

# Water, Wealth, and Social Status at Pompeii: The House of the Vestals in the First Century

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## *Abstract*

The use of water in Roman private houses has been identified as a highly visible status symbol. The detailed study of the House of the Vestals at Pompeii reveals how water features were central to the house's structural changes from the late first century B.C. The owners of the house invested heavily in fountains and pools as key elements in the display of their wealth to visitors and passers-by alike. This article relates the structural development of the House of the Vestals to the social history of decorative water usage, from an initial investment exploiting the pressurized water provided by the new aqueduct early in the Augustan period to the responses to crises following the earthquake of A.D. 62.\*

## INTRODUCTION

The supply of water to cities is a striking feature of the Roman ability to provide an urban infrastructure. The subject recently has seen a growth of research and publication.<sup>1</sup> Much of the water supply was devoted to the functional needs of the population and was accessed through street fountains. Baths created another demand that was part recreational and part functional. There remains, however, the question of how piped water was used in private houses. While fountains and baths can be quite readily observed, especially in the Vesuvian cities, the investigation of water in private houses has been more limited by the degree to which lead pipes have survived *in situ*.<sup>2</sup> Our work in Pompeii at the House of the Vestals (VI.i.7) has recovered

the full structural history of the house, and through excavation and structural analysis has enabled the reconstruction of its complete system of water pipes, drains, and cisterns. This has demonstrated that water features fed by piped supplies were integral to the expression of luxury demanded by the house's owners, which places the question of the use of water for display firmly in the debate on how domestic architecture expressed the social status of the upper classes of the Roman town.<sup>3</sup>

Several general studies on water technologies at Pompeii<sup>4</sup> offer useful overviews, but they lack specific details that only excavation can provide. For example, Jansen<sup>5</sup> studied more than 200 toilets from Pompeii and yet could only discern that two were drained into cesspits, whereas recent excavation projects have revealed that toilets in Pompeii were regularly connected to cesspits.<sup>6</sup> Even when the water systems of complete houses are studied<sup>7</sup> there is a tendency, recognized by Andersson,<sup>8</sup> to examine the specific water-related features largely divorced from the surrounding architecture.<sup>9</sup> Equally, such studies are usually unable to place the water systems within the structural and temporal developments of the houses. Consequently, we often are left with a highly descriptive picture of water use in Pompeian domestic architecture. The extensive excavation in the House of the Vestals has, however, enabled the majority of the water system to be analyzed and has allowed its temporal

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\*The excavation and survey in the House of the Vestals in Pompeii were undertaken by the Anglo-American Project in Pompeii ([http://www.brad.ac.uk/acad/archsci/field\\_proj/ampomp/index.html](http://www.brad.ac.uk/acad/archsci/field_proj/ampomp/index.html) [4 February 2004]). We are grateful to all our colleagues in the project for their contributions in a truly team effort. Particular contributions to results presented in this article include those by Jennifer Beckmann, H el ene Desalles, Eric DeSena, Gary Devore, Briece Edwards, Barry Hobson, Jane Richardson, Astrid Schoonhoven, Abigail Tebbs, Alys Thompson, and Sam Wood. We are grateful to Gemma Jansen and Simon Clarke for their comments and would also like to extend our thanks to Ann Olga Koloski-Ostrow and our other anonymous reviewer for their helpful remarks. It is also a pleasure to record our thanks to Prof. Pier Giovanni Guzzo and Dott. Antonio D'Ambrosio of the Soprintendenza Archeologica di Pompei for their support and encouragement for our

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<sup>1</sup> E.g., De Haan and Jansen 1996; Koloski-Ostrow 2001b; Koloski-Ostrow et al. 2001; Ohlig 2001; Jansen 2002.

<sup>2</sup> Cf. Jansen 2001; Sear 2004.

<sup>3</sup> Cf. Wallace-Hadrill 1994.

<sup>4</sup> E.g., pipe systems (Jansen 2001); toilets (Jansen 1997, 2001); baths (De Haan 2001); fishponds (Higginbotham 1997); and water use in gardens, (Jashemski 1996).

<sup>5</sup> Jansen 2001, 38.

<sup>6</sup> E.g., Varone 1991–1992, 195–6; Peters 1993; Dickmann and Pirson 2002; Jones and Robinson 2004; Hobson 2005.

<sup>7</sup> Jansen 2001.

<sup>8</sup> Andersson 1990.

<sup>9</sup> Although see Sear 2004.

development to be interpreted and its cultural implications explored.<sup>10</sup>

Immediately prior to the arrival of pressurized water from the new Serino aqueduct after 27 B.C.,<sup>11</sup> the House of the Vestals was a large and imposing property. Although not one of the original group of “Hellenistic Palaces” illustrated by Lauter and then by Zanker,<sup>12</sup> the House of the Vestals grew to rival these properties in terms of size and architectural embellishment. The house expanded during the mid first century B.C., when the property took over the entire northern end of Insula VI.i (figs. 1, 2).<sup>13</sup> Such a development was necessary to construct two peristyles and a range of accompanying reception spaces, as well as to secure the vital economic space facing Via Consolare. While the available space made it impossible to construct a grand ambulatory peristyle in the manner of a Hellenistic palace such as the House of the Faun or the House of Pansa,<sup>14</sup> the total ground area covered by the House of the Vestals ensured that it was among the 20 largest houses in the city. At this point the House of the Vestals reached its maximum size, and subsequent phases of rebuilding and redecoration took place within these confines. This suggests that the size of a property alone did not give enough social cachet and that decoration, and, perhaps more important, innovative decoration,<sup>15</sup> was a vital element of how wealth and social status were recurrently displayed.

The owners of the House of the Vestals were clearly followers, or maybe innovators, of Pompeian architectural and decorative fashion. Throughout the later history of the house, successive rebuilding and redecoration phases ensured that it was always at the cutting edge of contemporary Pompeian style. Indeed, the continual redevelopment of this property, of which the adoption of deco-

rative water features was just a facet, can be seen as an expression of the fierce social competition taking place within the upper classes of Pompeian society in the early years of the Imperial period.<sup>16</sup>

The role of water and water features has also been recognized as a significant element in the wide-ranging interpretations of social status and display in Pompeian domestic architecture. Zanker traces the development of the “villa culture of the Roman aristocracy in the late Republic”<sup>17</sup> in the domestic arts of imperial Pompeii, where architecture and decor were used to create illusions of pleasure, wealth, and leisure. During this period there was a transformation in Roman domestic taste in response to the complex factors of social and economic change associated with the rise of urban economic prosperity, the expansion of Roman citizenship, and the need among the upper classes to assert their claim to social leadership.<sup>18</sup> It is into this rapidly changing milieu that the shifting emphasis on the use of water in the House of the Vestals, from purely utilitarian to luxury, must be viewed.<sup>19</sup>

#### THE HOUSE OF THE VESTALS IN THE LATER FIRST CENTURY B.C.

In the second half of the first century B.C. the House of the Vestals would have been among the most imposing residences in the city. The public entrance to the property was located on Via Consolare (fig. 3). An entrance *fauces* (1)<sup>20</sup> led to a large atrium (2) with a tufa impluvium. To the rear of the tablinum (11) was a small peristyle (14) also built from tufa. Axially arranged with the small peristyle was another, much larger, peristyle (39) at the north of the house. Much of the property was floored with *opus signinum*, with mosaic used mostly to decorate thresholds.

<sup>10</sup> Cf. Wilson 2001, 102.

<sup>11</sup> Ohlig 2001, 80–4.

<sup>12</sup> Lauter 1975, 150, fig. 136; Zanker 1998, 33, fig. 2.

<sup>13</sup> Jones and Robinson 2004.

<sup>14</sup> Dickmann 1997.

<sup>15</sup> Cf. Wallace-Hadrill 1994, 143–74.

<sup>16</sup> Cf. Wallace-Hadrill 1994, 143–74; Zanker 1998, 135–203. Such lavish expenditure on housing is an echo of the literature from Late Republican Rome, which documents an escalation in the luxurious nature of urban housing at this time (Plin. *HN* 36.110). The prevailing social and political climate meant that a large, well-decorated house was a necessity for an ambitious politician (Cic. *Off.* 1.138–139), and rivals actively competed against one another to have the most opulent and visible domus (Cic. *Dom.* 100).

<sup>17</sup> Zanker 1998, 135–203.

<sup>18</sup> Wallace-Hadrill 1994, 143–74.

<sup>19</sup> Cf. Koloski-Ostrow 2001a.

<sup>20</sup> The numbers in parentheses in the main text are room numbers relating to the structure of the house in A.D. 79, and were taken from Bragantini et al. (1983). They are illustrated in figs. 2 and 3. It should be noted that the room numbers represent the physical space and that multiple numbers denote a larger area; e.g., the Narciso courtyard was contained by the spaces that later were represented by rooms 27, 34–36. It should also be noted that the use of architectural terms taken from classical literature such as “atrium,” “peristyle,” and “tablinum” are here used as shorthand to enable scholarly communication and in the full awareness of their potentially limited applicability to Pompeian architecture and the forms of social interaction and behavior that these spaces sustained and promoted (cf. Allison 2001).

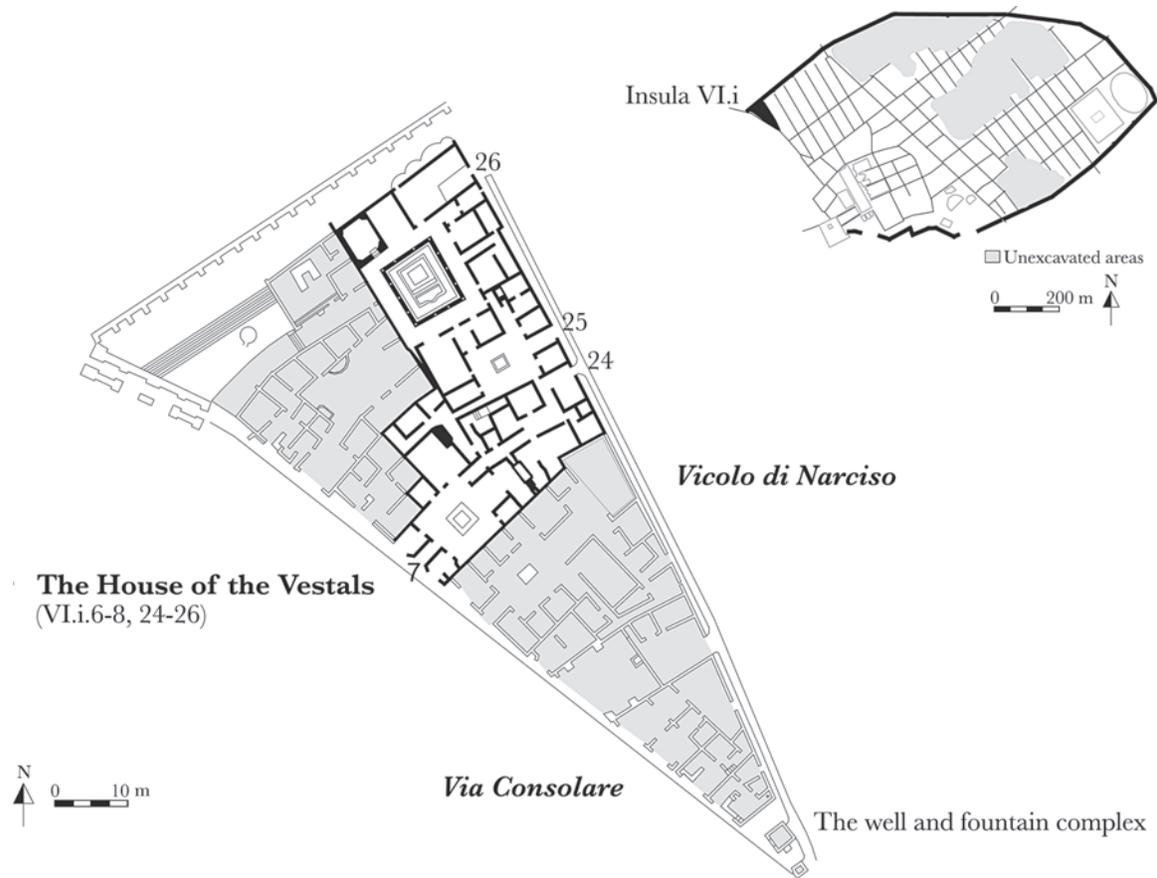


Fig. 1. Pompeii. Insula VI.i and the House of the Vestals

At this time domestic water needs were provided for by underground cisterns in the Consolare atrium (2), to the east of the small peristyle (14), in the small bath suite (7, B), in the courtyard opening from Vicolo di Narciso (27, 34–36), and in the large peristyle (39). Significantly, water usage was strictly utilitarian, and there were no decorative water features prior to the arrival of pressurized water in the house at the end of the first century B.C.

Although the archaeological remains are fragmentary, the early bath suite in the House of the Vestals is an important discovery. De Haan dates the majority of private baths in Pompeii to between 40 and 20 B.C.;<sup>21</sup> consequently, the possession of such a facility in the years before the aqueduct popularized private bathing must have been a real indicator of the wealth of its owners. Moreover, such early bath suites are remarkable for their parsimo-

nious use of water,<sup>22</sup> which clearly demonstrates how water was consumed sparingly prior to the introduction of pressurized water from the aqueduct.

#### THE ADDITION OF PRESSURIZED WATER FROM THE AQUEDUCT

Although Ohlig has argued that an early aqueduct serving Pompeii brought water from a source near Avella in the Apennine Mountains from the early years of the colony around 80 B.C.,<sup>23</sup> there is no evidence for the use of piped water from such an aqueduct in Insula VI.i. The second phase of the public water system transformed access to water in the city. With the construction of the Serino branch of the Campanian aqueduct system by Agrippa around 27 B.C.,<sup>24</sup> the large *castellum aquae* was built to regulate the supply of water and to distribute it throughout the city. As the *castellum aquae*

<sup>21</sup> De Haan 2001, 46. See also Fabbricotti (1976) for other potentially early baths.

<sup>22</sup> De Haan 2001, 42.

<sup>23</sup> Ohlig 2001, 84.

<sup>24</sup> Ohlig 2001, 82–4.



Fig. 2. Room numbers in the House of the Vestals, as of A.D. 79. (After Bragantini et al. 1983)

was located at the highest point in the city, the water was easily conducted from there to public and private users through calibrated, pressurized lead pipes.<sup>25</sup> Due to the topography of Pompeii, however, it was essential to reduce the pressure in the pipes, which was achieved by constructing small secondary water towers throughout the city.<sup>26</sup> The water towers also acted as distribution centers, and numerous service pipes led from the lead tanks surmounting each tower to private consumers.

Exactly how an individual Pompeian householder went about arranging a private supply of water is unknown. However, a near-contemporary Augustan edict from the colony of Venafrum in Campania<sup>27</sup> as well as literary sources from Rome provide insight into how it might have been done.

Individual property owners would have had to contact the aediles<sup>28</sup> for access to specific amounts of water, which was gauged by the size of the lead pipe brought from the main artery.<sup>29</sup> Such private grants of water were only made from the surplus of the public basins, and even that was sold.<sup>30</sup> Frontinus illustrates the care by which these water grants were regulated when he remarks, “as concerns the draft of water by private consumers, it is to be noted: No one shall draw water without an authorization from Caesar, that is, no one shall draw water from the public supply without a license, and no one shall draw more than has been granted.”<sup>31</sup> Such concerns over the rights to piped water vividly illustrate that it was a costly item. Furthermore, water was only available to a restricted group of people in Rome, as

<sup>25</sup> Jansen 2000, 112.

<sup>26</sup> Larsen 1982, 41–2.

<sup>27</sup> *CIL* 10(4842) = *ILS* 5743.

<sup>28</sup> Frontin. *Aq.* 95.1.

<sup>29</sup> Vitruvius *De arch.* 8.6.4. However, Jansen (2000, 119) notes that it is difficult to relate the widths of excavated pipes to those

recorded in Vitruvius (*De arch.* 8.6.4).

<sup>30</sup> Frontin. *Aq.* 94.4; Vitruvius *De arch.* 8.6.2. Although De Kleijn (2001, 99) also suggests that it is likely that the authorities could decide in favor of free private taps from the public supply.

<sup>31</sup> Frontin. *Aq.* 103.2.

Frontinus notes that water was ceded to the houses of principal citizens.<sup>32</sup> Such people were the highest aristocracy and among the emperor's most trusted men.<sup>33</sup> Consequently, a private supply of piped water to a household was costly and available only to a certain sector of society. It is within this context that its role as a luxury product arose and that its ostentatious use in the definition and promotion of social status must be viewed.

The aqueduct and its supply of pressurized water created the opportunity for new decorative experiments: fountains and pools became standard features of upper-class houses in the city and would have delighted the eyes and ears of their owners.<sup>34</sup> Nevertheless, according to Jansen<sup>35</sup> the complete water-pipe system has been preserved in only one house in Pompeii, the House of the Hanging Balcony; the house demonstrates all of the most important elements of a water-pipe system, namely, lead pipes, a distribution box, and different kinds of fountains, which were usually located in courtyards (atria and peristyles). In her survey of piped water in the city Jansen notes that at least 91 houses were connected to the main supply, a figure that can be increased to 124 if the impressions of lead pipes in the calcium deposits on water towers are used.<sup>36</sup> If one considers that approximately 1,000 properties have been excavated in the city,<sup>37</sup> this demonstrates the exclusivity of piped water and highlights its potential for use as a status symbol. In a similar way, it is possible to state that in the excavated areas of the city there are only 70 fishponds<sup>38</sup> and 30 private baths,<sup>39</sup> which again reinforces the suggestion that the possession of water features was a sign of both wealth and influence.

Excavations in the atrium of the House of the Vestals that opened from Vicolo di Narciso (27), as well as in the street itself and around the fountain at the end of Insula VI.i, have shown that the pipes for the urban water supply were laid at the same time as the creation of the raised sidewalks and the paved street surface in the last quarter of the first century B.C., possibly in the 20s. It would appear that the owners of the House of the Vestals quickly embraced the new possibilities offered by the use of piped water. Within a few years a coherent redevelopment program was put in place that involved

radical changes to both the architecture and decoration of the property (fig. 4).

These new arrangements were very extensive with major structural changes. A new entrance with four columns was added on Via Consolare (1, 3, and 13). Both peristyles (14 and 39) were rebuilt with brick columns replacing those in tufa, and the rooms around them were significantly altered. Doorways around the large peristyle (39) were widened and faced in brick, which opened new visual perspectives into the garden space. In the center of the house the old bath suite was demolished to make way for an enlarged service area and new kitchen arrangement (7–10), and from this area a new upper floor was accessed (over 21, 23–25). A new, much enlarged bath suite was constructed (31–34 and 50), which opened off of the Vicolo di Narciso atrium (27). The major reception rooms of the house were decorated in the Third Style, and virtually all the rooms except service areas were provided with mosaic floors. Many floor levels were raised by as much as 0.25 m to provide a level surface across the property into which the new water pipes were bedded. This signifies that a major factor in this complete renovation of the house was the desire to provide pressurized water throughout the house.

The pipe entered the house from Vicolo di Narciso, near the new bath suite. The inlet pipe would have gone to a major junction box<sup>40</sup> located in the *praefurnium* (34), where the water supply divided (figs. 5, 6). One line took water into the large peristyle (39), one toward the front of the house and the main atrium (2). These pipes fed a complex system of water features and fountains that formed a sequence from the formal, public entrance of the House of the Vestals on Via Consolare and the reception rooms clustered in this region of the house, through to the large peristyle and dining rooms at the northern end of the property.

The new scheme for the House of the Vestals in the Augustan period abandoned the former axial structure of the property with its linear route between the two peristyles. Instead, a more circuitous route through the property was created, where the journey from the "public" entrance on Via Consolare to the "private rooms" in the north of the property

<sup>32</sup> Frontin. *Aq.* 94.6.

<sup>33</sup> Eck 1982, 207.

<sup>34</sup> Pliny the Younger, Letters 5.6.20–24.

<sup>35</sup> Jansen 2001, 28–9.

<sup>36</sup> Jansen (2001, 27). However, other authors give slightly different figures: Eschbach (1979, 75) notes 63 private connections, and Andersson (1994) suggests 160 connections

(although this figure includes separate fountains in the same property as different connections).

<sup>37</sup> Ling 1990, 210.

<sup>38</sup> Higginbotham 1997, 198.

<sup>39</sup> De Haan 2001, 41.

<sup>40</sup> Cf. Jansen 2001, 30–1.

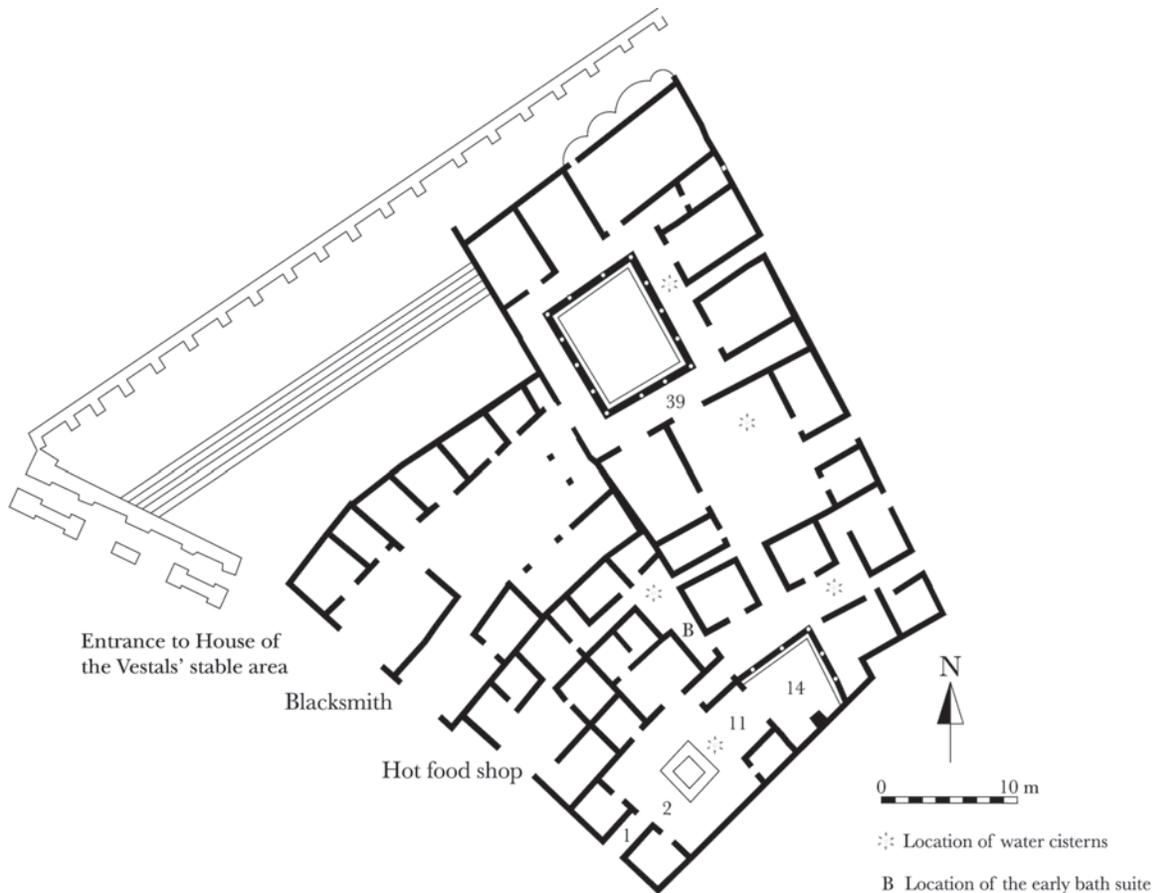


Fig. 3. The House of the Vestals at the end of the first century B.C.

becomes a drama of movement between the open areas containing fountains and natural light and the dark, narrow corridor spaces. Water played a dominant role within the open areas through the creation of focal points, highlighting the wealth and status of the property and its owners in the eyes of anyone visiting. The form of grand axiality was also abandoned in the House of the Bronze Bull, where it was similarly replaced by a series of closed, shorter views from groups of rooms that looked onto water features.<sup>41</sup>

The formal entrance to the House of the Vestals (1, 3, 13), on Via Consolare, was an elaborate, four-columned vestibule, unique in Pompeian domestic architecture.<sup>42</sup> Its columns were reminders of monumental public architecture and undoubtedly would have signified that a person of status owned this property. Looking deep into the house from outside the main entrance on Via Consolare would have provided views into the sumptuous atrium (2)

with its impluvium fountain. Significantly, elsewhere in the city most of the ornate fountains also tend to be oriented toward the entrance from the street; they were built to be seen by casual passersby and to make a social statement.<sup>43</sup>

It would appear that little effort was made to collect the water used in these fountains. While the fountain in the Consolare atrium (2) would have kept the cistern associated with the impluvium topped off, the run-off water from this fountain and all of the others was simply allowed to flow into the drains and pour out into the street. Given the expensive nature of piped water, the “wastage” of such a commodity must have been a deliberate act of conspicuous consumption designed to further augment the ideas of wealth and opulence in the minds of a viewing public.

Once inside the atrium of the House of the Vestals a visitor would have been able to look beyond the open doors at the rear of the tablinum

<sup>41</sup> Andersson 1990, 236.

<sup>42</sup> Leach 1997, 54–5.

<sup>43</sup> Andersson 1990, 213.

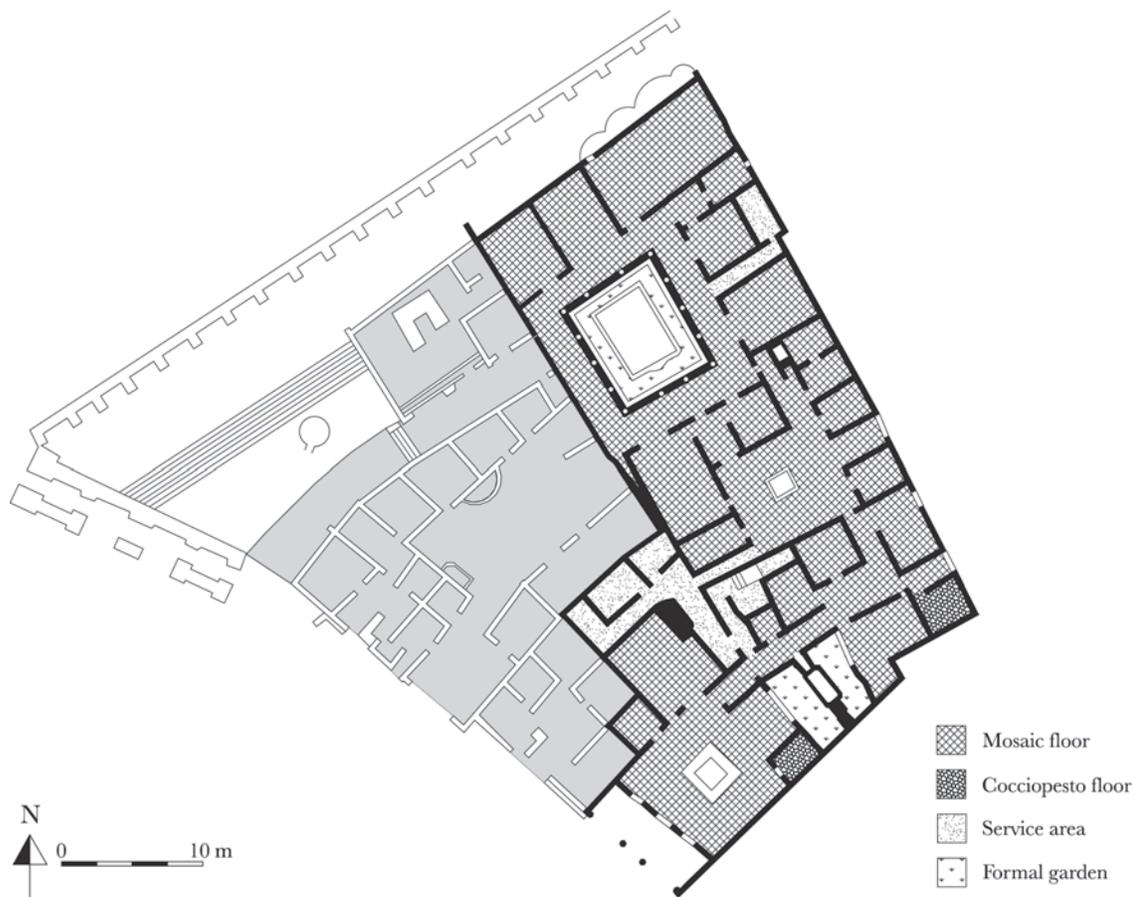


Fig. 4. The House of the Vestals in the early first century A.D.

(11) and glimpse a pool located in the middle of a small peristyle (14). The full grandeur of this water feature, however, would not have been readily observable to spectators in the atrium and would have been revealed to visitors only once they had passed through the corridor (6) adjacent to the tablinum and entered the small peristyle (fig. 7). Here they would have been greeted by the sight not just of a large pool, which almost filled the garden area, but probably also of a grand fountain statue located against the southern wall of the peristyle. The fountain would have filled the large pool with water that cascaded down an overflow channel at its northern end and disappeared into the main east–west drainage system of the house, literally at the feet of those passing by. The elaborate fountain was also the focal point of two small cubicula (22, 23) that were built at this time facing onto the peristyle.

The former courtyard opening off Vicolo di Narciso was converted into an atrium (27). It was

now a grandly decorated room floored with a sumptuous polychrome mosaic with leaf-and-tendrill decoration. In the center of this space was a feature that resembled a traditional marble-lined impluvium (fig. 8), furnished with a fountain. However, this impluvium did not have the cistern usually associated with such features, and water from its fountain drained directly out into Vicolo di Narciso.

The new bath suite (fig. 9) was a more luxurious replacement for the earlier cistern-fed bath complex. The apodyterium (31) of the new bath suite opened directly from the new atrium. Such a location is highly unusual, as private bath suites in Pompeii were normally located in service areas and were not on “public” display.<sup>44</sup> Furthermore, the new bath suite was not associated with a kitchen and consequently required its own praefurnium (34 and 50), which is again a rare occurrence and only paralleled in the House of the Menander and the House of the Cryptoporticus.<sup>45</sup> This atypical bath

<sup>44</sup> De Haan 2001, 42.

<sup>45</sup> De Haan 2001, 49 n. 8.

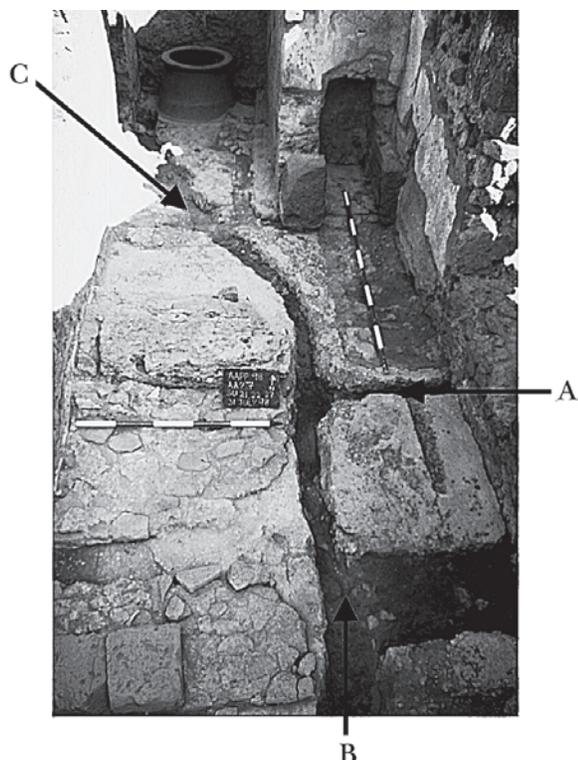


Fig. 5. The water-pipe trenches and location of the junction box in the praefurnium: *a*, aqueduct water enters the house; *b*, water pipe leading to the fountains in the Narciso atrium (27), small peristyle (14), and the Consolare atrium (2); *c*, water pipe leading to the swimming pool in the large peristyle (39)

suite, which corresponds most closely with a De Haan type-three bath,<sup>46</sup> had three rooms, an apodyterium (31), a tepidarium (32), and a caldarium (33), complete with a hot-plunge bath.

However, the most impressive new water feature was the pool in the middle of the large peristyle (39). In its original form the pool measured 4 x 3 m and was lined with waterproof plaster painted blue. It probably functioned as a swimming pool associated with the nearby bath suite. This is paralleled in other De Haan type-three baths, such as the House of the Silver Wedding and the House of the Centenary.<sup>47</sup>

The Augustan rebuilding of the House of the Vestals created an impression of lavish expendi-

ture in which the house was restructured and re-decorated around a system of fountains fed by pressurized aqueduct water. The piped water was entirely for display, and domestic water needs continued to be provided by underground cisterns that were filled with rainwater. Pressurized water was a luxury rather than a utility, and, as Wilson points out for North African houses, ostentation was the key: “for wealthy householders, it may have been of little concern whether water for washing or drinking arrived on tap, what mattered is that they—and guests to the house—should enjoy a fine view from the *triclinium* or *oecus* across a peristyle to a splashing fountain.”<sup>48</sup>

#### POST-EARTHQUAKE CHANGES

The earthquake of 5 February A.D. 62 signaled an end to the lavish use of running water in the House of the Vestals. It seems that the city was devastated. Dobbins<sup>49</sup> argues that virtually every major public building in the forum was heavily damaged, and the destruction of private houses was probably comparable.<sup>50</sup> Although there is little direct evidence of structural damage to the House of the Vestals caused by the earthquake, subsequently the property was again radically remodeled and re-decorated. The crucial impetus for this redevelopment appears to have come from the need to respond to the disruption in the aqueduct’s water supply.

Excavations at the southern end of the insula have allowed us to link directly the abandonment of the Augustan system of pipes and fountains in the House of the Vestals with the interruption in the city’s water system following the earthquake. The water tower located at the junction of Via Consolare and Vicolo di Narciso clearly dates from the initial construction of the piped water system.<sup>51</sup> Excavations down the western sidewalk of Vicolo di Narciso have traced the route of the main water pipe toward the water tower from the northern end of the street and a small branch off into the House of the Vestals. This main pipe clearly heads toward the water tower; also the pipe trenches of several secondary pipes go from the tower toward the large properties in the neighboring Insula Occidentalis.

swimming rather than pisciculture.

<sup>48</sup> Wilson 2001, 92.

<sup>49</sup> Dobbins 1994.

<sup>50</sup> Cf. Ling (1997, 234–7), as well as the various papers in Fröhlich and Jacobelli (1995).

<sup>51</sup> Also cf. Heres 1994, 56–7.

<sup>46</sup> De Haan 2001, 42.

<sup>47</sup> Alternatively, Higginbotham (1997, 22–30) suggests that the pool could have operated as a fishpond. The lack of pots set into the sides of the pool to provide shelter for fish and the presence of an overflow drain of a type more usually associated with public baths (cf. Manderscheid 2000, 508), however, would appear to offer support to the suggestion that the pool was for

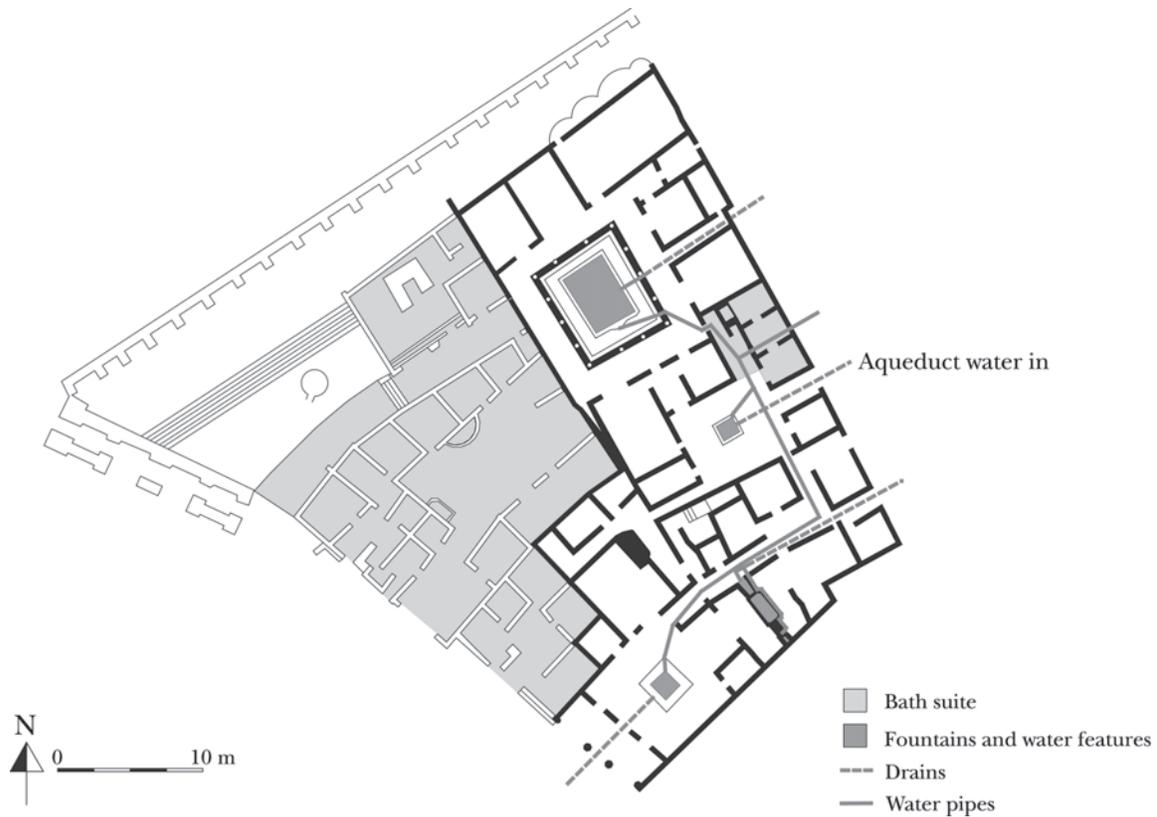


Fig. 6. The location of fountains in the House of the Vestals

There is then evidence of a second phase of piped water, which bypassed the water tower and headed straight for the adjacent public fountain. Significantly, the second phase of water pipes does not show any evidence of going to private houses in the area around the insula. It is likely, therefore, that in the post-earthquake period the water supply to the public fountain at the southern end of Insula VI.i was reconnected<sup>52</sup> but that private water supplies were no longer available in this area of the city.<sup>53</sup> This would have had profound implications for the use of water in the House of the Vestals, where it was such an important element of the household's display of social status. Just as the water features symbolized the social and economic power of the owners of the property in pre-earthquake Pompeii,

water features without water would have been an abject symbol of their impotence in post-earthquake Pompeii. If the occupants of the House of the Vestals were to compete in post-earthquake social life, their house had to be architecturally and decoratively up to the task.

The bath suite (31–33 and 50) is a prime example of these post-A.D. 62 redevelopments. It appears that initially some efforts were made to retain the hot-plunge bath as part of a semi-functioning bath suite. Such a reduction in the functioning area of the bath suite is mirrored in the House of the Menander, where the caldarium is repaired and the rest of the baths leveled,<sup>54</sup> which was a relatively common occurrence in the private baths of post-earthquake Pompeii.<sup>55</sup> Finally, it seems that a

<sup>52</sup> Although excavations in the sidewalk of Insula VI.ii by Nappo (1996, 41–2 and fig. 2) revealed lapilli-filled trenches, which may indicate that the water-pipe system was under repair at the time of the eruption.

<sup>53</sup> The absence of piped water to all of the properties around the abandoned water tower in the years after the earthquake is significant. Frontinus (*Aq.* 108–9) clearly indicates that water grants for private houses were strictly personal and bound to a fixed plot until that changed hands. Consequently, the

removal of water pipes from the House of the Vestals could have been interpreted as the result of the pre-earthquake owners of this property selling and moving on. However, the absence of private supplies going to other nearby houses would suggest this as the reason behind the removal of water pipes from the House of the Vestals, rather than a change in ownership.

<sup>54</sup> Ling 1997, 134.

<sup>55</sup> De Haan 2001, 46.

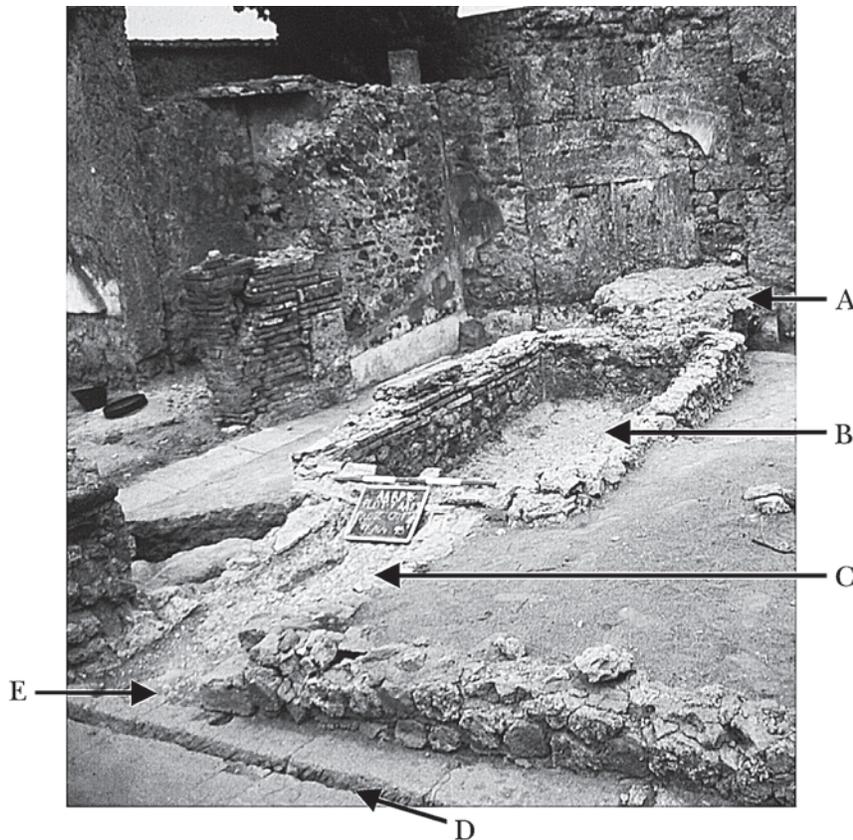


Fig. 7. The fountain in the Consolare peristyle: *a*, plinth for fountain statue; *b*, large pool; *c*, cascade for overflow water from large pool; *d*, trench for water pipe supplying fountain in Consolare atrium; *e*, drain for fountain cascade system.

decision was made to abandon the private bath suite in the House of the Vestals and to use the space as part of a new service quarter in this area of the house. The changing room (31) was returned to its original use as a small room opening off the atrium (27) and the hypocaust system in the tepidarium (32) and caldarium (33) was smashed out. In the demolition material a coin minted in A.D. 72 was found. Again, this abandonment of the bath complex is paralleled in many of the other private baths in the city. According to De Haan,<sup>56</sup> one-third of all private baths and half of the largest type-three baths went out of use in the post-earthquake period; the baths in the House of the Cryptoporticus, the House of the Labyrinth, and in the House of the Silver Wedding were all abandoned.<sup>57</sup>

With no water coming from the aqueduct, the owners of the House of the Vestals decided to take

extreme measures. They completely removed the lead pipes associated with the running-water features from the house, even where they lay beneath elaborate mosaics. The trenches were carefully filled in and it seems that the surfaces were repaired. Such drastic steps were not uncommon in other Pompeian great houses; for example, a magnetometer survey in the House of the Menander failed to locate the presence of any pipes in the atrium complex or in the garden, prompting Ling to speculate that they had been “disconnected” after the earthquake.<sup>58</sup> This was clearly a policy of no return. The removal of pipes meant that there could be no easy resumption of using the town supply.

The guiding principle behind the post-earthquake redevelopment of the House of the Vestals was not to abandon the use of water for decorative purposes but to use it on an abridged scale;

<sup>56</sup> De Haan 2001, 46.

<sup>57</sup> De Haan (2001, 46), however, warns that there may also be social factors behind the widespread abandonment of private baths, such as the growing importance of public bathing.

Therefore, the earthquake and the consequent disruption in the public water supply to these baths could just have been a catalyst for abandonment.

<sup>58</sup> Ling 1997, 69 n. 68.

running-water features were usually replaced by those with standing water. This can be observed in the impluvium of the Narciso atrium (27), from which the fountain was removed when the pipes were lifted and the drain out to Vicolo di Narciso was blocked. A low wall was built with bricks around the edge of the impluvium to create a small pool of still water.

In the large peristyle (39) there was a series of changes leading to a radical rebuilding and decoration program. A large step was inserted in the southern end of the pool (fig. 10), presumably to reduce the amount of water needed, suggesting that the piped system was still functioning but could not be relied on. The step was faced with waterproof plaster and painted blue to match the rest of the pool. The overflow drain of the pool also remained. Such overflow mechanisms indicate that running water in the pool was provided by aqueduct water.<sup>59</sup>

The changes to the pool signal that at first there was an expectation that the pre-earthquake system could be retained. Presumably during the 60s such hopes were frustrated. The period after the earthquake, therefore, must be seen as one when various strategies were attempted, before the final policy of wholesale redesign was adopted. The bath suite shows the same pattern, with its final removal securely dated to the 70s.

In the large peristyle (39), there was still a desire for water features, which determined the major reorganization of the whole northern end of the house. Access to the middle of the peristyle was regulated through the addition of a series of low walls built between its columns and a doorway on the southern side. This indicates a change in its function from the location of a swimming pool to a more formally planned garden space. A small pool was created at the southern end of the former large pool, with steps leading down into it (fig. 10). The guttering surrounding the peristyle was altered so that rainwater drained into this small pool. More important was the marble-lined pool built at the north end of the former large pool. It was built on an unfaced stone plinth, the foundations of which were cut through the waterproof floor of the former pool, leaving a gap that clearly prevented the space from holding water. It was probably filled with earth, so that a planted area could surround the new marble pool and its fountain.<sup>60</sup> Alternatively,

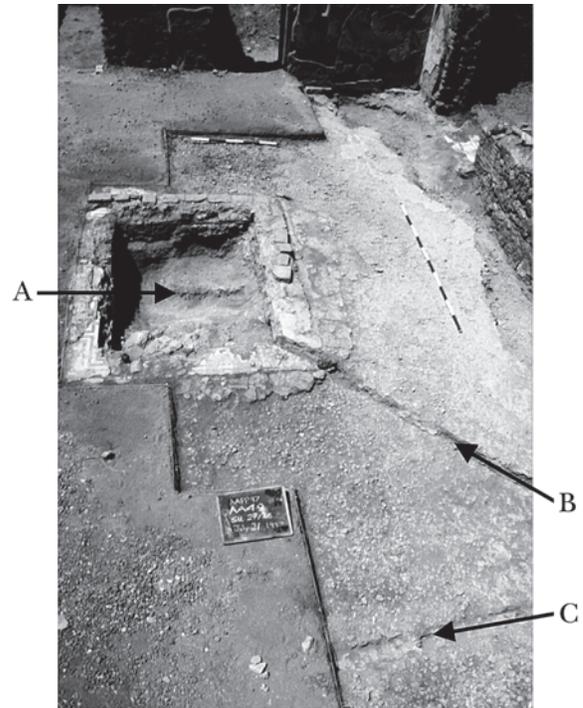


Fig. 8. The fountain in the Narciso atrium: *a*, impluvium; *b*, trench for water pipe supplying impluvium fountain; *c*, trench for water pipe supplying fountains in Consolare peristyle (14) and atrium (2)

wooden couches may have been set around the pool to create an outdoor dining area.<sup>61</sup> The white marble pool was also positioned to dominate the view from the triclinium (47) north of the peristyle. The small pool contained a fountain, the only running-water feature left in the house.

The creation of shallow pools of still water in the peristyle would have allowed the owners of the House of the Vestals to have areas of passive display water. Yet, such water features would have been a pale shadow of the elaborate active fountains that formerly graced the house and apparently continued to do so in properties in the city where it was still possible to receive aqueduct water.<sup>62</sup> Clearly, if the impression of luxury and status was to be maintained, a functioning fountain was highly desirable. However, this demanded an adequate new source of pressurized water. Such a source was provided by a new aboveground cistern inside a former reception room (48) in the northwest corner of the large peristyle, constructed by adding thick, interior reinforcing skins to the southern, western, and east-

<sup>59</sup>Cf. the round piscina in the frigidarium of the Forum Baths in Pompeii (Manderscheid 2000, 508).

<sup>60</sup>Such changes are also paralleled in the middle peristyle

of the House of the Lyre Player (Nappo 1998, 37).

<sup>61</sup>Cf. Andersson 1990, 225.

<sup>62</sup>Glaser 2000, 454.



Fig. 9. The hypocaust from the tepidarium of the Augustan bath suite

ern walls, lined with waterproof plaster, and by raising its floor level (fig. 11).<sup>63</sup>

The new cistern had an outflow in its southern side. It connected to a lead pipe that led to the northwest corner of the peristyle and then to the pool on the plinth to feed the fountain. In order to provide a large water catchment area for the cistern, an upper floor was added across the range of rooms north of the large peristyle. There is evidence of two stairways to this upper floor. A grand sweeping staircase (over 52 and 42) opened directly from the eastern side of the peristyle and led up to a range of north-facing rooms (over 44, 46, and 47) that would have enjoyed panoramic views of Vesuvius and across the Bay of Naples. A service staircase was also constructed from the former praefurnium (34) and led up to a series of service rooms, located above the eastern side of the large peristyle (over 40, 41, and 43).

There is no doubting the scale of the ambition for this scheme of reconstruction; indeed, it was necessary to rebuild much of the house around the large peristyle. Throughout the house the construction work was also accompanied by an extensive redecoration of every reception room in the latest Pompeian Fourth Style.<sup>64</sup> Only one public reception room was left decorated in the previous wall-

painting style. It is significant that this large banqueting room (46) off the northeastern corner of the peristyle had a roughly finished ramp up to a wide doorway onto Vicolo di Narciso. This room was probably being used as the base for the reconstructions in the house, an operation that was not fully completed by A.D. 79.

There are no indications that the reconstruction and redecoration program was required by any direct earthquake damage to the property itself. The changes were a response to the removal of a private supply of aqueduct water from the area around Insula VI.i. Without pressurized water, the elaborate sequence of fountains in the House of the Vestals ceased to function. What were once opulent symbols of the wealth and status of the householders quickly became symbols of failure. The house consequently required modernization, and, after a few minor changes, the owners of the property embraced a large program of work that would once again transform their property in the final years of the city's existence.

#### CONCLUSION

Our comprehensive analysis of the structural sequence of the House of the Vestals has allowed us to recover the full system of its water supply, through

<sup>63</sup>It has been argued that this cistern was a preexisting tank against which the House of the Vestals was extended (Eschebach 1996). The full examination of the structural details of the northern end of the house reveals that the correct interpretation is quite the opposite. The cistern was inserted into a pre-existing room, which was strengthened by inner skins

of walls, then surfaced with waterproof plaster. The doorway between the cistern and the peristyle has created some confusion. Close examination of the structural details and 19th-century engravings show that it was created by the Bourbon excavators.

<sup>64</sup>Carratelli 1993, 5–59.

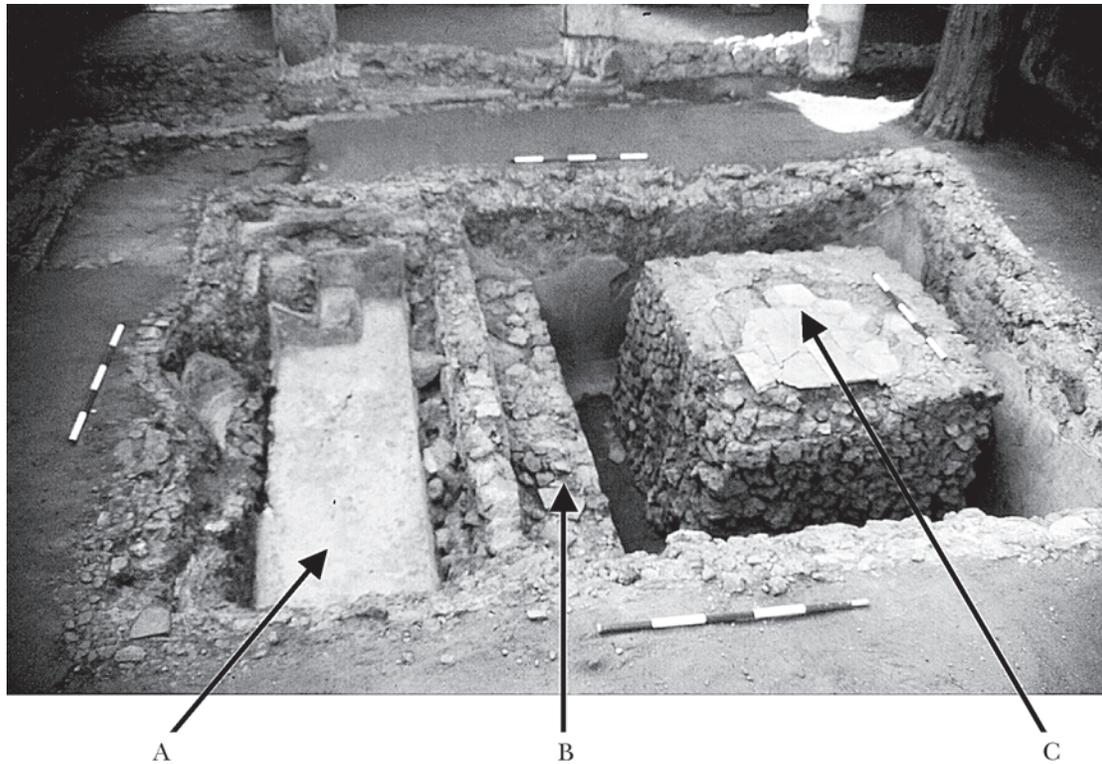


Fig. 10. Remodeled pool of the post-earthquake large peristyle: *a*, small rainwater-fed pool; *b*, large step to reduce volume of water required to fill the pool; *c*, gravity-fed fountain plinth

its cisterns, pipes, and drains. However, more significant is the recognition of the ways in which water for display was manipulated to demonstrate the social status of the householders. Piped water was an item of luxury, not a utility, in the House of the Vestals during the early Imperial period.<sup>65</sup> It was costly, available to only a restricted portion of the population, and used primarily as an element within opulent decorative schemes. It was not transported directly to kitchen or service areas, and household water was largely provided by rainwater-fed cisterns (although of course there was nothing to stop this supply from being augmented by fountain water collected in buckets or bowls by slaves).

The dramatic changes to the House of the Vestals during the Imperial period are part of a much longer history during which the house is almost constantly in a state of (re)development.<sup>66</sup> This work done after A.D. 62 must be viewed within the context of long-term structural change. The wholesale removal of water pipes, the abandonment of the

bath suite, the change of fountains from active- to passive-water features, and the construction of the gravity-fed fountain could have led to the interpretation of a house in crisis, the results of the desperate owners trying to cling to some of its former glory in a difficult period. Yet, while the earthquake and the damage it caused to the city's piped water system assuredly disrupted the House of the Vestals' function as a status symbol, an altogether different picture emerges when the water system is examined in conjunction with the other changes to the property.

The redevelopment of the House of the Vestals after the earthquake is certainly striking, but it is consistent with the scale of earlier major redevelopments. The owners of the house actively embraced the opportunity for change. The new upper floor surrounding the northern and eastern arms of the large peristyle provided both an increased service area and elegant reception rooms with views toward Vesuvius and the sea. Such "dining rooms with views" were formerly only the provision of the

<sup>65</sup> Cf. Koloski-Ostrow 2001a, 2.

<sup>66</sup> Jones and Robinson 2004; cf. Ling 1997, 238.



Fig. 11. The large cistern

properties built over the defensive walls on the southern and western edges of the city, rather than the grand houses within the former defensive perimeter. The house was again being brought architecturally up to date, as it was decoratively by the application of new frescos to all of its major reception rooms.

The expenditure on such a scheme of redevelopment was undoubtedly prodigious, and the house was again being suited for its social role within post-earthquake Pompeian society. It seems that money was not spared in the final redevelopment. This does raise the question of how much cultural choice played a part in the changes as well as the necessities imposed by the aftermath of the earthquake, as De Haan has argued for a lessening of the importance of private bath suites among the upper classes.<sup>67</sup>

Overall innovations in architecture and decoration were apparently routinely embraced and incorporated into the House of the Vestals throughout its history. The periodic renewal of the property was a vital element of both its growth to social preeminence within *Insula VI.i* and its development into one of the largest and most important properties in Pompeii. Whether it was the adoption of the atrium or peristyle as architectural features, the

wholesale redecoration in successive wall-painting styles, or the utilization of piped water in fountains, the house was continually updated and renewed. Such changes were related to the way in which the House of the Vestals was used as a vehicle for the display of luxury, to emphasize the status of its occupants, to associate them with the highest strata of society, and to highlight the social distance between them and the majority of the Pompeian population. The House of the Vestals continued to advertise social status through the introduction of new fashions, not least of which was in its use of water.

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<sup>67</sup> De Haan 2001, 46.

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