

# LIST OF ILLUSTRATIONS

## FIGURES

- Fig. 1. The excavation area of Borgo NW. Carl Nylander and King Gustaf VI Adolf under the *Capannone*, a structure that was funded by the king.
- Fig. 2. Börje Blomé and the workmen Aldo and Angelo Coletta from Blera arranging the photographic tower, *la giraffa*, in 1962.
- Fig. 3. Börje Blomé at work.
- Fig. 4. Ingrid Pohl working with the enormous amount of pottery.
- Fig. 5a. Alessandro Tilia and Angela Bizzarro.
- Fig. 5b. Giuseppe Tilia.
- Fig. 6. Lars Karlsson discussing ancient wall techniques.
- Fig. 7. Carl Nylander.
- Fig. 8. The Tolfa Mountains seen from San Giovenale.
- Fig. 9. View from the north-west of the curved oblong shape of the San Giovenale plateau, with the Borgo in the lower picture, the medieval *castello* of the di Vico family in the middle and the Acropolis in the upper part.
- Fig. 10. Plan of San Giovenale and the excavation areas of 1956–1965.
- Fig. 11. The earliest and the latest finds from the Borgo NW excavations. To the left a fragment of an Early Protocorinthian *kylix* from the late 8th century BC (cf. *San Giovenale* V:2, pl. 1, K:a-2-1) and to the right an early medieval spouted jug from the 6th–7th centuries AD (cf. *San Giovenale* V:2, pl. 101, A:h-1).
- Fig. 12. View towards the north before the excavations. The area of Borgo NW is to the right of the path leading to the car parking area.
- Fig. 13. The Borgo NW excavation in 1962. To the left is the Etruscan road cut and to the right the medieval–modern road up to the Acropolis. In the upper right the ruins of the medieval *castello*.
- Fig. 14. The female terracotta antefix from the late 6th century BC (cf. *San Giovenale* V:2, 191, find out of context, cat. no. 26).
- Fig. 15. The terracotta ram's head (cf. *San Giovenale* V:2, 191, find out of context, cat. no. 25, fig. 15, pl. 104).
- Fig. 16a. The Borgo NW excavation area has a difference in level of 7.75 m from the highest to the lowest levels. The upper arrow is pointing at the highest point = 173.01 metres above sea level (masl). The lower arrow is pointing at the lowest point = 165.26 masl. The middle arrow points at the fix measuring point = 171.17 masl.
- Fig. 16b. Close-up view of the fix measuring point for all levels, located at the level of 171.17 masl.
- Fig. 17. Section through the natural topography of the area, by S. Judson.
- Fig. 18. Sketch showing the erosion by the water currents of San Giovenale, by S. Judson.
- Fig. 19. *Tifo rosso* and *peperino*. Photograph by J. Sigurdsson.
- Fig. 20. *Tifo rosso*. Photograph by J. Sigurdsson.
- Fig. 21. The Vesca river valley south of the San Giovenale plateau. Photograph by J. Sigurdsson.
- Fig. 22. Professor and director Axel Boëthius in 1957. Photograph by J. Mark.
- Fig. 23. The Borgo NW excavations 1957.
- Fig. 24. Plan of the Borgo NW excavations 1957. In the centre right the road cut along the Borgo *Spina*. Drawn by C.O. Deurell, B. Blomé and J. Asplund.
- Fig. 25. Carl Nylander, Princess Margareta and the Italian workmen.
- Fig. 26. A sketch of room Ba by King Gustaf VI Adolf in 1962.
- Fig. 27. King Gustaf VI Adolf and *maresciallo* Onofrio at work in room Ba.
- Fig. 28. King Gustaf VI Adolf photographing the Borgo NW with *maresciallo* Onofrio.
- Fig. 29. The photographic tower, *la giraffa*, in 1961. Photograph by B. Blomé.
- Fig. 30. The old *Capannone* 1965–2002. Photograph by B. Blomé.
- Fig. 31. The new *Capannone*, from 2002. Photograph by J. Sigurdsson.
- Fig. 32. Detail from the new *Capannone* in 2002. Photograph by J. Sigurdsson.
- Fig. 33. Sketch plan of the excavation areas of Borgo NW.
- Fig. 34. View towards the south with House C in the centre and House D in the background. Photograph by J. Sigurdsson.
- Fig. 35. Setting beds for terrace wall/fortification Ma, from below and towards the east, excavated in 1965 and 1989. Photograph by B. Blomé.
- Fig. 36. Terrace wall/fortification Ma and palisade canals Q5–Q6, from above and towards the west. Photograph by B. Blomé.
- Fig. 37. Early stratigraphy at area Cb–Cc in 1961. Photographic montage of two pictures by B. Blomé.
- Fig. 38. Stratigraphy in room Ab, wall A7. Photograph by J. Sigurdsson.
- Fig. 39. Stratigraphy at niche Ag. Photograph by J. Sigurdsson.
- Fig. 40a. Stratigraphy at walls C8 (to the left) and B3 (to the right). Photograph by J. Sigurdsson.
- Fig. 40b. Sketch drawing of the level of the floors in different areas.
- Fig. 41. Plan over Borgo NW with rock cuttings and canals Q1–Q27. Plan by A. Bizzarro and G. Tilia.
- Fig. 42. Rock cutting Q1 towards the north-east and wall L1. Photograph by B. Blomé.
- Fig. 43. Rock cutting Q1 towards the south-west and wall B5. Photograph by B. Blomé.
- Fig. 44. View of canals Q7–Q8 and wall Mc, seen from the south.
- Fig. 45. Rock cutting Q13. Photograph by B. Blomé.
- Fig. 46. Cutting marks Q13. Photograph by B. Blomé.
- Fig. 47. The canal Q18 and the oval-rectangular holes Q19 for a light fence from Pre-House Period I and a fissure in the rock, seen from the east.
- Fig. 48. Plan with the oval Hut cuttings Q21, *Cantina* G, canal Q18 and holes Q19 from Pre-House Period I.
- Fig. 49. Oval Hut, cuttings for House F, canal Q18 and Q19 holes for a fence from Pre-House Period I. Photograph by B. Blomé.
- Fig. 50. Plan with *Cantina* G and stone supports Ga, House F and oval Hut Q21.
- Fig. 51. The recess in the bedrock for House F and cuttings for oval Hut Q21.
- Fig. 52. A sketch of *Cantina* G, showing excavation squares 3–4 and 6–7, drawn by King Gustaf VI Adolf in 1962.
- Fig. 53. The excavation of *Cantina* G in 1957. Photograph by B. Blomé.

- Fig. 54. *Cantina* G with stone supports Ga and fence cuttings Q19. Photograph by B. Blomé.
- Fig. 55. Elevation of the shaped rock TRe and its niches (Section G1 = *Pl. 4*). Drawing by G. Tilia.
- Fig. 56. The shaped rock TRe and niche Af. Photograph by J. Sigurdsson.
- Fig. 57. The shaped rock TRe and cistern Ae. Photograph by J. Sigurdsson.
- Fig. 58. The shaped rock TRe and niche Ah. In the background the modern fence above the rock. Photograph by B. Blomé.
- Fig. 59. The shaped rock TRe and niche Ah. Photograph by J. Sigurdsson.
- Fig. 60. Sketch showing in section the principle of the Great Fill Project.
- Fig. 61. Marks of the pick-axe on niche Ah. Photograph by J. Sigurdsson.
- Fig. 62. Plan of Borgo NW showing terrace walls/fortification Ma-Mb-Mc-Md/Me, foundation N1, Drain L, House D and Lane K about 600 BC.
- Fig. 63. Terrace wall/fortification Ma and the palisade canal Q5. Photograph by B. Blomé.
- Fig. 64. The Na-area with terrace wall/fortification Mb-Mc and palisade canals Q7-Q8. Photograph by B. Blomé.
- Fig. 65. Terrace wall/fortification Mc and palisade canal Q8. Photograph by B. Blomé.
- Fig. 66. Plan of Borgo NW showing walls, roads and houses about 600 BC.
- Fig. 67. Passage Nc. Photograph by B. Blomé.
- Fig. 68. Steps in the bedrock at Q15. Photograph by J. Sigurdsson.
- Fig. 69. North-south section through Houses A and B (walls A7, C8) with elevation of foundation N1 and Drain L (Section G2 = *Pl. 5*). Drawing by G. Tilia.
- Fig. 70. Foundation N1 and Drain L consisting of the two substantial walls L1 and L2. Photograph by B. Blomé.
- Fig. 71. Drain L towards the west. Photograph by B. Blomé.
- Fig. 72. Drain L towards the east. Photograph by B. Blomé.
- Fig. 73. The fill levels A-B-C. Photograph by J. Sigurdsson.
- Fig. 74. South elevation of wall L1 (Section T15 = *Pl. 31*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 75. Wall L1 from the south. Photograph by B. Blomé.
- Fig. 76. North face of wall D3. Drawing by B. Blomé.
- Fig. 77. Wall D3 from north-west. Photograph by B. Blomé.
- Fig. 78. Elevation from the south of wall D3 (Section T28 = *Pl. 39*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 79. Wall D3 from south-west. Photograph by J. Sigurdsson.
- 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.
- 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.
- Fig. 85. Room Ab towards the south-east. Photograph by B. Blomé.
- Fig. 86. Yard Ad towards the south with floor levels. Photograph by J. Sigurdsson.
- Fig. 87. Room Aa, work area Ac, yard Ad and alley Ai. North at lower right-hand corner. Photograph by B. Blomé.
- Fig. 88. Work area Ac towards the north. Photograph by B. Blomé.
- 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.
- Fig. 92. Niche Ah towards the east. Photograph by B. Blomé.
- Fig. 93. Niche Ah from the north. Photograph by J. Sigurdsson.
- 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.
- Fig. 96. Northern elevation of walls A18a and A18b (Section T10 = *Pl. 27*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 97. Niche Ah with Drain L towards the east. Photograph by J. Sigurdsson.
- 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.
- Fig. 101. Plan of House B/C with all architectural elements marked from both Periods 1 and 2. Drawing by B. Blomé, A. Bizzarro and G. Tilia. North is towards the upper right-hand corner.
- Fig. 102. North elevation of the north wall of House B/C with wall sections C6-C3-B3-B5 (Section T19 = *Pl. 34*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 103a. West elevation of the middle interior walls of House B/C with wall sections C8-B2 (Section L16 = *Pl. 11*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 103b. East elevation of the middle interior walls of House B/C with wall sections B2-C8 (Section L17 = *Pl. 12*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 104a. North elevation of the south wall of House B/C with wall sections C4-C1-B1-B7 (Section T25 = *Pl. 36*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 104b. South elevation of the south wall of House B/C with wall sections B7-B1-C1 (Section T26 = *Pl. 37*). Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 105. House B, Period 1. Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 106. View from the north-east towards House B/C. Photograph by J. Sigurdsson.
- Fig. 107. View of Drain L and House C from the north-east. Photograph by J. Sigurdsson.
- Fig. 108. Elevation seen from the south of named blocks of walls B1 and C1 (Section T26 = *Pl. 37*).
- Fig. 109. House B, room Ba with stratigraphy. Photograph by J. Sigurdsson.
- Fig. 110. Room Ba with Floor 4 of House B. Photograph by B. Blomé.
- Fig. 111. House B, room Bb, wall B5 with stratigraphy. Photograph by B. Blomé.
- Fig. 112. House C, room Ca with walls B2 and C3. Photograph by B. Blomé.
- Fig. 113. House C, room Ca towards the south-west. Photograph by B. Blomé.
- Fig. 114. House B, yard Be-Bc and walls B3 and C8. Photograph by J. Sigurdsson.
- Fig. 115. Yard Be-Bc. Wall C8 abutting walls B3-C3 with stratigraphy. Photograph by J. Sigurdsson.
- Fig. 116. House B/C seen from the north-east during excavation, 1961. Photograph by B. Blomé.
- Fig. 117. Room Cb. Photograph by B. Blomé.
- Fig. 118. The raised level of Well P1 from the west.
- Fig. 119. Houses B and C, Period 2. Drawing by B. Blomé, A. Bizzarro and G. Tilia.
- Fig. 120. Lane K between Houses B and D seen from below (from the north-west). Photograph by B. Blomé.
- Fig. 121. Plan of the southern area with Houses D-E-F.
- Fig. 122. Photographic tower image of Houses D-E-F.
- Fig. 123. Crack in the rock Na in room Ab from the north.
- Fig. 124. Cracks in the tufa rock (at A) and the wall D3, block II:5 (at B).
- Fig. 125. Crack in the tufa blocks in wall L1 continuing into the bedrock Na, seen from the south.
- Fig. 126. Crack in the rock under House C, wall C6 (under the metal support for the Period 3 post-earthquake water channel P1a).
- Fig. 127. Crack in wall C6, detail of *Fig. 126*.
- Fig. 128. Plan of Periods 3 and 4.
- Fig. 129. Niche Ah3 with new pavement blocks from the north.
- Fig. 130. Niches Ag and Ak from the east.
- Fig. 131. Work area Ac and niches Ag-Af-Ak from the south-east.
- Fig. 132. One-metre thick fill and new walls at House C after the earthquake. (a) tufa rock; (b) floor stratum; (c) fill; (d) late wall C11-K4-K2; (e) modern earth surface; Well P1. Photograph by B. Blomé.
- Fig. 133. Fallen blocks above work area Ac and niches Ag-Ak. House A in background, from the east.
- Fig. 134. Skeleton on bedrock level in niche Ah from the west.
- Fig. 135. Cellars O1 and O2. Note the staircases cut in the sides.
- Fig. 136. Drawing showing spots where samples described in the text were taken.
1. Sample 0A, soil; 2. Sample 0, block; 3. Sample 3 joint; 4. Sample 5 joint; 5. Sample 10B joint; 6. Sample 11 "plaster"; 7. Sample 14 "plaster"; 8. Sample CN1 floor; 9. Sample CN3 floor; 10. Sample CN16 floor; 11. Sample CN17 floor; 12. Sample CN19 floor; 13. Sample 22 hearth; 14. Sample 21A hearth (slag).
- Fig. 137. Area Bc between walls C8 and B3, with saved untouched soil in the baulk. Photograph by M. Klingspor Rotstein.
- Fig. 138. Filling between the blocks. The filling differs visibly from the surrounding tufa blocks. Photograph by M. Klingspor Rotstein.

Fig. 139. Area Bc between walls C8 and B3, freshly excavated and swept. The ground appears to consist of light, levelled clay. Photograph by M. Klingspor Rotstein.

Fig. 140. Yard Ad, wall A1. Some of the samples were taken from the untouched filling material of the saved soil of the baulk, using tubes. Left of this sample is the spot where a tufa sample 0, block was taken. Photograph by M. Klingspor Rotstein.

Fig. 141. It was quite difficult to extract a big enough piece suitable for analysis, from the frail material in the joints. Photograph by B. Blomé.

Fig. 142. Room Ba, wall B3. Sample 3 from joint consisted of quite solid larger pieces. Photograph by M. Klingspor Rotstein.

Fig. 143. Area Cc, wall C3. Sample 5, from joint. Photograph by M. Klingspor Rotstein.

Fig. 144. House B, saved soil B1. Sample 10B was taken from the joint behind the saved untouched soil of the baulk. Photograph by M. Klingspor Rotstein.

Fig. 145. House B, wall B1, saved soil from the baulk. Samples floor CN1 and CN3 are described in the text. Sample 0A (zero A) soil was also taken from this piece of soil as comparison. Sample 10B was likewise taken from this place. Photograph by M. Klingspor Rotstein.

Fig. 146. House C, wall C1. Sample 14, "plaster". Similar white hard layers were found on a number of places on the blocks. Photograph by M. Klingspor Rotstein.

Fig. 147. Area Bc, saved soil in a baulk by Drain L. Samples CN16 and CN17 are described in the text. Photograph by M. Klingspor Rotstein.

Fig. 148. Area Bc, outside House B, by wall B3 where sample CN19 floor was taken. Photograph by M. Klingspor Rotstein.

Fig. 149a. Work area Ac, an area burnt red. Sample 22 was taken here. Sample 21A comes from the side of the hearth from what was presumed to be slag. Photograph by M. Klingspor Rotstein.

Fig. 149b. Sample 21A. Photograph by M. Klingspor Rotstein.

Fig. 150. Thickness of pan-tiles (a), cover-tiles (b) and ridge-tiles (c). The entire range of thickness of every fragment is indicated (for instance, a tile with a thickness between 1.3–2 cm is represented by eight adjacent crosses).

Fig. 151. The registered colours of clay, core, slip and paint, distributed among the three basic roof-tile categories.

Fig. 152. The registered colours of clay and paint, distributed among the building periods in the Borgo NW. The ten colours presented in Fig. 151 have here been combined to only five.

Fig. 153. Drawing by B. Blomé of walls L3-L1.

Fig. 154. Section G2 showing stratigraphy (cf. Pl. 5).

Fig. 155. A scan of a part of Blomé's original plan.

Fig. 156. Digital elaborations in CAD of the plan in Fig. 155.

Fig. 157. Further digital elaborations with colouring of certain walls.

Fig. 158. Digital elaborations with indications of sections.

Fig. 159. Example of a section showing stratigraphy.

Fig. 160. Section L13 with stratigraphy inside room Ba (cf. Pl. 10).

## PLATES

Plate 1. Archaeological masonry plan of the area without letters.

Plate 2. Photographic montage of Borgo NW of images from the photographic tower, *la giraffa*, by B. Blomé (1961–1963).

Plate 3. Reconstruction of Borgo NW at Periods 1 and 2. The area is seen from the Borgo *Spina* rock in the south-east. Illustration: ARCD0C, R. Holmgren.

Plate 4. Section G1. View towards the rock outcropping from the west.

Plate 5. Section G2. View from the north-west of walls A4-A7-L2-L1-C8-B3-B5-B4-B1-B7.

Plate 6. Section L1. View from the west of rock Na, wall Mc.

Plate 7. Section L9. View from the west of rock Na, room Ab, through walls A7-L2-L1-B5, elevation of wall B4, through wall B7 + Section L21. View from the west through walls A3-A1 and room Aa (in one drawing).

Plate 8. Section L11. View from the west through canal Q6, room Ab, elevation of wall A4, through wall A7, yard Ad, through walls L2-L1, canal Q1, walls B3-B9-B1.

Plate 9. Section L12. View from the west through wall D3, elevation of wall D7, through wall D6, elevation of wall D5, through walls D1-E3-E5, elevations of walls E2a and E2b.

Plate 10. Section L13. View from the east through wall B1, room Ba, elevation of wall B9, through wall B3.

Plate 11. Section L16. View from the west of elevation of wall C8, through wall B3, elevation of wall B2, through wall B1.

Plate 12. Section L17. View from the east through wall C1, elevation of B2, through wall C3, elevation of wall C8, through wall C 9.

Plate 13. Section L22. View from the west through canal Q5, wall A15, elevation of wall A16, through wall A3, elevation of wall A2, through wall A1.

Plate 14. Section L23. View from the east through wall L3, yard Ad, elevation of wall A2, through wall A10, elevation of wall A16, through wall A15, canal Q5.

Plate 15. Section L25. View from the east through wall C4 and elevation of wall C2.

Plate 16. Section L29. View from the west through wall C6, Well P1, elevation of wall C7.

Plate 17. Section L31. View from the east through walls I1-I5-I3, elevation R1.

Plate 18. Section L32. View from the west through canal Q27, wall A15, niches Ak-Ag, wall A11, yard Ac, wall A18, niche Ah, wall A17, canal Q2.

Plate 19. Section L38. View from the west towards rock De, through Q22, House F.

Plate 20. Section T2. View from the north of wall A15 and canal Q6.

Plate 21. Section T4. View from the north through niche Ag, canal Q4, niche Af, and elevations of walls A10-A3.

Plate 22. Section T5. View from the south of walls A3-A10 and through wall A2.

Plate 23. Section T6. View from the north of walls A13-A11-A12.

Plate 24. Section T7. View from the south of through Q7, rock Na, rooms Ab-Aa, through walls A4-A2, work area Ac and elevations of walls A12-A11-A13.

Plate 25. Section T8. View from the north through walls A2-A4, elevations of walls A1-A7.

Plate 26. Section T9. View from the south of walls A7-A1, work area Ac, Q3, cistern Ae, ledge A9.

Plate 27. Section T10. View from the north of wall A18.

Plate 28. Section T12. View from the north through niche Ah, yard Ad, elevations of walls A17-L2-L3-N1.

Plate 29. Section T13. View from the south of walls L2-L3-A17.

Plate 30. Section T14. View from the north of walls L3-L1-N1.

Plate 31. Section T15. View from the south of canal Q8, walls N1-L1-L3-A17, cutting Q23.

Plate 32. Section T16. View from the north of walls C10-C9, through C8.

Plate 33. Section T18. View from the north through rock TRe, through wall R1.

Plate 34. Section T19. View from the north of walls I3-C6-C3-B3-B5-Nb-Mc.

Plate 35. Section T24. View from the south through walls C7-C5-I4, elevation of wall I5, through wall I2.

Plate 36. Section T25. View from the north of walls I1-C4-C1-B1-B7-Mc.

Plate 37. Section T26. View from the south of walls Mc-B7-B1-C1-C4.

Plate 38a. Section T27a. View from the north of canal Q14 and walls K3-K2, D3.

Plate 38b. Section T27b. The same with reconstruction.

Plate 39. Section T28. View from the south of wall D3 and through the upper part of Well P2.

Plate 40. Section T31. View from the north of wall D1, through canals Q11-Q9.

Plate 41. Section T32. View from the south of wall D1.

Plate 42. Section T33. View from the north of wall E3, rocks Nc-TRw and canal Q9.

Plate 43. Section T36. View from the south of canal Q10, wall D8.

## FOLD-OUT PLAN 1

Plan of the Borgo NW with all architectural elements, such as walls, rooms and rock-cuts, marked.

## FOLD-OUT PLAN 2

Plan of the Borgo NW with all architectural elements, such as walls, rooms and rock-cuts marked, as well as indications of where sections and elevations have been taken.

