The Roman public baths of Central Italy during the Imperial period:

an architectural study

Volume II: Figures

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The geological maps were generated via QGIS v. 3.10 using data from the Lithologic map 1:100.000 produced by the Servizio Geologico d'Italia (licenced under CC 3.0 Italy) <http://sgi2.isprambiente.it/mapviewer/> [last accessed 03/02/2020].

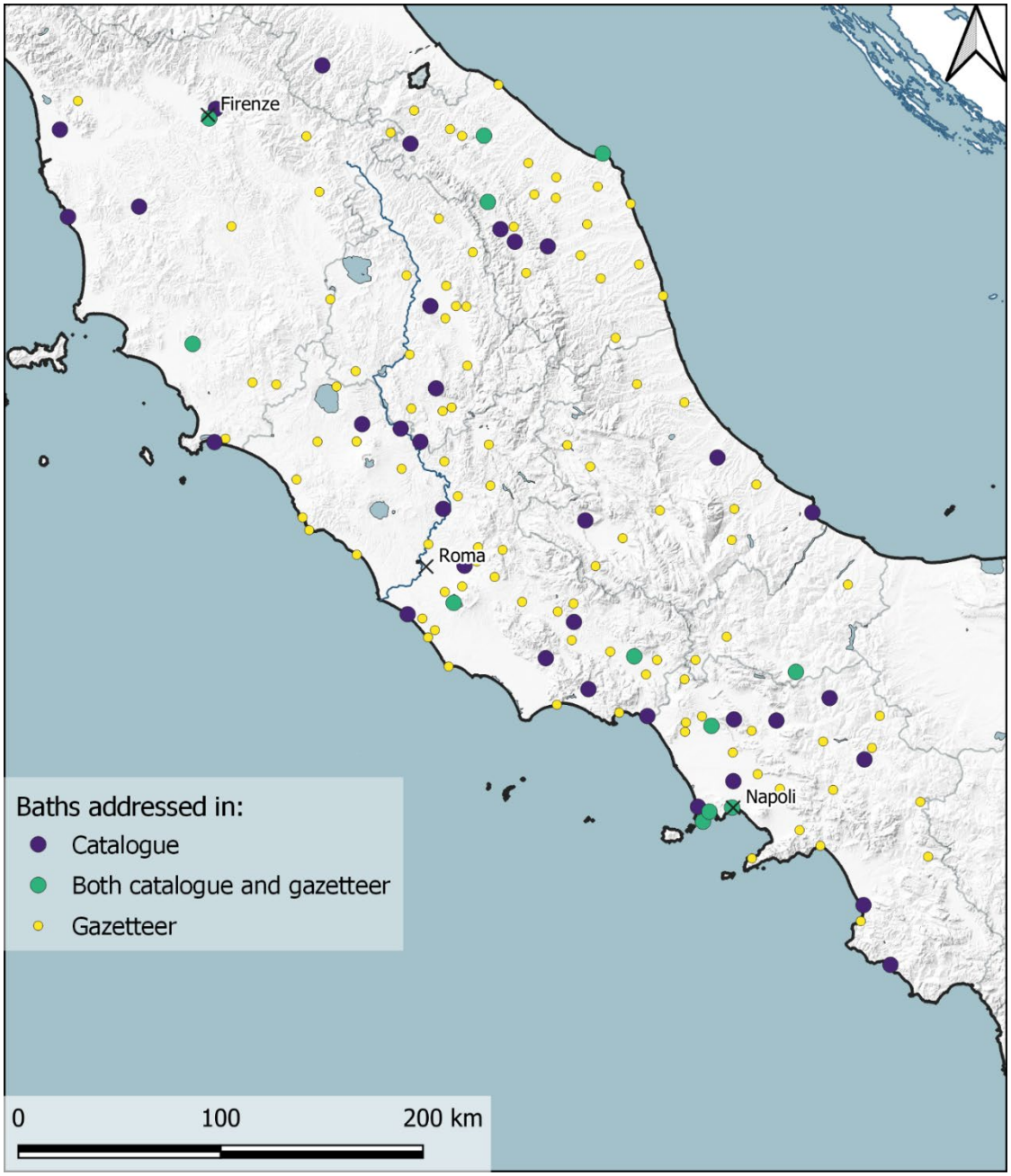


Figure 1: Distribution of all the baths listed in the catalogue and gazetteer.

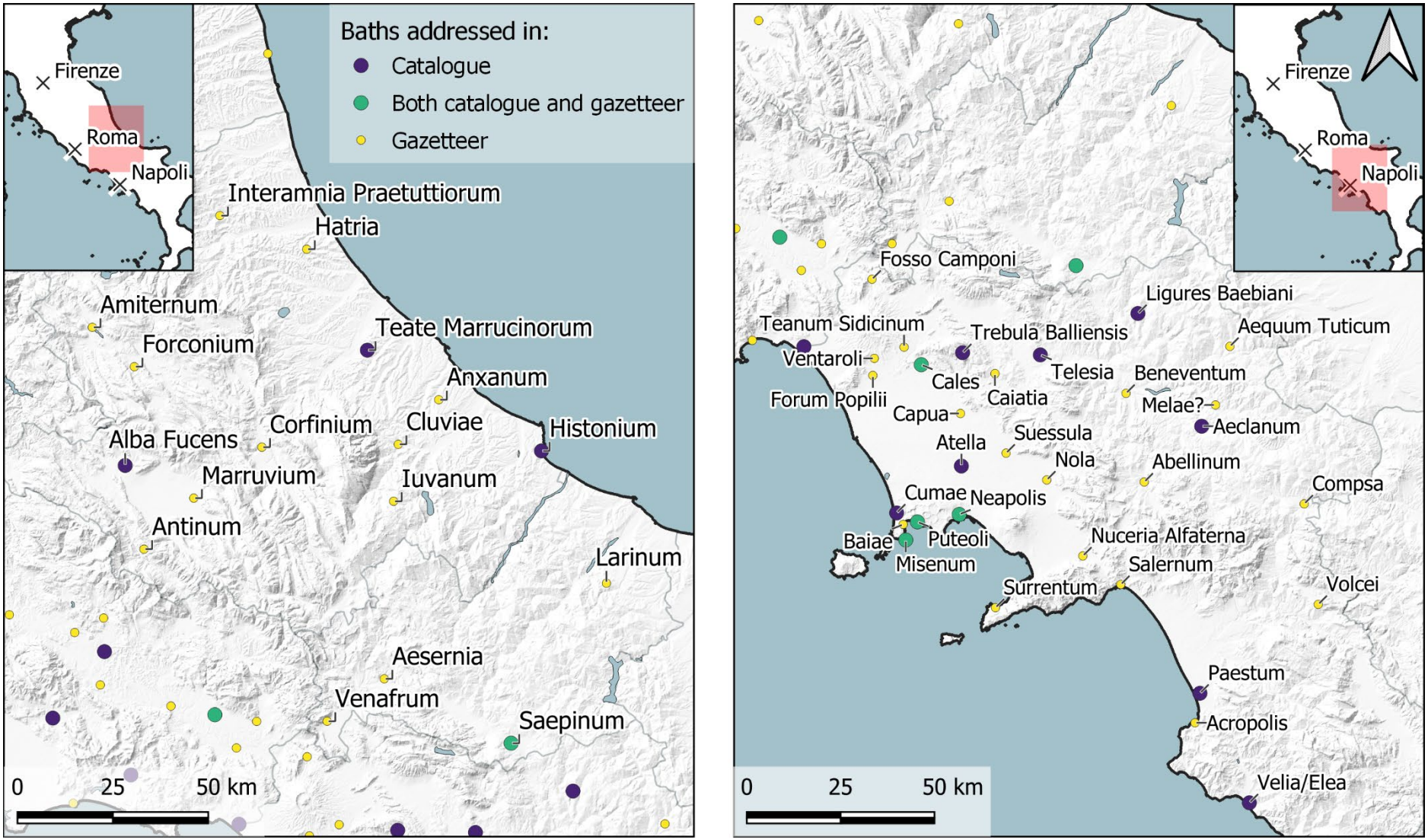


Figure 2: Distribution of the baths in Abruzzo, Molise (**L**) and Campania (**R**).

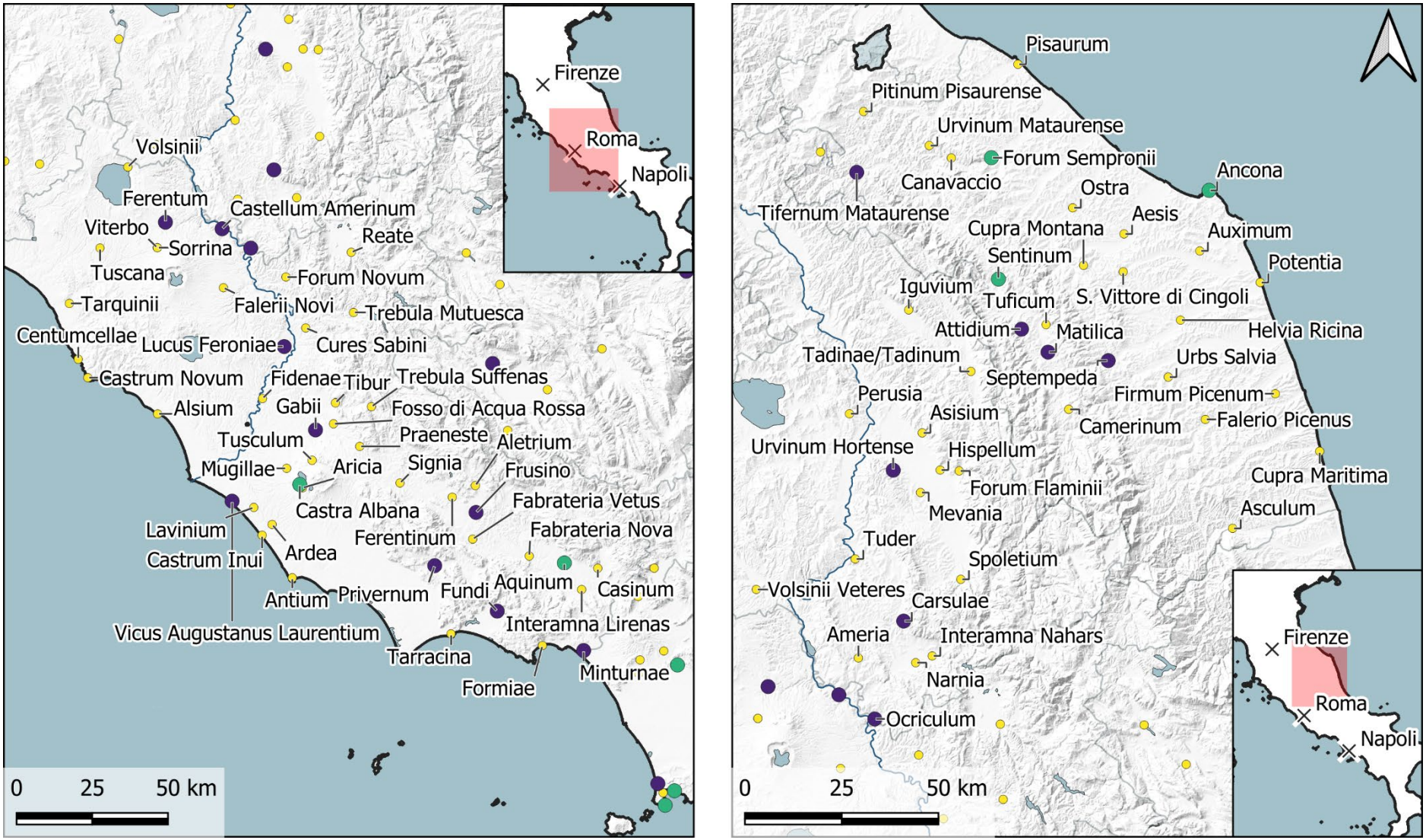


Figure 3: Distribution of the baths in Lazio (**L**), Umbria and Marche (**R**).

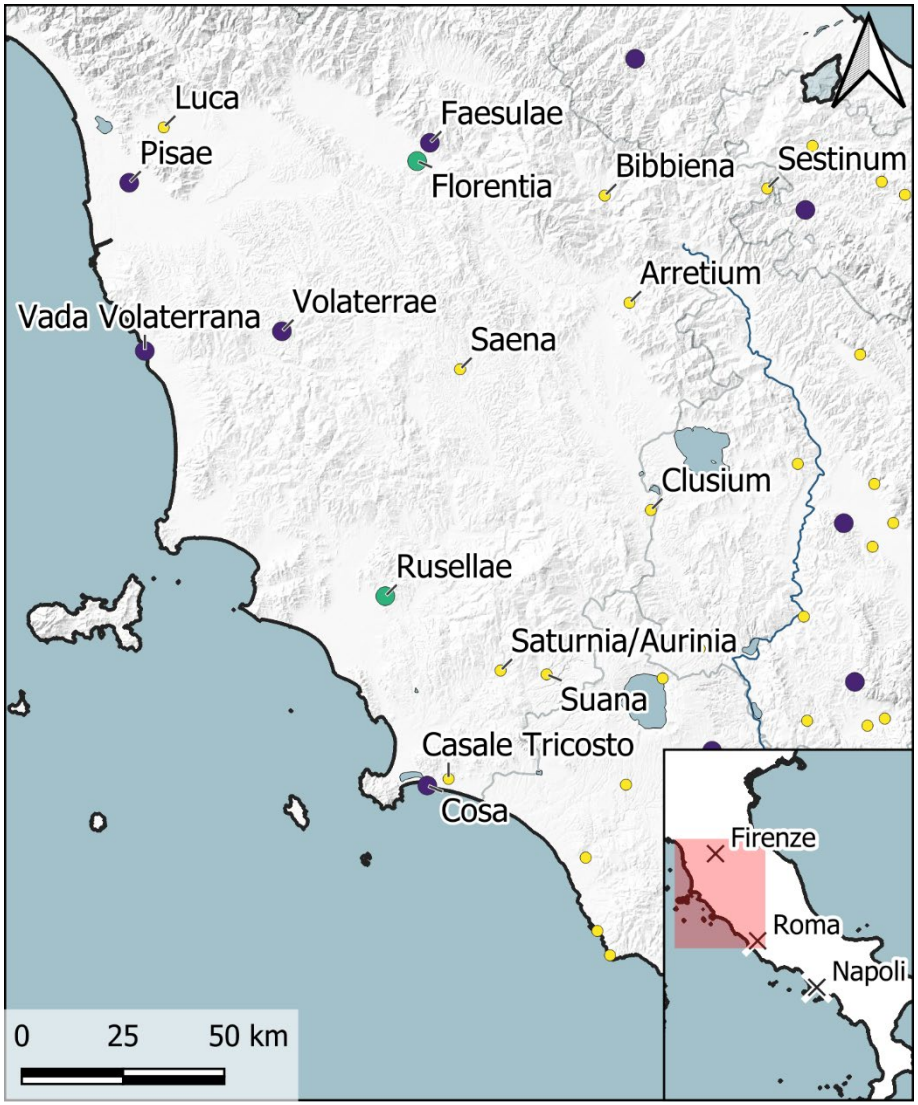


Figure 4: Distribution of the baths in Tuscany.



Figure 5: Map of Italy. The thesis is concerned with *regiones* I, IV, V, VI, VII (YUKIOSANJO 2013, licenced under CC BY-SA 3.0).

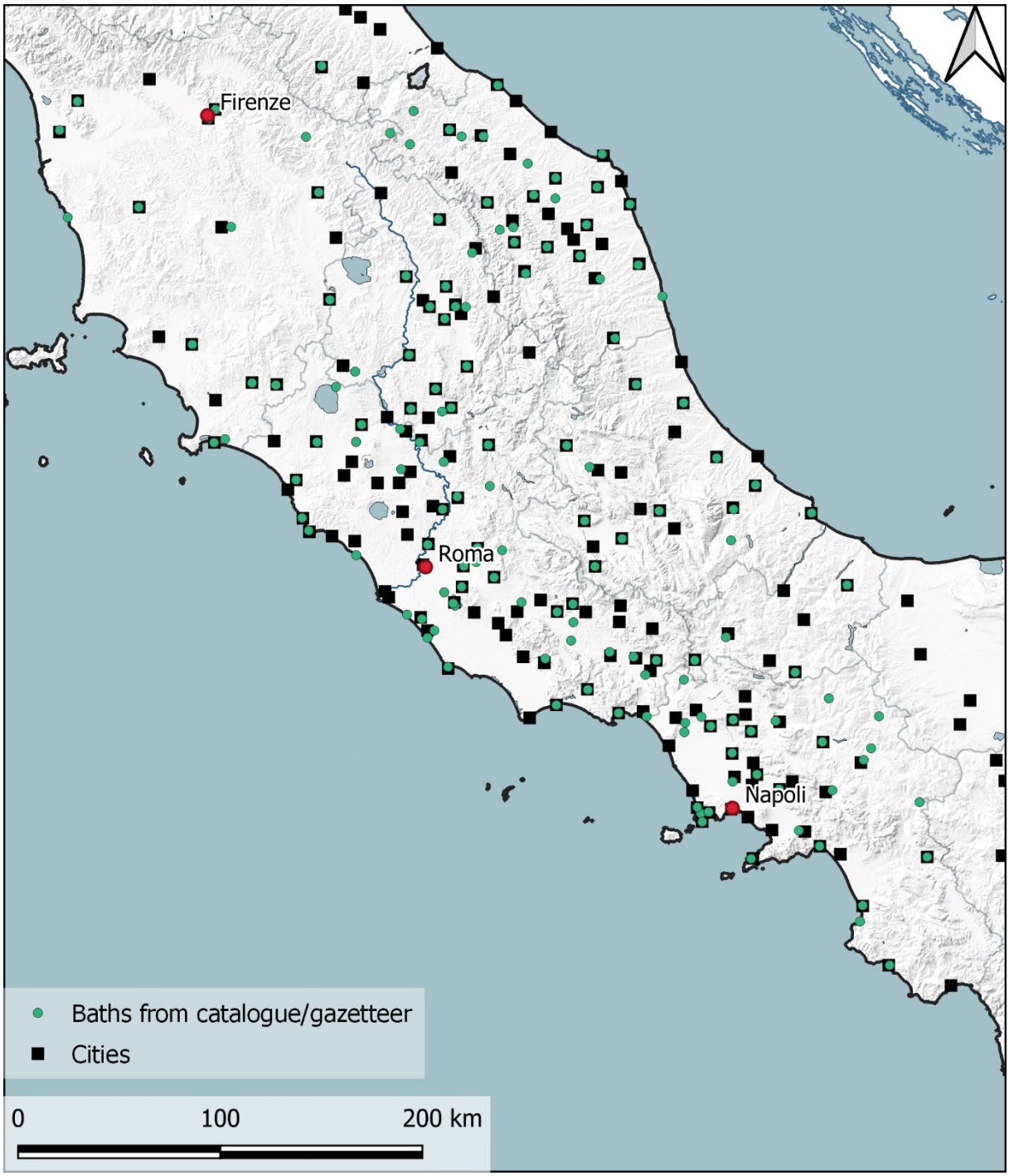


Figure 6: Distribution of known public urban bath buildings in Central Italy, compared with the distribution of settlements (data from HANSON 2016a; 2016b).

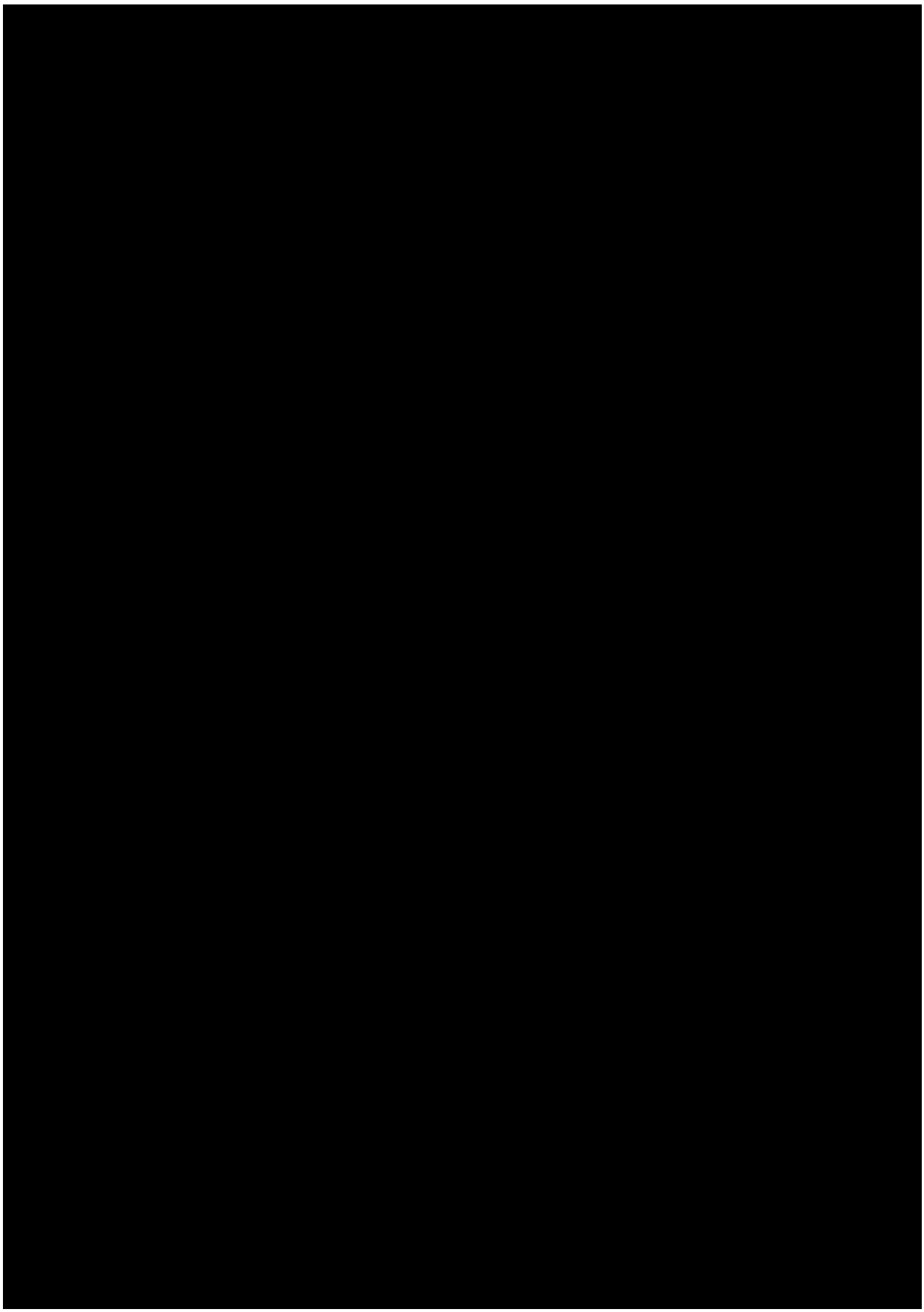


Figure 7: Krencker's typology of bath buildings (Krencker et al. 1929, fig. 234–240; Bouet 2003, pl. 149).

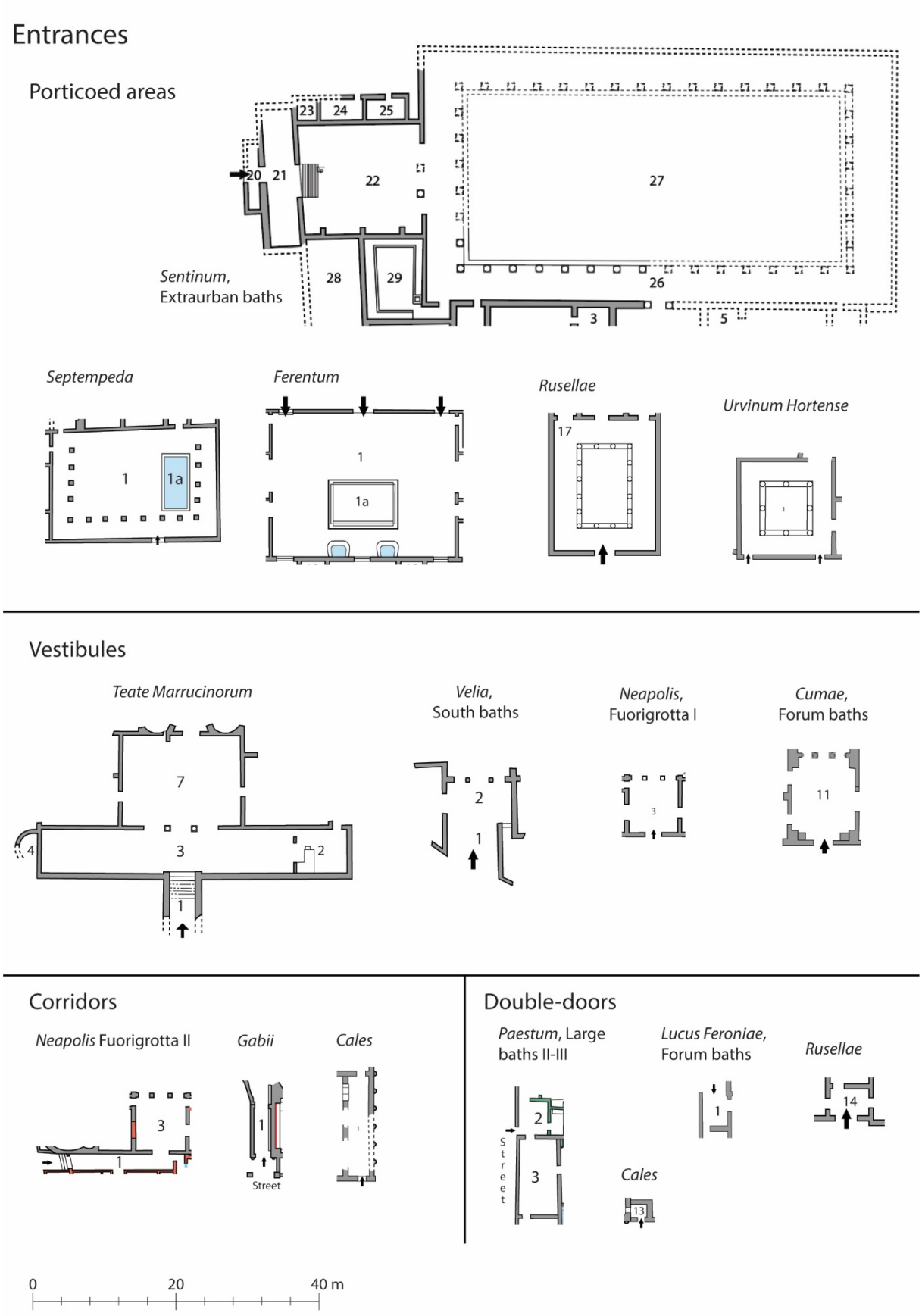


Figure 8: Selection of plans of entrances from the public baths of Central Italy.



Figure 9: Niches in the wall of the *apodyterium* R4 of the Central baths at *Cales* [Ca.01].



Figure 10: *Apodyterium* R3 of the baths of *Attidium* [Ma.03], with niches in the benches.



Figure 11: Selection of plans of *apodyteria* from the public baths of Central Italy.

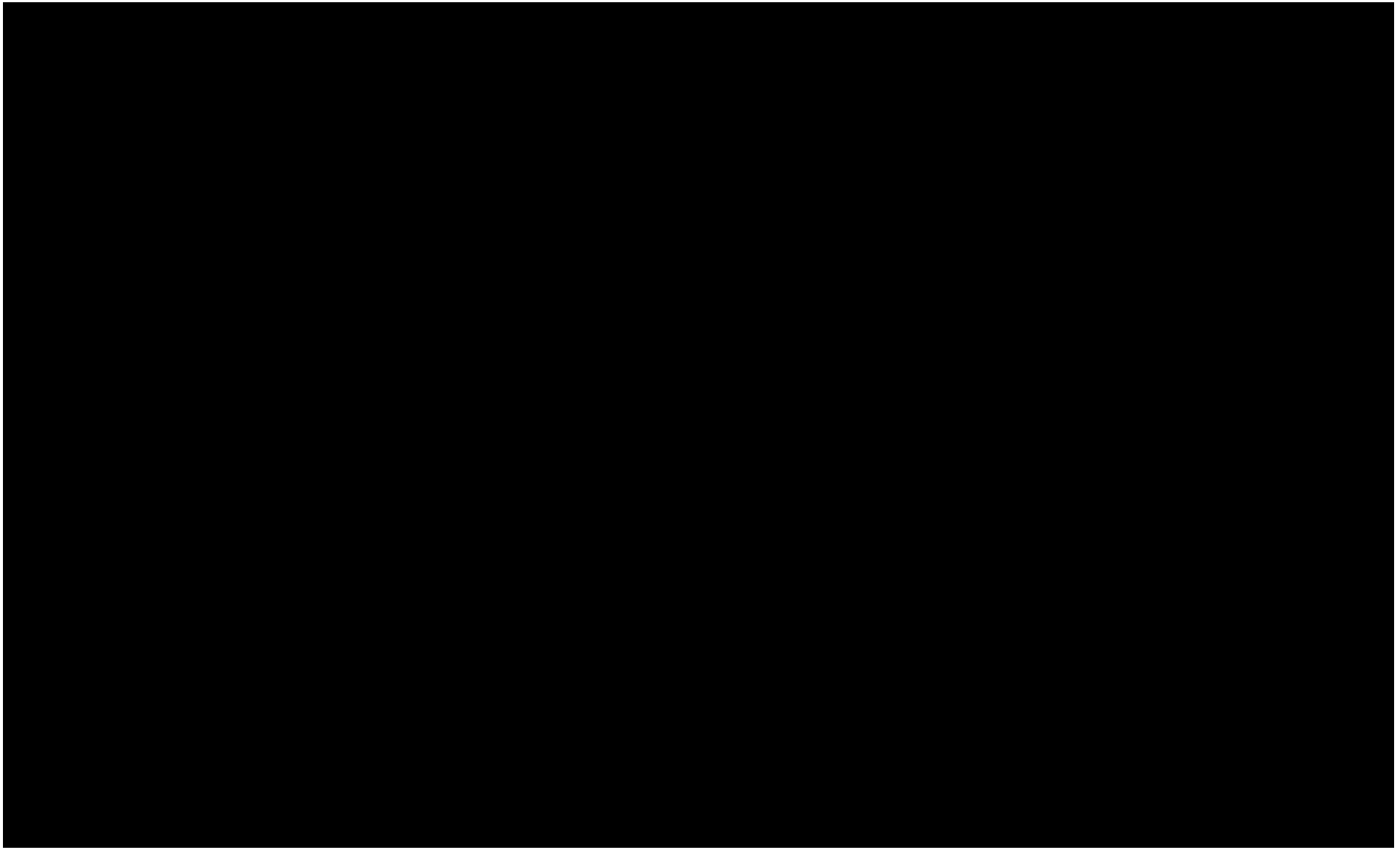


Figure 12: Typology of *caldaria* in *Gallia Narbonnensis,* according to Bouet (BOUET 2003, pl. 32–33).

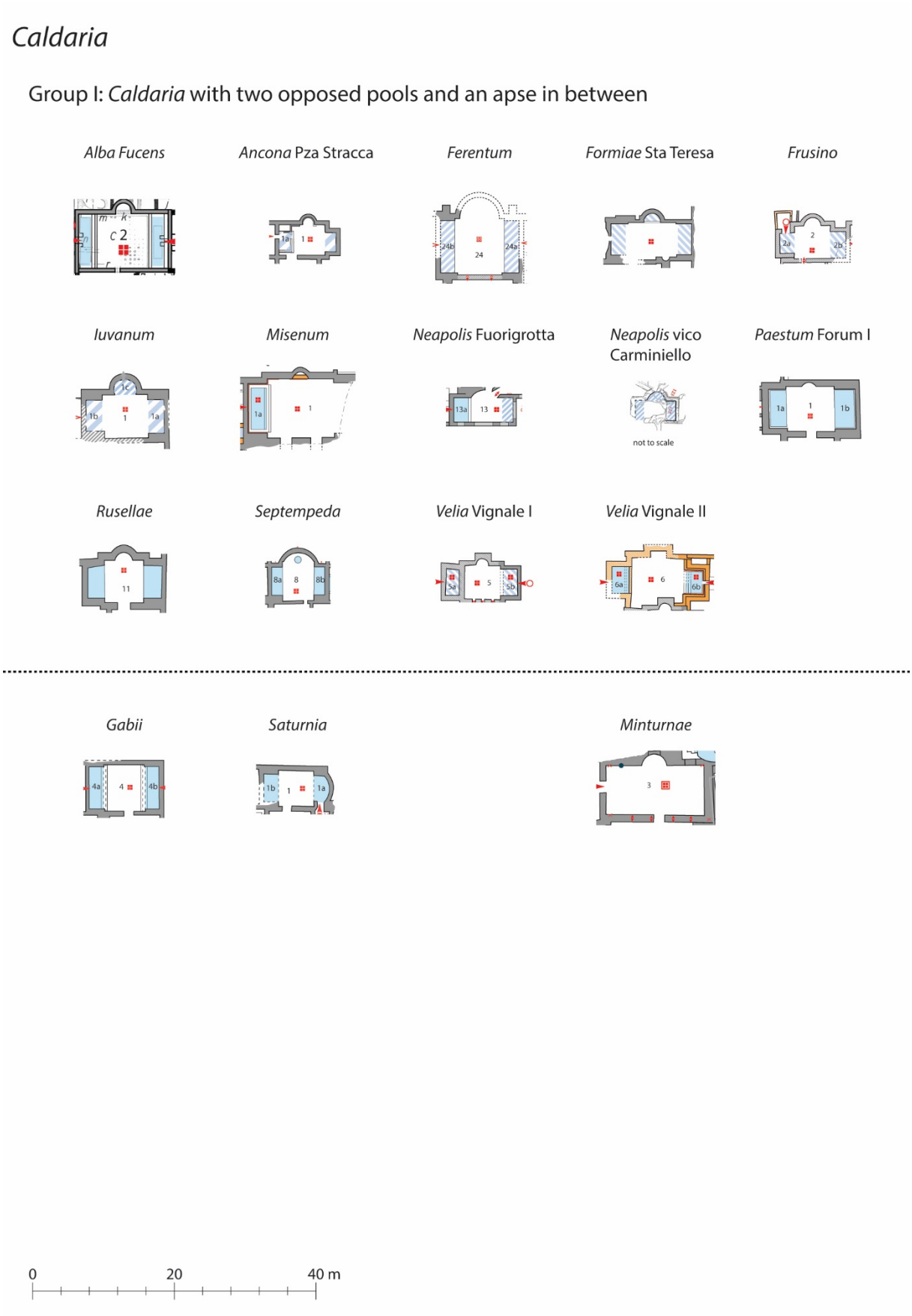


Figure 13: Selection of plans of *caldaria* from the public baths of Central Italy.

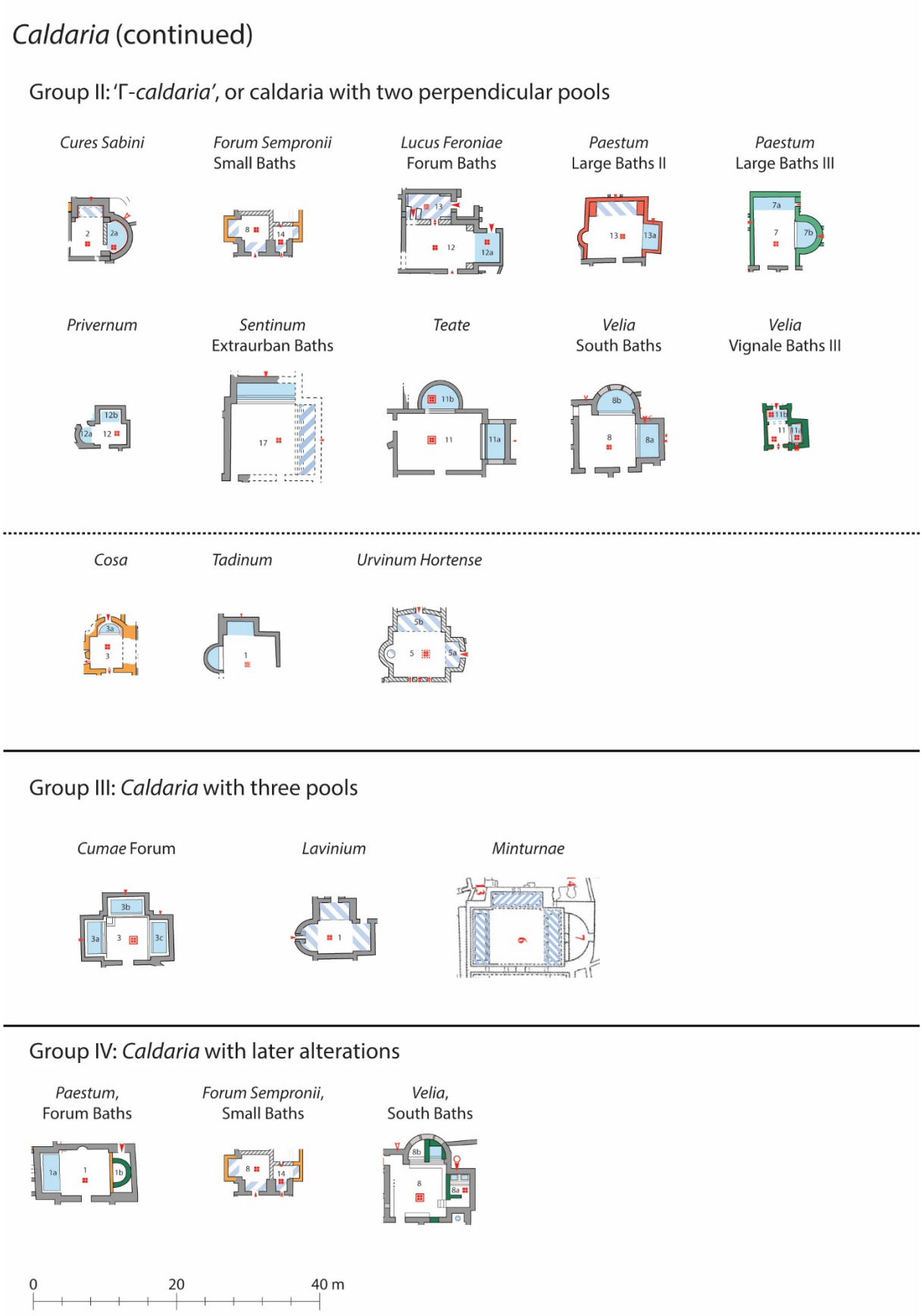


Figure 14: Selection of plans of *caldaria* from the public baths of Central Italy (continued).

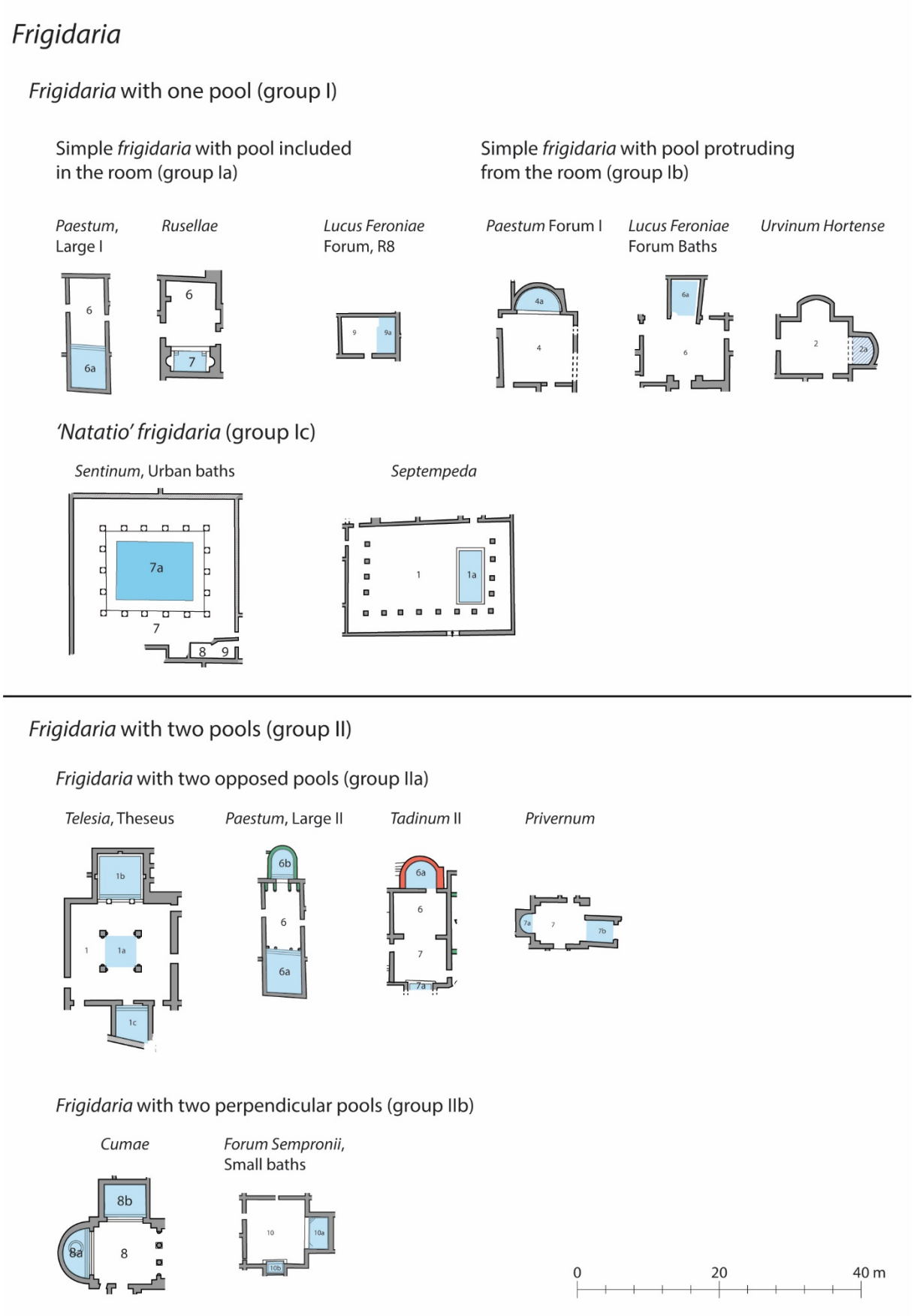


Figure 15: Selection of plans of *frigidaria* from the public baths of Central Italy.

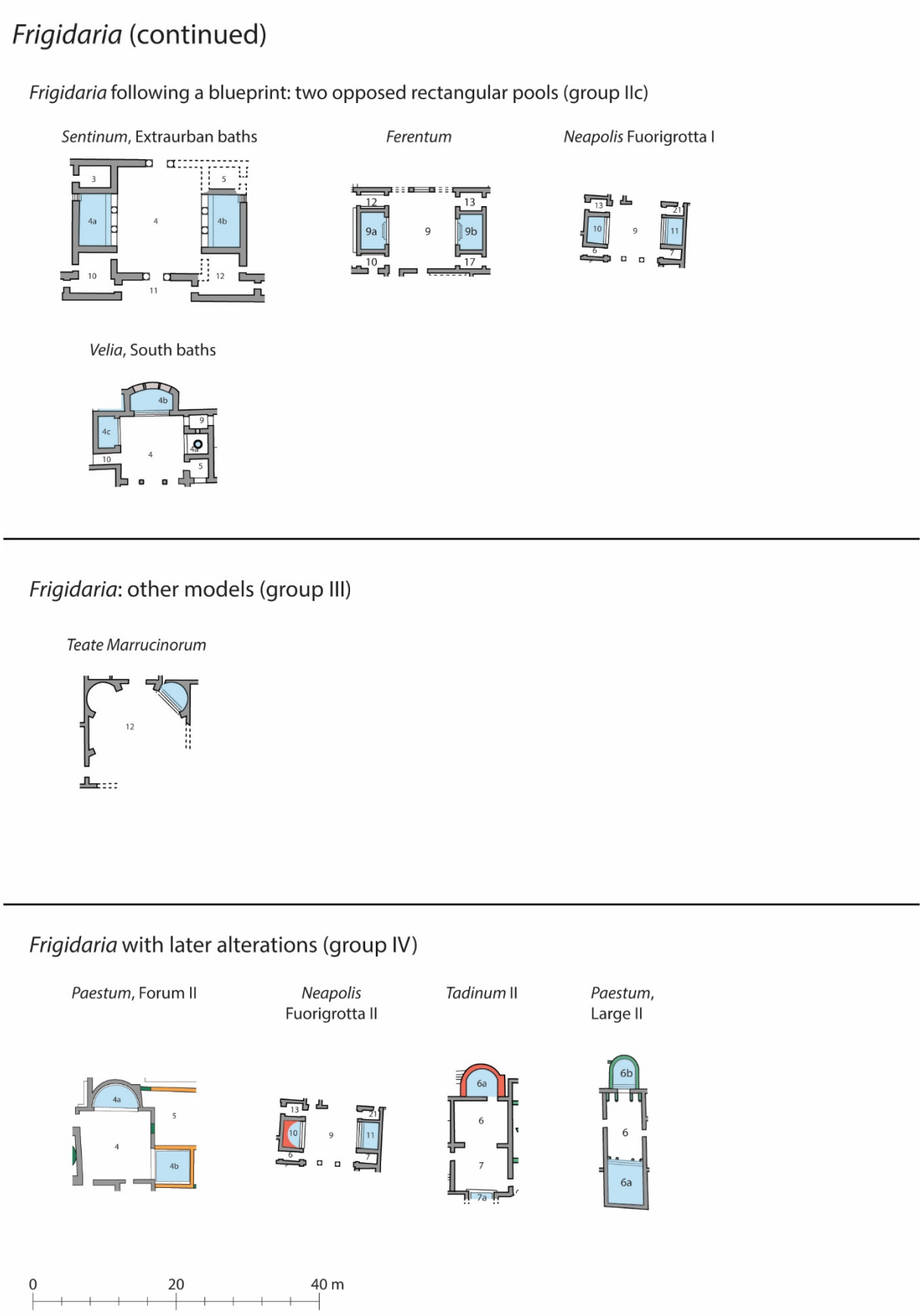


Figure 16: Selection of plans of *frigidaria* from the public baths of Central Italy (continued).



Figure 17: **L**: Plan of the Hadrianic Baths north of the Olympieion in Athens; **R**: axonometric view of the Small baths of *Bulla Regia*. Scale 1:400 (L: Alcock 1993, fig. 44; R: Yegül 1992, fig. 291).

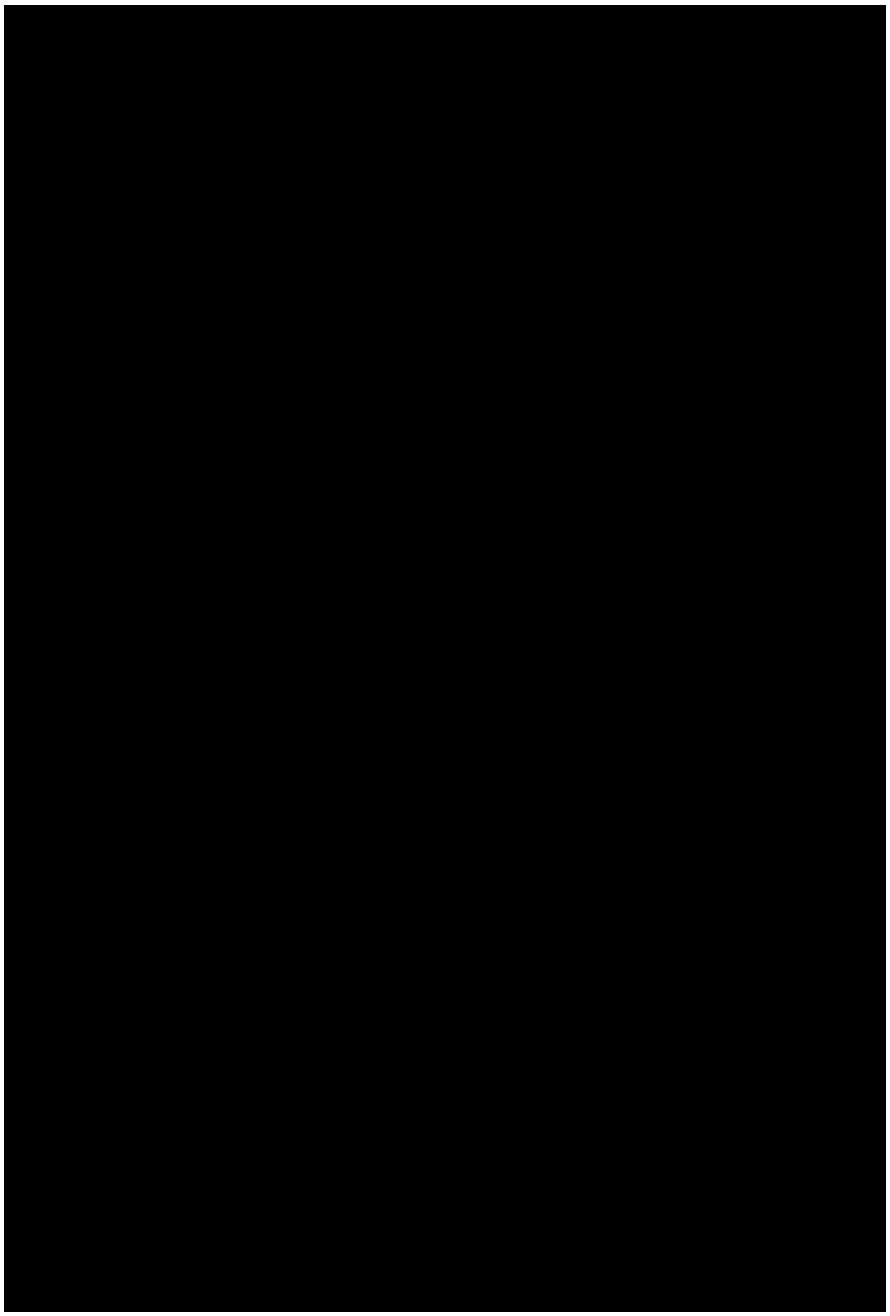


Figure 18: Drawing and picture of the mosaic floor of rooms R1–R2 in the Amphitheatre Baths of *Larinum* [Mo.01] (CILIBERTO & DI NIRO 2015, fig. 1, 4).

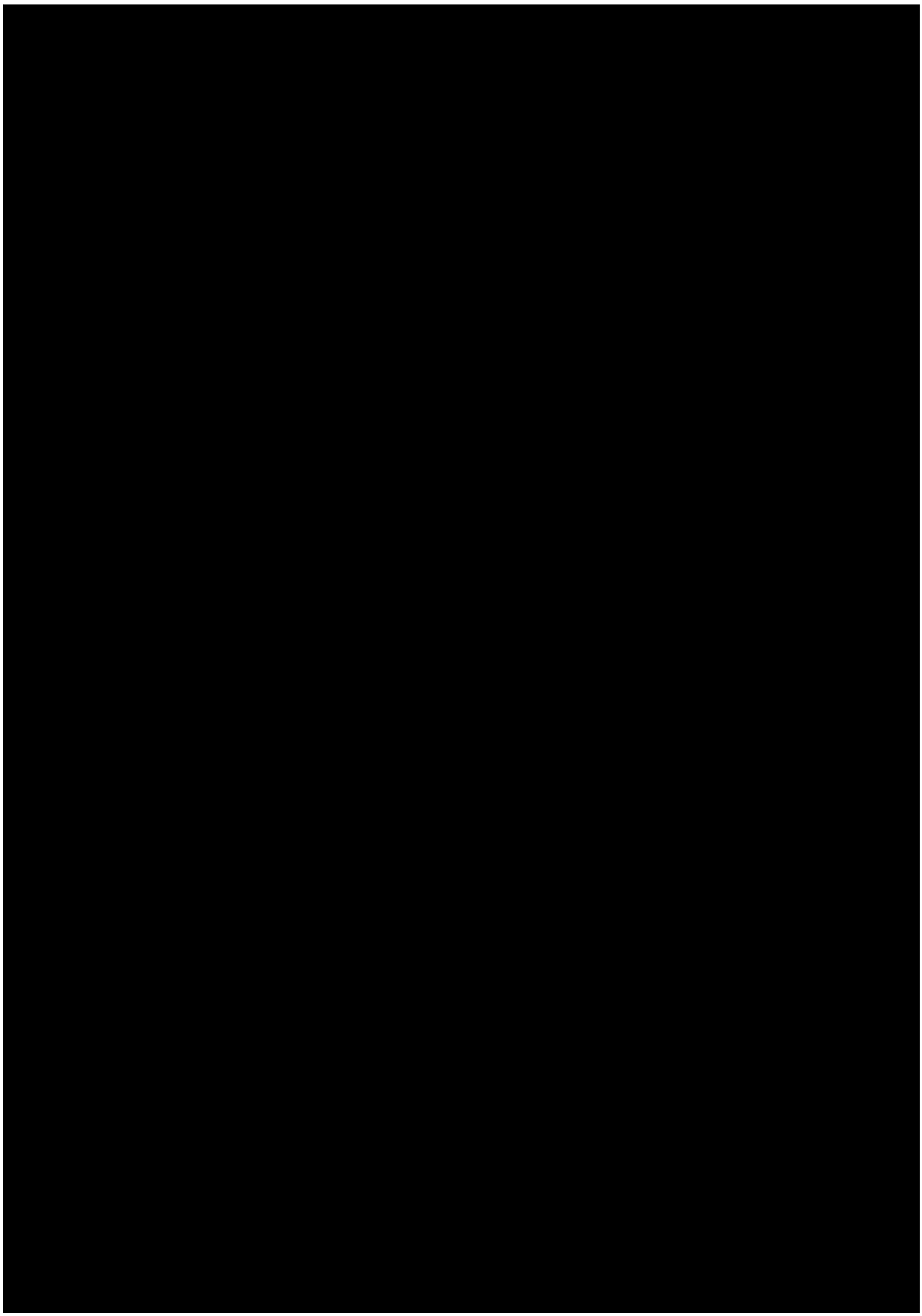


Figure 19: Mosaic floors of the vestibule R3 (T) and *frigidarium* R6 (B) of the baths of *Neapolis* Fuorigrotta [Ca.04] (T: MARTINA D 2019; B: GIGLIO & SORICELLI 2019, fig. 15).

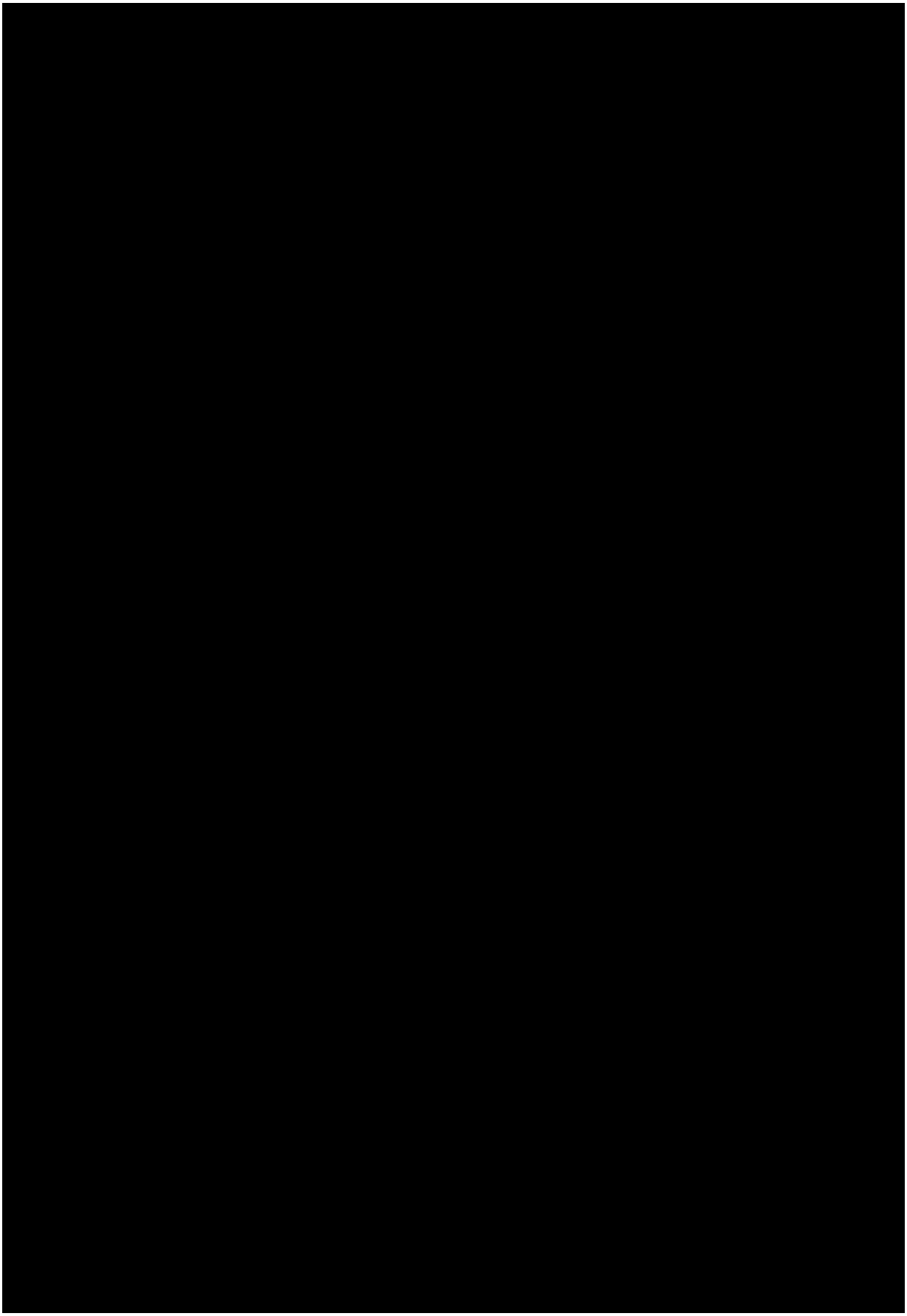


Figure 20: Etching of the mosaic of the octagonal room R1 of the baths of *Ocriculum* [Um.01] made by Panini in 1779 (PANINI 1779).

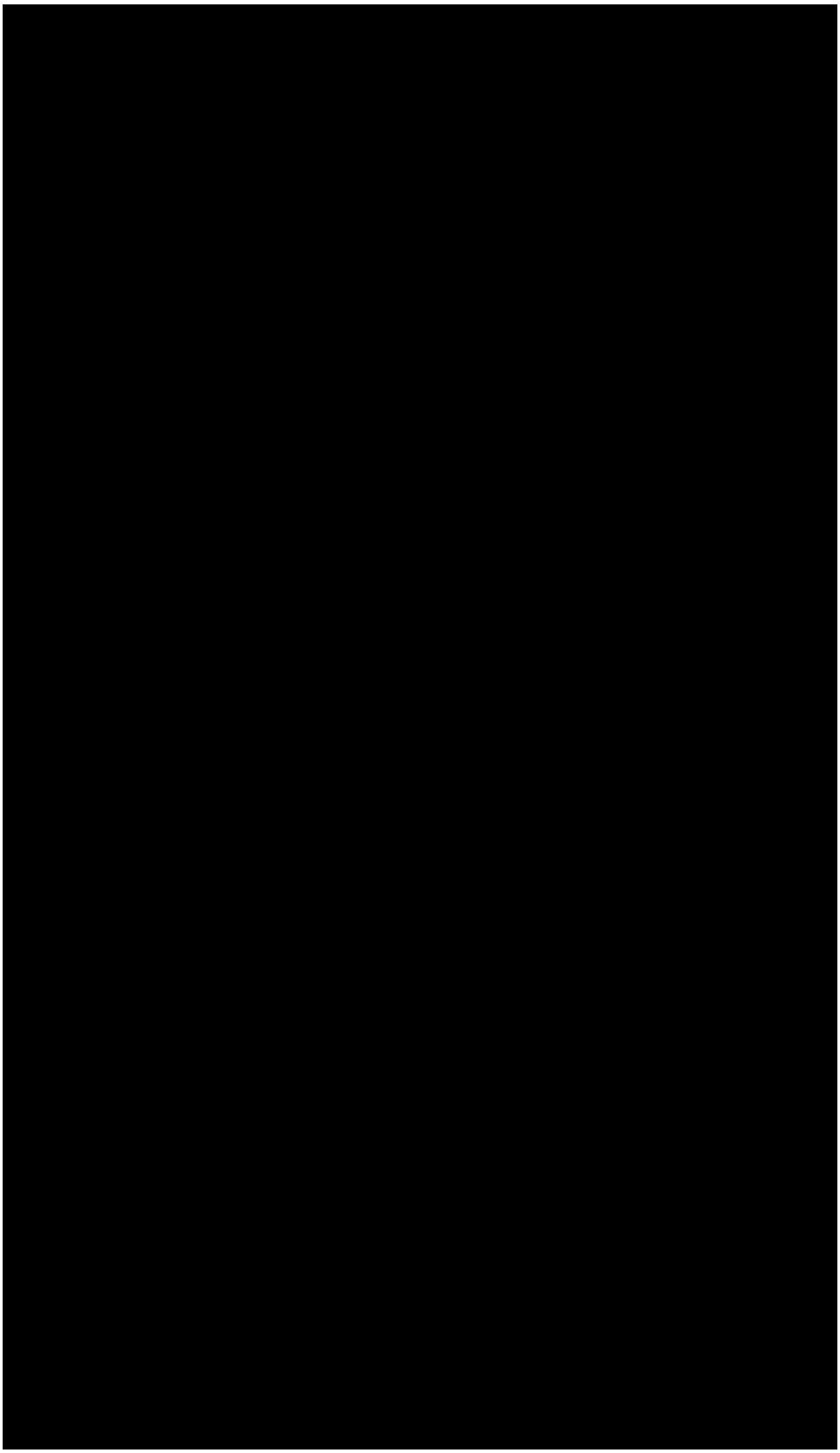


Figure 21: Polychrome mosaic depicting a bath building, found in 1872 in Via Marsala, Rome (SALVETTI & BEVILACQUA 2013, fig. 55).



Figure 22: Plan of the baths at Tor Paterno; the *caldarium* is highlighted. Scale 1:400 (LAURO 1998, fig. 31, modified by author).

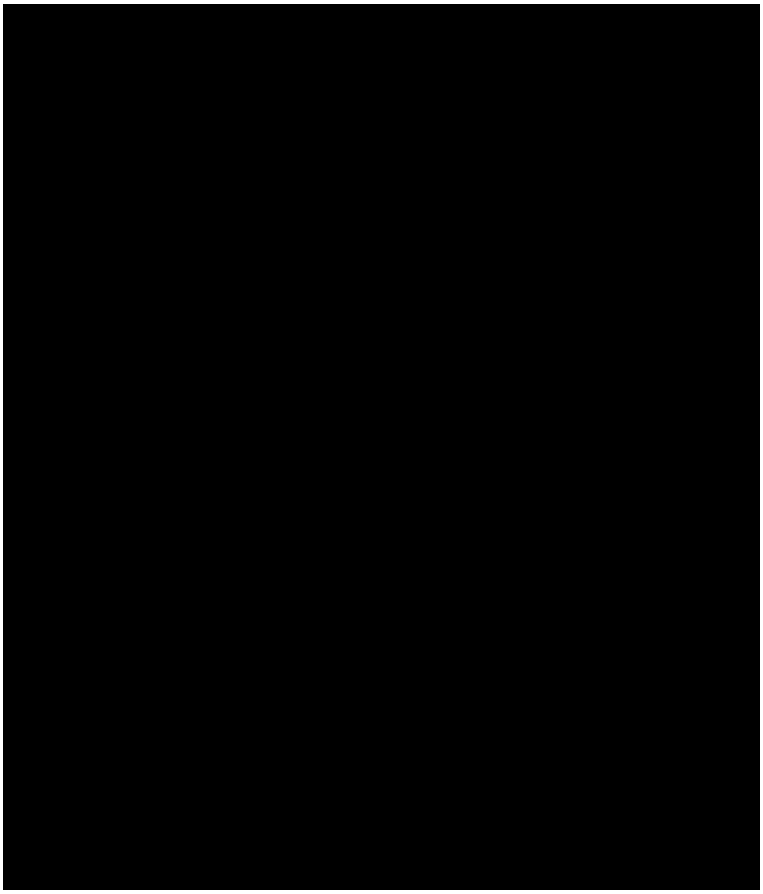


Figure 23: Topographic map of Italy (GABA 2009 (online resource), licenced under CC BY-SA 3.0, modified by author).



Figure 24: Map of the volcanic systems of Italy (LANCASTER 2015, fig. 11, modified by author).

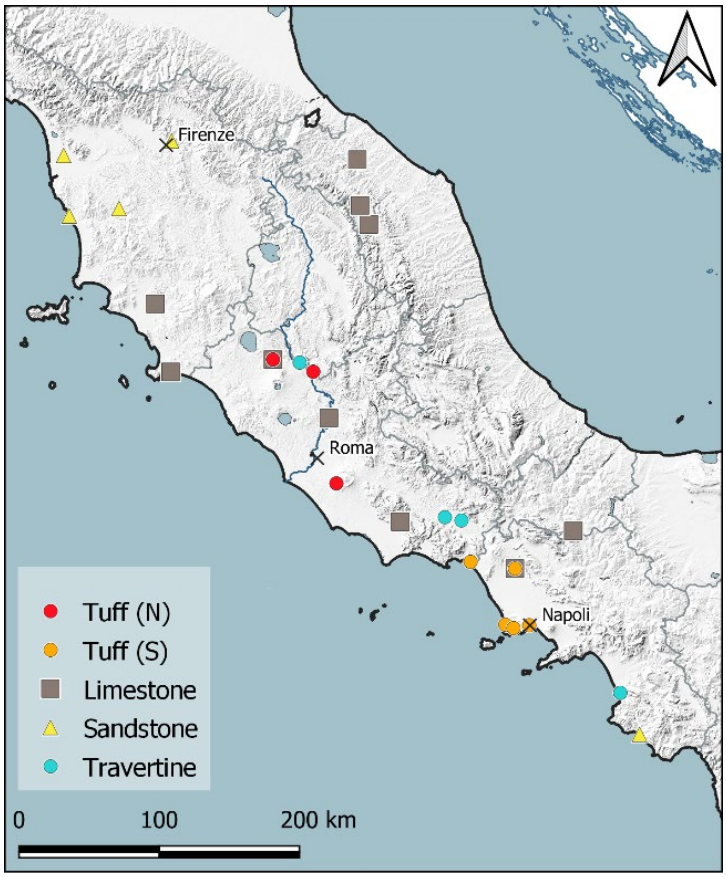


Figure 25: Distribution map of the types of stone used for the facing of the bath buildings of Central Italy.

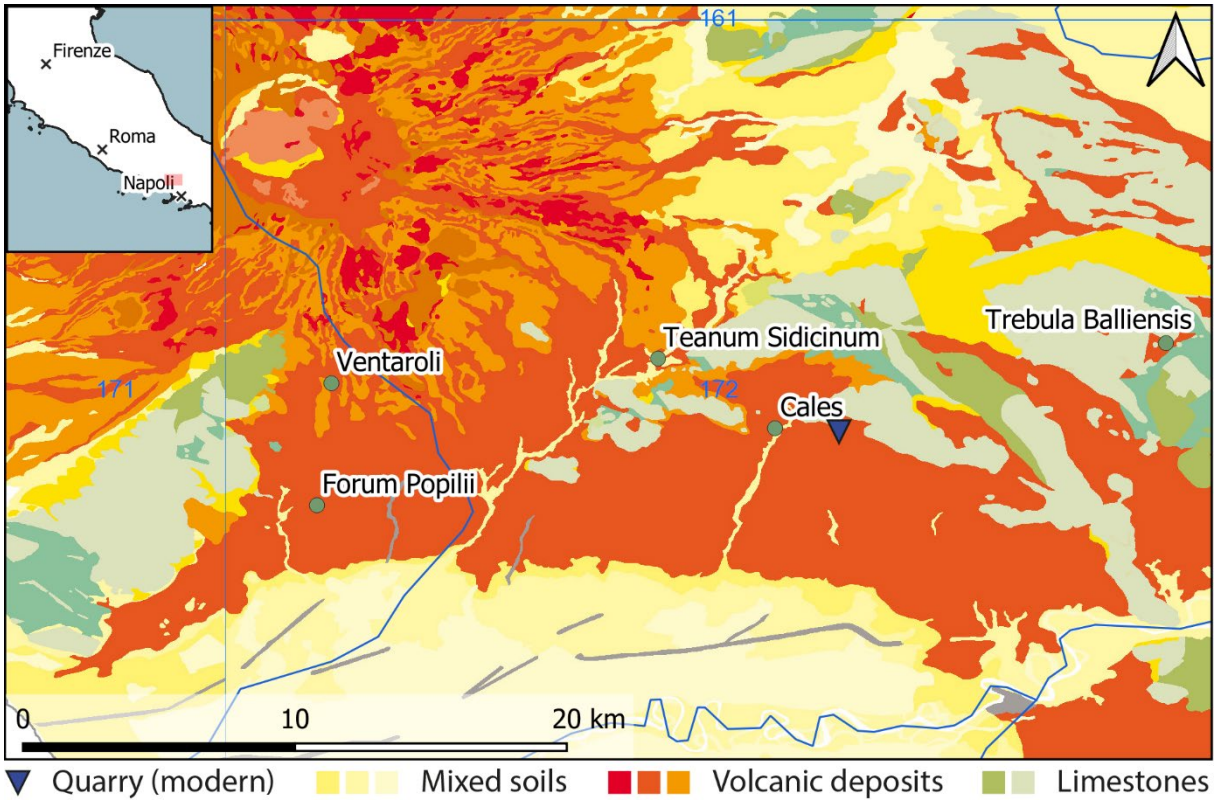


Figure 26: Lithographic map of the area around *Cales* [Ca.01].

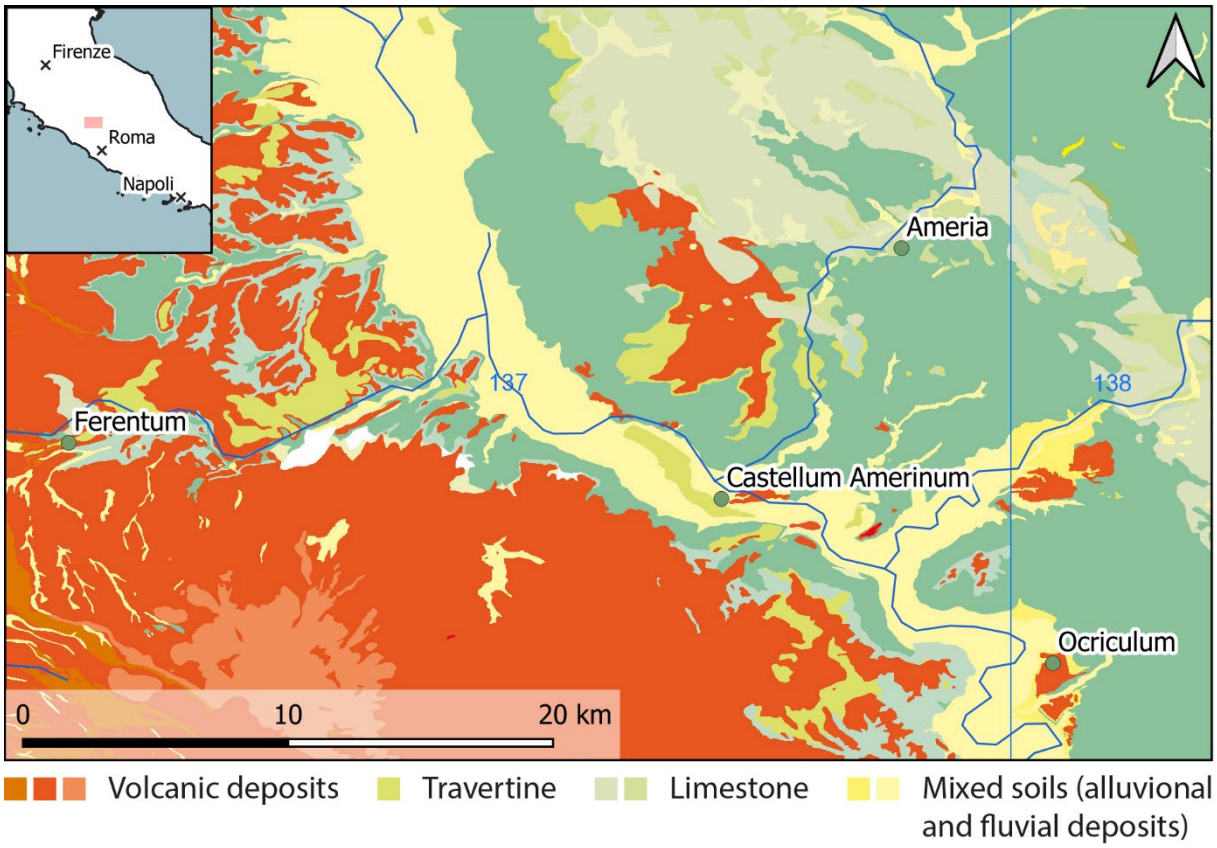


Figure 27: Lithographic map of the area around *Ferentum* [La.03], *Castellum Amerinum* [La.G.09] and *Ocriculum* [Um.01], along the course of the Tiber river.

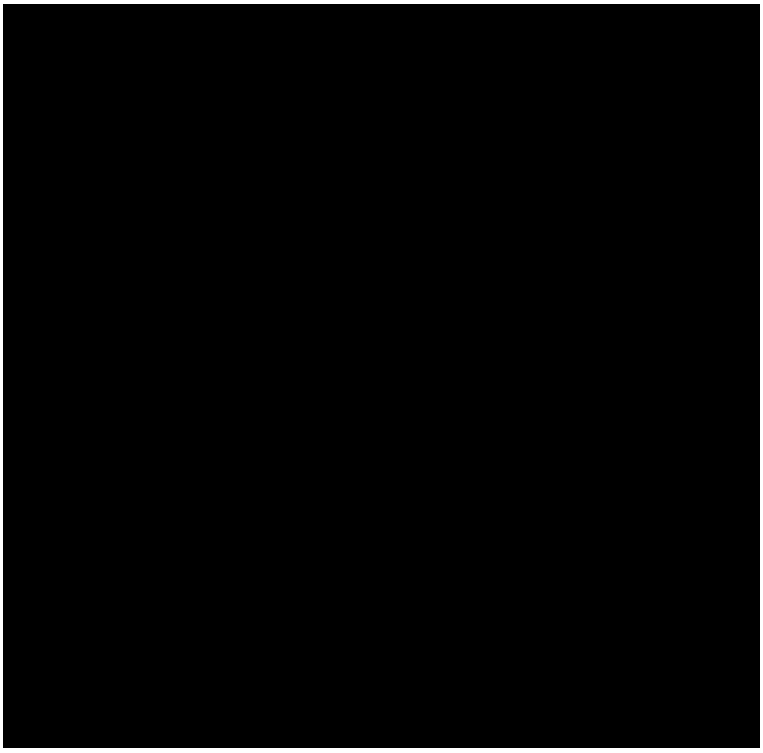


Figure 28: Map showing the major limestone and timber sources in Central Italy (LANCASTER 2005, map 4, modified by author).

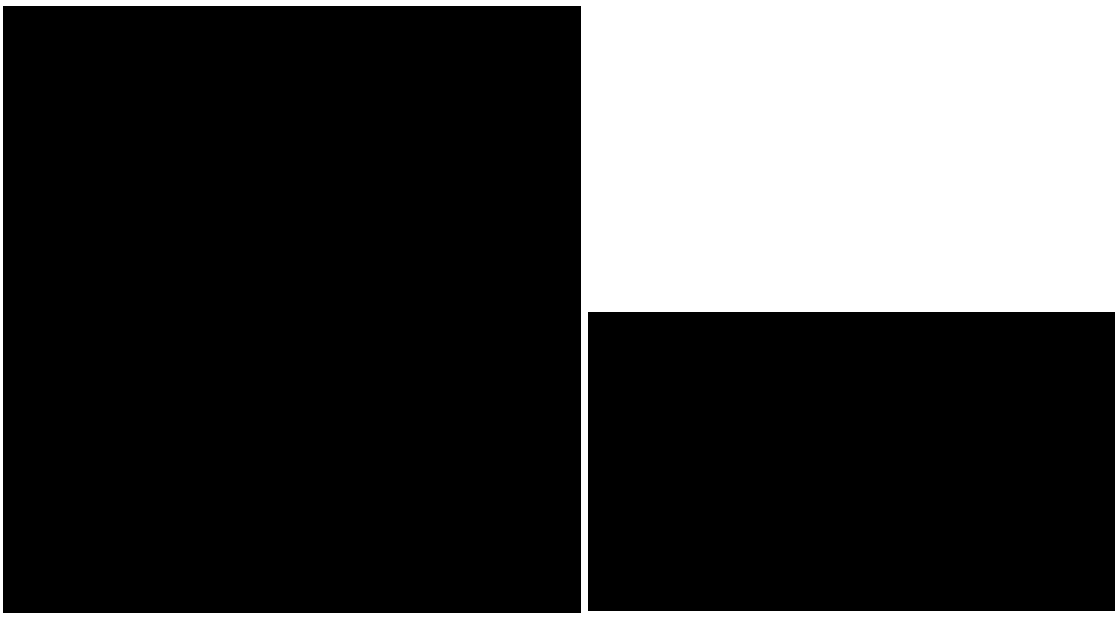


Figure 29: Central Baths of *Cales* [Ca.01]. **L**: walls faced with reticulate panels of tuff (above) and limestone (below) blocks, framed by sawtooth quoins. **R**: detail of the facing, showing how the different hardness of the stone affected the aspect and regularity of the blocks.

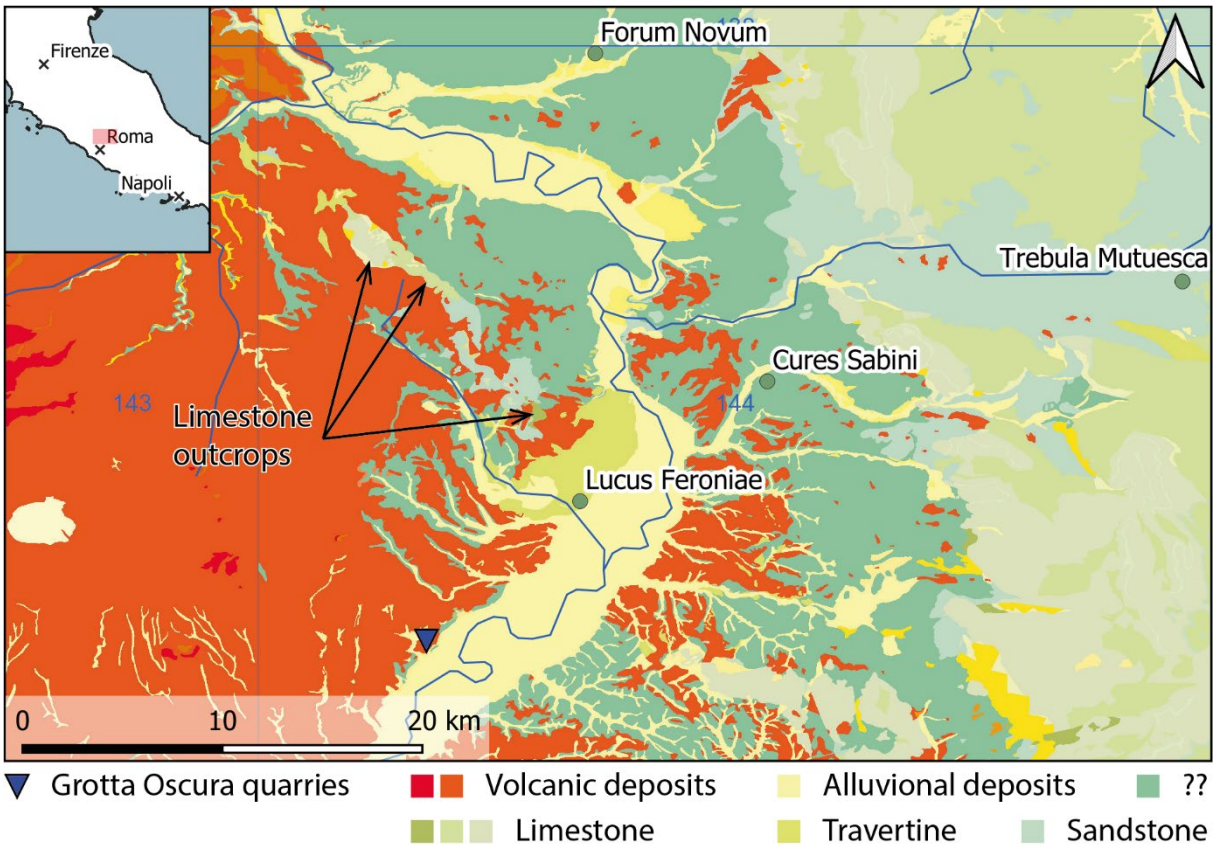


Figure 30: Lithographic map of the area around *Lucus Feroniae* [La.06], along the course of the Tiber river.



Figure 31: Use of *caementa* in the concrete of the walls and vaults in the baths of *Ocriculum* [Um.01] (L, vault), *Castra Albana* [La.02] (M, wall and vault), and *Pisae* [To.05] (R, wall).



Figure 32: Examples of *caementa*. **A**: *Castra Albana* (*Lapis Gabinus*); **B**: *Castra Albana* (Tufo Giallo della Via Tiberina); **C**: *Pisae* (pozzolana in wall); **D**: *Ferentum* (pozzolana in wall); **E**: *Ocriculum* (pozzolana in vault); **F**: *Ferentum* (pozzolana in vault). **Right**: *Castra Albana* (pozzolana).



Figure 33: Different treatment of the hypocaust facings in the Forum Baths of *Lucus Feroniae* [La.06] (R12) and the *Decumanus* Baths of *Saepinum* [Mo.02] (R3).



Figure 34: Wall facing of the baths of *Pisae* [To.05], R2, S wall, from N. Full brick facing for the lower part, then alternate courses of stone blocks and bricks.

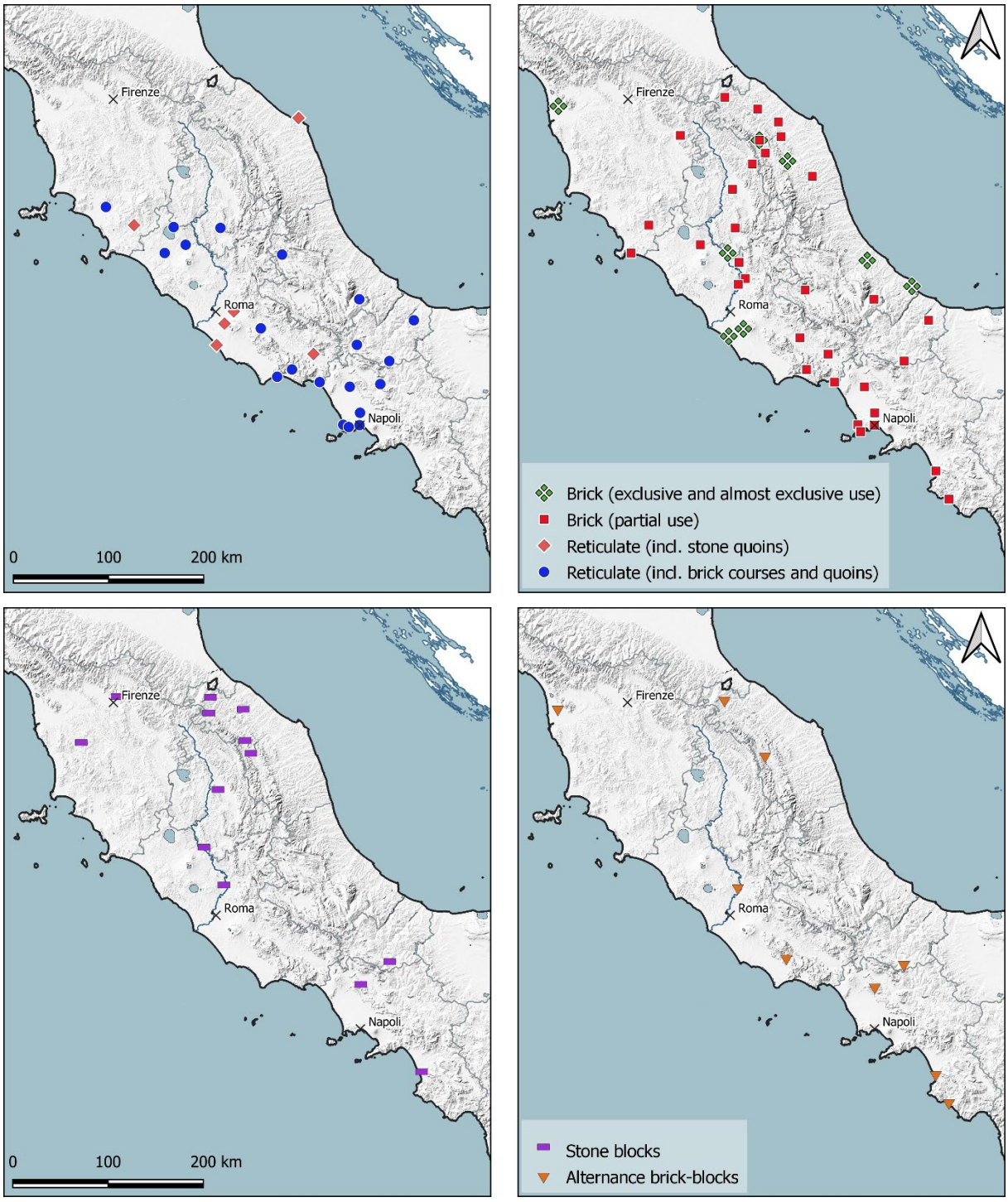


Figure 35: Distribution maps of the different facing techniques used in the bath buildings of Central Italy.

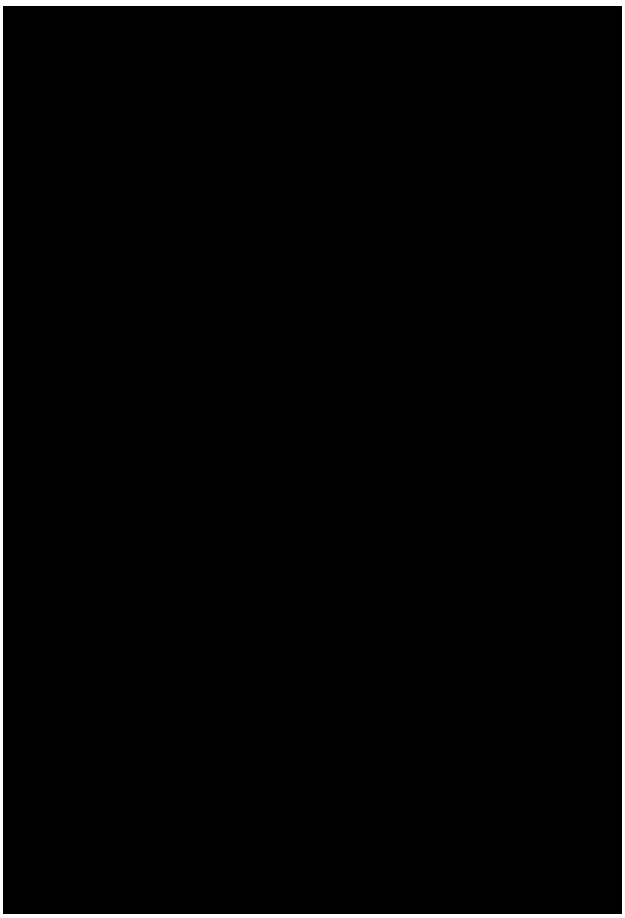


Figure 36: Map showing the area of use of reticulate facing and of facing using course of stone blocks (TORELLI 1980, fig. p. 162).



Figure 37: Quoining techniques: sawtooth (**L**) and bonded (**R**) quoins.



Figure 38: Constructional details of the baths at *Castra Albana* [La.02]. **L**: 1 m² of brick facing, showing the two different types of brick. **R**: Brick facing; the arrow indicates a patch of yellower, thicker bricks.

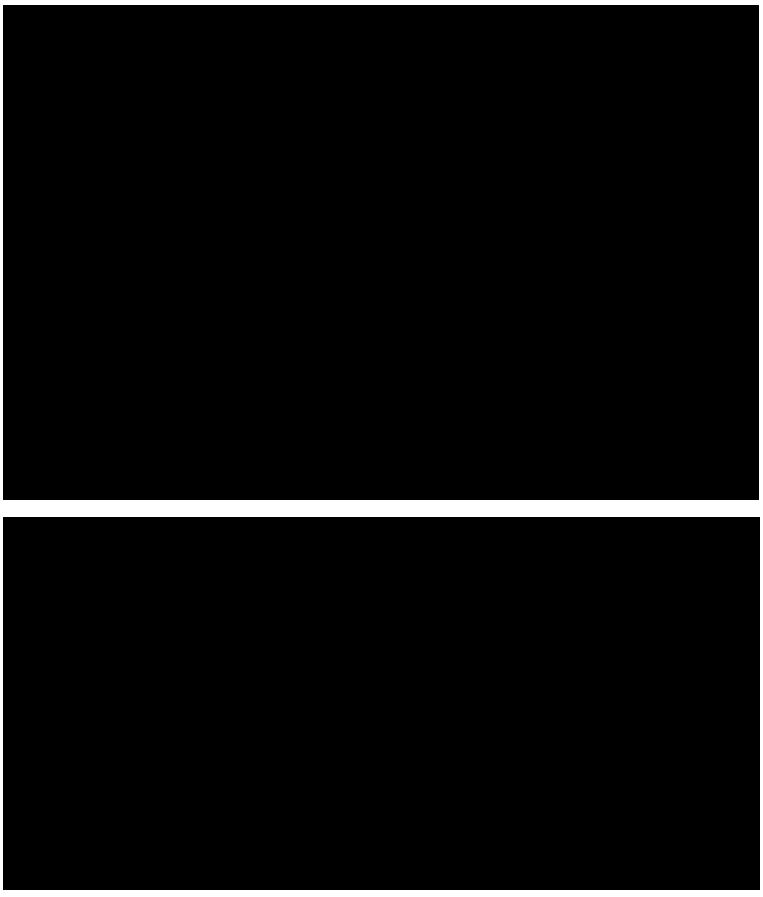


Figure 39: *Velia,* Vignale Baths [Ca.12], facing made reusing Hellenistic Velian bricks. **T**: Rough reticular facing. **B**: brick courses.



Figure 40: Rough reticulate facing in the *Decumanus* Baths of *Saepinum* [Mo.02] (R5, from SW), possibly reusing stone reticulate blocks from the construction of the city walls, visible in the background.



Figure 41: Forum Baths of *Cumae* [Ca.02]. Brick facing with reticulate panels in R11, S wall, and brick facing in heated room R4, N wall.

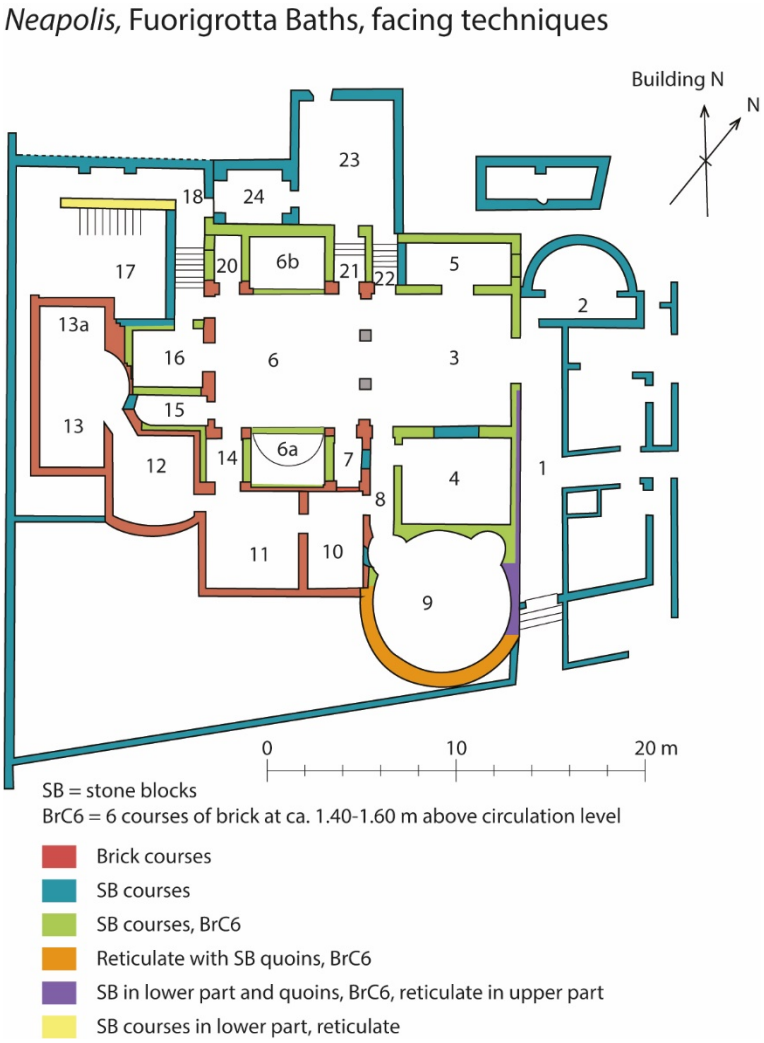


Figure 42: Facing techniques used in the baths of *Neapolis* Fuorigrotta [Ca.04]. Only the heated rooms R10 to R13 were fully faced with brick courses.



Figure 43: *Cumae*, Forum Baths [Ca.02]. High base of brick and reticulate facing in R6.

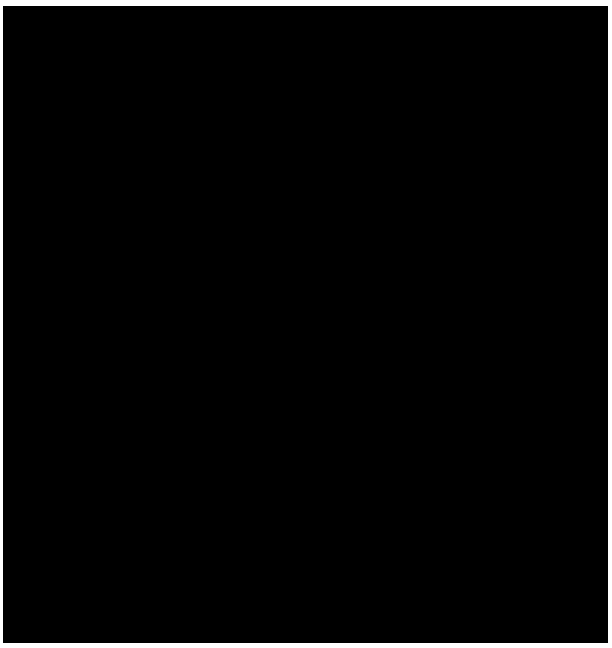


Figure 44: Use of CBM for specific purposes in the baths of *Privernum* [La.08] (R11): brick facing in the hypocaust, around the *praefurnium* mouth and for the first courses of elevation. The level of the *suspensurae* is marked with two rows of tiles (AMICI & CANCELLIERI 2004, fig. II.3).



Figure 45: Facing of the hypocaust and wall of R7 in the Large Baths of *Paestum* [Ca.08], with four brick courses marking the level of the *suspensura*.



Figure 46: Forum Baths of *Paestum* [Ca.07] (R1, from NW), facing made of courses of stone blocks, with brick courses and quoins.



Figure 47: Use of rectangular bricks to delimit the pools of the *caldarium* R3 (R3a, from SE) of the baths of *Cumae* [Ca.02].



Figure 48: Facing of the hypocaust of R14 (from SW) in the Small Baths of *Forum Sempronii* [Ma.05], damaged by heat.

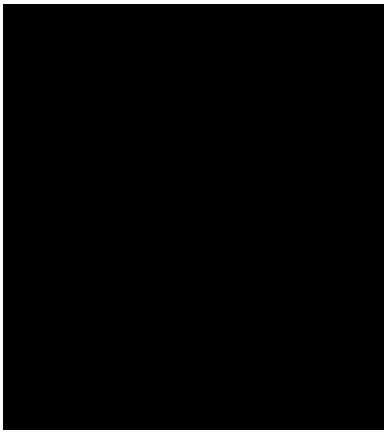


Figure 49: Sketch showing (in hatched) the areas of a wall undergoing the most stress (GIULIANI 2006, fig. 4.1).



Figure 50: Thickened corners and added piers, possibly to support a cross-vault, in the Forum Baths of *Cumae* [Ca.02], R11, E wall, from W.

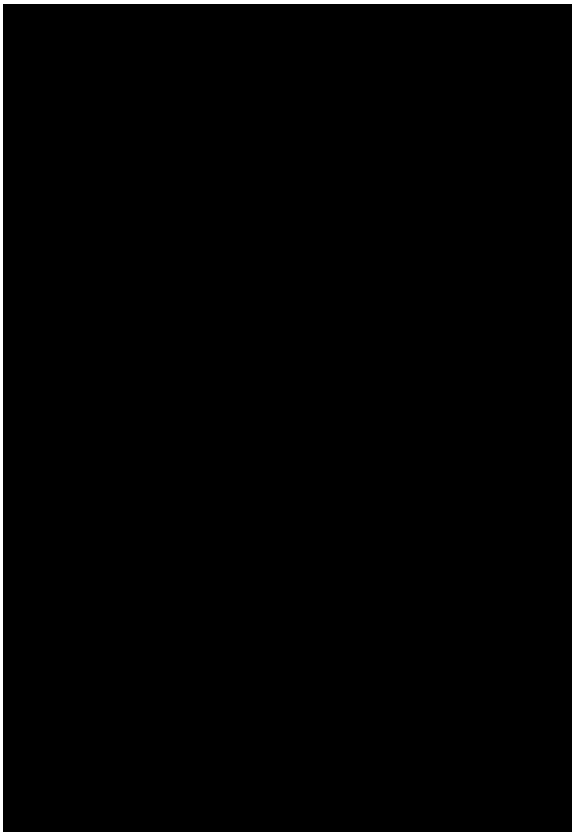


Figure 51: *Neapolis*, Vico Carminiello Baths [Ca.06] (R5, from N). Reticulate panel in a brick-faced wall.



Figure 52: Brick-lined intrados of a vault in the substructures of the Cellomaio Baths of *Castra Albana* [La.02].



Figure 53: Brick courses marking the transition between facing and vaulting in the Forum Baths of *Cumae* [Ca.02] (R6).

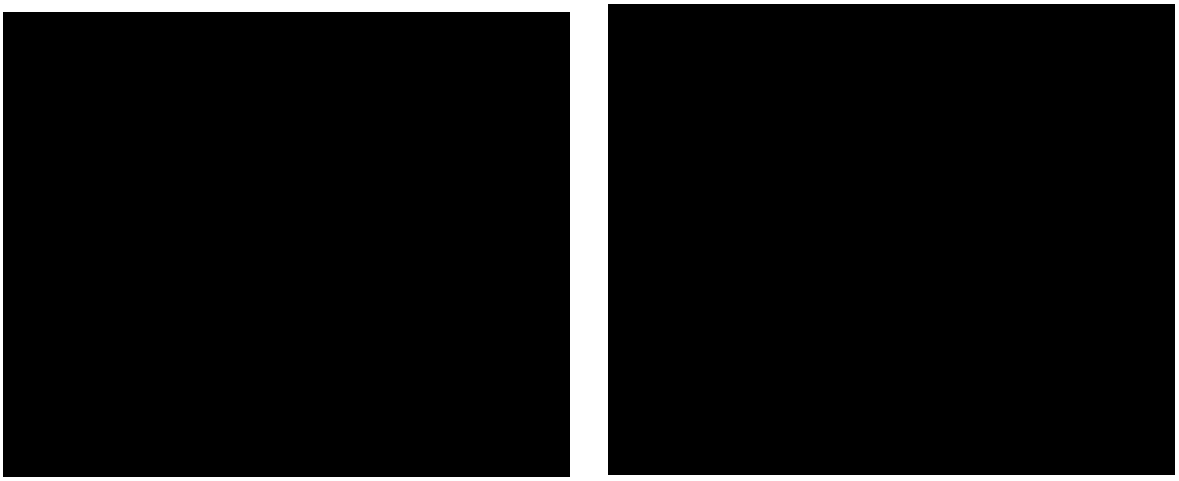


Figure 54: Cross vaulted *frigidaria*, 3D models of the baths of *Privernum* [La.08] (**L**) and *Pisae* [To.05] (**R**) (L: AMICI & CANCELLIERI 2004, fig. II.16; R: CAMPUS 2015, fig. 5).

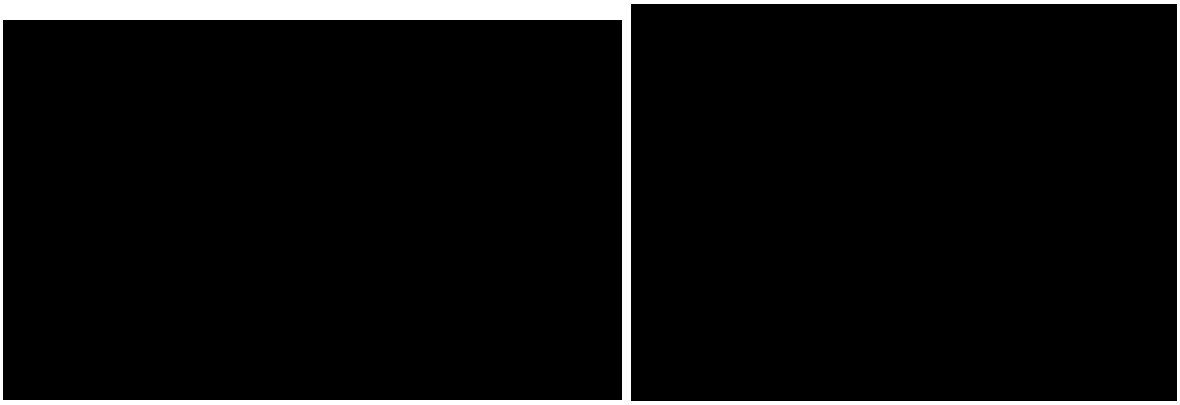


Figure 55: Vaulting in the baths of Piazza Signoria in *Florentia* [To.04]. **L**: Collapsed metal elements from the vault in R7; **R**: proposed reconstruction of the vault of the same room (SALVINI, BIANCHI & BUENO 2019, fig. 10; R: SHEPHERD & SABELLI 1989, fig. 3).



Figure 56: Reconstructed axonometric view of the Small baths of Hadrian's Villa in Tivoli showing the variety of vaulting solutions (MACDONALD & BOYLE 1980, fig. 7).



Figure 57: Umbrella vault in the baths of *Ocriculum* [Um.01] (R1, from S) (ANTONELLI 2019, fig. 7).



Figure 58: *Velia*, South Baths [Ca.11]. R4b, from W. Overflow pipe.



Figure 59: *Cales*, Central Baths [Ca.01], well R12. The shape of the well suggests the use of a bucket-chain for lifting water.



Figure 60: Elevated tank above the service area (R11) of the Central Baths of *Cales* [Ca.01], from SE. The *cocciopesto* floor is prominent, and the walls of the tank were covered in it too.



Figure 61: Large cistern storing water for the baths of *Cosa* [To.01], R16. The four piers were added in the 2nd cent. AD, possibly to support a roof (DE GIORGI 2018, fig. 4).



Figure 62: Baths of *Cosa* [To.01]. Shaft containing a water-lifting device (**R**, R9) to lift water to an elevated tank (**L**, R7) from which the pools of the baths were fed (DE GIORGI 2018, fig. 6).

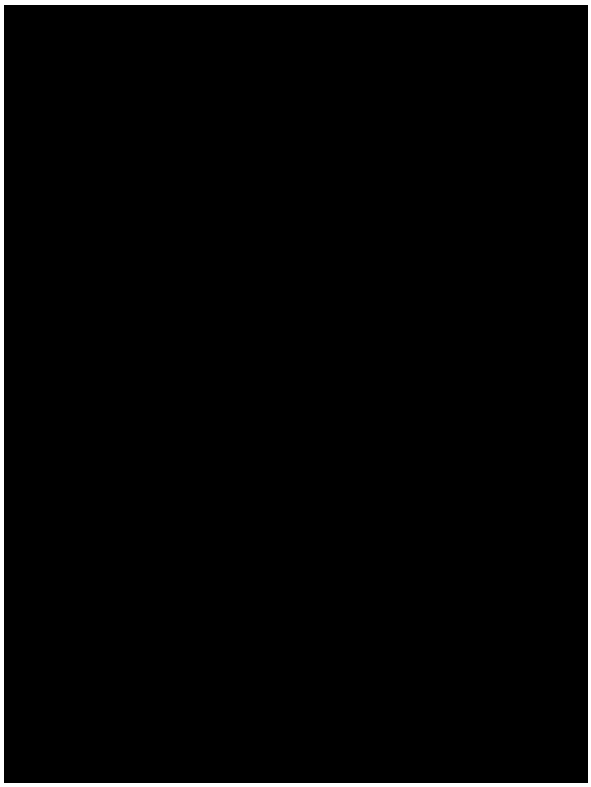


Figure 63: *Aquinum* [La.01], fistula *in situ* along the N side of the baths, from WNW (©Aquinum excavation, Università del Salento).

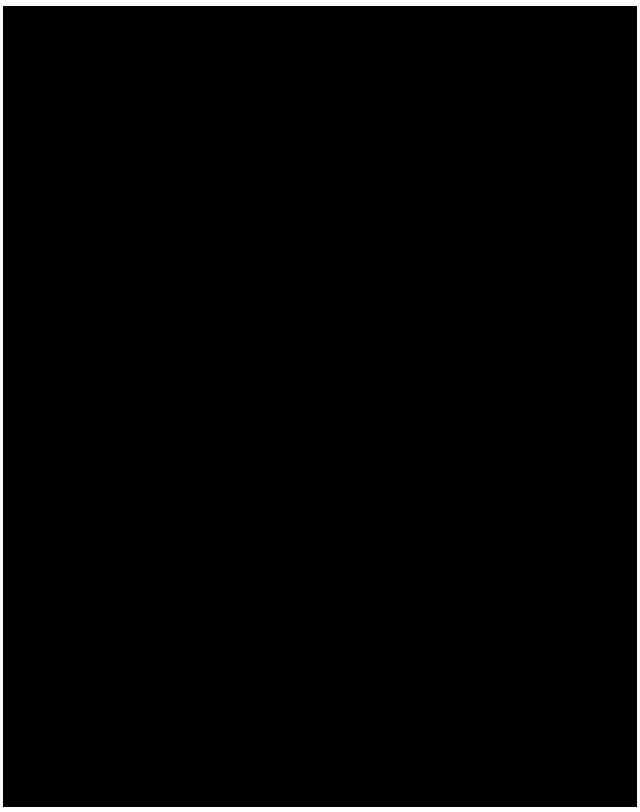


Figure 64: Plan of the large reservoir at *Firmum Picenum,* which may have stored water for possible nearby baths [Ma.G.24] (BODON, RIERA & ZANOVELLO 1994, fig. p. 335).



Figure 65: Plan of the reservoir galleries of the Grotta Dragonara at *Misenum,* which may have stored water for a nearby set of baths [Ca.03] (BODON, RIERA & ZANOVELLO 1994, fig. p. 330).



Figure 66: Water tanks next to the baths of *Castellum Amerinum* [La.G.09]. The one to the right one might have also acted as a settling tank.

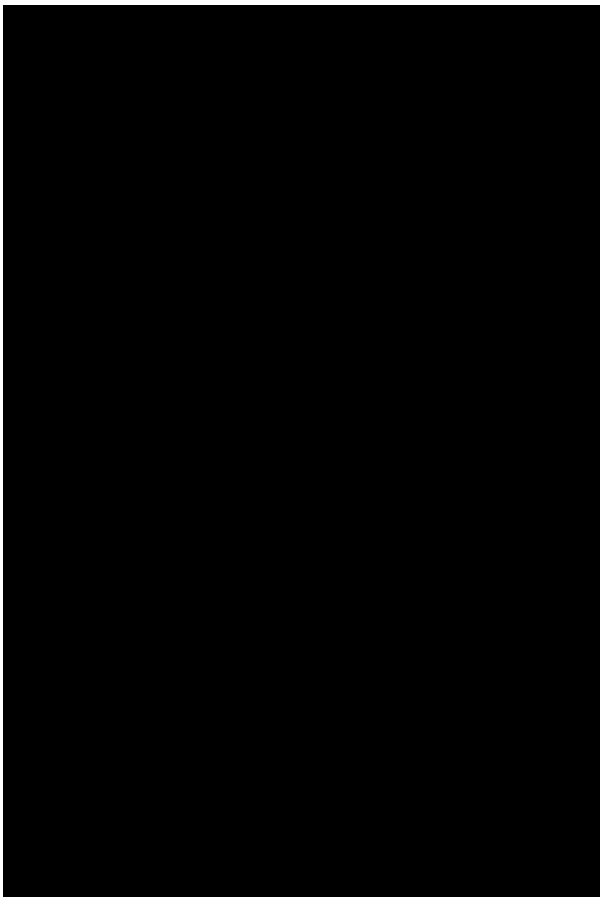


Figure 67: Shaft next to the baths of *Neapolis* Fuorigrotta [Ca.04] (R25). The pier against the right wall and the corresponding recess in the opposite wall suggest the use of a waterwheel to lift water.

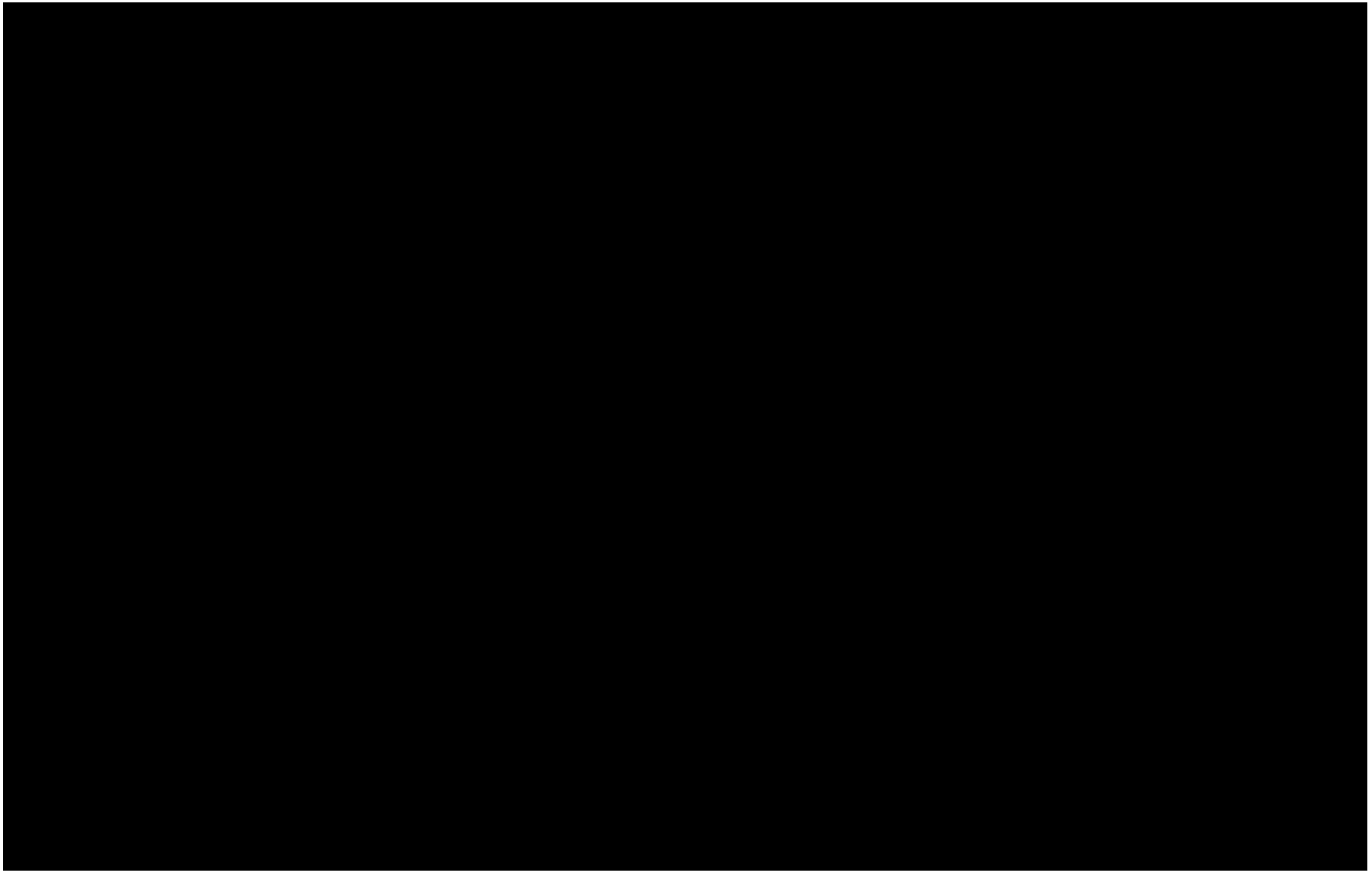


Figure 68: Reconstruction of different possibilities of disposition of boilers, water tanks and access staircases around *praefurnia* (BOUET 2003, pl. 185–191).



Figure 69: *Velia*, South Baths [Ca.11], *praefurnium* A from N. The width of the structures around the *praefurnium* suggests that part of them was used as stand for a water tank (Courtesy Ufficio Scavi Velia).



Figure 70: *Cumae*, Forum Baths [Ca.02], N outer wall towards R2, from N. The square opening to the left (red arrow) could have been made to allow lead pipes to go through. The door for the personnel to access R2 is visible at the far right.



Figure 71: *Neapolis*, Fuorigrotta Baths [Ca.04], R17 from W, N. **L**: the masonry block in the bottom right corner could have supported a water tank, and water could have been supplied to the cold-water facilities via the opening in the wall. **R**: the width of the masonry blocks around the *praefurnium* suggests that they could have supported a water tank. Supply to pool R13a occurred through the larger rectangular opening (the two smaller square holes above on either side are putlog holes).

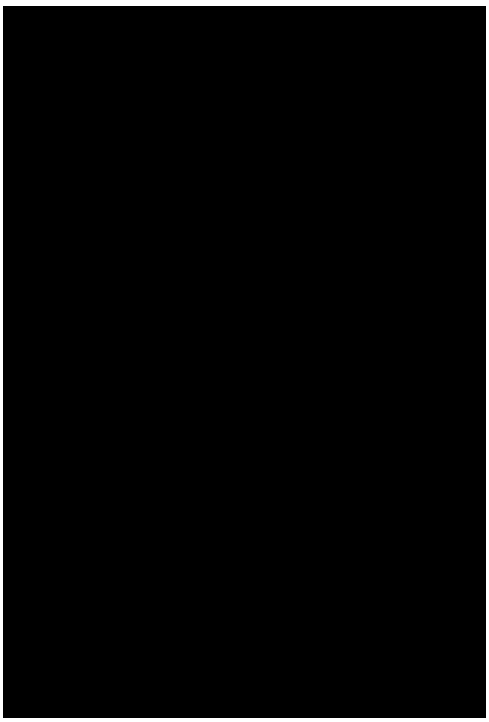


Figure 72: *Privernum* [La.08], bipartite water supply: cold-water framed in blue, hot-water in red (AMICI & CANCELLIERI 2019, fig. 16, modified by author).



Figure 73: *Velia*, South Baths [Ca.11], R13 towards R8a, from N. Current state. The square openings indicated by red arrows mark the location where the pipe went through the wall to supply pool 8a (the right opening has been blocked). Right underneath, indicated by green arrows, the semi-circular openings are for the overflow of water.



Figure 74: *Velia*, South Baths [Ca.11], R13, S wall towards R7, from N. The opening in the wall to the left allowed the pipes to supply water to the *labrum* in the NW recess of R7.



Figure 75: *Velia*, South Baths [Ca.11], R13, S wall towards R8b, from N. R: detail, from NW. The opening in the wall above and to the left of the central arch allowed the pipes to supply water to pool R8b.

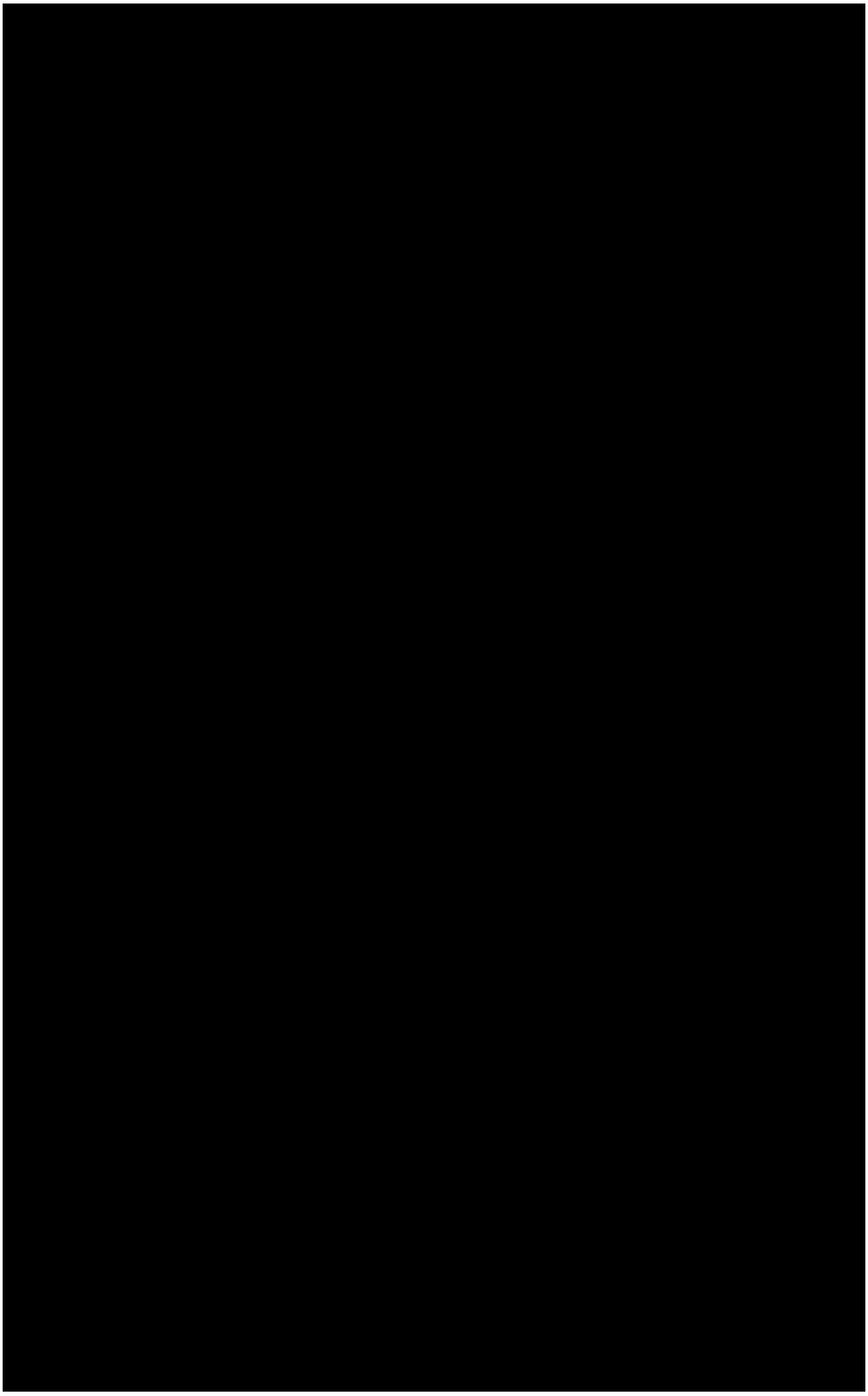


Figure 76: *Velia*, South Baths [Ca.11], W outer walls towards R4b, from N, W, NW. The openings in the wall (red arrows) and the recess in the central window (green arrow) of pool R4b allowed the pipes to supply water to it. The dotted white lines represent a possible path followed by the supply line.



Figure 77: *Velia*, South Baths [Ca.11], R11a. N wall, from S. Insert: E wall, from W. The top left opening in the wall was the supply line from the main tank; the right opening was the continuation of the supply line, towards 4b, on the other side of the N wall; the line then continued towards the S, shown in the insert, where the right opening was for the supply of pool R4c. The bottom L opening was for the disposal of the water contained in pool R11a. The dotted lines represent the probable path followed by the supply line.



Figure 78: *Velia*, South Baths [Ca.11], R10. W wall, from NE. The largest opening was the supply line to R4c. The dotted lines represent the probable path followed by the supply line.

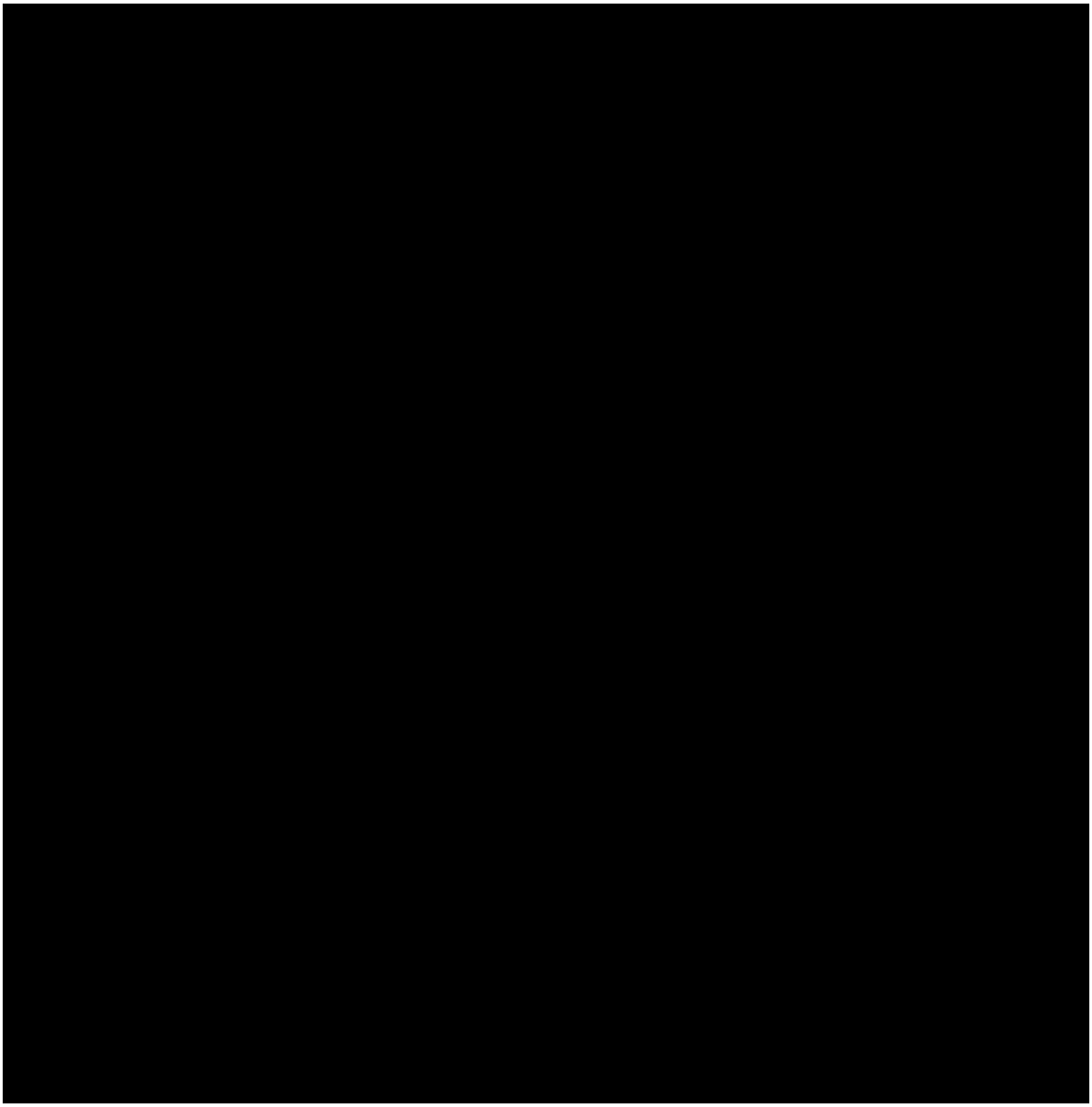


Figure 79: *Cumae*, Forum Baths [Ca.02], water supply to R8a and R8b. **TL**: outer N wall towards R8b (L) and R8a (R), from NW. The openings on each side of the central pillar were made to fit the water-supply pipes. **TR**: outer N wall towards R8a, from N, with an opening to fit a water supply pipe. **BL**: outer wall of R8a, from W. Recess created in the window sill to fit an axial water supply pipe. **BR**: R12, SW corner, from NE. Openings to fit a water supply pipe to pool R8b (red arrow) and, right underneath, opening leading to R8 (green arrow). Note the location of the openings at the junction of two walls, with the exception of the axial supply in apse 8a that made use of the existing window.

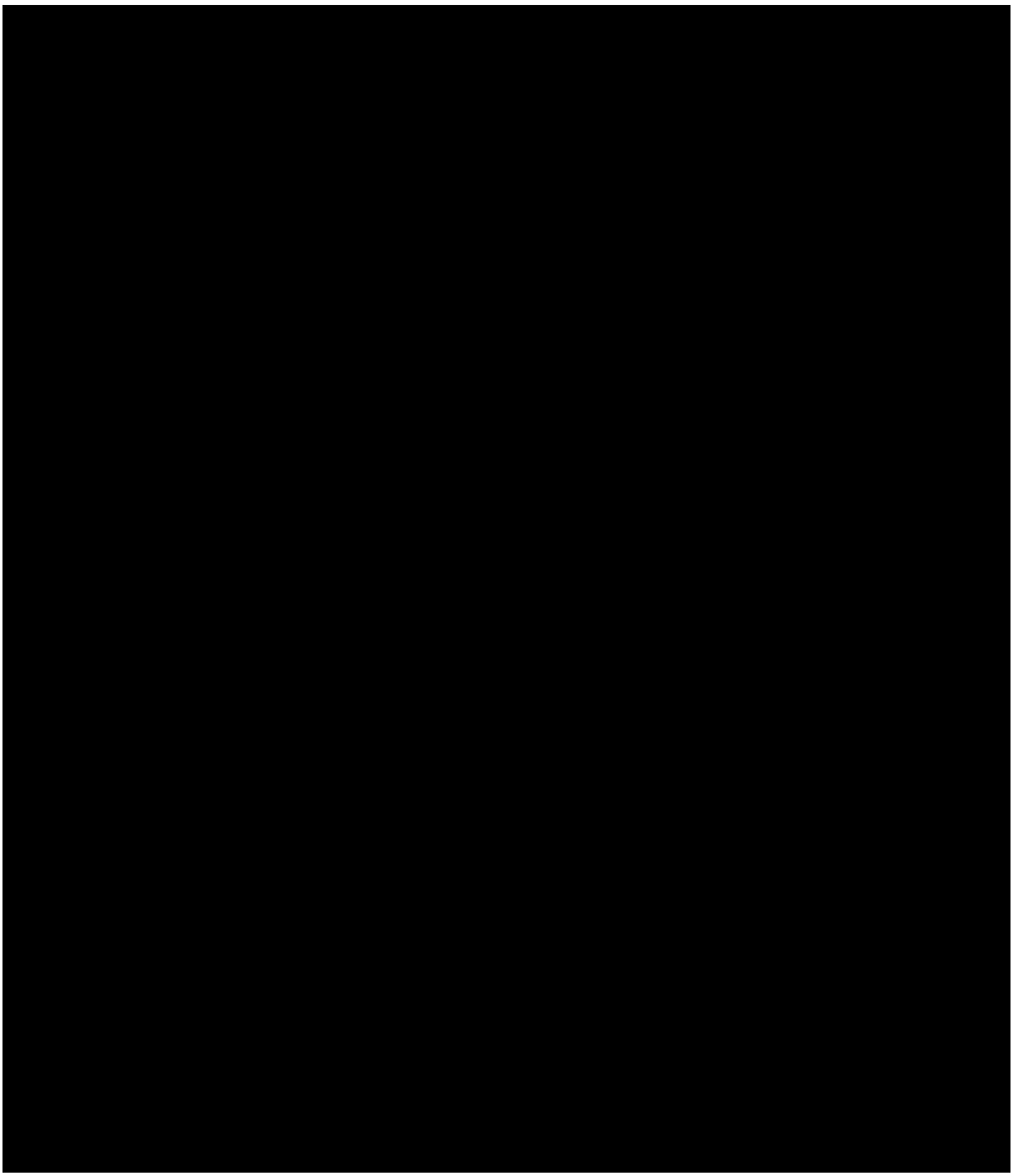


Figure 80: *Cumae*, Forum Baths [Ca.02], supply to hot-water pools R3b and R3c, seen from R3, from W, N. **T**: the square openings (red arrows) allowed pipes to go through and supply R3b. The reason for the multiplication of openings, with the 4th one to the right (green arrow), is unclear. **B**: the supply occurred via two openings in the back wall (red arrows) and a side opening to the left (green arrow).



Figure 81: *Minturnae,* baths [La.07]. Connection between R5 and R6a, from W. The large recess in the centre of the picture, where the steps interrupt, was a passage connecting *natatio* R5 to the *frigidarium'*s pool R6a; it was blocked in a later phase.



Figure 82: *Centumcellae*, Terme Taurine. Connection between the pools of the *tepidarium* and *caldarium* (MM 2015 (online resource), licenced under CC BY-SA 4.0).



Figure 83: *Velia*, South Baths [Ca.11], N wall of R8a, from S. The larger opening in the centre served for the supply of water to the pool R8a. This was the E opening, the W one is not visible on the picture. Not the semi-circular overflow slightly underneath.



Figure 84: *Velia*, South Baths [Ca.11], NW corner of R8, to N. The square opening in the centre was the passage for the pipe that supplied pool R8b, whose stairs are visible on the left. To the right was pool R8a (Courtesy Ufficio Scavi Velia).

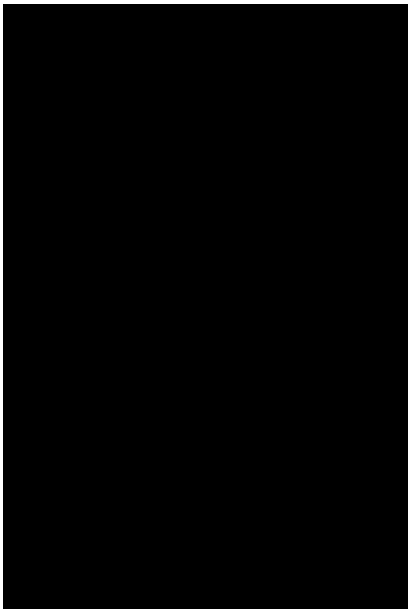


Figure 85: *Velia*, South Baths [Ca.11], NW recess of R7. The larger opening in the centre served for the supply of water to the *labrum* that stood in the recess. Note the cocciopesto on the lower part of the walls.



Figure 86: *Velia*, South Baths [Ca.11], water supply to pool R4b, from N, S, E. **T**: the two square openings in the jambs of the pool entrance were the passages for the water supply. **B**: at the centre right (red arrow) was a recess for the entrance of the water pipe. Note, on the left, a semi-circular opening, interpreted as overflow.



Figure 87: *Velia*, South Baths [Ca.11], water supply to pool R4c, from E. The square opening in the W jamb of the pool entrance was the passage for the water supply.



Figure 88: *Cumae*, Forum Baths [Ca.02], supply to cold-water pool R8a. From S, W, N. **L**: opening in the N jamb. **C**: opening under the window sill. The blocking of the window belongs to a secondary phase. **R**: S jamb. No opening is visible in this jamb, but if there was an opening symmetrical to that on the N jamb, it would be where the red arrow points at. The original opening might have been concealed by modern restorations.



Figure 89: *Cumae*, Forum Baths [Ca.02], supply to cold-water pool R8b. L: opening in the E jamb, from NW. **R**: opening in the W jamb, from NE.



Figure 90: *Neapolis*, Fuorigrotta Baths [Ca.04]. Supply to cold-water pool R6a. from W, E. Recesses in the E (**L**) and W (**R**) walls to accommodate the water-supply pipes. The dotted lines indicate the water flow.



Figure 91: *Aquinum* [La.01]. Large pool R11a of the men's section, from E. The supply to this pool came in all likelihood from the pedestal-like structure on the right of the picture, as supported by the thick layer of concretions found on it. The walls are not preserved high enough to determine if there was a supply via the jambs framing the opening. The pedestal-like structure emphasised the axiality of the water supply.



Figure 92: *Minturnae* [La.07], *natatio* R5, from N. Tower-like structure in the centre of the pool, connected with the scenographic introduction of water; note the hole on the upper surface, probably containing a lead pipe.

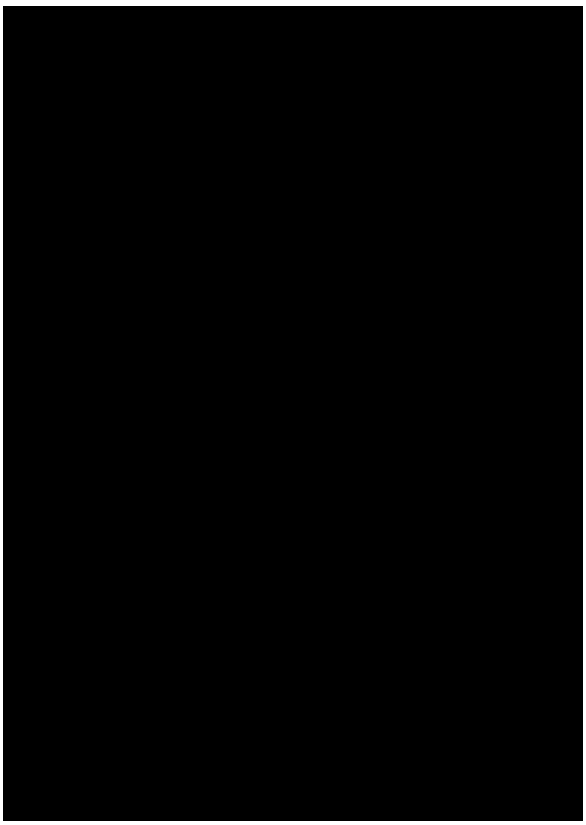


Figure 93: Tivoli, Small Baths at Hadrian's Villa, room N, reconstructed view of the water display, from NE (MACDONALD & BOYLE 1980, fig. 18).



Figure 94: *Neapolis*, Fuorigrotta Baths [Ca.04], R6, from N. Modifications made to the water drainage system in a post-construction phase are visible on the mosaic floor (highlighted in red) (GIGLIO & SORICELLI 2019, fig. 15).



Figure 95: *Aquinum* [La.01], women's *frigidarium* R41, from E. Negative of the robbing of lead *fistulae* supplying water to a central *labrum*, and possibly of *fistulae* disposing water from the same *labrum* (© Università del Salento).



Figure 96: *Aquinum* [La.01], women's *frigidarium* R41. Water supply and disposal systems of the central *labrum* (L), and terracotta piece for the discharge of water in the sewers (Ceraudo & Murro 2018, fig. 15–16).



Figure 97: *Aquinum* [La.01], pool R24b, from SW. Water in the pool drained onto the floor or R24 via a pipe (in inset) embedded in the masonry of the steps.



Figure 98: *Aquinum* [La.01], service area R25 and *praefurnium* F, from NE. Visible are the remains of an *in situ* lead *fistula*, for the emptying of a now-lost boiler located to the left, on the *praefurnium*.



Figure 99: *Aquinum* [La.01], latrines of men's section, from E. Reconstruction of the water circulation in the latrines (©Aquinum excavation, Università del Salento, modified by author).



Figure 100: *Aquinum* [La.01], latrines R10, from SE. Visible in the central basin is a large lime concretion, at the place where running water entered the basin (©Aquinum excavation, Università del Salento).



Figure 101: *Velia*, Vignale baths [Ca.12], R14 from W. *Praefurnium* K on the left and blocked *praefurnium*(?) or hypocaust access (L) on the right (SAMARITANI & DE DOMINICIS 1997, fig. A33).



Figure 102: *Paestum*, Large Baths [Ca.08], *praefurnium* I, from E. The long outer extensions of the *praefurnium* could have supported boiler and *testudo*.

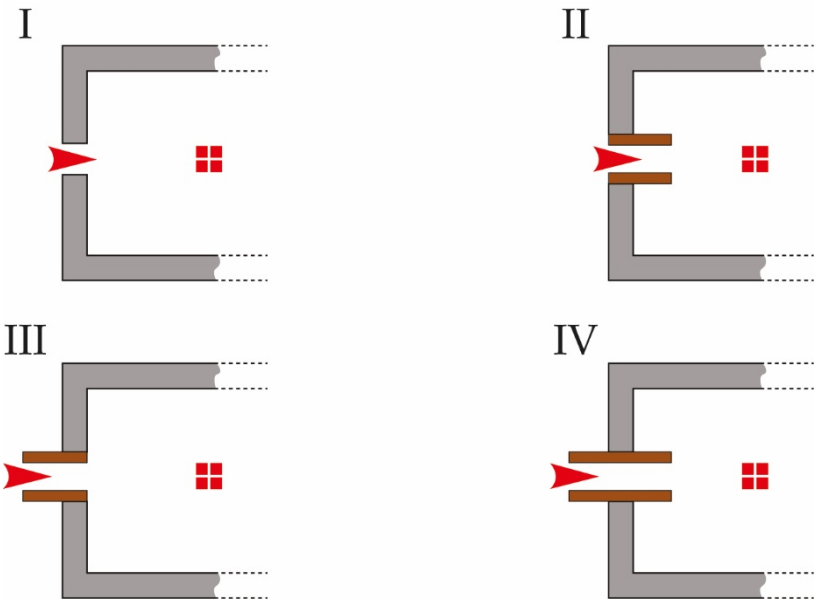


Figure 103: Different types of *praefurnia* represented in plan, according to Degbomont's typology. Type I had no longitudinal extensions, type II only extension inside the room, type III extension outside the room, and type IV longitudinal extensions both inside and outside the room (after DEGBOMONT 1984, fig. 86).



Figure 104: different types of *praefurnia* with outer longitudinal extensions to support water-heating devices. **L**: *testudo*. **C**: triple boiler, as described by Vitruvius. **R**: simple boiler (DEGBOMONT 1984, fig. 137–139).



Figure 105: *Ferentum*, baths [La.03], *praefurnium* C, from N. The *praefurnium* and its extensions were made of large slabs of refractory stone.



Figure 106: *Forum Sempronii*, Small Baths [Ma.05], *praefurnium* E, from NE. The stone slabs of the *praefurnium* have been heavily damaged by the repeated action of fuel combustion.



Figure 107: *Leptiminus* (North Africa), East Baths. Red crosses on the hypocaust *area,* under removed *pilae*, are all that remain of a grid of 0.57 m squares traced to facilitate the laying out of *pilae* (STIRLING, MATTINGLY & BEN LAZREG 2001, fig. 1.27).

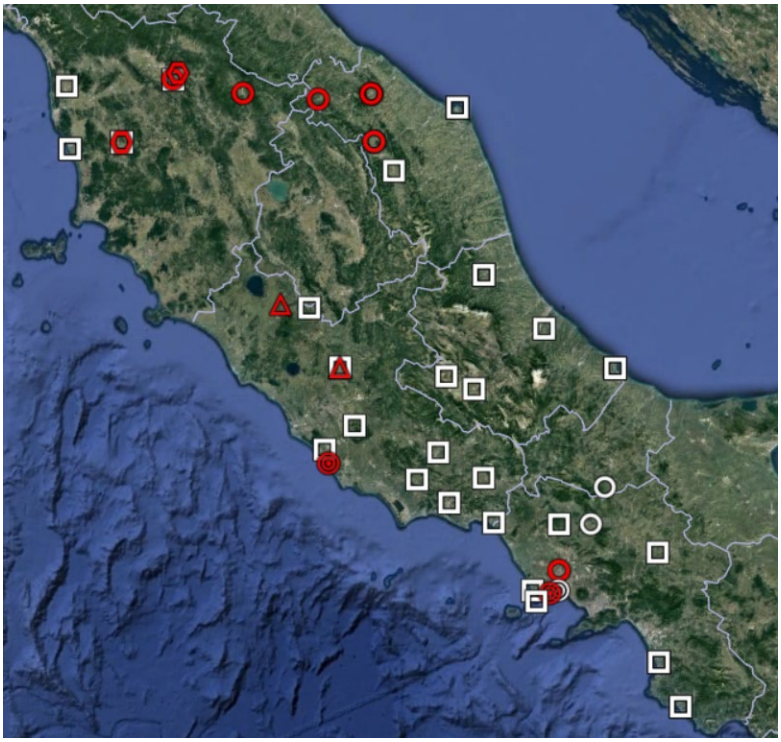


Figure 108: Distribution map of the type of *pilae* used in the baths of Central Italy.



Figure 109: Distribution map of the baths using *pilae* made of circular bricks.



Figure 110: Octagonal *pilae* supporting the floor of the *caldarium* R8 in the baths of *Faesulae* [To.02].



Figure 111: *Pilae* made of stone monoliths with sides dug out. **L**: *Aquincum* (*Pannonia*), Double Baths. **R**: Pergamon, East Baths of the Upper Gymnasium (L: BJOERTVEDT 2015, licenced under CC BY-SA 4.0; R: YEGÜL 1992, fig. 447).



Figure 112: *Pilae* made of hollow tubes. **L**: *Neapolis* Santa Chiara [Ca.05]. **R**: *Baiae,* Piccole Terme.

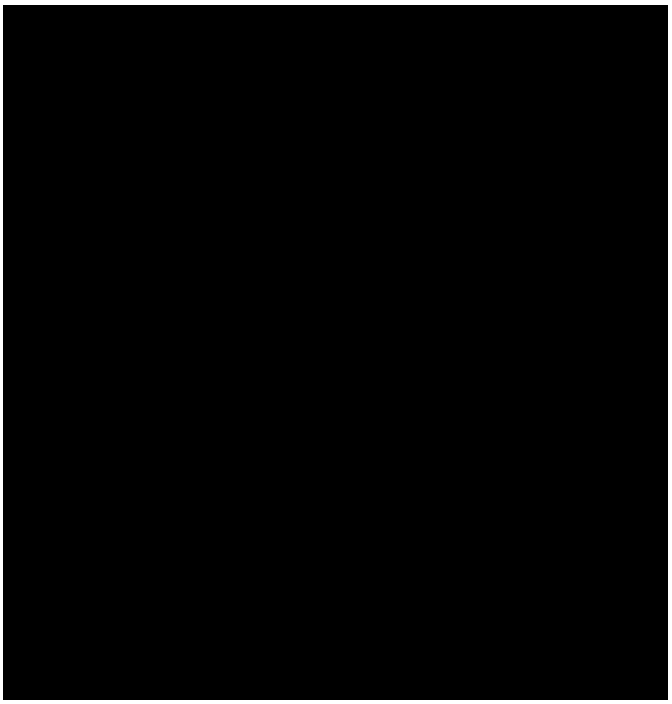


Figure 113: *Castrum Inui* [La.G.26], *pilae* made of hollow tubes (Ardea – Castrum Inui (Lazio) 2010).



Figure 114: *Faesulae* [To.02], *caldarium* R8. Horizontal section at the level of the hypocaust, showing the *pilae* and the masonry blocks under the pools R8a–R8b (SABELLI & BALLERINI 2014, pl. 10).



Figure 115: *Ferentum* [La.03], pool R21a from S. Note the double layer of *bipedales* capping stone *pilae* set close to each other.



Figure 116: *Aquinum* [La.01], R16, from E. Hypocaust, with tiles with knocked-off flanges set vertically against the walls to protect them from the heat.

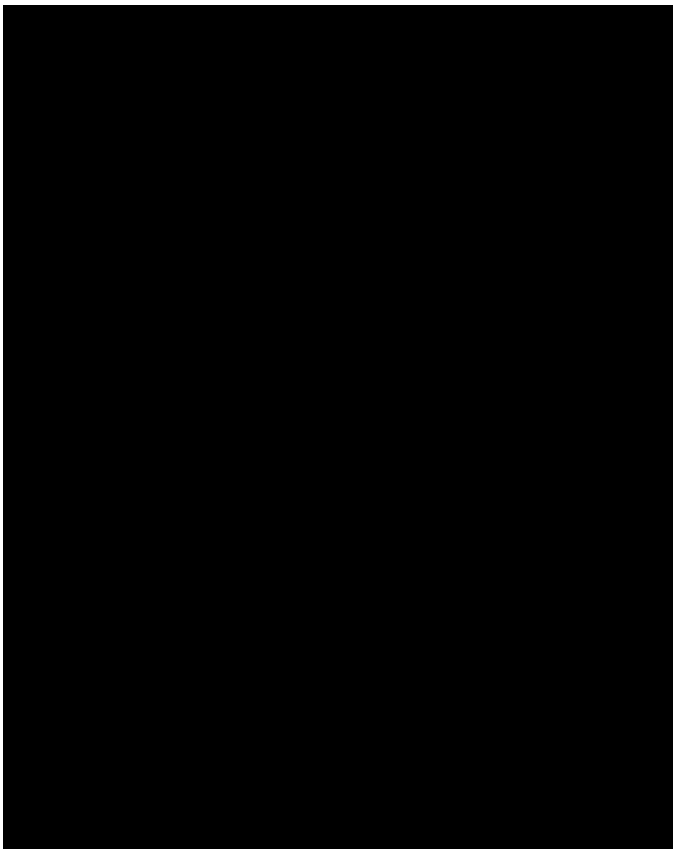


Figure 117: *Neapolis,* Fuorigrotta Baths [Ca.04], R11, from SW. Cocciopesto layer for the protection of the hypocaust walls. The upper part of the walls was also covered in cocciopesto and bear the marks of the *tubuli* of the wall heating system.



Figure 118: *Forum Sempronii* Small Baths [Ma.05], R14, from SW. Hypocaust wall facing, damaged by prolonged exposition to fire. Note the difference with the restored stone blocks.



Figure 119: *Neapolis* Fuorigrotta Baths [Ca.04]. *Tegulae mammatae*. The back row of *tegulae mammatae* is still *in situ*.



Figure 120: *Velia* South Baths [Ca.11]. *Tegulae mammatae* bosses reused as aggregate in the blocking of a windows in pool R4b.

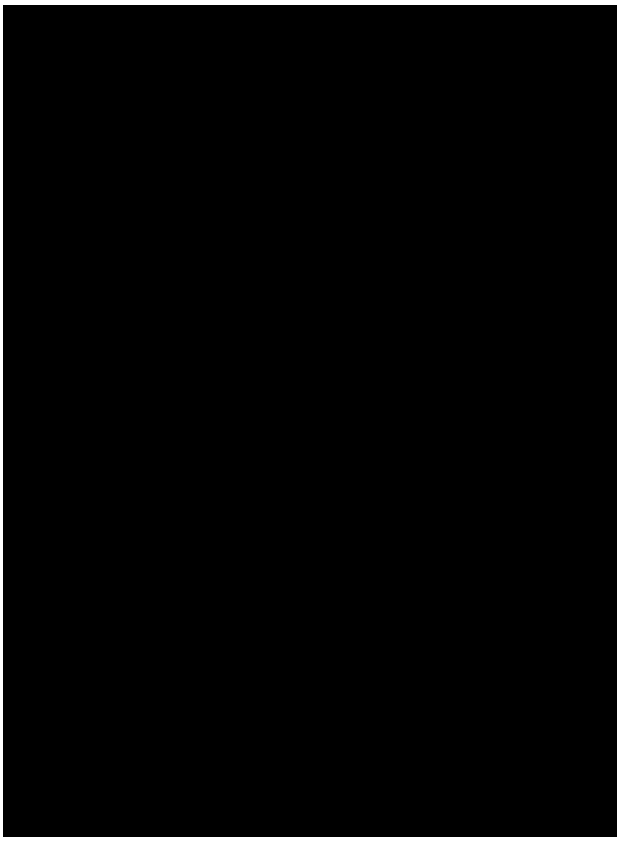


Figure 121: *Pisae* [To.05], R4, SW corner, from E. Vertical drain pipe embedded in the thickness of the wall.

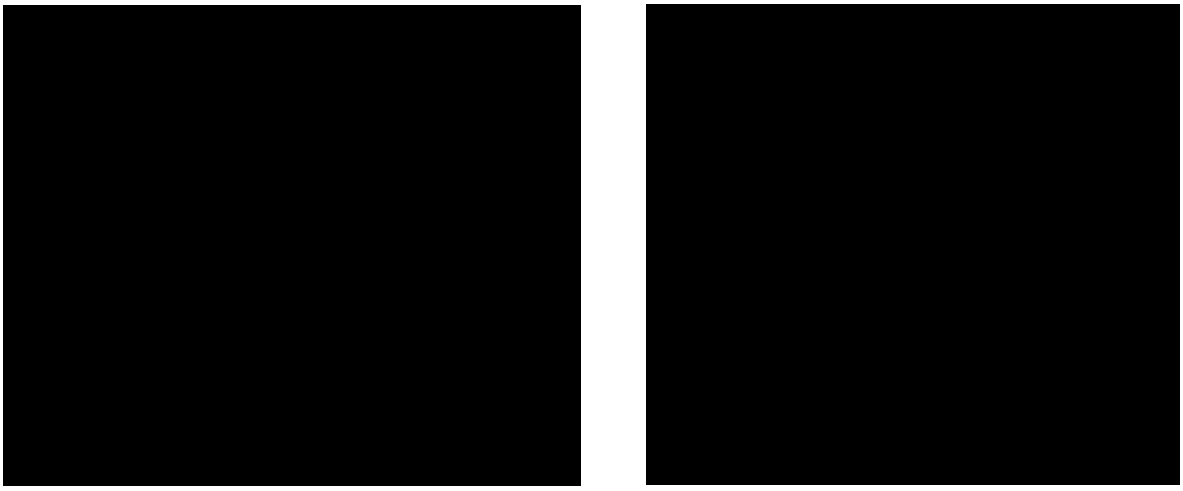


Figure 122: *Minturnae* [La.07]. **L**: Chimney opening in the hypocaust of R3, E wall, from W. **R**: Chimney pipe in the S wall of R3, from above.



Figure 123: *Aquinum* [La.01]. R14 from SW, with indication of the position of the four chimneys, and *praefurnium* L (dotted line).



Figure 124: Reconstruction of the warm water heating system of a Roman bath (GARBRECHT & MANDERSCHEID 1994, vol. A, fig. 3; TRÜMPER 2015, fig. 9).

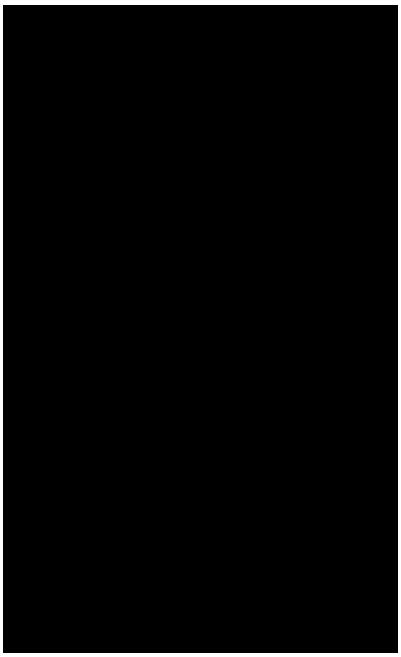


Figure 125: Boiler of the baths of the Villa della Pisanella at Boscoreale (BROISE *et al.* 1987, fig. 145).



Figure 126: Stand for two boilers, one on either side of *praefurnium* A in the baths of *Faesulae* [To.02], R12, from E.



Figure 127: *Aquinum* [La.01], R23, remains of boiler stands made of CBM, from N.



Figure 128: *Praefurnium* F in R25 in the baths of *Aquinum* [La.01]. Dashed lines indicate the remains of the casing of the boiler, the arrow points at the remains of *fistula* used for draining the boiler.



Figure 129: Bronze fragments with rivet(s) found in the Central Baths of *Aquinum* [La.01] (L) and in the baths of *Faesulae* [To.02] (R). Both were probably cut from a boiler or a *testudo* (L: © *Aquinum* excavation, Università del Salento; R: © Museo Civico Archeologico di Fiesole).

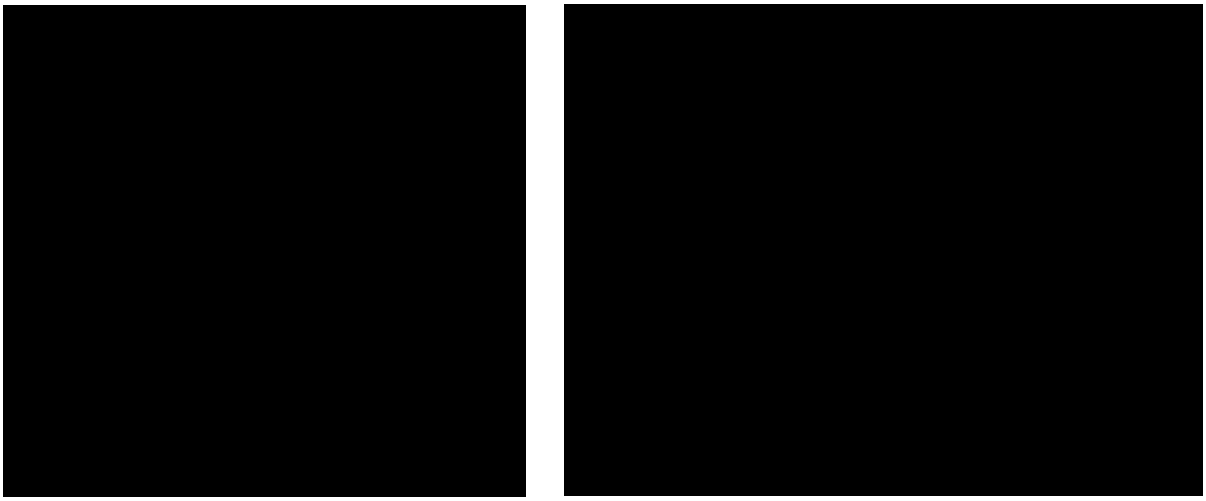


Figure 130: **L**: *Faesulae* [To.02], arch of *praefurnium* A, from E. **R**: *Neapolis* Fuorigrotta [Ca.04], arch of *praefurnium* A, from S. The intrados of the arch being higher than the *suspensura* floor is indirect evidence for the pool being equipped with a *testudo*.



Figure 131: Baths of *Teate Marrucinorum* [Ab.03], R8, N wall, from S. The putlog holes are located just above the *suspensura* floor.

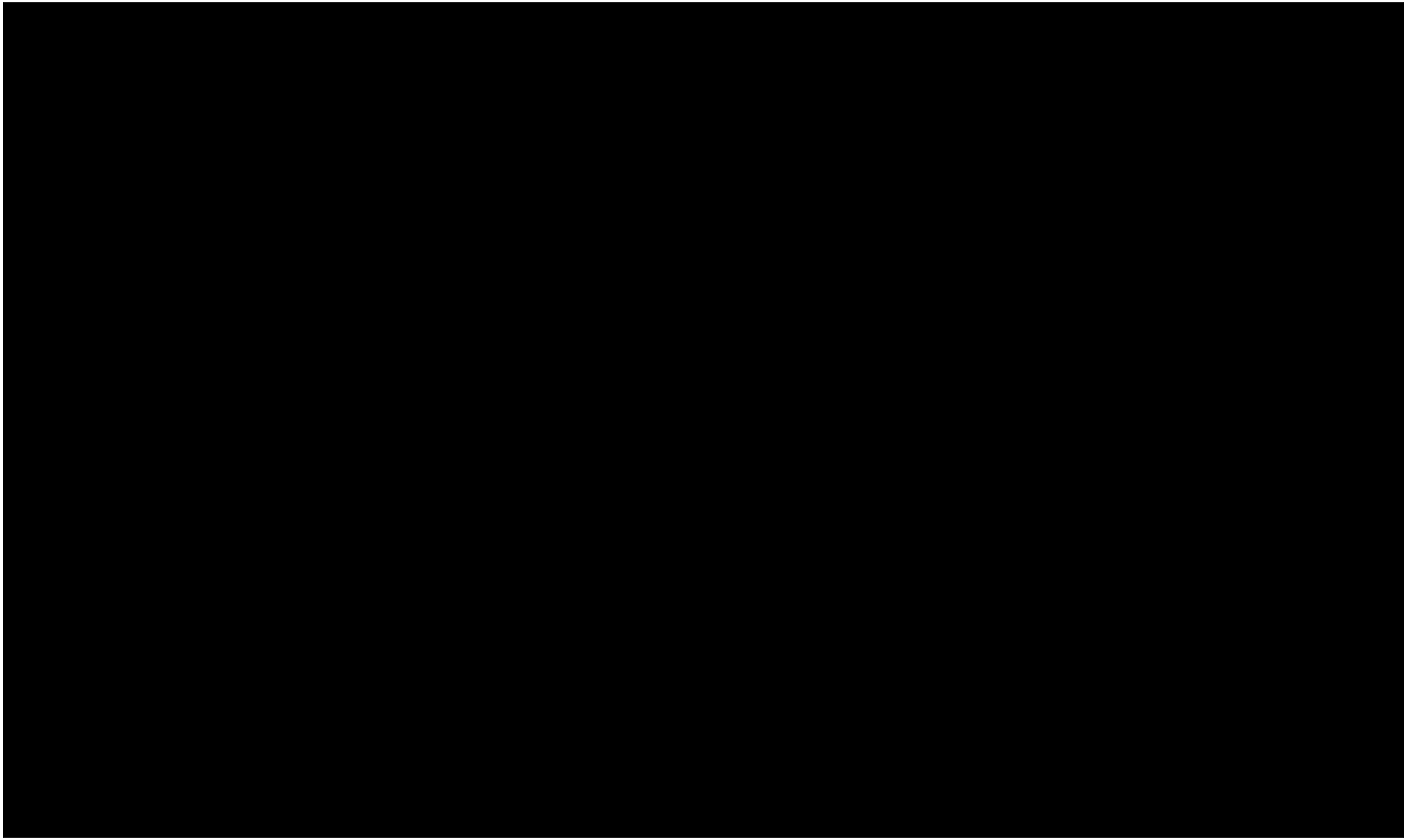


Figure 132: Mosaic floor inscriptions from Central Italian baths, roughly at the same scale (De Visscher & De Ruyt 1955, 71, pl. XXXI; Mercando 1979, pl. 18; Maioli 2000, fig. p. 166; Ciuccarelli *et al.* 2012, fig. 5 (modified by author); Ceraudo, Molle & Nonnis 2013, fig. 8; Ceraudo, Molle & Nonnis 2017–2018, fig. 7).

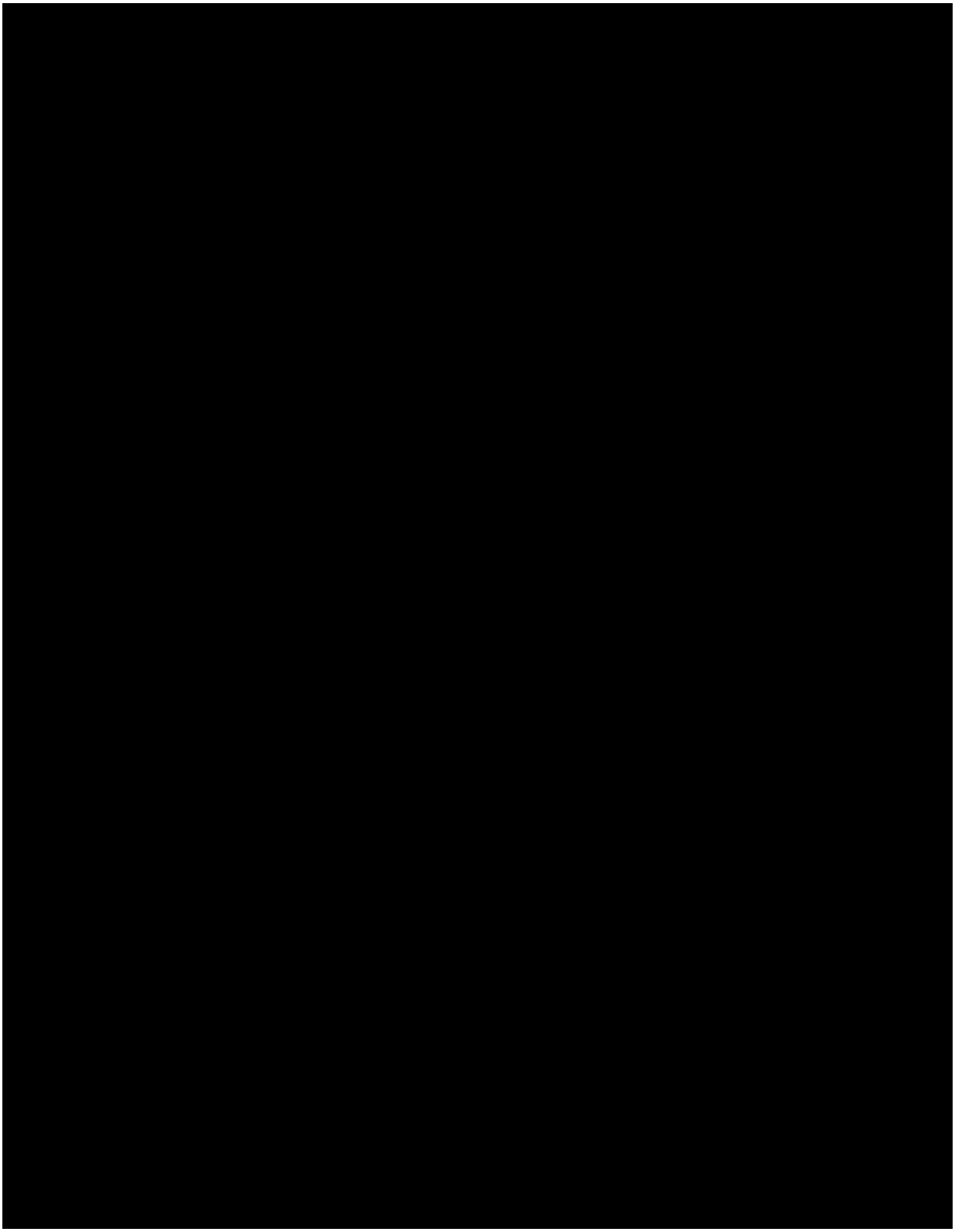


Figure 133: Position and dimensions of the mosaic floor inscriptions in the baths of *Alba Fucens* [Ab.01] [E02] (reconstruction, with possible position of [E04] indicated), *Ancona* [Ma.01] [E08], and *Aquinum* [La.01] [E09]–[E10]. The table indicates the proportion of the surface area of the mosaic floor occupied by the inscription. Black arrows mark the main entrance(s) to the room, dashed line frame the inscriptions (CIUCCARELLI *et al.* 2012, fig. 3; CERAUDO 2019, fig. 5, 11).



Figure 134: Inscription [E09] from *Aquinum* [La.01], seen from the centre of the room (R11), from W (© L. Di Siena).



Figure 135: Inscription [E10] from *Aquinum* [La.01], seen from the centre of the room (R41), from E (© L. Di Siena).



Figure 136: Inscription [E27] from *Forum Novum* (Coarelli 2005, fig. 1).



Figure 137: Inscription [E23] from *Fanum Fortunae* (© EDR).



Figure 138: Duplicate inscriptions [E31]=[E32] from *Interamnia Praetuttiorum* (© EDR).

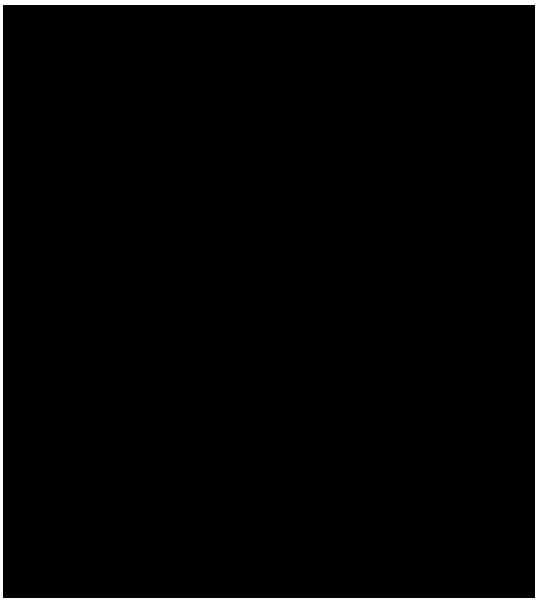


Figure 139: Inscription [E56] from *Praeneste*; the inscription had a duplicate [E57] (© EDR).



Figure 140: Inscription [E49] from the Forum Baths of *Paestum* [Ca.07] (© EDR).



Figure 141: Inscription *CIL* X.1063 from *Pompeii* (© EDR).



Figure 142: Plan of the Small Baths of Hadrian's Villa at *Tibur*, scale 1:400 (BOUET 1998, fig. 6).

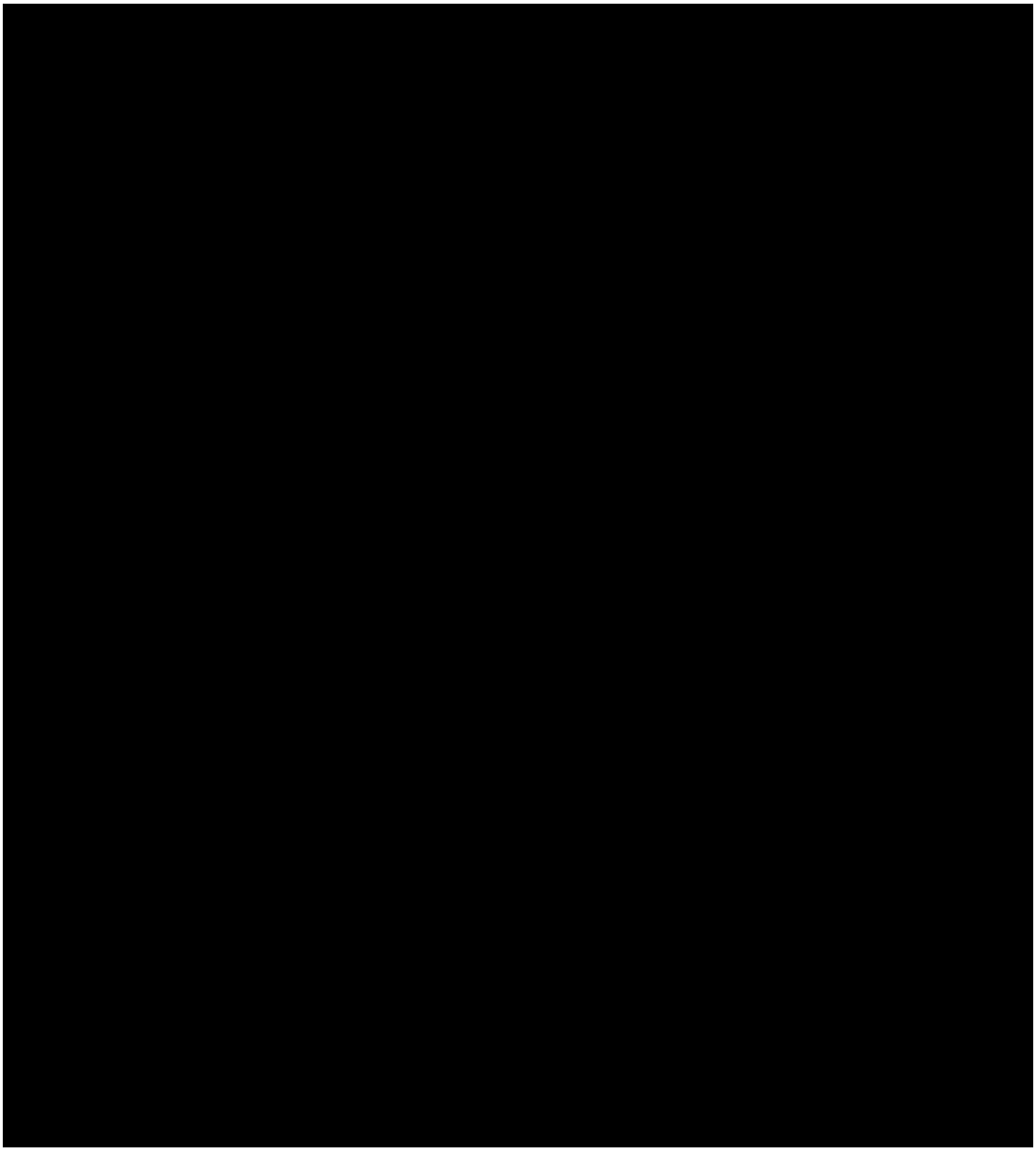


Figure 143: Plan of the Large Baths of Hadrian's Villa at *Tibur*, scale 1:400 (BOUET 1998, fig. 7).



Figure 144: Plans of the baths under Piazza dei Cinquecento/Stazione Termini (**L**, approximate 1:800 scale) and of the baths under San Giovanni in Laterano (**R**, scale 1:800), in Rome (FOULCHÉ 2011, fig. 58, 79).



Figure 145: 1797 Palladio's drawings of the plans of the *Thermae Helenae* (**L**) and of the baths of Palazzo Tittoni (**R**) in Rome. Unknown scale (FOULCHÉ 2011, fig. 85, 102).



Figure 146: Plan of the Lateran Baths in Rome. 'Block-*frigidarium*' highlighted. Scale 1:800 (FOULCHÉ 2011, fig. 29).

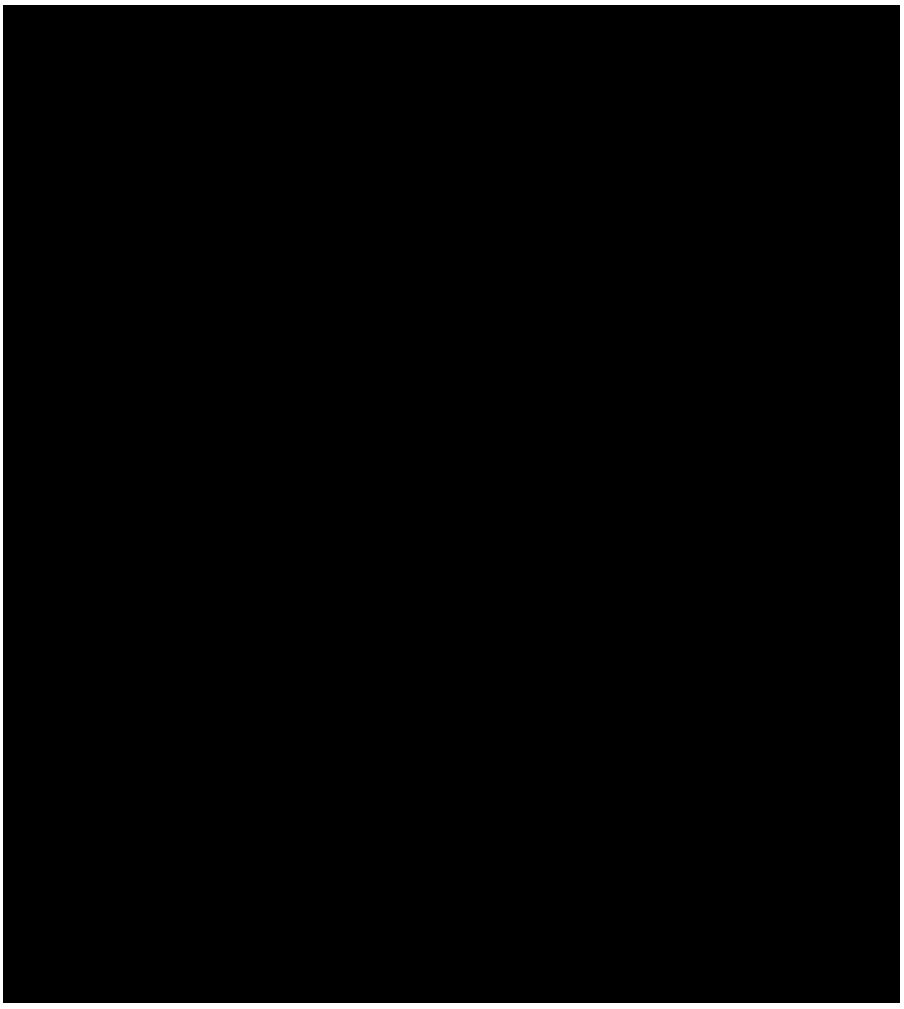


Figure 147: Plan of the Terme di Nettuno in *Ostia*. Scale 1:800 (POCCARDI 2001, fig. 2).

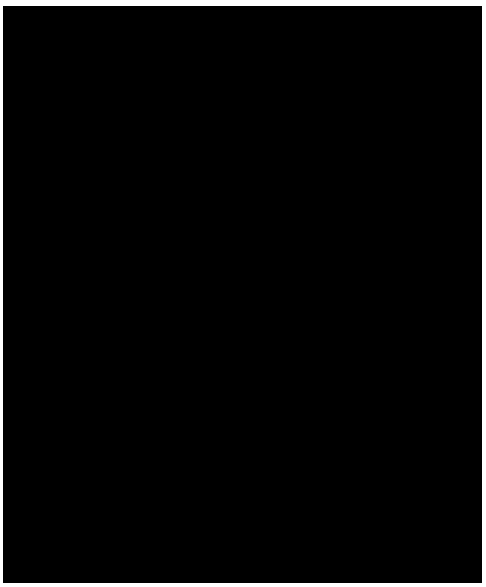


Figure 148: Plan of the Terme di Porta Marina in *Ostia*. Scale 1:800 (POCCARDI 2006, fig. 4).



Figure 149: Plan of the Terme del Foro in *Ostia*. Scale 1:800 (POCCARDI 2001, fig. 9).



Figure 150: Plans of the Terme del Nuotatore (**L**) and of the Terme del Mitra (**R**) in *Ostia*. Scale 1:800 (L: BAKKER 2005; R: HERES 1982, fig. 77).



Figure 151: Plans of the Terme dell'Invidioso (**L**, unknown scale) and of the Terme del Bagnino Buticosus (**R**, scale 1:800) in *Ostia* (L: BAKKER 2007; R: MAR 1996, fig. 9).



Figure 152: Plans of the Stabian Baths (**L**) and Central Baths (**R**) of *Pompeii*. Scale 1:800 (L: TRÜMPER 2017, fig. 8; R: DE HAAN & WALLAT 2006, fig. 1).

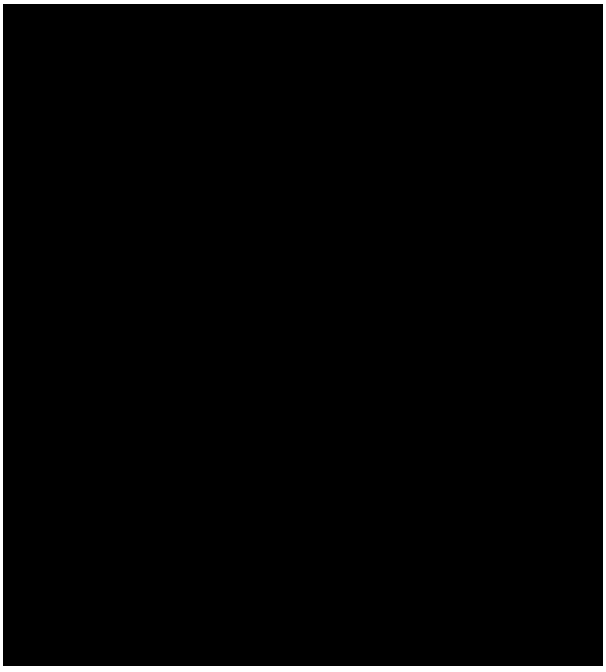


Figure 153: Plan of the baths of *Comum*. Scale 1:800 (JORIO 2011, fig. p. 11).



Figure 154: Plans of the 'Imperial' Baths of *Grumentum* (**L**) and of the baths of *Copia Thurii* (**R**). Scale 1:800 (L: CAPANO 2013, fig. 2; R: D'ALESSIO & MALACRINO 2016, fig. 2).



Figure 155: Plans of the baths of *Turris Libysonis* (**L,** approximate 1:800 scale) and of the Terme a Mare of *Nora* (**R**, scale 1:800) (L: NIELSEN 1993, vol. 2, fig. 134; R: BONETTO *et al.* 2018, fig. 67).



Figure 156: Plans of the baths of *Tharros* (**L**), of the Small Baths of *Nora* (**C**), and of the Small Baths of Marrubiu (**R**). Scale 1:800 (L, R: NIEDDU 1988, fig. 1, 7; C: BONETTO *et al.* 2018, fig. 72).



Figure 157: Plan of the Large West Baths of *Banasa*. Scale 1:800 (REBUFFAT, HALLIER & MARION 1970, fig. 25.14).

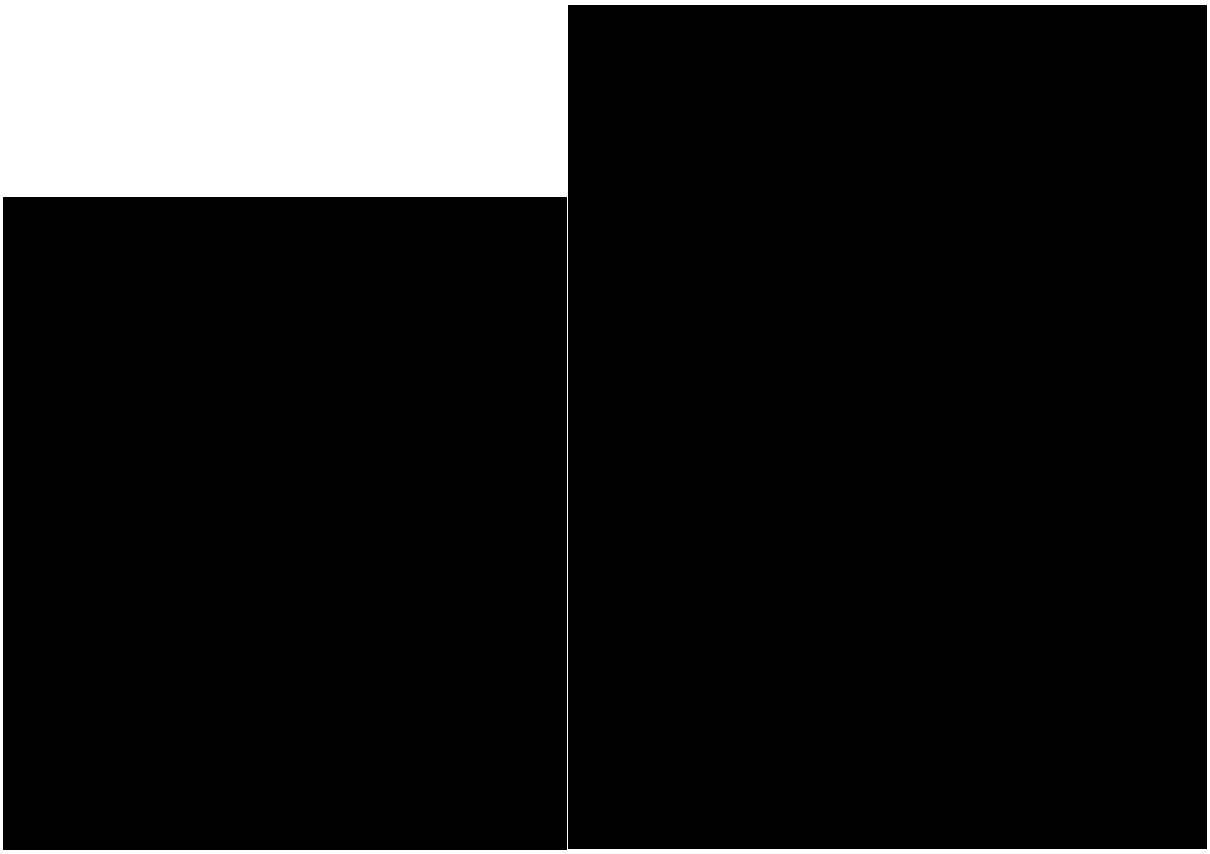


Figure 158: Plan of the baths of *Julia Memmia* at *Bulla Regia* (**L**) and of the Large Baths of *Cuicul*. Scale 1:800 (YEGÜL 1992, fig. 220, 245).



Figure 159: Plan of the West Baths of *Gigthis*. Scale 1:800 (YEGÜL 1992, fig. 251).



Figure 160: Plans of the Large (**L**) and Small (**R**) Baths of *Madaurus*. Scale 1:800 (YEGÜL 1992, fig. 254–255).



Figure 161: Plan of the South Baths of Bosra. Scale 1:800 (FOURNET 2012, fig. 6).

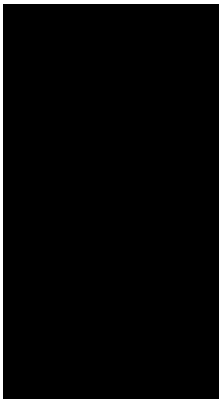


Figure 162: Plan of the Propylaea Baths of *Eleusis*. Scale 1:800 (YEGÜL 2015, fig. 12.12).