

The British Archeological Project at Grumentum: 2018 Season

A report on the excavations in Settore S, Grumentum

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In August 2018, the British Archaeological Project at Grumentum (hereafter BAPG) completed its fifth season of fieldwork in Settore S at Grumentum (Fig. 1). The project was initiated in 2014 and is exploring the growth of Grumentum's commercial and industrial economies between the late Republic and the early Dominate. Previous excavation campaigns in Settore S have shed light on the nature of the archaeological remains in the area. In 2009 and 2010, Vincenzo Scalfari of the University of Verona opened a large trench adjacent to the forum's southeast corner. The primary aim of this excavation was to test the results of a geophysical survey, which seemed to indicate the presence of a large building complex running roughly parallel to the forum (Fig. 2). Although Scalfari's campaigns were inconclusive—he postulated that the area was home either to a building complex or a house—the results of the BAPG's excavations have confirmed the existence of a single, elongated structure positioned parallel to the forum's east wall. The building is composed of two main components: a series of rooms, each measuring approximately 33 m², and a wide colonnaded *porticus* situated to their west (Fig. 3). It appears that each room was accessible only via a doorway opening off the *porticus*. The entire structure was probably erected in the early 3rd century AD, and was subject to multiple phases of subdivision and reconstruction over the following centuries. The colonnade, in particular, was rebuilt on multiple occasions, with the last of these events probably occurring in response to fire that broke out in the 4th century.

During the final week of the 2017 season, two important developments occurred within the BAPG trench. First, we identified the rear wall (US 6561) of Botteghe 2 and 3 in the western part of Sounding 9. The presence of this wall allowed us to determine the size of the rooms on the eastern side of the complex. The surfaces to the east of the wall were roughly paved with tile and ceramic, indicating that this was probably external space and, consequently, that the building was limited to a single row of rooms (Fig. 4). The second discovery was of even greater import. Midway through the 2017 season, we elected to open a small window (1x1.5 m) on the eastern side of Sounding 5, so that we could continue excavating stratigraphically while also preserving a mortar floor that occupied the western two-thirds of the sounding (see Sounding 5, below). This excavation resulted in the discovery of wall 6564, which was located directly under the western façade of the building complex (represented by walls 6264 and 6364) (Fig. 5). Wall 6564, however, can be associated with a much earlier structure positioned on the same alignment as the 2nd/3rd century complex. Though we cannot date this earlier building with certainty at this point, the ceramic record recovered from the contexts above it suggest that it was erected in the late 1st c. BC or early 1st c. AD.

As a result of these discoveries, the goals for the 2018 season were fairly straightforward. In addition to continuing our exploration of the colonnade and adjacent areas, we wanted to focus on the eastern side of the complex in an effort to (1) determine the function of Bottega 3, (2) confirm that space to the east of wall 6561 was indeed an external area and (3) obtain a precise date for the structure located below the 3rd century building. The remainder of this report offers an overview of the important developments that occurred in each sounding, and, where relevant, discusses the relationship between these developments and the season's goals. The sounding descriptions move from west to east, transitioning from outside the building complex to the west (Sounding 4), through the *porticus* (Sounding 5) and into Room 3 (Sounding 7), finishing in the space to the east of wall 6498 (Sounding 9). The report concludes with a description of the finds recovered in 2018 and a short discussion of the aims for next year.

Sounding 4

Sounding 4 is characterised by different contexts on the two sides of wall 6003, a structure that runs roughly north-south and divides the sounding in a larger western area, and a smaller eastern one (Fig. 6), which contains a small section of the *porticus*. The western area is composed of a sequence of deposits and limited walking surfaces, which have been interpreted thus far as artificial surface elevations intended to match those occurring in the *porticus* to the east.

This year's main goal was to reach a depth that would help us determine—across the entirety Sounding 4—the existence of layers predating the construction of wall 6003. In the past, the area east of wall 6003 had been more deeply excavated: in 2016 we discovered a patchwork of “conglomerates” (US 6482 and US 6481) that we tentatively considered surfaces built immediately before the wall itself. The conglomerates were also identified further to the east, in Sounding 5 (Fig 7). On the other hand, the size of the western area had caused a slower and therefore shallower excavation. This year we wanted to make up for this diffidence in depth: it was decided to stop excavating the eastern area, and to focus efforts to the west, with the hope of finding similar conglomerates that could help determine the nature of the entire area before its division by the construction of wall 6003.

A complementary goal was the identification of the western part of the foundation trench for wall 6003 in order to soundly date this structure, as the eastern side has yet be identified (either it was removed during the construction of platform 6385, which was excavated in 2016, or it is at a lower level than expected and thus has not yet been reached).

The Eastern Area

As mentioned in the introduction, this year the eastern area saw no excavation. However, thanks to a rainstorm, the southern section was cleaned again. This allowed us to reassess the layers (US 6405 and US 6503) located near the brick column 6362, confirming the event sequence hypothesised last year. The sequence is as follows, starting from the earliest event:

- 1) Creation of conglomerates (US 6481=6495 and US 6482=6494) and construction of wall 6003. It is still unclear which of the two happened first (see “The Western Area” below).
- 2) Accumulation of walking surfaces of mostly red and brown soil, one of which (US 6398) likely connected to a fire, given the presence of traces of burning.
- 3) Construction of the brick column 6362 (and its foundation 6400) to the east of wall 6003. The wall was not damaged by the construction of the column that was actually built adjacent to it: wall 6003 was probably still visible and standing.
- 4) Accumulation of surfaces in phase with the use-life of column 6362.
- 5) Construction of “platform” 6385. The creation of this structure destroyed the walking surfaces abutting wall 6003 and possibly the wall's foundation trench as well.
- 6) Construction of the square pillar base 6266. The foundation cut for this structure cut through the remains of wall 6003.
- 7) Creation of the robber trench 6477, which was used to remove stones from the remnants of wall 6003. It appears that this robbing trench came from south (Scalfari's area) and impacted only the first 50 cm of wall 6003 in Sounding 4. Column 6362 was not affected. The creation of other square pilasters in the area and the survival of the column suggest that the colonnade was still in use.
- 8) Phase of abandonment: partial removal of the square pillar base 6266 and creation of the robbing trench 6404 for the column 6362 (that also caused partially removed platform 6385). The last four rows of bricks were left in situ.

The Western Area

No variations of relevance were detected in the western area, which continues to be composed by a sequence of horizontal and mostly thin layers (average 1 cm) of limited dimensions: some are interpreted as walking surfaces, others as deposits, and they almost never occupy the full sounding.

In 2018 we excavated the area west of wall 6003 to the same depth as that to the east, but no continuity of layers was observed. This result is somewhat surprising: last year in the eastern area we discovered the “conglomerates” US 6481 and US 6482, which we thought predated the construction of wall 6003 and thus continued into the western part of the sounding. Now it seems that these strata date to the period after the construction of wall 6003.

It appears that we have reached the western foundation of wall 6003 as its structure becomes slightly wider and its stones extend outward. This consideration indirectly suggests that the foundation trench should be in the vicinity. In fact, one context (US 6645), which abuts the foundation and is characterised by pieces of stone and mortar in a soft matrix, has been tentatively interpreted as the fill of the foundation trench for wall 6003. This layer was identified only in the final days of the season and was not excavated, however, so this interpretation is not certain. In fact, it appears that that this “fill” is also partially covered by other layers, and their removal in 2019 should clarify its nature.

The finds this year have been underwhelming both in quality and quantity. Beyond the ceramic, only one illegible bronze coin was found (US 6609), and a quarter of a broken *mortarium* was finally removed from the top of US 6635. In fact, the top of this *mortarium* became visible in 2017, but until this year we had not reached the layer to which it belonged. Its removal allowed also to confirm its nature: the fragment is made up of its concave and roundish interior, part of its base, and part of the outside, still featuring one of its handles (6x7 cm) near the rim (Fig. 8). The *mortarium* was carved out of one piece of hard, white limestone. No marks are visible, but the lines of fracture appear to be neat, so the piece may be in primary deposition. Is it possible that this *mortarium* is somehow connected to the activities that happened in the *porticus* and/or rooms to the east?

A piece of an Arretine *sigillata* plate confirms that most of the layers in this area are the result of secondary deposition: both the fabric at the edge of the break and the red slip are very worn, suggesting that the plate was not immediately deposited in Sounding 4 after it was broken.

Conclusions

Like the previous years, the layers excavated to the west of wall 6003 can be interpreted as deposits and walking surfaces of limited dimensions: the ground level of the whole area seems to have been artificially raised on multiple occasions over a long period of time. The materials recovered appear to be in secondary deposition, thus they probably did not originate from the activities occurring in the adjacent *porticus* or the building complex, with the only possible exception being the *mortarium*. Few pieces of glass were found in these layers, a substantial difference from the late-antique strata excavated two years ago.

No work was done in the area east of wall 6003. However, a clean-up of its southern section has confirmed the sequence of construction and destruction of wall 6003, column 6362, and pillar base 6266: wall 6003 is the oldest structure of the sounding, followed by the construction of the adjacent brick column 6362 (phase 2 of the *porticus*), the partial destruction and removal of wall 6003, the construction of pillar base 6266 (phase 3 of the *porticus*), and finally by the partial removal of the column 6362 and pillar base 6266 (final abandonment).

Surprisingly, no continuity of layers was detected between the areas east and west of wall 6003, even though we seem to have reached levels predating the construction of such a wall: the eastern “conglomerates” identified in 2017 could not be found to the west, and thus it is necessary to conclude that they actually postdate the wall.

Dott. Massimo Betello

Sounding 5

Sounding 5 is situated under the proposed *porticus*, between wall 6003 and the building facades at the eastern edge of Settore S (Fig. 3). While it was originally hypothesised that this space represented the location of a road, excavations over the last two years have led to a new theory: the area functioned

as a location for walking surfaces, which led to and past the entrances to the rooms (Botteghe 1 and 2) opening to the east. The 2017 excavations seemed to confirm this hypothesis, with the discovery of a beaten earth (US 6489) and partly-paved surface comprised of a tile, ceramic sherd, and stone conglomerate (US 6495) covered with mortar (US 6494) (Fig. 7). On the east side of the sounding, where an exploratory window was opened to uncover older stratigraphic units, a tile and stone surface in a soil matrix (US 6554) was partially observed (Fig. 5); at the start of 2018, it was suspected that this surface, which represents the oldest SU yet recorded within Settore S, extended across the entirety of Sounding 5.

Based on the results of the 2017 excavations and our ongoing research goals related to the chronology, functionality, and distribution of space in Settore S, the following questions were to be addressed during the 2018 excavation campaign:

- 1) Was Sounding 5 home to a series of walking surfaces, commensurate with the use of this space as a *porticus*? If so, how many surfaces can be identified?
- 2) Does the early surface US 6554 extend across the entirety of Sounding 5?
- 3) What was the purpose of architectural feature 6421?

To address these questions, the primary aim of the 2018 excavations was to bring the western half of the sounding down to the level of US 6554, positioned at the base of the eastern window. This plan entailed first the removal of the walking surface US 6494-6495; this surface also extends into Sounding 4, where it was left intact. The following paragraph will review the key contexts observed in Sounding 5 during the 2018 excavations, from oldest to youngest.

The oldest layer visible at the close of the 2018 season was a dark brown, silty loam layer (US 6641) covered by the tile and stone surface US 6554; these were the oldest contexts observed in Sounding 5. US 6641 was exposed only in the northwest corner of the sounding. Above surface US 6554, a thin layer of mortar was patchily observed (US 6643). It was concentrated primarily in the southwest corner of the sounding. It was in a very poor state of preservation and a yellowish color.

Above these three layers, we discovered a series of contexts associated with the construction of architectural feature 6421. US 6640, a mass of solid, pure yellow clay, was located only beneath feature 6421 in the west of the sounding and was probably laid as a foundational support. Above US 6640, and across the entire sounding, was US 6535, a layered SU that served as the base for 6421. At the base of US 6535, loose stones, tiles, and ceramic sherds were laid atop the surface US 6554; over these a thick red clay layer containing waste materials (animal bone, slag, bits of metal, architectural debris) was laid. US 6535 appears to have been quite wet, based on the calcium/limescale build-up seen on the underside of the artefacts.

It seems that the architectural feature 6421, composed of river cobbles and cut stone bonded with a compact mortar, was positioned atop US 6535. Despite having reached the base of the feature, we have not yet confirmed its function. Given its stratigraphic relationship to the contexts located further to the east, it possibly served as part of the colonnade connected to the 1st c. BC/1st c. AD building, but further excavation will be required to confirm this interpretation. It also appears that the feature was modified on multiple occasions over the course of its use-life. Following its construction, an episode of maintenance or repair is suggested by US 6633, a deep cut through west-to-east sloping layer US 6625 that encircles 6421 (Fig. 9). The fill of this cut (US 6634) was quite loose, containing a large quantity of ceramic, animal bone, slag and charcoal. Part of a *vernice nera* plate was deposited at the bottom of the cut US 6633. Based on the artefact content and soil colour of US 6634 and US 6625, the cut US 6633 was probably back-filled with the same soil that was removed from it, meaning that this phase of construction took place quite quickly. This makes sense, as US 6625 was associated with an intentional raising of ground the surface to the level of US 6526, a walking surface located further to the east. The final modification to 6421 occurred in a later occupation phase, when a shallow trench (US 6447) surrounding the feature was cut through US 6444, 6472, 6489 and 6495. This intervention perhaps also represents an attempt to repair the feature, although there is no obvious structural evidence that this occurred.

On top of US 6525 and 6526, the walking surfaces in phase with the initial construction of 6421, layers US 6489 and US 6494-6495 were identified. US 6489 was a compact reddish-brown layer of *battuto* that stretches across the entirety of Sounding 5. Like US 6256 below, US 6489 contained predominately ceramic sherds; alongside large quantities of *ceramica comune*, diagnostic wares were also present, including Arretine *sigillata*, *vernice nera* and *ceramica a pasta grigia*. US 6489 also contained a fair amount of slag, some animal bone, and the odd bit of metal and glass. The walking surface US 6494-6495 was positioned on top of US 6489 in the western half of the sounding. US 6495 was a conglomeration of ceramic sherds, tiles, and small stones, upon which the mortar layer US 6494—now patchily dispersed—was set. This surface was also discovered to the east of wall 6003 in Sounding 4 (there called US 6481-6482), where it was left intact during the 2018 season, as noted in the Sounding 4 description above. In the eastern half of US 6489, four small, roundish pits were cut. These ranged in size from approximately 30-40 cm in diameter to 10-15 cm deep, and contained similar artefacts, mostly sherds, animal bones, slag, charcoal, and architectural debris. The purpose of the pits is unclear.

Based on the discoveries made this year, we can attempt to answer our three key research questions.

1. *Was Sounding 5 home to a series of walking surfaces, commensurate with the use of this space as a porticus? If so, how many surfaces can be identified?*

Based on the archaeological levels recounted above, and including another from 2016, we can confirm that Sounding 5 contains series of walking surfaces (presented from oldest to youngest):

- 1) US 6554, the oldest surface discovered in Settore S thus far; pre-dates architectural feature 6421
- 2) US 6526, a *battuto* surface associated with the construction of 6421
- 3) US 6489 and US 6494-6495, with 6421 still visible above this surface
- 4) US 6418, a mortar and stone surface, with 6421 visible above this surface

2. *Does the early surface US 6554 extend across the entirety of Sounding 5?*

Yes. The excavation of the sounding down to the level of the eastern window opened in 2017 indicate that US 6554 extended across the entirety of the sounding. It also seems likely, based on proximity to and the presence of shared layers between Soundings 4 and 5, that US 6554 extends west to the limit of or even beyond wall 6003 (as the wall likely post-dates this surface).

3. *What was the purpose of architectural feature 6421?*

Until this year's excavations, the function and chronology of architectural feature 6421 remained a mystery. Cut US 6447, which was discovered during the 2017 campaign, was originally thought to have represented a construction trench; the same was thought of the cut US 6633 (the fill of which contained the *vernice nera* plate) found during the 2018 season, but this too was not associated with 6421's construction. It is now clear that this architectural feature was much larger—and positioned at a much greater depth—than we originally thought: it was built without a construction trench on top of the compact surface US 6535, probably in the 1st c. BC or early 1st c. AD.

6421 may have functioned in conjunction with wall 6540, found in the eastern window during the 2017 campaign, but the precise relationship between the two architectural elements remains unclear (Fig. 10). There is not much new information regarding 6540, as excavation focussed on the western two-thirds of the sounding in 2018. However, it is clear that the pair were roughly coeval, as the construction trench of wall 6540 was cut through US 6535, the surface on which architectural feature 6421 was built. The relationship between these structures will be examined further during the 2019 campaign.

Conclusions

We can say with a fair degree of certainty that Sounding 5 was home to a series of walking surfaces between the 1st and 5th centuries AD. Further, it is evident that the construction events that occurred

in Sounding 5 were deliberate and multiphasal, necessitating both planning and the expectation of a specific outcome. As discussed above, not only was a foundation level of clay and stone laid atop surface US 6554 prior to the construction of architectural feature 6421, but a series of fill layers abutting the feature were also created to raise and level the walking surface. A later series of raising and leveling events were initiated in conjunction with the deposition of US 6489, the thick preparation layer that served as the foundation for the mortar and conglomerate surface US 6494-6495, which was observed across the entirety of the sounding. A later walking surface was manufactured again from mortar and stone (US 6418); this was roughly level with the top of feature 6421.

Based on the archaeological record, and on the production dates of the diagnostic ceramic types recovered from these contexts, the oldest period of construction in Sounding 5 can be divided into four phases (listed oldest to youngest):

Phase 1: Stone and tile surface US 6554 (date to be determined). The removal of surface US 6554 in 2019 will offer insights into the earlier phases of construction, and it is hoped that, based on the consistently older ceramics and the increasing depth of excavation, we will soon be reaching the initial period of Roman occupation at Grumentum.

Phase 2: The construction of architectural feature 6421, which includes archaeological levels US 6535 and US 6526.

Phase 3: The construction of the conglomerate-mortar surfaces US 6494-6495, and *battuto* floor US 6489 surfaces.

Phase 4: The construction of mortar surface US 6418 on top of compact soil surface US 6429.

The documentation of Sounding 5 that pertains to the levels discussed above discussed includes a plan drawing of US 6494-6495, a plan drawing of the East Window view of US 6554, photogrammetry of the entire 6554 surface, including architectural feature 6421 and wall 6540, and photogrammetry of the entire US 6495-6494 surface. Additionally, a plan-view photograph of the sounding at the close of the 2018 season was taken, recording the following contexts: US 6421, US 6641, US 6554, US 6643, US 6640, cut 6527 and wall 6540.

Aims for 2019

The 2019 field season will focus immediately on the removal of the most ancient surface, US 6554. The removal of this surface will hopefully provide us with a date for this phase of occupation, and will further give us more clues regarding the construction of wall 6540. Architectural feature 6421 will be left intact atop a soil platform, and excavation with an aim of reaching deeper levels across the rest of the sounding will be carried out.

Dott.ssa Kristen Heasley

Sounding 7

Sounding 7 is located across the façade wall of the building functioning with the proposed *porticus*; while most of its surface encompasses the inner space of Bottega 3, a small band is left outside of it on the western side of the wall (Fig. 11). This field season, like last year, aimed to continue to understand the inner space of Bottega 3 through the ages. Therefore, the part of the sounding located to the west of the wall (and thus in the *porticus*) was left untouched. Consequently, the surface here remains at a considerably higher level than the area under excavation inside the bottega.

Inside Bottega 3

While it is assumed that Bottega 3 was used for artisanal or production activities, as a *taberna*, the definitive proof for this conclusion is still missing. The 2018 field season did, however, shed some light on this space. The following paragraph will review the key contexts observed in Sounding 5 during the 2018 excavations, from oldest to youngest. The oldest context reached this year was US 6638, a red brown layer mixed with charcoal. This SU was found in the southeast corner of Sounding 7, at the very bottom of cut US 6639. The cut seems to go through US 6624 (on which more will be

said below) or more probably—as the presence of some tiles and stones lying flat in the cut and around suggests—is contemporaneous with it. The exact function of cut US 6639 is still relatively uncertain, but we could have reached the first evidence of the activities taking place in this room, perhaps related to firing or cooking, as the charcoal in US 6638 could suggest. This hypothesis relies as well on the fact the US 6624, a red brown layer, is a possible walking surface, for a dozen and more coins were found either slightly embedded in it or laying on it, some of them grouped together (Fig. 12). This layer extends across more or less three quarters of the room, save for the northwestern corner, which is occupied by US 6623, a dark brown layer filled with ceramic material, mortar and pebbles. The localisation of this layer suggests that it may postdate US 6624, but this supposition needs to be confirmed next year. All these layers were left unexcavated at the end of the 2018 season.

The cut US 6639 was filled with layer US 6613, a hard, light olive clay layer with scarce materials but containing two joining pieces of worked marble (Fig. 13). The fill strangely extended beyond the limits of the cut, forming a kind of platform raised above US 6624 by about 10 cm. The rest of the bottega was covered by US 6612, a brown silty clay layer, which seems to have been destruction or deconstruction layer, for it contained large pieces of tile and cut stone (similar to those used in wall 6264) laying more or less flat but at slightly different levels. This uneven deposition suggests that it was unlikely to be a walking surface. Some coins were also recovered, including one *sestertius* that could offer a *terminus post quem* for this layer; at present, however, it remains illegible.

At its upper limit, US 6612 blended with US 6564, a compact yellow-brown clay layer. As a precaution, this blended section was labelled US 6605: while not a context on its own, this area indicates that the events associated with the creation of US 6564 and 6612 occurred in close temporal proximity to one another, resulting in a “mixed” area between the two layers. Along a southern section of wall 6264 was an elongated cut (US 6602), filled by US 6601, a soft brown silt (Fig. 14). This cut is located at the junction of wall 6264, the later cut stone structure, and wall 6583, which was built at an earlier date in *opus testaceum*. While it was at first thought that these US represented a foundation cut and its fill, the presence of *opus signinum* covering the part of wall 6583 preserved by US 6601 seems to refute this hypothesis, for it is unlikely that this type of plaster would appear at a wall’s foundation. It is more probable than we have simply uncovered a section of wall that had been “waterproofed,” although the reasons for the waterproofing remain unclear. Interestingly, the *opus signinum* seems to have covered the junction between wall 6583 and wall 6464, indicating that they were part of the same architectural programme, despite the fact the two were not bonded: the former simply abuts the latter. At the moment, however, we cannot offer a date for the plastering event or the junction of the two walls.

As noted in last year’s report, US 6563 and 6564 were one and the same. Consequently, it was decided to keep US 6564 as the only numbered context for this level. The soil of this layer extended horizontally across the whole of the room, and its compact nature indicates that it was likely an occupation surface. During the removal of this layer, a small mortar ledge projecting from the inner face of wall 6264 became visible; it seems to divide the wall’s elevation along its whole length, starting from the junction between wall 6264 and 6583. Under this ledge, the wall is set backward a couple of centimetres. It is still unclear if this part of the wall, which was labelled US 6644, is a completely different phase—in which case it postdates 6583 but predates 6264—or if it is a partial removal of plastering applied to the face of wall 6264. In both cases, layer US 6564 seems to be the limit between the two operations, which reinforce the hypothesis that it functioned as a surface, despite the total absence of any traces of an artisanal or productive activity.

Conclusions:

To summarise, it seems that it was possible to identify two different surface layers in Bottega 3, linked to two phases of the wall. The oldest one, SU 6624, could function with wall 6644, and it is connected to cut 6639, which is believed to be some sort of productive area. The latest, SU 6564, is associated with wall 6264, but doesn’t bear traces of any kind of activities.

Aims for 2019

During the 2019 field season, excavations will continue in Bottega 3, in an effort to understand better the types of activities and deposition processes that took place in this room over the course of the Roman period. Removal of deeper layers will hopefully provide interesting insights for the dating of the various architectural phases, especially the construction of walls 6583, 6264 and 6464.

Thomas Kerboul

Sounding 9

Sounding 9, located to the east of Botteghe 2 and 3, was opened in 2017 in order to find the back wall of these rooms (Fig. 3; Fig. 15). Below medieval agricultural fills (US 6201), this wall (US 6561) was successfully located in the northwest corner of the sounding. East of and abutting wall 6561, a multi-phase surface comprised of a layer of tile (US 6566) and mortar (US 6560) was also discovered.

The 2017 season closed with several unanswered questions regarding the chronological phasing of construction events in Sounding 9. These questions concerned primarily the function and construction phases of wall 6561, as two cuts were recognised but not explored. In the northwest corner of the sounding, a robber trench (US 6599) was identified; the extent of this cut is indeterminable due to the sounding limits. A second cut (US 6597) was observed bisecting wall 6561, and it is hypothesised that this may have served as a drainage channel. Further, the relationship between wall 6561 and party wall 6464, which formed the boundary between Botteghe 2 and 3, needed to be clarified. To address these issues, the key research questions for the 2018 field season were the following:

- 1) What is the chronological phasing of the major US observed in Sounding 9?
- 2) What is the relationship between walls 6561 and 6464?
- 3) Does wall 6561 continue to the south, beyond its junction with wall 6464?
- 4) Does the eastern section of Sounding 9 represent an internal or external space?

In an effort to better address these questions, the decision was taken prior to the start of the season to expand the boundaries of the sounding to the east and to the southwest. In doing so, our aim was to expose more of wall 6561 in the west and the tile surface US 6566, which covered the eastern two-thirds of the 2017 trench. Thus two formal expansions were laid out: Extension 1, which broadened the sounding a meter towards the east, and Extension 2, which increased the area around the southwest corner by 5 m².

In Extension 1, below the compact medieval agricultural fills (US 6201), a stone and mortar feature (US 6604), likely a drainage channel, was discovered atop a second layer of agricultural fill (US 6603). This fill was similar in nature to US 6201, and was not identified elsewhere in the sounding; the only identifying distinction was the presence of the structure 6604 (Fig. 16). It is likely that US 6604 is early medieval, as it rests on soils approximately 30 cm above the late antique mortar surface US 6560. In Extension 2, the removal of US 6201 revealed the southerly continuation of mortar surface US 6560 and tile surface US 6578, as well as a yellow clay layer in the western third of the extension.

The oldest visible feature at the close of the 2018 season was wall 6561, for which a construction trench has not yet been identified (Fig. 17). Evidence for the later robbing of this wall was recognised in the northwest corner of the sounding (US 6599). Additionally, the wall appears to have been deliberately cut from west to east, in line with the junction of 6561 with wall 6464 (cut 6597; more on this below). The expansion of the sounding to the south revealed that wall 6561 continued southwards, and we now suspect that it represents one long, continuous structure, which established the rear wall of Botteghe 1 and 2. Excavations in this area also clarified the relationship between wall 6464—the partition between Botteghe 2 and 3—and wall 6561. It is now clear that the former postdates the latter, which confirms what we had expected all along: that the interior partition walls that divided the botteghe were installed after the building's superstructure (represented by wall 6583/6264 in the west and wall 6561 in the east) was erected.

The oldest soil layer discovered in Sounding 9 thus far was the loose brown US 6594, which was visible only in the southern part of the sounding, to the east of wall 6561; it was thought to be covered by the tile surface US 6566. US 6594 was only partially visible due to bioturbation, which has previously been identified in this section of the sounding. The tile surface US 6566 was comprised of flat, broken roof tiles that do not appear worn; these were concentrated just to the east of wall 6561. A rectangular cut (US 6614) filled with a loose, dark brown soil (US 6615) was also observed; this feature was not excavated in 2018. Above US 6566, a layer of brownish-yellow silty clay (US 6592) served as a fill used to level the surface for the laying of a mortared walking surface (US 6560). The mortar surface, which was variably decaying and crumbly, was quite thick—up to 15 cm in some areas. This surface also abutted wall 6561 and continued over the base of the aforementioned cut US 6597. That the mortar continued over the cut suggests that the cut was intentional and perhaps functioned as a drainage channel. US 6560 was also observed to abut the eastern limit of tile surface US 6578 (of which only a small portion, c. 15x20 cm, was observed at the close of the 2017 season). The expansion of the sounding through Extension 2 revealed that this tile surface, comprised of re-used triangular column tiles and broken roof tiles, continued to the south. It was also determined that US 6578 was built upon the southern extension of (collapsed) wall 6561, south of its junction with wall 6464. A compact clay surface (US 6631) was discovered at the western limit of US 6578; this appears to have been an intentional levelling layer, laid atop the refuse of wall 6561's collapse. This collapse event is recorded by US 6637, a hard, brownish silty clay soil containing numerous large cut stones. It is suspected that the tile surface US 6578 was built upon levelling layer US 6631, and that these two layers, along with mortar surface US 6560, were related and served as a single levelling/resurfacing event.

Based on this season's results, we can begin to piece together the phasing of the main architectural events that occurred in Sounding 9. The following chronology is proposed (events listed from oldest to youngest):

- 1) Wall 6561 is constructed, likely contemporaneously with wall 6264.
- 2) Wall 6464, which abuts both walls 6561 and 6264, is constructed.
- 3) Wall 6561 collapses or is destroyed.
- 4) A multi-phase construction event takes place to level the area. This includes a cut (US 6597) through wall 6561 to create a drainage channel, the construction of mortar surface US 6560, the levelling of collapse layer US 6637 and the deposition of US 6578 atop the levelled remnants of wall 6561 in the southwest corner of the sounding.
- 5) Possible drainage channel 6604 is constructed at a much later date, following a build-up of medieval fill soils.

Dott.ssa Kristen Heasley

Materiali

L'attività di ricerca svolta presso i locali del magazzino del Museo Archeologico dell'Alta Val D'Agri ha previsto la catalogazione, l'inventariazione e la realizzazione della documentazione sia fotografica che grafica dei materiali rinvenuti presso il foro di Grumentum, settore S. Lo studio condotto contemporaneamente alla campagna di scavo archeologica effettuata nel mese di luglio 2018 ha sottolineato la presenza delle medesime attestazioni materiali già riportate alla luce durante le indagini eseguite dall'equipe del BAPG nel corso del 2015-2017.

Materiali Rinvenuti

Dal completamento della revisione sistematica dei reperti rinvenuti lo scorso anno e dall'inizio delle analisi su quello recentemente recuperato sono emerse le attestazioni qui di seguito elencate:

- Frammenti di ossa e denti di animali in cattivo stato di conservazione; frammenti di lucerne (N. Inv. 2326 Sounding 9 SU 6560); frammenti di vetro (non inventariati perché non diagnostici, di piccole dimensioni, di svariati colori e gradazioni); frammenti di conchiglie (sia di terra che

di mare); piccoli frammenti di carbone; frammenti di intonaco di colori differenti (rosso, giallo, rosa, viola, bianco, verde); piccoli gruppi di tessere musive; marmo; schegge di metallo, di scorie e di ferro; ed infine piccoli frammenti di bronzo (di difficile attribuzione date le dimensioni notevolmente ridotte).

- Ingente è la quantità di reperti ceramici recuperati. All'interno di questo grande gruppo è stato possibile sia individuare le diverse classi ceramiche che catalogare i singoli frammenti ad esse attribuite. L'analisi attualmente effettuata, ed ancora in fase di revisione e di completamento, conferma e apporta nuovi dati quantitativi a quanto emerso durante le indagini precedenti. Si tratta di attestazioni ceramiche prevalentemente frammentarie, il più delle volte in cattivo stato di conservazione e soltanto in sporadici casi è stato possibile effettuare alcune integrazioni.
- Il gruppo più ampio identificato è quello relativo alla ceramica comune. All'interno della classe è stato possibile distinguere la "ceramica comune da mensa" e la "ceramica comune da fuoco". Si è dinanzi ad una classe particolarmente difficile da definire e da comprendere che privilegia essenzialmente l'aspetto funzionale a svantaggio di quello estetico ma di imprescindibile importanza dal momento che offre una serie di indispensabili informazioni sul vasellame riservato al consumo e alla conservazione dei cibi (da mensa) e alla loro preparazione (da fuoco). L'osservazione autoptica ha permesso di individuare una serie di impasti dissimili la cui classificazione e preliminare conoscenza necessitano di ulteriori conferme e uno studio più specifico. In linea generale si può affermare che si tratta di produzioni locali: la ceramica comune da mensa è caratterizzata da un impasto più depurato, ricco di mica e di inclusi, mentre la ceramica comune da fuoco è poco depurata e ricchissima di inclusi al fine di resistere maggiormente agli shock termici alla quale veniva quotidianamente sottoposta. Per ciò che riguarda le forme è stato possibile individuare prevalentemente brocche, olle, anforette, coppe di diverse dimensioni, coperchi e piatti (da mensa); pentole, tegami, coppe e coperchi (da fuoco). A questo grande gruppo segue la ceramica comune decorata (con vernice tendente al rosso e al nero) e la ceramica comune a pareti sottili (acroma e decorata) le cui forme attualmente individuate, per entrambe le classi, sono da attribuire a coppe di differenti dimensioni e ad ollette.

Da segnalare, seppur in quantità nettamente inferiore, la classe relativa alla ceramica "Italic Thin Ware". Si è in presenza di coppe di piccole dimensioni con e senza motivi decorativi. Si tratta di una classe ceramica facilmente distinguibile per lo spessore notevolmente ridotto delle pareti e per una vernice lucente con riflessi metallici.

Lo studio sui reperti ceramici ha evidenziato inoltre la presenza di ceramica africana di tipo A-C-D. In questo caso si è dinanzi a frammenti caratterizzati da un'ottima qualità della vernice uniformemente distribuita sulla superficie e, talvolta, presentano decorazioni a rotella e/o barbotina simili ai tipi ampiamente diffusi nei mercati occidentali. Allo stato attuale della ricerca e delle attribuzioni è necessario precisare che si tratta di poche forme, per lo più scodelle e grandi piatti da portata, che trovano tuttavia una diffusione capillare e appositi confronti in tutti i centri del Mediterraneo.

Ad essa fa seguito la ceramica africana da cucina (al momento rinvenuti pochissimi frammenti non diagnostici) seguita da manufatti riferibili alla ceramica fine a vernice nera (di probabile produzione campana. Solo uno studio più accurato sui pochi frammenti diagnostici potrà confermare con esattezza la tipologia di produzione A-B-C). Sono stati inoltre rinvenuti piccoli frammenti non diagnostici riferibili alla ceramica fine di produzione pompeiana. Da annoverare anche la presenza della classe relativa alla ceramica sigillata. In questo caso appaiono forme standardizzate e un repertorio formale alquanto ridotto. Attualmente sono state individuate solo coppe. Ad una visione autoptica i frammenti possono essere ritenuti di produzione italica: caratterizzati da un'argilla calcarea, molto pura e sprovvista di sgrassanti. Alcuni di essi presentano decorazioni, il più delle volte ottenute a stampo (*appliques*) probabilmente applicate con argilla liquida (*barbotine*), come confermato da appositi confronti, direttamente utilizzata sul vaso per comporre piccoli e semplici motivi decorativi. La lucidità, la brillantezza e una

superficie-sia esterna che interna-notevolmente liscia al tatto sono elementi che accomunano i frammenti. A completare l'exkursus è la ceramica a pasta grigia per la quale, attualmente, sono state individuate solo grandi piatti da portata.

- Tra i reperti notevoli è invece da annoverare la presenza di spilloni per capelli (N. Inv. 2064 Sounding 4 SU 6553; N. Inv. 2334 Sounding 7 SU 6564; N. Inv. 2168 Sounding 4 SU 6572; N. Inv. 2166-2167 Sounding 7 SU 6612; N. Inv. 2442-2444 Sounding 7 SU 6612; N. Inv. 2244 Sounding 4 SU 6627); di monete (N. Inv. 1927-1939 Sounding 7 SU 6473/6536; N. Inv. 2292 Sounding 4 SU 6574; N. Inv. 2322-2323 fuori contesto; N. Inv. 2333 Sounding 7 SU 6563 /SU 6564; N. Inv. 2090 Sounding 4 SU 6590; N. Inv. 2165 Sounding 7 SU 6605; N. Inv. 2421-2441 Sounding 7 SU 6612) rinvenute nella maggior parte dei casi in cattivo stato di conservazione, corrose, illeggibili e in alcuni casi non integre; ed infine piccoli “dadi” da gioco (N. Inv. 1958 Sounding 4 SU 6549 ; N. Inv. 2298 Sounding 4 SU 6557=6580; N. Inv. 2302 Sounding 4 SU 6593; N. Inv. 2321 fuori contesto; N. Inv. 2173 Sounding 5 US 6489).

Metodologia Di Classificazione

I manufatti rinvenuti, sia quelli ritenuti diagnostici che quelli notevoli, sono stati opportunamente numerati seguendo un semplice schema di inventariazione che prevede l'indicazione dell'anno di scavo, seguito dal numero del Sounding, dal numero dell'Unità Stratigrafica e infine da un numero progressivo. Ad ogni reperto diagnostico e notevole è stata associata una scheda contenente le seguenti indicazioni: dati generali che riportano informazioni correlate al numero di inventario, alla data del rinvenimento, al numero del Sounding e al numero di US. A tali informazioni seguono quelle relative alla categoria (ad es. moneta, lucerna, ceramica, spilloni, dadi da gioco etc.), alla tipologia di produzione (ad es. nel caso della ceramica se si tratta di una produzione africana A o B); riferimento bibliografico; osservazioni sul frammento (ad es. se il reperto è caratterizzato da un profilo completo o meno o, come nel caso dei manufatti ceramici, se si è in presenza di orlo, ansa o piede); indicazioni relative alle dimensioni dell'esemplare esaminato (informazioni sul diametro, sullo spessore e sull'altezza massima) espresse in centimetri. Tali dati sono seguiti da indicazioni inerenti la presenza di motivi decorativi, da osservazioni sul colore, da informazioni sulla produzione ed infine da considerazioni relative all'arco cronologico.

Gli esemplari diagnostici sono corredati da apposita documentazione grafica realizzata manualmente in scala 1:2 e da relativa documentazione grafica. Per ciò che riguarda invece tutti gli altri reperti rinvenuti non ritenuti diagnostici si è proceduto semplicemente con il relativo conteggio.

Obiettivi

Ci si prefigge, pertanto, per la prossima campagna di studio dei materiali (luglio 2019) di revisionare e completare la catalogazione, la documentazione grafica e fotografica relativa alle Unità Stratigrafiche individuate nella campagna di scavo 2018 e di procedere con il medesimo approccio metodologico per le attestazioni materiali che saranno in seguito individuate, al fine di avere una visione d'insieme più completa delle dinamiche commerciali e produttive del sito romano di Grumentum.

Dott.ssa Cristina di Lorenzo

Summary

At the start of the 2018 campaign, our chief aims were we to uncover definitive evidence for the function of the building complex under excavation in Settore S, and to obtain a better understanding of the structures that existed in this area prior to its construction. Thus far, however, excavations inside the “botteghe” have not offered insight into the types of activities that took place within this complex. While we have identified a pair of occupation levels in Bottega 3, neither contained artefact assemblages offering definitive evidence for how the space was used. If the building was home to series of *tabernae*, as we imagine, we might also expect to find architectural evidence confirming this

identification. Yet the only doorway that we have recognised thus far, which grants entry onto Bottega 2, is not of the traditional “wide” variety: it measures only 1.27 m from jamb to jamb (Fig. 18). Nor is there evidence for the masonry fixtures associated with retail outlets and workshops elsewhere in Roman Italy: we have found no basins, tubs, or bar counters, and there is no sign of the customary stairway that led to a mezzanine or upper floor above. So for the moment, our reading of this complex as a commercial/industrial property must remain exclusively in the realm of “informed speculation.”

It is possible, however, to draw some preliminary conclusions about the nature of this building based upon the archaeological and geophysical data obtained thus far. The construction date for the complex can be set firmly in the late 2nd or early 3rd century AD, and excavations in Sounding 5 have confirmed that it was not the first building located on this site. Over the course of the 3rd and 4th centuries, the internal arrangement of the building’s rooms was adjusted, and the colonnade rebuilt on at least one occasion; this may have been in response to a fire, for which we have found evidence throughout Soundings 4 and 5.

In terms of the overall architectural design, there are two realistic interpretations of the evidence at present:

Option 1

The building was composed of a single range of rooms flanked by the portico to the west, and it extended northwards to a line established by the north wall of the forum (the extent of the building in this direction is easy enough to determine thanks to the results of the geophysical survey conducted during the late 2000s). A cobbled yard was located to the building’s east, as suggested by the tile-and-mortar surface (US 6560/6566) discovered in Sounding 9 (Fig. 19). It must be acknowledged that this would be an unusual arrangement for a commercial property in this part of the Roman world. The closest comparable structure is probably the so-called “strip building” located outside the Porta Ercolano at Pompeii, which is similarly composed of a colonnade, portico, and row of *tabernae*. Here, however, there is a balance between the width of portico (4.2 m) and depth of the shops (17.4 m); at Grumentum, the opposite is the case: the portico’s width of 5.24 m nearly matches the depth of the rooms to the east, which measure about 6.2 m from front wall to rear.

Option 2

A more likely scenario is that the portico and shops represent one section of a much larger complex, in which a central yard was flanked by two or three additional ranges of rooms (Fig. 20). There are a number of building types of the high imperial period that utilised such an arrangement—from *horrea* to apartment complexes. But the scale of the building and its proximity to the forum might suggest that a *macellum*—perhaps similar in design to the example from Minturnae, which dates to the mid-2nd century AD—is the most likely option.

Needless to say, only further excavation—particularly to the north and the east of the current trench—will reveal the full extent (and hopefully function) of the complex. These areas, along with the sector’s earlier building phases, will be the main foci of the 2019 field season.

Figures



Fig. 1 Forum of Grumentum, photographed in 2017; “S” indicates location of the BAPG trench

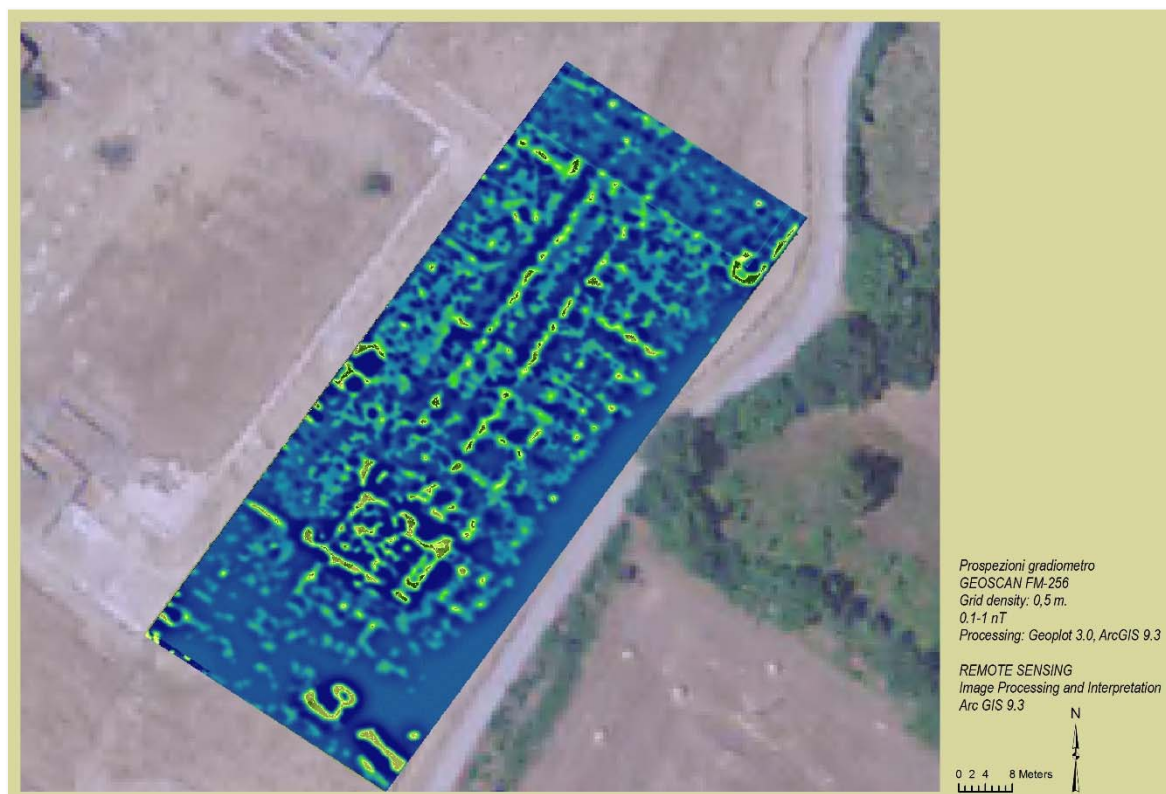


Fig. 2 Results of the 2011 magnetometer survey conducted in Settore S

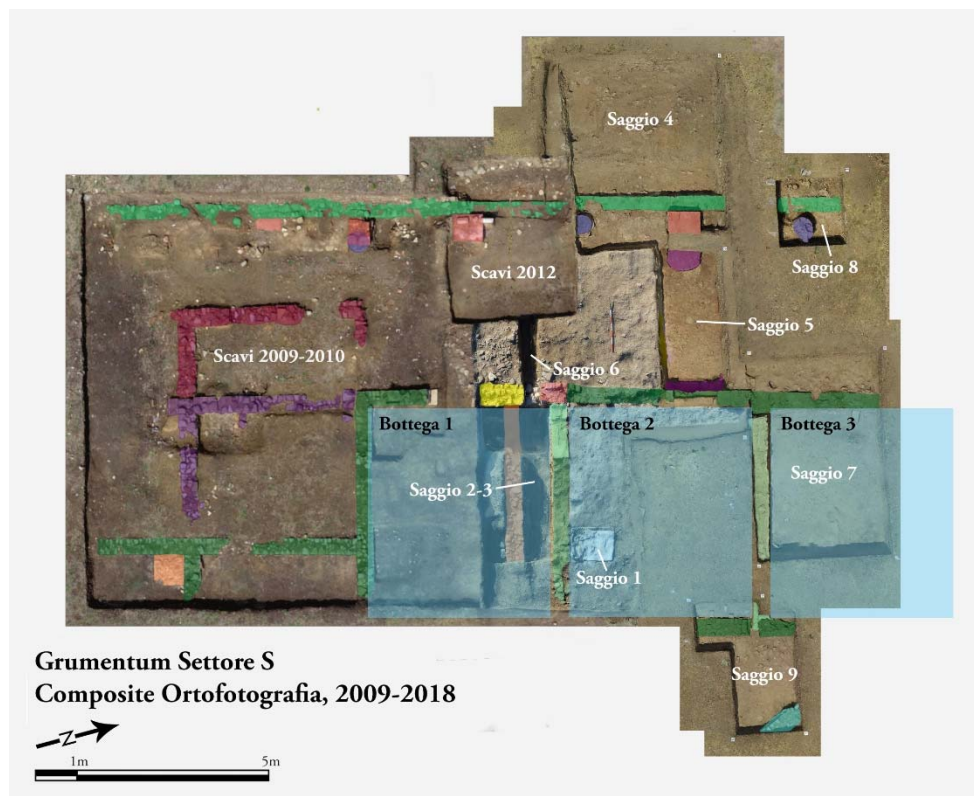


Fig. 3 Composite orthophotograph of excavations in Settore S at the conclusion of 2017 season; architectural elements and phasing highlighted in various colours



Fig. 4 Mortar surface to the west of wall US 6561 in Sounding 9, during 2017 season



Fig. 5 Sounding 5 during the 2017 campaign. Surface US 6554 visible on the left, wall US 6540 on the right

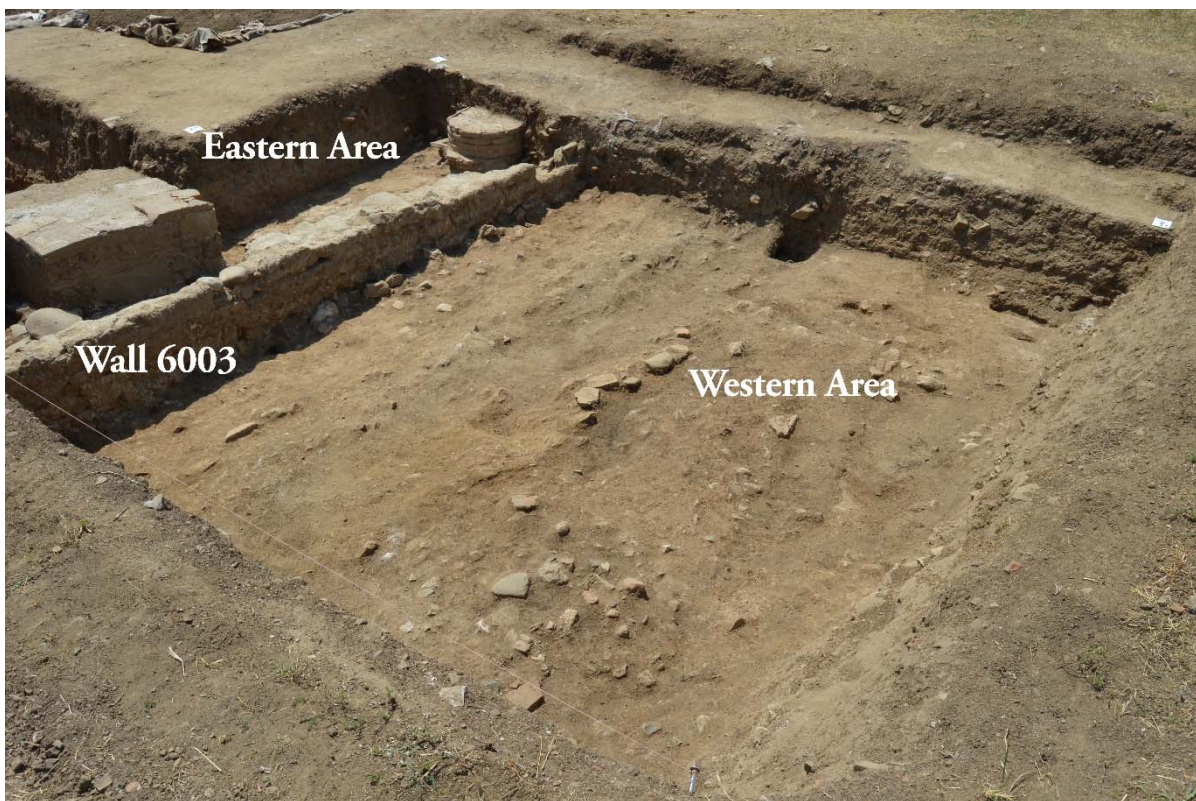


Fig. 6 Sounding 4 at the conclusion of the 2018 season; view from northwest



Fig. 7 Plan of “conglomerate” surface US 6482-6495 in Soundings 4 and 5, recorded in 2017



Fig. 8 Broken *mortarium* recovered from US 6635 in Sounding 4



Fig. 9 Architectural feature 6421 surrounded by cut 6633. Remains of *vernice nera* plate visible in situ at upper right



Fig. 10 Sounding 5 at the conclusion of the 2018 season. Wall 6540 visible at far left; architectural feature 6421 at far right

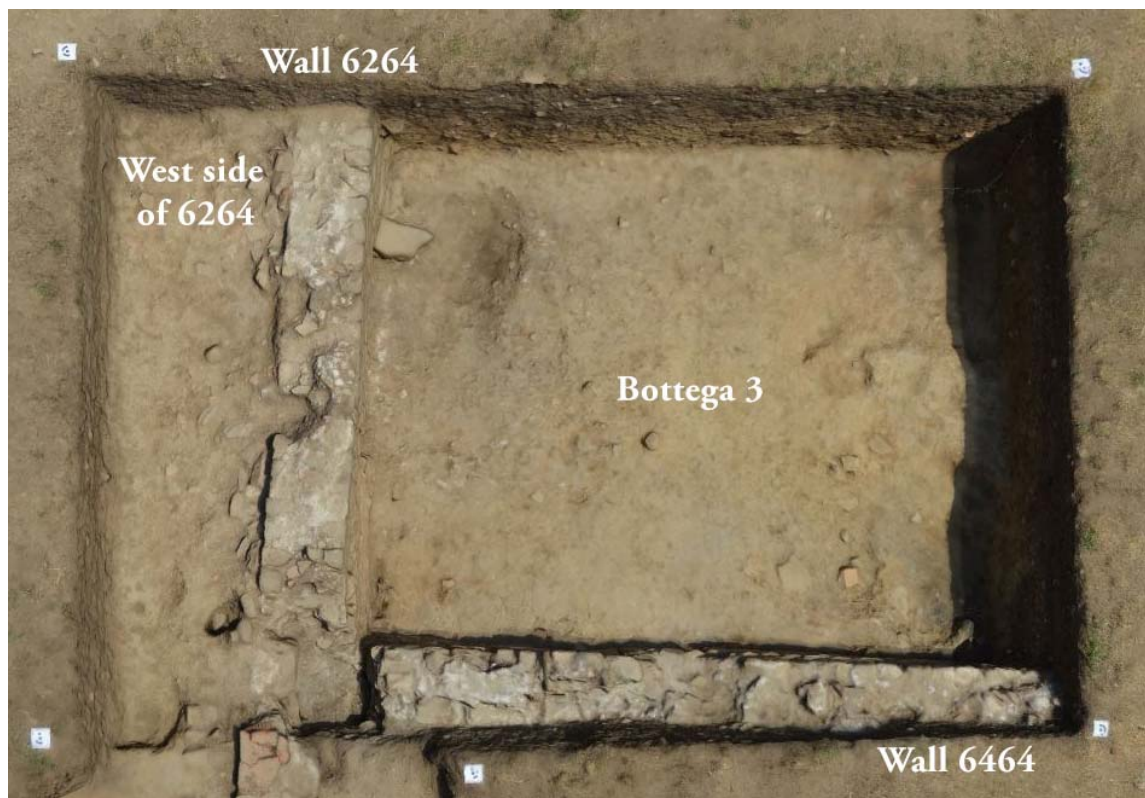


Fig. 11 Orthophoto of Sounding 7 at the conclusion of the 2018 season



Fig. 12 Group of bronze coins (US 6612) found laying on surface of US 6624



Fig. 13 Broken pieces of worked marble retrieved from US 6613



Fig. 14 Cut US 6602, located at junction of walls 6264 and 6583. The removal of fill US 6601 revealed the *opus signinum* plastering on the lower section of the 6583



Fig. 15 Sounding 9 at the conclusion of the 2018 season; view from northeast. Wall 6561 visible towards the back of the trench



Fig. 16 Structure 6604, view from west



Fig. 17 Plan view of Sounding 9, Extension 2 depicting wall 6561

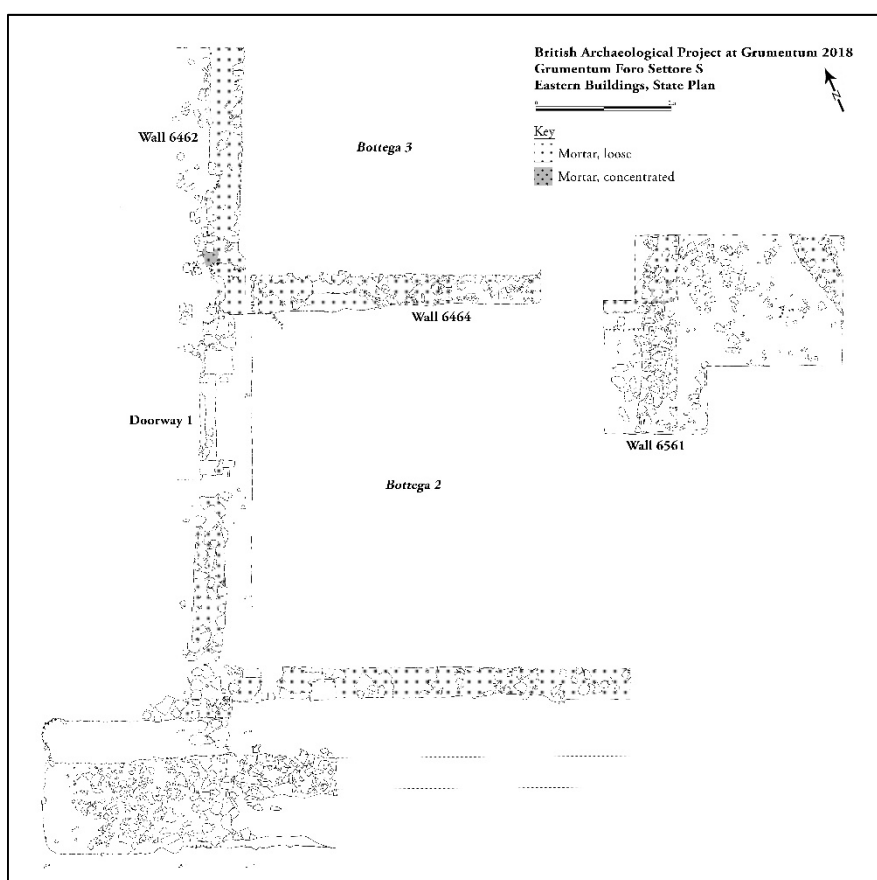


Fig. 18 Plan of the Botteghe 2 and 3; doorway granting access on Bottega 2 visible at left



Fig. 19 Hypothetical reconstruction of building complex in Settore S (Option 1), left; so-called “Strip Building” at Pompeii, right (Pompeii GIS courtesy *Pompeii Bibliography and Mapping Project*)



Fig. 20 Hypothetical reconstruction of building complex in Settore S (Option 2), left; *macellum* at Minturnae, right (*macellum* plan after Bellini and von Hesberg, 2015, Fig. 1)¹

¹ Bellini, G. and von Hesber, H. (2015). *Minturnae: nuovi contributi alla conoscenza della forma urbis*. Roma: Edizione Quasar.