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Abstract

Excavations on the Kastro at Kavousi (P1. 77:a) were conducted over a five-year span between 1987 and 1990 and again in 1992.¹ Seasons of study and site conservation took place in 1991 and between 1993 and 1995. Preliminary reports have been published through 1990,² but these give only a fragmentary picture of the development of the settlement because they do not take into account the excavations of 1992 or the work accomplished during the study seasons. It is now possible to present a fuller picture of the settlement; accordingly, this article provides an overview of the work accomplished to date.

Disciplines

Ancient History, Greek and Roman through Late Antiquity | Archaeological Anthropology

Comments

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EXCAVATIONS ON THE KASTRO AT KAVOUSI

AN ARCHITECTURAL OVERVIEW

(PLATES 77–84)

EXCAVATIONS ON THE KASTRO at Kavousi (Pl. 77:a) were conducted over a five-year span between 1987 and 1990 and again in 1992.¹ Seasons of study and site conservation took place in 1991 and between 1993 and 1995. Preliminary reports have been published through 1990,² but these give only a fragmentary picture of the development of the settlement because they do not take into account the excavations of 1992 or the work accomplished during the study seasons. It is now possible to present a fuller picture of the settlement; accordingly, this article provides an overview of the work accomplished to date.

A preliminary study of the stratigraphic phasing of the site was presented in the preliminary report for the years 1989 and 1990,³ and so the emphasis in this overview

¹ The Kavousi Project is directed by Geraldine C. Gesell (Executive Director) of the University of Tennessee, William D. E. Coulson (Field Director of the Kastro) of the American School of Classical Studies at Athens, and Leslie Preston Day (Field Director of Vronta) of Wabash College. The Project is sponsored by the University of Tennessee under the auspices of the American School of Classical Studies at Athens. It has been funded by the National Endowment for the Humanities (an independent federal agency), the Institute for Aegean Prehistory, the National Geographic Society, and the Office of Research Administration, the College of Liberal Arts, and the Department of Classics at the University of Tennessee. Support for research was provided by grants from the Graduate Schools of the Universities of Minnesota, Notre Dame, and Tennessee, and Wabash College, and fellowships from the American School of Classical Studies at Athens, the Fulbright Foundation, the Samuel H. Kress Foundation, and the Archaeological Institute of America (Olivia James Traveling Fellowship). Additional financial support was provided by the East Tennessee Society of the Archaeological Institute of America, Gustavus Adolphus College, the College of St. Catherine, Randolph Macon College, Mr. and Mrs. Richard L. Sias, Mr. and Mrs. James T. Bradbury, Mr. D. A. Coulson, Mr. Alexander B. Hawes Jr., and other private donors.

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The three sections of this article on the architecture of selected buildings on the East Slope, West Slope, and east of the False Peak (the Northwest Building) have been written by the three scholars respectively responsible for the final publication of these areas, Jennifer L. Tobin, Donald C. Haggis, and Margaret S. Mook, and edited by W. D. E. Coulson. The plans and sections presented here were drawn by these scholars; the pottery was drawn by Coulson and Mook; the photographs were taken by Coulson. All drawings were inked by Roxana Docsan.

² See the articles listed under Gesell, Day, and Coulson and under Gesell, Coulson, and Day in the accompanying bibliography.

³ Gesell, Day, and Coulson 1995, pp. 92–115, 117–119.

FIG. 1. Kastro. Plan of settlement (1994)

has been placed on the architecture, which has not been fully discussed elsewhere.⁴ A selection of representative buildings (Fig. 1) from each chronological period (Late Minoan [LM] IIIC, Protogeometric [PG], Late Geometric [LG], and Early Orientalizing [EO]) has been chosen. Building A on the East Slope has been selected because it is a representative example of a LG to EO house. It represents the best preserved architecture on the site and thus provides an excellent opportunity for the examination of construction techniques and

⁴ Previous articles have concentrated either on general reviews of the excavations or on pottery studies. For reviews of the excavations see Coulson 1995; Coulson, forthcoming. For specific pottery studies see Mook and Coulson 1993; Mook and Coulson 1997.

architectural details. A similar emphasis is placed on the architectural phasing of selected buildings on the West Slope, specifically Buildings G and L. Also presented is a preliminary report on the 1992 excavations in the southwest corner of the hilltop (Building H) and in the lower terrace (Building K). The article concludes with a discussion of the Northwest Building. More weight has been placed on the examination of this building than on the others, since here the development of an insular architectural unit can be traced continuously throughout the duration of the Early Iron Age. Architectural studies have also amplified considerably the 1990 plan of the Kastro;⁵ accordingly, an updated version is published here (Fig. 1).

The results of work on the Kastro provide a rare and perhaps unique illustration of the foundation, growth, and development of an Early Iron Age community from its inception early in Late Minoan IIIC until the end of the 7th century. The Dark Age encompasses important changes in economic, political, and social systems that are evident in changes in the nature of the material culture. The structural and organizational changes in the physical remains of the Kastro settlement have been documented with a view to understanding the cultural transformation of early Greek society in the transition from Bronze Age to Iron Age. While a continuous and contiguous stratified sequence of occupational levels on the Kastro has been described in earlier reports concentrating on the ceramic sequence, the relationship of these levels to the architectural phasing and changes in settlement plan have not been fully explicated. This report thus provides a link between stratigraphic studies, ceramic studies, and architectural studies conducted between 1992 and 1995, offering a preliminary description and interpretation of the archaeological context of Early Iron Age cultural change and the development of a Dark Age Cretan community.

This article does not constitute a final publication of the architecture on the Kastro, however, since the buildings selected for discussion are treated only in a preliminary way. There is, for example, no detailed comparative examination of the relation of these buildings to those of other sites on Crete nor any description of the ceramic and other finds in their context with discussion of the parallel evidence. There are also other buildings on the Kastro which have not been included in this overview. All the above topics, including more detailed analyses of the buildings presented here, will be covered in the final publication in the volumes addressing the architecture, ceramics, small finds, and environmental evidence.

THE EAST SLOPE

BUILDING A

Excavations on the east slope of the Kastro yielded a large building of the Late Geometric to Early Orientalizing periods.⁶ After excavating nearly four meters of stone

⁵ Gesell, Day, and Coulson 1995, p. 93, fig. 8 and p. 95, fig. 9.

⁶ For preliminary reports on Building A see Tobin 1994; Gesell, Day, and Coulson 1995, pp. 94, 96–97, pl. 29.

Fig. 2. Plan of Building A

Fig. 3. Building A, south-north section

tumble, five contiguous rooms were uncovered (Rooms 41–45) that constitute a single architectural unit, Building A (Fig. 2). The rooms are arranged in a line along a fairly level but narrow bedrock terrace (Fig. 3). To the west, the bedrock rises sharply and is incorporated into the walls of several rooms. To the east the bedrock drops off; because of the existence of several doors opening to the east, one can postulate here the presence of a pathway that ran along the eastern side of the building but which has now eroded away.

The construction technique employed in Building A is consistent with that used throughout the Kastro.⁷ The walls have two faces and are of local schist, which was split to create evenly shaped blocks. Larger stones were laid in rough courses, with smaller pieces of schist filling the interstices, and were held in place by mud mortar. Occasionally, larger stones run through the entire width of a wall, binding the two faces together. Where possible, the bedrock was used either as the foundation for a wall or as part of the wall face. For the most part, the western walls of the building were built against the bedrock, and this explains the high preservation of many of them (up to 3.50 m). Most of the rooms have clay floors, either spread directly on bedrock or laid on a schist packing. Only in Room 42 has the bedrock been shaved in certain areas to serve as the floor, although in that room most of the floor is clay. The roofs were flat and primarily composed of clay. In at least two of the rooms there is evidence for interior support.

The pottery from the various rooms of the building awaits final study, but preliminary analysis suggests that Building A was first constructed in the LG period. Sometime in EO it underwent modification before final abandonment.

Room 44 (Fig. 2)

Building A was entered from a path along the east side through Room 44 (Pl. 77:b), where a door is located at the northern end of Wall J. Room 44 misses being a perfect 5-meter-square unit only because of the north-northeast–south-southwest orientation of the northern half (Wall I') of the west wall as it follows the line of the bedrock. The interior face of the eastern wall of Room 44, Wall J, is preserved at floor level and consists of small stones. The exterior face is built of massive slabs and stands nearly a meter above the present ground level (the original level of the path is not known). Approximately 1.00 m from the north end of Wall J is the entrance, identified by a pivot hole and an adjacent threshold block (Pl. 77:c). The threshold block is large and worn (1.10 m long, 0.40 m wide). On either side of it, built into the foundations of Wall J, are two stone spurs, which project 0.14 m from the exterior face. They sit at the same height on either side of the threshold, their upper surfaces 0.20 m below its top face. The purpose of these projections is not immediately clear, but they may have served as underpinnings for a wooden or stone step, which would have given easy access to the building. The doorway itself is at a lower elevation than the rest of the room (see p. 323 below).

The wall forming the western limit of Room 44 provides a good example of the extent to which the bedrock was used on the Kastro. The upper reaches consist of a bedrock shelf, which overhangs the room and leaves a two-meter gap down to the floor. In this

⁷ See also Mook 1993, pp. 77–138.

space two small walls were built, Walls I and I', in order to create a smooth face for the lower portions of the wall. Both wall fragments, made up of carelessly laid small stones, are poorly preserved and have partially collapsed. Because of the uneven line of the bedrock shelf, Wall I' extends into Room 44 at a more pronounced angle than does Wall I to the south.

Wall K forms the northern limit of Room 44. The western end of the wall begins about 1.60 m west of the inner face of Wall I'. Here it is anchored against bedrock and was clearly extended this far for increased stability. Wall K at its western end extends into Room 44 by 0.50 m before it is interrupted by a door, 1.15 m wide, which originally led into Room 45. Sometime in the EO period, however, the door was carefully blocked (Pl. 77:b). A similar case occurs in Wall H to the south. Here the wall is interrupted by a door leading to Room 43 (1.10 m wide), which was also later carefully blocked.⁸ Two stones from the threshold between Rooms 43 and 44 are visible underneath the blockage.

The floor of Room 44 consisted of clay, which in certain sections where the floor was removed was found to lie on very uneven bedrock. Where the bedrock was particularly low a packing of small stones was used to raise the level to that of the floor. The level of the exterior door in Wall J is 0.90 m below the floor to the west. Thus, upon entering Room 44, one proceeded up a gentle slope of stepped bedrock and stones to the floor proper in the center of the room. There is no evidence for an interior support in Room 44, although its large size would indicate that some sort of support was necessary.

In sum, Room 44 served as an entranceway for Building A. Its primary use is not clear. Finds include three spindle whorls and a few stone tools, which suggest domestic use. The most extensive assemblage of pottery from the entire building, however, comes from this room. The most common shape is the open drinking vessel, mostly in the form of cups, represented here by two examples (Fig. 4:1, 2). The monochrome thin-walled cup with pointed and everted rim (1) appears to be EO in shape. The deep, straight cup (2) reflects more of a LG shape. Given the general EO tenor of the deposit, however, the straight cup may represent the continuation of a LG shape into EO.⁹ Room 44 also yielded a large number of fragments from amphoras and pithoi, although none could be reconstructed to the degree of the three pithoi from Room 42 (see p. 326 below). Unlike the situation in the other rooms of Building A, Room 44 was found to contain a good number of closed vessels, of which the jug shoulder (Fig. 4:3) and the lid (Fig. 4:4) are published here as representative examples. The bird on the jug shoulder (3) supports an EO date

⁸ Blocked doorways can be found throughout the Kastro during the Orientalizing period. It would seem that the population had dwindled at that time. Some of the multiroom houses were broken up into one-room units by blocking doors, as appears to have been the case with Building A. In other buildings, rather than keep all sections in repair, the unnecessary rooms were blocked off and abandoned; see Haggis 1992, pp. 311–312; Haggis 1993, p. 159; Mook and Haggis 1994; Haggis 1996, p. 414.

⁹ The high, vertical, and everted rim of the cup illustrated as Figure 4:1 forms a collar around the top of the vase, which then flares outward just above mid-belly. A number of similarly shaped cups come from Tomb P at Fortetsa; see Brock 1957, no. 1460, p. 127, and no. 1547, p. 133, pl. 103 (both). For a similar cup from the Kastro see Gesell, Day, and Coulson 1995, p. 115, fig. 21:10. For a selection of LG deep cups from the Kastro, similar in shape to that illustrated as Figure 4:2, see Gesell, Day, and Coulson 1995, p. 115, fig. 21:7–9.

FIG. 4. Building A, pottery from Room 44

FIG. 5. Building A, pottery from Room 45

for the deposit.¹⁰ The small coarse tray (Fig. 4:5) is an unusual shape; these trays are usually flat underneath, but this example has small tripod feet in imitation of the larger tripod cooking pots. The EO vessels illustrated in Figure 4 therefore provide evidence for the final use of the room, perhaps contemporaneous with the blocking of the doors in Walls H and K.

Room 45 (Fig. 2)

North of Room 44 is Room 45, a small room measuring roughly 3.50 meters square. Its west wall, Wall L, does not bond with the western wall of Room 44 to the south, but this might be explained by the fact that Wall I' is only a short interim wall between the floor and the bedrock shelf (see p. 320 above), and consequently bonding these two walls might have proved problematic. Room 45 is considered the northernmost limit of Building A.¹¹ Wall M, like Wall K to the south, extended westward beyond the western edge of Room 45 by some 0.70 m in order to anchor itself against the bedrock. Its greatest preserved height is 1.80 m, its full length is 4.10 m, and its width varies from 0.50 m to 0.60 m. Wall M is made up of small, casually coursed stones (0.10–0.20 m in length); the quality of construction is very different from the larger and more carefully laid stones of the other terminal wall of Building A (Wall A in Room 41).

The east wall of Room 45, Wall N, has practically disappeared; only a few foundation stones exist at the northern and southern extremities to give an indication of the line of the wall.

The west wall of Room 45, Wall L, is by far the most interesting. It abuts Wall K to the south and Wall M to the north and has a maximum preserved height of 1.35 m. It is built up against the bedrock; the distance between the bedrock and the inner face of Wall L is about 1.20 m. This space did not go to waste but was utilized for the construction of three niches within Wall L. All three stand about 0.70 m above floor level and are equally spaced along the wall.¹² They measure approximately 0.30 m high, 0.30–0.33 m wide, and have various depths (southern niche 0.40 m; middle niche 0.27 m; northern niche 0.63 m). The niches are well built, each having two to three horizontal stones forming their ceilings. The floors and walls of each of the niches are carefully constructed with two to three courses of stones. Nothing was found in them, but they may have been used for storage. Niches of the same kind of construction can be seen in old village houses in the Kavousi area today.¹³

The floor of Room 45 is of clay. Close to Wall L there are three flat stones, standing approximately 0.05 m above the floor, perhaps as bases for storage vessels. In the center of the room a triangular stone with flat top projects above the floor in which it is embedded. This may have served as a base for a post to support the roof.

¹⁰ Birds with hatched bodies and wings occur at Fortetsa in EO; see Brock 1957, p. 187, esp. motif 17t.

¹¹ Although there is a room located to the north of Room 45 whose walls bond with Wall M, the lack of a door uniting the two rooms makes it likely that Room 45 forms the northern limit of Building A. The study of the rooms to the north of Building A falls beyond the scope of this article.

¹² These niches are illustrated in Gesell, Day, and Coulson 1995, pl. 29:d.

¹³ A comparison between traditional modern houses of the Kavousi area and those of the Kastro is being prepared for publication by M. Mook and D. Haggis; see Mook and Haggis 1994.

With the exception of pottery, no significant finds came from the floor or lower fill, but features like the niches and potstands suggest that the room was probably used for storage. In LG times, one could enter Room 45 via Room 44. Later, when access was cut off from Room 44, Room 45 most likely existed as a single unit. It is possible that there was a door in Wall N, constructed either in the original phase of the building or, more likely, later in EO, after the door to Room 44 was blocked. The poor preservation of Wall N, however, does not allow this suggestion to be proved with any certainty. Like that from Room 44, the pottery from the floor of Room 45 appears to be mostly EO in date and contemporaneous with the blocking of the door. Of the examples illustrated in Figure 5, the cups (Fig. 5:1–3) have EO features, most notably the everted rim and S-shaped body of no. 1 and the narrow banding on nos. 2 and 3.¹⁴ Room 45 also yielded a greater variety of coarse shapes than the other rooms of Building A, thus perhaps providing further evidence of its use for storage. The painted pithos (Fig. 5:5) and cooking pot (Fig. 5:6) are illustrative of these coarse shapes. The amphora with square rim and ribbed body (Fig. 5:4) may also indicate use of the room for storage.

Room 43 (Fig. 2)

Room 43 is a small rectangular room measuring approximately 1.80×5.00 m (Pl. 77:d). It was originally entered through Room 44 to the north, but this door was later closed. Room 43 also communicates with Room 42 to the south through a door in Wall E. Wall E (maximum height above floor level 1.60 m, width 0.58 m) bonds with Walls G and D at the west and is interrupted by a wide door measuring 1.30 m. The wall continues to the east (maximum height 1.10 m, width 0.57 m), where it bonds with the east wall of Room 42 (Wall F). There is no trace of an eastern wall for Room 43.

Unlike the interior doors previously encountered in Building A, the door in Wall E was never blocked, and thus some observations can be made about its construction (Pl. 78:a). The doorjambs are carefully built. The inner faces of the doorway are made up of slabs of schist laid in courses. The coursing is done with special care; every 0.25 m vertically, a single long stone spans the distance between the two faces of the wall. This provides a strong and even face to the doorway. The door between Rooms 42 and 43 preserves a fine threshold of two steps, leading down into the lower Room 42. The top step lies at the floor level of Room 43 and consists of a large flat stone in the center of the door, with several stones between it and the doorjambs. The step abuts the doorjambs and thus was constructed after the jambs were built. The lower step slightly underlies the upper one and is constructed of three large stones, which lie about 0.20 m above the floor level of Room 42. The threshold helps to ease the 0.30 m transition between the two rooms.

The west wall of Room 43, Wall G, is built against bedrock and incorporates bedrock into its face (Pl. 77:d). About 0.90 m from Wall E the bedrock has been carved back to form the wall of the room. At the meeting point between Wall G and Wall H, the bedrock curves at a right angle to make the corner against which Wall H abuts.

¹⁴ For EO cups see note 9 above. Narrow banding on open vessels, however, occurs most frequently on skyphoi and kotylai in EO; for example, see Coldstream and Sackett 1978, p. 46, fig. 1:7.

FIG. 6. Building A, pottery from Room 43

At the eastern side of Room 43 no trace of a wall has been discovered. There exists instead a makeshift stairway beginning at floor level just east of the door to Room 42. The top step is a row of stones running perpendicular to Walls E and H, consisting on the south of two large stones, bedded on small schist plates and fill, and on the north of two small stones that sit on a bedrock ledge. From here a rough stairway, made of stepped bedrock supplemented by stones, leads down to the exterior pathway. The evidence permits two suggestions for the time of construction of this stairway. It may have been a later addition to the room, created by necessity when access had been blocked to Room 44 with its external doorway (Pl. 77:d). In this case, Room 43 would have had an eastern wall, which was later removed when access to Room 44 was denied. It is more likely, however, that the staircase was part of the original construction of Room 43 and that the room was always accessible from the exterior pathway.

Room 43 seems to have been used as an area in which cooking took place. The floor was not the usual packed clay but was roughly paved. Three stone tools were found lying on the floor: two querns and a grinding stone.¹⁵ An oven, measuring 0.80×0.90 m, was placed in the corner between Walls E and G.¹⁶ The oven had a mud-brick dome superstructure, as indicated by the curved fragments of mud brick discovered within it. A space of about 0.40 m was left between the northwestern section of the oven and the eastern face, which would allow items to be placed within the chamber. The paving, the tools, and the oven would indicate that this small room was used for cooking. The oven and paved floor, along with the devotion of much of the eastern half to a staircase and

¹⁵ The study of the stone tools is being prepared for publication by Heidi Dierckx.

¹⁶ The oven is illustrated in Gesell, Day, and Coulson 1995, pl. 29:c.

the absence of an east wall in contrast to Rooms 44 and 42, suggest that the room was an unroofed exterior space, or lobby, which provided access to Rooms 44 and 45 to the north and Rooms 41 and 42 to the south.

A selection of the pottery from the floor consists of a preponderance of drinking vessels, mostly skyphoi (Fig. 6:1–3). EO characteristics include the everted rims and thin walls of nos. 1 and 2, the internal banding of no. 1, and the flat outturned rim and squat, shallow shape of no. 3.¹⁷ These vessels may thus be associated with the later reconfiguration of Rooms 41–43 into a single unit, when access to Rooms 44 and 45 was cut off. Four fragments of roughly baked clay were found near the oven, of which the best preserved is illustrated here (Fig. 6:4). These are thin walled and circular-to-oval in shape and may have served as stands on which to place pots with a fire underneath.

Room 42 (Fig. 2)

Room 42 is by far the most impressive room of Building A. It is 5 meters square with unusually well preserved walls. Its center is dominated by a large hearth flanked by two stone bases. It is also the lowest room in the building, lying 0.30 m below Room 43 and 0.50 m below Room 41 (Pl. 78:b).

Wall D, on the western side of Room 42, is preserved at its southern end to a height of 3.50 m. It is built against the bedrock and bonds with both Wall C on the south and Wall E on the north. It is constructed in rough courses with large stones interspersed with small ones. Wall E to the north is also preserved to a good height of about 2.00 m at its western side. In the corner formed by Walls D and E is a stone bin, measuring 1.40 × 0.80 m (Pl. 78:c) and constructed with a rim of upright stones surrounding its stone-lined floor; the floor of the bin is about 0.25 m above the level of the floor of the room. Several other bins have been identified on the Kastro but none so well built as this one.¹⁸ Such a bin formed an elevated dry space ideal for storage.

The southern wall of Room 42, Wall C, is bisected by a door (see pp. 328–329 below) leading to Room 41 (Pl. 78:d). Wall C is well preserved at its western end, having a height of 2.50 m and an average width of 0.60 m. It bonds with Wall D on the west and with Wall F on the east. The quality of construction is quite high, especially on the western side of the door, where large, nearly rectangular stones (0.20–0.60 m long) have been carefully laid in courses, the large stones surrounded by small schist plates. About 0.90 m from the floor and 1.00 m from Wall D, a small rectangular niche, 0.10 m high and 0.20 m wide, was built into the wall (Fig. 2, Pl. 78:d). Penetrating almost the entire width of Wall C, it appears to be an intentionally built feature, perhaps used for storage like the niches in Room 45.

The eastern section of Wall C (height at door 1.35 m, width 0.60 m) is less well preserved than the western (height at door 1.70 m). By the door is a small shelf, 0.70 m long and 0.20 m wide (Pl. 78:d). At the western end of the shelf is an upright stone 0.35 m high. The rest of the shelf is at a lower level, standing about 0.20 m above the floor. The

¹⁷ The outturned rim and shallow shape of the vessel illustrated as Figure 6:3 perhaps identify it as a lekane; see Coldstream and Sackett 1978, p. 56, no. 44 and p. 57, fig. 9:44.

¹⁸ For other bins on the Kastro see Gesell, Day, and Coulson 1995, p. 96, note 66.

use of this feature is not immediately clear: it seems too shallow and low to be a bench and should perhaps be interpreted as a shelf or a pot stand.

Wall F, on the eastern side of Room 42, is best preserved in the middle, where it stands 0.87 m above the floor and has a width of 0.60 m. The interior face exhibits very uneven masonry of small stones. On the exterior, large, roughly cut stones were employed, and the wall sits partially on bedrock outcrops. Its size and roughness indicate (a) that it is an exterior wall, and (b) that it does not also function as the upper portion of an interior wall for a building on the terrace below.

The floor of Room 42 is even, made up of a combination of clay and bedrock; the bedrock appears mainly in the eastern section of the room. In the center of the room is a hearth, characterized by ash and hard, burnt earth, flanked on the east and west by two stone bases (Pl. 78:d). The western one is a roughly trimmed schist plate, slightly oblong (0.40 m east–west, 0.37 m north–south). The top is about 0.05 m above the floor. The burning reaches to the eastern edge of the base, which sits firmly on the clay floor. The eastern base is more impressive: it is a well-carved cylinder of limestone. Limestone outcroppings exist on the False Peak on the northwest side of the Kastro; although this type of stone is not used so commonly as is schist, it is employed in buildings on the Kastro on occasion.¹⁹ The stone has been carefully carved, with chisel marks still visible, especially on the top face, where numerous marks, each about 0.02–0.03 m in length, run at a 45-degree angle to the north–south axis of the base (Pl. 79:a). The sides have thicker, groovelike marks nearly perpendicular to the top face. The bottom face was left rough, and no tool marks are visible. At its eastern edge there is a curved hollow on the underside, carved to accommodate a rise in the bedrock on which it sits. The roof of the room was thus supported by two posts which sat on these bases. It is likely that between the posts there was an opening in the roof that allowed the smoke from the hearth to escape.

Room 42 must have been used as a main living room. The few finds (three loomweights, a quern, and a stone polisher) indicate typical domestic activities.²⁰ An interesting feature, however, is the number of pithoi found in the room; parts of three large pithoi were recovered, of which the most complete is illustrated here (Fig. 7). Although difficult to date, its square rim, collared neck, and beveled base would suggest that it be placed somewhere in the LG or EO periods.²¹ The rest of the pottery from the floor again includes a preponderance of drinking vessels, mostly cups (Fig. 8:1–3). The EO features of these vases include the thin walls and pointed, everted rims of nos. 1 and 3, the interior banding on nos. 1 and 2, and the squat S-shaped profile of no. 3. The narrow exterior

¹⁹ See Mook 1993, p. 79.

²⁰ See also Gesell, Day, and Coulson 1995, p. 96 and note 68.

²¹ Parallels for the pithos illustrated as Figure 7 are hard to find, since undecorated coarse vessels are rarely published. Several painted collared, or necked, pithoi, however, were found at Fortetsa in both LG and Orientalizing contexts; see Brock 1957, nos. 391, 392, p. 40, pl. 27 (from Tomb LST) and no. 1016, p. 93, pl. 60 (from Tomb II). A smaller version of Orientalizing date but with exaggerated collar comes from Well 12 of the Unexplored Mansion at Knossos; see Coldstream and Sackett 1978, p. 54, fig. 7:15.

FIG. 7. Building A, pithos from Room 42

FIG. 8. Building A, pottery from Room 42

FIG. 9. Building A, plan of Room 41 with sondages

and interior banding on the shallow bowl (Fig. 8:4) can also be placed in EO.²² Like the vessels from Room 43, these four vases may be associated with the later restructuring of Rooms 41–43. The floor of Room 42 also yielded a coarse lekane (Fig. 8:6) and a kalathos (Fig. 8:5). The latter has isolated lugs on the rim; such vessels are common in the LMIIC period on the Kastros. Vessel no. 5 may be an heirloom but, more likely, may represent the continuation of a Minoan shape and decorative scheme into LG and EO.

Room 41 (Figs. 2, 9)

South of Room 42, Room 41 is a rectangular unit measuring 2.70 m by *ca.* 5.00 m. The north wall of Room 41, Wall C, has been described above (pp. 325–326). The threshold in Wall C, like the one in Wall E, does not bond with the doorjambs but was set into position after the jambs were constructed (Pl. 79:b). The top of the threshold consists of two long stones (northern 1.10 m long, 0.10–0.24 m wide, 0.13–0.17 m high; southern 1.00 m long, 0.25 m wide, 0.075 m above the floor of Room 41). At the eastern doorjamb,

²² Although the running-dog decoration (Fig. 8:1, 2) is a LG feature, the pointed rims (Fig. 8:1, 3) that form a collar around the tops of the vessels are more common in EO. A number of vessels from this deposit may well be transitional in nature, containing both LG and EO features. For the high vertical and everted rims of EO cups see note 9 above. For narrow exterior and interior banding see note 14 above.

both slabs fall short of the wall, and the gap is filled with smaller stones. The space was doubtless necessary because slabs the entire width of the door could not have been slid between the jambs. The southern face of the threshold is comprised of a single course and stands just above the floor level of Room 41. The northern face, however, is made up of three to four courses and stands 0.50 m above the floor level of Room 42 (Pl. 78:d), making entry into that room rather uncomfortable. Perhaps a wooden step was placed in Room 42 to facilitate entry.

The eastern doorjamb of Wall C rests on a large block that extends through the wall (0.70 m long, 0.55 m high, 0.25 m wide). In Room 42 it is flush with the face of the wall and sits directly on the floor. The block projects about 0.20 m into Room 41, however, as a roughly square ledge and stands only 0.20 m high above the floor (Pls. 79:b, 80:b). Its top face was shaved down to create a flat surface in which was carved a pivot hole. Privacy could thus be obtained by closing a door between Rooms 41 and 42.

Wall A, on the south side of Room 41, is fairly well preserved to a maximum height of 3.00 m. As it fell at the trench line, the southern face of the wall was not excavated. Since there is no door leading out to the south, Room 41 is interpreted as marking the southern limit of Building A. Surface investigation of the unexcavated ground to the south, however, indicates that there were more buildings in this area, since the tops of walls are visible in places. Wall A is carefully built (Pl. 79:c). At floor level an even course of similarly shaped rectangular stones, all about 0.25 m high, runs along its entire length. Each stone is between 0.40 m and 0.60 m long; most are embedded in the floor, although a few have smaller stones for support or foundation. From sondages made in 1992 (see pp. 331–332 below) it was established that Wall A extends 0.25 m below floor level. Wall A thus possessed a “euthynteria” course designed to coincide with the floor level; its position argues that the level of the floor had already been determined when construction began.

Wall B at the west is the best-preserved and arguably the best-constructed wall on the Kastro (Pl. 79:d). It is built against the bedrock of the hillside and stands at a preserved height of 3.00 m. Like Wall A, Wall B continues 0.20–0.30 m below floor level (Fig. 10). At floor level, Wall B has a course of large rectangular blocks which again serve as a “euthynteria”, larger but not so regular as those in Wall A. Near the center of the wall in this bottom course there is a massive stone, nearly square (0.60 m high, 0.70 m long), which has the appearance of an orthostate. The upper courses of the wall are very even, built of large rectangular stones surrounded by smaller schist plates. At about 0.80 m below the preserved top of the wall is a line of flat stones, which runs the length of the wall. Two similar courses occur at 0.80 m intervals down to the bottom of the wall. These can be interpreted as intentional leveling courses, of which three are preserved.

There is little preserved of the east wall of Room 41; it seems to have tipped over the precipitous eastern edge of the terrace. The bedrock juts out to the east to form a ledge that could help support the wall, and on this ledge are preserved a few stones in a line, which may represent the foundations of the wall. It did not, however, run parallel to the western wall (B). Owing to the lack of preservation, there is no clue to whether there was a door on the east, but the steep slope of the bedrock would indicate that there was no way to enter the room from this side.

Fig. 10. Building A, Room 41, section A-A'

FIG. 11. Building A, pottery from Room 41

The floor of Room 41 is made up of clay with bits of schist. East of the center there is a patch of burning in the floor, the remains of a hearth. Since the floor was particularly high and well preserved in Room 41, it was decided in 1992 to sink two small test pits in the floor. The aim was to see if there was an earlier occupation phase in this area, as well as to understand better the relationship between Rooms 41 and 42, since the floor of Room 42 lies 0.30 m below that of Room 41.

The first sondage was a 1.00 m-wide strip along the base of Wall B (Figs. 9, 10). After digging through 0.15 m of hard clay floor surface, which was virtually sterile, a layer of softer schist floor packing was encountered (also practically sterile), which lay on very craggy bedrock. At the level of the packing and under the floor, the lower half of a pithos was found set into a cleft in the bedrock. It was placed at the level of the lowest foundations of Walls B and C (Pl. 80:a). In the pithos were a broken jug of LG date (Fig. 11:7; see p. 332 below), two body fragments from cups, and half a loomweight. The pithos itself was in poor condition: only the lower half was present (Fig. 11:8), and there was a large hole in the base that was filled with a flat stone. Its presence is enigmatic. The pithos was not dumped under the floor at the time of construction but seemed to have been carefully placed against the foundations of the walls and in the hollow of the bedrock. The area around the pithos, however, did not look like a living surface; the bedrock was very sharp and rough, and no other habitation debris was discovered in the sondage.

In order to learn more about this bedrock surface and its relationship to the walls of Room 41, a second sondage (Figs. 9, 10) was sunk against the door and the eastern section of Wall C (Pl. 80:b). Here the northern section of the floor against Wall C was found to be quite thick, about 0.20 m deep. Below the floor was a layer of schist packing that filled a hollow of bedrock in which the foundations of Wall C were placed. This

packing contained a number of rim and body fragments of cups of LG date, including the monochrome rim illustrated as Figure 11:2. On the southern side of the test pit, however, the clay floor stood only a few centimeters above bedrock. The bedrock in Room 41, then, is very uneven, and its highest projections determined the elevation of the floor (Fig. 10). This explains the 0.30 m discrepancy between the levels of Rooms 41 and 42.

The floor of Room 41 was laid on rough and uneven bedrock with no indication of an earlier floor. One may conclude that the area was empty or cleared at the time of construction. As for the pithos, it would have been present at the time of building, since it was wedged into the bedrock by the foundations of Walls B and C. The LG date of the jug inside it may indicate the construction date of the room.²³ It is possible that the pithos was used to hold the water needed for the mud mortar of the walls. Since the pithos was only half preserved and had a broken foot, there was no need to salvage it after work in the area was completed. The broken bits of the LG jug (not all pieces were present in the pithos) and other trash were dumped inside, and all were buried under the floor.

Room 41 may have been used for sleeping quarters. It could be closed off from the living room, Room 42, and possessed a small hearth. The finds from the room (a quern and a spindle whorl) shed small light on its function. The pottery from the floor consists mostly of drinking vessels (Fig. 11:1, 3–6) with the high vertical everted rims and thin walls common to EO.²⁴ They are complemented by a series of small conical feet and are associated with the latest period of use in the room.

CONCLUSION

Building A is important for our knowledge and understanding of Iron Age architecture. In the first place, it was clearly laid out with extreme care. Several of the rooms are square or nearly square, which indicates careful planning before construction. An interest in axuality can be observed from the position of the four interior doors, which are all in line with one another, although this means that they do not always fall in the center of walls. The extent of planning can be seen best in Room 41, where the level of the floor was decided before the walls were constructed.

Similarly, the high quality of the masonry speaks for the care and sophistication that went into the construction of Building A. This can be seen in the variety of built features throughout the building, such as the niches, the bin, the oven, and the bases, and is illustrated by the fact that certain walls are still standing over three meters high.

Despite these impressive features, it is difficult to interpret Building A as anything other than a house. The few finds discovered on the floors indicate the domestic activities of weaving, spinning, and cooking. Since the house is large and well constructed, one

²³ For the jug see Brock 1957, no. 950, p. 90, pl. 71; no. 1317, pp. 113–114, pl. 96; no. 1442, p. 126, pl. 96. Brock, however, calls his examples *aryballoi*; Figure 11:7 is slightly taller and may therefore be classed as a jug. For a jug also decorated with concentric circles on the shoulder but with a much shorter neck, from Building L on the Kastro, see Gesell, Day, and Coulson 1995, p. 112, fig. 20:1. The deposit of the jug is here interpreted to represent an event contemporaneous with the construction of Room 41. There are in fact three events which are represented in this situation: production of the vase, abandonment of the vase, and construction of the room. These events allow for a second interpretation, that is, that the jug might have been abandoned in EO times, in which case the construction of Room 41 might represent part of the reconfiguration of Rooms 41–43 in EO, rather than part of the original building.

²⁴ See note 9 above.

may suppose that it was the home of an important member of the Kastro community, but any further judgment on his role in society would be purely speculative.

JENNIFER L. TOBIN

THE WEST SLOPE

This section is a brief overview of the topography, architecture, and stratigraphy of the West Slope of the Kastro, concentrating on the plans of individual buildings. After preliminary study of the stratigraphy from this area, several structures can be understood to encompass discrete architectural units, perhaps individual houses, that may serve to represent specific occupational phases in the history of the Kastro. Building G, although continuously occupied from Late Minoan IIIC to the Geometric period, presents the entire plan of a Protogeometric house; Building L is a Late Geometric house, with significant structural and use changes in the Early Orientalizing period, helping to elucidate depositional processes during the abandonment phases of the Kastro; and Building K, although its architecture is poorly preserved, is an important stratigraphic parallel to Building G, containing a continuous sequence of occupation levels throughout the Dark Age. Finally, LG–EO Building H, most recently excavated, is peculiar in its room sizes, position in the Kastro settlement, adjoining court, architectural refinements, and communication patterns that suggest a singular status and possible communal or even cult function.

Detailed preliminary reports on the ceramic phasing of the West Slope have been published previously,²⁵ and the West Slope pottery is currently being studied by Coulson and Mook as part of the preparation of the final publication of the ceramic sequence on the Kastro.²⁶ Discussion of pottery is therefore omitted in the present section; the aim here is neither to reiterate preliminary pottery discussion nor to anticipate the conclusions of the final publication but to concentrate on the changes in the occupational history of the West Slope that are reflected in the architecture and stratigraphy.

The apparent complexity of habitation phases on the West Slope is very much a result of two factors: periodic changes and renovations in the architecture throughout the Dark Age, and the accident of preservation because of the contours of the bedrock terrain. The actual-state plan (Fig. 1: Buildings G–M) itself reflects the stratigraphic complexity, illustrating the narrow, closely spaced terraces with multiple and densely packed house walls of various periods. The physical terrain is perhaps the most important factor in the development of the settlement in this area and throughout the Kastro. On the steep West Slope there appears to be a constant tendency through time to expand room and house sizes, while improving aesthetic quality, structural integrity, and the regularity of room shape and external façades. This tendency toward expansion and regularity, however, was perennially impeded by the limits and irregularity of the physical landscape, the narrow spaces provided by the bedrock terraces and the sometimes precipitous slope of the Kastro itself. Notwithstanding the overwhelming difficulties presented to the builder by the terrain, the buildings are both ambitious and technically sophisticated. As part of a settlement, they represent the growth of an agglomerative plan from the LM IIIC period

²⁵ Coulson 1995; Gesell, Day, and Coulson 1995, pp. 101–115.

²⁶ Mook and Coulson 1993; Mook and Coulson 1997.

until abandonment of the site in the 7th century B.C. During this long period, the plan of the Kastro was not static. Although the evidence indicates that LM IIIC foundations were used for later PG–LG structures, the buildings became increasingly complex in internal form and gradually regularized, segregated, and defined in functional components. At the same time, their spatial relationships to other buildings and communication patterns within the settlement required sometimes radical renovation of the town plan, no doubt an increasingly communal concern and organized endeavor. The architecture of the West Slope represents the dynamics of these internal and external changes and the opposing tendencies of culture and environment: the apparent conflict between the sophistication of architectural forms and the adversity of terrain.

The summit of the Kastro is a bedrock ridge that runs north–south and is occupied by the seven rooms excavated by Harriet Boyd Hawes in 1900 (Rooms 1–7) and Building H (Rooms 27 and 38). Immediately west of this summit, or hilltop, is a steep slope consisting of several distinct bedrock ledges upon which Dark Age buildings were discovered in the 1987–1990 excavation seasons. This area west of the hilltop, the West Slope, consists of three well-defined areas of habitation, or terraces, which conform to the natural contours of the bedrock (Figs. 1, 12): the *Upper Terrace* is comprised entirely of Building G (Rooms 21–26); the *Middle Terrace* is occupied by Building L (Rooms 57, 8N, 8S, 34, and 35) and Building M (Room 36); the *Lower Terrace* consists of Building I (Rooms 28, 29, 37), Building J (Room 30), and Building K (Rooms 31–33). These terraces are natural bedrock shelves, which descend from east to west (*ca.* 15 m) on a slope of some 30 degrees. The approximate difference in elevation from the floor levels on the hilltop to the lowest habitation level on the Lower Terrace is 10 m. While continuous use of living surfaces and extensive slope modification in the LG and EO periods have occasionally obliterated or disturbed continuous stratigraphy, areas of the West Slope have retained sequential habitation levels from the LM IIIC period until the 7th century B.C. The preservation of LM IIIC and intermediate phases from PG to Geometric times is usually dependent on sharply uneven contours, or even gentle dips, in the bedrock; these help to retain habitation layers (especially in the abrupt angles formed by the bedrock shelves) against the steeply-sloping and rapidly eroding surface veneer. An equally important factor affecting the preservation of early deposits on the Upper Terrace was an extensive architectural terracing operation in LG, which involved the filling-in of the LM IIIC–Geometric habitation areas in order to expand the settlement activity on the hilltop in a westward direction. Slope conservation in more recent periods (Fig. 12: modern terraces) has also contributed to the preservation of the deeply stratified Dark Age remains.

HILLTOP

Building H: Rooms 27 and 38 (Figs. 13, 14)

Excavation of Room 27 clarified the plan and stratigraphy of Building H. While originally thought by Boyd to have been an open courtyard,²⁷ the southwestern edge of the hilltop was revealed during excavation in 1990 and 1992 to be a large three-room

²⁷ Gesell, Day, and Coulson 1985, p. 330. For a brief, one-paragraph preliminary report on Building H, see Gesell, Day, and Coulson 1995, p. 107 and pl. 33:a.

Fig. 12. West Slope, Rooms 24, 35, 31, east-west section

FIG. 13. Plan of Building H, Rooms 27 and 38

house of LG–EO date (Figs. 1, 13, Pl. 80:c, d). The walls of the house are preserved less than 1.00 m high, but the western side of the building is supported by a massive artificial terrace, contained by a retaining wall on a two-stepped platform (Figs. 13, 14). The rooms are axially arranged with a north–south orientation, and doorways are centrally placed. The access to the house is a doorway in the northeastern corner of Room 27, from which descends a series of steps from an area lying to the east (Boyd’s “Room 1”); this Room 1 is *ca.* 1.25 m higher than the floor level of Building H and was probably a small open courtyard on the hilltop rather than a roofed space.

The northernmost room of Building H is a small side chamber (Room 38), bordered on the north by the south walls of Rooms 2 and 26, with internal dimensions of about 2.50×5.00 m (Fig. 13, Pl. 81:a). The foundations of this room were excavated in 1990 as part of the exploration of the southern end of the Upper Terrace. These excavations revealed a series of stepped lateral walls along the west that helped to make level the uneven bedrock and supported the upper walls of the room. The specific function of this small room remains uncertain.

A doorway, *ca.* 1.00 m wide, leads from this chamber into the main room of Building H, Room 27 (Fig. 13, Pl. 80:c). The room measures 5.20×9.30 m (internal dimensions) and is the largest single room yet excavated on the Kastro. The north and south walls are preserved to a height of *ca.* 0.40 m, and the northern portion of the east wall has eight courses extant to a height of about 1.00 m (Fig. 14). The southern half of the east wall consists of a face of the natural bedrock (*ca.* 1.00–1.50 m high), which serves as a socle;

FIG. 14. Building H, Room 27, east-west section A-A'

no more than two courses of the superstructure are preserved above it. The western wall is extant only in the far north and south, where the segments bond with the north and south walls of the room. The south wall is broken in the center by a wide doorway (*ca.* 1.60 m), which leads into a third room now obscured by large schist boulders that have fallen from the high bedrock outcrop that forms the Kastro peak. This ancillary southern chamber, perhaps a storage area, was left unexcavated in 1992 because of both the difficulty in removing the fallen boulders and the lack of time.

Excavation of Room 27 revealed a shallow but dense accumulation of ceiling clay and wall tumble extending across the central and southern areas. The distribution of stone debris suggests that the material had fallen from the east and south walls, probably long after abandonment of the hilltop. Removal of this wall tumble exposed a hard clay floor that served to make the living surface level with the flat and smooth bedrock floor exposed in the center of the room.

Two column or pillar bases were found in the middle of the room, roughly on axis with the north and south doorways. The southernmost base is a single rough-hewn limestone block with a smooth, flat top. The northern base is constructed of two elongated, roughly rectangular slabs of schist flanking a bedding of five cobbles. It is obvious that the slabs served as lateral supports for the sides of the wooden pillar, while the cobble bedding was the foundation. The inner-facing edge of the eastern slab was worked to form a concavity, which helped to contain the curved edge of a tree trunk or wooden post. The pillar bases are of different construction techniques and materials, and they are spaced down the center of the room in order to minimize the span. The maximum span (between the posts themselves) is about 4.50 m; the maximum distance between a post or the central axis and any wall is no more than 3.00 m. It is striking that there was no effort made to align the bases on the actual medial north-south axis of the room. While the southern base is situated squarely on a central axis with the northern and southern doorways, the northern pillar base is intentionally placed off-axis, by almost exactly 0.50 m. The intentional lack of symmetry in the placement of the north pillar is probably the result of the practicality of room function. A concentration of the activities that occurred in the northern third of Room 27 might have required the westward shifting of the northern pillar, creating more space and perhaps allowing freer movement in this area of the room. First, the main traffic area in the building is in this northern part: movement in and out of the building and between Rooms 27 and 38 would have converged or intersected in this area; and second, a concentration of paving stones and a large saddle quern in the northern end of the room might indicate a work area in the final period of use. Finally, the off-axis pillar location is a feature of Room 34 of Building L on the middle terrace, where the large central apsidal hearth required the shifting of the pillar base to accommodate extra beams supporting the extra weight of a chimney pot.²⁸ The floor surface of Room 27, however, is extremely eroded, and no evidence for a hearth has been preserved, although such centrally located features are uniformly present in other Geometric houses on the Kastro.

While the west wall of Room 27 is preserved only in the north and south corners, the foundations of the west side of Building H consist of a well-built retaining wall, which

²⁸ Gesell, Day, and Coulson 1995, pp. 109–111, figs. 18 and 19.

was constructed in order to extend the terrace some 2.50 m to the west, thus widening the floor of the room beyond the limits of the bedrock shelf (Fig. 14, Pl. 81:b). The retaining wall itself consists of large schist slabs in regular courses, preserved to 2.00 m in height (12 courses); it forms an impressive 14.00 m-long façade along the lower west face of Building H. The façade appears to be constructed with a secondary retaining wall, thus forming a double wall to support the deep foundation and leveling fill for the west side of Room 27. An interesting embellishment is a two-stepped platform, or leveling course, of regular limestone slabs that supports the outer façade of the retaining wall.

Features discovered in Room 27 include four flat schist stones, possibly pot stands or pavers for a work area, in the northeast corner of the room just south of the stairway; a pot stand, quern, and two whole jugs in the northwest corner; a stone-lined bin and cut-bedrock bench in the southeast corner; and, of uncertain function, a partially dressed block of limestone against the east bedrock wall. The latter may represent a seat or the base for a wooden bench along the east wall. The main period of use for the building is LG–EO. It was abandoned sometime in the 7th century and largely emptied of its contents.

Exploration of Building H has allowed a new interpretation of Boyd's "Room 1" on the hilltop (Fig. 1). While originally thought to have been an interior space adjoining Room 2,²⁹ this area may now be seen as an exterior courtyard that provided access to two separate houses, Building H on the west and, through Room 2, Building N on the north. From Room 1, one could descend into Building H through the doorway in the east wall of Room 27. Access to Room 2 is more problematic because of the poor preservation of its south and east walls; an entrance on the south or east is likely. The "good" doorway that Boyd observed at the north end of the west wall of Room 2³⁰ probably led to two western rooms (overlying Room 25), which were only partially preserved along the southwestern edge of the Upper Terrace. That Room 1 was an exterior court is supported by the exposed bedrock surface, the complete absence of south and east walls, and the presence of a stone kernos discovered during Boyd's excavation on the hilltop.³¹

Building H is exceptional among houses on the Kastro. The particularly spacious central room, Room 27, has an internal area of some 48.36 m², making it the largest single undivided enclosed space on the Kastro, smaller perhaps than LM IIIC House A at Vronta but not by much. Indeed the area ratio of connecting contiguous rooms is on the order of 3:1 or 4:1, whereas the common ratio on the Kastro in PG–LG is 2:1 or 1:1. Another peculiar feature is the western retaining wall, which both permits the exceptional size of the central room and is arguably the most ambitious example of slope modification on the Kastro, involving the construction of the two-meter-high façade and stereobate platform. While slope modification is commonplace on the Kastro, this example is exceptional in terms of architectural embellishments, expense of resources, and the interest in expanding the area of the central Room 27, in some areas more than two meters beyond the limits of the natural bedrock shelf.

²⁹ Gesell, Day, and Coulson 1985, p. 333.

³⁰ Boyd 1901, p. 140; Gesell, Day, and Coulson 1985, p. 333.

³¹ Boyd 1901, pp. 141–142, fig. 7; Gesell, Day, and Coulson 1985, p. 333.

On the spatial scale of the adjacent structures, the placement of this house and its main room is significant. The exclusive entrance to Room 27 is lateral, from the east down the stairway from the courtyard ("Room 1") with the kernos. The courtyard is in fact the only securely identified external public space in the Kastro settlement. The presence of the kernos is striking. Although kernoï have potentially diverse functions and interpretations of their uses are controversial, the Minoan contexts of these artifacts outside collective tombs, in or near courtyards, and along public walkways might strengthen, at the very least, the courtyard attribution for Boyd's Room 1.³² The building and courtyard complex are located against a sharp outcrop and high backdrop of bedrock and occupy the highest and potentially most central and visible location within the settlement, enhancing the visual impact and accentuating the spatial focus of the structure. While ascending routes of communication on the Kastro are problematic and remain a subject of intensive study, they necessarily terminate in this courtyard and at the entrance to Building H. The bedrock rise that forms the southern edge of the court and the southern wall of the building is the true peak of the Kastro.

The artifact assemblage, if not post-abandonment or post-*de facto* refuse, of Building H, Rooms 38 and 27 is unremarkable, suggesting a largely domestic function. The artifact inventory (coarse wares, fine wares, a millstone, a saddle quern, juglets, beads, a terracotta weight, a figurine fragment, animal bones, and marine shells) shows the usual signs of multiple domestic activities. Even so, the scaling down of the Kastro settlement in the 7th century B.C. involved drastic changes to house plans and room functions, suggesting that inventories of artifacts from abandonment deposits may not uniformly reflect functions from all periods of a room or building. Furthermore, considering patterns of secondary deposition and post-abandonment activity, such artifacts may not even indicate room function at the time of abandonment. The large size and exceptional architecture of Building H and its spacious main room and bench, the direct and peculiar lateral access to it from the central court of the Kastro, the presence of the kernos stone, and the location of the complex at the highest and most obtrusive spot all point to a special function for the structure, perhaps public, political, religious, or a combination of these.

THE UPPER TERRACE

Building G: Rooms 21-26. The Protogeometric House (Figs. 15-17)

The exploration of the Upper Terrace and the excavation of Building G have been described in previous reports.³³ The building is particularly important because it represents the complete plan of a PG house. Furthermore, Rooms 24 and 25 produced a continuous sequence of floor surfaces from early LM IIIC until the abandonment and filling of the structure in LG. This stratigraphy has formed the basis for the initial Dark Age pottery sequence on the Kastro. Since preliminary reports on these stratigraphic sequences have

³² Boyd 1901, pp. 141-142; Gesell, Day, and Coulson 1985, pp. 332-333. For kernoï at Gournia and in Minoan contexts see Soles 1991, pp. 71-72; Soles 1979, p. 154; and Day, Coulson, and Gesell 1986, pp. 365-366 and note 21 for the function and continuing use of kernoï into the Early Iron Age; and Mazarakis Ainian 1988, p. 106, for the placement of courtyard and kernos at LM IIIC Vronda.

³³ Gesell, Day, and Coulson 1985, pp. 330-337; Gesell, Day, and Coulson 1988, pp. 298-300; Gesell, Coulson, and Day 1991, pp. 167-171; Gesell, Day, and Coulson 1995, pp. 101-107.

FIG. 15. Plan of Building G, Rooms 21-26

FIG. 16. Building G, north-south section B-B'

FIG. 17. Building G, Room 24, north face of Walls C and D

been published elsewhere,³⁴ discussion here concentrates on the architectural phases of Building G.

Late Minoan IIIC (Phases I–III)

LM IIIC remains were uncovered across the entirety of the Upper Terrace, and it appears that the first inhabitants of Building G used the natural bedrock as their initial floor surface. Continuous use of floors and erosion have both contributed to the mixing of pre-PG levels along the north end of the terrace and made difficult the isolation of distinct phases of LM IIIC habitation. A slight dip or depression in the bedrock in the area of Room 24 (Figs. 12, 16, Pl. 81:c), however, has helped to preserve three successive floor surfaces, which correspond to two separate phases of LM IIIC (Phases I and III). These phases were correlated to similarly preserved deposits in Rooms 34 and 35 of Building L and Rooms 32 and 33 of Building K. The first floor surface of Room 24 was the bedrock; the habitation level consisted of reddish and dark brown sandy soil sealed by a layer of clay (Phase I). The final floor surface, capping the last pure LM IIIC layer (Phase III), had upon it a deep fill of mixed LM IIIC and PG pottery; this layer (Phase IV), floor surface, and architecture represent a transitional LM IIIC–Early Protogeometric (EPG) renovation phase (Figs. 15–17). The Phase IV layer is sealed by a PG floor.

While room divisions in these early phases are not easily distinguished, the house did take its basic form in the LM IIIC period. The long north–south wall (Wall G)

³⁴ In Gesell, Day, and Coulson 1995, pp. 101–107, the discussion concentrated on the stratigraphy in Rooms 25/26 of Building G, and so the east–west section of the West Slope on p. 102, fig. 12, is that which runs through Rooms 25, 36, and 32. In this article, because the text includes discussion of Room 24 of Building G, Room 35 of Building L, and Room 31 of Building K, the east–west section in Figure 13 is that which runs through the next set of rooms to the north.

extending along the entire western edge of the Upper Terrace is constructed on bedrock and coincides with the first use of the building (Figs. 15, 17); the eastern wall (Wall F) of the house was also in place by early LM IIIC. Although the builders of Room 24 made ample use of the natural bedrock face for the eastern wall (*ca.* 2.00 m in height), the upper part is built of stone and is preserved to two courses (Fig. 12). Joining this wall segment at its northern end is the east wall of Room 23 (Wall H), which snakes irregularly with the bedrock contour in a kind of curve from south to north, where it ends in the southeast corner of Room 22. The east wall of the building is largely nonexistent in the area of Room 22, but portions do exist in the far north and south, and a bedrock cutting between the extant segments suggests a wall bedding (Fig. 15).

The only extant crosswall is a short spur (Wall A) dividing but allowing access between Rooms 24 and 25 (Figs. 15, 16). While it is possible that Building G consisted of only two rooms in the LM IIIC period, the juncture of Rooms 22 and 23 is too poorly preserved to rule out the possibility of a crosswall dividing these areas. Furthermore, the PG wall (Wall E) that later divided Rooms 23 and 24 was left in place during excavation and thus precluded investigation of lower levels, which might have produced a similarly placed LM IIIC crosswall. The only extant feature that might define room function in LM IIIC is the large terracotta hearth in Room 25.³⁵

Transitional Late Minoan IIIC–Early Protogeometric and Protogeometric (Phases IV and V)

In Phase IV, Building G appears to have undergone a series of renovations. At the end of LM IIIC a new wall (Wall B) was constructed a little to the south of Wall A, blocking access between Room 25 and the rest of the house (Figs. 15, 16). Thus, in this late LM IIIC phase, probably at the end of Phase III, it appears that Room 25 went out of use, and a deep layer of black ash, animal-bone debris, and pottery filled the space across the entire room. The material of the fill was probably refuse debris from surrounding dwellings.

In Phase IV there were several additions to the house, which appear to have been attempts to regularize and compartmentalize the interior space. First, Wall C was constructed, shortening Room 24 and becoming the new south wall of the house. Second, Room 23 was regularized and narrowed by the addition of new east and west walls, which were clearly built to stand in line with the east and west walls of Room 24. Another addition is the stone-lined terracotta oven situated in the northeast corner of Room 23; it is possible that Room 23 (Pl. 81:d) had replaced Room 25 as the main cooking area of the house. Although no hearth was discovered belonging to this phase, ovens and hearths have diverse and overlapping cooking functions. Thus, in Phase IV, Rooms 23 and 24 appear to be a single, neatly rectangular and undivided room.

In the PG Phase V, Building G took its final form. A new segment of wall (Wall D) was built directly on top of Wall C (Figs. 15–17). Wall D is better constructed and differs remarkably from its LM IIIC foundations, making use of smaller stones, regular coursing, and even facing. Another wall (Wall E) was built in PG, finally dividing Rooms 23 and 24. The off-center doorway connecting the rooms is a narrow space between the east

³⁵ Gesell, Day, and Coulson 1995, p. 102, fig. 12.

side of Wall G and the west end of Wall E. This rebuilding of Room 24, involving the addition of the north crosswall (E) and the redesign of the south end of the house (Wall D), coincides with the first pure PG floor surface. It is possible that this extensive rebuilding in PG might account for the deep fill of Phase IV, whose features and debris could indicate a final LM IIIC habitation phase disturbed by the renovations to the house in PG.

The PG house is a three-room building entered from the north via a doorway and steps in the north wall of Room 22 (Figs. 15, 16). The steps ascend from Room 21, which was probably an open courtyard giving access to both Building G and Room 7 (Fig. 1). It is possible that Room 7 was an ancillary building of related function, an extension of the PG house, or a separate one-room dwelling.³⁶

The rooms of the house (22–24) are axially arranged and conform to the limits and natural contours of the bedrock. Their actual sizes vary but suggest a remarkable conformity, given the confines of the terrain. Room 22 is the least well preserved; it was possibly as large as 3.00×5.00 m. Given its size and position, it was perhaps the main living/working area. The large well-built oven in Room 23 (Pl. 81:d) suggests a cooking area or kitchen, and the narrowest room (24), only 1.75×3.50 m, was probably a storage area (Pl. 81:c). The small bin in the northeast corner of Room 24 lends some support to this attribution.

Subprotogeometric (SPG), Geometric, and Late Geometric (Phases VI–VIII)³⁷

Building G appears to have functioned in its three-room form throughout PG and Geometric until the beginning of LG (Phase VIII), when the entire house was abandoned, filled in, and leveled in order to construct an architectural terrace for expansion of building activities on the hilltop. Before excavation, the entire Upper Terrace was thought to have been a corridor or path running from north to south from the top of the stairway in the north wall of Room 22.³⁸ In 1988, the first rooms of Building G were recovered from under the deep fill of the “corridor”, which sloped gradually down from south to north along the terrace. The downward slope of the fill in the north, dropping approximately 4.00 m from the highest point in the south, can be attributed to the extreme erosion that has devastated the middle of the West Slope in the area of Rooms 22 and 23. Excavation revealed that this fill, containing LG sherds,³⁹ consisted of the remains of an artificial terrace built directly over Building G. This terrace was evidently constructed to support the westward expansion of LG houses on the hilltop. While the overlying LG houses are largely lost to the extreme erosion of the West Slope, remains of rooms are partially extant along the extreme eastern edge of the terrace (Room 6 and in the area of Room 25); some

³⁶ For the axial Dark Age plan see Hayden 1981, p. 137; for ancillary rooms and porches see Day, Coulson, and Gesell 1986, p. 360; Hayden 1981, pp. 101–102, 132–135.

³⁷ For the first use of the term Subprotogeometric applied to the pottery from East Crete, see Mook 1993, pp. 194–197. This is a term that has not been used previously for the Cretan sequences. It is employed here because it best describes the period that existed on the Kastro from the end of PG to the beginning of LG. The contemporary phases in central Crete, as defined at Knossos, are PGB, EG, and MG, but these are lacking on the Kastro; see Gesell, Day, and Coulson 1985, p. 117, note 93. See also note 93 below.

³⁸ Boyd 1901, p. 139; Gesell, Day, and Coulson 1985, pp. 335–337.

³⁹ Gesell, Coulson, and Day 1991, p. 171.

portions of floors, bins, and walls are preserved. The two rooms overlying Room 25 were entered from Room 2 and probably formed an extension of the house on the hilltop. The west wall of LG Room 25 is drawn on the actual-state plan (Fig. 1); this wall was removed in 1990 to allow exploration of the deep deposits of the LM IIIC–PG house.

THE MIDDLE TERRACE

Building L: Rooms 57, 8N, 8S, 34, 35. The Late Geometric House (Figs. 18–20)

Building L is a single four-room house of LG date that occupies nearly the entire length of the Middle Terrace. A preliminary report of excavation along the Middle Terrace has been published.⁴⁰ The aim here is to clarify and summarize the history and plan of the LG house and its modifications in the Orientalizing period.

While well-preserved LM IIIC habitation levels have been found in the deep sondage in Rooms 34 and 35 (Figs. 12, 20), the intermediate phases (PG–Geometric) were most likely disturbed by the rebuilding of the West Slope in LG and require further study. On the west side of Room 35, a LM IIIC wall has been preserved along the western edge of the bedrock terrace. Built on bedrock, the wall forms the foundation for later Geometric renovations to the room. The LM IIIC foundations are partially damaged on the interior face, but run north–south the full length of the room. The natural bedrock seems to have formed high socles for the north, south, and east walls of the room in LM IIIC, although the walls on these sides cannot be dated to this period. Both the north and south walls are certainly post-LM IIIC constructions. One natural bedrock fissure in the northeast corner of the room seems to have been worked into a smooth and regular depression and partially lined with clay. The ash debris contained within it suggests cooking activity. A bin lying to the west of the hearth, on a lower level, utilizes both the bedrock and stacked stones for its sides. The size of the house in LM IIIC is not certain, as the bedrock climbs sharply both north and south of Room 35, permitting PG–LG builders to use level bedrock foundations for their houses while obliterating the LM IIIC remains. One sounding, however, was excavated beneath the clay floor of Room 34, just south of the bench that borders the apsidal hearth. This sondage revealed a bedrock crevice sloping to the south and containing a few LM IIIC sherds, perhaps evidence for LM IIIC occupation across the Middle Terrace.

The actual-state plan (Fig. 18) illustrates the form of Building L in its LG phase, as well as the results of the deep sounding beneath the LG floor in Room 35. The house was entered from an exterior courtyard or porch on the north (Room 57) through a doorway in the north wall of Room 8N. This enormous hall, which is the largest room of the house, and the adjoining Room 8S were excavated by Boyd; their specific functions remain obscure.⁴¹ Room 8S communicated with Room 34 by means of a doorway in the southeast corner of Room 8S (Pl. 82:a). The floor level of Room 8S is about 1.20 m higher than that in the adjoining Room 34 because of an abrupt drop-off in the bedrock shelf. Access to Room 34 was facilitated by a wooden stairway indicated by the stairwell space between the south wall of Room 8S and the spur wall in the north part of Room 34

⁴⁰ Gesell, Day, and Coulson 1995, pp. 107–113.

⁴¹ Gesell, Day, and Coulson 1985, p. 337.

FIG. 18. Plan of Building L, Rooms 8N, 8S, 34, and 35

Fig. 19. Building L, Room 34, north-south section C-C'

FIG. 20. Building L, Room 35, west-east section D-D' (north wall)

(Figs. 18, 19, Pl. 82:b). The stairs ascended from west to east to a stone-built or wooden landing in front of the doorway in the northeast corner of Room 34. Rooms 34 and 35 were connected by a doorway in the center of the south wall of Room 34.

While the functions of Rooms 8N and 8S are now impossible to determine with certainty, their size and position suggest that they were the main living and sleeping areas, on a higher level and conveniently separated from the work and storage areas in Rooms 34 and 35 (Pl. 82:a, c). This proposed function of Rooms 8N and 8S might be supported by the specialized functions of the adjoining southernmost rooms. In Room 34 the bench, large apsidal hearth, stand, and associated artifacts (hydria, jugs, cups, bowls, iron spit, terracotta loomweights, querns, and a variety of stone tools) suggest a domestic working and cooking area during the last phase of use. A single large pithos that was recovered in the northeast corner of Room 35 (Pl. 82:c) indicates that this adjoining area was the main storeroom of the house, conveniently placed next to the kitchen. It is important to note, however, that the artifact assemblage of Room 34, the food-processing or domestic work area, represents material in place at the time of abandonment in the Orientalizing period.

At the end of LG or at the beginning of EO, the doorway connecting Rooms 34 and 35 was blocked (Fig. 20), and Room 35 was abandoned and completely filled in (Fig. 12), probably to support an architectural terrace for buildings on the Upper Terrace. Furthermore, the doorway between Rooms 8S and 34 was similarly blocked in order to accommodate an additional lateral north-south wall, which buttressed the unstable foundations of Room 23 on the terrace above (Fig. 1). Room 34 continued to function as a kitchen/domestic work area in EO; however, access to it could only have been from a new

doorway in the northwest corner of the room, where the base of a doorjamb is partially preserved (Fig. 18). This door in the west wall of the house would have led directly onto a long artificial terrace, which occupied the full extent of the Lower Terrace, after the abandonment of Buildings I, J, and K, in the EO phase. The presence of this doorway is suggested by the break in the west wall of the room in the north. Evidence for an artificial terrace in clay is substantiated by the deep, yellow, phyllite-clay deposits overlying the extant LG architecture of Building M in the north and Building K in the south (Fig. 22: clay fill).

The renovation of the Middle Terrace in the 7th century greatly reduced the size of Building L. It is likely that the instability of the West Slope along the east side of Room 34 required a complex series of lateral retaining walls to support the unstable architectural fill of the Upper Terrace. Such a renovation would have precluded the use of the doorway and stairway between Rooms 8S and 34. In the EO phase, the inhabitants of Rooms 8N and 8S still used Room 34 as a kitchen or domestic work area but simply entered it from outside the house via the terrace along the west side of Rooms 8N and 8S and overlying the area of Rooms 28, 29, and 37 (Fig. 1). This new external access to Room 34 might suggest general use of the kitchen by the inhabitants of adjoining or nearby houses. The changing house forms and altered communication patterns in the Kastro's EO phase point to possible economic or social changes. Blocked doorways and reduction in house size at the end of LG are not isolated phenomena here on the West Slope and are frequently reduplicated elsewhere on the Kastro in Buildings B and P and in the Northwest Building. Such a reduction in living areas might suggest a widespread population decrease, movement of population to other nearby sites such as Azoria (to the north of the Kastro), or functional changes of rooms within the settlement for seasonal, pastoral, or agricultural activities.

THE LOWER TERRACE

Building K: Rooms 31–33 (Figs. 21, 22)

The main purpose of excavation in 1992 was to clarify and define the architecture and stratigraphy of Building K, which consisted of three rooms (Rooms 31–33) along the Lower Terrace (Fig. 21, Pls. 82:d, 83:a). These excavations revealed both the southern limits of the building and a stratified sequence of floor surfaces spanning the entire Early Iron Age and mirroring the same sequence as that in Room 24 of Building G on the Upper Terrace. Since there was less modification of this terrace in the PG–LG phases, the stratigraphy here (Fig. 22) is more compact than in Room 24, and the intermediate Phases VI and VII (SPG–Geometric) are not well differentiated. The level VI–VII is a floor with habitation debris well stratified between the pure PG level (V) and the LG floor and habitation debris (VIII); this level was simply called Geometric but most likely spans the period SPG–Geometric (*ca.* 900/850–750 B.C.). A similar compression of phases occurred in Room 23 of Building G, where the rise in the bedrock was continuously used and the terrain was not conducive to the buildup and preservation of floor surfaces.

The architecture and stratigraphy of Building K are not so well preserved as in Building G because of the steep drop-off west of this terrace. The western edge of Building K has long since eroded, leaving only traces of the western wall foundations at

the far south and in the area of Rooms 30 and 31 (Fig. 21). The most extreme erosion is evident in the area immediately west of Room 34 (Fig. 18) and north of Room 30, where only bedrock remains.

The phases, sequence of floor levels, and features of Building K are best visualized in section (Fig. 22). The earliest use is in LM IIIC (Phases I–III undifferentiated). To this earliest period belongs a segment of the western wall (Wall F) in the southwest corner of the building (Fig. 21). Additionally, a bin or stand is situated against the bedrock shelf in the southeast corner of the building. A floor surface, found across the large extent of the LM IIIC house, is best preserved at the south; in the northern area of the building, at corresponding levels, the material is LM IIIC, but only patches of a living surface were preserved.

In the subsequent transitional phase (IV) a good floor surface extended across the entire house. In this phase the south wall (Wall A) of Building K was constructed, forming the southern limit of the building; the stand or bin continued in use, and a flat schist stone, perhaps a pillar or post support, is situated in the center of the southernmost area. The northern limit of the building is difficult to determine. Wall B, certainly the northern limit of the house in LG, was built on a rise in the bedrock and could well have been in use in LM IIIC or LM IIIC–PG.

In the Protogeometric period (Phase V), Wall A continued in use, and a good clay floor surface can be traced across the entire building. This PG floor is the first well-preserved living surface in the northern area of the house. Furthermore, there are signs of other architectural renovations. The LM IIIC segment of west wall (Wall F) in the southwest corner of the building was leveled, and the PG floor extended over it toward the west; the building was clearly expanded upon a built terrace, whose foundations (retaining wall G) are still visible in the far southwest corner and along the west side of Rooms 30 and 31. It is likely that the entire house was widened as much as 1.50 m along the western edge, but there are few extant segments of this wall.

Dating to the subsequent SPG and Geometric phases (VI–VII) is another floor, but no changes in the architectural plan are evident. It is possible, but unlikely, that throughout LM IIIC–Geometric the house consisted of a single undivided room bounded on the north and south by Walls A and B. The later (LG–EO) Walls C, D, and E were left in place during excavation and might obscure earlier room divisions.

In Phase VIII (LG) Walls A and B remained in use, defining the northern and southern limits of the house, but the first significant internal changes and room divisions are discernible. Although there is no certain division between Rooms 31 and 32, a crosswall (Wall C), preserved to three courses, was built in LG, creating a division between Rooms 31/32 and 33 (Pl. 83:a). Communication between the rooms was by means of an off-center doorway between the west wall of the house and the west end of Wall C. While the poor preservation of the western edge of the terrace might have obscured the connections between rooms, a similar off-center door placement (pp. 343–344 above) was observed in LM IIIC and PG phases in Building G on the Upper Terrace (Rooms 23–26). Within Room 33, a bench was built in the northeast corner, and a spur wall divided the room in a kind of “but-and-ben” arrangement (Fig. 21).

From the earliest phases, the eastern walls of Building K consisted of the natural bedrock socle with upper portions of stone preserved to various heights and conforming to the irregular contours of the bedrock shelf. The socle is the western face of the bedrock shelf that forms the foundation for Buildings L and M on the terrace above and to the east; the upper, built portion of the wall is a party wall, shared by houses on both Middle and Lower Terraces. In LG a new east wall (Wall H) was constructed in Room 33, regularizing the shape of the room.

It is in EO, the final phase (IX) of the use of Building K, that a three-room plan is first evident (Figs. 21, 22). Walls A, B, and C remained in use, while a fourth wall (Wall D) was a new addition, defining and separating Rooms 31 and 32. The function of the rooms in this phase remains obscure, and no features or artifacts were evident that might elucidate specific activities.

Sometime in EO, Building K was abandoned and filled in with a deep layer (*ca.* 0.80 m) of yellow phyllite clay. This clay layer corresponds to the leveling fill that was uncovered at the far north of the Lower Terrace covering the entire Building I.⁴² The purpose of the clay terrace in that area was to create a path or street along the west edge of Rooms 8N and 8S in order to provide external access to Room 34 of Building L. It is possible that the clay fill at the south is an extension of this western corridor along the entire Lower Terrace, eroded only in the area north of Room 30. On top of the clay fill was built Wall E (Figs. 21, 22), which may have functioned as a buttress wall for the deep fill of an architectural terrace built over Room 36 on the Middle Terrace.

CONCLUSION

The preserved buildings of the West Slope are of various periods spanning the entirety of the Dark Age. While settlement activity and architecture are apparent on all the terraces in LM IIIC, it is only along the Upper Terrace (Building G) that a plan is distinguishable. The LM IIIC house conforms to the uneven and narrow bedrock shelf, incorporating bedrock features into the architecture with little sign of planning and even less concern for symmetry or regularity of room size or house composition. In the PG period there is a marked increase in regularization of the plan and compartmentalization of internal space. Buildings L and K both show signs of extensive rebuilding. The placement of crosswalls created distinguishable rooms with fairly uniform dimensions; external walls were rebuilt, resulting in regular rectangular designs and even façades; finally, interior space was expanded by architectural terracing along the west. The first two-, three-, and four-room houses appear in this period and closely approximate Hayden's "axial" plan type.⁴³

This tendency toward regularization and expansion of room size continues into LG and is best illustrated by the plans of hilltop Building H and Building L on the Middle Terrace. In these examples, architectural terracing permits rooms of very large and regular

⁴² The clay layer discovered in the northern area of the Lower Terrace (Gesell, Coulson, and Day 1991, p. 172) was originally described as "yellow-brown clay roofing material". The even deposition and depth of the deposit (*ca.* 0.80–1.00 m) suggests that it was leveling fill rather than ceiling debris.

⁴³ Hayden 1981, pp. 132–135; Hayden 1983, p. 386.

dimensions. Façades, large room size, and axial symmetry or regular internal dimensions are of great importance to the LG architect, who appears to be attempting to overcome the extreme slope, instability, and erosive tendencies of the narrow terraces of the West Slope. The constant opposition between the irregularity of terrain and the regularity of architectural form seems to be an underlying principle in the evolution and development of the Kastro settlement. From LM IIIC to EO, the ever-increasing efforts to enlarge room and house size and to overcome the uneven floors and irregular external façades and wall faces seem to be, in every phase, impeded by the exigencies of the terrain and environment. Too little is known yet of the internal configuration of the LM IIIC houses or the construction date of many of the LG buildings to suggest social or political changes from phase to phase. What is evident, however, is that it was the PG builder who improved the size and shape of the LM IIIC house and thus established the essential form of the Kastro settlement.

DONALD C. HAGGIS

THE NORTHWEST BUILDING

The Northwest Building is situated on the saddle between the Kastro hilltop and the False Peak to the west, northwest of the main area of excavation (Fig. 1).

Intensive study of the pottery, stratigraphy, and architecture of the Northwest Building (Fig. 23), conducted from 1991, has produced a much more refined understanding of the habitation in this area of the Kastro than was hitherto possible. The following is a synopsis of the history of the Northwest Building, which is the result of this study.⁴⁴ The results are nevertheless still preliminary, as details of the ceramic sequence await the final analysis of the pottery from the entire site. Wherever possible, an attempt has been made to correlate the pottery from the Northwest Building with that associated with the stratigraphic phases identified on the West Slope of the Kastro.⁴⁵

LATE MINOAN IIIC

In LM IIIC, habitation in the area of the Northwest Building consisted of a single two-room house situated near the cliff edge to the north (Fig. 25). This house included Room NW 1 and the area below Rooms NW 2–NW 4; two phases of habitation are indicated by the two distinct LM IIIC floors below Room NW 2. The rooms are built within naturally recessed areas of the bedrock; the extensive use of bedrock for floors and wall socles is a feature of many of the LM IIIC houses on the Kastro. As a result, room plans are fairly irregular and follow natural contours of the terrain.

⁴⁴ The present synopsis is based on Mook 1993. For a brief, one-page preliminary report on the Northwest Building, see Gesell, Day, and Coulson 1995, p. 114.

⁴⁵ See note 3 above.

FIG. 23. Plan of the Northwest Building

FIG. 24. Northwest Building, schematic plan with wall designations

NW 1

Fig. 26. Northwest Building, Room NW 1, west-east section F-F'

Fig. 27. Northwest Building, Room NW 2, south-north section G-G'

Fig. 28. Northwest Building, Rooms NW 3-NW 4, south-north section H-H'

on Figure 25.) This included the areas below Walls H, J (and its wall bench), and K (and its wall bench and stand).

In Room NW 1 the extant architecture associated with this phase of habitation includes the poorly preserved northern wall, Wall A. It is situated directly on bedrock, although it has slipped somewhat to the south. The southern face of Wall A is founded on the level of the bedrock floor in Room NW 1, while the northern face rests upon a ledge of bedrock slightly below the level of the floor, on the face of a sheer cliff (Pl. 83:b).

The eastern and western bedrock spurs in Room NW 1 were utilized as deep socles, upon which sections of wall (Walls B and C) were constructed to raise them to ceiling height (Fig. 26, Pl. 83:b). The date of the construction of Walls B and C is not certain, but since there is no evidence for roof or wall collapse in Room NW 1 until after the final phase of habitation, it may be that these walls are part of the original LM IIIC foundation.

The main room of the LM IIIC house lay below Rooms NW 2–NW 4. The large outcrop of bedrock on which Wall C is located continues eastward, and its southern face created the northeastern boundary of the room below, Room NW 3 (Fig. 28). At the eastern end of this outcrop, in the northeast corner of Room NW 3, Wall D is the facing for a shallow inset in the bedrock.

The easternmost possible boundary of the main room is likewise determined by bedrock. In Rooms NW 3 and NW 4 the line of a steep vertical rise in the bedrock is indicated by later Walls L and N, and the eastern face of Wall L is founded on the top of a bedrock ledge, *ca.* 1.88 m above the LM IIIC clay-and-bedrock floor in Room NW 3. The wall of the LM IIIC house is located either under portions of these later walls, where it would make a facing for the bedrock, or was built on top of the bedrock ledge and no longer survives.

The entrance to the LM IIIC house was located at the southern end of this ledge, in the southeastern corner of the room. To the east of Wall N ten steps are cut into the bedrock and make a right-angle turn at the transition from the upper ledge down into Room NW 4 (Pl. 83:c).⁴⁶

The southeastern wall of the LM IIIC house, Wall E, begins adjacent to the lower steps of the staircase and extends to the northwest, following the slope of the bedrock down into the area of Room NW 2. It is constructed along the southern edge of the bedrock plateau on which Rooms NW 3 and NW 4 are situated (Fig. 28). On the southwestern side of the wall, the bedrock drops steeply down into the area of Room NW 8.

The two major southern walls of the LM IIIC house, Walls E and G, closely follow the contours of the bedrock and are linked by Wall F. Wall F abuts the sloping bedrock below the southern face of the west end of Wall E and is situated at a right angle to it.

Wall G is the southwestern wall of the house. It bonds at a right angle with Wall F and follows the contour of the bedrock downslope from Wall E. Later Wall CC was built directly on top of it (Fig. 27) and continued to the west beyond Wall G for 1.30 m. The western 1.80 m of Wall CC was removed during excavation, confirming the existence of Wall G but exposing very little of it.

⁴⁶ See Gesell, Coulson, and Day 1991, pl. 70:c, d for photographs of the upper steps.

The westernmost possible parameter of the structure, in Room NW 2, is indicated by bedrock outcrops to the southwest of Wall B, which were exposed prior to excavation. No trace of a wall was preserved, but the original western wall of the LM IIIC house was unlikely to have been located beyond the western end of Wall G and probably followed the irregular contours of the bedrock outcrops at the west.

Each room of the house was equipped with a bench. To the west of Wall D is a stone bench, built against the bedrock outcrop and founded on bedrock. Wall J was later constructed over the bench and obscures a portion of it. The bench in Room NW 1 is created by a natural spur of bedrock along the east, running parallel and adjacent to the socle of Wall C (Fig. 26). On its northern end, where the spur dips down, a large limestone slab was mortared into place in order to extend the level surface of the bench.⁴⁷

In the northeast corner of the main chamber, below Room NW 3 and adjacent to the southern face of Wall D, is a low circular stand (Fig. 28). It consists of a roughly oval schist slab, founded on small schist stones bonded with clay mortar. In Room NW 1 a small rectangular structure is located at the southwest, which effectively creates a passageway on its eastern side, *ca.* 0.70 m wide, between the two rooms of the house. Although initially identified as a stand, it has been suggested that this feature is in fact the poorly preserved remains of a pier.⁴⁸ Such a pier would have reduced the span required for the doorway to a size manageable by a simple lintel.

Two phases of LM IIIC habitation can be discerned for this house. The ceramic evidence indicates that the initial phase of habitation occurred early in the period (West Slope Phase I). This phase was best seen in the area of the main room below Room NW 2, where deep fissures in the bedrock and a slope to the southwest required substantial leveling. Here, the fissures and the southern area of the room were partially filled in (Room NW 2, Level 1)⁴⁹ and then covered with a clay packing (Room NW 2, Level 2), which was used to surface most of the area below Room NW 2 (Fig. 27). Level expanses of bedrock in the central and northern regions of this area were left exposed, however, so that the floor was a combination of clay and bedrock. Below Room NW 4 the bedrock is quite level (Fig. 28) and functioned as the floor surface, although three deep depressions were filled with flat stones. The contemporary floors in Room NW 1 and below Room NW 3 were also bedrock (Figs. 26, 28).

The transition from the main room of the LM IIIC house to Room NW 1 is marked by a rise in the bedrock, which then slopes down slightly from south to north. The bedrock in Room NW 1 was modified to some extent in order to create a more level surface. Two natural fissures, located parallel to the bedrock spurs, may have served as drainage channels in the early phases of habitation, since they were not intentionally filled (Fig. 26). They slope from south to north, running to the north below Wall A and out onto the cliff edge (Pl. 83:b). A similar natural channel runs downslope from the bedrock plateau

⁴⁷ See Gesell, Coulson, and Day 1991, pl. 68:d.

⁴⁸ The author thanks Professor F. A. Cooper for this suggestion and the observation that, without such a pier, the span required by the lintel would not be possible without a relieving device.

⁴⁹ Within each room, distinct stratigraphic horizons have been assigned a consecutive level number, beginning with the lowest stratum. These are the numbers that appear on the sections.

FIG. 29. Northwest Building, pottery from the LM IIIC house (first phase)

FIG. 30. Northwest Building, pottery from the LM IIIC house (second phase)

south of Room NW 6, culminating above the fifth step of the staircase leading into the main room of the house. The channel becomes wider and deeper toward the staircase, and a receptacle could have been placed on step five in order to collect the runoff of water.

On the floor of the northern edge of the main room, just southwest of Room NW 1, was a hard patch of burnt red clay containing many fragments of carbon. It continued into the unexcavated area below Wall H and may be the poorly preserved remains of a hearth. Embedded in the southern edge of this red clay were several fragmentary vessels (Pl. 83:d), including two deep bowls (Fig. 29:2, 3), a shallow bowl or basin (Fig. 29:4), and a cooking dish (Fig. 29:5). Fragments of a pyxis were found on the floor nearby to the east (Fig. 29:6). A kylix (Fig. 29:1) was recovered from the leveling fill below the floor.

The pottery from these deposits is typical of early LM IIIC on the Kastro (West Slope Phase I) in that two or three of the vases are LM IIIB in style. One deep bowl (Fig. 29:2), with a flat base, is decorated with loops and dots and has a monochrome interior. The decoration, rim shape, and angle of the handles indicate that this pot is LM IIIB2 in date.⁵⁰ The only known parallel for the decoration on this piece is from Palaikastro, found either at Kastri or Rousolakkos.⁵¹ The shape of the other deep bowl (Fig. 29:3), decorated with a bivalve-shell chain, is close to LM IIIB2 examples, but the vessel could also belong to early LM IIIC. The bivalve-shell-chain motif originates in LM IIIA and is retained into LM IIIB with only a single outline; a second outline, as on this example, is found late in LM IIIB and early in LM IIIC.⁵² Such isolated, more widely spaced motifs begin to occur on bowls and cups in LM IIIB2, anticipating the LM IIIC "open style".⁵³ As on these two examples, the handle zone on the exterior of deep bowls is usually framed by a single band at the rim and two body bands, a format which begins as early as LM IIIA,⁵⁴ becoming common in LM IIIB⁵⁵ and a standard feature by LM IIIC.⁵⁶

The kylix (Fig. 29:1) has a carinated profile with an indented lip, identical in shape to one from central Crete that is assigned to late LM IIIB or early LM IIIC.⁵⁷ The interior

⁵⁰ Birgitta Hallager and Athanasia Kanta confirmed this date (personal communication). Hallager also pointed out that on LM IIIB deep bowls the handles swing out horizontally from the body of the vessel almost immediately, while on LM IIIC deep bowls they run vertically up the vessel for some distance before turning out horizontally. See also Gesell, Day, and Coulson 1995, p. 117 and p. 118, fig. 22:1.

⁵¹ Kanta 1980, p. 192, pl. 80:10.

⁵² B. Hallager, personal communication; Popham 1965, p. 330, on LM IIIB; Popham 1967, p. 350, fig. 7:2, for the LM IIIC motif; Sackett, Popham, and Warren 1965, p. 288, fig. 9:h, i, and k, for early LM IIIC. See also Gesell, Day, and Coulson 1995, p. 118, fig. 22:2.

⁵³ Watrous 1992, pp. 145–146.

⁵⁴ Popham 1965, pl. 86:c; Popham 1967, p. 346, fig. 5:1.

⁵⁵ Popham 1964, no. 30, pl. 8:c, d; Popham 1965, pl. 85:e; Popham 1967, pls. 87:c, d, 88:a (late LM IIIB or early LM IIIC); Popham 1970, p. 197, fig. 5:1, pl. 52; Popham 1984, pls. 127:b, 179; Watrous 1992, p. 141.

⁵⁶ Seiradaki 1960, p. 30, fig. 21:1, pl. 10:a; Popham 1965, p. 322, fig. 3:3–6, p. 323, fig. 4:7–9, p. 325, fig. 5:22, 25, p. 326, fig. 6:31, 32, 37; Cadogan 1967, p. 260, fig. 2:8, 11; Popham 1979, fig. 8:1–4; Warren 1982/1983, p. 81, fig. 47:left, p. 82, figs. 48:top right, 49:lower left and center; Day, Coulson, and Gesell 1986, p. 369, fig. 8:14.

⁵⁷ Popham 1965, pp. 319–320, fig. 1:g.

is monochrome coated, and the exterior is decorated with a rim band and a floral motif, possibly part of a tricurved streamer, although no good parallels for it exist.

The large shallow bowl (Fig. 29:4) is decorated on the interior and exterior with bands and a wavy line in the handle zone. An earlier parallel (LM IIIA) comes from Archanes.⁵⁸ Bands and wavy lines on large open vessels are found in burials at both Kastri and Myrsini.⁵⁹

The pyxis (Fig. 29:6) is the only one identified from an LM IIIC context in the Northwest Building. It is straight sided, with two horizontal handles running vertically along the upper body and continuing well above the rim, a feature typical of LM IIIC pyxides.⁶⁰ The shape is similar to the straight-sided pyxides from Karphi, although the one from the Northwest Building does not have the sharp incurving top of Karphi types 1–3 and 6 or the inner ledge for a lid found on Karphi types 4 and 5.⁶¹ Rather, the top of the rim has only a shallow depression to receive a lid, perhaps an earlier feature of pyxides. The exterior is decorated with vertical stylized tree motifs, somewhat similar to that found on a cup or bowl from Karphi.⁶²

The cooking dish (Fig. 29:5) is made in a typical LM IIIC coarse fabric. Cooking dishes are large open vessels with a rim diameter greater than 0.30 m and most frequently about 0.50 m. The deep rim is straight or flaring with well-smoothed surfaces. This type of vessel is found as early as Early Minoan (EM) IIB and continues to be produced into LM IIIC.⁶³ On LM IIIC examples, including this one, there is a distinct demarcation between the rim and the rounded bottom, which is extremely thin and usually preserved for only a few centimeters beyond the rim. The exterior of the bottom is very rough, as if it were formed by impressing into or over a rough-surfaced mold.⁶⁴

These vessels represent a combination of fine eating and drinking vessels in association with cooking wares. The fine pyxis was probably used for special storage.

The clay floor surface in the western half of the main room was at a lower level than the floors in the eastern part of the room and in Room NW 1. At some point, after the beginning of LM IIIC, this area was resurfaced with schist-slab pavers set in clay (visible on the plan of Room NW 2 in Figure 31; Fig. 27: NW 2, Level 3, Pl. 84:a).⁶⁵ Within the schist-slab and clay floor were found a variety of LM IIIC vessels (West Slope Phases II–III), both fine and coarse. Two deep-bowl rim fragments (Fig. 30:1, 2) have reserved bands on the interior, a feature found with increasing frequency as the period

⁵⁸ Lebesi 1972, pl. 362:α.

⁵⁹ Sackett, Popham, and Warren 1965, pp. 285–286, p. 295, fig. 15:P34 (basin), p. 296, fig. 16:P18 (kalathos); Kanta 1980, p. 172, pl. 67:6 (kalathos).

⁶⁰ Kanta 1980, p. 282.

⁶¹ Seiradaki 1960, pp. 18–19, fig. 12.

⁶² Seiradaki 1960, p. 30, fig. 21:d.

⁶³ Warren 1972, p. 111; Betancourt 1980, pp. 5–7.

⁶⁴ Cooking dishes from Chania Kastelli have woven impressions from baskets on the exterior of the bottoms (B. Hallager, personal communication).

⁶⁵ These schist slabs set in clay were originally interpreted as the upper level of collapsed roofing material (Gesell, Coulson, and Day 1991, p. 175). Subsequent excavation in Rooms NW 1–NW 4 and study of the pottery necessitated a revision of this interpretation and identification of this stratum as a floor surface.

progresses. One (Fig. 30:2) is decorated on the exterior with a deep band at the rim and a wide wavy line below.⁶⁶ Use of the wavy line in the main zone of fine vessels is an innovation of LM IIIC.⁶⁷ Bowls with monochrome interiors are current throughout all phases of LM IIIC on the Kastro.⁶⁸ Those from the later LM IIIC habitation in the Northwest Building have a variety of exterior decoration. The example shown as Figure 30:3 is decorated with an abstract version of the Minoan flower motif. The center of the flower is indicated by concentric accumbent loops, the uppermost of which has a pointed apex, surrounded by radiating strokes or fringes.⁶⁹ It is set on a base line (a band), and like one from central Crete, it is probably a simplified version of the typical Minoan flower with “U” center.⁷⁰ The LM IIIC cooking tray (Fig. 30:4) is blackened from burning on the exterior of the walls. Trays have fairly straight sides and flat bottoms, like those at Kommos from earlier periods.⁷¹ On this example, two adjacent depressions on the rim (made by pressing with a finger) were probably either for pouring (not very efficiently) or for holding spits to suspend meat across the tray. The latter idea was suggested by Seiradaki for cooking dishes from Karphi, although on those vessels there is no obvious way to secure the spits.⁷² An almost identical tray with the same finger impressions comes from Kastri (where one of the two handles has been preserved).⁷³ Plain cooking trays were also found at Kastri and Karphi.⁷⁴

The clay used in the schist-slab floor continued into the northeastern area of the room, below Room NW 3, where it filled shallow depressions in the bedrock and formed a new floor surface in conjunction with it (Fig. 28: NW 3, Level 1). The few sherds found in this clay packing included a cup (Fig. 30:5), which is coated on both the interior and the exterior with a metallic black slip mottled to red. This is also a surface treatment found on vessels from the West Slope in LM IIIC Phase III contexts.⁷⁵

The original bedrock floor surfaces in Room NW 1, below Room NW 4, and at the eastern edge of Room NW 2 continued to be used. The habitation debris directly on the bedrock floor in the southeastern part of the main room, below Room NW 4 (Fig. 28: NW 4, Level 1), contained only LM IIIC pottery and should be associated with this second phase (West Slope Phases II–III). The pottery includes a broad range of both fine decorated wares and coarse storage and cooking wares. A deep bowl with monochrome decoration (Fig. 30:6) provides a good example of one type that occurs frequently in LM IIIC deposits

⁶⁶ Tzedakis and Kanta 1978, p. 52, fig. 36:154, pl. 10:154, for a similarly decorated deep bowl.

⁶⁷ Popham 1965, p. 324; Watrous 1992, p. 147. See, however, the several deep-bowl or cup fragments with a wavy line as the central motif from the North Platform of the Unexplored Mansion, dated by Popham to LM IIIB (Popham 1984, pl. 127:a).

⁶⁸ As elsewhere on Crete, for instance at Chania (Tzedakis and Kanta 1978, p. 15).

⁶⁹ Similar to the fringed arcs on a sherd from Kastri (Sackett, Popham, and Warren 1965, p. 291, p. 288, fig. 9:u).

⁷⁰ Popham 1965, pp. 327–328, fig. 7:43.

⁷¹ Betancourt 1980, p. 7, fig. 4.

⁷² Seiradaki 1960, p. 9.

⁷³ Sackett, Popham, and Warren 1965, p. 296, fig. 16:P13, p. 290, fig. 11:n, pl. 76:b.

⁷⁴ Seiradaki 1960, pp. 9–11, fig. 6:1, 3–5; Sackett, Popham, and Warren 1965, p. 285, p. 290, fig. 11:m–o. Neither report distinguishes cooking trays from cooking dishes.

⁷⁵ Mook and Coulson 1997, p. 359.

on the Kastro. Another contemporaneous type is represented by deep bowls that have a reserved band on the rim interior and a reserved disk on the interior at the base, or both (Fig. 30:7).⁷⁶ The reserved disk, however, first occurs in central Crete early in LM IIIB and possibly late in LM IIIA⁷⁷ and is well attested at Kommos from LM IIIA2 onward.⁷⁸ The champagne glass is represented only by a stemmed foot (Fig. 30:8). Its shape is unusual for the shallowness of the depression under the foot, which leaves a very thick area between the depression and the interior of the bottom of the vessel. It is similar to a foot from Kastri but is most closely paralleled by an example from Karphi, which is attributed to a krater but is actually the size of the foot of a small champagne glass.⁷⁹ A krater fragment (Fig. 30:9) has a reserved band on the interior of the rim and a rim band on the exterior. The surfaces are badly worn, but it was apparently decorated in the "close style" to judge from the fragmentary decoration, which appears to be that of filling arcs.⁸⁰ The shape of the rim is similar to that of a LM IIIC krater from Vronda.⁸¹ A cooking dish (Fig. 30:10) was also found in the habitation debris; a double spout was formed by pulling in the rim.⁸²

Additionally, four stone tools, two querns, a stone vessel fragment, and a door socket were found in this habitation debris. The door socket very likely came from the entrance to the house; the actual doorway would have been located on the seventh or eighth step of the staircase, where the eastern wall should have been located. In the northeastern part of the main room, below Room NW 3, only a tripod cooking base and legs found sitting on the bedrock in the northeast corner, adjacent to the circular stand, can be securely associated with the floor.

The evidence is incomplete for determining any variation in room function during the LM IIIC occupation of this house. It is probable, however, that Room NW 1 was used primarily for storage, as it is such a small room.

The plan of the LM IIIC house relies heavily on the topography of the selected site; only the placement of Walls F and G involved a decision that was not necessarily influenced by the contours of the bedrock. The result is an extremely irregular plan but one that maximizes the benefits of the terrain. These include sheer faces of bedrock that could serve as wall socles, especially in the naturally formed niche which creates Room NW 1; protection from the strong north winds by the bedrock outcrops that rise up to the north; and level expanses of bedrock that could be used as floor surfaces.

PROTOGEOMETRIC

In PG, settlement in the area of the Northwest Building was greatly expanded (Fig. 23). The main room of the LM IIIC house was divided, creating Room NW 2 to the west,

⁷⁶ Kanta 1980, p. 259.

⁷⁷ Popham 1965, p. 321.

⁷⁸ Watrous 1992, p. 130.

⁷⁹ Sackett, Popham, and Warren 1965, p. 289, fig. 10:b; Seiradaki 1960, p. 24, fig. 16:7.

⁸⁰ For examples of filling arcs on "close style" kraters see Seiradaki 1960, pp. 35–36, figs. 25:f, 26:a; Sackett, Popham, and Warren 1965, p. 292, fig. 13:KP31.

⁸¹ Day, Coulson, and Gesell 1986, p. 362, fig. 5:23, p. 375.

⁸² Seiradaki (1960, p. 10) discusses this type of spout and illustrates the feature in a photograph: pl. 12:a, third row, second from right.

FIG. 31. Northwest Building, plan of Rooms NW 1–NW 2, the Protogeometric–Late Geometric house

which with Room NW 1 then became a separate house. Rooms NW 3 and NW 4 were built over the eastern half of the LM IIIC house and were ancillary to Room NW 5 and its porch, Area NW 6, which was constructed on a higher level of bedrock to the east. Thus, Rooms NW 3–NW 6 functioned as a second PG house. Concurrent with the division of the LM IIIC house into two separate dwelling units was the construction of two additional houses on the lower terraces to the southwest. One house consisted of Rooms NW 7–NW 9, on the terrace immediately below Rooms NW 2 and NW 4. Although the plan of this house is dependent on the bedrock terrain, great effort was made to regularize the interior spaces. The other, Room NW 10, was a single-room house built on the terrace below Room NW 7.

Rooms NW 1 and NW 2, NW 7 Exterior (Fig. 31)

At the beginning of PG (West Slope Phase V), or possibly during the LM IIIC–PG transition (West Slope Phase IV), the main room of the LM IIIC house was divided by the erection of Wall J. This division created Room NW 2 on the western side of the wall, which with Room NW 1 functioned as an individual house. Much of the western face of Wall J was constructed on the level of the LM IIIC surface, while the eastern face was built upon fill. Wall J has slipped severely to the west, especially at its northern end.

The area of Room NW 2 was *ca.* 13.70 m², and the interior space for the entire house was *ca.* 19.20 m². Even with this division of the main room, the floors of the final phase of the LM IIIC house in these areas continued to be used: the bedrock in Room NW 1 and the schist-slab floor in Room NW 2. The pottery in the habitation debris on these floors (Fig. 26: NW 1, Level 1A; Fig. 27: NW 2, Level 4) indicates that they were used continuously from LM IIIC into LG. The west end of the bench in the main room of the LM IIIC house projected beyond Wall J and continued to be used, and a stone tool was found lying upon it. Room NW 1 probably still functioned as a storeroom, while the larger room, Room NW 2, served as the main living area.

In this phase a new entrance must have been created to access Rooms NW 1 and NW 2, although none now exists, since the old entrance to the LM IIIC house (the steps leading into Room NW 4) could no longer be reached from the western side of Wall J. The height of the bedrock surrounding Room NW 1 precludes entrance directly into the house from this room. The most obvious place for an entrance is the western side of Room NW 2, at the southwest by Wall G. Here the bedrock just beyond the area of the room is level with the floor and would have provided easy access in and out of the house. The easiest place to make a new doorway would also have been where the western wall abutted the southern wall.

Perhaps to accommodate this new entrance, the sloping bedrock to the southwest of Wall G was leveled with clay and surfaced, after Room NW 7 was constructed (Fig. 24). The bedrock upon which Wall T1 is founded slopes steeply to the southwest; this clay created a level exterior surface adjacent to Walls T and T1, which apparently could be directly accessed from Room NW 2.

Rooms NW 3, NW 4, NW 5, and Area NW 6 (Fig. 32)

To the east of Wall J two new rooms, Rooms NW 3 and NW 4, were built on top of the LM IIIC house. This construction occurred after the LM IIIC period, at a time when PG pottery styles had already been introduced on the site, either in the LM IIIC–PG transitional period (West Slope Phase IV) or early in PG (West Slope Phase V). This is suggested by the presence of both PG and LM IIIC pottery, in roughly equal amounts, in the leveling fill above the LM IIIC floor (Fig. 28: NW 3, Level 2 and NW 4, Levels 2–3) and in the clay packing of the second floor in this area (Fig. 28: NW 3, Level 3 and NW 4, Level 4). Within the fill above the LM IIIC floor, PG pottery shapes included examples of bell skyphoi (Fig. 33:1–3) and of large closed vessels (Fig. 33:4). The bell skyphos with upswing, horizontal loop handles and conical foot is introduced during the LM IIIC–PG transitional phase and in PG replaces the Minoan deep bowl as the most popular drinking vessel. The decoration on many of these skyphoi was made by holding the vessel by the foot and dipping it, so that the exterior is coated with paint to a point below the handles and the interior is either monochrome coated or partially coated. This technique is most clearly exhibited on Figure 33:1 and 2. The paint is usually dull and may be in any shade from black to brown, although brownish black is the most common. Early examples, such as Figure 33:1, have broad, top-heavy proportions, with rim diameters equal to or greater

FIG. 32. Northwest Building, plan of Rooms NW 3–NW 5 and Area NW 6, the Protogeometric house

than the height of the vessel.⁸³ The foot of Figure 33:1 is quite small and barely conical. It does, however, have a feature noted by Popham on many of the better-turned early skyphos feet from the Unexplored Mansion at Knossos: a projecting lump at the center of the underside of the foot.⁸⁴ This characteristic is also found on the base of Figure 33:2.⁸⁵

Later in PG the bell skyphos at Knossos becomes less deep, and the height of the vessel is approximately the same as the rim diameter.⁸⁶ Examples of such skyphoi are also found in other areas of Crete.⁸⁷ The S-shaped profile of the earlier, slimmer variety, however,

⁸³ Evans 1928, p. 136, fig. 69:c, e (PG); Brock 1957, no. 2, pp. 8–9, pl. 3:2 (Subminoan); Coldstream 1972, p. 67, p. 69, no. A18, p. 70, fig. 2, pl. 14 (Subminoan); Warren 1982/1983, p. 76, p. 86, fig. 62:left (Subminoan).

⁸⁴ Popham 1992, p. 62. Coldstream does not mention this feature, contrary to Popham's reference.

⁸⁵ Many such feet from the Northwest Building are from strata that include material as late or later than SPG, and at least one base with this feature must be dated to SPG.

⁸⁶ Coldstream 1963, p. 41, nos. 2–5, fig. 13:2, pl. 13:c; Coldstream 1992, pp. 80–81, pls. 51:GA1, GB23, 58:GH4.

⁸⁷ Boyd 1901, pl. 1; Vlasaki 1985, pp. 20–21, pl. 1A:1a (late 9th or early 8th century).

FIG. 33. Northwest Building, Protogeometric pottery

is retained. Skyphoi of this type are well represented in Figure 33:2 (the most complete example) and Figure 33:3.

Several decorated body sherds from closed vessels are also PG. Shoulder fragment Figure 33:4 preserves much of a horizontal figure-eight or scroll pattern. Such decoration is found on several amphorae from graves at Agios Ioannis and elsewhere, very tentatively dated to Middle Protogeometric (MPG) but certainly earlier than PGB.⁸⁸

Once the rubble-and-soil leveling fill was in place, the eastern wall of Rooms NW 3 and NW 4 was built (Fig. 32). This new eastern wall was constructed in two separate sections, L and N. Four-fifths of the length of Wall L is founded upon the bedrock ledge above and to the northeast of Room NW 3, while the southern one-fifth of the wall is built upon what appears to be decomposing bedrock.

⁸⁸ Boardman 1960, pp. 129–130, no. I.1, and a full bibliography of the type; p. 132, no. IV.1; p. 135, no. VI.1; p. 140, no. VIII.1; p. 142, A; p. 145, where Boardman suggests these vases should be associated with EPG, pl. 32.

Wall N was founded on fill and abuts the southern end of Wall L and part of the southern face of Wall M. It forms a facing for the western side of the bedrock outcrop above, on which Area NW 6 is located and into which the bedrock steps leading down into Room NW 4 were cut. At its southern end, Wall N is founded at the level of bedrock step 7, and here a large rectangular stone served as a threshold block, for passage through the wall and into Room NW 4. This threshold block had slipped severely to the west, but its upper surface was originally at the same level as bedrock step 5, which became the lowest step in use. A cupboard was built into Wall N, and its back wall was formed by unfinished bedrock. Large, flat schist slabs created an even floor, situated *ca.* 0.74 m above the PG clay floor surface in Room NW 4.

Wall K was built on top of the same fill and abuts the eastern side of Wall J, separating Rooms NW 3 and NW 4 (Fig. 28). A doorway, 0.45–0.50 m wide, was left at the eastern end of Wall K and connects these two rooms. The western end of Wall K has slipped to the west with Wall J, while its northwest corner has slipped a little to the north.

In Room NW 4 a bench and stand are located against the southern side of Wall K, running its entire length. The stand is located at the eastern end of the bench, between Wall K and a hearth. In Room NW 3 a bench was constructed against Wall D and founded on the fill (Fig. 28), between the face of the bedrock ledge below Wall L and a narrow partition wall to the west of Wall D (Fig. 32). This north–south partition wall divided the area of Room NW 3 roughly in half. The area to the east of this partition wall and all of Room NW 4 were surfaced with a clay floor packing (Fig. 28: NW 3, Level 3 and NW 4, Level 4), which was laid against all the exposed built features in these two rooms except Wall N.⁸⁹ In Room NW 3 the area between the partition wall and Wall J was not surfaced, and the fill on top of the LM IIIC floor was left exposed. A roughly circular hearth, partially outlined by stones, was placed in Room NW 4 adjacent to the southern side of the stand (Pl. 84:b).

The interior space of these two rooms is quite small, *ca.* 5.80 m² in Room NW 4 and only 1.90 m² in Room NW 3, with a total of just under 8.00 m² for the two rooms and the doorway between them. Although this is larger than House NW 10, discussed below, the fact that the space is divided between two rooms, one of which is too small for anything but storage, is a distinct drawback and severely limited the use of the space. The bench in Room NW 4 is too short for sleeping, and given the location of the hearth, there is barely floor space for a single person to sleep in an extended position. As a result, one may suggest that these two small rooms were associated with Room NW 5, which would have served as the main room of the house.

Room NW 5 and its porch, Area NW 6, are located at the top of the bedrock steps on a broad shelf of bedrock. NW 5 is a large room with *ca.* 14.00 m² of interior space. The limits of the room were mostly determined by the terrain. Although no wall was preserved at the north, rising bedrock spurs indicate the northern limit of the room, and a natural corner is created with the higher shelf of bedrock on the east. The eastern wall is also not extant within Room NW 5, but its southern end is preserved in Area NW 6

⁸⁹ Along much of the eastern side of Room NW 4, in the doorway and just into Room NW 3, the floor surface had been completely destroyed by modern tree-root disturbance.

(Wall O) and indicates that the wall was founded on the bedrock ledge, *ca.* 0.50–0.80 m above the main expanse of bedrock within the room.

The western wall is Wall L, which continues almost to the rising spurs of bedrock to the north. Wall M is a crosswall situated at a right angle to the southern end of Wall L, with which it bonds. Both walls are built on a shelf of bedrock that is stepped down 0.17–0.34 m below the main expanse of bedrock within Room NW 5. This shelf runs parallel to Wall L and forms a recessed space along the western side of the room. Wall M continues up to the eastern face of this shelf, and its eastern end may mark one side of the doorway into the room. The main expanse of bedrock within Room NW 5 is relatively level, sloping down slightly from east to west and from north to south; it may have been used without modification as the floor.

Area NW 6 is a shallow porch at the southern end of Room NW 5, with an area of 4.25 m². It opens to the south and fronts a level area of bedrock at the top of the steps, which begin at the southwest corner of the porch and lead down into Room NW 4. The porch is enclosed on three sides: on the north by Wall M, the southern wall of Room NW 5; by Wall N to the west; and by Wall O to the east. Wall O is built on the southern end of a bedrock shelf, which appears to have served as a socle for the entire original length of the wall through Room NW 5.

In this house, Room NW 5 would have been the main living/sleeping area, furnished with a shallow porch in front that accessed the two ancillary rooms below via a bedrock staircase. Room NW 4 was possibly the kitchen of the house, suggested by the hearth, and the closet-sized Room NW 3 probably functioned as a small storeroom adjacent to the kitchen. The total floor space would thus have been *ca.* 22.00 m². Although no pottery deposits were found on the floors of this house, the roof of Rooms NW 4 and NW 3 (Fig. 28: NW 4, Level 6 and NW 3, Level 4) apparently collapsed sometime in SPG (West Slope Phase VI); the house may have been occupied at least into the beginning of this period.

Rooms NW 7, NW 8, and NW 9 (Fig. 34)

Rooms NW 7–NW 9 form an axially planned, three-room house constructed in PG. The creation of these rooms on the terrace immediately to the south of the LM IIIC house required the construction of a number of walls on the north, in order to accommodate both the terrain and the preexisting structures. The jog in the southern walls of the houses above (caused by Wall F), the desire for rooms of certain dimensions, and perhaps a concern for adding additional support to the upslope walls resulted in a rather awkward series of constructions to achieve fairly regular interior spaces in the new rooms.

Before Room NW 7 was constructed, the northern wall of Room NW 8 (Wall P) was built. This wall is located on a ledge of bedrock below Wall E, much of it now below collapsing sections of Wall E and the eroding bedrock ledge on which parts of Wall E were founded. At its original height it continued up against the lower part of the southern face of Wall E. At its western end, Wall P abuts Wall F; from there it runs in a southeasterly direction along the line of Wall E, terminating at a large spur of bedrock, which forms the northeastern corner of Room NW 8. After Wall P was in place, Wall Q was constructed. This wall abuts the southeastern end of Wall F and the southern side of Wall P at the western end (Fig. 35). The eastern end of Wall Q bonds with Wall S, at right angles to

Fig. 34. Northwest Building, plan of Rooms NW 7–NW 9, the Protogeometric house

FIG. 35. Northwest Building, Room NW 7, south-north section I-I'

Walls Q and P. In this way, the severe irregularities of the LM IIIC upslope walls were eliminated from the interior plans of the rooms on the terrace below. The southeastern part of Wall R, the northern wall of Room NW 7, lies within the angle created by Walls Q and S, abutting the northwest side of Wall S and running against the southwestern faces of Walls Q and G (Figs. 24 and 35). Wall T, built as a separate segment at the western end of Wall R, continues as far west as does the LM IIIC Wall G. The southern faces of Walls S, R, and T create a continuous line, permitting a regular plan for the interior space (Pl. 84:c). The western wall of the room, Wall T1, is built against the southern face of Wall T, at a right angle to it. Wall S1, the eastern wall of Room NW 7, divides it from Room NW 8. A generous doorway, 1.09–1.24 m wide, is located between the end of Wall S1 and the southern wall of the room, providing passage between them. The southern end of S1 is very poorly preserved but does not appear to have had any special finishing to present a neat face for the doorway.

Wall U is the southern wall of both Room NW 7 and Room NW 8. The original western extent of the wall is not known; it is likely that it continued to the southeast the length of Room NW 9. This wall functioned as a massive terrace wall, supporting the floors of the rooms to the north (Rooms NW 7–NW 8) and serving as the back wall for the rooms to the south (Rooms NW 10–NW 11). At the junction with Wall T1, Wall U was founded on a steeply sloping bedrock spur and has completely collapsed. Farther west, Wall U is built on a bedrock shelf. In Room NW 7 it is constructed on a rather steeply sloping area of bedrock, which may account for the many segments that have slipped out of

position, creating the irregular plan that now survives. In much of Room NW 8, however, the wall is founded on the edge of a much more level bedrock shelf, and although fewer courses are preserved, the line of the wall has held. The eastern boundary of Room NW 8 is defined by Walls V and V1, which have a doorway 1.00 m wide between them. The jambs of the doorway are neat and even. The choice of location for these walls was strongly influenced by the terrain: they are built on a ledge of bedrock, *ca.* 0.30 m above the main expanse of bedrock within Room NW 8.

Room NW 9 is the least well preserved of the house; no trace of a southern wall remains. A modern terrace wall was built along the southern edge of the room where the bedrock drops off and had mostly collapsed and tumbled downslope, where massive piles of stone were visible prior to excavation. The northern boundary of the room is defined by the edge of a massive bedrock outcrop, on which Area NW 6 is situated at the upper level (Fig. 23). The spurs of this outcrop were roughly trimmed to form approximately vertical faces, and the two natural insets between the spurs were faced with wall segments of single-stone thickness, Walls W and W1. These walls were each built on 0.03–0.20 m of bedrock, which is now decomposing. It is possible that above the height of the insets these walls originally had a double-faced construction, so that the exterior (northern) face was founded on a much higher level, on top of the bedrock outcrop.

The eastern wall of Room NW 9 was built on a steeply sloping bedrock spur, which runs from the northeast down to the southwest and functioned as the wall socle. Much of this spur was exposed prior to excavation. At the northeast, this spur is 1.48 m above the level bedrock within the room. A portion of the wall itself, Wall DD, 1.60 m long, is preserved toward the southern end of the socle. At the southeastern corner of Room NW 9, the spur ends at the level of the bedrock within the room. Here a large stone is mortised into place, between the end of the spur and another outcrop of bedrock. This appears to have been the location of the entrance into the house, as it is the only place on the eastern side of Room NW 9 where the level of the exterior is near to that of the interior. The mortised block may be part of the threshold, and a doorway *ca.* 0.90 m in width could easily be accommodated here. The bedrock to the south of the room drops steeply down, so that in every respect this is the most suitable location for the main entrance. Thus, three rectangular rooms with rather regular plans were constructed on this terrace. The floor area of Room NW 7 was 8.14 m², of Room NW 8, 15.09 m², and of Room NW 9, *ca.* 18.20 m². The total floor area of the house, including the interior doorways, was *ca.* 42.76 m².

Expanses of bedrock in the northern area of Room NW7 slope gently to the southwest, then *ca.* 0.65 m inside Wall U they drop off steeply (Figs. 34, 35). At the doorway between Rooms NW 7 and NW 8 the bedrock rises some 0.52 m into Room NW 8, where it is very level and forms a broad ledge upon which the room is situated. Here, too, the bedrock dips down just to the north of Wall U. At the transition from Room NW 8 to Room NW 9, the bedrock again rises *ca.* 0.30 m. Within Rooms NW 7 and NW 8, the sloping bedrock on the northern side of Wall U was covered with varying amounts of leveling fill containing PG pottery (Fig. 35: NW 7, Level 1), including a coarse bowl (Fig. 33:5). The bowl, found in Room NW 8, has a monochrome interior with rather carelessly executed banding on the exterior. Clay floor packing covered the leveling fill and uneven areas of bedrock in both

rooms (Fig. 35: NW 7, Level 2), while level expanses of bedrock were left exposed. Within this clay packing in Room NW 8 were found fragments of a large closed vessel (Fig. 33:6) that may belong to a hydria, neck-handled amphora, or globular jug. The shoulder, neck, and one neck handle are preserved. The interior of the neck is monochrome coated; the vessel is decorated on the exterior with a deep band at the rim and another at the transition to the shoulder. One set of six compass-drawn, concentric circles is preserved on the shoulder, with three bands below it. This decorative scheme finds a close parallel on a neck-handled amphora from Fortetsa,⁹⁰ although the neck on Figure 33:6 is much shorter, shorter than those generally found on neck-handled amphoras. It is perhaps more in keeping with the shape of PG globular jugs; indeed, jugs with similar decoration were found in the lower deposit of a well at Knossos⁹¹ and in a house by the Royal Road.⁹² These Knossian jugs are dated to later in PG (MPG).

In the center of Room NW 8 a hearth was dug into the clay floor and was situated immediately on the bedrock. Also, a roughly oval schist slab was embedded in the clay floor on the western side of the doorway between Rooms NW 9 and NW 8, apparently to alleviate wear on the clay floor (Fig. 34).

Although clay was used to surface portions of both Room NW 7 and Room NW 8 during this initial phase of the life of the house, in Room NW 9 the bedrock served as the earliest floor. In this area in particular, the bedrock is quite level and without modification creates a more-than-serviceable floor surface. Although the bedrock does drop off at the southeast, the southern wall probably occupied much of this lower area. The soil, debris, and few PG sherds found in this depression may well have accumulated during the PG phase of habitation, rather than being intentional leveling material.

The innermost room of the house, Room NW 7, may have been used primarily for storage, while Room NW 8 functioned at least in part as a kitchen and Room NW 9 provided a large multipurpose living room. All three rooms continued to be used, apparently unaltered, into LG, to judge by the pottery found on their floor surfaces.

Room NW 10 (Fig. 36)

Room NW 10 was also constructed in PG and is located on the terrace below Room NW 7, to the southwest. It constitutes a long, narrow, one-room house, whose plan follows the contours of the shallow terrace (Fig. 23). Within the room the bedrock slopes from northeast to southwest, and at the west it drops off steeply to the south. The western wall of the house has not survived; the preserved western end of the northern wall may not represent its original length, since the bedrock rises in this area and was partially exposed prior to excavation. Although the full extent of the house may not be known, it is possible, on the basis of the extant walls, to calculate its minimum size as 7.10 m².

The southern wall of Room NW 7, Wall U, serves as the northern wall of Room NW 10. The western two-thirds of Wall X, the southern wall of Room NW 10, is built against

⁹⁰ Brock 1957, no. 181, p. 21, p. 146, pl. 10.

⁹¹ Coldstream 1960, no. 10, p. 163, fig. 2 on p. 160, pl. 42.

⁹² Coldstream 1972, p. 71, no. 10.

Fig. 36. Northwest Building, plan of Room NW 10, the Protogeometric house

steeply sloping bedrock, so that its southern face, preserved to a height of 2.00 m, is founded on bedrock *ca.* 1.25 m below that on which the northern face is built. The eastern end of Wall X is finished with large rectangular blocks and forms one side of the doorway into the house. The northern side of the doorway, 1.07–1.20 m wide, is created by Wall Y, abutting Wall U at right angles and directly in line with the eastern end of Wall X. The house is long, at least 6.00 m in length, and narrow, varying from 1.20 m to 2.10 m in width. It is fitted with a very narrow bench, built against the preserved western end of Wall U.

Well-compacted clay was used to fill in the sloping bedrock at the southern side of the room and to create a floor surface in most of the interior. It contained only PG pottery, including bell skyphoi (Fig. 33:7, 8) of the type discussed above in connection with Figure 33:2. In the western part of the room bedrock rises unevenly up to Wall U and was left exposed. A hearth was situated on the floor in the eastern half of the room near Wall X.

SUBPROTOGEOMETRIC

The evidence for construction in SPG (West Slope Phase VI) is extremely meager and consists solely of the addition of an exterior surface and open-air hearth to the east of Room NW 10, in the area beneath the later Room NW 11.⁹³ The three other houses constructed in PG appear to have been used into this period unaltered. Habitation debris on the floors of Rooms NW 1 and NW 2 indicates that occupation continued in this house throughout SPG. While no habitation debris was preserved on the floors of Rooms NW 3 and NW 4, SPG pottery was found on the bedrock within Room NW 5. Also, the presence of SPG pottery in the collapsed roofing material on the floors of Rooms NW 3 and NW 4 suggests that these rooms had fallen into disrepair and begun to collapse before the end of the period. It is likely, however, that they were still in use at the beginning of SPG. The floor deposits and habitation debris in Rooms NW 7 and NW 8 attest to the continued use of House NW 7–NW 9 throughout SPG.

Room NW 10 and the Area below Room NW 11 (Fig. 23)

In SPG the one-room house, Room NW 10, was provided with a clay-surfaced exterior area, placed to the east of the house. Although this surface was poorly preserved, a hearth was found in association with it, partly on the bedrock and partly on the clay. A seemingly meager addition, an open-air cooking area would nevertheless have greatly relieved the stress on the interior space of such a small house.

⁹³ Although many strata in the Northwest Building contained SPG pottery, no architectural feature, habitation level, or primary deposit, with the exception of the exterior clay surface to the east of Room NW 10, can be dated exclusively to this period. Therefore, the definition of the SPG ceramic style has relied upon better-stratified deposits from the West Slope (Phase VI), the study of which is still in progress. So, too, on the West Slope a *stratigraphic* phase intermediate between SPG and LG, provisionally called “Geometric” (Phase VII), has been isolated in certain areas. The analysis of this material is just beginning, and so it cannot yet be stated whether there is an associated and distinct ceramic style or whether this represents a chronological phase across the site. It would thus be premature to discuss here the SPG pottery from the Northwest Building before the relevant pottery from the West Slope has been fully studied. See also note 37 above.

LATE GEOMETRIC

New construction began again in LG. House NW 1–NW 2 was occupied into LG, although before the end of this period the roof had begun to collapse along the eastern side of Room NW 2, as indicated by heaps of fallen roofing material, and some walls had begun to tumble; in particular, Wall G was in a deteriorated state at this time. It is thus likely that habitation in this house ceased for a time during the latter part of the period.

The collapse of Rooms NW 3 and NW 4 continued in LG, but it is possible that Rooms NW 5 and NW 6 remained in good repair and continued to be inhabited. Sometime in LG, the area of Rooms NW 3–NW 4 was rebuilt. Since the earlier Walls J, L, and the northern part of Wall N were still standing, they formed the basis of the new room, which overlay the northern area of Room NW 4 and all of Room NW 3, extending *ca.* 1.50 m beyond the northern limits of the latter.

House NW 7–NW 9 continued to be inhabited in LG, at which time a second floor surface was laid down in Room NW 7 and the bedrock floor in Room NW 9 was surfaced with clay. Also in LG, Room NW 11 was added to the eastern end of Room NW 10, expanding the previously existing structure into a two-room house and more than doubling its size.

Rooms NW 3, NW 4, NW 5, and Area NW 6

Sometime in SPG, the roofs of Rooms NW 3 and NW 4 collapsed fairly completely, to judge by the depth of the roofing material that covered the floors (Fig. 28: NW 3, Level 4 and NW 4, Level 6). Walls D and K, the eastern end of Wall E, and the partition wall in NW 3 (Fig. 32), had collapsed to their present heights before the roof had completely fallen. Most of Wall E had also fallen. The collapsed roof and wall tumble (Fig. 28: NW 3, Level 5 and NW 4, Level 7) filled the room to a depth of as much as 0.70 m on the western sides of the two rooms, approximately up to the level of the floor of the cupboard in Wall N (p. 369 above). The collapse of the walls seems to have continued into LG, to judge from the pottery found mixed within the tumble.

In LG this area was rebuilt (Fig. 37). Walls J, L, and N, the latter at least up to the northern side of the cupboard, were still standing, and it is possible that Room NW 5 continued to be inhabited and remained in a good state of repair. The renovation of Rooms NW 3 and NW 4 consisted of the construction of a wide rectangular wall, Wall EE, which filled the cupboard and projected beyond it, forming a good corner with Wall N. The western end of Wall EE had a finished, even face, and apparently the space between this wall and Wall J, *ca.* 1.25 m, served as the doorway into the remodeled room. The southern end of Wall N had partially collapsed, and the northern side of the cupboard and the cupboard floor presented a solid foundation for new construction. Access into this room was still from the bedrock staircase, since to the north the bedrock has many deep fissures and rises very unevenly to the nearby cliff edge. The northern wall of the room was not preserved but was probably not much further than the northern preserved edge of the floor surface of this phase, and would have been situated between Wall L and either Wall J or Wall C (Fig. 24).

The clay floor surface associated with this remodeling was preserved in most of the room (Fig. 28: NW 3, Level 6), although in the western part the modern surface was

FIG. 37. Northwest Building, plan of the Late Geometric–Orientalizing room above Rooms NW 3 and NW 4

at a level below the line of this floor. The floor packing contained PG–LG sherds (West Slope Phases V–VIII). Among the LG pottery was a monochrome black variant (Fig. 38:1) of the reflex-handled tray. It has the same profile as the more typical variety but is outfitted with simple rectangular lug handles rather than the more elaborate reflex type. A monochrome example of such a tray, but with rounded, reflex lug handles, was found

FIG. 38. Northwest Building, Late Geometric pottery

in a burial at Gavalomouri in West Crete.⁹⁴ A fragment of a small Creto-Cypriot lekythos was also in the floor packing (Fig. 38:2). One side of the belly is preserved, decorated with a set of ten finely drawn concentric circles. The type with one set of circles on each side occurs in mostly LG contexts at Fortetsa.⁹⁵ The horizontal “S”, a standard motif for zones of ornament in Eteocretan Geometric,⁹⁶ is found on a fragment of a pithos from this stratum (Fig. 38:3). Although this motif is associated with material from Early Geometric (EG) contexts onward in Central Crete,⁹⁷ it does not seem to have been much in fashion until LG in the eastern part of the island. Another pithos, or jar (Fig. 38:4), is also decorated in the Eteocretan fashion, with haphazardly crosshatched butterfly motifs separated by columns of dots on the shoulder. A very close parallel for this scheme is found on a straight-sided pithos from Bone Enclosure V at Vrokastro.⁹⁸

A great many sherds, SPG in date, were found on the floor surface, including a substantial scatter of pithos sherds located in the northern part of the room (Fig. 37), together with fragments of LG open vessels decorated on the shoulder with concentric

⁹⁴ Vlasaki 1987, no. 8, p. 311, fig. 3:7, pl. III:1.

⁹⁵ Brock 1957, p. 158, pl. 50:829.

⁹⁶ Coldstream 1968, p. 260.

⁹⁷ Brock 1957, p. 179 (motif 11q).

⁹⁸ Hall 1914, pp. 162–163, fig. 98.

circles. In LG, rows of double and triple concentric circles are new to the repertoire, perhaps introduced to the island via Cypriot unguentaria.⁹⁹ The shoulder of a skyphos (Fig. 38:5) is decorated with double concentric circles; the exterior circle overlaps the rim band. A broad-bellied deep cup (Fig. 38:6) has triple concentric circles on the shoulder; these also touch the band above.

This room above Rooms NW 3 and NW 4 was 2.25 m wide and, based on the northern extent of the floor, at least 3.25 m long. Thus, its interior space was not less than *ca.* 7.30 m². Although this is probably adequate for an individual dwelling, it may have functioned as an ancillary room to Room NW 5, if the latter were still standing in LG, as seems possible, since Wall L was still in good repair. The combined interior space would then have been at least 21.30 m².

Rooms NW 7, NW 8, and NW 9

The PG house NW 7–NW 9 was occupied through LG, and the original floor surfaces were utilized into LG. A great deal of habitation debris was allowed to accumulate on these floors (Fig. 35: NW 7, Level 3A), the top of which was compacted and can be identified as a second floor surface, created in LG (Fig. 35: NW 7, Level 3B). A layer of habitation debris on top of this second floor yielded a rich deposit of finds (Fig. 35: NW 7, Level 4). Included among the sherd material was a fragmentary reflex-handled tray (Fig. 38:7). Numerous examples of such “trays” were found in the Northwest Building (over 30 fragments, apparently from different vessels). These are fairly shallow, from 0.045 to more than 0.057 m in height, with rim diameters varying from *ca.* 0.14–0.16 m to as much as 0.22 m and base diameters from 0.105–0.125 m most typically to 0.16 m. Opposite sides of the rim have large, lug-type, reflex handles affixed to them. They are always made with a fine, well-levigated clay and have distinctive burnished surfaces both inside and out, giving a lustrous, almost metallic appearance to the vessel. The rim is trimmed flat, as are the edges of the handles. Comparable trays are known from Geometric graves at Vronda,¹⁰⁰ Arkades,¹⁰¹ Vromomero,¹⁰² Fortetsa (where they are about half as large),¹⁰³ and the area of Agios Nikolaos.¹⁰⁴ The Vronda, Vromomero, and Fortetsa examples each have one handle that is pierced with a hole at its apex, while the handles on the vessel from Agios Nikolaos are both pierced twice at the apex. All these vessels are undecorated, save for the Agios Nikolaos example, which has relief decoration on the underside of the base. Because of the elaborate decoration present on the underside of larger trays, it has been suggested that they, and by association the smaller ones like those from the Northwest Building, served either as lids¹⁰⁵ or as ornaments to be hung on the wall.¹⁰⁶ The pierced handles may further suggest use as a lid, providing the means for

⁹⁹ Coldstream 1968, p. 252.

¹⁰⁰ Gesell, Day, and Coulson 1988, pp. 294–296, fig. 6:7 (Grave 3).

¹⁰¹ Levi 1927–1929, Tomb R, no. 215, pp. 285–286, fig. 369.

¹⁰² Sakellarakis 1986, no. 24353, p. 47, fig. 43, pls. 58, 59.

¹⁰³ Brock 1957, p. 81, pl. 58:890 (Tomb P2).

¹⁰⁴ Droop 1905–1906, no. 1013, pp. 38–39, figs. 15, 16.

¹⁰⁵ Droop 1905–1906, pp. 38–39; Levi 1927–1929, pp. 285–286.

¹⁰⁶ Brock 1957, p. 165.

securing it to another pot. The Northwest Building trays, however, are unlikely candidates for wall plates, since neither are the handles pierced nor the undersides decorated. Perhaps in a domestic context these vessels functioned only as trays or shallow dishes. The contexts of the reflex-handled trays from the Northwest Building indicate that this vessel type was introduced in PG and reached its greatest popularity in LG.

A well-preserved, broad-bellied, monochrome cup with an offset pointed rim was also recovered from the habitation debris (Fig. 38:8). It is perhaps a shallower forerunner of the standard deep cup from advanced LG.¹⁰⁷ Other finds from the habitation debris included a crumpled piece of bronze sheeting with rivets, two semicircular sheets of bronze rivetted together, a number of miscellaneous terracotta finds including a spindle whorl, two weight fragments, and a stopper, as well as a stone weight, two fragmentary stone querns, and two stone tools. Such a variety of finds might suggest that this room was used for storage.

With the creation of the second floor surface in Room NW 7, the original floor in Room NW 8 nevertheless continued to be used; because of the rise in the bedrock, the floor of Room NW 8 was still at a slightly higher level than the floor in Room NW 7. At this time, the bedrock surface of Room NW 9 was covered with a clay floor. This clay floor covered most of the bedrock, filled the depression along the southern side of the room, and created an extremely level surface. Found within the floor packing were sherds ranging in date from PG to LG. Thus, all three rooms of the house were used in LG, probably throughout the period.

Rooms NW 10 and NW 11 (Fig. 39)

In LG, Room NW 11 was added to Room NW 10, creating a two-room house. The floor surface in Room NW 10 laid down in PG, however, was used throughout the life of the room. Room NW 11 enclosed the exterior space to the east of Room NW 10 that had first been surfaced in SPG. Wall U formed the northern side of the new room, and Wall Z was erected to the south.

From the west end, where Wall Z is founded on the edge of a bedrock shelf, it runs eastward, abutting the vertical face of a higher bedrock spur and continuing over the top of the spur for a distance of 0.55 m. The eastern wall of Room NW 11 is not preserved; its location, however, can be determined by the eastern terminus of Wall Z. This coincides with a level ledge of bedrock, which runs from the northwest to the southeast and would have provided a natural bedding for the eastern wall.

The southwest corner of the room was created by Wall BB, which is bonded to Wall Z. Wall AA, ca. 0.55 m to the west of Wall BB and parallel with it, likewise is bonded to Wall Z and continues northward on the bedrock shelf to abut Wall X. The purpose of the two parallel Walls, AA and BB, is not immediately apparent; they may be explained, however, if the space between them is interpreted as containing a narrow staircase, some 0.55 m wide. Three stone steps could have been built into the corridor created between the two walls; entrance into the room would have been at a right angle to the staircase, across Wall BB. The preserved height of Wall BB could then be seen as the foundation course

¹⁰⁷ Coldstream 1972, pp. 80, 83, no. D32, and 84, both in fig. 8, no. E2; Gesell, Day, and Coulson 1988, pp. 284–285, fig. 2:7, pl. 74:c; Gesell, Day, and Coulson 1995, p. 115, fig. 21.

FIG. 39. Northwest Building, plan of Rooms NW 10 and NW 11, the Late Geometric house

for a threshold, with Walls X and Z creating the sides of the doorway, *ca.* 0.90 m wide. No other natural accommodation for entrance into the house in this phase is obvious. Although the eastern wall of the house is not preserved, the location of a bench at the eastern edge of Room NW 11, coupled with the topography of the bedrock farther east, makes entrance into the house from this side unlikely. The bedrock beyond the bench is over a meter above any possible exterior surface to the south of Room NW 11 and runs into the face of the massive bedrock outcrop upon which Room NW 9 is built, over 1.50 m above (Fig. 23). Entrance into the house from the south is thus the most plausible reconstruction.

Within Room NW 11, the sloping bedrock adjacent to Wall Z was covered with fill, which raised this area to the level of the SPG clay surface. This fill and the SPG clay surface and hearth were then covered with a clay floor packing, which provided a level living surface. The floor surface was not preserved adjacent to Walls Z and BB; this is partially the result of disturbance to the area when modern terrace walls were constructed over the ancient walls.

Room NW 11 contained two benches, one on the northern side of the room, adjacent to Wall U, and one on the east. The western end of the northern bench has slipped to the south, while the eastern bench has slipped to the west.

The interior area of Room NW 11 measures 7.12 m²; the new two-room house thus had a minimum total space of *ca.* 17.00 m². With the addition of Room NW 11, Room NW 10 may have functioned exclusively as a kitchen and storeroom, with the wider space of Room NW 11 used as the main living area. The house was not occupied beyond LG, but Room NW 11 was apparently still used as a rubbish dump in the Orientalizing period, before the roof collapsed.

ORIENTALIZING

In the Orientalizing period (West Slope Phase IX) there is a marked reduction in the number of rooms inhabited in the Northwest Building. House NW 1–NW 2 was refurbished and remodeled, constituting the only new construction.¹⁰⁸ The room above Rooms NW 3 and NW 4, presumably in conjunction with Room NW 5 and Area NW 6, continued to be inhabited, as evidenced by the pottery in the habitation debris on the floors. House NW 7–NW 9 was systematically reduced in size by the blocking of doorways.¹⁰⁹ House NW 10–NW 11 was not inhabited beyond LG, and Room NW 11 was apparently being used as a rubbish dump at this time.

Rooms NW 1 and NW 2 (Fig. 40)

Toward the end of LG the roof on the eastern side of Room NW 2 began to collapse, along with portions of Wall G and the western wall of the room (Fig. 27: NW 2, Level 6). At the beginning of the Orientalizing period, however, there was some major remodeling of the house. The southern wall was rebuilt: Wall CC was constructed directly upon the remains of the earlier Wall G (Fig. 27) but continued to the west *ca.* 1.30 m beyond it (Pl. 84:c).¹¹⁰ The eastern end of Wall CC abutted Wall F. Walls F and J, linked by Wall E, continued to function as the eastern wall. Still, no western wall was recovered for this room. The western terminus of Wall CC suggests that the missing wall would have followed the edge of the bedrock outcrop on the west of Room NW 2 and was probably built upon it.

A new wall, Wall H, was also constructed between Rooms NW 1 and NW 2 at this time. First, Room NW 1 was filled with stones and soil up to a depth of 0.28 m, bringing it approximately to the level of the top of the wall collapse in Room NW 2 (Fig. 26: NW 1, Level 2). Most of Wall H was built on, and partially into, this fill and the tumble in Room NW 2, while the west end of the wall was founded on a bedrock spur.

The eastern end of Wall H is smoothly finished and set *ca.* 0.70 m to the west of the bedrock socle of Wall C, thereby creating a doorway between Rooms NW 1 and NW 2. Wall H has slipped severely to the south; it is likely that it originally continued farther

¹⁰⁸ Gesell, Coulson, and Day 1991, p. 172, incorrectly states that the doorway between Rooms NW1 and NW 2 was intentionally blocked. This was not the case; rather, architectural tumble filled the doorway after abandonment.

¹⁰⁹ See pp. 387–388 below.

¹¹⁰ An earlier report suggested that Wall CC was associated with the lowest schist-slab paved surface (now identified as a second-phase LM IIIC floor) and functioned as a terrace wall (Gesell, Coulson, and Day 1991, p. 175). Excavation subsequent to 1988 yielded information that has resulted in the interpretation of Wall CC as a house wall constructed in the Orientalizing period.

FIG. 40. Northwest Building, plan of Rooms NW1–NW2, the Orientalizing house

west. Wall B1 is an associated construction: built on the fill, it connects Wall B on the bedrock socle to the new Wall H. Within Room NW 2 a bench was located against Wall J. Founded on a stratum of collapsed roofing material, it has slipped somewhat to the west, as has the northern end of Wall J. With these changes in the walls, the available interior space of the house would have been slightly increased to *ca.* 21.60 m².

After these architectural modifications had been completed, new floor surfaces were put down. In Room NW 1 the floor was entirely of clay and covered the top of the earlier stand or pier (Fig. 26: NW1, Level 3). The bedrock bench on the eastern side of Room NW 1 continued to be used, projecting *ca.* 0.20 m above the new clay floor. A roughly circular hearth was located on the floor in the northwest corner of the room, against the bedrock socle of Wall B. This hearth, together with fragments of cooking pots and numerous storage vessels scattered over the floor, indicates that Room NW 1 functioned as both a kitchen and storage room.

The new floor of Room NW 2 (Fig. 27: NW 2, Level 7) was not preserved in the southern and western parts of the room. It consisted of a well-compacted clay surface and a concentration of schist paving slabs, 0.10–0.20 m in size, embedded in the clay floor

packing in the north-central area of the room and contained SPG–Orientalizing pottery.¹¹¹ Several Orientalizing vessels were recovered from the removal of the floor; they include two skyphoi with tall, vertical rims. The larger (Fig. 41:1) has a rim diameter of 0.16 m and is coated with streaky black to reddish brown paint, while the smaller (Fig. 41:2), with a rim diameter of 0.12 m, is plain. This shape is unique to the Orientalizing period and is usually decorated in the white-on-black technique.¹¹² A high-collared amphora rim was also found (Fig. 41:3). It is decorated on the exterior with alternating sets of linked, five-fold concentric circles and smaller double concentric circles in added white (white-on-black technique), a typical scheme in the Orientalizing period.¹¹³ An elaborately decorated jug was found in fragments within the clay floors of both Room NW 2 and Room NW 1 (Fig. 42). The style is light ground with decoration in glossy red-to-black paint, which is extremely worn. The front face, opposite the handle, is adorned with two sets of two birds each, one on either side of the central hatched motif. The birds may be identified as sets of male and female peacocks, with their “eyed” feathers depicted with a dotted scale pattern. They stand on a groundline of bands framing a register of outline tongues with pendent spirals below. No good parallel for this vase exists on Crete. These vessels date the construction of the new floors in the house to the Orientalizing period.

Substantial floor deposits were found in both Room NW 1 and Room NW 2. Although the pottery on these floors is predominantly Late Geometric, a significant proportion is Orientalizing. This probably indicates both that pottery produced in LG continued to be used in the Orientalizing period on the site and that many vessels continued to be produced in the LG styles, so that the introduction and adoption of Orientalizing shapes and decorative schemes was a gradual process.

The deposit in Room NW 1 had the largest number of pots and other finds associated with any floor in the Northwest Building. A number of vessels were also found on the bedrock bench,¹¹⁴ including a small aryballos (Fig. 41:4) at the southern end wedged in the gap between the bench and wall socle. The aryballos is covered with fine bands, and the shape is paralleled by aryballoi from Fortetsa, which are decorated with bands on their lower bodies.¹¹⁵ The ring base of Figure 41:4 has a groove underneath, a feature found on the Late Orientalizing (LO) jug from a well at Knossos.¹¹⁶

Room NW 2 appears to have been the main living area of the house, but the floor deposit here was not nearly so extensive. Three stone implements were found on the schist

¹¹¹ At one time this clay and schist-paving-slab floor was interpreted as “the top of a deep deposit of tumble” (Gesell, Coulson, and Day 1991, p. 175). The even deposition and numerous pots and finds on the surface, in conjunction with the associated floor deposit in Room NW 1, suggest that this surface was a floor.

¹¹² Brock 1957, no. 808, p. 73, pl. 50, no. 1260, p. 108, pl. 103; Davaras 1968, no. A44, p. 138, pl. 40:b, no. A73, p. 140, pl. 40:c; Coldstream 1992, p. 74, no. GF15, pl. 57.

¹¹³ Coldstream 1992, p. 85.

¹¹⁴ A selection of vases from the bench and floor of Room NW 1 was presented in Gesell, Coulson, and Day 1991, pp. 172–175, fig. 12, pls. 68:d, 69:b–e. Three corrigenda, however, should be noted: fig. 12:1 was found on the floor of Room NW 2, not Room NW 1; fig. 12:5 is monochrome coated and not decorated with blobs; on the photograph of fig. 12:3 (pl. 69:c), the vessel is wrongly stated as coming from Room NW 2 when in fact it was found in Room NW 1.

¹¹⁵ For example, Brock 1957, no. 1253, pp. 108, 158, pl. 96.

¹¹⁶ Coldstream and Sackett 1978, p. 51, no. 13, fig. 6.

FIG. 41. Northwest Building, Orientalizing pottery

FIG. 42. Northwest Building, Orientalizing jug from the floors of Rooms NW1 and NW 2

paving slabs (Fig. 40): a long chisel was located on the western side of the paving; a drill holder was adjacent to the southeast corner of Wall H; and a rectangular mortar was in an overturned position on the south. In addition to the sherds scattered across the floor within the habitation debris, a nearly complete Orientalizing deep cup with tall flaring rim was smashed on the floor adjacent to the southern face of Wall H.¹¹⁷ The upper courses of the wall, having slipped, overhung the sherd scatter. Adjacent to Wall J, at the northern end of the bench, was another scatter of pottery located on and partially embedded in the clay floor. Here, Wall J also has slipped, and its upper courses likewise overhung parts of the floor deposit. The shoulder and neck of a jug were smashed near the bedrock in this corner, while the neck and rim of an oinochoe,¹¹⁸ an aryballos,¹¹⁹ and two fragments of a terracotta weight were clustered together nearby.

Area above Rooms NW 3–NW 4, Room NW 5, and Area NW 6

The room built on top of Rooms NW 3–NW 4 was inhabited into the Orientalizing period. Directly upon the clay floor surface were found fragments of two lids, both with decoration in added white paint, which indicates an Orientalizing date. Orientalizing pottery, including a decorated closed vessel and a pithos fragment, was also found on the bedrock within Room NW 5; however, the stratigraphic significance of the material found on the bedrock within Room NW 5 is dubious. Yet the room above Room NW 3, Room NW 5, and the porch Area NW 6 do appear to have constituted one of the houses occupied in this period.

Rooms NW 7, NW 8, and NW 9

In this house the latest pottery found directly upon a floor surface was found in Room NW 8, in particular, an Orientalizing kotyle base (Fig. 41:5). It is coated inside and out with dull black paint, save for a thin reserved band at about mid-body on the exterior. Similar kotylai, but with the reserved band lower on the body, have been found at Fortetsa, and the type can be dated to LO.¹²⁰

Sometime after the roof had begun to collapse in Room NW 8, apparently in the Orientalizing period, a small blocking wall was erected in front of the doorway into Room NW 7. This effectively closed off Room NW 7 from use, since there was no other access to the room. At the time this blocking wall was erected, Room NW 8 must not have been used for habitation, since the blocking wall was built on 0.05–0.10 m of fallen roofing material. Only on the eastern side, toward Room NW 8, did this blocking wall have a good face. Perhaps somewhat later, the doorway between Room NW 8 and Room NW 9 was also blocked, eliminating access to Room NW 8 as well. Here, the doorway itself was

¹¹⁷ Gesell, Coulson, and Day 1991, p. 174, fig. 12:1, pl. 69:b (from Room NW 2, not Room NW 1 as reported). See also note 110 above.

¹¹⁸ Gesell, Coulson, and Day 1991, p. 175, fig. 13:1. Further study of this vessel has indicated that the register on the neck is decorated with the horizontal “S” motif.

¹¹⁹ Gesell, Coulson, and Day 1991, p. 175, fig. 13:2. This aryballos has a flaring rim, which was omitted from the published drawing.

¹²⁰ Brock 1957, no. 970, p. 91, pl. 74, a Protocorinthian import. Pl. 104:1340 and pl. 105:1542 are local imitations of Protocorinthian kotylai.

filled with roughly stacked stones, mortared with clay mud. Although no Orientalizing pottery was found on the floor of Room NW 9, it was clearly in use for at least some portion of the period, as it provided the only access into Room NW 8.

The floor deposit in Room NW 9 should be associated with the final phase of habitation. A few fragmentary vessels were found smashed together directly on the floor, on the east side of Wall V1. A bronze knife blade and tang was found on the floor in the central area of the room toward the doorway into Room NW 8, and a small stone tool was found on the floor to the northeast of the knife (Pl. 84:d).

CONCLUSION

Habitation in the Northwest Building began when the Kastro was first occupied at the beginning of LM IIIC and continued uninterrupted until the abandonment of the site in the Orientalizing period. Current analysis of the architectural phasing and features has resulted in the identification of specific households. The long duration of habitation and attendant phases of growth, particularly in PG, suggest that the families of each household were related and evolved from the first nuclear family to build in this area of the Kastro.

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a. View of the Kastro from the south

b. Building A, Room 44 from the northeast

c. Building A, Room 44, threshold and pivot block, from the west

d. Building A, Room 43 from the east

a. Door jambs and threshold between Rooms 42 and 43, from the southeast

b. Rooms 42 and 41 from the northwest

c. Room 42, bin from the southeast

d. Room 42, door to Room 41 from the north

Building A

W. D. E. COULSON, D. C. HAGGIS, M. S. MOOK, AND J. TOBIN: THE KASTRO AT KAVOUSTI: AN ARCHITECTURAL OVERVIEW

a. Room 42, limestone base from the south

b. Room 41, threshold and pivot block, from the south

c. Room 41, Wall A from the north

d. Room 41, Wall B from the east

Building A

a. Building A, Room 41, pithos from the south

b. Building A, Room 41, northern sondage from the south

c. Building H from the north

d. Building H from the south

W. D. E. COULSON, D C. HAGGIS, M. S. MOOK, AND J. TOBIN: THE KASTRO AT KAVOUSI: AN ARCHITECTURAL OVERVIEW

a. Building H, Rooms
27 and 38 from the
east

b. Building H, retaining wall from the south

c. Building G, Room
24 from the north

d. Building G, Room 23 from the north

a. Building L, Room 34 from the east

b. Building L, Rooms 8S and 34 and stairwell, from the south

c. Building L, Room 35, aerial view

d. Building K, Rooms 31-33 from the east

a. Building K, Rooms 32 and 33 from the north

b. Northwest Building, Room NW 1 from the east

c. Northwest Building, bedrock steps of LM IIIC house, from the northwest

d. Northwest Building, below Room NW 2, pottery scattered on LM IIIC floor, from the south

W. D. E. COULSON, D. C. HAGGIS, M. S. MOOK, AND J. TOBIN: THE KASTRO AT KAVOUSTI: AN ARCHITECTURAL OVERVIEW

a. Below Room NW 2, schist-slab floor of LM IIIC house, from the east

b. Room NW 4, Protogeometric floor, hearth, bench, and Wall K, from the east

c. Room NW 7, Protogeometric Walls R, T, and T1, and Orientalizing Wall CC, from the southeast

d. Room NW 9, bronze knife and stone tool on floor, from the north