# FASTIONLINEDOCUMENTS & RESEARCH

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## The Fourth season of Excavations at VIII.7.1-15 and the *Porta Stabia* at Pompeii: Preliminary report<sup>1</sup>

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The Pompeii Archaeological Research Project: *Porta Stabia* (PARP:PS) recently completed its fourth campaign of excavations during which six trenches were excavated across the extent of VIII.7.1-15 (with one of these opened within the *vicolo* south of the *Odeon* at doorway 16). This fourth season was especially successful in that we are now able to clearly detect an overall phase plan for the entire *insula* thanks to the accumulated physical and stratified connections between several phased trenches from all seasons of our excavations, a primary goal for the season. To that end, all 2008 trenches were strategically located to aid in the definition of certain properties, and to recognise the spatial relationships within and between such buildings (fig. 1). Trench 16000 was opened in the courtyard of property VIII.7.6; trench 17000 was located in the entire rear room of VIII.7.7-8; trench 18000 was opened in the front room of VIII.7.12; trench 19000 was opened in the rear kitchen of VIII.7.9-11; trench 20000 was opened in the *vicolo* between *insula* VIII.7 and the *Odeon*; and trench 21000 was opened in the southwest corner of the service suite to property VIII.7.6.



Fig. 1. Location of all trenches.

<sup>&</sup>lt;sup>1</sup> This paper was presented as a poster at the 17th InternationI Congress of Classical Archaeology, held at Rome 22th-26th September 2008 on the theme" Meetings between Cultures in the Ancient Mediterranean".

To compliment the research of the excavated trenches, the Project continued to invest much time and resources into collecting and analysing the artefactual and bio-archaeological record of VIII.7.1-15, as well as continuing our architectural survey of the entire zone. Our programme of conservation was much advanced this year by the generous access to the resources and materials of the laboratory of the SAP. Also, and in collaboration with the British School at Rome, we have initiated a plan to conduct geophysical survey of the neighbourhood, including the *Quadriporticus* and the region beyond the *Porta Stabia* that will be undertaken in the spring of 2009.

In the following preliminary report for the 2008 season, each trench is organised by phase, although several of these phases await a more comprehensive analysis of the ceramic and numismatic material before firm(er) dates can be attributed.

#### Trenches 16000 and 22000:

Trench 16000 covered an entire room inside the property at entrance 5-6 (fig. 2). In 79 CE, this spacious property consisted of several commercial rooms located at the front (one containing an oven), a small kitchen, two spacious *triclinia* or *cubiculi*, a suite of storage or service rooms, and a large garden with masonry dining couch and water feature. It was one of the largest properties in the *insula* at the time of the eruption. We had several research questions about this area that Trench 16000 would address: did the development of the property follow the same trajectory whereby commercial activities replaced industrial ones in the early 1<sup>st</sup> century CE, as we have seen elsewhere across the *insula*? And how did this property relate – socially and spatially – with its neighbours?

Trench 22000 was a small trench in the narrow passageway of property 5-6 at a point where earlier features (drains, especially) could be seen to pass through the partition wall from Room 37 in the northern neighbour (see Trench 17000, below).

#### Phase 1: Pappamonte Foundations

The most abundant evidence for the earliest construction activity in this *insula* comes from the pappamonte foundations found in Trench 16000. The foundations consisted of two parallel stretches of pappamonte blocks – three in one wall (below WF 108; figs 3 and 5), a single block in the other (below WF 187; fig. 4) – that were laid down not later than the second half of the 4<sup>th</sup> century BCE and preserved by their reuse as foundations for later walls. The row of three pappamonte blocks uncovered in the base foundations of the later WF 108 was particularly interesting as its construction, or use, was associated with a ritual deposit. Cut into the same earthen surface that was related with this pappamonte wall was a small and shallow rectangular pit (10-15 cm deep; fig. 5), which was subsequently filled with

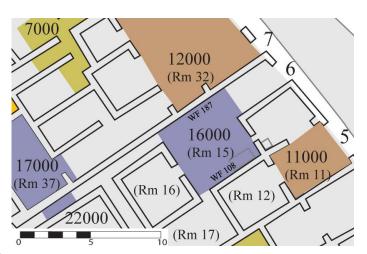


Fig. 2. Plan of Trenches 16000 and 22000.



Fig. 3. The three pappamente blocks below WF 108 (looking south; for scale see fig. 5).



Fig. 4. Single pappamonte block below a later drain in WF 187 (looking north).



Fig. 5. Small ritual pit cut into a surface associated with the row of pappamente blocks below WF 108 (looking south).



Fig. 6. Burnt ritual deposit found within the pit from fig. 5 (looking west).

a densely burnt deposit that contained the remains of a small meal and some Black Gloss Ware (which provided the dating evidence for the walls; fig. 6)<sup>2</sup>.

The meal itself was remarkable. Its remains contained not only fish bones, grape seeds and shells of thin-walled nuts which are quite common around the site, but also burnt chicken bones and burnt limpet shell (neither of which have ever been uncovered in our excavations of this *insula*) as well as either burnt pig or burnt sheep/goat bones (rare in our excavations); some unburnt specimens of each of these classes of material were also recovered from this context. The burning was substantial and inconsistent with cooking evidence, therefore we have interpreted this deposit as a deliberately burned offering that was likely associated with the installation of the pappamonte block

Tab. 1.	•
Material	Notes
Ceramics	
Black Gloss Ware	583 gms
1 Black Gloss cup	Morel 1512 a1
1 Black Gloss cup	Morel 24137 c1
1 Black Gloss cup	Similar to Morel 4222 b1
1 Black Gloss cup	Similar to Morel 2227
Cookware	106gms
Coarseware	107gms
Amphorae	22 gms
Heavy Fraction	
Mammal rib bones	Medium sized; heavily butchered; pig, or sheep/goat
Chicken bones	
Fish bones	
Limpet shells	
Charcoal	
Light Fraction	
Two thin-walled nut shell fragments	
Carbonised grape seeds	

wall. Given that this context was uncovered so late in our season, the following table (table 1) lists the recovered finds but without the precise quantification and identification of every class; the complete analysis of this material will be undertaken upon our return to our field laboratory in June 2009.

Pappamonte foundations less substantial than those in Trench 16000 have been found in other places within the *insula* (eg. in Trench 1000<sup>3</sup>; and in Trench 17000, see below) and surely constitute an early phase of building activity in this area of the city. It has only been in this trench, however, that we can for the first time date this activity, recognise some articulation between two (parallel) walls, and document some associated ritual activity.

#### Phase 2: The Industrial Phase

Here, as elsewhere in the *insula*, we can now recognise a long hiatus of occupation between at least the later 4<sup>th</sup> century and the mid 2<sup>nd</sup> century BCE when the area appears to have been redeveloped as a hub of industrial activity<sup>4</sup>. In Trench 16000,

<sup>&</sup>lt;sup>2</sup> The Black Gloss Ware assemblage was made up of Morel types 1512a1, 24137c1 and those similar to Morel types 4222b1 and 2227.

<sup>&</sup>lt;sup>3</sup> DEVORE, ELLIS 2005: 6-7.

<sup>&</sup>lt;sup>4</sup> Cf. Coarelli, Pesando, forthcoming; and Ellis, Devore, forthcoming.



Fig 7. Several phases of the waste chute exposed, including the L shaped wall (left of the chute) that reoriented access to the chute from an area under the later walls and threshold.

a new sequence of opus incertum walls (WFs 108 and 187) were built to incorporate the earlier pappamente blocks as foundations, resulting in a large square room that would more or less keep the same width until 79 CE. A packed earthen floor characterised this room in this phase.

A waste chute was installed early along the southern opus incertum wall (WF 108), which originally contained a wide doorway to Room 12 (fig. 7). This chute underwent several renovations during its operation. Slightly later than its installation, but still within the second half of the 2<sup>nd</sup> century BCE, a small L-shaped wall was placed around the chute seemingly to reorient its access from Room 15 to another space to the west (probably the precursor to the as yet unexcavated Room 16). Several roof-tiles were then laid against this new wall to create a small adjacent work surface. Next, the top of the waste chute was given a more substantial masonry capping of sarno stones set within a square of opus signinum, its weight supported by three buried amphorae. Finally, an amphora was placed upside-down near this feature to serve as an adjacent soak-away, but was later (but still within this phase) replaced by a more robust opus signinum basin of unknown purpose.

All of these features (the waste chute, L-shaped wall, and basin) were next abandoned and covered by the raising of a new earthen floor surface. This coincided with a refocussing of industrial activities toward the rear of the premises, which in this phase included at least several of the rooms (certainly Room 37) that will later constitute a separate property at entrance 7-8; the long northern property wall (WF 187), which will eventually become a partition wall to the northern property at entrance 7-8 was open (or opened?) in this industrial period with a doorway. Properties 6 and 7-8 were thus a unified building during this phase of the insula's development, with industrial

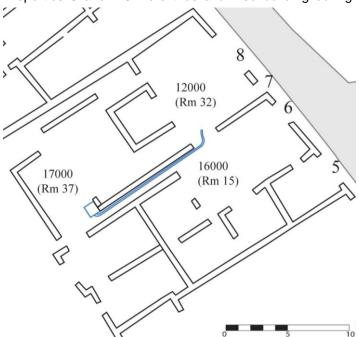


Fig. 8. The layout of properties 5-6 and 7-8 during the Industrial Phase. The drain that ran between each property is marked blue.

operations in the rear of the premises (fig. 8). As elsewhere, the locations and courses of drains helped us to recognise property divisions/ownership and their activities. For this example, a drain was found in Trench 22000 which had exited from a tank inside Room 37 in property 7-8 (see Trench 17000, below, and fig. 17), ran along the passageway in 5-6, turned through the open doorway in WF 187 of Trench 16000 (Room 15), and emptied into a cistern in Room 32 (found in 2007 in Trench 12000; fig. 9)<sup>5</sup>. We must, therefore, consider properties 5-6 and 7-8 to have been part of one complex during this industrial period, and that the northern property wall (WF 187) of 16000, which although appearing today as an impenetrable partition wall between two neighbouring properties, had instead a longer history of permeability with regards to the movement of activity and people. This observation itself serves as a reminder of the necessity for appropriate and targeted excavations for penetrating the architectural history of Pompeii, more than architectural analyses alone. By the end of the Industrial Phase, the square Room 15 of Trench 16000 had lost all of its visible industrial features, possibly as industrial activity now shifted to Room 37 of property 7-8 for the remainder of the phase<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> DEVORE, ELLIS 2008: 7-8.

<sup>&</sup>lt;sup>6</sup> In DEVORE, ELLIS 2008: 7-8 the cistern into which the drain running through WF 187 empties was ascribed to the Commercial Phase for Trench 12000. With the benefit of 2008's explorations of Trench 16000 and 17000 we can now revise this phasing of Trench 12000 to reflect a more long-standing industrial presence in that property than was visible in the 2007 excavations.



Fig 9. The ash deposit revealed in section below the western half of the later oven fixture.

#### Phase 3: The Commercial Phases

The division of the large complex into two separate properties clearly signals the next most significant development in this area. The drain that had originated in Room 37 of property 7-8 (Trench 17000) was sealed and abandoned (see fig. 17) and all access to property 7-8, including the doorway to Room 32, was closed. Large-scale structural changes like these demanded building materials and pozzolana to make mortar/plaster, and it was for these that a large pit was cut into the centre of Trench 16000 to recover the abundant pozzolana ash/soils that form the natural volcanic topography for this zone of Pompeii<sup>7</sup>. This use of the subterranean volcanic terrain as a veritable 'builder's yard' during times of (re)construction is a now familiar pattern that we see across the insula (cf. Trench 19000, below). All of this speaks of a complete change in character, and potentially ownership. The orientation of the property was redirected toward the west and the large garden at the back (see Room 30 in fig. 41) rather than property 7-8 to the north. ITS ware from the large pit suggest a post late 1st century BCE date for this renovation which is consistent with the early Imperial era redevelopment that we

have been documenting throughout this insula8.

The latest recognisable events in Trench 16000 possibly date to the earthquake period of 62 CE in Pompeii, or slightly later. A large burn deposit covered the entire room, more or less, and possibly even rooms further to the west (fig. 10). This may be evidence for a small domestic disaster, or even fallout from the earthquake.

A small oven and preparation surface was installed after this fire along the southern wall (WF 108) and the entire room was given a new raised floor (fig. 11). This necessitated the raising of the thresholds of the two communicating rooms to the west (Rooms 16-17). Several pieces of recycled marble were used as spolia in the reconfiguration of the threshold to Room 16, including one that had a very worn inscription on its surface, rubbed virtually smooth with foot traffic (fig. 12). We were not able to recognise more than a few letters because of the da-



Fig 10. The oven fixture and masonry bench looking southeast (the oven was built into the small partition wall to the left of the bench and continues into the neighbouring room).

mage to this stone. The presence of somewhat abundant spolia is supportive of a post-62 CE date for the fire and subsequent remodelling of these spaces.

While Trench 16000 in this final phase may not immediately seem like a commercial space on the floor-plan, the oven itself seems likely to have served some retailing activity associated with the nearby entrance at VIII.7.5. Alternatively, the oven might have serviced 'dining' spaces in the decorated (and as yet unexcavated) Room 16, and perhaps even Room 17.

#### Trench 17000:

In excavating the large front room (Room 32) of property 7-8 in 2007, we found a substantial double-drain that conveyed water into a massive cistern as well as draining liquid waste out onto the *via Stabiana*<sup>10</sup>. This season we decided to locate

<sup>10</sup> DEVORE, ELLIS 2008: 7-8.

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On the extraction of pozzolana to make mortar, see LANCASTER 2005: 51-66.

<sup>&</sup>lt;sup>8</sup> For some discussion, see Ellis, Devore 2008: 314-317; Devore, Ellis 2008: 3-4, 11; Ellis, Devore: forthcoming.

<sup>&</sup>lt;sup>9</sup> For the development of Room 11 at entrance VIII.7.5, see DEVORE, ELLIS 2008: 1-4.

the



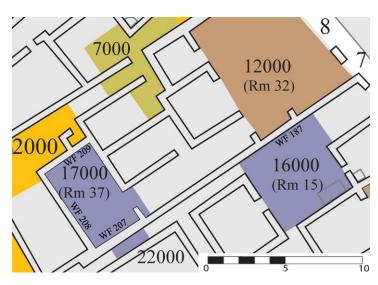


Fig 12. Plan of Trench 17000.

Fig 11. The worn fragment of a marble inscription that was reused in the threshold

the origin of this drainage system by excavating the back room (Room 37) of property 7-8 (fig. 13). This room had been surveyed by H. Escherbach who found what he interpreted to be a downpipe for rainwater and the ephemeral remains of some possibly industrial features<sup>11</sup>. We thought that excavations here could also help us to relate the sequence of activities here with those in the front of the property, and to better define the structural and functional relationships with the neighbouring properties.

#### Phase 1: Pappamonte Foundations

As elsewhere in the southern half of the insula, the earliest structures here utilised pappamonte foundations dating to about the last half of the 4<sup>th</sup> century BCE (figs. 14-15). In Trench 17000 these consisted of two blocks of pappamonte constructed upon a yellow levelling fill above natural soil. Nothing else, however, was found in association with these foun-



Fig 13. The two pappamonte foundation blocks in the north of Trench 17000.

dations. Moreover, and as was the case for Trench 16000, these pappamonte foundations represent a phase of activity that was followed by a period of inactivity for close to two centuries<sup>12</sup>.

#### Phase 2: First Industrial Period

It was not until Pompeii began to experience a mid-late 2<sup>nd</sup> century BCE renaissance that occupation of this corner of the plateau returned in earnest. A fill containing late 2<sup>nd</sup> century BCE pottery levelled the earlier remains and a small oval basin of mortar and plaster was constructed (fig. 15). It was not clear what this basin was actually used for, but its presence represents a reoccupation of this corner of the city that would now last until the eruption.

<sup>&</sup>lt;sup>11</sup> ESCHEBACH 1984: 63-66.

<sup>&</sup>lt;sup>12</sup> Cf. Coarelli, Pesando, *forthcoming*; and Ellis, Devore: *forthcoming*.



Fig 14. Oval basin with ceramic pipe leading beyond the later WF 208. More of the pappamente blocks are exposed in the top-right of the picture.

The basin was drained by a terracotta pipe (via a perforated sheet of lead that acted as a strainer) that ran to the southwest beyond later architectural and trench limits (the later WF 208; fig. 16). It should be noted that the sheet of

lead was affixed with iron nails and was therefore not designed to filter out impurities from entering the basin (since there would be no way to remove debris as it accumulated behind the



Fig 15. The perforated lead sheet covering the pipe opening inside the basin.

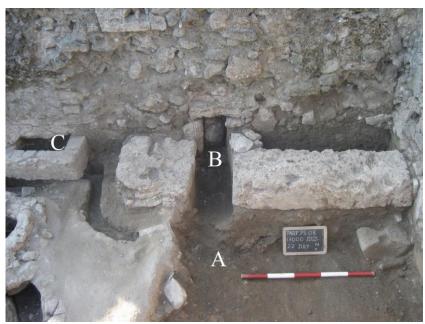


Fig 16. The instillations of Phase 4, including: (A) the soak-away in the centre of the room (removed prior to the taking of the photograph); (B) the drain passing between the bench and through WF 207 (see fig. 8 for the continued course of this drain); and (C) the tank that passed through WF 207.

strainer). Instead the sheet kept whatever was held in the basin out of the terracotta pipe. A similar perforated lead sheet can be seen *in situ* to function in the same way in the gutter of a *peristyle* in I.9.11-12<sup>13</sup>.

#### Phase 3: Intermediary Period

The dimensions of the space the oval basin occupied is not known, since it was only when the basin was eventually put out of use by a large levelling fill that the generally rectangular shape of the room seen on the plan today (WFs 207-210) was established. This fill also levelled all of the topographical undulations in this area, serving as a stable foundation for the construction of the western (WF 208) and northern (WF 209) walls. Small traces of smaller flanking walls (with yellow plaster) were also found as internal divisions within this space so we should imagine a small suite of rooms at the back of a property, possibly with a garden accessible to the southwest. An upside-down amphora with holes punched in its body was installed as a soak-away against one of the interior walls. Datable ceramics in this phase point to a late 1<sup>st</sup> century BCE date for these developments.

<sup>&</sup>lt;sup>13</sup> See Figure 16.2 in JANSEN 2007: 259.



Fig. 17. Some of the installations of Phase 5, including: (A) the soak-away; (B) the drain; and (C) the capstone.

### Phase 4: Unified Space and Liquid Movement

The suite of rooms that replaced the oval basin was itself replaced by a more complex arrangement of industrial fixtures. The internal walls were knocked down and buried under a new fill as the room was opened into a large rectangular space containing several new features concerned with the removal and disposal of liquid waste via a complex system of drains and channels (figs 8 and 17). A deeper and more substantial soak away chute was built in the centre of

the room, replacing the earlier up-side-down amphora. Additionally, an ample drain built between two sizable sarno stones that held traces of *opus signinum* on them (a covered bench/table with a drain running through its middle?) also emptied its contents into a second smaller soak away in the south. This second soak away chute had a small channel constructed beside it as part of its system. Thirdly, a tank built through an opening (later blocked) within the southern boundary (WF 207) of the room also had the choice to send its overflow down a third waste chute as well. This tank may have been a settling tank as it was quite shallow. Finally, there was a long trough along the west wall (WF 208) that was used in whatever industry was practiced here in this phase. Subsequent developments in this room have obscured our understanding of which of these systems were exposed or sealed by a floor, but in any case we can assume that the southern half of the room must have been a very cluttered workspace. Those working in the property would have also had access to property 5-6 in this phase, presumably at the open doorway between Rooms 32 and 15 (see Phase 2 in Trench 16000, above).

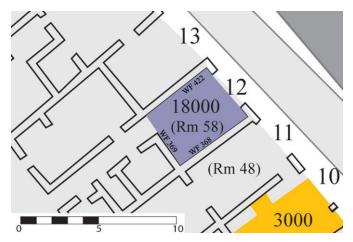


Fig. 18. Plan of Trench 18000.

#### Phase 5: Loss of Access to the South

All connections with the property to the south (entrance 6) seem to have ended in this phase, sometime after the late Augustan age. This also meant that the drain that ran through the southern wall to the cistern in Room 32 and the drain that ran from the tank down the corridor to the cistern went out of use, since they now ran under someone else's floors. Both were blocked (see figs 9 and 17). In fact, virtually all of the previous phase's liquid movement system was put out of use and buried, signifying a major change in function for this room. Only the central soak-away remained to become the anchor for a new closed system. Overflow from this soak-away was now conducted via a new channel to a catchment (for filtering) with a cover stone (for emptying) and then into a long drain channel that ran down the corridor of the

property to empty onto the street (fig. 18). Beside this long drain was another parallel drain that ran from a down-spout (presumably carrying rain water from the gutters) also to the front of the property where it could either empty into a massive cistern system (explored in 2007 in Trench 12000)<sup>14</sup> or join the other drain in emptying out onto the street.

A substantial *opus signinum* floor, with a small platform along the west wall, was laid at this point. This is the most substantial flooring yet seen in this room.

Although the switch from mostly industrial to commercial activities is not as pronounced in this property as elsewhere in the *insula*, the clear change follows the same pattern of a shift away from a certain type of industry producing a great deal of liquid waste to some other activity with a completely different character. Liquid was still mo-

<sup>&</sup>lt;sup>14</sup> See DEVORE, ELLIS 2008: 7-8 (inc. fig. 12).



Fig. 19. The southern wall (WF 368) of Room 58 built directly onto the volcanic lava

ving from the back of the property to the front up until 79 CE, but the system that took soak-away waste was integrated with one that funnelled clean drinking water into a massive underground cistern, allowing the owners of the property to manage the movement of all liquids utilised by the occupants. This shift (Phase 5) coincided with



Fig. 20. The opening to the waste chute in Trench 18000.

a shift in property ownership as space, and access to it, was lost to the south (see Phase 3 of Trench 16000, above), and probably the west (as seen in Trench 7000)<sup>15</sup> as property 7-8 reduced in size to encompass only six ground floor level rooms.

#### Trench 18000:

Trench 18000 was excavated across most of the entire front room (Room 58) of VIII.7.12, a property in which we had only previously excavated a part of the rear of the premises in 2006 (figs 19 and 30)<sup>16</sup>. This trench was intended to further develop our structural understanding of this northern area of the *insula*. While the entire room was clearly arranged to operate as a shop in its final phase, the excavations had the potential to define any earlier arrangement and use of space. The location was also intended to target the relationship between this property at entrance 12 and its neighbour to the south (9-11), whose architectural stratigraphy had suggested it was built first.

#### Phase 1: Delineation of Property 9-11 to the South

The construction of the southern wall (WF 368), which had foundations laid directly onto the volcanic lava that represents the so-called 'bedrock' for this area of Pompeii (figs 20 and 30), represents the earliest activity in this trench. This wall was actually built as the northern boundary for the southern neighbour at property VIII.7.9-11 (for Room 48), for all walls north of its construction within this trench and the property (entrance 12) only appear in later phases. This fact alone has important and broad implications for the overall development of the *insula* because it demonstrates that the property at 9-11 was built prior to the property at entrance 12. As a consequence, a paucity of diagnostic objects within Trench 18000 could help date this phase; this earliest phase of construction for property 9-11 has otherwise – and still tentatively without further and stronger evidence – been attributed to at least the mid 2<sup>nd</sup> century BCE based on stratified relationships to datable contexts elsewhere <sup>17</sup>.

Although the events of this first phase of construction in property 12 seemingly look toward the property at 9-11, evidence for early activities in this neighbouring space was forthcoming. A hard packed floor surface was laid against this wall (WF 368), while a well-constructed and rather deep (around 2m) waste chute was discovered in the northeast corner of the trench (figs 21-22). The chute was constructed of *opus incertum* and built or cut through the terracing layer for this phase directly onto the natural sloping topography of lava whose natural ravines facilitated the removal of waste; a large chamber was cut further into the lava to enable an increased volume of waste, but issues

<sup>17</sup> See Phase 1 for Trench 12000 in Devore, Ellis 2008: 5.

 $<sup>^{15}</sup>$  Ellis, Devore 2007: 122-123; Ellis, Devore 2008: 314-317.

<sup>&</sup>lt;sup>16</sup> For the excavations in 2006 see Trench 9000 in ELLIS, DEVORE 2006: 10-12.

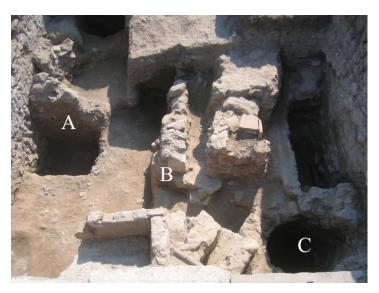


Fig. 21. The small room in the southeast corner of the trench was formed by the addition of a north-south wall (A) and east-west wall (B) (looking west). Note the opening to the waste chute (C).



Fig. 22. The location of the tank within and under the (later) threshold to Room 58 (looking east toward the via Stabiana).

of safety precluded our recovery of its full size, absolute dimensions, entire contents, and complete chronology. Nevertheless, the waste chute was of considerable importance for

understanding the archaeological record for this space as its contents were rich with at least two main phases of disposed items. The earliest deposits of waste were so heavily saturated that they produced some extremely rare wet-preserved ecofactual materials: fabric, wood (some charred), bark, large mammal (mostly cattle) bones, fish bones, and a wide variety of seeds (including wet-preserved and semi-mineralised grape seeds, wheat seeds, legumes, and possibly broad beans or horse beans). This earlier phase of deposits proved very different in content to the second phase of usage by containing a much wider variation in food types and waste. Apart from having a drier environment, the second and later phase of deposits were almost entirely made up of fish bones and grape seed. The waste chute therefore represents at least two phases of usage, or at least a shift in the kinds of waste once thrown into it; the second phase was likely part of Phase 2, below. In the first phase of usage the waste was thrown – or even poured – into the chute, as can be deduced by the liquefied material that had hardened down the northern face of the chute. In the second phase the waste entered via a drain (see Phase 2, below). It is also likely that the chute was accessible from all sides during each phase of its existence, as the construction of WF 422, built over the northern section of the chute, did not occur until Phase 3.

#### Phase 2: First Spatial Delineation

It is in this phase that we witness the first structural arrangement of space within the trench, an event that likely occurred sometime during the second half of the 1<sup>st</sup> century BCE. A small room (north-south 1.8m by east-west 2.8m) was built within the southeast corner of the trench. WF 368 served as its southern boundary, against which a small north-south wall defined its westward limit while for the northern limit an east-west wall extended eastward to below the later threshold of Room 58 (figs 22 and 30). An eastern wall for this small room was missing, likely beneath the construction of the later threshold to Room 58. This is a significant loss of information, for a street-side wall here – with or without a threshold to the street – could have told us much about the spatial relationship and functional role of this small room to traffic along the *via Stabiana*. The entrance was likely in the northwest corner of the small room.

Along with the new room we uncovered the very scarce remains of a new earthen floor that was laid on top of the surface from Phase 1. The first in an eventual sequence of drains was installed with this floor to run from west to east across the northern side of the trench (north of the small room) from an as yet unidentified origination point. This drain will be the only one of the four drains to occupy this room, however, which did not empty its contents onto the street. Instead, the drain emptied into the waste chute still in use from the earlier phase. This new inlet of waste probably explains the second phase of waste material already mentioned above (Phase 1). Used almost exclusively now for the disposal of fish bone and grape seed, it would appear plausible that we are here dealing with the byproduct of *garum* production that could have been focussed further within the property. Geophysical survey in this property (planned for March of 2009) and further excavation to the west of Trench 18000 should locate the source of those activities.





Fig. 24. The two roof-tiles cap the waste chute from the previous phases. The new drain passes over the chute toward the via Stabiana, right of the photograph.

Fig. 23. Close-up of the tank, its southern extent mostly destroyed by later building activity.

#### Phase 3: The Industrial Phase

The third phase signifies great changes to the arrangement and use of space in trench 18000. These changes can be dated to the late 1<sup>st</sup> century BCE, presumably not very long after the commencement of Phase 2. The elevation of the space was raised considerably, likely in concert with developments at the street level. This caused the complete destruction of the walls that had made up the small room of the preceding phase. Two new walls (WF 369 in the west and WF 422 in the north - see figs 19 and 30) were installed to delineate the space in a manner that would remain until 79 CE. A new opus signinum floor was also laid for what is now a more clearly defined space. A rectangular tank with hydraulic plaster lining was cut into this surface, set inside the room at the southern end of the threshold like so many tanks already uncovered within the insula (figs 23-24)<sup>18</sup>. The southern extent of the tank incorporated the north face of WF 368. The waste chute from the earlier phases was now rendered inoperable, capped by roof-tiles. The drain from Phase 2 was also dismantled at this time, replaced by a new drain that ran directly over it but which continued beyond the inoperable chute toward the street (fig. 25). These significant changes to the floor level and drainage of this space were not merely caused by developpments internal to the property itself, but may reflect - or have been prompted by broader infrastructural changes that were now sweeping across Pompeii. At about this time an aqueduct was installed to service Pompeii (in the 20s BCE), flushing Pompeii with previously unimaginable (and thus unplanned for) volumes of water. This develo-

pment caused certain streets to be raised and re-surfaced to handle the extra torrents of waste-water, which in response caused the floor-levels of a number of street-side rooms to be raised to avoid flooding, caused nowobsolete waste chutes to be capped, and caused new drains to be laid to run toward, and thus be flushed by, the sharply increased volumes of water on the street. The impact of these infrastructural developments on the street itself, as well as the Porta Stabia, is seen in the creation of a new drain that was installed behind the Porta Stabia fountain to redirect the torrents from gushing through the gate (fig. 26)<sup>19</sup>.

#### Phase 4: Abandonment of the Industrial Phase

The fixtures associated with the previous phase were now abandoned in the early 1<sup>st</sup> century CE, reflecting the now-familiar and wide-spread changes in activity across the insula: commercial/retail activities replacing industry/

DEVORE, ELLIS 2005: 7-9; ELLIS, DEVORE 2007: 124-125.

<sup>&</sup>lt;sup>18</sup> For a discussion of these and others across Pompeii, see especially Devore, Ellis 2008: 5-6 and Ellis, Devore: forthcoming. See also Devore, Ellis 2005: 2-3; Ellis, Devore 2007: 121-123; and Ellis, Devore 2008: 314-316.





Fig. 25. The city drain at the southern extent of the via Stabiana, passing behind the Porta Stabia fountain and through the gate itself.

Fig. 26. The two repagula (door-stops) of Phases 4 and 5. The one on the right is from Phase 4, the other Phase 5. Note their location behind the middle threshold block.



Fig. 27. Close-up of the two repagula. The one below is from Phase 4, the other Phase 5.

production<sup>20</sup>. A much less-permanent packed earthen floor now replaced the *opus signinum* floor, which caused the Phase 3 drain to be dismantled and replaced by a new one on much the same alignment. The street-side tank was also destroyed during this process of change. A *repagulum* was installed in the centre



Fig. 28. The large Phase 5 drain, partly removed to reveal section (beneath chalk-board).

of the room to provide greater security (figs 27-28)<sup>21</sup>. Its location in the centre of the room is important, for it could only have functioned with a narrower doorway into the property than that which we see operating in 79 CE (cf. the Phase 6 discussion for this trench, below). That narrower doorway for this phase must also have been at a lower level to the later and wider incarnation, as suggested by the floor-level and *repagulum*. This narrower doorway for this phase provides some indication as to why all of the drains had turned their course southward at the old waste chute so as to pass through the doorway/threshold rather than head through a front façade wall.

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<sup>&</sup>lt;sup>20</sup> For some discussion, see Ellis, Devore 2008: 314-317; Devore, Ellis 2008, 3-4, 11; Ellis, Devore: forthcoming.

<sup>&</sup>lt;sup>21</sup> For an example of such a security device, see the plaster cast that was made of the blocking of the entrance to the House of the Ephebe at I.7.10 in ADAM 1994: 297, figs 679 and 680.

Fig. 29. Room 58, looking west.

#### Phase 5: New Surface and Drain

The floor was raised once more, again with a packed earth surface containing material dating up until 79 CE. This raising of the floor level required the setting of a new repagulum stone just north of where the earlier locking mechanism had been (see figs 27-28). Interestingly, this caused some damage to the earlier *repagulum*, which was not recycled. As is so common with this space, the new flooring and level heralded the creation of a fourth new drain on the same alignment as the others, and which also incorporated components of the most recent defunct drain. This drain was considerably larger than any of its antecedents (fig. 29).



Phase 6: Raising of the Threshold

Yet another quite extensive raising of the floor-level and the associated threshold defines the final phase that led to 79 CE. A new floor of opus signinum now covered the room, a flooring type that had not been used in this front space for almost a hundred years (see Phase 3). These events coincided with the widening of the threshold to create this final retail entrance that is so typical of the Pompeian shops; that the space now operated as a shop is mostly inferred from this wide threshold from the street. Little else can be said of this final phase, however, given that its contents have been so greatly disturbed since the property was first brought to light in the 19<sup>th</sup> century. The recycled use of the blocks for this threshold is, however, of some (albeit trivial) interest (fig. 30; see also fig. 23). Of the three stones that now constitute the threshold, it would appear that the northernmost and southernmost had originally formed the earlier, narrower, threshold; not only are they of identical dimensions and stone type, but when placed one up against the other the shuttered groove matches perfectly and the narrowing of the doorway this would have caused equally coincides with the location of the earlier repagulum directly behind the swinging

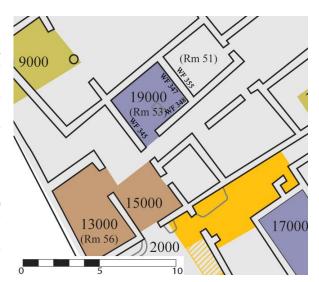


Fig. 30. Plan of Trench 19000.

door. When this system was widened in this phase, these two stones were set at each end of the widened doorway and a third stone was placed between the two to elongate the shuttering system. This third piece seems itself to have been recycled from elsewhere, for apart from being of a slightly different stone type to the other two, it was of a different size altogether and was considerably more worn.

#### Trench 19000:

A trench was opened in Room 53 at the rear of property VIII.7.9-11, to build upon the results garnered from our excavations of two nearby areas (Trenches 13000 and 15000) in 2007 (fig. 31)<sup>22</sup>. It was initially clear that a kitchen was in operation here in the final phase/s, for part of the cooking structure survives (fig. 32)<sup>23</sup>. We excavated the northern half of the room down to the natural topography, while only the uppermost stratigraphic sequences were revealed in the southeast. Three phases can be recognised, beginning in the early 1<sup>st</sup> century BCE.

<sup>23</sup> For an early description of the structure see Mau 1875: 168-169.

 $<sup>^{22}</sup>$  For the 2007 excavations see Trenches 13000 and 15000 in Devore, Ellis 2008: 8-11.



Fig. 31. The cooking structure in Trench 19000.

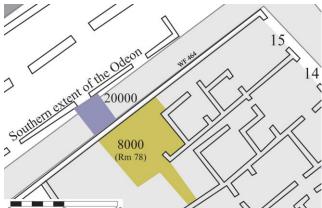


Fig. 32. Plan of Trench 20000.

#### Phase 1: Creation of the Space

The first recognisable activities for this trench involved the creation of Room 53, which in this earliest phase, and according to the stratified relationships of the standing architecture, must have included Room 51 to the east; the sub-dividing wall (WFs 347/355) would be introduced in the following phase (see fig. 31). This room was a later addition to the rear of the property; a coin from the foundation deposits, a copper As dating from the late 2<sup>nd</sup> century BCE to the early 1<sup>st</sup> century BCE, along with some thinwall fragments of the Ricci type 1/20, dates this phase to the early 1<sup>st</sup> century BCE<sup>24</sup>, while the front of the property probably dates to at least the mid 2<sup>nd</sup> century BCE<sup>25</sup>. While this new space was a late addition to the rear of the property, it was not the latest, for a tannery had been in operation further to the west (Room 56) since the later 2<sup>nd</sup> century BCE<sup>26</sup>. In any case, this extension to the property must have been a significant event. During the construction of the room a pit was cut through the volcanic lava in the northeast corner of the trench (i.e.: not the room itself, for at this stage the room was much longer) and filled with many burnt mammal bones, fish bones, charcoal, and seeds. Although the food remains were clearly burnt, the variety and number of them do not suggest a ritual; the volume of material was, moreover, ten times that of the more securely identified ritual contents discussed in Trench 16000 above. The pit, although not extensive, could also have been dug to extract pozzolana soil for building material. A floor of *opus signinum* characterised the room in this first phase.

#### Phase 2:

The next phase of activity involved the sub-division of the long rectangular space into Rooms 53 (Trench 19000) and 51. This first activity involved another cutting of a pit through the floor surface into the volcanic soils to extract pozzolana to create mortar and plaster. This was a major undertaking, for only a small section of the earlier Phase 1 *opus signinum* floor survives *in situ* (against WF 345). The large void was then filled with building debris and topped by a hard mortar surface, and the space sub-divided by WF 347. Many datable ceramics were retrieved from the levelling fills for this floor surface, dating this phase to the first half of the 1<sup>st</sup> century CE. An unusually high number of coins were recovered from the levelling deposits for this new floor – 50 in total that may represent a dispersed hoard(?), although they might also be suggestive of the increased commercialisation of this area of Pompeii in the early 1<sup>st</sup> century CE<sup>27</sup>. No specific function, however, can yet be attributed to the room at this phase.

#### Phase 3: Instillation of the Oven

In the final years a cooking facility was installed in the southeast corner of the room (fig. 32). That the space now operated (perhaps exclusively?) as a kitchen is clear, and it probably was in service to the dining space in Room

<sup>&</sup>lt;sup>24</sup> The authors appreciate the contributions here of Giacomo Pardini, who is undertaking the study of our numismatic record.

<sup>&</sup>lt;sup>25</sup> See Phase 1 of Trench 12000 in Devore, Ellis 2008: 5.

<sup>&</sup>lt;sup>26</sup> See Trench 13000 in Devore, Ellis 2008: 8-11.

<sup>&</sup>lt;sup>27</sup> For some discussion, see Ellis, Devore 2008: 314-317; Devore, Ellis 2008: 3-4, 11; Ellis, Devore: forthcoming.

56 (Trench 13000) if not also to the triclinium in Room 46 (Trench 2000; see fig. 31)<sup>28</sup>. The oven was L-shaped, its heating and cooking area being against WF 348 while the arm that extended into the centre of the room might have facilitated food preparation and delineated the cooking space itself. Some fragments from a Dressel 2-4 amphora handle were set within part of the structure, which dates it to the final years of Pompeii. The latest of two plaster finishes for the walls of Room 53 at least corresponds to this phase, but we cannot know their sequential relationship any more precisely. Little survives of the plastered finish except for some traces of blue, red and yellow paint.

#### Trench 20000:

Trench 20000 was located within the *vicolo* of the *Odeon* to abut that structure and the northern limit – as defined in 79 CE – of our *insula* (fig. 33)<sup>29</sup>. This space is usually labelled as VIII.7.16 and is considered to be the main entrance to the *Quadriporticus* (fig. 34). We excavated this trench with the hope of determining the extent of some earlier structures uncovered just to the south in Trench 8000 during our 2006 season; one of the early-phased walls of that trench projected further north than the later delineation of the *insula*, so it was for this wall, and so its arrangement of space, that we hoped to uncover and relate to the construction of the *Odeon* itself<sup>30</sup>.

#### Phase 1: Earlier Projections

We indeed recovered the projection of that earlier wall as expected, but found that its northward extension had been cut and dismantled in antiquity, leaving just a small stub almost directly below WF 464; no information about how it related to the construction of the *Odeon* could therefore be gleaned from it. It did, however, represent an im-



Fig. 33. The Quadriporticus with its entrance from the vicolo of VIII.7.16, looking east.



Fig. 34. The open drainage channel just below WF 464.

portant physical link between the second phase of activity in Trench 8000 with this first phase in Trench 20000.

#### Phase 2: The Drainage Channel

The cutting and dismantlement of the earlier wall served the construction of a large and open drainage channel (figs 35-36) that ran on a 1-2 degree grade from west to east across the southern limit of the trench, likely from the *Quadriporticus* to an as yet unidentified outlet on the *via Stabiana* (a geophysical survey of this *vicolo*, sche-

<sup>30</sup> See Phase 2 for Trench 8000 in Ellis and Devore 2006, 9; Ellis and Devore 2007, 123.

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<sup>&</sup>lt;sup>28</sup> On Room 56, see Devore and Ellis 2008, 10-11. For the *triclinium* in Room 46 (Trench 2000), see Devore and Ellis 2005, 3-5; Ellis and Devore 2007, 122-123; Ellis and Devore 2008, 314-317.

<sup>&</sup>lt;sup>29</sup> This trench was excavated very quickly – just over one week – so as not to impede, or be impeded by, the heavy tourist traffic that circulates through this area.



Fig. 35. The drainage channel in section, looking east.



Fig. 36. View of the northern limit of VIII.7.1-15 and the vicolo of VIII.7.16. This vicolo was the main entrance from the via Stabiana to the Quadriporticus. The Odeon is at right.



Fig. 37. The extension of WF 464 to the eastern limit of the Quadriporticus.

duled for March of 2009, should reveal more of its course). The drain was built of mortared masonry and brick, with large (approx. 50cm x 50cm) roof-tiles used for the bedding of the channel (fig. 36). This channel was 30 cm deep as well as wide, and lined with a sturdy hydraulic plaster.

It was only after this drain was in place that the northern wall (WF 464) of our *insula* was constructed (figs 33 and 37). Whether this construction occurred within this actual phase, or as part of a following (and separate) one, is uncertain, but the wall was at least built against the drainage feature and both events can be attributed to the early 1<sup>st</sup> century BCE. This was an important development in this area as the construction of this drain and wall now defined the northern limit of the *insula* through to 79 CE. This primary construction of the northern boundary to the *insula* did not extend entirely westward to the *Quadriporticus*, however, as it appears today. Instead, it extended from the street-front only so far as the now-buried N-S wall from the earlier phase. From this point to the eastern limit of the eastern suite of rooms of the *Quadriporticus* appears to have been an open space – some kind of yard that was open to the *vicolo*.

It seems likely, therefore, that the establishment of this northern limit to the *insula* (at least in part), the laying of the drain, and the creation of the *vicolo* were all part of a larger development that centred on the erection of the *Odeon*, which we can confidently attribute to the benefaction of two new Roman colonists – *C. Quinctius Valgus* and *M. Porcius* – in the 70s BCE (*CIL* X, 844). This is an assumption based more on the dating of these developments in general, and the delineation and delimitation, at

least in part, of the *insula* from any further northward expansion, than it is on any recognisable stratified deposits. While we were able to uncover some of the foundations of the *Odeon* itself, the surfaces into which these were cut were lost to later activities, thereby destroying any stratified relationship between the *Odeon* and the sequence of developments in the north of our *insula*.

#### Phase 3: Extension of the Northern Boundary

The north wall (WF 464) of the *insula* was next extended westward as far as the eastern limit of the eastern suite of rooms of the *Quadriporticus* (fig. 38). The *insula* was now fully separated from the *vicolo*, an important event that can be dated to the later first half of the 1<sup>st</sup> century CE. The extension of this wall coincided with some important changes to the drainage channel, which was now decommissioned by filling it with soil and then topping that fill with a mortar surface. Set within that mortar surface, while it was still wet, were two courses of terracotta pipes – each pi-



Fig. 38. The two courses of terracotta pipes built within the earlier drainage channel (that on the left came from within WF 464).

pe was approx. 15cm diam. X 50cm length (fig. 39). One course followed the original east-west course of the channel - its origin and destination as yet unknown. The other was built within the new extension of the wall, thus vertically from an upper floor or roof, but upon reaching ground level it turned eastward along the same drainage channel, again toward an as yet undiscovered destination. The construction and arrangement of each pipe is of some interest. The northern pipe that originated from the west terminated precisely where the pipe from the wall now entered. Each course of terracotta pipe was joined here by a lead fixture (much of which has since been removed by the earliest excavators, it seems) that was inserted into each pipe system to enable the contents of the northern course to now run through the southern (fig. 40). This bonding of the pipes, as well as their similar appearance and construction (each of the terracotta pipes was joined to the next by a lead bonding), raises certain questions about their commission; how was this element of hydraulic infrastructure organised, with the northern pipe likely originating from a public space/construction, while the similarly constructed southern course was of a seemingly private construction?

Phase 4: Rebuilding



Fig. 39. The lead joint within the terracotta pipe that came from WF 464.

The final phase of activities might likely have been caused by the earthquake of 62 CE or its aftershocks. Almost the entire northern wall (WF 464) was rebuilt on its original course, keyed into part of the original wall that still stands at its easternmost extent. The vertical terracotta piping of Phase 3 was never rebuilt, although its northern counterpart from the west could possibly, if not likely, have remained in service. No pavement was ever recorded within this vicolo in the first excavations, or recognised by ourselves, and it is thus possible for this final phase that any finished surface (i.e.: pavement stones like those that still lead from the via Stabiana see fig. 37) were now removed, possibly for reuse elsewhere.

#### Trench 21000:

Trench 21000 was opened in Room 27, which is the southwest room of an apparent 'service suite' toward the rear of property VIII.7.6 (fig. 41). Our motivations were to remove the approximately 1.5m deep modern debris in order to conduct our architectural survey, and to excavate against the southernmost wall (WF 157) of the *insula* with the hope of generating dating material for its creation. Four phases came to light, but given the spatial limitations of this trench, and of its findings, the phases here are simply synthesised together.

The first two phases were defined by two walls on a slightly different east-west alignment to the final wall (WF 157) that delimited the space (these earlier walls turned further to the northwest than the later wall which held a more westerly alignment). The earliest of these was plastered red, was eventually destroyed and replaced by the second that was plastered with yellow paint (fig. 42). The small confines of the trench where these walls were discovered, as well as later building activity, prevented the recovery of datable material for these two ephemeral phases. In fact, not even the surfaces for these two phases survived later building activity. The third incarnation of this southern boundary was built next (WF 157), again resisting firm dating evidence (figs 42-43). The distinct lack of

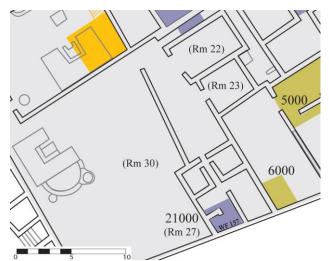


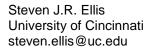
Fig. 40. Plan of Trench 21000.

structural features and surfaces for these earliest phases suggests the area to the north of it was likely an open space for a garden or small-scale horticultural unit.

The most recognisably significant development in this area occurred in the early 1<sup>st</sup> century CE when Room 27 was first established. All of the walls for this 'service suite' were now built, and a toilet installed in the western end of Room 27 (fig. 44). This toilet would be in place until 79 CE. The establishment of these features in the early 1<sup>st</sup> century CE accords with the distinct move toward commercialisation that swept the *insula* in this phase. This toilet was probably now part of a utility area that serviced the large *triclinium* and dining areas of Rooms 22, (23?) and 30 (see fig. 41).



Fig. 41. The three phases of southernmost wall in Trench 21000, being: (A) the earliest, plastered red; (B) the second, plastered yellow; and (C) the latest (WF 157), which is here almost completely reconstructed in modern times.



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Fig. 42. WF 157, the southernmost structural limit to the insula.



Fig. 43. The toilet in the western end of Room 27.

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