Water for men or water for the Gods? The caput aquae of the aqueduct of Santa Maria in Stelle (Verona)

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Abstract

The hypogeum of Santa Maria in Stelle, Verona, is mainly known as a place of Christian worship, built between 4th century CE and 5th century CE. This paper traces the previous phases of the monument, through the analysis of archaeological records, ancient cartography, and historical sources, and explores the reasons for its construction and the people involved. In fact, the site was not originally a place of worship, but a service facility, acting as the *caput aquae* of a small aqueduct, which has been traced back to Pomponius Cornelianus, consuland curator, who lived between 2nd century CE and 3rd century CE.

Keywords

Roman archaeology, ancient topography, archival research, Roman water supply systems, Verona, Regio X

1. Introduction

1.1 Gap in previous studies

Santa Maria in Stelle is a village on the eastern side of the Pantena Valley, 8 km from Verona, famous for the presence of a hypogeum, known in the literature as 'Pantheon', which can be reached through an underground tunnel under the church of Santa Maria Assunta. It is a Christian complex dating back to the end of the 4th century CE, with two apses decorated with wall paintings and mosaic floors. The history of this complex began before its Christian phase, perhaps in the 3rd century CE, when it was only a water channel. Previous studies have focused on interpretations of the Christian paintings (Dorigo 1968; Toynbee 1970, 648-653; Zuliani 1974, 1-8; Dalla Barba Brusin 1977, 258-272; Bisconti and Braconi 2012, 648-653; Lusuardi Siena and Baratto 2013, 182-185; Brandenburg 2014, 239-258; Antolini 2020, 25-62), but earlier phases of the structure have not previously been investigated in depth. Therefore, the water supply system, has thus far been neglected as a subject of study except superficially as integrated into studies of the subsequent phases.

Various interpretations of the water supply system have been put forward over time: a cave dedicated to Trofronio, the tomb of the *Pomponii*, an *aedes catechizandorum*, a nymphaeum and an oratory for private worship. All these interpretations differ on the function of the hypogeum in a second phase of its construction, contemporary with the realisation of the apses and the paintings, while they agree on the formal function of the building as a water supply system. Thus, the debate remains open.

This paper will attempt to reconstruct the former function of the complex based on archaeological and archival data, as well as the reasons that probably led to its construction and the people involved in the project. At the same time, it will try to prove that all building activities inside the hypogeum were adapted over time to the presence of the water supply system, which was always in operation.

1.2 The water supply system and its context

The fragmentary nature of the documents relating to the Roman phase does not allow scholars to clearly place the complex of Santa Maria in Stelle within the broader context of settlement dynamics of the Pantena valley. The archaeological remains offer only limited insight into the Roman presence, with epigraphic material representing the most significant source of information (Franzoni 1987, 93-98; Franzoni 1991, 87-96). As previously observed by Lanfranco Franzoni (1991, 90), the pervasive occurrence of inscriptions associated with the gens Valeria in the area could indicate the presence of their properties in the valley (Cenati, Gregori and Guadagnucci 2015, 200-204). It is regrettable that these archaeological observations are absent, which precludes any possibility of confirming whether this wealthy family, attested in Verona since its foundation (Buchi 1987, 13-45), may have owned a villa in the Pantena valley. However, we can assume that the ancient landscape was occupied by rural settlements, perhaps centred around a pagus, of which no evidence remains. Similarly, no evidence of centuriation has been found (Capuis et al. 1990, 133-136; Muzzioli 2010, 36-37), although its presence has recently been hypothesised without any convincing arguments being proposed (De Zuccato and Checchi 2019, 146). Due to this lack of information, in order to better understand the settlement dynamics of the Pantena Valley, it is therefore necessary to analyse the neighbouring contexts, which provide more information: Verona and Montorio (Fig. 1).

Verona (Fig. 1, A) has been inhabited since the Protohistory by indigenous people who settled on the slopes of the hill of San Pietro (Malnati, Salzani and Cavalieri Manasse 2004, 347-378.), where a settlement is thought to have existed in the Bronze and Iron Ages. The plain, on the other hand, was occupied extensively only during the Roman period (Cavalieri Manasse 2018, 42-43; Bruno and Cavalieri Manasse 2022, 43-55). Scholars agree in identifying a first phase of the Roman *colonia* – established in 89 BCE – which overlapped with the indigenous site, and a second, linked to the granting of the title of *municipium* – founded in 49 BCE – during which the urban layout of the plain was defined.

The hill of Montorio Castle (Fig. 1, C) has been inhabited since the Iron Age. In the same area a Palaeovenetian necropolis has been identified, dated between 7th and 6th century BCE, later abandoned in 4th century BCE (Salzani 1996, 295; Biondani, Corrent and Salzani 2000, 61; De Angelis 2002, 188; Alloro and Pasa 2003, 19-21; Malnati, Salzani and Cavalieri Manasse 2004, 352-355; Guidi, Candelato and Saracino 2008, 18). Later, the Roman population settled directly on the remains of a Rhaetian settlement, which was abandoned at the end of 1st century CE and moved further east, to the site of the modern village of Montorio (Malnati, Salzani and Cavalieri Manasse 2004, 347-378) (Fig. 1, D).

In addition to these contexts, another crucial element must be considered: the *Via Postumia* (Basso, Bruno and Grossi 2019, 20-21) (Fig. 1, E). This road, planned in 148 BCE, connected Verona and *Vicetia* and probably included connections to the Pantena valley.



Figure 1 - Map of the surveyed area: A: Verona; B: S. Maria in Stelle; C: Montorio Castle; D: Montorio; E: Via Postumia; F: branch of the Via Postumia, probably leading to the Pantena valley (elab. by the author; map data: © Google Earth).

The aforementioned elements permit the formulation of the hypothesis that the Pantena valley was part of the same settlement dynamic that started in the mid-2nd century BCE, and was most prominent after 89 BCE, in which a new process of landscape reorganisation likely commenced in Verona following the settlement of the *colonia* (Fig. 2). It can be reasonably assumed that the valley was included in the local road system and that a route connected the valley to the *Via Postumia*, perhaps at today's Porta Vescovo (Fig. 1, F). This road could have been partially discovered in Grezzana (Fig. 3, 17), and the funerary monuments found along its route could be interpreted as a sign of its importance (Gabrielli 2023, 155; De Zuccato and Checchi 2019, 147-153). In particular, the discovery of a circular mausoleum, dating from late 1st century BCE/early 1st century CE, 18m in diameter and not far from the aforementioned route, could be interpreted as further evidence of the presence of an ancient road system of great importance (De Zuccato and Checchi 2019, 150-152; Franzoni 1991, 92-94). The presence of a place of worship in the area has also been hypothesised, as

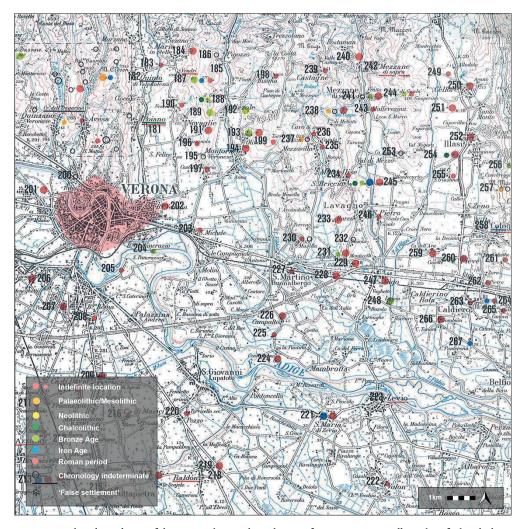


Figure 2 - Archaeological map of the surveyed area where the site of Santa Maria in Stelle is identified with the n. 184 (adapted from Capuis et al. 1990: 98).

evidenced by the discovery of a bronze *tabula ansata*¹ (De Zuccato and Checchi, 152). However, this reconstruction is not supported by tangible evidence.

Finally, regarding the water supply systems, we know that there was no connection between the aqueduct of Santa Maria in Stelle and the water supply systems of Verona (Gangale Risoleo 2018, 279-280) (Fig. 4). Instead, Verona was supplied by two aqueducts, one from the east and the other from the west (Gangale Risoleo 2017, 229-256; Gangale Risoleo 2022, 145-147). This is why the aqueduct of Santa Maria in Stelle should be analysed as a separate infrastructure; its blueprint also doesn't reach Verona².

 $^{^{1}}$ The tabula is inscribed with the following text: M(arcus) Domitius / Servus / v(otum) s(olvit) l(ibens) m(erito).

² Some scholars included the aqueduct of Santa Maria in Stelle in the water supply systems of Verona: Buonopane 1987, 292–294; Ghiotto 2006, 79.

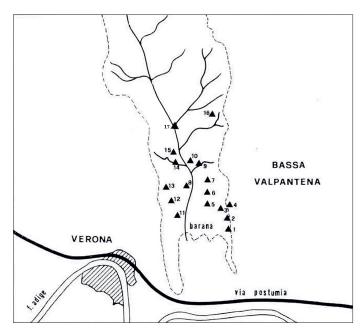


Figure 3 - Sites within the Pantena valley where evidence from the Roman period has been discovered: 1.

Montorio Castle, 2. Gazzol (villa Balladoro), 3. Novaglie, 4. Pipaldolo, 5. Nesente, 6. Vendri, 7. Santa Maria in Stelle,
8. Cassiano, 9. Sezano, 10. Cellore di Sezana, 11. Poiano, 12. Palesago, 13. Quinto, 14. Marzana, 15. Cuzzano, 16.

Romagnano, 17. Grezzana (adapted from Franzoni 1991: 87).

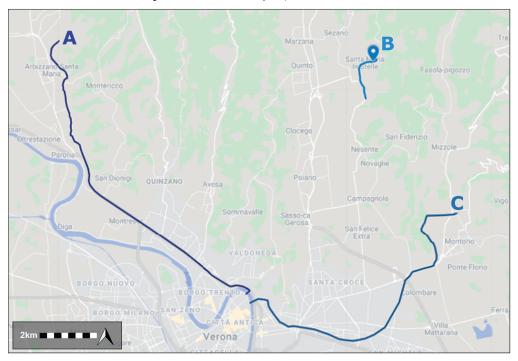


Figure 4 - The aqueducts in the surroundings of Verona: A: the aqueduct of Novare-Parona; B: the aqueduct of Santa Maria in Stelle; C: the aqueduct of Montorio (elab. by the author; map data: © Google My Maps).

2. The complex and its building phases

2.1 The current situation

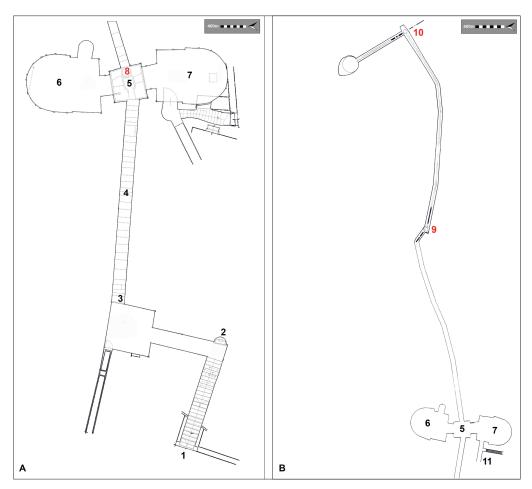


Figure 5 - The plan of the hypogean area (A-B), dropshafts are indicated in red: 1. current entrance, 2. statue of Cornelianus, 3. inscription, 4. first corridor, 5. connecting chamber, 6. northern apse, 7. southern apse, 8. previous location of the inscription (15th century CE), 9. dropshaft, 10. dropshaft, 11. entrance in use since at least in 15th century CE and perhaps earlier (adapted from Gangale Risoleo 2018: 272, fig. 6; 275, fig. 8).

The hypogeum is currently accessed by a staircase on the side of the church of Santa Maria in Stelle (Fig. 5, 1). At its entrance is a statue (Fig. 5, 2), made in modern times by assembling several pieces, perhaps discovered in the surrounding area, and traditionally attributed to the figure of *Cornelianus*, the supposed founder of the complex. Then, a first corridor leads to the apsidal rooms. At the beginning of this corridor there is an inscription (Fig. 5, 3), originally placed in another part of the complex, attributing the construction of the building to the Cornelian family. The corridor (Fig. 5, 4) leads to an atrium between the two apses (Fig. 5, 5). The northern one is decorated with early Christian paintings (4th–7th century CE) and a

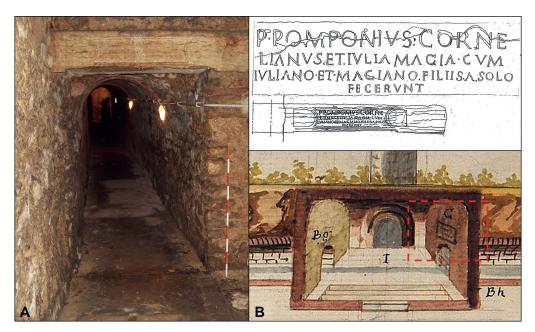


Figure 6 - The inscription inside the hypogeum: A. the current position (photo by L. Marino); B. the original position in a drawing from the end of 18th century CE, marked with letter C (BCVR, ms. 1002, c. 1r., detail).

mosaic floor (Fig. 5, 6). The southern apse (Fig. 5, 7) is also decorated with paintings from the same period and a mosaic floor, badly preserved. A water channel runs along the connecting rooms and in this first room there is a double basin (Fig. 5, 8). There are two more basins along the course of the channel before it reaches the spring (Fig. 5, 9 and 10).

2.2 Reconstructing the ancient building through sources.

By analysing documents of 15th century CE and some drawings of 17th century CE onwards, it is possible to reconstruct some details of the complex that have been erased in modern times. Thanks to the descriptions of Felice Feliciano (*CIL* V, 3318, 3706=Feliciano 1465, c. 129r) and Pietro Donato Avogaro³ (Peebles 1962,1-47; Lodi 1996, 247; Ferrari 2003, 799-801; Gangale Risoleo 2018, 266), it is possible to reconstruct the access to the hypogeum from at least 15th century CE⁴ (Fig. 5, 11). Thanks to their descriptions, we can also relocate the inscription attributing the origin of the whole complex to the family of *Cornelianus*⁵ (*CIL* V, 3318=Feliciano 1465: n. 149): *Publius Pomponius Cornelianus* and *Iulia Magia*, together with the sons *Iulianus* and *Magianus*, built it from the ground up.

The inscription was not located at the beginning of the corridor (Fig. 5, 3; Fig. 6, A), but on the wall, above the same corridor, in the atrium between the two apsidal rooms (Fig. 5, 5; Fig. 6,

³ BSVP: cod. 647.

⁴ BSVP: cod. 647, c. 1v r. 17: in specu(m) triginta gradib(us) descendis.

⁵ *P(ublius) Pomponius Corne/lianus et Iulia Magia cum / Iuliano et Magiano filiis a solo / fecerunt.* My previous interpretation of the position of the inscription according to Pietro Avogaro was wrong (Gangale Risoleo 2018, 276).

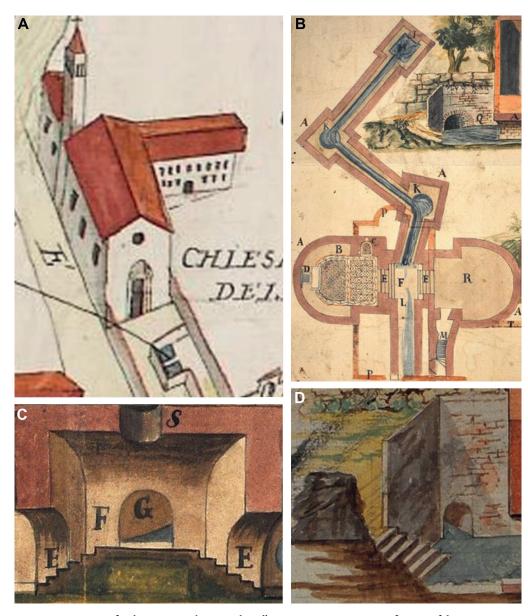


Figure 7 - A series of 18th century CE drawings that allow us to reconstruct certain features of the monument that are now lost: A. details of the presence of a basin at the current entrance to the hypogeum (ASVR, Campagna famiglia, mappe e disegni, 337, concession to publish n. 17/2024); B: the absence of a pavement along the water channel (BCVR, ms 1002, 2r, detail); C: the presence of a staircase that allowed access to the last dropshaft located between the two apses (BCVR, ms 1002, 2r, detail); D: the presence of some steps at the basin located at the current entrance to the hypogeum (BCVR, ms 1002, 4r, detail) (all pictures elab. by the author).

B). In addition to these elements, there is a series of drawings from the 17th–18th century CE⁶ that show a basin in the place of the modern entrance (Fig. 7, A and D). Furthermore, thanks to Cristofali's 18th century CE drawings⁷ (Gangale Risoleo 2018, 276), we can reconstruct the presence of some steps that descended inside the outermost basin and others that were built in the centre of the atrium that communicated with the two apsidal rooms, to connect the two spaces without interfering with the aqueduct channel (Fig. 7, C). From these drawings we can also presume new information on the pavement of the first part of the channel (Fig. 7, B). In fact, the channel didn't have a pavement until 1817, when the local priest decided to build one after a serious flood (Pighi 1903, 16; Gangale Risoleo 2018, 275).

2.3 The first phase of the complex

2.3.1 The water supply system

So far, we can distinguish the different phases of construction of the complex, the first of which (Linington and Falamaki 1970, 83–84) was part of a water supply system. After this phase, the northern apses (Fig. 5, 6) were built first, cut into the rock, while the southern apses (Fig. 5, 7) were partly cut and partly built (Linington and Falamaki 1970, 83). This means that the water channel was built against a cliff (Gangale Risoleo 2018, 274–275).

However, the hydraulic function of the complex seems never to have been interrupted, because even when the complex became a place of worship, new solutions were found to keep the water flowing: a side access (Fig. 5, 11) (Gangale Risoleo 2018, 274-275) that did not interfere with the channel and some steps to overcome it were built at the point of passage between the two apsidal rooms (Fig. 7, C). However, we do not know whether the water had a function within the ritual practices or whether it was used only for civil purposes. It is also doubtful that the hypogeum ever had a funerary function (David and Maccani 2007, 16; Gangale Risoleo 2018, 274-275), as this would be difficult to reconcile with the passage of fresh water. The funerary inscription of *Pomponia Aristoclia*⁸ (CIL V, 3706) was probably placed in the hypogeum later.

The identification of the different building phases is a key point for understanding the complex transformations and, above all, its original phase when it was not a place to receive the faithful, but a service passageway for the management and maintenance of the water supply system.

The aqueduct, in this first part, is characterised by the presence of three dropshaft cascades (Fig. 8) (Chanson 2000, 56-67, 69-70), located at the intersections of the blueprint, and we

⁶ ASVE: Provveditori ai beni inculti, Verona, r. 102, m. 86, dis. 5; Campagna famiglia, mappe e disegni, 157, 'Uso acque di S. Maria in Stelle' (1688 nov. 10); Campagna famiglia, mappe e disegni, 154, 'Confini possessi Giusti in Villa delle Stelle' (1735 gen. 29); Campagna famiglia, mappe e disegni, 337, 'Rilievo acque di spettanza Giusti' (1748 giu. 26).

⁷ BCVR: ms. 1002, cc. 2 r. e 4 r.

Other inscriptions of a funerary type are attested within the hypogeum, and it is likely that they come from the surroundings.

⁹ The scholar defines *dropshaft cascades* as hydraulic systems used in the Roman world to dissipate energy and possibly to collect sediment where there were steep gradients along the short sections of an aqueduct, as opposed to steep chutes, located along longer sections (with greater horizontal development). It is thought that they also had the function of re-oxygenating the water and improving its quality (Vitr. *de arch.* VIII, 6, 6; Plin. *NH* 31, 58; see also Sherwood, et al. 2020, 349, 350).

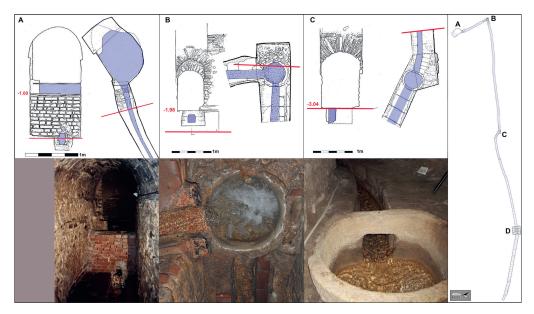


Figure 8 - The dropshafts located along the first section of the aqueduct: A. first basin; B. first dropshaft; C: second dropshaft; D: third dropshaft (adapted from Gangale Risoleo 2018: 272, fig. 6; photos by L. Marino).

have assumed the presence of a fourth basin, perhaps a reservoir (piscina limaria?), at the modern entrance (Fig. 7, A and D).

There are three stone basins associated with the dropshaft cascades, probably installed to allow the water to decant and scatter the debris transported along its course (Gangale Risoleo 2018, 270-271). This hypothesis seems to be confirmed by a note from 18th century CE¹⁰ which mentions the presence of a large amount of gravel at the supposed reservoir and inside the channel, which caused the flow to slow down. The same circumstance is reported by Giovanni Battista Pighi at the beginning of the 20th century CE (Pighi 1903, 15), who testifies that in the 18th century the channel had to be reclaimed by raising the upstream section. Furthermore, in 1818 (Pighi 1903, 16), a flood swept a lot of debris downstream, destroying the walls of the basin at the entrance to the hypogeum and filling it up to its source. The water, unable to find an outlet, flooded the church above.

The basins at the dropshafts and the reservoir may have had the same function (Fig. 8), allowing the debris to settle to the bottom. At the same time, the dropshafts controlled the flow of water: the water goes from an altitude of -1m to -4.13m over about 130m, giving a slope of 2.4%¹¹ (Pace 2010, 18–21). It is possible, however, that the gradient was greater and that the current geometry is the result of modern works carried out with the aim of reducing the slope and avoiding possible flooding inside the channel.

¹⁰ ASVR: Campagna famiglia, mappe e disegni, 337, 'Rilievo acque di spettanza Giusti' (1748 giu. 26).

¹¹ Vitruvius (de arch. VIII, 6, 1) recommends a slope of no less than 5% (rivi libramenta habeat fastigata ne minus in centenos pedes sicilico) while Pliny says that it must correspond to 2% (NH 31, 31: libramentum aquae in centenos pedes silici minimum erit; si cunicolo veniet in binos actus lumina esse debunt).

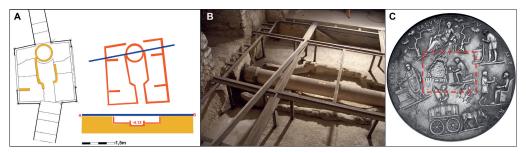


Figure 9 - The third dropshaft located between the apses and its comparison with a water basin depicted in the so-called 'pátera de Otañes': A: plan of the dropshaft (adapted from Gangale Risoleo 2018: 272, fig. 6); B: photo of the dropshaft (photo by L. Marino); C: patera de Otañes (adapted from Iglesias Gil and Ruiz Gutierrez 2012: 351, fig. 2).

The first two basins at the dropshafts have a very simple configuration (Fig. 8, B and C): a stone basin with an outlet hole, the bottom of which is at a lower level than the supply channel at the edge of the basin. This configuration was modified in the second basin (Fig. 8, C). Here, in modern times, a pavement has been built so that the water flows underneath it, thus varying the height of the incoming and outgoing water in relation to the settling basin.

A third basin is in the atrium between the two apsidal rooms (Fig. 8, D; Fig. 9, A and B). The basins were probably made of stone to prevent erosion caused by the acceleration of the water flow due to the presence of the dropshafts (Chanson 2000, 59, 67, fig. 18).

This basin is currently covered by a metal grating (Fig. 9, B), and it is not possible to determine its correct height in relation to the two apsidal rooms. It is at -0.50 m above sea level, while the stone slabs placed laterally are at -0.35/-0.40 m above the level of the hypogeum (-4.00/-4.14 m above sea level). It was intercepted during the laying of a fibre-cement pipe in 1957¹² (Franzoni 1991, 101; Gangale Risoleo 2018, 269, fig. 4), but has certainly been affected by the various restorations carried out in the hypogeum. The presence of a staircase was previously reconstructed here, but it no longer exists. It was discovered in 1972¹³ (Franzoni 1991, 101) during some investigations carried out by the former Soprintendenza Archeologica of Padua. Franzoni proposed that it was reconstructed like the other two basins at the dropshafts but is also composed of a rectangular part that framed the circular one, narrowing slightly to the size of the water channel. The lack of evidence does not allow a precise reconstruction. The morphology seems to be different from the others, but it is difficult to determine whether these differences are decorative or otherwise functional¹⁴. One hypothesis is that it contained a filtering system that has now been lost¹⁵; however, a ritual function cannot be ruled out.

Dropshafts are often associated with the presence of inspection manholes (Fig. 10, C); perhaps because they are recognised as sensitive points within the channel, requiring careful inspection and frequent maintenance (Zanovello 1997, 668). Ancient sources recommend that they should be located every ca. 35m¹⁶ (Sherwood, et al. 2020, 348, 350). It is likely that they

¹² ADSVR: disegno 173/124, Verona 22.02.57, Acquedotto rurale di S. Maria in Stelle.

¹³ ASAVR: L. Benvegnù, Verona. Ipogeo di S. Maria in Stelle, 1° agosto 1972.

¹⁴ Some examples in Dessales 2013: 80-113.

¹⁵ Maybe a 'disposif d'èvacuation' (Dessales 2013, 77). See also Alarcão and Etienne 1977, 51 ss. and plate LXXVI.

¹⁶ Vitruvius mentions the construction of these vertical shafts (de arch. VIII, 6, 4: ...parietes cum camera in specu struantur

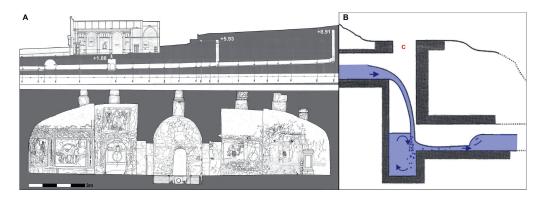


Figure 10 - The relationship between dropshafts and inspection manhole: A: section of the first branch of the conduit and the central part of the hypogeum (adapted from Marino and Galante 2008: 50); B: sketch of the operation of a dropshaft where the letter C marks the inspection manhole (adapted from Chanson 2000: 61, fig. 10).

were built during the construction phases of the *specus*, to orient the underground excavation during construction, and to allow air circulation as well (Mari 1991, 165; Tölle-Kastenbein 1993, 109–111). In the hypogeum, these are all arranged according to the basins (Fig. 10, A). The one in the atrium between the apsidal rooms, now bricked up, is located at a height of 7.30 m; and the others remain at ca. 13m and 16m, respectively.

The area of the aqueduct in the hypogeum illustrated so far is about 160m long and can be identified as the *caput aquae*¹⁷ of the water supply system (Fig. 11). The aqueduct continued downstream, along a reconstructed route of about 1.25km. Thanks to Pietro Avogaro's indications (Lodi 1996, 254; see also Gangale Risoleo 2018, 268-269), we can partially reconstruct its course, at least in 15th century CE. From the hypogeum it continued towards Villa Giusti-Puttini and then ended in the locality of Vendri (Lodi 1996, 232; see also Franzoni 1991, 86-87 and Gangale Risoleo 2018, 269-270) (Fig. 11, B). This information is partly confirmed by modern cartography¹⁸, although the route has been modified to some extent to coincide with the modern road. This may have happened in 1837, when the public washhouse was built (Antolini 2006, 74-76) (Fig. 11, C). The aqueduct was still functional in this period.

et ita perducatur, puteique ita sint facti uti inter binos sint actus) and also Pliny (HN 31, 31: libramentum aquae in centenos pedes sicilici minimum eri, si cunicolo veniet, in binos actus lumina esse debebunt).

This word refers to the place where an aqueduct begins and doesn't describe a precise structure. Ancient sources give different interpretations, but they don't explain it in detail: a) *Frontinus* (Aq. 5, 5) reports that Aqua Appia started from a conduit placed a capite, where the source started, but doesn't explain the morphology of the structure placed at the beginning of the aqueduct (Del Chicca 2004, 8-9, 155-156, 303); in another passage he underlines that he measured the amount of water of Rome's aqueducts starting from the *capita ductum* (Aq. 64, 4; Del Chicca 2004, 50-53, 303); b) *Vitruvius* (de arch. 8, 6, 3) doesn't describe a drive structure but he uses *caput fontis* to indicate the water source in general (Gros 1997, 1140-1141, 1185); c) Ulpian (43, 20, 1, 8) proposes a brief description of the term *caput aquae*, specifying that from a legal point of view it is the place where the water comes from if it's spring water, and it is the place where the conduit starts if the water comes from a river or a lake (Capogrossi Colognesi 1966, 13-15). For a brief archaeological overview of these structures see: Tölle-Kastenbein 1993, 25-32; Trevor Hodge 2002, 67-79; Pace 2010, 810. A good example is the *caput aquae* of Trajan's aqueduct in Rome (Quilci 2009, 455-458; O'Neill 2014, 201-214).

¹⁸ ADSVR: disegno 173/124, Verona 22.02.57, Acquedotto rurale di S. Maria in Stelle; see also Gangale Risoleo 2018, 269, fig. 4.



Figure 11 - The aqueduct of Santa Maria in Stelle from the church (A) to the villa Giusti-Puttini in Vendri (B), the public washhouse (C), and the church of San Zeno in Vendri (D) (elab by the author; map data: © Google Earth).

2.3.2 Pomponius Cornelianus and his family in Santa Maria in Stelle

Among the features that we have highlighted to reconstruct the first phase of the complex, two elements could be related: the presence of the steps at the end of the hypogeum (Fig. 7) - where we have hypothesised a reservoir -, and the inscription that could attribute the construction of the water supply system to *Pomponius Cornelianus* and his family (Fig. 6). This inscription states that *Pomponius Cornelianus* and his family built an unspecified building from the ground up $(a \ solo)^{19}$.

We have reconstructed its former position inside the hypogeum at least during the 15th century CE, fixed in one of the walls of the atrium (Fig. 6), above the section of the water channel that leads to the supposed *reservoir*. We could hypothesise that it was moved in 19th century CE, when the staircase that still gives access to the hypogeum was built. However, it is also likely that the position of the inscription in the 15th century CE was not the original one, and we propose to link the inscription to the steps near the reservoir. These steps were probably the remnants of a service staircase that gave access to the underground through a structure on a higher level that provided access for maintenance work. The reservoir was covered, and part of it was above ground. The inscription of *Cornelianus* may have been placed here to celebrate the family that built the complex. The inscription must therefore have once

¹⁹ For comparison see CIL XI, 1222 (=EDR081079: a solo erexit) and CIL XI, 7285 (=EDR079090: ad solum deiectis); see also Tomasi 2021: 13–26, 97–107; Riera 1994: 108 (CIL 6, 1258=EDR104280), 118–119.

been exposed on the front of this building, rather than hidden in the water channel. It is possible that this structure collapsed, leaving the reservoir in the open air, and its materials were used to build some of the villas in the area (Lodi 1996, 209-263).

However, it must be stressed that the inscription does not mention an aqueduct²⁰ and the reference to the building remains generic. It could be interpreted as a structure built from the foundations, but it is also possible that the intention was to indicate that the water supply system had been built from the source.

Pomponius Cornelianus is known from three other inscriptions, thanks to which we can outline his cursus honorum and his presence in Verona and the Veneto region. Two of these are dedicated to Jupiter, the Preserver, and come from Santa Maria in Stelle. One of them is lost (CIL V, 3243)²¹. The second, carved on an altar, is now in the Museo Lapidario Maffeiano in Verona (CIL V, 3254=EDR093827; Modonesi 1995, 30-31, n. 24)²². A third, found in Schio (CIL V 3106=EDR145645; Venturi 1825, 88; Franzoni 1975, 37, n. 13; Ghiotto 1997, 183-189; Ghiotto 2006, 69-82)²³ and carved on an altar, is dedicated to the Augustan Nymphis and Lymphis.

Thanks to these inscriptions we know that *Pomponius Cornelianus* was *consul*, *curator rerum publicarum* and received the title *clarissimus iuvenis*. There is also a connection with water, because at the beginning of his career, as a young senator, he contributed to the discovery (or restoration) of a spring near Schio (Vicenza), for which he donated an altar to the *Nymphae Lymphaeque Augustae* (Bassignano 1987, 323-324)²⁴. It is also interesting to note his offering in favour of *Iuppier Conservator* - a worship particularly widespread in Verona (Bassignano 1987, 335) - as gift for the good health of the dedicant and his family. The involvement of the whole family is reflected in the inscription, which dates to the construction of the water supply system.

This makes it possible to identify *Pomponius Cornelianus* with the *consul suffectus* of the same name of 237 CE (*PIR*, III, p. 76, nn. 533–534)²⁵, or at least to date his activity in the Severan period. It is not clear whether the family originated from Verona or Vicenza, although the oldest inscription places the young *Pomponius* in the territory of Vicenza (Cenati, Gregori and Guadagnucci 2015, 199).

It is interesting to report on other people with the same cognomen (probably derived from the nomen Cornelius) who were involved in the construction of water supply systems; P. Cornelius Cornelianus was a manufacturer of lead pipes (EDR158985) and water distribution boxes (CIL XV, 7775 a-b=EDR141323, EDR141325) in Castrum Novum (Civitavecchia), and six members of the Gens Cornelia (L. Cornelius Longus, M. Cornelius Avitus, L. Cornelius Longus, C. Cornelius Servinus, and M. Cornelius Cornelianus), offered funds for the construction of the aqueduct of the municipium Flavium Ebusum, today's Ibiza (CIL II, 3663). See also Priuli 1986, 194-195; Bruun 1989, 337; Marì Casanova 2021, 2-5.

To Jupiter Optimus Maximus, the Preserver, for the good health of Publius Pomponius Cornelianus, Iulia Magia and his sons Iulianus and Magianus... $\{Iovi/Conservat(ori) pro salute/P(ubli) Pompon[i]/Corneliani et Iuliae/Magia[e] e[i]us et Iu[i]/ian[i] et [Magiani f(iliorum)] - - -].$

To Jupiter Optimus Maximus, the Preserver, from Publius Pomponius Cornelianus consul and public administrator [I(ovi) O(ptimo) M(aximo) / Conservatori / P(ublius) Pomponius / Cornelianus / consularis / curator / rerum / publicarum].

²³ To the Nymphs and the Augustan Lymphae for the return of the waters, *Publius Pomponius Cornelianus*, a young senator, dedicated following a vow [*Nymphis Lymphisq(ue) / Augustis ob reditum / aquarum / P(ublius) Pomponius / Cornelianus c(larissimus) i(uvenis) / ut vovit.*]; Museo Naturalistico-Archeologico of Vicenza (inv. n. E1-62).

²⁴ Other similar texts come from *Ateste* (*CIL* V, 2476=EDR130474), from *Vicetia* (*CIL* V, 3184=EDR146340) and from *pagus Arusnatium* (*CIL* V, 3915=EDR112946).

²⁵ See also Eck 1980, 300, n. 76; Alföldy 1982, 345, n. 40; Breuer 1996, 266, V42; Franzoni 1975, 37, n. 13; Sartori 1960, 246-247.

We also know that his sons had similar careers. The eldest one, *Pomponius Iulianus*, was governor of the province of Arabia around 235-236 CE (*PIR* III, p. 77, nn. 543-544; CIG 4584 add. S. 1181)²⁶ and perhaps also became a *consul* like his father. The second son, *Pomponius Magianus*, was governor of Thrace under Gordian III between 241 and 244 CE (*PIR* III, p. 77, n. 549)²⁷ and may also have become a *consul*. It is not clear whether the inscription on the *consul Publius Pomponius Magianus* from Pozzuoli (*CIL* X, 8180=EDR169759) can be linked to him. Instead, *Pompon(ius) Iulianus* (*PIR* III, p. 77, n. 543)²⁸, *praefectus ducenarius* of the *Legio II Parthica*, must be linked to another branch of the family.

In conclusion, we can hypothesise an intervention of the family of *Cornelianii* for the construction of the water supply system in 3rd century CE. However, we cannot exclude the existence of an older system belonging to the same family, which probably owned some *praedia* in the valley.

3. Reasons for construction

We have outlined the main features of the structure of the *caput aquae* of the aqueduct of Santa Maria in Stelle and hypothesised its chronology, but one crucial point remains to be analysed: why did the *Cornelianii* family decide to build this infrastructure?

Hugo Brandenburg (2014, 239–258) has suggested that the complex was a private water supply, later transformed into an *oratorium* of Christian devotion, perhaps decorated in imitation of some public buildings, with the aim of celebrating in a private context the splendour of a cult that had initially manifested itself only on the initiative of the Empire. The scholar places the intervention in a context suspended between private initiative and imitation of imperial initiative (Brandenburg 2014, 239). *Cornelianus*, owner of several *praedia* in the valley, would have decided to build a water supply system for agriculture, but perhaps also to embellish his villa with a nymphaeum or *balneum*²⁹. Moreover, the presence of all the members of the *Cornelianii* family in the inscription seems to confirm the private nature of the building.

The aqueduct reached a property of the *Cornelianii*, which could not have been far from the source. The reconstruction of the aqueduct's path leads to Vendri (Fig. 11, B). Like the spring itself, this place belonged to the Giusti family in the 15th century CE, and there was a villa with a well from which spring water was drawn³⁰. It is therefore plausible to assume that the pre-existing channel was reused, and that the arrival point coincides with the site of the villa of the *Cornelianii*. There is no evidence of villas in the Pantena valley (Franzoni 1987, 93), but some remains from the Roman period can be identified in Vendri: two altars with a crowning *foculus*, part of the front of a sarcophagus and an altar dedicated to *Iuno* (*CIL* V, 3233)³¹. We have

²⁶ See also: Breuer 1996, 266-267, V43.

²⁷ See also: Breuer 1996, 267, V44.

²⁸ See also CIL VI, 793=EDR138686; see Breuer 1996, 267-268, V45.

²⁹ For comparisons of aqueducts in the *suburbium*, see: Thomas and Wilson 1994, 139-196; Wilson 1999, 314-331; Dell'Era 2000, 249-262; Taylor 2000, 57-61; Bruun 2003, 485-501; De Franceschini 2005, 144-156, 163-166, 199-202, 209-214, 222-236; Marzano 2007, 165-171; Munzi 2007, 215-229; Bannon 2009; Viitanen and Korhonen 2014, 249-252; Bruun 2015, 132-150; Sánchez 2015, 289-299; Gangale Risoleo 2020, 25-40. See also Bruun 2009, 575-604; Maganzani 2012, 153-157.

³⁰ ASVR: Campagna famiglia, mappe e disegni, 155, 'Irrigazione possessi Giusti (1598 lug. 02)'; see Gangale Risoleo 2018, 270.

³¹ To the holy Juno Luna Regina, P. Vitullius Philologus, sexvir augustalis, offered, as requested [Jun(oni) Lun(ae) reg(inae)

a good comparison in nearby Montorio (Fig. 1, D), where a villa-dated between the middle and late imperial period-was built on the route of an aqueduct that supplied a *balneum* (Capuis, et. al. 1990, 135; Gangale Risoleo 2017, 238-239).

However, the need to celebrate the construction of the building with an inscription perhaps underlines that the private initiative had an impact on the surrounding area³². We can therefore assume that the water supply system provided water not only to the *Cornelianii* family, but to all the inhabitants of the valley, and that the same *balneum* that is supposed to belong to the villa, was perhaps sometimes made available to the people of the *pagus*, where the family properties were located (Maréchal 2021, 211-230)³³.

Worship also had an important communitarian function, but if we consider the attested rituals within the Pantena Valley (Fig. 3), we can only gather some indications from inscriptions and toponymy (Franzoni 1991, 84-87). These indicate the presence of female cults (*Venus, Iuno* and *Matrona*) and some dedications to the *Lares*. An exception to this is Vendri (Fig. 3, 6), where the end of the aqueduct has been traced. The presence of a *vicus Veneris* since 832 CE (Franzoni 1991, 86) and an old note led to the hypothesis that the remains of a temple dedicated to Venus may be located underneath the local church of Vendri, dedicated to San Zeno (Fig. 11, D) (Orti Manara 1848, 45; Antolini 2013). Unfortunately, there are no archaeological remains that can be used to confirm this reconstruction.

Returning to Santa Maria in Stelle, it can be postulated that the complex also had a ritual function (maybe also connected to *Venus*?) which may have been in continuity with the subsequent developments, such as the establishment of the complex as a place of Christian worship in the 3rd century CE. Furthermore, the discovery of an epigraphic cylindrical altar at Santa Maria in Stelle³⁴ has been interpreted as an indication to define the sacred perimeter of the complex (Orti Manara 1848, table II; Franzoni 1991, 96) (Fig. 12).

Hypothetical ideas for this interpretation can be linked to the shape of the last dropshaft (Fig. 9, A and B) and its comparison with a detail from the so-called 'pátera de Otañes'³⁵ (Iglesias and Ruiz Gutiérrez 2012, 349-365; Iglesias and Ruiz Gutiérrez 2014, 277-294) (Fig. 9, C). This was found in Cantabria and depicts different scenes around a spring that, thanks to an inscription, are known to be *Salus Umeritana*. The basin in the centre of the scene has a similar shape to that of Santa Maria in Stelle, and the poor man next to it, who is barefoot and wearing a short tunic, filling a jar, has been interpreted as collecting healing waters (Iglesias and Ruiz Gutiérrez 2014; 285).

sacr(ae) / P. Vitullius / Philologus / VIvir Aug(ustalis) / (ex) imperio (posuit)]; the inscription is described in Verona in 16th century by Francesco Caroto (Franzoni 1987, 93) and has now been walled up in the villa Giusti-Melloni (Antolini 2013, 7-9). The discovery of three parallelepipedal elements in the floor of the basement of the villa has been linked to an ancient structure (Antolini 2013, 7, footnote 1). See also Franzoni 1991, 86-87 and Capuis, et al. 1990, 133-134.

³² Bruun (2015, 141) suggests another interpretation for this kind of initiative. He thinks that behind the high cost of building a private aqueduct may lie the aim of selling water to the neighbourhood, even giving away part of the land needed to trace the aqueduct in exchange for water.

³³ It could be identified as a rusticum balneum as attested by Columella (Rust. 1.6.19–20).

³⁴ The altar is currently housed in the Museo Archeologico al teatro romano di Verona, and another identical specimen is kept on private property.

The inscription on the front links to a place called 'Salus Umeritana' which is supposed to be in the surroundings of Flaviobriga (Iglesia and Ruiz Gutiérrez 2014, 285-292). It is also interesting to note that on the back of the patera there is a graffito, made in a second phase, that links the object to Lucius P. Cornelianus (Iglesias and Gutiérrez 2014, 287-290).



Figure 12 - The anepigraphic cylindrical altar found at Santa Maria in Stelle: A: a drawing from the 19th century (adapted from Orti Manara 1848, table II, n. 9); B: a photograph of the altar inside the Museo Archeologico al Teatro Romano di Verona (photo by the author).

We cannot exclude a dedication to nymphae, which is very common for the sacred value attached to running water in antiquity (Riera 1994, 119; Corbier 1984, 242; Petraccia and Tramunto 2013, 175-191; Bassani 2019, 17-19)36, and which we have already linked to Cornelianus. Among other things, it should be stressed that Lympha has a direct link with agriculture and the success of the harvest (Bassignano 1987, 323). It is also plausible to assume that all these functions coexisted, making the spring multifunctional and a centre of attraction for the vallev. In this sense, an interesting comparison could be made with a monument erected in the late republican period by the Gens

Allia at Ponte Rovescio (Chiusi, ancient Clusium)³⁷, along the route of the $Via\ Cassia$ and perhaps dedicated to a water cult, which, according to a bronze lamina, was active at least until the 1st century CE ($CIL\ XI$, 2097)³⁸.

4. Conclusion

In conclusion, although the evidence is limited, it is possible to hypothesise that the aqueduct of Santa Maria in Stelle was located in a *suburbium*, a distance from Verona, but well integrated with the social and political dynamics of the town. This *suburbium* was populated by *villas* belonging to members of the local elite, integrated into the rural social dynamics, and using water both as a symbol of status and as a means of fidelity to the territory, because we must not forget that most of the water was used for agriculture (Bruun 2015, 136).

Abbreviations

ADSVR: Archivio della società Acque Veronesi s.c.a r.l.

ASAVR: Archivio Soprintendenza Archeologica del Veneto, Nucleo operativo di Verona.

ASVE: Archivio di Stato di Venezia. ASVR: Archivio di Stato di Verona.

³⁶ In Rome, the *statio aquarum* was placed under the protection of the nymph Iuturna.

³⁷ The discovery of some inscriptions (*NSc* 1876: 35-36; *CIL* XI, 7119 a-f; *CIL* XI, 7207), albeit incomplete, allow scholars to link the monument to the *Gens Allia*. See Menichetti 1992, 362, n. 6.5; Paolucci 2005, 71-75; Faralli 2012, 115-118; Giontella 2012, 123-124; but also Pack 1988, 33, 83-84; Raimondi 2001, 111-113; Chellini 2002, 48.

³⁸ Sentius Lucilianus erected as a gift for the Nymphae of the Ogulnia spring {Sentius [L] ucilianus Nymphis aq[uae] Ogulni/ ae d(onum) p(osui)it}; it is in the National Etruscan Museum of Chiusi (inv. 62941). See also Menichetti 1992: 362, n. 6.4; Pack 1988: 53; Paolucci 2005: 27; Paolucci 2023: 60–61.

BCVR: Biblioteca Civica di Verona.

BSVP: Biblioteca del Seminario Vecchio di Padova.

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