

CHAPTER SEVEN

THE NORTHERN AREA A BUILDINGS AND STRATIGRAPHY OF PERIODS 1 & 2

Area A is the northern part of the Borgo NW (Fig. 80).¹⁰¹ It is bordered in the south by Drain L and in the north by the wall system Ma and the rock above the old road Via Dogana. In the east there is a high rock TRe. The difference in level is more than seven metres (af. 1.84 to uf. 5.91 = 7.75 m, Fig. 81) between the highest excavation point at the TRe (af. 1.84 m) and the western, lowest point, at fortification wall Mb–Mc (uf. 5.91 m). The difference in level between the workshop floor Ac (uf. 2.10 m) and that of the first Floor 1 at House Aa/Ab (uf. 2.55 m to uf. 2.80 m) is almost one metre.

Area A consists of two different areas. In the east, the almost 10 m-high rock face TRe was worked off vertically some 3.50–4 m in order to obtain a level building and work yard Ac/Ad (uf. 2.10–2.50 m). The irregular slope was made smooth for the western part of House Aa/Ab, for wall N1 (uf. 4.20 m) and further down for the terrace wall/fortification Mb/Mc (uf. 5.61–5.91 m). Both these walls were built in order to retain the huge earth fill A-B-C.

The excavations of House A were complicated. However, thanks to the existence of the *Capannone*, it has been possible to continue the study of the stratified baulks, as well as conducting a detailed study of the preserved walls. This means that the results of Ingrid Pohl's pottery analysis of the 1980s, while fundamentally important, has to be supplemented by this new study of House A and work yard Ac/Ad. The sloping constructions, fills, floors and finds are difficult to present here. For greater clarity, the general stratigraphy of Area A is presented synthetically, rather than as detailed descriptions of the various excavation places. The chronological sequence of the area follows the general Borgo NW periods:

Period 1. Work including rock cutting in the eastern part, and terracing and filling (A-B-C) in the western part to prepare for Area A of House A, courtyard Ad, alley Ai and rock-cut niches Af, Ah1 and cistern Ae.

Period 2. Floors and a hearth on a slightly higher level (c. 20 cm).

Period 3. After the earthquake, a radical change of Area A on a much higher level and with the constructions Ah3, Ag and Ak.

Period 4. Abandonment.

Period 5. Medieval burial in Ah.

HOUSE A AND YARD Ad

Description of walls and rooms

House A measures 12 × 5 m and consists of the two rooms Aa and Ab, and the work area Ac. The house was laid out along the east–west slope. It stands partly on bedrock (work area Ac/wall A2, uf. 2.30–2.50 m), and partly on the A-B-C filling (rooms Aa and Ab, uf. 3.00 m). The entrance of the house was open towards the south. Between House A and Drain wall L2 there was a yard, Ad.

Room Aa¹⁰² (Figs. 82–84)

This room was the main, centre space surrounded by four, well-joined walls, A1–A4. To this room was added—though not joined—Room Ab, walls A5–A7 on the west, fill C and Ac's working area walls A8–A10 on the east rock. Room Aa had its eastern wall A2 solidly built and cut into the rock (uf. 2.55 m), while the other three walls, A1, A3 and A4 were placed in stratum C but on fill stratum A. Room Aa has an internal measurement of c. 15 m². Wall A1 has a length of 3.57 m, wall A2 3.90 m, wall A3 3.85 m, and wall A4 4.15 m. In spite of only two courses remaining, it is possible to follow the construction procedure. The first course of the strong north–south walls A2 and A4 were laid out first. These were joined, by means of an L-shaped corner block between A2/A3, to the less impressive wall A3 (corner A3/A4 missing). Course I of wall A1 was then inserted into the space between walls A2 and A4, bonding with A4 in course II. Only two courses remain, but there must have been at least one more, possibly forming a foundation for mudbrick. The first, slightly sloping, Floor 1 (uf. 2.60–2.75 m) was hard and solid and was documented also by the inside threshold levels cut in walls A1 (uf. 2.76 m) and A3 (uf. 2.67 m). It is also related to the hard Floor 1 of yard Ad, outside the house entrance (uf. 2.56–2.72 m). On this Floor 1 there were probably two hearths (uf. 2.60–2.65 m). The second floor inside Room Aa was not well preserved. It was documented as a rather rough stone floor of Period 2 or perhaps even Period 3.

¹⁰¹ The distance from the north to the south is 11 m, from the east to the west 20 m, giving a total of 220 m².

¹⁰² It should be noted that Pohl in *San Giovenale* V:2 names this room Ab.

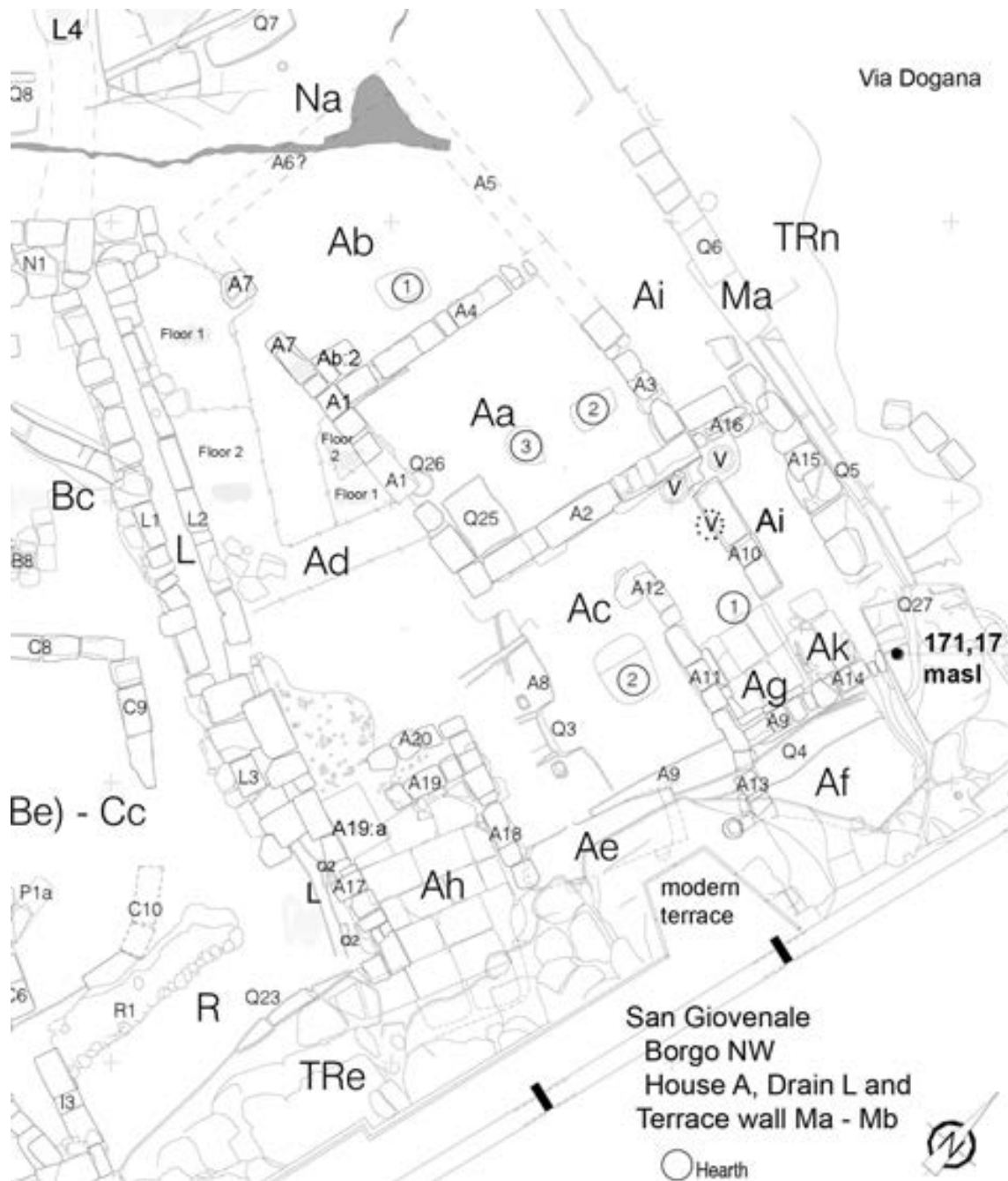


Fig. 80. Plan of the northern area with House A and rooms Aa, Ab, work area Ac, yard Ad and Drain L.
Drawing by B. Blomé, A. Bizzarro and G. Tilia.

Measurements of walls and blocks

Wall A1 has a length of 4.63 m (exterior side) and 3.57 m (interior side) (Pl. 25). Course I contains five blocks (from east to west): (1) $0.70 \times 0.60 \times 0.50$ m; (2) $0.55 \times 0.40 \times 0.40$ m; (3) 0.27 m (now missing); (4) $1.27 \times 0.76 \times 0.48$ m; (5) $0.52 \times 0.45 \times ?$ m. Course II has two blocks remaining: (1) $0.48 \times 0.28 \times 0.40$ m; (3) $0.96 \times 0.35 \times 0.45$ m. Blocks 1 and 3 have cuttings indicating a threshold (at *uf.* 2.60 m and Floor 1 at *uf.* 2.75 m).

Wall A2 (at *uf.* 2.50–2.60 m) has a length of 4.75 m (exterior side) and 3.90 m (interior side) (Pls. 13–14). Course I contains six rough blocks, partly obscured and set deeply into the tufa rock on the upper, east side, two examples measure $0.60 \times 0.25 \times 0.50$ m; $0.65 \times 1 \times 1.25$ m. Course II contains five blocks: (1)

$0.45 \times 0.40 \times 0.60$ m; (2) $1.14 \times 0.40 \times 0.46$ m; (3) $1.50 \times 0.48 \times 0.48$ m; (4) $0.39 \times 0.34 \times$ broken; (5) $1.18 \times 0.55 \times 0.45$ m. Course III contains a few smaller stones.

Wall A3 (at *uf.* 2.65–2.98 m) has a length of 4.90 m (exterior side) and 3.85 m (interior side) (Pls. 21–22). Course I contains four blocks, partly broken: (1) $1.10 \times 0.55 \times 0.45$ m (cut back into shape and indicative of the floor level); (2) $0.40 \times 0.54 \times 0.40$ m; (3) $0.75 \times 0.52 \times 0.40$ m; (4) (broken) $0.75 \times 0.55 \times 0.45$ m. Course II contains a fragmentary block: $0.64 \times 0.13 \times ?$ m.

Wall A4 (at *uf.* 2.96–3.05 m), A3/A4 corner is missing, preserved wall length 4.15 m (exterior side) and 3.50 m (interior side), restored length 5.05 m (exterior side) and 4.15 m (interior side). Course I contains four blocks (from south to north): (1)

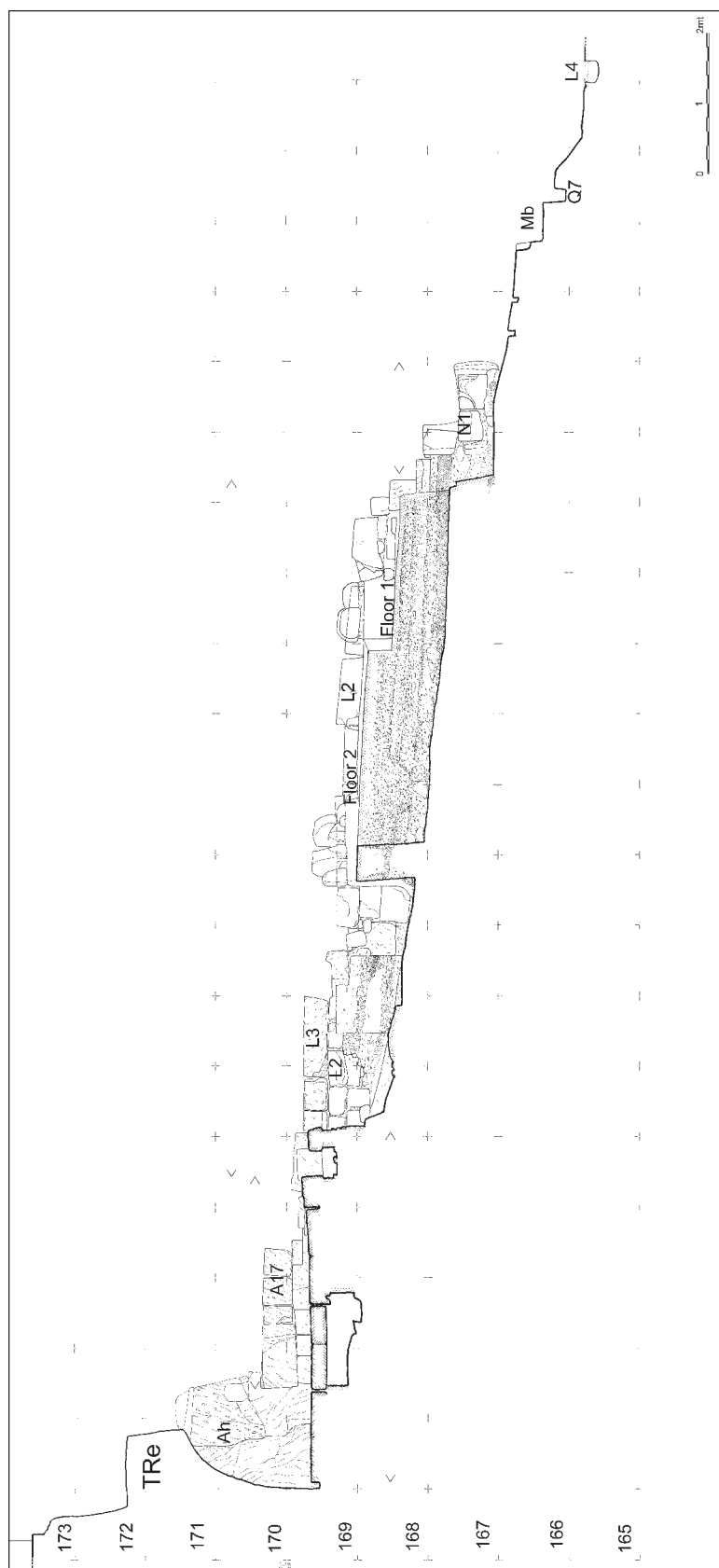


Fig. 81. View from the north with sections through House A from the rock TRe down to palisade canal Q7 (Section T12 = Pl. 28). Drawing by B. Blomé, A. Bizzarro and G. Tilia.

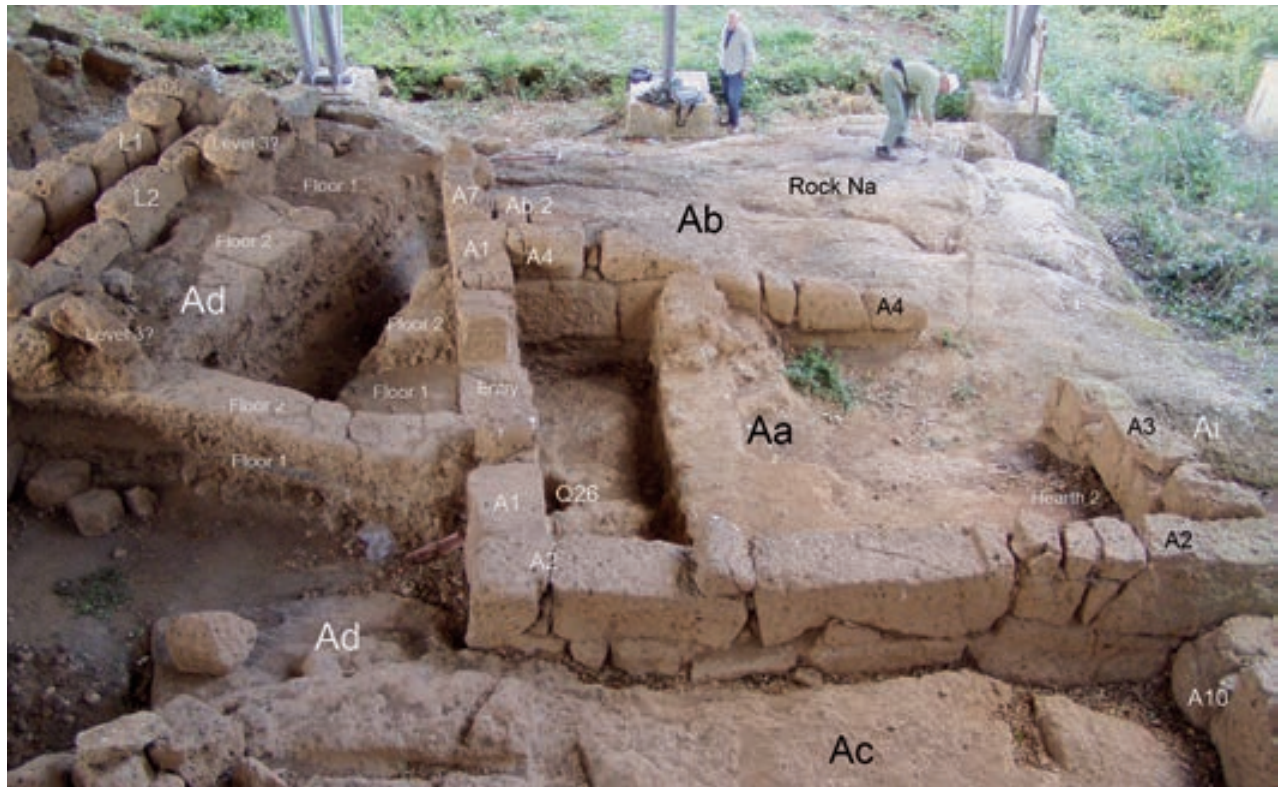


Fig. 82. Drain L, yard Ad, work area Ac, rooms Aa and Ab, seen towards the west. Photograph by J. Sigurdsson.

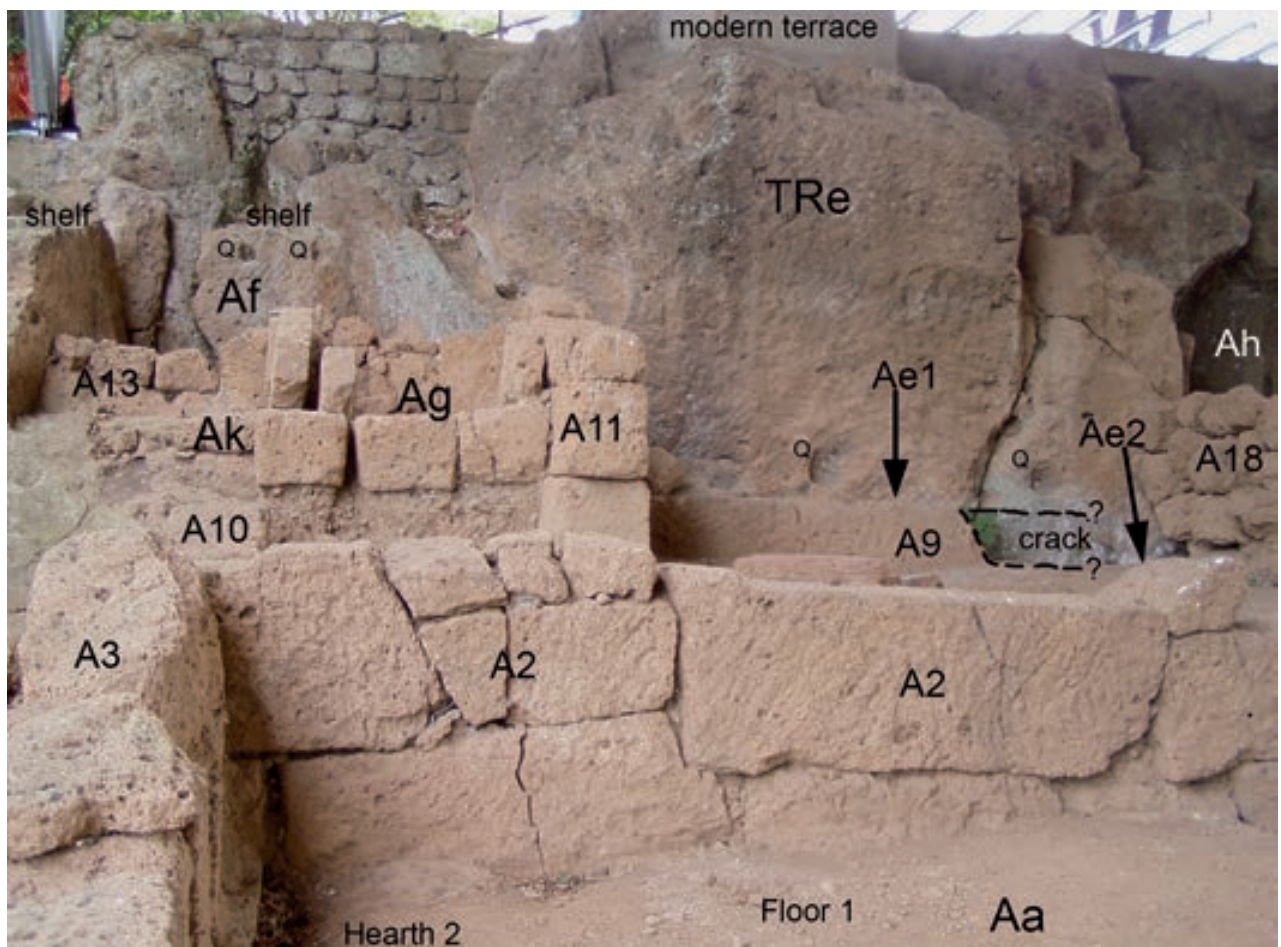


Fig. 83. Room Aa towards the east, with niche Af, cistern Ae and niche Ah. Photograph by J. Sigurdsson.

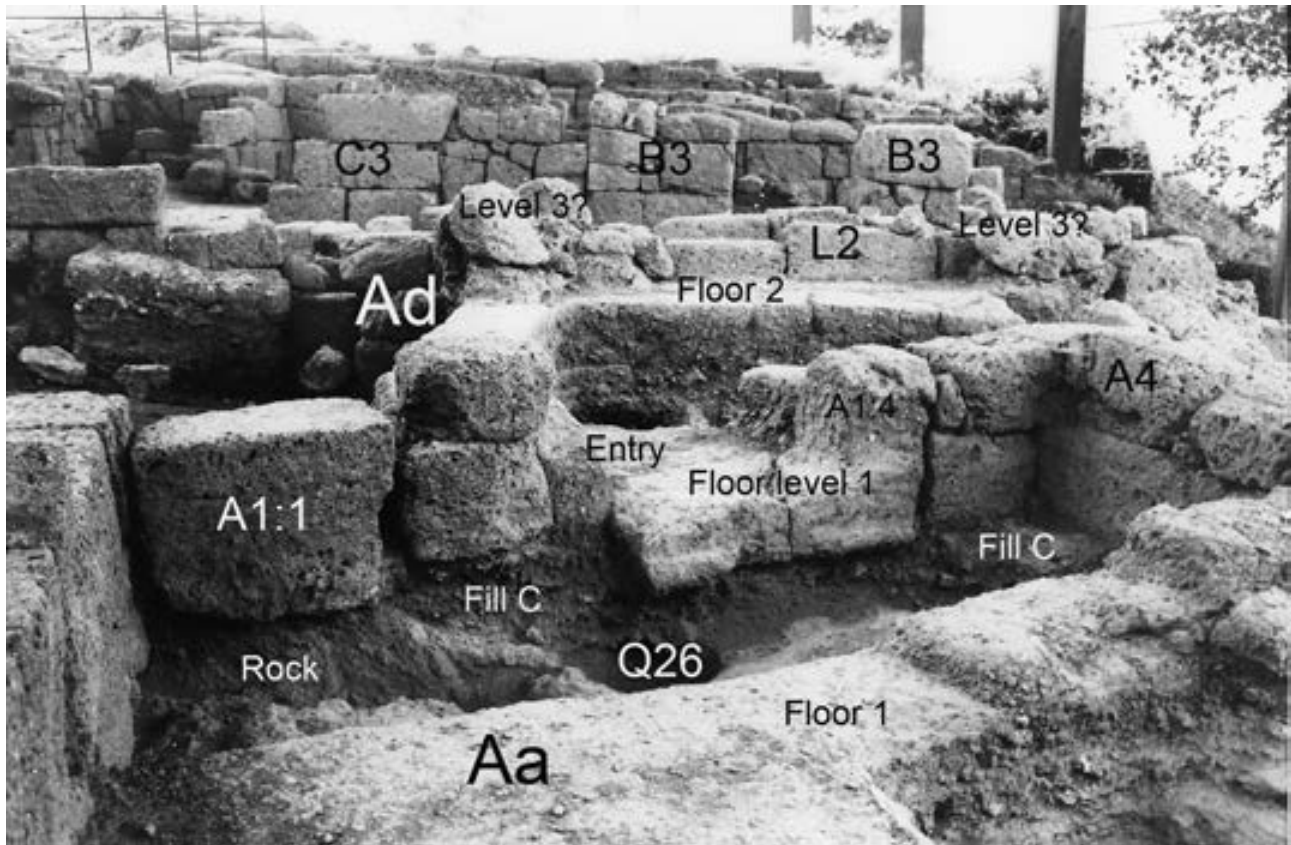


Fig. 84. Room Aa and yard Ad towards the south. Photograph by B. Blomé.

1.35 × 0.55 × 0.43 m; (2) 1.20 × 0.55 × 0.45 m; (3) 0.27 × 0.40 × 0.44 m; (4) eroded, 1.20 × ? × 0.45 m. Course II: (1) 0.60 × 0.40 × 0.45 m; (2) small stone; (3) 0.85 × ? × 0.45 m.

Room Ab¹⁰³ (Fig. 85)

Most of room Ab is destroyed. The once existing walls A5 and A6 and the corners A5/A6 and A6/A7 have vanished and only part of wall A7 remains. This makes it impossible to establish the western length of House A, although a total length of about 12 m is probable. Only a couple of stones remain of wall A7. The entrance wall A7 of room Ab was added and set on a higher level (0.25 m) of the growing fill stratum C and abuts the corner of walls A1 and A4 of room Aa. Wall A7 also provides other important information: two threshold blocks show the level of the entrance and indicate the level of the no-longer surviving Floor 1 (*uf.* 2.72 m). Floors 1 and 2 (*uf.* 2.20 m) agree nicely with Floors 1 (*uf.* 2.74 m) and 2 (*uf.* 2.25 m) in yard Ad. In addition, two flat blocks in corner A7/A4 indicate that the second (or *possibly* an even later) floor in room Ab was paved with stones. If we hypothesize that the entrance, as in the other rooms of House A and room Ba of House B, is roughly at the centre of the wall, room Ab would measure about 3.50 × 4 m, i.e. *c.* 14 m².

Measurements of walls and blocks

Walls A5 and A6 have disappeared.

Wall A7 (*uf.* 2.97–3.01 m) has a preserved length of 2.65 m. Course I consists of three blocks (from east to west): (1) 0.28 ×

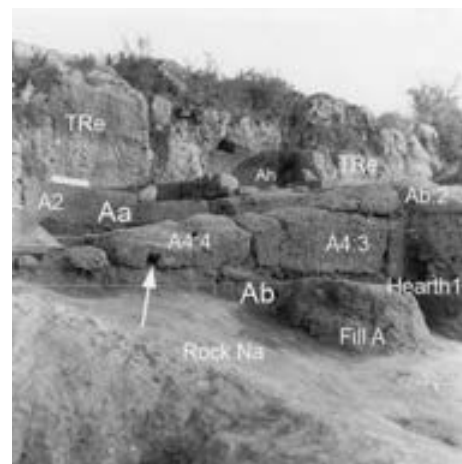


Fig. 85. Room Ab towards the south-east. Photograph by B. Blomé.

0.50 × ? m; (2) 1.05 × 0.60 × 0.45 m (cut as door/threshold at *uf.* 2.72 m); (3) very fragmentary, once part of the other side of the door/threshold, to be restored to a length of *c.* 1.40 m, 0.55 × 0.50 × 0.58 m. Course II contains two fragmentary and eroded blocks with plough marks on top: (1) 0.30 × 0.35 × 0.37 m; (2) 0.75 × 0.35 × 0.45 m. In addition, two thin blocks of a pavement, also with plough marks: 0.55 × 0.25 × 0.30 m and 0.55 × 0.45 × 0.30 m.

¹⁰³ It should be noted that Pohl in *San Giovenale* V:2 names this room Aa.

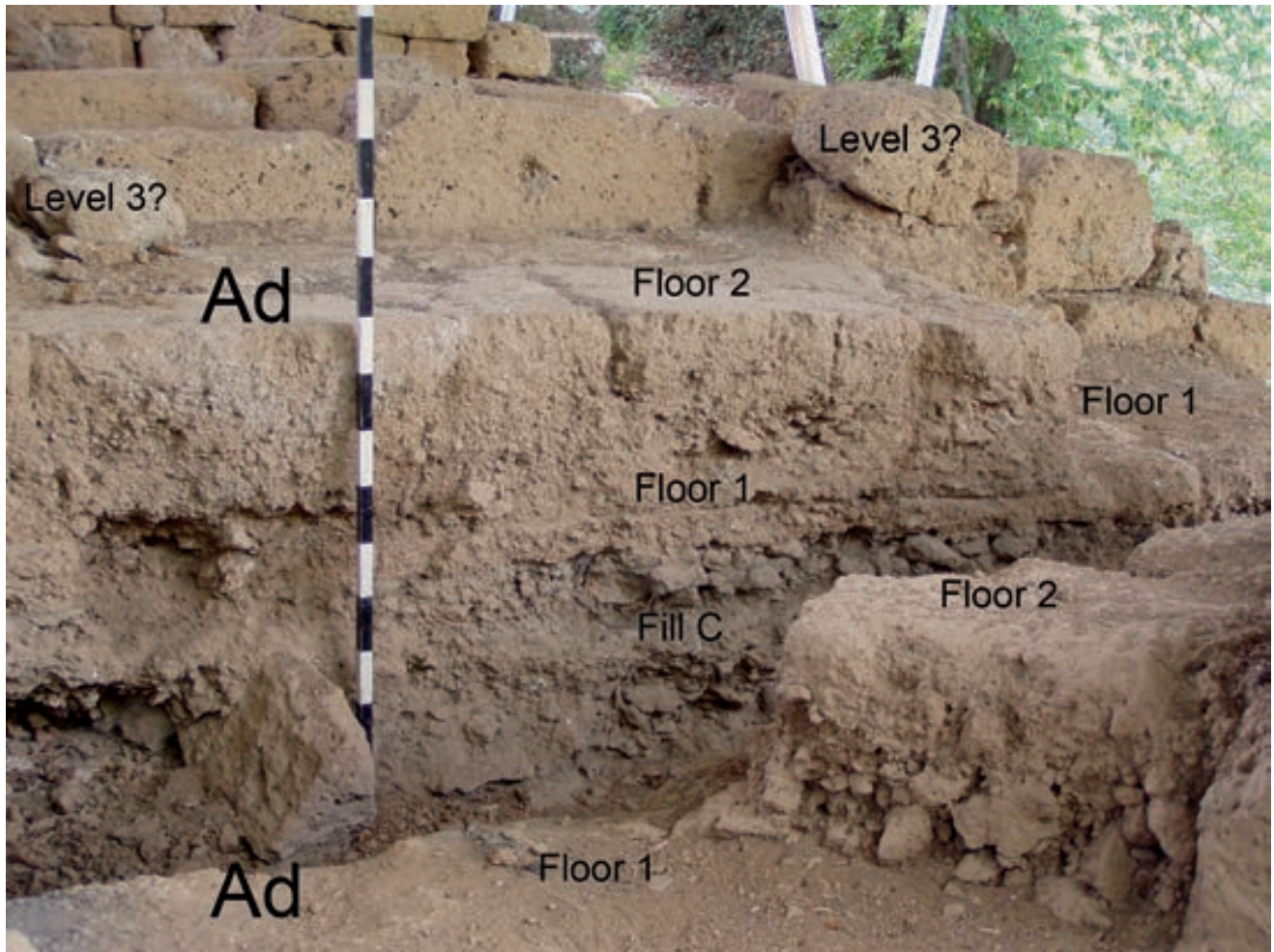


Fig. 86. Yard Ad towards the south with floor levels. Photograph by J. Sigurdsson.

Yard Ad (Fig. 86)

This is a triangular area between the rock TRe, House A and Drain L. The eastern part of the early Ad-area is partly hidden beneath the late Period 3 construction Ah, just like the early area Ac beneath hearths/niches Ag and Ak. Just as House A, yard Ad was, originally, built partly on the bedrock in the eastern half, and

partly on fills A-B-C in the slope towards the west. The part of Ad just outside the rooms of House A is important. Here the two Floor areas 1 and 2 are well prepared and showing an inclination of *c.* 0.08–0.10 m per metre. Actually, the level of Floor 1 slopes 0.55 m from the eastern area Ah to the western room Ab and to N1.

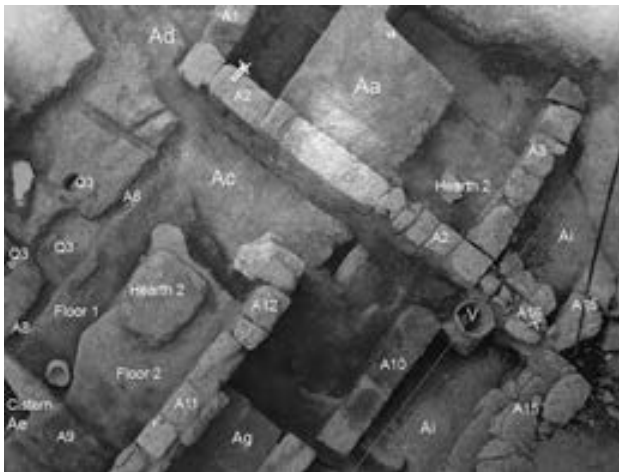


Fig. 87. Room Aa, work area Ac, yard Ad and alley Ai. North at lower right-hand corner. Photograph by B. Blomé.

Stratigraphy (Fig. 86)

The situation with sloping fills in and around House A and the surrounding Ad floor is fairly clear. This is the stratigraphic situation:

Stratum 1. Topsoil. Rock fragments, blocks and earth were found in the eastern part, and earth and blocks in the western part.

Strata 2–3. On Floor 2 and in the area in front of niche Ah, much pottery was found and, after more earth, a great amount of large and small stones, all possibly related to the activity of Period 3 or, in part, coming from the higher area of the Borgo Spina. Finds: a lot of pottery.¹⁰⁴

¹⁰⁴ Find groups 62-180 and 62-184, *San Giovannelle* V:2, 31–34, cat. nos. 1–66.



Fig. 88. Work area Ac towards the north. Photograph by B. Blomé.

Stratum 4 = Floor 2. Except for a part in the centre of the room Aa, not much of this floor area was preserved (*uf.* 2.41 m). Keeping in mind that the floor(s) on the inside of buildings are always a little lower than their thresholds and yards, there is a fairly good correspondence with the well documented Floor 2 of yard Ad (*uf.* 2.18–2.33 m). Room Ab is not well preserved, but offers important information. In the corner of walls A4/A7 are preserved two flatish stones (*uf.* 2.20 m), indicating a stone pavement that fully corresponds to the Ad Floor 2 outside (*uf.* 2.18–2.33 m).

Stratum 5. Fill stratum above Floor 1. This is a fill, 0.30–0.40 m thick with much stones of medium size. No finds.

Stratum 6 = Floor 1. Above and into the big fill C were constructed the two rooms of House A, with walls A1–A4 (for room Aa) and the walls A5–A7 (for room Ab). Wall A1 has a threshold (*uf.* 2.58 m) with an entrance width of 0.90 m and one or even two hearths (*uf.* 2.69 and 2.64 m). Room Ab has a threshold (*uf.* 2.76 m) and, no doubt, the floor was about 5–10 centimetres lower (*uf.* 2.85–2.90 m). The sloping and hard floor level in the Ad-area (*uf.* 2.56–2.77 m), outside the rooms, corresponds nicely to the thresholds and floors (*c. uf.* 2.56–2.72 m). Finds: pottery and tiles.¹⁰⁵

Strata 7–9 = The Great Fill Project. On the sloping rock there were the three fills, A/B/C: see Chapter Six on the Great Fill Project.

WORK AREA Ac (Figs. 87–89)

In front of the rising tufa rock TRe/TRn, work area Ac covers a surface of 21 m² (*uf.* 2.20–2.30 m), including three walls measuring 4.40, 4.90 and 5.10 m in length. In addition, there is, in the TRe/TRn rock, rock ledge A9 (*uf.* 1.66 m). It has a width of 1–2 m, and a length of 7.60 m, and is located on a 0.50–0.70 m higher level than the work area floor surface. It contains niches Af and Ah1 and, a little later, cistern Ae. The numerous later changes in the area complicate the interpretation of the earliest constructions.

However, the main developments of the area can be reasonably conjectured. Two entrances to the work area existed originally: one in wall A8 and one in niche Af and rock area A9. Wall A8 of work area Ac was very different from walls A1 and A7 in rooms Aa and Ab. Wall A8 never had a stone-built wall. Instead some thinner, light material, with a thickness of 0.15–0.20 m, probably consisting of wooden planks, was set into the bedrock floor. In addition, there was a rock-cut entrance located on a 0.20 m lower area, Q3 (the rock-cutting measures 0.96 × 0.50 m). It is flanked by two holes for wooden supports (the east hole measures 0.28 in depth and 0.30 m in width; the west hole measures 0.25 in depth and 0.24 m in width). Wall A8 joins the 0.60 m higher rock area of A9, which contains the cistern Ae and niche Af, close to the rock face of the TRe. Wall A10 (5.05 m) has been destroyed by the later constructions Ag and Ak, but cuttings and a couple of sturdy blocks still *in situ* indicate the general layout of work area Ac. Did Ac have a roof? The A8/Q3-area must have had a wooden fence and an entrance gate of some kind and, perhaps, even a roof. However, no other clear evidence for this roof has been found in the main area, but there ought to have been a cover of some kind, not least because of the work going on inside with the several, huge hearths (see Fig. 89).

Measurements of blocks and walls

Wall A8: No blocks are left *in situ*, but setting beds for blocks and a threshold can be traced for a length of 4.40 m. At the corner of A1/A2/A8, there is a cutting for a block, measuring 0.50 × 0.40 m, at corner A8/A9 there is a similar cutting, measuring 0.30 × 0.45 m. The threshold cutting is 0.90–0.95 wide. In front of the threshold, there are two deep, slightly oval holes, measuring 0.24–0.30 m in width and 0.28 and 0.25 m in depth.

“*Wall A9*”: is the entire rock level of rock ledge A9 (7.60 m long and 1.20 m wide).

Wall A10 (Sections T4 and T5, *Pls.* 21–22) has a length of 5.05 m and contains four blocks. There is one cutting for a missing block, and other blocks have been replaced by Ag/Ak. Only one course is preserved, blocks 1 and 2 are set deeply in the rock on the inside, block 3 on the outside, (measuring from the west to east): (1) 0.40 × 0.65 × 0.50 m; (2) 1.25 × 0.70 × 0.50 m; (3) 0.43 × 0.54 × 0.44 m; (4) 0.60 × 0.42 × 0.43 m; (5) cutting 0.70 × 0.45 m.

Wall A11 (*uf.* 1.99 m) has a length of 2.75 m and a thickness of 0.35–0.45 m (Sections T6 and T7, *Pls.* 23–24). Three courses and an eroded block of a fourth course remain. Course I (from east to west) contains five blocks: (1) 0.20 × 0.22 m; (2) 0.90 × 0.25 × 0.30 m; (3) 0.32 × 0.40 m; (4) 0.58 × 0.42; (5) 0.78 × 0.40 × 0.45/0.43 m (with a cutting indicating reuse). Course II contains three blocks: (1) 0.80 × 0.37 m; (2) 0.90 × 0.45 m; (3) 1.05 × 0.45 × 0.40 m. Course III contains five blocks: (1) broken; (2) 0.30 × 0.40 × 0.35 m; (3) 0.45 × 0.40 × 0.35 m; (4) 0.49 × 0.38 × 0.35 m; (5) 0.72 × 0.28 × 0.35 m.

Wall A12 was built on the fill as an extension of wall A11, but on a higher level, corresponding to its second course, *uf.* 1.49/1.50 m (Section T6, *Pl.* 23). It was rather sloppily built with six reused stones, of which only one could be characterized as a real block. Wall A12 was dismantled in 1963. It was carelessly built on the fill of Period 3. It is 1.40 m long and is preserved to a height of *c.* 0.80 m, consisting of six stones, the westernmost of which is rough and protrudes beyond the line of the wall.

¹⁰⁵ Find group 62-185; *San Giovenale* V:2, 30f., cat. nos. 59–72.

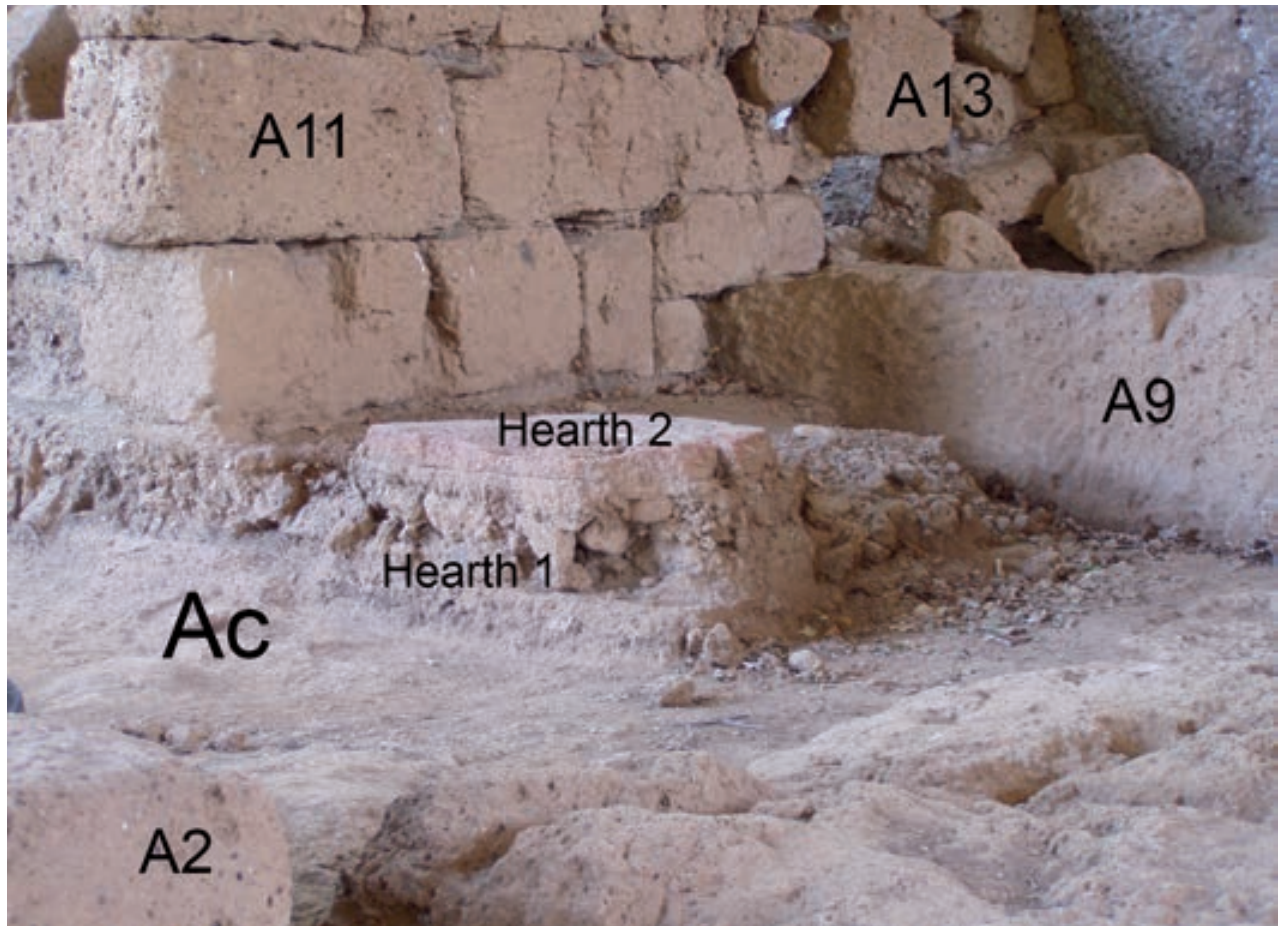


Fig. 89. Work area Ac with hearths 1–2, towards the north-east. Photograph by J. Sigurdsson.

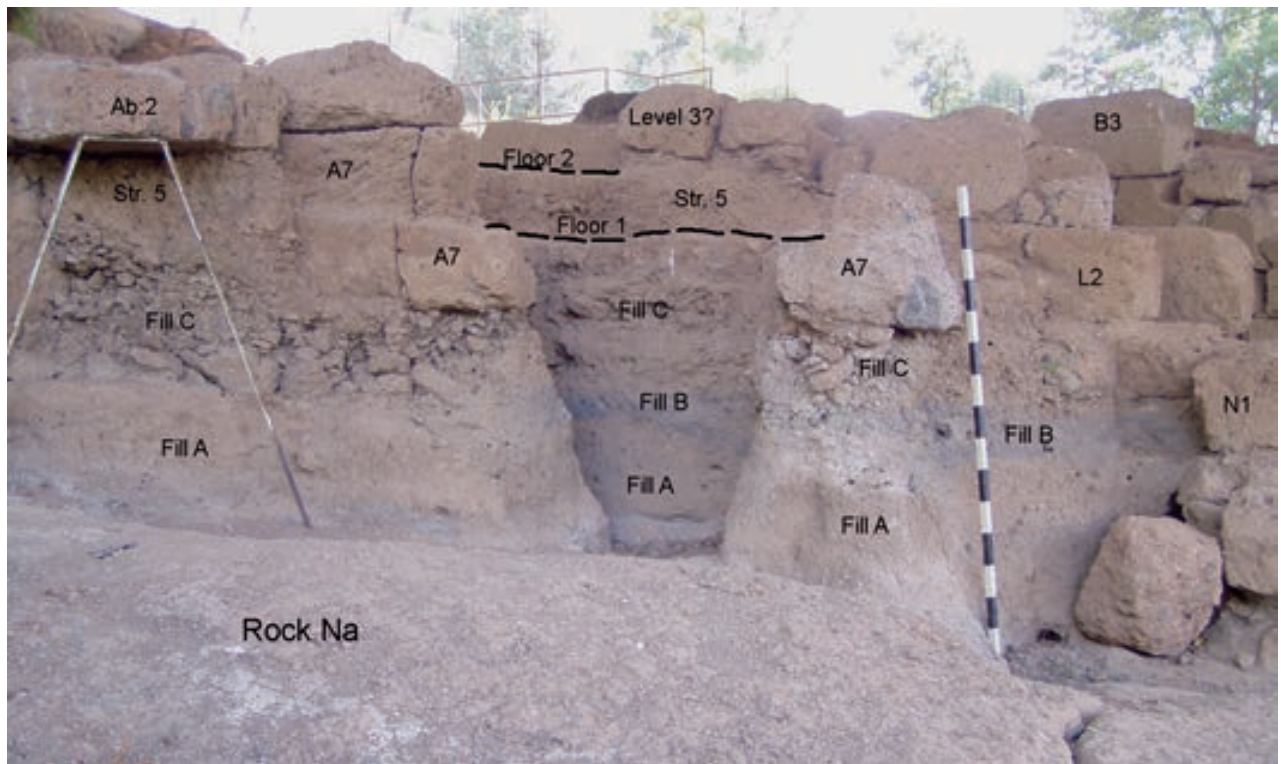


Fig. 90. The Fills A-B-C and Floors 1–2 seen from room Ab towards yard Ad. Photograph by J. Sigurdsson.

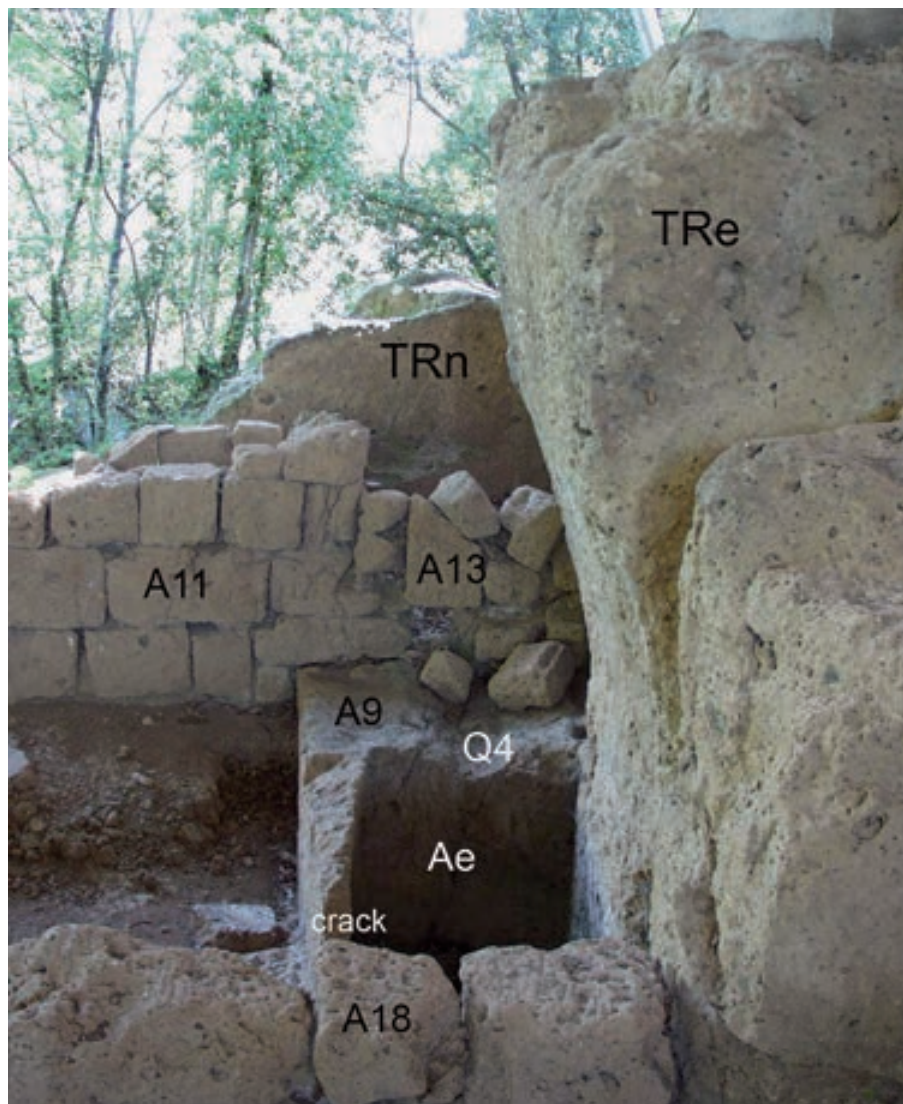


Fig. 91. Rock ledge A9 and cistern Ae from the south. Photograph by J. Sigurdsson.

Stratigraphy (Fig. 90)

Later disturbances and a medieval burial complicated the stratigraphy. Huge stone masses covered part of the area. Most of this material had probably been thrown down from the higher *Spina* area, when various wine-cultural activities were undertaken there, probably in the Roman period. Yet the location of Ac-Ad, close to the steep rock TRe, has partly protected it from the erosion typical of the lower, western part of the slope. It was thus possible to reconstruct most of the stratification, thanks to the strata left intact under the later constructions. Although Pohl has followed the excavator's notes of 1962–1963 in her presentation of the strata and finds, it seems meaningful today to read the sloping stratigraphy in a simpler, generalized way and to restore three main levels or periods.

Strata 1–2. Topsoil. A great amount of stones, cut and uncut, were filled into the area, especially in the eastern part of Ad and Ae.

Stratum 3. A significant fill stratum was created of varying thickness (0.25–0.45 m) on the top of Floor 2. The fill structure covered also yard Ad in front of work area Ac. It consisted of earth

and *tufetti*, inside towards the north, and earth and stones in the yard towards the south. This fill operation also includes closing the opening between the rock-cut niche Af and the canal leading to cistern Ae. This considerable fill formed the ground level for the now higher reconstructed area Ac/Ad, including Ah3 and the two hearth-constructions Ag and Ak.

Stratum 4 = Floor 2 (Pohl str. 6a/5a). Small stones of tufa form Floor 2. This floor was disturbed in several places due to later activity. The most important feature of this floor was a big, oval hearth with a wall about 7 cm thick, burnt to a strong red and very hard surface.¹⁰⁶ The hearth and the floor area were full of burnt tufa fragments and small metal fragments. During the period of use, Floor 2 and wall A11 were built on a thin accumulation of earth close to the hearth. At some point, cistern Ae was destroyed (by an earthquake?) and the area then changes markedly (late Period 2–early Period 3).

¹⁰⁶ Unfortunately, the excavator stupidly destroyed part of this important feature, while cutting a profile section through the area. *Mea maxima culpa!* Of the many things to be regretted from the early exploration of 1961–1965 this is probably the worst.

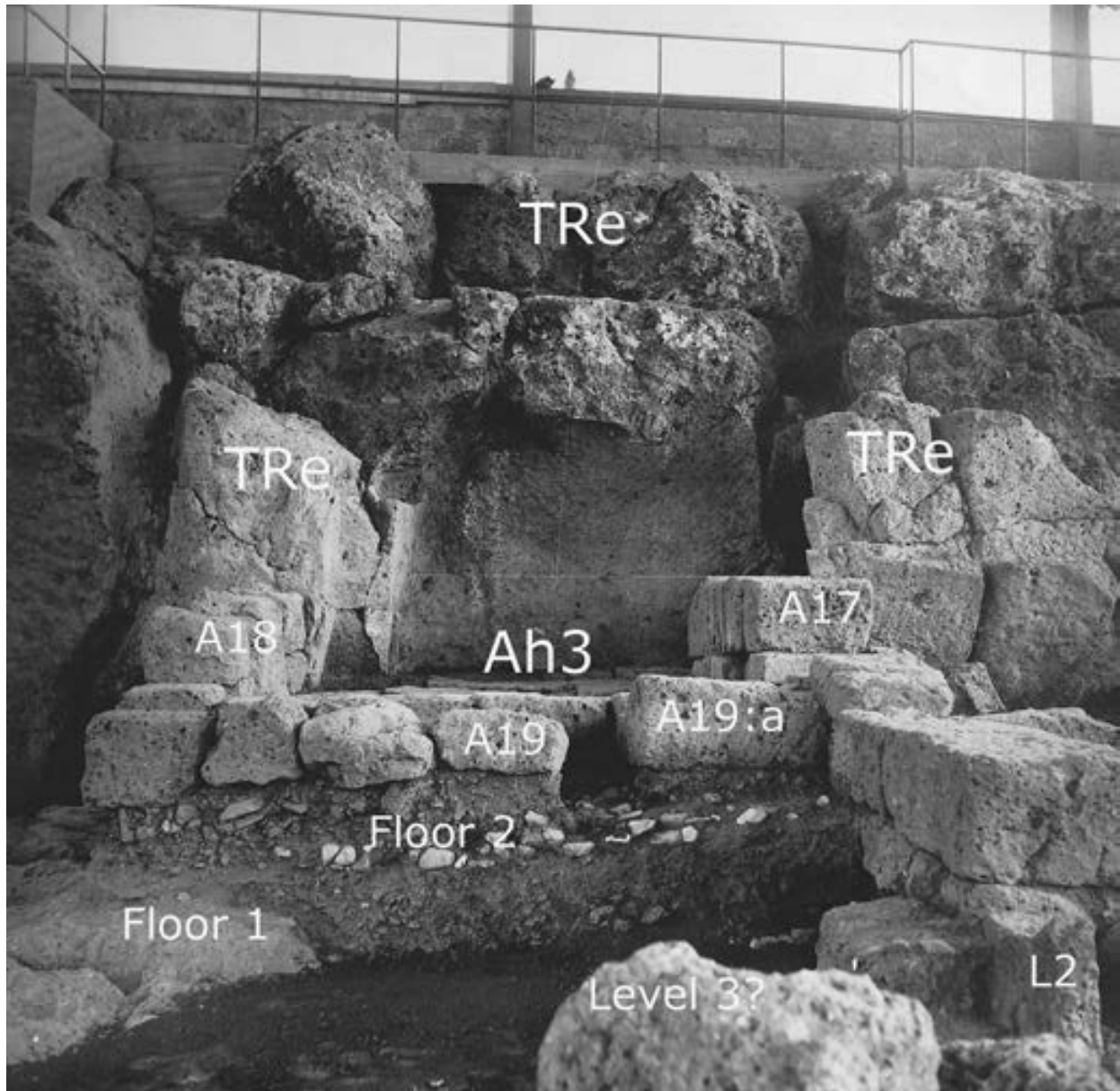


Fig. 92. Niche Ah towards the east. Photograph by B. Blomé.

Stratum 5 (Pohl str. 7/6). This stratum consists basically of material found on and above Floor 1b in a fill, about 0.25 m thick. It contained medium-sized tufa stones, fragments of roof-tiles and pottery. Finds: Italo-Geometric ware (1), Fine or Transitional, Ordinary and Grey Bucchero (7 + 11 unnumbered fragments), Red-slip ware (5), brazier of Internal Red-slip ware with impressed decoration (1), Cream-slip and Late Italo-Geometric wares (2), Kitchen ware and fragments of *dolia* and of a cooking stand (Scheffer, type IIB), and several fragments of roof-tiles.¹⁰⁷

Stratum 6 (Ac: Floors 1a–1b; Ah: Floor 1). Thin clay was laid on the ground for the first, Floor 1a (*uf.* 2.38 m). Floor 1a is not well documented but there may have been a hearth, containing rather hard greyish zones and minute fragments of charcoal. Here and there were found small fragments of metal. The hard clay area

and “red-burnt hearth” on Floor 1b (*uf.* 2.27–2.29 m) were well preserved, although covered by later fills. Finds: pottery together with the evidence of stratum 5.

Stratum 7 (basically the same as the fill C). After the extensive shaping of the rock face in the area, the uneven bedrock (*uf.* 2.20–2.40 m) was partly filled with earth and *tufetti*. This was also the period of the construction for niches Af and Ah. Finds: no pottery but a few small metal fragments.

SUMMARY OF STRATIGRAPHY

The basic understanding of the complicated site has now been based on the amount of numerous *uf*-levels. They have helped us to establish the following four main floor levels in the slope, from the eastern Ac to the western Aa/Ab:

¹⁰⁷ Find groups 62-181, 63-125, 63-129a and ind. nos. 62-163 and 63-130; *San Giovenale* V:2, 34f., cat. nos. 1–26.

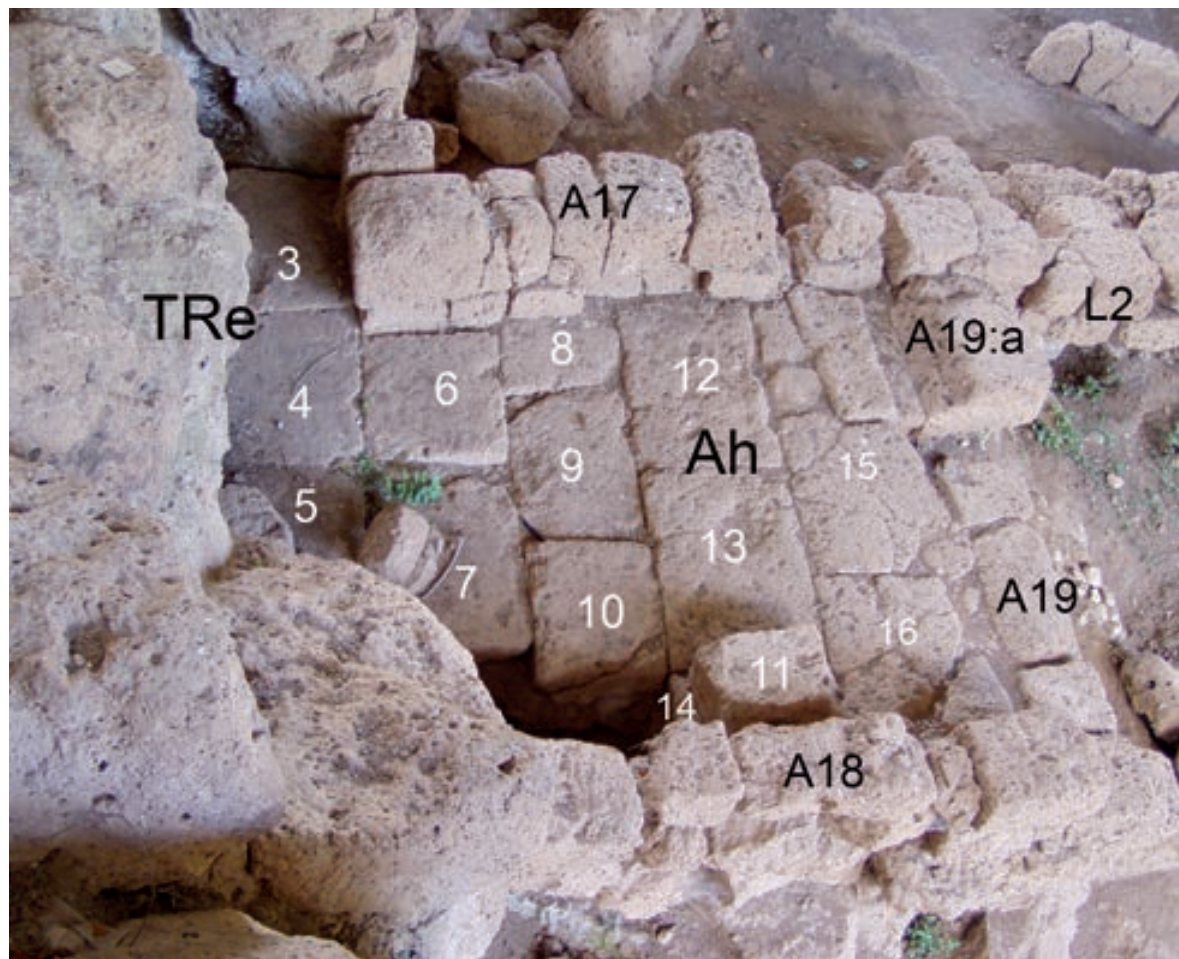


Fig. 93. Niche Ah from the north. Photograph by J. Sigurdsson.

Floor "0". A-B-C: *uf.* 2.60–5.50 m; first hearth *uf.* 3.08–3.16 m.

Floor 1. House A, walls A4: *uf.* 2.95–3.05 m; A7 *uf.* 2.95–3.00 m; A2 *uf.* 2.55 m; yard Ad: *uf.* 2.35/2.56–2.72/2.81 m.

Floor 2. Yard Ad: *uf.* 2.00/2.20–2.36/2.41 m.

Floor 3. Niches Ah, Ag and Ak: *uf.* 1.30/1.40–1.56/1.88 m.

THE BEDROCK OUTCROPPING IN THE EAST (alley Ai, niche Af, cistern Ae and niche Ah)

In the north-eastern part of Area A, rock face/wall TRn/A15 and rock-structure TRe/A9 demarcate the alley Ai and the rock ledge A9. Here was laid out an area for metalwork called Af, Ae and Ah. The north–south ledge A9 is 7.60 m long and 1.20 m wide. It holds niche Af (*uf.* 1.66 m) and the cistern Ae (*uf.* 1.69–2.70 m). The rock-cut grotto of niche Ah is not directly connected with the A9 area but it is located on the same level (*uf.* 1.71 m). There is thus a general A9/Ah level of *uf.* 1.65–1.71 m, and this is 0.60–0.70 m higher than the contiguous working area of Ac/Ad (*uf.* 2.20–2.40 m). The entire work area Ac/Ad was later radically changed and is now dominated by the impressive constructions of Period 3. It is thus difficult to solve all problems of the earlier Periods 1 and 2.

Alley Ai (see Fig. 87)

The uneven and rather steep alley Ai is 12 m long and 1.10 m wide. It runs west–east from area Na (*uf.* 3.00 m), between walls A3–A10 and walls Ma/A15, up towards the rock-shelf A9. Alley Ai leads directly to the entrance of niche Af and it was used during both Periods 1 and 2. In Period 3 the old passage was closed



Fig. 94. The blocks 7, 9, 10 and 11 from Ah3 are here removed in order to investigate the lower levels. Photograph by B. Blomé.

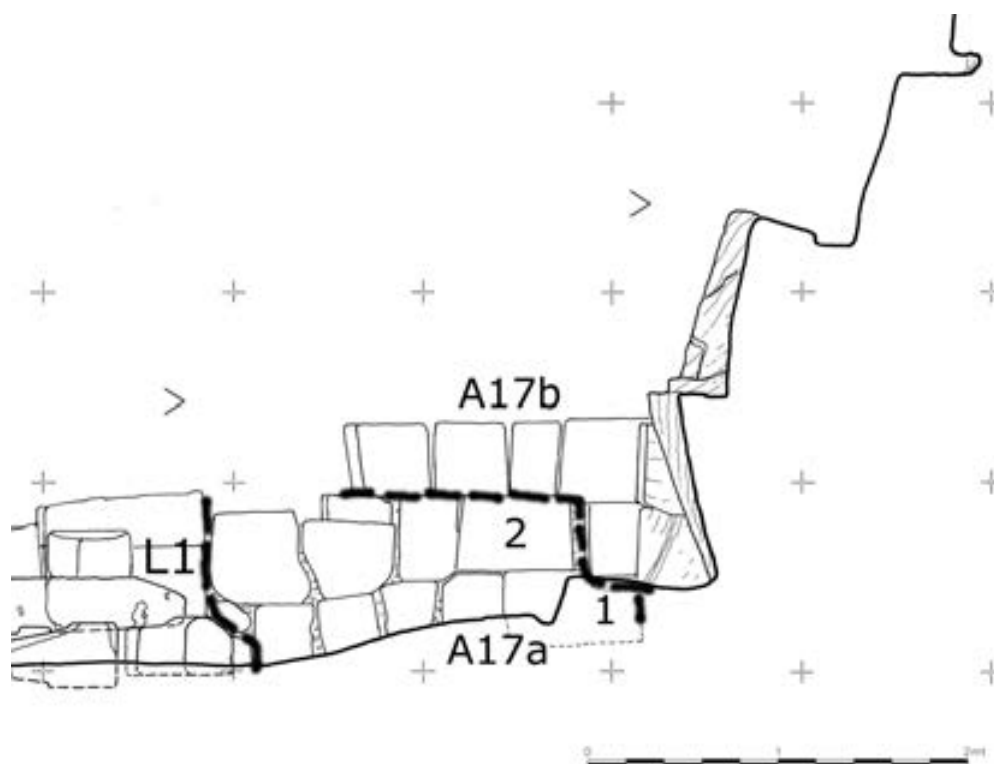


Fig. 95. Southern elevation of walls A17a and A17b (Section T15 = Pl. 31). Drawing by B. Blomé, A. Bizzarro and G. Tilia.

by wall A16 (Pl. 13), it was infilled with earth and at least three big water *dolia* (62-194, 63-128) were put there. Finds: West of wall A16 there were 12 pottery fragments:¹⁰⁸ Transitional and Ordinary Bucchero (4), Red on white ware (1), Red-slip ware (2), Internal Red-slip (3), Kitchen ware (2), loom weight (1) and pan-tiles (2). East of wall A16 fragments of mainly early material was found:¹⁰⁹ Etrusco-Corinthian ware (3), Transitional and Ordinary Bucchero (5), Red on white ware (1) Red-slip ware (3), Internal Red-slip ware (2), Kitchen ware (4), roof-tiles (2).

Niche Af (see Fig. 83)

Alley Ai came up to niche Af, which was cut out from the TRn-TRe rock and from the A9 rock ledge. It measures $2.10 \times 1.10 \times 0.45$ m. It has an entrance (width 0.60 m), a threshold (0.15 m) and an irregular floor (*uf.* 1.66 m), covering a surface of 2.60 m². In the floor, there is a shallow hole for a big jar (D 0.25 m) and canal Q4 (0.30 m wide and 0.15 m deep) leading rainwater into the big cistern Ae in the area of A9. Did niche Af have a roof? In the TRe rock, there are two small round cuttings (12 cm wide), and above these cuttings there is a flat horizontal area in the rock. Were the two holes there for holding roof beams? In that case rock ledge A9 must have been carrying a mudbrick wall to reach a height so that it could support the assumed two beams. A roof over Af is thus possible, but it remains problematic (see the problems of Ac-wall A8-Q3). Canal Q4 and cistern Ae were no doubt early. Finds: There were no finds documented for Periods 1 and early 2. Canal Q4 and the entire Af-area were covered by a stratum of brownish earth and *tuffetti* with a thickness of 0.20–

0.30 m. The stratum was primarily related to late Period 2 and to early Period 3 material and containing hundreds of fragments of pottery:¹¹⁰ Etrusco-Corinthian ware (2), one small stemmed bowl with traces of black glaze and an incised lambda-like sign (63-132); Etrusco-Archaic Black glaze B (1); numerous fragments of an interesting decorated Ordinary Bucchero *oinochoe* (63-131 and 63-133) and fragments of four different Bucchero vases; Red-slip ware (9), Internal Red-slip ware fragments of nine vases; Kitchen ware (3), a loom weight and a broken cover-tile.

Cistern Ae (Fig. 91)

Close to niche Af and water canal Q4 is the impressive cistern Ae. It was cut out in a rough way with a pointed pickaxe from the A9-ledge (depth *uf.* 1.66 m to *uf.* 2.74 m) and had, no doubt, two periods.

(1) Cistern Ae was originally 2.50 m long, and 0.85 to 1 m wide and had a depth of 1.10 m. It could thus contain the impressive amount of *c.* 2,500 litres of water. A little higher (0.25 m, *uf.* 1.60 to *uf.* 1.35 m) in the vertical TRe-rock, just above the cistern, there are two holes (0.20 m broad and deep), which possibly were part of a wooden cover. At some point, cistern Ae was partly destroyed (by the earthquake?): the entire south-west part of area A9 and a main part of the thin wall of the cistern were destroyed (about 0.60 m, from *uf.* 1.66 m down to *uf.* 2.15 m). At this point, the cistern could only collect water in its lowest part, *c.* 1,200 instead of previously 2,500 litres.

¹⁰⁸ Find group 62-183a-c; *San Giovenale* V:2, 64.

¹⁰⁹ Find groups 62-194, 63-128 and 63-159; *San Giovenale* V:2, 63f.

¹¹⁰ Find groups 63-131–63-132 and ind. no. 63-133; *San Giovenale* V:2, 62f., cat. nos. 1–31.

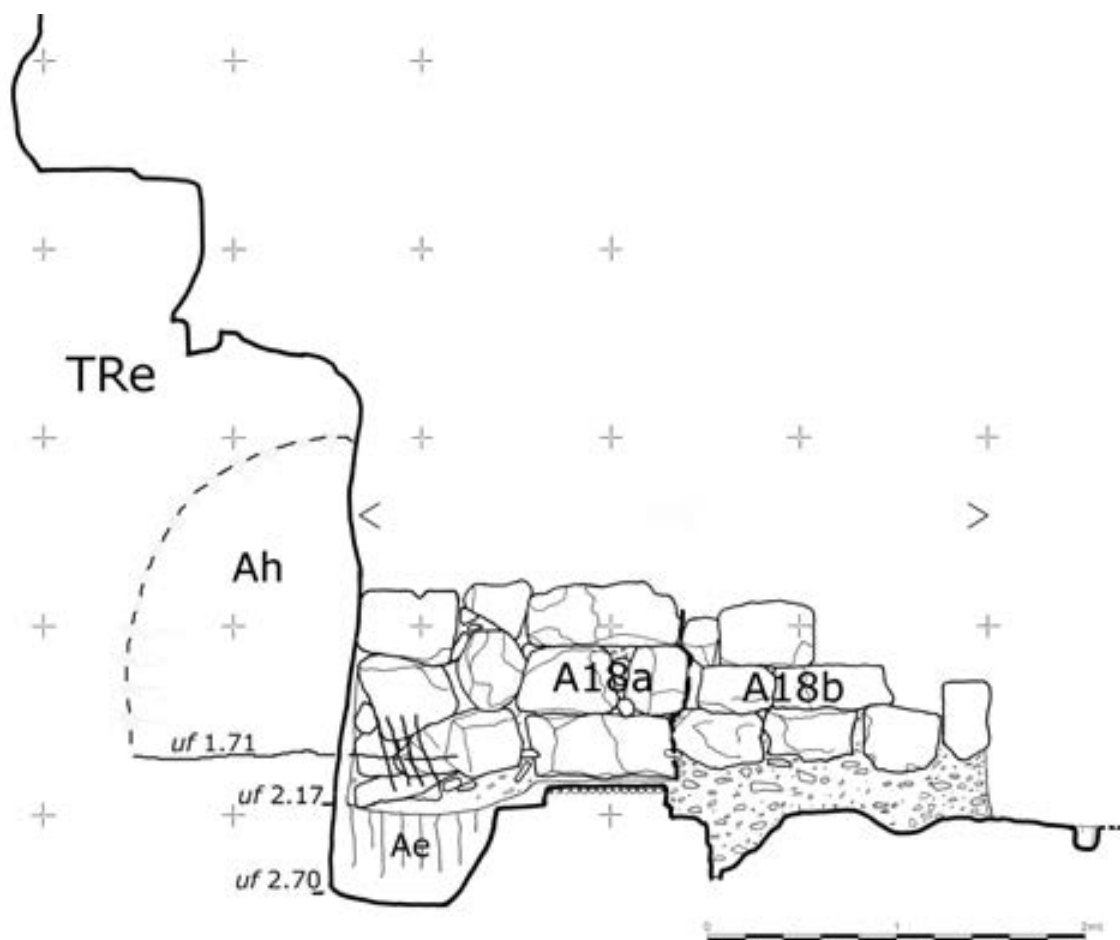


Fig. 96. Northern elevation of walls A18a and A18b (Section T10 = Pl. 27). Drawing by B. Blomé, A. Bizzarro and G. Tilia.

(2) Cistern Ae was now, as if compensating for the loss, extended up to and even into wall A18 of Ah. The new cistern became 3 m long, 0.85 to 1 m wide, and only 0.50 m deep (*uf.* 2.17 to *uf.* 2.74 m). This meant that it could hold a maximum of 1,500 litres.

The cistern Ae was an important part of the creation of the entire TRe/A9-area and was part of the metalworking activities. The reorganization of the cistern, after the partial destruction, was done when wall A18 was already standing. A18 stands on earth from the middle or end of Period 1. This reorganization therefore most probably took place in the middle or late Period 2, when the entire area of Ac/Ad and the cistern were filled-in with earth, stones and pottery (level lifted 0.25–0.45 m). Finds of late Period 2/early Period 3. The upper part of the fill inside the cistern contained large amounts of broken tiles, household ware and *Bucchero* of mostly later type (Find group 63-114c). The lower part contained a fair amount of pottery of various shapes of Attic Red figure or Black glaze, Ordinary *Bucchero*, Red-slip ware, Kitchen ware and *dolia* (Find group 63-114d). Some of this material was very well preserved and included almost complete or major parts of vases, i.e. ind. nos. 63-118, 63-119 and 63-120.¹¹¹

When was the first cistern made? Was the cistern later destroyed and re-cut as cistern (2)? Cistern (1) was probably cut out from rock ledge A9 already during Period 1 as part of the initial creation activity. In Period 2, the situation was changed. A

new large and deep Cistern Ae (2) was constructed as evidenced by: (a) new cuttings were made on the TRe rock and niche Af with other tools than those used before; (b) the cistern cut the rock ledge A9 and the TRe rock but also cut the two blocks of the older wall A18; (c) creation of the canal Q4. In addition, oval red hearth 2 and the well-built wall A11, which were later built nearby, both respected the existence of canal Q4.

Niche Ah (Figs. 92–96)

This impressive construction, niche Ah, was the dominating point of the eastern area. The niche consisted partly of a grotto cut into the vertical rock TRe (Fig. 96), and partly of a floor area in front of it. At some point the roof of the rock cracked and a section collapsed. The present situation represents the latest period (Period 3), but it also reflects previous phases. The width is 5 m, the original depth of the niche may have been 1.30–1.50 m and its height 1.90–2 m. The pavement is impressive and well laid (at *uf.* 1.40–1.50 m). It measures 5 × 3.20 m (16 m²) and consists of 19 rather big blocks, both inside and in front of the grotto, and of the low sidewalls A17 and A18 (Figs. 95–96).

During the excavation, it was important to maintain the integrity of the monumental niche Ah3, and this made it difficult to gain information about its earlier phases. However, in 1963 one block from wall A18 and four blocks from the Ah3 pave-

¹¹¹ *San Giovenale* V:2, 40–58.

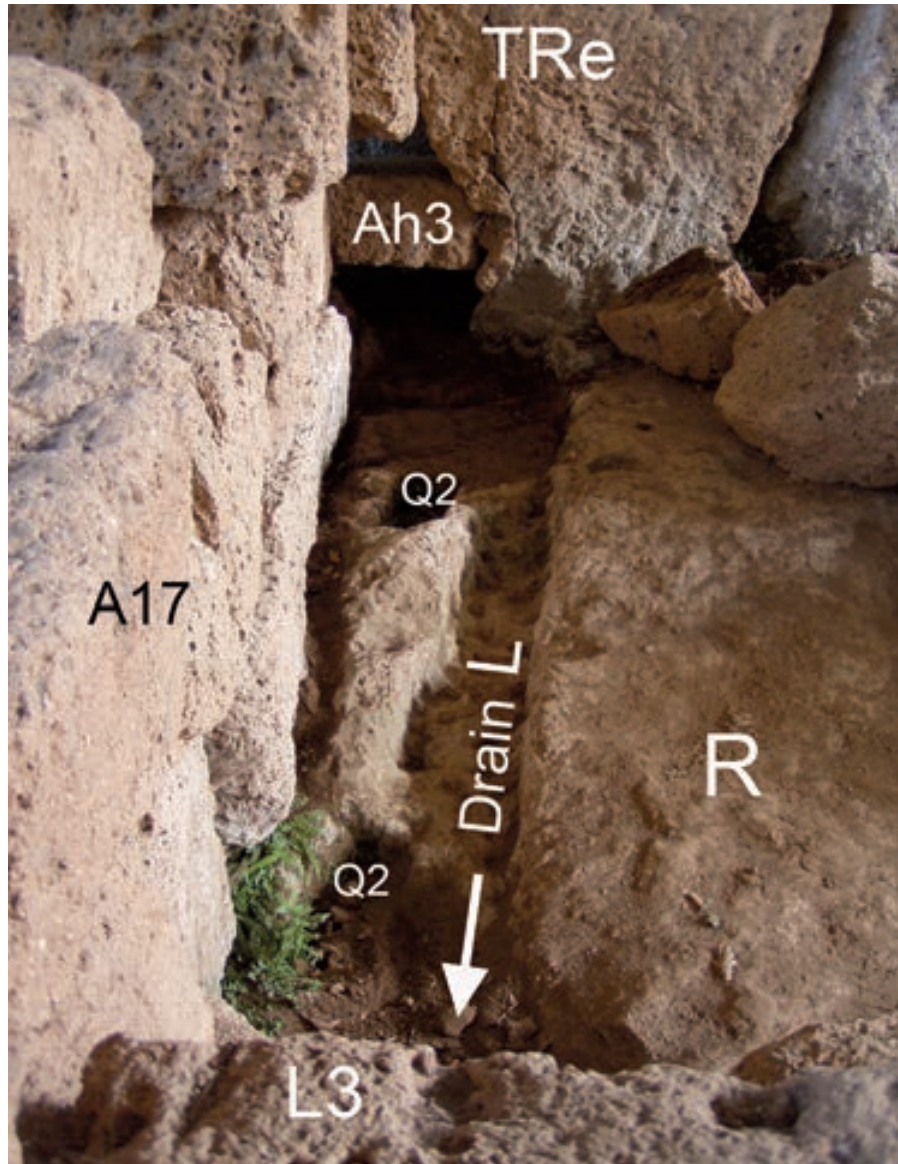


Fig. 97. Niche Ah with Drain L towards the east. Photograph by J. Sigurdsson.

ment slabs (7 & 9–11) were lifted, in order to allow a limited investigation of the remains of Periods 1 and 2 and of Floor 1 (*uf.* 2.10–2.20 m) and Floor 2 (*uf.* 1.90–1.95 m) (Fig. 94).

Measurements of walls (Figs. 95–96)

Wall A17 is 2.20 m long and preserved in three courses (Fig. 95). Blocks 1–5 of course I, from the east (see Sections T13 and T15, *Pls.* 29 and 31), partly standing on the bedrock, partly on earth; four blocks in course II. The rest, especially course III, was built in Period 3. Wall A18 is 3.40 m long and 0.40–0.45 m thick, with three, rather irregular courses (Fig. 96): six blocks at course I; six blocks at course II; four blocks at course III. Since three blocks of the early wall A17 were set on the horizontal bedrock, while wall A18 was built on an earthen floor level, it is likely that wall A18 was later than wall A17, perhaps from the late Period 1 or even early Period 2.

The problem of Q2 (Fig. 97)

What did the place look like before the construction of grotto Ah and walls A17a and 17b? Was alley Ai the only entrance to the north-east area? Or was there also a southern entrance? Since the area of TRe/Drain L was always important it is possible that there was an entrance also from the south. In fact, along the rock TRe, an early north–south alley (Ib-I1-Ia-R) seems to arrive to the Area R-Ad-Drain L and perhaps continue to area Ad-Ac. Here Drain L did not have walls but was instead an open water canal. In front of the later wall A17/niche Ah, there are two holes, Q2. What was the function of these holes? They look very similar to the door cut Q3 at wall A8. Was there an early entrance preceding the construction of the first niche Ah and wall A17? Even after the construction of wall A17, was there a narrow passage into the Ad-Ac-area? The blockgroups A and B of wall A17 are different and surprisingly well-cut (see Fig. 95). Were they part of an early opening? Or were blockgroups A and B just reused from another context?

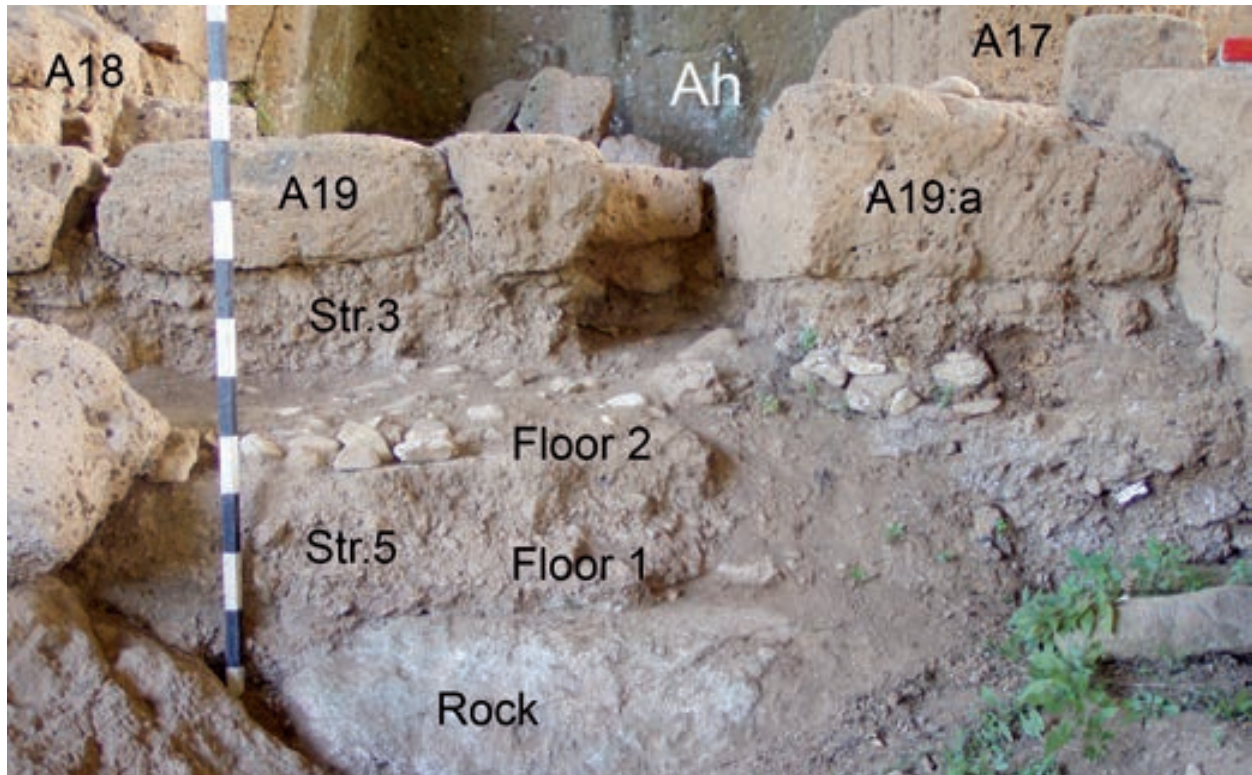


Fig. 98. Niche Ah from the west with wall A20 removed. Photograph by J. Sigurdsson.

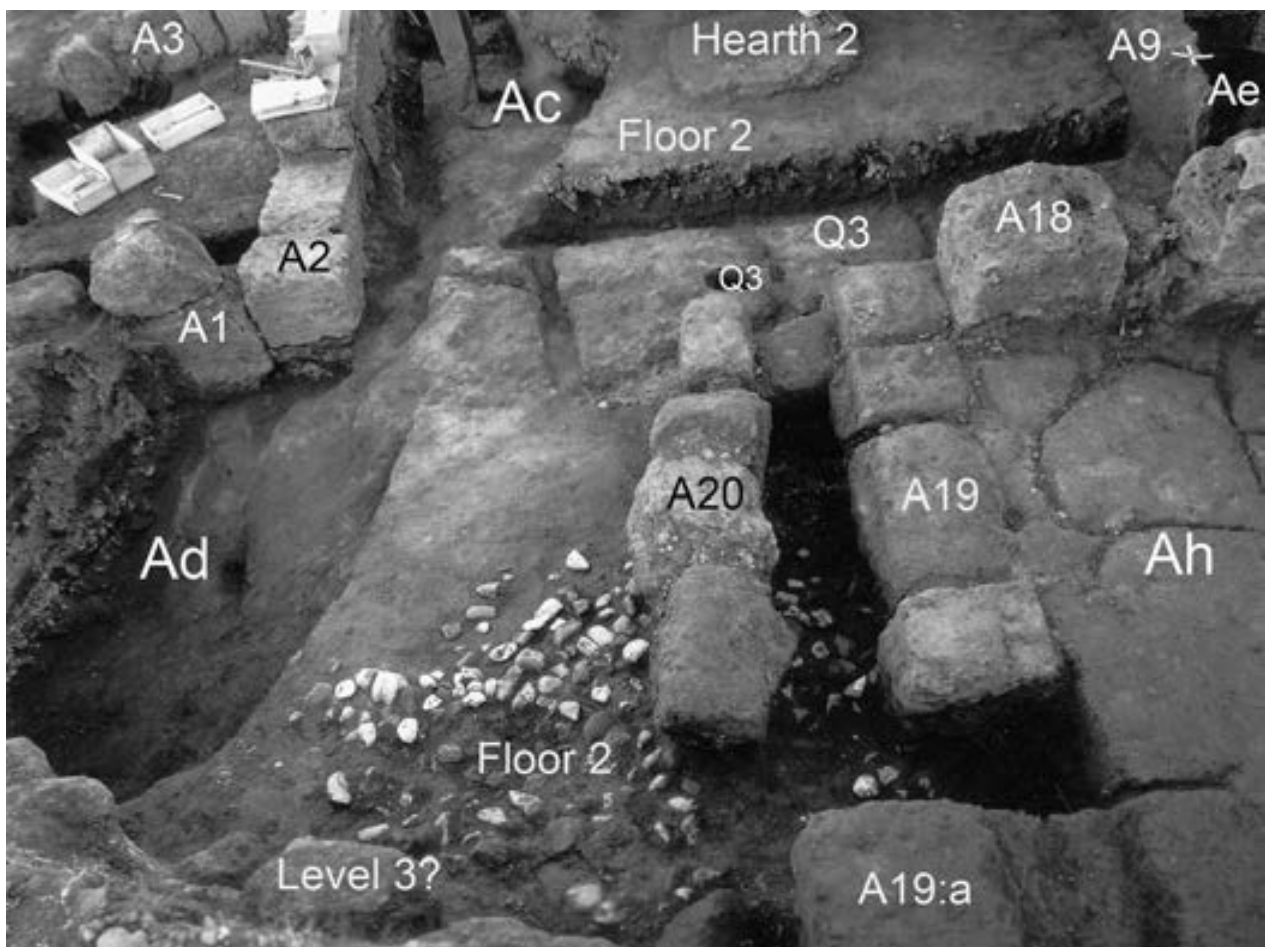


Fig. 99. Niche Ah from the south, before wall A20 was removed. Photograph by B. Blomé.

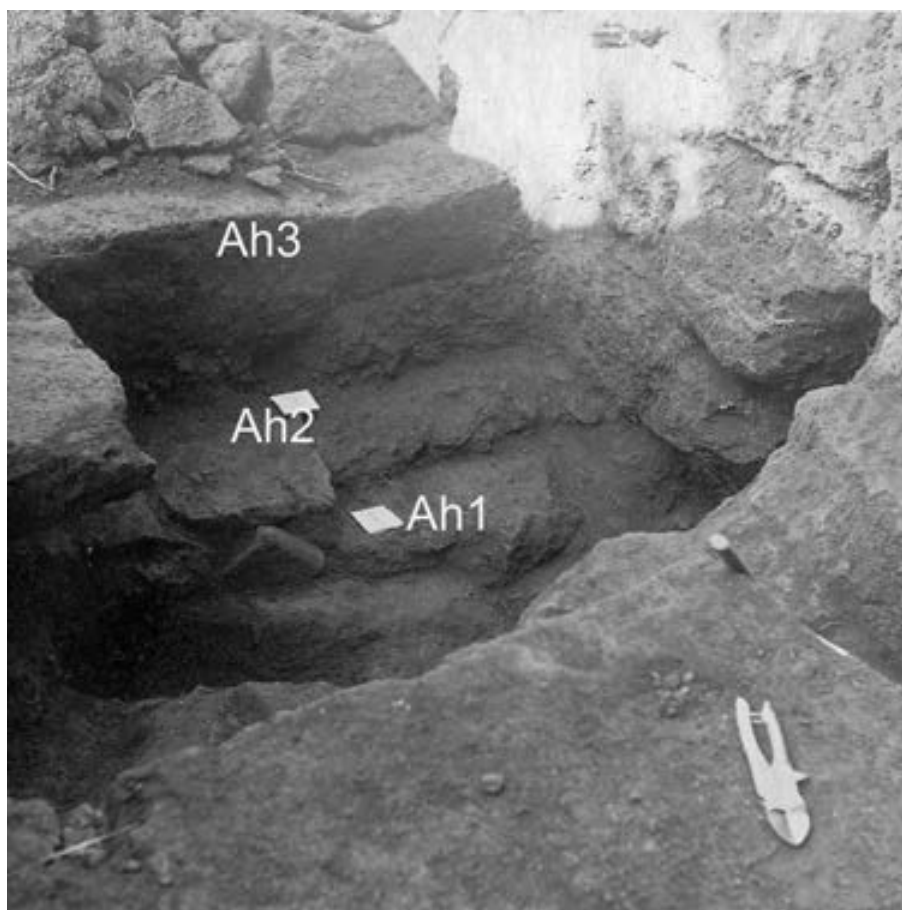


Fig. 100. Niche Ah with the stones removed, cf. Fig. 94. Photograph by B. Blomé.

The early period of niche Ah (Figs. 98–99)

Niche Ah and yard Ad are located in the slope of the uneven east–west rock. The general levels are: (1) the highest A9–Ah rock is at *uf.* 1.70 m; (2) the lower, general Ah-rock level is at *uf.* 2.15–2.28 m; (3) the rock just outside Ah is at *uf.* 2.30–2.40 m; (4) further west the rock drops to *uf.* 2.85 m.

Period 1. The uneven Ah rock, including a water canal (?) was levelled with earth and *tufetti* for the sloping Floor 1 (*uf.* 2.10–2.20/2.25 m). Below and on the first floor there was some early pottery (63–166c).¹¹² Wall A17a, built directly against the existing wall L2, was constructed, initially, with five blocks cut into the sloping rock and with four or five blocks on top of these. It seems possible that a narrow entrance in the south–north direction was still maintained in Periods 1 and 2, between blocks A1/B1 and the TRe grotto (see Fig. 97). Wall A18 is different. It is probably somewhat later, has rather rough stones and was set, not like A17 on the rock, but on a thin higher level of earth. It is even possible that wall A18 consists of two parts: the stones close to the vertical TRe may have been the earliest A18a, while wall A18b is on a slightly higher level and is slightly different in type and dimension. It is important that wall A18a already existed when cistern Ae was re-cut after the destruction.

Period 2. Floor 2 was laid out with a river-stone pavement on a higher level (*uf.* 1.90–1.95 m) and in front of niche Ah. This floor

is clearly related to Floor 2 in the western area at Ad/room Aa (*uf.* 2.18 m and sloping to *uf.* 2.31 m at Ad/room Ab).

Summary of area Ac/Ad during Periods 1 & 2 (before the earthquake) (Fig. 100)

1. The shaping of the eastern rock TRe/TRn and the construction of the western Mb/Mc terrace wall system to obtain an acceptable living and working area, meant the quarrying of blocks and the preparation of the area for House A, as well as the metalwork area Ac and rock ledge A9 with the niches Af, Ah and the cistern Ae.
2. Work area Ac had a back wall A10 and a front wall A8 with the entrance Q3 flanked by two wooden posts. In the bedrock inside Ac (*uf.* 2.30–2.40 m), Floors 1a (*uf.* 2.38 m) and 1b (*uf.* 2.28 m) are documented and, at least on Floor 1b, there is also a hearth. From the same period is Af, the canal Q4/cistern Ae and Ah1.
3. The rise in level of 0.20–0.10 m. The new Floor 2 (*uf.* 2.00 m) has a big, oval, red hearth (measuring 1.15 × 0.97 m). Wall A11 was built. Niche Ah2 was developed on a slightly higher level. Cistern Ae (bottom at *uf.* 2.74 m) was partly destroyed (by the earthquake?) and re-cut into the ledge A9.
4. Ah3 belongs to Period 3.

¹¹² *San Giovenale* V:2, 43–58, cat. nos. 144, 193, 210, 224, 378, 386, 514, 624.