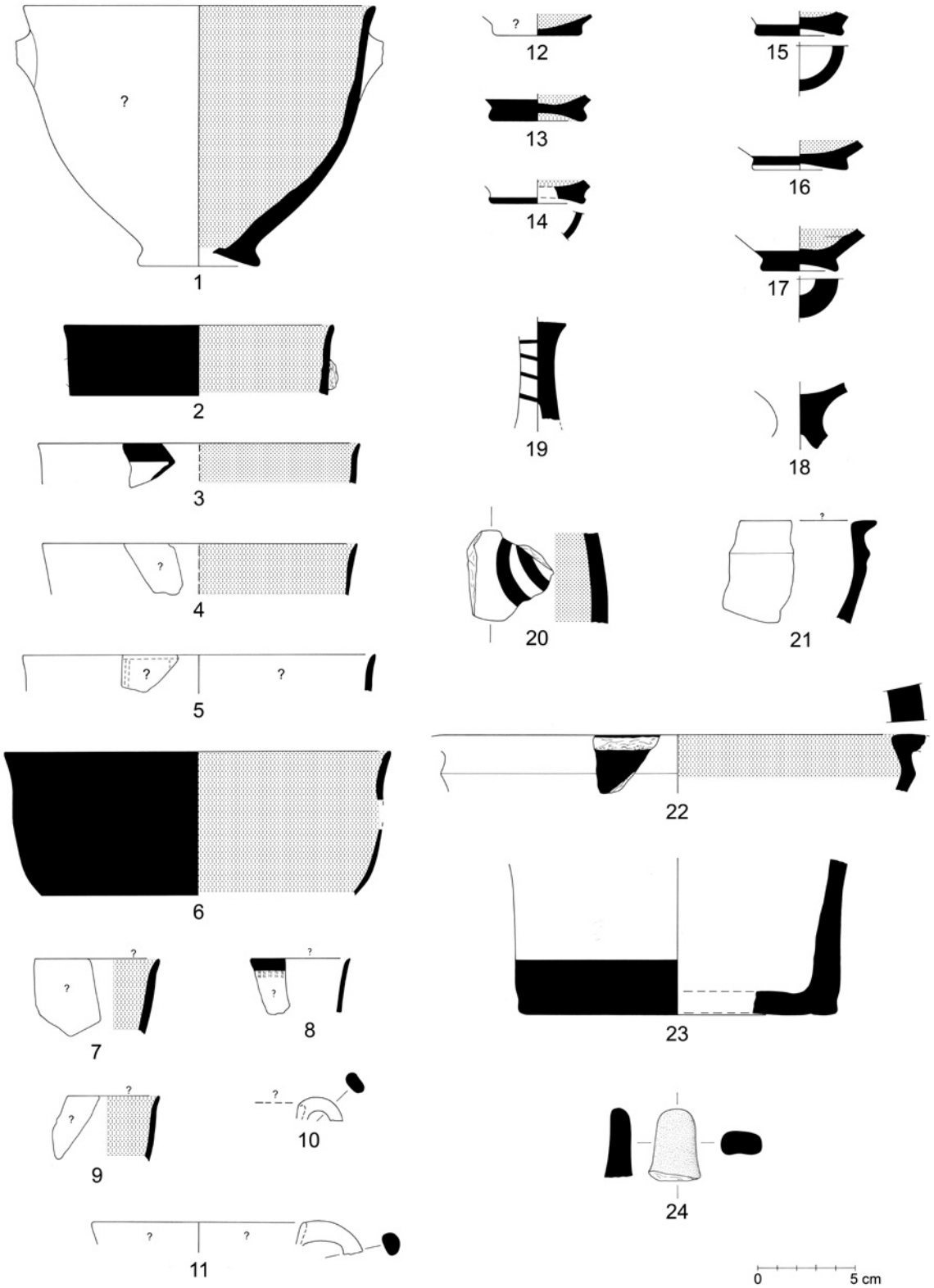


Figure 32. Selected LM IIIC fine pottery. Drawing R. Docsan and D. Faulmann

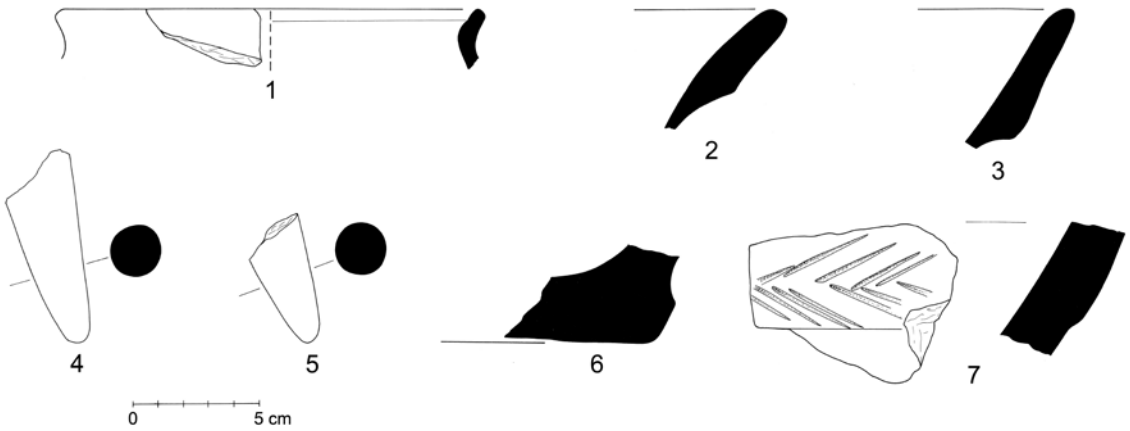


Figure 33. Selected LM IIIC cooking and storage pottery. Drawing R. Docsan

pyxis (Fig. 32:23).[136] A fragment from the tiara of a "goddess with upraised arms" type of figurine is a remnant of cultic equipment well represented in the excavated shrines at Vronda, Kephala-Vasiliki, and Chalasmenos.[137] This figurine fragment is made of the slipped phyllite-quartzite fabric most commonly used for the figurines found at the shrine on Vronda.[138] The recovered LM IIIC cooking and storage pottery included numerous examples of tripod cooking pots with everted rims and round-sectioned feet (Fig. 33:1, 4, 5),[139] cooking dishes (Fig. 33:2, 3),[140] and pithoi, including several decorated with bands of incised chevrons or herringbone pattern (Fig. 33:6, 7).[141]

Identifiable PG pottery consists exclusively of fragments of dipped bell skyphoi: conical feet with reserved interiors and everted rims with rather thin walls (Fig. 34:1–3).[142] As noted above, a large krater, with a rim diameter of ca. 45 cm, was found within D400 (Fig. 29). While the closest parallels in decoration are found on kraters from Knossos dated to PGB,[143] certain features and aspects of the regional sequence suggest that a slightly later date is appropriate. The decorative panel is placed within a reserved zone between the handles, while the handles fall within the area of solid black, more akin to the decorative schemes found on mainland/Attic Early Geometric (EG) and Middle Geometric (MG) kraters.[144] Within the reserved area, concentric circles flank an elaborate central panel framed by hatching. One band of interior hatching or billets is located within each set of concentric circles, which appear to lack any central filling motif. Between

136. Cf. Day and Snyder 2004, p. 75, fig. 5.13:5, 6.

137. Gesell, Day, and Coulson 1988, pp. 289–290, pl. 78; Eliopoulos 2004, p. 87, fig. 6.6; Day et al. 2006, pp. 140–143, fig. 1:a, b; Tsipopoulou, pers. comm.

138. KTS fabric type XI; cf. Day 1997, pp. 401–403, fig. 11.

139. These are most commonly in KTS fabric type IV (Haggis and Mook 1993, p. 274; Mook 2005, pp. 169–170). Cf. Mook and Coulson 1997, p. 349, fig. 17:39; Tsipopoulou 2004, pp. 108, 115, fig. 8.7.

140. Cf. Mook 1999; Tsipopoulou 2004, p. 115, fig. 8.9:96-426, 92-28-1.

141. Both fragments illustrated in Fig. 31:6, 7 are made with KTS fabric type X (Haggis and Mook 1993, pp. 275–276; Mook 2005, p. 171), widely used for LM IIIC pithoi found both on the Kastro and at Vronda (Mook and Coulson 1997, pp. 361–362, fig. 35:154; Day and Snyder 2004, pp. 65–67, figs. 5.3, 5.4). Cf. Tsipopoulou 2004, p. 108, fig. 8.3:92-70.

142. Cf. Mook 2004, p. 169, fig. 12.8.

143. Coldstream and Catling 1996, pp. 369–370; Coldstream 2001, pp. 46–51, fig. 1.13:c. A somewhat similar scheme of circles flanking a central panel is also found on PGB bell kraters from Kommos (Callaghan and Johnston 2000, p. 220, no. 60, 229, no. 166, pls. 4.6:60, 4.12:166).

144. Coldstream and Catling 1996, p. 375.

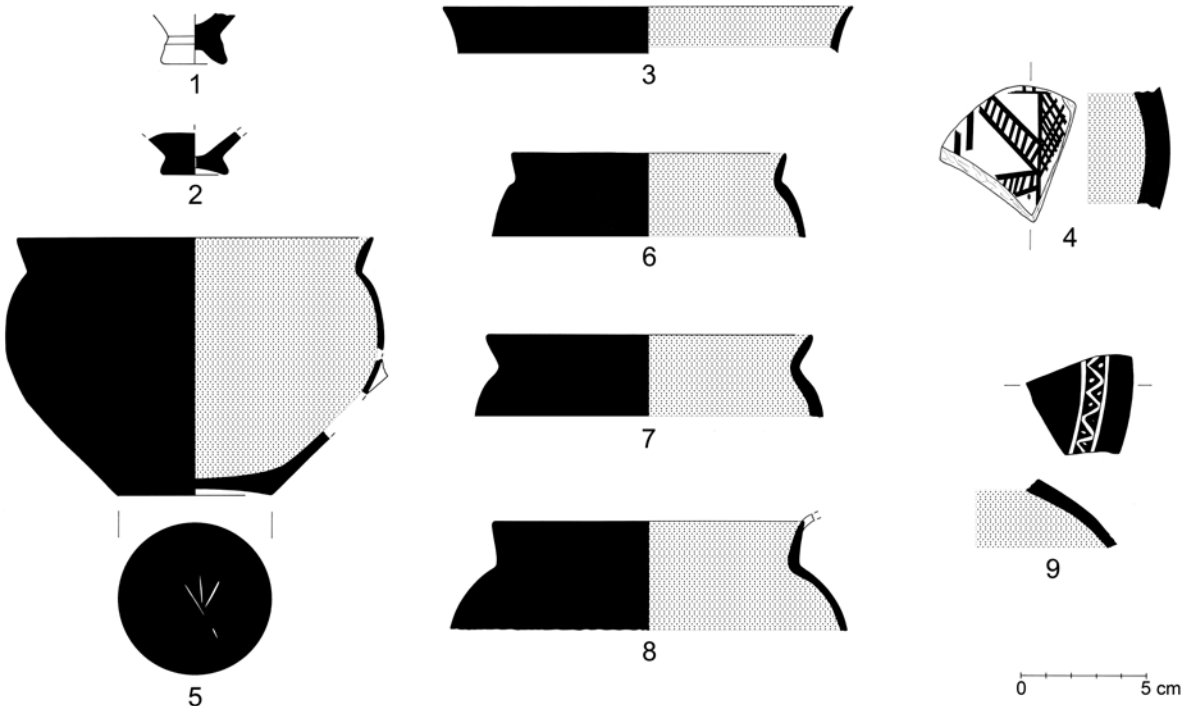


Figure 34. Selected EIA pottery.
Drawing R. Docsan and D. Faulmann

the hatched frame, the central panel contains a series of wavy lines topped by a checkerboard pattern, and off center in the checkerboard pattern is an overlay decoration consisting of a six-petal rosette. The rim, offset above a ridge, is not the typical PGB splaying type, but instead is only slightly thickened and hollowed on the interior. The double handles with a central bucranium on each side of the krater are found on some Knossian kraters dated to PGB,[145] typical of the mainland/Attic type.[146] This krater is best situated within the Subprotogeometric–Geometric phases of the Kavousi region.[147] A fragment from a dark-on-light Geometric krater with hatched and crosshatched motifs was also recovered (Fig. 34:4).

Black monochrome-coated cups are the most frequently occurring LG shape at Azoria (Fig. 34:5–8).[148] Surfaces are coated with matte black slip, apparently dipped. These are large cups with thin walls and offset rims, sometimes sharply everted.[149] Rim diameters range from ca. 11 to 14 cm, and some examples were probably quite deep (the restored cup, Fig. 34:5, has a height of ca. 10 cm). Bases are plain and often slightly concave. A domed lid decorated with a dotted zigzag band is one of the few examples of added-white decoration preserved (Fig. 34:9); it dates to LG–EO.[150]

145. Coldstream and Catling 1996, p. 36, no. N2, pl. 70; Coldstream 2001, pp. 47, 51, fig. 1.15:d.

146. Coldstream and Catling 1996, pp. 374–375.

147. Mook 2004, pp. 169–173.

148. Mook 2004, p. 173, fig. 12.11; Tsipopoulou 2005, pp. 422–424, fig. 125.

149. For similar LG examples, see Coldstream 1972, pp. 85–87, fig. 8: E4, F17, F18; Coldstream and Catling 1996, pp. 387–388; Coldstream 2001, pp. 55–57.

150. Cf. Coldstream and Catling 1996, pp. 329–330; Coldstream 2001, pp. 33–35, fig. 1.7:a–e.

CONCLUDING COMMENTS

The evidence for the Final Neolithic period at Azoria indicates long-term occupation and multiple phases of rebuilding. While the number and configuration of houses across the site and the details of ceramic phasing within the period cannot yet be determined, the excavation samples have produced sufficient evidence to reconstruct a village-size settlement with an open plan. Houses were probably tightly grouped in clusters with narrow alleys between buildings and partially paved open spaces functioning as common multipurpose work areas. The pottery assemblage is dominated by phyllite-quartzite and micaceous fabrics confirming local production, perhaps at the site itself. The presence of granitic-dioritic fabrics (22% of the total sample from B1200) indicates that the FN settlement was in close contact with neighboring communities across the Isthmus of Ierapetra to the west. The most likely geological sources of this temper are the granodiorite outcrops in the areas of Kalo Chorio and Istron, although similar outcrops are found as far east as Gournia and as far west as the Kritsa valley. The existence of substantial amounts of the granodiorite wares in the Azoria assemblage is an indication of active exchange between communities along the Mirabello coast.

The FN pottery is formally similar to material recovered in excavations and surveys in the areas of the north isthmus and Kalo Chorio, as well as farther afield in eastern Crete.[151] While the vessel shapes from Azoria correspond generally with those in the FN sequences at Phaistos and Nerokourou,[152] the definition of chronological phases and regional styles of FN pottery remains problematic, and it is not possible at this stage of study to assign a specific absolute date for the Azoria pottery. Two characteristics of the artifact assemblage are, however, noteworthy and may provide clues to chronology. First, the overwhelming dependence at Azoria on local chert for chipped stone tools, and the complete absence of obsidian, may support an early FN date. At Nerokourou, which according to the excavators represents a late phase of FN, the stone assemblage is entirely obsidian.[153] The surface collection from the nearby FN–EM II site of Alykomouri and its adjoining rock shelter at Ayios Antonios produced only obsidian.[154] In stratified EM I levels at Kalo Chorio, of the 81 examples of chipped stone, 75 were pieces of obsidian and only six of chert, all finished implements.[155] Even though such evidence could point to a later FN and FN–EM I connection to routes of the Aegean obsidian trade, the presence or absence of obsidian and chert on any FN site should be dependent on a number of variables as outlined above: availability of source material, proximity to exchange routes and links to the Aegean, local social practices, and regional economic systems. The correlation is, nevertheless, very interesting, given Azoria's proximity to the coast and the unequivocal dominance of Melian obsidian in the FN and EM I record elsewhere in this area of Crete.

The second piece of evidence is also negative. Nowicki has recently pointed out the similarities between ceramic assemblages at Azoria and Katalimata, arguing that both fit well into Vagnetti's early FN (Nowicki's FN I) classification at Phaistos.[156] One important distinguishing charac-

151. Manteli 1992; Branigan 1999; Hayden 2003; Nowicki 2003; Papadatos 2004.

152. Vagnetti 1975; Vagnetti and Belli 1978; Vagnetti, Christopoulou, and Tzedakis 1989.

153. Vagnetti, Christopoulou, and Tzedakis 1989, pp. 75–85, 88.

154. Haggis 2005, pp. 98–99.

155. Haggis 1996a, p. 680.

156. Vagnetti 1975; Nowicki 2003, pp. 20, 53–63.

teristic and apparently ubiquitous component of late FN assemblages is the so-called cheese pot, a coarse bowl with a row of holes below a beveled or rounded rim.[157] These pots are absent at Azoria and Katalimata, but well represented at local FN–EM I sites at Kavousi village, in the Ayios Antonios valley, and in EM I deposits at Kalo Chorio.[158] The FN settlement at Azoria appears to have been inhabited and abandoned early in the period, with the FN population relocating to lowland sites within or near the Kampos plain and the Mirabello coastal zone. Sites such as Kavousi village and Alykomouri were occupied late in FN and continued into EM I–II.

The Late Prepalatial settlement at Azoria was significantly smaller than its FN predecessor, and the material pattern fits well with the picture derived from intensive survey. A small group of houses evidently occupied the southwest corner of the South Acropolis, facing west, the direction of two other sites of EM III–MM IA date in the well-watered and fertile hills behind Kavousi village. These sites formed a cluster of interdependent hamlets centering on the springs formed at the juncture of limestone and phyllite dividing the foothills south of Kavousi. The expansion of settlements into the Kavousi mountains at the end of the Early Bronze Age represents a break from the EM I–II pattern of nucleated sites on low hills above the Kampos plain. The regional pattern in the Late Prepalatial period is decidedly dispersed: clusters of farmhouses and small hamlets are situated in close proximity to arable land and perennial water supplies, positioned to exploit new agricultural and pastoral resources. Even though the site of Azoria is evidently abandoned after this Late Prepalatial phase, the immediately surrounding areas of Avgo, Chondrovolakes, and Xerambela continue in use into the Protopalatial period, showing an expansion of settlement.

The Early Iron Age settlement at Azoria covered an area of the South Acropolis as large as that occupied by the later Archaic civic complex, although the precise size of the site across the LM IIIC–LG span is as yet uncertain. Based on the evidence from surface survey, we estimate a size of 6 hectares—10 times the size of neighboring EIA settlements. While an expansion of settlement at Azoria in the Protogeometric cannot yet be demonstrated conclusively, the consistent presence of PG–LG material in foundation deposits indicates that it was a substantial settlement, fitting our general picture of PG sites elsewhere on the island.[159] An interesting result of the stratigraphic excavation of pre-Archaic levels is the evidence it has produced for changes in the structure of the settlement and the condition of the EIA remains in the 7th and 6th centuries B.C., which may help us to understand the social dynamics of rebuilding and the reuse of EIA material in an Archaic cultural context.

One characteristic of the Early Iron Age in Crete is the conscious and deliberate reuse of Bronze Age and earlier EIA settlements, cemeteries, and cult places as part of a social-symbolic discourse that emphasized links to the past and served to legitimize and solidify power relationships and community identity. Wallace and Prent have both argued recently that EIA communities claimed and actively projected lineage ties and political connections to certain locales by reusing the remains of settlements and

157. Vagnetti 1996, p. 32, fig. 2:4. At Nerokourou, fragments of "cheese pots" occur under both the *teglie* and *dolio con pareti svasate* categories (Vagnetti, Christopoulou, and Tzedakis 1989, pp. 62, 65, figs. 23:102–105, 37–40).

158. Haggis 1993b; 1996a, p. 669; 2005, p. 48.

159. Coulson et al. 1997; Nowicki 2000, pp. 241–247; Wallace 2003, pp. 257–258.

cemeteries, usually focusing their attention and frame of reference on standing monuments of presumed or known antiquity.[160] This pattern of purposive visual references to palatial and LM IIIC sites is, according to Wallace, a means of reconstructing an "ancestral past,"[161] a new foundation for regional identity and a means of elite appropriation of symbols of power,[162] which may have been important in restructuring sociopolitical relationships in the emerging polis. The results of excavation at Azoria demonstrate a remarkable break from this observable pattern. In the 7th century, references to the site's EIA history and its local ancestry (suggested by the continuous occupation from LM IIIC to the Early Orientalizing period) had perhaps become less important for the inhabitants of the settlement: earlier remains were effectively erased from the topography of the new civic center. EIA structures were not only destroyed as a matter of convenience or technical necessity during the renovations, but they were also deliberately buried and even elaborately concealed as part of the urban design. In contrast to the documented EIA practice of using earlier remains as visual, ritual, and ultimately symbolic focal points of community consciousness, the physical transformation of Azoria was clearly a process of erasing the visible indicators of the EIA past, avoiding even the most subtle reuse of foundations.[163]

At Azoria, a new identity was constructed in the 7th century. New forms of monumental public architecture played a significant role in reshaping community consciousness and in defining new political roles and social institutions of the emergent polis. Could it be that visual and symbolic references to specific EIA buildings had inconvenient and perhaps politically meretricious effects by projecting and thus retaining (and privileging) links to specific kinship groups and local lines of descent? The EIA visual language of the ancestral past, in an Archaic context, would surely have created an exclusionary political discourse, potentially divisive and contested in the new polis community. The polis included and integrated a wider community than Azoria itself, encompassing the populations ultimately derived from no less than seven sites in the settlement clusters of Avgo and Kavousi. The Archaic context of the EIA remains at Azoria indicates a conscious effort to conceal the past by means of constructing a new civic material culture.

This is not to say that the early Archaic inhabitants were not interested in the past or that the settlement lacks altogether references to its EIA origins, only that such symbols were carefully controlled and reintegrated into a new systemic context that emphasized public venues of aristocratic display at the expense of visible references to local lineage connections. EIA objects were selected and recycled. As "heirlooms" or "antiques" having been removed from their original context, their meaning is connected not to specific places or kinship groups but perhaps to generic notions of antiquity. The Geometric krater from D400, the LM IIIC pithos in B300, and the LM IIIC–PG bovine figurines from B1200 and B1500 are artifacts that would have retained much of their original symbolic function, and even ritual importance, but their meaning in the Archaic city was generic and intrinsic, formed independently of their specific origin in the new systemic context of the civic center.

160. Prent 2003; Wallace 2003.

161. Wallace 2003, pp. 271, 275.

162. See also Borgna 2003, p. 172; Prent 2003, esp. pp. 88–89, 98–99.

163. This process of rebuilding stands in marked contrast to the evidence from the Kastro (cf. Coulson et al. 1997), where repeated rebuilding from LM IIIC to the EO period integrated and incorporated earlier foundations and even entire buildings.

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