FASTIONLINEDOCUMENTS&RESEA

The Journal of Fasti Online (ISSN 1828-3179) • Published by the Associazione Internazionale di Archeologia Classica • Palazzo Altemps, Via Sant'Appolinare 8 – 00186 Roma • Tel. / Fax: ++39.06.67.98.798 • http://www.aiac.org; http://www.fastionline.org

# Archaeological Research at the Sanctuary of Venus in Pompeii: Interim Report of the 2018-2019 Seasons of the Venus Pompeiana Project

Marcello Mogetta - Ilaria Battiloro - Ivan Varriale - Daniel P. Diffendale -

Giordano Iacomelli – Mattia D'Acri – Chiara Corbino – Chiara Comegna – Giacomo Pardini

As part of the new cycle of archaeological research promoted by the Archaeological Park of Pompeii in the Sanctuary and Temple of Venus (VIII.1.3), a team from Mount Allison University and the University of Missouri undertook a second and third season of fieldwork in the summers of 2018 and 2019. This report presents the stratigraphic data collected from trenches excavated within the cella, in the open court E of the temple, and in the E wing of the triporticus that surrounded it. The results have allowed us to further define the spatial organization of the area prior to the construction of the monumental sanctuary, first uncovered in 2017, revealing more remains of Samnite-era buildings that occupied elongated city blocks which were formally developed during the 2<sup>nd</sup> century BCE and repurposed in the early 1<sup>st</sup> century BCE, possibly for commercial functions. Based on finds from the obliteration sequence of these features and the surviving architectural decoration, the erection of the temple and triporticus can be securely dated to the late 1<sup>st</sup> century BCE, thus undermining previous reconstructions that variously assigned the first building phase to the Late Samnite, Sullan or Caesarian periods.

## Introduction

The Venus Pompeiana Project (VPP), a collaborative initiative between Mount Allison University, the University of Missouri, and the Archaeological Park of Pompeii, has completed three consecutive seasons of study and fieldwork within the precinct of the Temple of Venus at Pompeii (2017-2019)<sup>1</sup>. The main objective has been to reanalyze unpublished legacy data from previous excavations, most notably the campaigns directed by E. Curti of the Scuola di Specializzazione in Archeologia di Matera (2004-2007)<sup>2</sup>, seeking to better understand the early development of the sanctuary and clarify its sequence of construction.

<sup>2</sup> CURTI 2008a.

<sup>&</sup>lt;sup>1</sup> Prot. No. 48, 1 June 2017, "Il culto di Venere a Pompei: nuove indagini nell'area sacra (VIII.1.3)". We are grateful to the former and current directors of the Archaeological Park of Pompeii, M. Osanna and G. Zuchtriegel, for their constant support of the project. We would also like to acknowledge G. Stefani, L. D'Esposito, F. Muscolino, G. Scarpati, A. Martellone, and M.L. Iadanza for their precious collaboration, with M. De Luca, V. Sabini, D. Busiello, and U. Franco. The project has been generously funded by: Social Sciences and Humanities Research Council of Canada; Archaeological Institute of America, Cotsen Grant; Department of Classics Archaeology Funds (Mount Allison University); Crake Foundation (Mount Allison University); President's Research and Creative Activities Fund (Mount Allison University); Arts & Science Dean's Office (University of Missouri); Department of Classics, Archaeology, and Religion, Luitpold and Barbara Wallach Research Fund (University of Missouri); Research Council Large Grants (University of Missouri).

To reach firmer conclusions about the nature of the occupation during the Samnite-to-Roman transition, which has been the object of considerable debate following Curti's excavations<sup>3</sup>, new targeted interventions have been carried out by VPP in several sectors of the sanctuary. Our overall strategy has been to reopen the old trenches so as to resurvey both the standing features and the exposed sections. This has allowed us to test portions of the stratification which were left untouched, and to continue the investigations below the levels reached in 2007. The associated finds were also retrieved from storage to be restudied, thus integrating the old and new data.

As has already been reported, the first season of fieldwork in 2017 concentrated on a previously excavated area E of the temple podium (Curti's Trench IIS)<sup>4</sup>. In this sector, direct stratigraphic relationships had been observed between the various floors of the court and the foundations of the E portico; architectural evidence predating the construction of the temple complex had also been exposed. To better define the layout and clarify the function of those features, Trench A was opened to the E of Trench IIS, in a previously unexplored portion of the E portico. On that basis, we were able to anchor the first monumentalization of the site in the post-Sullan period<sup>5</sup>. We also demonstrated that the topographic organization of the area prior to the erection of the sanctuary was radically different. During the Samnite period, a street running south from Via Marina demarcated two separate city blocks of elongated shape (referred to as E block and W block), each occupied by multiroom structures. Projected to the north, the street reaches the intersection of Vicolo del Gigante; to the south, its course aligns with the extent of a vaulted ramp enclosed within front terrace of the sanctuary and associated pomerial passageway, suggesting that the street originally continued up to the line of the fortifications (fig. 1).

Armed with that background information, we returned to the site in 2018-2019<sup>6</sup>. Trench IIS was expanded W toward the temple podium, in an area previously untested (Trench IIS-W); immediately to the N, we reexposed another square from Curti's excavations (Trench IIN); Trenches B and C were opened across the E portico, reaching the *opus reticulatum* structure that separated the sanctuary from the N-S leg of the Vicolo di Championnet (Vicolo della Basilica); finally, a small sondage was reopened in the NW sector of the cella (Curti's Trench IVN) (fig. 2). The placement of the trenches has allowed us to obtain a continuous cross-section from the temple podium to the E precinct wall (fig. 3).

Taken together, the results of the stratigraphic excavations carried out thus far have produced a critical mass of new data on the history of the cult place between the 2<sup>nd</sup> century BCE and the final destruction in 79 CE, enabling us to refine the site periodization. The phasing can be now summarized as follows:

• Phase 1: Samnite-era structures predating the first monumentalization of the area (1a), with a subphase of post-Sullan modifications and restorations (1b);

• Phase 2: Augustan-era construction of the temple and *triporticus* complex (2a), with a sub-phase of modifications and restorations (2b);

Phase 3: Reconstruction following the 62 CE earthquake (still unfinished in 79 CE).

In this report, we provide a detailed account of the stratigraphic sequence documented within each of the trenches excavated in 2018-2019, present the associated diagnostic ceramic and coin finds, and offer a first contextualization of the results<sup>7</sup>.

[M.M. - I.B. - I.V. - D.D.]

<sup>&</sup>lt;sup>3</sup> For an overview of Curti's research project, see LEPONE 2017; CARROLL 2010 for an early critique.

<sup>&</sup>lt;sup>4</sup> The architectural setting of the sanctuary is described in greater detail in BATTILORO et al. 2018: 4-6.

<sup>&</sup>lt;sup>5</sup> BATTILORO *et al.* 2018: 8-20.

<sup>&</sup>lt;sup>6</sup> VPP is co-directed by I. Battiloro and M. Mogetta with the help of I. Varriale (Field Director); D. Diffendale, with the assistance of M. Harder (Topography and Photogrammetry); S. Buchanan (Archive); C. Monda, with the assistance of D. Taggiasco (Architectural Structures); L. Arbezzano, J. Assaly, M. D'Acri, M. Pignataro, P. Wright (Trench Supervisors); M. Barretta, G. Iacomelli (Finds Lab Supervisors); G. Pardini (Numismatist); C. Comegna (Archaeobotany), with the collaboration of L. Motta e N. Cullen; C. Corbino (Archaeozoology); Terrae, Indagini Archeologiche e Analisi di Laboratorio, and M. Langella provided logistical assistance. We are grateful for the enthusiastic participation of students from Canadian and American institutions (Mount Allison University, Brock University, University of New Brunswick, Trent University, University of Regina, University of Winnipeg, Simon Fraser University): E. Arima, C. Brun, B. Cavanagh, E. Chaykowski, K. Christensen, V. DeHart, A. Drisdelle, K. Edwards, A. Ehler, E. Globe, S. Hanek, H. Graham, B. Harder, S. Hillier, C. Jacquard, E. Kesteven, M. King, P. LeBlanc, N. Legere, A. Liu, E. March, S. Martinez, K. Mason, M. McIntire, E. Munro, M.-N. Mutter, K. Nix, C. Osborne, G. Patten, N. Payne, L. Nishiyama, M. Reeves, A. Stockford, G. Tarnowski, K. Theoret, H. VanElslander e K. Yui.

<sup>&</sup>lt;sup>7</sup> For a preliminary synthesis see also BATTILORO, MOGETTA 2021.



Fig. 1. Schematic phase plan showing the distribution of Samnite-era architectural features exposed below the sanctuary, including the N-S street identified in 2017 and updates from the 2018-2019 seasons (Author: D. Diffendale).



Fig. 2. State plan of the Sanctuary of Venus showing the position of the trenches excavated by the Venus Pompeiana Project (Author: D. Diffendale).



Fig. 3. Cumulative cross-section of the stratigraphic sequence with indication of the main building phases (Author: D. Diffendale).

#### Trenches IIS-W and IIN (figs. 4-18; tables 1-4; pl. I-II)

Trench IIS-W is an L-shaped sondage measuring 7.3 x 3.6 m, delimited to the E by a N-S masonry drainage channel which traversed the open court in Phase 2b, and to the W by the exterior E facing of the temple podium of Phase 3. The W sector of the trench preserved a complete stratigraphic sequence (figs. 4-5).

To the N, a narrow pedestal of unexcavated deposits separates Trench IIS-W from Trench IIN, which measures 3.0 x 3.3 m. No archaeological deposits were excavated in Trench IIN, where we only removed Curti's backfill to record in detail structures that had been brought to light in 2006.

Phase 1 stratigraphy and finds from these trenches establish a pre-temple use of the area well into the 1<sup>st</sup> century BCE; phase 2 documents the destruction of buildings and new construction with a *terminus post quem* of 30 BCE, i.e., the new Sanctuary of Venus; and phase 3 belongs to the Flavian period.



Fig. 4. VPP 2018-2019: E-W cross-section of Trench IIS-W, viewed from S, integrating the available spatial data from the 2006 excavations (Author: D. Diffendale).



Fig. 5. VPP 2018-2019: N-S cross-section of Trench IIN and IIS-W, viewed from E, integrating the available spatial data from the 2006 excavations (Author: D. Diffendale).

#### Phase 1a: Stratigraphy

Whereas the presence of the Augustan-period drainage channel (2364) directly above it prevented us from reaching the actual road levels, we were able to document the sequence of construction of the W sidewalk. Below its beaten-earth surfaces (3014, 3021) was a preparation level of brown silt (3071), which in turn covered another compact deposit featuring ceramic inclusions only on the upper interface (3069=3072). This probably represented the level that was cut for the construction of the sidewalk, sitting directly above natural soil (3073).

In the W block, part of the building that faced onto the street has been brought to light in 2018 (fig. 6). The structure is delimited by a clay-based mortared rubble perimeter wall (**2971**), heavily damaged and in some stretches razed to the foundation level, which consisted of pappamonte blocks (**3004**). In terms of layout and internal organization, we can reconstruct with some confidence an axial sequence of three adjoining rooms (fig. 7). To the north is Room A, poorly preserved due to extensive spoliation and modern subsidence. A narrow threshold (**2495**) gave access from it to a central space, Room B. To the south, Room B is delimited by an E-W *opus incertum* wall of Sarno limestone rubble (**2988**); abutting its SE termination are the remains of a pilaster or anta (**3036**). Farther to the S, we hypothesize the existence of a third space, Room C, delimited to the W by a badly damaged foundation course in Sarno limestone headers, oriented N-S (**3023**). Room C was probably accessible from the street, as indicated by a spoliation cut (**3009**) into the perimeter wall which could have resulted from the removal of a stone threshold (width: 1.80 m).

Abutting the E perimeter wall in Room B is a rectangular cocciopesto basin (2970=3042), which likely discharged onto a drainage channel built into the sidewalk (2934) (fig. 8). Next to the basin, in the SE corner of the room, was a 3-m deep cistern in the shape of a narrow, truncated cone (3063: bottom approximately 0.9 m wide; 3062: mouth), approximately 0.6 m wide, built into a square construction shaft dug into the palaeosol (3049) with mortared rubble walls (3033), and lined with hydraulic plaster (3053) (figs. 9-10). Excavation of the preparation levels in Room C (3037, 3069) revealed a deep linear cut (3076, filled by 3074, 3078), at the bottom of which was an underground channel sloping from S to N that fed the cistern. This mortared-rubble conduit (east side: 3088; west side: 3087), covered by Sarno limestone slabs (3080), evidently collected water from an open area or atrium located to the S of Room C.

No layers relating to the initial occupation of the building have been identified, making it difficult to interpret its original function.

[I.V. - D.D. - M.M. - I.B.]



Fig. 6. VPP 2017-2019. Phase 1a-b: Main structural features identified in Trenches IIS-W, IIN, IIS-E, A and B (Author: D. Diffendale).



Fig. 7. Schematic reconstruction of the building identified in Trenches IIS-W, IIN, with indication of Rooms A, B, and C (Author: D. Diffendale).



Fig. 8. VPP 2018, Trench IIN: View (from N) of Rooms A and B (Phases 1a and 1b). Note to the left the remains of the sidewalk of the N-S street delimiting the W city block (2935), the associated drain (2934), and the threshold of Room B (2495) (Photo: VPP).





Fig. 9. VPP 2018, Trench IIS-W: View (from E) of Rooms B and C (Phases 1a and 1b). Note the position of the cistern in relation to the cocciopesto basin 2970. (Photo: VPP).

Fig. 10. VPP 2019, Trench IIS-W: Composite photomodel of the Room B cistern (Author: D. Diffendale).

#### Phase 1a: Finds

A total of 264 ceramic fragments were retrieved from the layers associated with the construction and use of the sidewalk and the sequence on top of the underground channel in Room C. The most attested type is Black Gloss (n=138), followed by common ware (n=71) and cooking ware (n=55) sherds respectively. The diagnostic parts (rims, handles, bases) are generally poorly preserved and highly fragmented, hindering precise and reliable typological identification. Of the 54 diagnostic sherds, the most frequent category is represented by Black Gloss (20 rims, 3 handles, 5 bases), followed by common ware (9 rims, 4 handles, 3 bases) and cooking ware (4 rims, 4 handles, 2 bases).

The most significant elements for dating purposes are described in Table 1. The sample includes examples of patera shapes belonging to the middle Campana A production (200/190-100 BCE)<sup>8</sup>, such as Morel's type 2272b1, datable to between the end of the 2<sup>nd</sup> c. BCE and the first half of the following century (from **3071**; Plate I.1), 2255a, characteristic of the middle 2<sup>nd</sup> century BCE (from **3037**)<sup>9</sup>, and 2257a, datable to the second half of the 2<sup>nd</sup> century BCE (from **3021**). The two fragments of 4<sup>th</sup> century BCE *skyphoi* (Morel 4311 and 4343 a1) clearly represent residues.

[G.I. – M.D.]

#### Phase 1b: Stratigraphy

The obliteration sequence of the cistern (fig. 11) indicates that the building underwent a series of modifications while its rooms were still in use. Similar remodeling activities are documented also in the E block<sup>10</sup>. In the first stage of the process, the cistern was defunctionalized by blocking the connection with the feeding channel, causing the conduit to progressively fill with sediment containing animal bones and malacological remains (**3084**). The mouth of the cistern was razed to build a small sec-



Fig. 11. VPP 2019, Trench IIS-W: Cross-section of the Room B cistern and associated fills (Author: D. Diffendale).

tion of N-S wall (**2992**), which possibly served to delimit a manhole or to isolate that area. Adjacent to the wall, a raised cocciopesto floor was created (**2934**), perhaps replacing an earlier one; the rim of basin **2970=3042** was chiseled away to make the new surface better adhere to the pre-existing feature. In Room C, the pilaster was removed, and a new beaten-earth surface (**2999**) was created across the entire space as part of the razing activities. A concentration of coins was detected on this layer (fig. 12), including a Roman quadrans of the late 2<sup>nd</sup> or early 1<sup>st</sup> century BCE (see **Cat. no. 34**) and a serrated denarius minted in 85 BCE (see **Cat. no. 36**), which must have circulated for some time before being halved and eventually entering the stratification.

Following these structural changes, the cistern shaft was repurposed into a midden: the lower section was progressively filled with dumps of heterogeneous material, among which were fine tableware and cooking vessels (**3060**; fig. 13) and remains indicative of food waste, including seashells, fish bones, scales, and sea urchin shells (**3059**), further discussed below. This suggests that the shaft was being used as a midden.

[I.V. - D.D. - M.M. - I.B.]

<sup>&</sup>lt;sup>8</sup> For the internal periodization of the Campana A production, see MOREL 1994: 47; BRECCIAROLI TABORELLI 2005: 70-71.

<sup>&</sup>lt;sup>9</sup> Examples of the same patera type found in Curti's excavations are reported by COLETTI 2020: fig. 9.3.

<sup>&</sup>lt;sup>10</sup> BATTILORO *et al.* 2018: 12.



SU	Class	Shape	Production	Type/Comparanda	Chronology	Fragments/ Individuals	Plate
3021	Black Gloss	Skyphos	Etruria	Morel 4311	4 <sup>th</sup> c. BCE	1/1	-
3021	Black Gloss	Patera	Middle Cam- pana A	Morel 2257a	Second half 2 <sup>nd</sup> c. BCE	1/1	-
3037	Black Gloss	Plate/Patera	Middle Cam- pana A	Morel 2255a	Mid-2 <sup>nd</sup> c. BCE	1/1	-
3037	Black Gloss	Cup	Etruria/Latium	Morel 2241a	3 <sup>rd</sup> / 2 <sup>nd</sup> c. BCE	1/1	-
3037	Black Gloss	Сир	Campana A	Morel 2737 c1	Middle/Third Quarter 3 <sup>rd</sup> c. BCE	1/1	-
3069	Black Gloss	Сир	Etruria/Latium	Morel 2842a1	Middle/ Sec- ond Half 2 <sup>nd</sup> c. BCE	1/1	-
3071	Black Gloss	Patera	Middle Cam- pana A	Morel 2272b1	End 2 <sup>nd</sup> c. BCE- First Half 1 <sup>st</sup> c. BCE	2/2	Pl. l.1
3078	Black Gloss	Skyphos	Campana A	Morel 4343 a1	End 4 <sup>th</sup> c. BCE	1/1	-
3078	Black Gloss	Unguentarium	Etruria/Latium	Morel 7111c	2 <sup>nd</sup> c. BCE?	1/1	-
3078	Common Ware	Lagynos	Campania	Di Giovanni – Gasperetti 1993, 273, type 1262	2 <sup>nd</sup> - 1 <sup>st</sup> c. BCE	1/1	-

Table 1. VPP 2018-2019, Trench II SW. Phase 1a: distribution of diagnostic finds.



Fig. 12. VPP 2018, Trench IIS-W: Plan of beaten-earth surface 2999 (Phase 1b) showing the findspots of coins, identified by special find number (for the correspondence see Cat. nos. 4, 11, 12, 18, 19, 22, 25, 26, 34, 36; not plotted: Cat. nos. 8, 15, 16 and 30, found from the screen).



Fig. 13. VPP 2019, Trench IIS-W: View of the concentration of ceramic vessels (3060) deposited at the bottom of the Room B cistern in Phase 1b (Photo: VPP).

#### Phase 1b: Finds from the lower fills of the cistern

The deposits excavated at the bottom of the cistern contained 344 sherds, 128 of which are diagnostic. The most attested ceramic type is common ware (n=122), followed by cooking ware (n=100), Black Gloss (n=86), and Thin Wall pottery (n=18). The assemblage also includes a small amount of Eastern Sigillata A (n=8), so-called Italo-Megarian pottery (n=5), locally made Internal Red Slip (n=3), and lamps (n=2). The overall state of preservation of the finds is good: some of the vessels are whole; others are fragmented but their shape can be reconstructed in its entirety. The datable types are listed in Table 2.

Among the most notable items is an ESA plate of a shape commonly attested at Pompeii in the first half of the 1<sup>st</sup> century BCE (*Atlante* Form 3; Pl. I.6), featuring an upwardly curved rim, a bottom decorated by internal bands, and usually presenting double-dipping streaks<sup>11</sup>. An equally important class for dating purposes is represented by examples of Italo-Megarian relief cups belonging to the final phase of production from Latium (150-75 BCE)<sup>12</sup>. The best-preserved vessel (Pl. II.1) finds close *comparanda* with the so-called Delian type attested in Sicily (Morgantina and Monte Iato)<sup>13</sup>. Another body fragment (Pl. II.2) has a decoration characterized by rows of overlapping leaves, whose style can be linked to the production by the Greek potter Herakleides, active at Tibur in the early 1<sup>st</sup> century BCE<sup>14</sup>. The fine ware assemblage also features Thin-Walled beakers or goblets comparable to Marabini types V.57-58 (Pl. I.2), XXIII (Pl. II.6), III.26 (Pl. II.7), and III.30-31 (Pl. II.3-4), all dating to the second or third quarter of the 1<sup>st</sup> century BCE<sup>15</sup>.

<sup>&</sup>lt;sup>11</sup> SIGGES 2002: 138, table. 18; fabric Sig. 01 (PESANDO, GIGLIO 2017: 966).

<sup>&</sup>lt;sup>12</sup> Tibur was among the main production centers: PUPPO 1995: 66-80; LEOTTA, OLCESE 1997: 13-74; LEOTTA 1998: 7-64.

<sup>&</sup>lt;sup>13</sup> On the *comparanda*, see PUPPO 1995: 113, PI. XLIX, S11g, (Monte lato); PUPPO 1995: 117, PI. L, M3 (Morgantina).

<sup>&</sup>lt;sup>14</sup> On the decorative pattern, see PUPPO 1995: 175, fig. 25c; PUPPO 1995: 59 XXII-XXIII, H3 (by Herakleides). On Herakleides, see also LEOTTA 1996: 227.

<sup>&</sup>lt;sup>15</sup> The two examples of the Marabini III.30-31 type find precise comparisons with materials from the recent excavations of the harbor site of Naples: FAGA 2008: fig. 2, nos. 3-4.

SU	Class	Shape	Production	Type/Comparanda	Chronology	Frag- ments/l ndivid- uals	Plate
3059	Black Gloss	Pvxis	Campana B	Morel 7551	100 - 27 BCE	1/1	-
3059	Thin wall	Beaker	Central Italy	Marabini V, 57-58	Second/ Third Quarter 1 <sup>st</sup> c. BCE	1/1	Pl. I.2
3059	Common ware	Lid	Campania	Olcese 2003, type 1, table. XIX, 1-4; Chiara- monte Treré 1984, table. 110, 1-3, 6.	2 <sup>nd</sup> - 1 <sup>st</sup> c. BCE	4/4	-
3060	Black Gloss	Patera	Campana A	Morel 2287	100 - 50 BCE	2/2	Pl. I.4
3060	Black Gloss	Cup/Bowl	Late Campana A	Morel 2942	1 <sup>st</sup> c. BCE	1/1	Pl. I.3
3060	Black Gloss	Dish	Late Campana A	Morel 2653	1 <sup>st</sup> c. BCE	1/1	-
3060	Black Gloss	Patera	Aretine Black Gloss	Morel 2286	60/50 BCE	1/1	Pl. l.5
3060	<i>Eastern Sigillata</i> A (ESA)	Dish	Syrian- Palestinian Area	Atlante type 3	End 2 <sup>nd</sup> c. BCE- 10 CE	1/1	Pl. I.6
3060	Italo-Megarian Ceramic	Cup	Latium (Tivoli)	Puppo 1995, table XLIX, S11g, p. 113	150 - 75 BCE	4/1	PI. II.1
3060	Thin Wall	Beaker	Central Italy	Marabini III, 26	Second/ Third Quarter 1 <sup>st</sup> c. BCE	1/1	Pl. II. 7
3060	Thin Wall	Beaker	Central Italy	Marabini III, 30-31	Second/ Third Quarter 1 <sup>st</sup> c. BCE	2/2	Pl. II.3-4
3060	Thin Wall	Beaker	Central Italy	Marabini XXIII	Second/ Third Quarter 1 <sup>st</sup> c. BCE	1/1	Pl. II.6
3060	Lamp	Tronco-conical	Etruria/Central Italy	Ricci 1973, type G; Pe- sando, Giglio 2017, fig. 334, LUC 107.	Second Half 3 <sup>rd</sup> c. BCE- Beginning 1 <sup>st</sup> c. BCE	1/1	Pl. II.7
3060	Lamp	Warzenlampe	Etruria/ Central Italy	Dressel 2/3	Beginning 1 <sup>st</sup> c. BCE- 15 CE	1/1	-
3060	Common Ware	Olla	Campania	Olcese 2003, type 3b, table VIII, 7; Berg 2005, table IV, 1	End 2 <sup>nd</sup> c. BCE - 14 CE	2/1	-
3060	Internal Red Slip	Baking Tray	Latium	Leotta 1993, nn. 70-72	End 2 <sup>nd</sup> c. BCE- Augus- tan Age	2/1	-
3060	Cooking Ware	Dish/Lid	Campania	Di Giovanni 1996, 2421d	2 <sup>nd</sup> c. BCE- 2 <sup>nd</sup> c. CE	5/3	PI. II. 8
3059- 3060	Cooking Ware	Olla	Etruria/ Latium	Olcese 2003, type 3a, table VIII, 4	2 <sup>nd</sup> c. BCE- Augustan Age	2/1	-

Table 2. VPP 2019, Trench II SW. Phase 1b: diagnostic finds from the bottom fills of the cistern in Room B.

The sample of Black Gloss pottery is more numerous. As in the previous subphase, it includes several examples of *paterae*. Worth mentioning is a specimen of Morel type 2286 (Pl. I.5), whose fabric betrays an origin in the Late Republican Arretine production of the 60s and 50s BCE<sup>16</sup>. Other examples of the same form, such as Morel 2287 (Pl. I.4), belong to the Campanian production, datable between the beginning of the 1<sup>st</sup> century BCE and 50 BCE. Cup/bowls with deep basin are also attested, such as Morel 2942 (Pl. I.3), which can be assigned to the late production phase of the Neapolitan Campana A. Imports from Etruria are represented by a fragmentary *pyxis* similar to Morel 7551 (Campana B).

<sup>&</sup>lt;sup>16</sup> MOREL 2009; FERRANDES 2014: fig.7. nos. 4-5.

The group of utilitarian pottery features three dishes/lids of Campanian production (Pl. II.8), fragmented but fully restored, whose chronology is between the 2<sup>nd</sup> century BCE and the 2<sup>nd</sup> century CE. Rim fragments from **3060** join with other fragments found in the layer above belonging to the same *olla* (Olcese 2003, type 3a, table VIII.4, produced between the 2<sup>nd</sup> century BCE and the Augustan age), suggesting that the fills at the bottom of the cistern formed as part of a single activity.

Finally, we report the presence of an almost complete Black Gloss lamp (only the handle is missing), featuring an anvil-shaped nozzle and a decoration consisting of a band of tongues arranged in a radial pattern around the discus (Pl. II.5). Datable to a broad period between the second half of the 3<sup>rd</sup> and the beginning of the 1<sup>st</sup> centuries BCE<sup>17</sup>, the object was probably still in use at the time when the deposit was closed. Another lamp fragment from the same layer, whose body is characterized by a semi-glossy, reddish-brown slip (2.5YR 5/8), can instead be ascribed to the class of the so-called *Warzenlampen*, produced and distributed from the beginning of the 1<sup>st</sup> century BCE to the end of Augustan period<sup>18</sup>.

Although the overall number of diagnostic elements is relatively small, the combined evidence allows us to place the initial formation of the ceramic assemblage around 75 BCE. The deposit must have been closed before 50 BCE, as suggested by the complete absence of Italian Terra Sigillata from the assemblage<sup>19</sup>.

[G.I. – M.D.]

## Phase 2a: Stratigraphy

To make room for the monumental sanctuary, the Samnite-era structures were torn down and systematically spoliated (3092), and deep cuts were dug through the floors (3012). As part of these operations, the repurposed cistern of Room B was finally put out of use by another series of dumps (3050, 3051, 3052, 3054, 3056). The rim of the cistern, which had been already modified in the previous phase, was eventually demolished to insert a limestone slab and seal the opening (3028). A flat base made with tiles and fragments of a recycled louterion (2993, 2995) and retained by a rubble wall (2991) was assembled directly on top of the slab that capped the cistern's mouth (fig. 14). This feature was bounded by a horse-



Fig. 14. VPP 2018, Trench IIS-W: Detail of the tile structure (3032) built on top of the mouth of the Room B cistern in the context of the spoliation activities of Phase 2a (Photo: VPP).

shoe shaped structure (**2994**, **2997**, **2998**), built with mortared rubble and fragments of the cistern's well-head. Based on the traces of burning visible on the tile structure and the frequent faunal and fuel remains found both below the tile structure and on the surface of the beaten-earth floor in use in Room C, we interpret this roughly built-up feature as a temporary cooking facility used by the laborers as the demolition activities were underway.

The building debris derived from the destruction of the buildings that stood in the area was incorporated in leveling layers as part of the construction fills for the new sanctuary terrace (worked and unworked stones, tiles, plaster, fragments of *opus incertum* masonry, cocciopesto: **3022**, **3013**, **2986**, **2985=2689**). This first series of dumps was covered by a thick deposit of sterile yellowish silt, whose top interface slopes steeply from W to E (**2980=2688**). This layer could have been part of the spoil heap which would have resulted from the excavation of the foundation trench for the temple podium (as seen in Trench IVN). In the E sector of the trench, where the silt deposit becomes thinner, another large dump of building materials (**2978=2674**) brought the surface to a uniform level. On top of this sequence, the preparation for the pavement of the temple court was laid

<sup>&</sup>lt;sup>17</sup> The type is attested in the Formigue shipwreck (second half of the 3rd century BCE): RICCI 1973: 223.

<sup>&</sup>lt;sup>18</sup> RICCI 2002: n. 139 (with earlier bibliography).

<sup>&</sup>lt;sup>19</sup> On the beginnings of TSI production in central Italy, see MARABINI MOEVS 2006.

(2965=2812=2672)<sup>20</sup>. The elevation corresponds to that of the surface on top of which the base of the altar preserved in front of the temple rests.

[I.V. - D.D. - M.M. - I.B.]

#### Phase 2a: Finds from the upper fills of the cistern and its obliteration sequence

A total of 116 fragments were recovered, including common ware (n=37), cooking ware (n=28), Thin-Walled pottery (n=19), amphorae (n=14), Black Gloss (n=10), Italian Terra Sigillata (n=7), and a lamp (n=1). Except for a few residual examples (e.g., the Black Gloss lid Morel 9111 a1 and cup Morel 2582 a1), all the diagnostic materials can be dated between the end of the 1<sup>st</sup> century BCE and the early 1<sup>st</sup> century CE (Table 3). Unlike in the lower fills of the cistern, however, these finds consist of individual fragments of incomplete vessels. The greater degree of fragmentation betrays that they are in secondary deposition.

SU	Class	Shape	Production	Type/Comparanda	Chronology	Frag- ments/Indi viduals	Plate
3050	Lamp	Volute or Semi-Volute	Central Italy	Bailey A-B-C-D	Augustan Age- Tra- janic Period	2/2	Pl. II.16-17
3051	Thin Wall	Beaker	Campania	Ricci 1/30 = Marabini XV	Augustan Age- 2 <sup>nd</sup> c. CE	1/1	Pl. II.12
3051	Sigillata Itali- ca	Dish	Central Italy	Conspectus 1.1	Second Half 1 <sup>st</sup> c. BCE	1/1	Pl. II.15
3051	Internal Red Slip	Baking Tray	Campania	Chiosi 1996, type 1a, fig. 1, n. 140 = Goudineau 28-30	Second Half 1 <sup>st</sup> c. BCE- End 2 <sup>nd</sup> / Begin- ning 3 <sup>rd</sup> c. CE	2/2	-
3052	Black Gloss	Cup	Campana B	Morel 2582 a1	180-160 BCE	1/1	-
3052	Thin Wall	Cup	Central Italy	Marabini XXXVI, 191-193 = Ricci 2/214	Augustan Age- Middle 1 <sup>st</sup> c. CE	2/2	Pl. II.13

Table 3. VPP 2019, Trench II SW. Phase 2a: Diagnostic finds from the upper fills of the cistern in Room B.

Despite the poor state of preservation, some clear chronological indications can be derived. One of the TSI fragments plausibly belonged to the molded foot of a chalice (PI. II.14), whose production was established around 30 BCE. The fragment of a rim of a Conspectus 1.1 plate (PI. II.15) and an additional 5 walls of TSI can be assigned the second half of the 1<sup>st</sup> century BCE, as can 5 body sherds. Two fragments of lamps, although quite small, can be securely identified with any of the Bailey A-B-C-D types (PI. II.16-17) because of the presence of volutes (or semi-volutes), a style first introduced sometime in the last quarter of the 1<sup>st</sup> century BCE<sup>21</sup>.

Several specimens of Thin-Walled pottery dating to the Augustan period have been found, including cups such as the Marabini XXXVI.192-193 = Ricci 2/214 form (Pl. II.13), one-handled goblets of the Ricci 1/116-117 type (Pl. II.11), and beakers Ricci 1/30 = Marabini XV type (Pl. II.12) and Ricci 1/159 = Marabini XII (Pl. II.10). The former has a fabric rich in augite inclusions, which betrays the Campanian origin of the production. The latter, rimless and tronco-conical in shape, represents the only provincial import, widely attested in contexts from the harbor of Naples<sup>22</sup>. Slightly earlier in date is the one example of Ricci 1/20 = Marabini VII type (Pl. II.9), which was produced in Central Italy between the first quarter of the 1<sup>st</sup> century BCE and the Augustan Age.

Among the cooking wares, two fragments of Internal Red Slip baking trays featuring undifferentiated rounded rims have been identified, whose diffusion spans from the second half of the 1<sup>st</sup> century BCE to the 2<sup>nd</sup> century CE with numerous attestations in Pompeii and around the Bay of Naples more generally<sup>23</sup>. Amphora body sherds are less diagnostic but can be referred to a wide range of production centers, based on the macroscopic observation of their fabrics: the Vesuvian region (n=4), North Africa (n=6), and the Aegean (n=4).

<sup>&</sup>lt;sup>20</sup> For the corresponding sequence excavated in 2017 farther to the W, see BATTILORO et al. 2018: 12-13.

<sup>&</sup>lt;sup>21</sup> MARABINI MOEVS 1973: 52, n. 59; from 15/10 BCE according to PAVOLINI 1977: 35, n. 4.

<sup>&</sup>lt;sup>22</sup> FAGA 2008: fig. 5, nos. 1-2.

<sup>&</sup>lt;sup>23</sup> PESANDO, GIGLIO 2017: 426.

Taken together, the ceramic assemblage provides a *terminus post quem* of 30 BCE for the final obliteration of the cistern, placing it in the early Augustan period.

[G.I. – M.D.]



# Phases 1b-2a: Ecofacts from the cistern

100% of the deposits from the cistern fill sequence were dry-sieved at the time of excavation using a 6 mm mesh. Faunal remains and large pieces of charcoal were hand-picked by the excavators directly from the sieve and bagged for further processing and study by the Applied Research Laboratory of the Archaeological Park of Pompeii. In addition, for each stratigraphic unit, a 20% fraction of the sieved deposits was sampled for flotation. The floating machine used a 2 mm mesh for the heavy fraction and 0.5 mm for the light fraction, which was then inspected under the microscope. Deposits from the leveling layers on top of the cistern as well as from small pits dug into the preparation of the temple court of Phase 2b were also selected for this kind of analysis (as discussed below). Preliminary results are available for the archaeozoological materials collected from one of the bottom fills (**3059**), as well as for the finds from the preparation layers below the tile cooking surface that sealed the cistern (**3026**, **3027**, **3032**). The identifications are summarized in Table 4.

		Number of Identified Specimens				
	Таха	SU 3026	SU 3027	SU 3032	SU 3059	
	Pig/Wild boar	1		3	20	
Mammals	Ovicaprid	1				
	Weasel				4	
	Gallus domesticus	3		1		
Birds	Aves	1			5	
	Egg shell				63	
Fish	Mackerel?	1				
	Fish	5	3		23	
	Arca noae				26	
	Cardidae			1		
Bivalve Molluscs	Cerastoderma glaucum				30	
	Donax trunculus	1		7	41	
	Scrobicularia plana				44	
	Unionidae				242	
Gastropods	Hexaplex trunculus				1	
Castropous	Helicinae			3	106	
Cephalopods	Sepia officinalis				3	
Echinoidea	Paracentrotus livi- dus				152	
	TOTAL	13	3	15	760	

Table 4. VPP 2019, Trench II SW. Phase 2a-b: Archaeozoological remains from the fills of the cistern in Room B.

The most remarkable feature of the assemblage is the high frequency of mollusks (both freshwater and marine taxa are represented) and sea urchin, indicative of ancient food waste. An unusual small mammal species, the weasel, is also represented (another individual is reported for **3060**). Large quantities of fish bones, scales, and sea urchin shells were also found in the upper levels of the cistern fills **(3051, 3052, 3054, 3055**,

**3056**), whose samples were processed separately in 2019. The closest parallel for the assemblage is represented by the materials recovered from the fills of a larger "a fiasco" cistern located within a multi-room building east of the N-S street, excavated by Curti's team in 2004. A total of 230 shells (including both marine and terrestrial) and 80 identifiable fish bones have been reported out of a sample of 1288 individuals from this partially published context, excavated in 2004<sup>24</sup>. Recently dated to the early 1<sup>st</sup> century BCE<sup>25</sup>, that deposit also included the almost complete remains of two weasels, in addition to butchered bones of predominantly juvenile pigs, ovicaprids, and, to a much lesser extent, cows.

Elsewhere at Pompeii, similar proportions of fish and shellfish are not attested in published collections. However, fish and shellfish are ubiquitous in the deposits sampled from the Cardo V sewers at Herculaneum, indicative of kitchen or table waste. Both would have been widely available locally and could offer cheap and nutritious dietary fare, so it is unclear whether we can read any issues of social status into the pattern<sup>26</sup>. Nothing in the composition of the deposit from the Trench IIS-W cistern suggests that its formation was ritual in nature. The presence of weasels is more difficult to interpret. Larger mustelids (e.g., the marten and the ferret/polecat) were likely to have been tamed in antiquity. The smaller weasels certainly did nest in Roman houses, but their presence was not necessarily desired. House weasels were mentioned alongside other vermin like house flies and house mice, and they were known to steal food (Petronius 46; Pliny NH 29.60). A. King cites specimens excavated from 2<sup>nd</sup>-1<sup>st</sup> century BCE levels in the Forum area and the precinct of the Temple of Apollo; their occurrence in other midden deposits has been interpreted as possibly intrusive<sup>27</sup>.

The overall evidence clearly points to meals being prepared and likely consumed on site (in both heavy and light fractions, samples were rich in charred material, most commonly large fragments of charred wood from burnt fuel). Only a small number of charred seeds, which consisted primarily of plants commonly found at Pompeii—such as olive, emmer, and millet—were identified. The comparative dearth of carpological material is significant because charred seeds are not less likely to preserve than charred wood in unmixed contexts. Thus, botanical remains from the cistern represent solely the disposal of fuel. It seems that, rather than burning their food waste, ancient Pompeians were likely discarding their trash unburnt, which prevents the preservation of macrobotanical remains.

[C.Cor. – M.M.]

# Phase 2b: Stratigraphy

As part of a larger program of modifications involving the E portico and associated water features, the court level was raised by 0.5 m (2957=2631). Three refuse pits were dug in the preparation layer (2958, 2960, 2964), whose fills (2959, 2961, 2963) contained fragments of Nocera tuff Corinthian capitals (fig. 15). A larger and irregularly shaped cavity (2966), filled by a deposit of gray silt and stones (2962), can probably be related to the same activity. This frequentation level was sealed by a thin mortar layer (2912; fig. 16), but no traces of a proper pavement are preserved.

[I.V. - D.D. - M.M. - I.B.]

## Phases 2a-b: Palaeobotanical materials

Preliminary data are available for **3026**, **3027** and **3032** (tile structure), **2980** (a layer of silty soil with very few inclusions), all assigned to Phase 2a, as well as for **2959** and **2961**, the fills of small pits dug into the court floor preparation level during construction activities assigned to Phase 2b.

<sup>25</sup> COLETTI 2020: 84-85 n. 46.

<sup>&</sup>lt;sup>24</sup> NICODEMO 2005: 5-6 (stratigraphy of the cistern); 77-80 (faunal assemblage; A. Carnell).

<sup>&</sup>lt;sup>26</sup> NICHOLSON *et al.* 2018.

<sup>&</sup>lt;sup>27</sup> KING 2002: 434-435.



Fig. 15. VPP 2018, Trench IIS-W: Fragments of Corinthian capitals in stuccoed Nocera tuff from one of the refuse pits (2961) associated with construction activities in the east court of the sanctuary in Phase 2b (Photo: VPP).



Fig. 16. View of the lime mortar surface of Phase 2b (2912) as exposed in 2006 in Curti's Trench IIS (Photo: M. Mogetta). Note its association with the drainage channel and lavapesta pavement to the S.



Fig. 17. VPP 2018-2019, Trench IIS-W: Taxa identified in paleobotanic samples collected from Phases 2a and 2b deposits. (Author: C. Comegna).

The analysis of the charcoal remains (n=56) has revealed the presence of 6 taxa (fig. 17)<sup>28</sup>. The most frequent is beech (*Fagus*), which was a high-altitude forest wood primarily used for fuel<sup>29</sup>, followed by hornbeam (*Ostrya/Carpinus*), which prefers mid-to-high mountain ranges and is often found close to beech. Hornbeam could be used as timber, but the occurrence of small-to-medium sized branches in other assemblages from Pompeii (e.g., House of the Surgeon) suggests it was used as fuel. Other secondary fuel woods in the sample are less attested, and include ash (*Fraxinus*), maple (*Acer*), and oak (*Quercus*), all found on mid and low slopes. Fruit trees are also documented by the plum family (*Rosaceae prunoideae*); these woods could have come from the slope of Vesuvius or the plains, where they were cultivated, or from gardens. Small branches from these trees were used to light fires, thus accounting for the mixed pattern of distribution<sup>30</sup>.

[C.Com. – M.M.]

## Phase 3: Stratigraphy

The top-most layers excavated in Trench IIS-W can be referred to the reconstruction of the sanctuary in the Flavian period (fig. 18)<sup>31</sup>. A lime mortar surface spread across the entire area of the court (**2612**) corresponds to ground level of the worksite in use in 79 CE. On top of it were concentrations of stone chips resulting from the working of the trachyte blocks and white marble architectural elements (**2602**, **2908**, **2910**), as well as cuts to house the fulcrums of the lifting machines (**2911**, **2914**, **2924**).

The temple podium was reinforced by a ring of trachyte blocks (**2916**) sitting on top of deep concrete foundations (**2917**), built within wooden shuttering (whose postholes were also preserved: **2955**, **2953**). The foundation trench (**2913=2950**), running alongside the podium for its entire length, was backfilled with the waste from the finishing of the facing blocks (**2602=2952**).

[I.V. - D.D. - M.M. - I.B.]

<sup>&</sup>lt;sup>28</sup> For the identifications, see SCHWEINGRUBER 1990; NARDI, BERTI 2006.

<sup>&</sup>lt;sup>29</sup> On the use of beech for charcoal production in Campania, see VEAL 2009.

<sup>&</sup>lt;sup>30</sup> MEYER 1988; MURPHY, THOMPSON, FULLER 2013.

<sup>&</sup>lt;sup>31</sup> BATTILORO et al. 2018: 13-14; 16. On the building phase in general, see COLETTI et al. 2010: 198-204.

## Trench IVN (figs. 19-23; table 5; pl. III)

Trench IVN, measuring 1.5 x 1.5 m, is in the NW corner of the cella. The sector is delimited by the back wall of the cella to the N and by the concrete fill between the ring of trachyte blocks and the original retaining wall of the podium to the W. In 2005, Curti's team removed a portion of the concrete pavement below the surviving cella floor preparation, exposing the grid of mortared-rubble walls that formed the podium substructure, and digging the sediment infill to reach the bottom of the foundations (fig. 19)<sup>32</sup>. In 2019, having re-recorded the standing architectural features in that sector we emptied the backfill from one of the excavated quadrants, resuming the investigation of the archaeological layers preserved below the foundations down to the natural levels (fig. 20).

No evidence predating the construction of the existing temple was detected in this sector. Phase 2 stratigraphy and finds refer to the establishment of the temple podium in the Augustan period and document subsequent modifications in the Julio-Claudian era. Phase 3 features belong to the Flavian reconstruction of the podium.



Fig. 18. VPP 2018, Trench IIS-W: General view (from W) at the start of the excavation. Note the Flavian-era lime mortar surface (2612) and the concentrations of waste materials (2602) filling the foundation trench of the trachyte stone blocks of the Phase 3 temple (Photo: VPP).

<sup>&</sup>lt;sup>32</sup> COLETTI et al. 2010: 193-196.



Fig. 19. Pompeii, Temple of Venus excavations (2005). Cella, viewed from SE. Note the position of Trench IV N within the cella (Photo: E. Curti; Archive of the Pompeii Archaeological Park).



Fig. 20. VPP 2019, Trench IVN: E-W cross-section of the deposits excavated below the podium foundations, viewed from S (Author: D. Diffendale).



Fig. 21. Detail of the large cavity (4041) identified in 2005 W of the temple podium (Photo: M. Mogetta). Note the position of Phase 1a features (peristyle and votive pit).

# Phase 2a-2b: Stratigraphy

The undisturbed sequence of leveling layers we excavated beneath the podium foundations can be referred to the preparatory works for the erection of the first temple. Although Samnite-era architectural remains are documented elsewhere around the podium, in this sector of the site they appear to have been demolished completely to free up space. The purpose was probably to quarry soil and volcanic deposits from the bedrock, which would have been employed for mortar-based construction within the sanctuary. The edge of a deep, large pit was identified in 2005 to the W of the podium (**4041**; fig. 21); the cavity continued under the podium, where we identified its bottom (**3525**) (as indicated in fig. 3).

The dumps that filled the pit consist of alternating concentrations of building debris (fragments of mortared rubble and cocciopesto floors; plaster) and layers of well-selected soil almost devoid of inclusions (**3517**, **3518**, **3519=3520**, **3521**, **3522**, **3523**, **3524**; finds from the top 10 cm of **3517** were not collected in order to avoid contamination from the backfill). The upper interface of this stratum corresponds in elevation to the crests of the



Fig. 22. VPP 2019, Trench IVN, concrete substructures of the cella. Detail of the E-W wall 3511. Note how the wall is built in two courses, with the lower section preserving traces of the formwork. The structure rests directly on top of the construction fill 3517 (the upper portion of which was excavated by Curti) (Photo: VPP). To the left is visible the N-S grid wall 3512, featuring a similar technique; to the right is the podium retaining wall 3509 (the upper portion of which was raised without shuttering).

Phase 1 walls found razed below the E court of the temple. This suggests that a uniform flat surface was created across the entire extent of the sanctuary in order to build the temple and ancillary structures.

The temple podium is encased by a 1 m thick structure made with mortared rubble of Sarno limestone, whose interior facing was unfinished (**3509**). Abutting the retaining structure and forming a series of square boxes measuring on average 1.5-1.6 m is an internal grid of perpendicular concrete walls (**3510**, **3511**, **3512**, **3513**), 0.40-0.50 cm thick and built within formworks in two superimposed courses (fig. 22), to which would have corresponded two levels of sediment infill<sup>33</sup>. The same technique is visible in the substructures of the *pronaos* and finds a parallel in the substructures of the Temple of Apollo<sup>34</sup>.

Resting directly on top of the foundation grid is a concrete platform slab extending across the entire podium (**3508**, coarse preparation; **3507**, finished surface). The surviving back wall of the cella (**3526**), whose interior facing is in *opus quasi reticulatum* of Nocera tuff and lava rubble (**3528**), is built directly above it. On the exterior of the cella wall are the remains of L-shaped Nocera tuff orthostats (**3527**) whose indentation was built

<sup>&</sup>lt;sup>33</sup> COLETTI *et al.* 2010: 194 assign the upper course of the grid to a later reconstruction without providing any stratigraphic evidence. We found examples of the same decorated cocciopesto fragments cited as proof that elements of the original cella floor were dumped in the upper fill (on which see COLETTI, STERPA 2008: 142 fig. 8) in layers below the foundations, making the theory implausible on stratigraphic grounds. On the problem, see also the discussion in BATTILORO, MOGETTA 2021: 38 n. 20.

<sup>&</sup>lt;sup>34</sup> On the temple of Apollo, see DE CARO 1986: 11; RESCIGNO 2017: 42 fig. 7; COOPER, DOBBINS 2015 (assigning the existing podium to an Augustan-era expansion of a Samnite cella). GIULIANI 2018: 166-167, discusses the use of the technique.

into the wall core. These slabs originally masked the interface between the wall and the platform, forming the crown molding of the podium.

Traces of the interior decoration of the cella are also preserved (fig. 23). The Nocera tuff block documented within our trench (**3501**) was part of a series of bases for engaged columns (or half-columns) lining the side walls, which elsewhere appear incorporated into the topmost pavement currently preserved across the cella (finer surface **3505**; coarser preparation **3506**), abutting the back wall. The presence of a shallow bedding layer of mortared rubble beneath the Nocera tuff base (**3502**), whose interface is not visible in the sections of the top floor, may indicate that the original floor and floor preparation associated with the interior order were removed in a second phase of redecoration. Probably as part of the same activity, the top surface of the bases was chiseled away, leaving only a lip (for pilasters or engaged semi-columns?). The cult statue base, a masonry plinth (**3503**) resting on a Nocera tuff molding (**3504**), should also be assigned to this sub-phase, since it sits on top of the uppermost floor preparation. In this stage, the cella was decorated by the *opus sectile* mosaic whose scanty remains were documented in 2005<sup>35</sup>.

[M.D. - I.V. - M.M.]



Fig. 23. VPP 2019, Trench IVN: View of the cella at the start of the excavation, showing the Nocera tuff base (3501) belonging to the original interior colonnade (Phase 2a). Note the layer of mortared rubble underneath it (3502), and the relationship with the preparation of the cella mosaic floor (3506), which incorporated it in Phase 2b. The cult statue base (3503-3504) rests on it, abutting the back wall of the cella (3528) (Photo: VPP).

## Phase 2a: Finds

A total of 217 fragments have been retrieved from the construction fills below the temple foundations. Most of the finds are represented by cooking ware (n=89), common ware (n=61), and amphorae (n=24). Fine wares are less attested, featuring only Thin-Walled pottery (n=17) and Black Gloss (n=11). Diagnostic materials are scarce (n=17) but nonetheless provide useful chronological indications (Table 5).

<sup>&</sup>lt;sup>35</sup> COLETTI, STERPA 2008: 134-135 and 143 fig. 9 (with a terminus post quem of 1 CE).

SU	Class	Shape	Production	Type/Comparanda	Chronology	Frag- ments/l ndivid- uals.	Plate
3517	Black Gloss	Cup/Bowl	Late Campana A	Morel 2942	1 <sup>st</sup> c. BCE	1/1	PI. I.3
3517	Black Gloss	Cup	Central Italy	Base with single central stamp (ro- sette); Etrusco-Latial Style G (Fer- randes 2016: 108-118)	Second Half 3 <sup>rd</sup> - Beginning 2 <sup>nd</sup> c. BCE	1/1	-
3517	Thin Wall	Goblet	Central Italy	Marabini XXXV, 173	Augustan Age	2/2	Pl. III.1-2
3517	Thin Wall	One- handled Goblet	Campania – Vesu- vian Area	Ricci 1/111, 1/116-117	Augustan Age- 2 <sup>nd</sup> c. CE	4/3	Pl. III.3-5
3517	Cooking Ware	Olla	Campania	Olcese 2003, type 15, table XIII, 5; Chiaramonte Treré 1984, fig. 98, nos. 3-6	2 <sup>nd</sup> c. BCE- 1 <sup>st</sup> c. CE	1/1	Pl. III.6
3517	Cooking Ware	Pan with Bifid Rim	Campania	Olcese 2003, type 3, table XV, 1; Dyson 1976, 22 II 27; Quercia 2008, type 1; Di Giovanni 1996, 2130; Pesando, Giglio 2017, vari- ant T1a, table LIII.	Late Republican Period- End 2 <sup>nd</sup> c. CE	1/1	Pl. III.7
3523	Amphora		Northern Africa	Van der Werff 2; Ramón Torres 1995, T 7.4.4.1	End 2 <sup>nd</sup> c. BCE	3/1	PI. III.8
3524	Amphora		Vesuvian Area Pompeii/ Surren- tum	Dressel 2-4	Middle 1 <sup>st</sup> c. BCE- 2 <sup>nd</sup> c. CE	2/1	-

Table 5. VPP 2019, Trench IV N. Phase 2a: Diagnostic finds from below the temple foundations.

Among the Black Gloss fragments is the rim of a large plate Morel 2942 (PI. I.3), which can be assigned to the late Campana A production, dating to the 1<sup>st</sup> century BCE. A date later in the 1<sup>st</sup> century BCE for the formation of the deposit is suggested by the 5 specimens of Augustan-era Thin-Walled vessels, including two examples of Marabini XXXV.173 goblets (PI. III.1-2) and three of the one-handled cup Ricci 1/111, 1/116-117 (PI. III.3-4-5), which is also attested in the upper fills of the Trench IIS-W cistern. The latter specimens all feature a brown-beige clay fabric (10YR 7/3) with frequent black inclusions of volcanic origin, typical of the Campanian production, and a metallic surface glaze of different red-orange shades (5YR 7/6; 2.5YR 5/8).

The sample of utilitarian pottery includes two fragments of amphora handles with bifid section that can be assigned to the local Dressel 2-4 production, as indicated by the light purple fabric (5R 4/5) with numerous small- and medium-sized white, black, and grey inclusions ("black-sand fabric")<sup>36</sup>. The everted molded rim of a Late Punic amphora (PI. III.8) recovered from the bottom of the sequence (**3523**), datable to the second half of the 2<sup>nd</sup> century BCE<sup>37</sup>, is residual yet greatly significant: it joins with 1 rim and 2 walls retrieved from the fills of the large cavity excavated in 2005 W of the podium (**4032=4226**), thus confirming our interpretation of the stratigraphy.

Finally, as for cooking wares, we identified two fragments of pans with unmarked bifid rims (PI. III.7), belonging to a Campanian production typical of the Late Republican period and attested until the 1<sup>st</sup> century CE<sup>38</sup>. The fragment of an *olla* rim with an enlarged triangular section (PI. III.6) can be assigned to a local type whose diffusion had a similar range<sup>39</sup>.

[G.I. – M.D.]

<sup>&</sup>lt;sup>36</sup> Type A of PANELLA, FANO 1977 (p. 145; Table I, 1; no. 1628, fig. 1), associated with the production by L. Eumachius (active between the Late Republican and the Augustan periods). The fabric composition is compatible with the geology of the Somma-Vesuvius (HESNARD *et al.* 1998; TCHERNIA, ZEVI 1972; PEACOCK 1977; VAN DER WERFF 1989: 359; OLCESE 2015: 155-156). <sup>37</sup> E.g., TONIOLO 2019: 299, table 27, 297 (Pompeii, Impianto Elettrico excavations).

<sup>&</sup>lt;sup>38</sup> The type is attested at Francolise, with a dating between the mid-1<sup>st</sup> century BCE and the mid-2<sup>nd</sup> century CE (COTTON 1979, fig. 45 no. 18). Known attestations at Pompeii come from contexts dating to the 2<sup>nd</sup>-1<sup>st</sup> centuries BCE, Augustan-Tiberian, and Flavian periods (DI GIOVANNI 1996, type 2131; BUSTAMANTE *et al.* 2011: fig. 24, 134, 533-534; CHIARAMONTE TRERÉ 1984: 148; TUFFERAU-LIBRE 2004: fig. 8, nos. 1-4-5).

<sup>&</sup>lt;sup>39</sup> OLCESE 2003: 86. The shape can also be compared with Pompeian specimens dated to the 2<sup>nd</sup> century BCE (CHIARAMONTE TRERÉ 1984: fig. 98, nos. 3-6, 161-163).



Plate III.

10 cm

## Trench B (fig. 3; fig. 6)

Trench B, excavated in 2018 and measuring 5.3 x 2.0 m, is located in the eastern portion of the sanctuary, bounded to the W by the *opus incertum* wall **10010**, to the east by the *opus quasi reticulatum* wall **11009**, and to the N by the *opus incertum* walls **11002** and **11003**. It is bordered to the S by a large inverted roughed-out Proconnesian marble capital, and includes a 2.0 x 0.8 m extension at the SW corner along the E side of **10010**, resulting in an L-shaped trench. Removing the modern topsoil **11000** revealed the foundations of 11002 (**11006**), 11003 (**11007**), and 11009 (**11008**) as well as the N-S foundation **11005** which roughly bisects the trench creating E and W stratigraphic basins; only the W basin was excavated in depth.

Phase 1 stratigraphy belongs to the Samnite E block. The features assigned to Phase 2 refer to the construction of the E portico of the Augustan-era Sanctuary of Venus, while Phase 3 documents its Flavian expansion.

## Phase 1a

A portion of a N-S *opus incertum* wall **11019** is all that remains from the Samnite period structures in this trench. This was exposed for 1.4 m, continuing beyond the S limit of the trench, terminating to the N where it was cut by later activity.

## Phase 2a

The top of the Samnite wall 11019 was destroyed (**11021**) and above it was constructed the *opus incertum* wall **10010**, which formed the foundation of the front W wall of the Augustan-period eastern portico, together with **11002**, **11003**, **11006**, **11007** (E-W wall supporting an interior division of the portico) and **11008-11009** (back E wall of portico).

## Phase 3

As part of the Flavian reconstruction of the precinct, the superstructure of the Augustan-period porticus was demolished, and a new N-S foundation wall (**11005**) was built across the center of the trench abutting the S face of the Augustan foundations 11006-11007, while its N extension (**11016**) was laid directly onto these foundations. The chamber formed by the two Augustan foundations and the Flavian foundation was filled with a series of deposits (**11027**, **11015=11014**, **11001**), in large part deriving from the destruction of the earlier structures.

[D.D.]

# Trench C (figs. 24-29)

Trench C is located in the NE area of the sanctuary site and never underwent previous archaeological investigation. It is a narrow strip measuring 1.55 x 3.5 m bounded to the W by the *opus incertum* wall that delimited the sanctuary during Phase 2 (**11009**, with foundation **11008**) and to the E by the *opus reticulatum* structure that superseded **11009** in the last building phase (**12008**). The excavation of this area allowed us to study the enlargement dynamics of the sacred area and clarify the topographic relationship between the sanctuary and the street that separated it from the Basilica.

The stratigraphy identified below modern disturbance (electrical wire cable) pertains to the creation of the sanctuary in the Augustan era and its enlargement during the Flavian period (fig. 24). The detailed analysis of the ceramic finds is still in progress and will be presented in our next interim report.

M. Mogetta – I. Battiloro – I. Varriale – D. P. Diffendale – G. Iacomelli – M. D'Acri – C. Corbino – C. Comegna – G. Pardini • Archaeological Research at the Sanctuary of Venus in Pompeii: Interim Report of the 2018-2019 Seasons of the *Venus Pompeiana Project* 



Fig. 24. VPP 2019: E-W cross-section of Trench C, viewed from S (Author: D. Diffendale).

## Phase 2a

Probably in connection with the creation of a worksite for the initial construction of the sanctuary, a preparation layer (**12068**) and a very compact surface (**12067**) were deposited. Layer **12068** contained ceramic material (e.g., Sigillata) that can be attributed to the Augustan period, as well as residual Black Gloss, bucchero and perhaps Attic pottery. A small portion of cement floor (**12028**; lime mortar preparation **12027**), indicative of building activities, was visible in the SE corner of the trench. A group of postholes of small dimension was identified on the surface of **12067** (fig. 25). The size and spatial arrangement of the cuts are compatible with the kind of traces that would have been left by wooden scaffoldings or fences, which may have served for the creation of the wall delimiting the E portico, consisting of a concrete foundation (**11008**), built partly above ground within shuttering and partly within a trench that cut through the preparation and earlier (unexcavated) layers. On top of the foundation is an *opus incertum* superstructure featuring predominantly Sarno limestone rubble (**11009**), preserved to a height of ca. 1.1 m. Its exterior face was rendered with a thick coating in plain white plaster (**11006**).

#### Phase 2

After the construction of **11008** (and probably also **11009**), a series of shallow fills were deposited, covering the work-surface **12067** and laid against **11008**. These may be related to construction or use of the side-walk of the Vicolo della Basilica. The latest terra sigillata seems to date to the Late Augustan period, but because we cannot bring these layers into a direct relationship with the Phase 2b construction activity identified inside the precinct, we assign them for now to a generic Phase 2.



Fig. 25. VPP 2019, Trench C: Composite photomodel of the Augustan-era precinct wall (11009, 11008), viewed from NE. At the bottom of the trench is visible the ground level that was in use during the construction activities of Phase 2a, characterized by the presence of small postholes (Author: D. Diffendale).

## Phase 3

In addition to dismantling of the sidewalk, some of the basalt pavers of the Vicolo della Basilica were dislodged and tossed to the side to make space for the trench into which were poured the concrete foundations (**12009**) of the *opus reticulatum* wall **12008**, thus expanding the sanctuary's boundaries further to the E (fig. 26). The presence of a marble threshold laid on top of the crest of **12008** indicates that the level of the Vicoli di

Championnet and della Basilica was meant to be raised ca. 1.5 m, obliterating the original pavement also on its W-E leg. The Augustan precinct wall was razed down to the floor level of the temple court, and the gap between it and the new boundary wall was filled with a massive deposition of building debris and large fragments of fresco (**12002**, **12014**, **12015**) (fig. 27), which we determined to be the decoration of the E portico before the Flavian interventions.

[D.D. - I.V. - M.M. - I.B.]



Fig. 26. VPP 2019, Trench C: Composite photomodel of the Flavian-era precinct wall (12008), viewed from E. Note the marble sill, at much higher elevation than the pavement of the N-S leg of the Vicolo di Championnet, and the spoliated basalt pavers (Author: D. Diffendale).



Fig. 27. VPP 2019, Trench C: Deposition of building debris and large fragments of fresco (12002) filling the gap between the Phase 1 precinct wall and the Flavian-era expansion (Photo: VPP).

## Painted Plaster from Trench C: Stylistic Analysis

Of the approximately 400 fragments collected from the fills, 70% belong to a socle in Pompeian Third Style (Group 1). Around 100 fragments could be reassembled (fig. 28), for a total length of 2 m. The lower register consists of a shallow plinth (0.15 m) and taller socle (0.57 m), both having a black background separated by a white line. The geometric decoration features a series of panels framed by partitions bordered by two lines in light gray and gold enclosing a central volute motif in gold. The central panel, measuring 1.42 m (or 1.60 m including the partitions), also preserves parts of the connection between the socle and main zone (0.18 m), for a total height of about 0. 90 m. Its main motif features interlaced squares forming triangles inscribed with gold rosettes; two stylized stems branch vertically off the central motif.



Fig. 28. VPP 2019, Trench C: Recomposed socle in Pompeian Third Style (Group 1) (Photo: I. Varriale; D. Diffendale).

In the proposed reconstruction (fig. 29), the lateral panels are decorated with a lozenge whose top and bottom vertices are combined with cross motifs (only one element has been identified; the other is hypothesized for symmetry). Crowning the socle is a molding consisting of red, white, green and brown lines; a fascia with dentils is executed with thin brush strokes in brown. On top of the cornice is preserved part of the middle register. Responding to the partitions of the central socle panel are the bases of a pair of columns that framed an aedicula with black background surrounding a white panel. The central aedicula must have been flanked by red panels, as demonstrated by the fact that one of the two columns has a red background on the left side and a black background on the right.

The best *comparanda* can be found among other examples of Third Style compositions, such as at V.1.14 (datable to the initial phase of the style)<sup>40</sup>, and the "Black Room" (15) of the Villa of Agrippa Postumus at Boscotrecase (datable to a more mature phase, 20-10 BCE)<sup>41</sup>. The arrangement of the socle's decoration as well as the characteristics of its motifs find parallels in examples from the Villa Imperiale, such as the vestibule (b) and the oecus (E), especially for the molding. Whereas at the latter site the architectural elements are executed with greater thickness and three-dimensional depth,<sup>42</sup> our decorative system is still based on flattened features, and the molding that separates the main zone from the socle is rendered in a much more cursive manner. On stylistic grounds, we propose a date in the last two decades of the 1<sup>st</sup> century BCE.

<sup>&</sup>lt;sup>40</sup> BASTET, DE VOS 1979: 45 (Phase 1a).

<sup>&</sup>lt;sup>41</sup> BLANCKENHAGEN, ALEXANDER 1990; ANDERSON 1987: 37-47. For the date, see BASTET, DE VOS 1979: 45 (Phase 1c).

<sup>&</sup>lt;sup>42</sup> BASTET, DE VOS 1979: 37-39 (Phase 1b). Note that Oecus (E) was also affected by a series of renovations in the Fourth Style (PAPPALARDO, GRIMALDI 2018: 124-126).



Fig. 29. VPP 2019, Trench C: Reconstruction model of the Pompeian Third Style socle originally decorating the Augustan-era portico (Photo: I. Varriale; D. Diffendale).

A smaller group of fragments, still under study, belongs to a Fourth Style decoration characterized by a white field framed by a gold embroidery border (Group 2). A close parallel for the motif can be found in the Casa dell'Efebo<sup>43</sup>. We hypothesize that this decoration relates to a first phase of restoration work conducted within the original portico right after the earthquake of 62 CE.

Finally, a third group is represented by a series of plaster fragments in white and red with crushed terracotta inclusions. These plain coatings originally lined the exterior of the precinct wall (**11009**) toward the Vicolo di Championnet and the Basilica.

[*I.V.*]

## Summary of the Evidence

The results of the 2018-2019 seasons help us clarify outstanding issues concerning the spatial configuration of the site prior to the establishment of the monumental sanctuary, as well as the chronology of the complex.

The excavations in Trenches IIS-W and IIN have provided new data to sketch the basic topography and internal organization of one of the elongated city blocks flanking the side street which bisected the area in the pre-Roman phase. Materials recovered from the construction layers of the sidewalk allow us to place the use of the street between the second and third quarters of the 2<sup>nd</sup> century BCE, confirming preliminary data obtained in 2017<sup>44</sup>. An axial row of at least three rooms (Rooms A-C) was identified along the perimeter wall, and the presence of an open space to the S can be inferred from the orientation of the drainage channel that fed a cistern built into the central room (Room B). The levels correspond with those of the L-shaped platform located at the S end of the block, which similarly features a cistern and water channels discharging into a lower terrace. To the W, the extent of the multi-room building is unknown. It is uncertain if the peristyle uncovered in 2005 W of the temple podium belongs to the same complex, but the foundation deposit associated with it points to the

<sup>&</sup>lt;sup>43</sup> BARBET 1981: 955, Group VI, Type 40b: 997, fig. 9.

<sup>&</sup>lt;sup>44</sup> BATTILORO et al. 2018: 28 (including coin evidence from the top surface of the sidewalk).

same phase of urban development in the area (180-150 BCE)<sup>45</sup>. We plan to investigate the problem further with future fieldwork to the SE and NW of the podium but note that, at present, nothing indicates that the site had a religious function.

The obliteration sequence of the Room B cistern implies that Samnite-era structures unrelated to the later temple and *triporticus* remained in use for some time after the foundation of the Roman colony. The finds from the deeper fills of the cistern, which are associated with a series of structural modifications to the spaces around it, date the transformation to the period immediately following the Sullan conquest of Pompeii when the structures located in the SW extent of the city may have suffered considerable damage as consequence of the 89 BCE siege<sup>46</sup>. The archaeozoological samples collected from the deposit are notable for documenting otherwise unusually frequent fish and mollusk consumption patterns throughout the 1<sup>st</sup> century BCE. The possibility that these rooms had acquired a commercial function as a result of the repurposing cannot at present be ruled out. In fact, their proximity to Porta Marina, the main access from the coast and Pompeii's harbor, could provide a plausible explanation for the unusual concentration of marine components in the assemblage<sup>47</sup>.

Finds from the upper fills of the cistern, which was sealed in the context of the demolition and spoliation activities to make room for and arrange the construction site across the entire area, firmly anchor the first building phase of both the temple (a tetrastyle on a tall podium) and the *triporticus* in the final decades of the 1<sup>st</sup> century BCE. This is confirmed by our analysis of the preparation layers of the Vicolo di Championnet, exposed at the bottom of Trench C, which indicates a post-Samnite origin for the street pavement bordering the precinct (at least in its N-S leg, the Vicolo della Basilica). This evidently replaced in function the old N-S street, now completely buried under the sanctuary court. The new chronology is also supported by the finds from the leveling layers preserved below the cella foundations, for which we identify a single construction phase (with a subphase for the redecoration of the cella). The E portico, open court, and S terrace received modifications during the Julio-Claudian period, including a new lavapesta pavement and associated substructures and drainage system (as documented in 2017), but we are still unable to pinpoint the date of these building episodes more precisely.

The Augustan date we have established for the complex is consistent with the surviving marble architectural members of the portico<sup>48</sup>, the remains of its Third Style wall paintings described above, as well as the cycle of inscriptions of statue bases associated with the colonnade<sup>49</sup>. Whereas the stratigraphic evidence helps us make sense of the archaeological context, the implications also definitively put to rest the traditional idea that there was any direct connection between the foundation of the Roman colony and the dedication of a sanctuary to the goddess under which Sulla seemed to have placed Pompeii<sup>50</sup>.

The data collected from the Flavian-era levels confirm previous reconstructions about the final restoration of the temple (to be enlarged into a hexastyle Corinthian) and expansion of the sanctuary<sup>51</sup>. Its extension to the S and SW could probably only be achieved after T. Suedius Clemens completed his public land reclamation project in 72-74 CE<sup>52</sup>. The fragments of Fourth Style decoration found in the construction fills of the Flavian precinct wall may refer to a more limited program of conservation carried out in the immediate aftermath of the 62 CE earthquake, but before the Augustan-era sanctuary was finally razed<sup>53</sup>.

[M.M. - I.B. - I.V. - D.D.]

<sup>&</sup>lt;sup>45</sup> The top section of the pit was cut by **4041**; its original mouth would have necessarily reached the ground level of the peristyle. Coletti (2020: 81, fig. 3; 83, fig. 4) interprets it as a ritual deposit that would have marked the dismantling of a larger sacred building close to the peristyle, of which, however, we find no evidence.

<sup>&</sup>lt;sup>46</sup> Frequent lead slingshots, a class of objects usually linked with the traces of the 89 BCE siege, come from the upper sequence excavated in Trench A in 2017 (Phase 2a): BATTILORO *et al.* 2018: 15-16.

<sup>&</sup>lt;sup>47</sup> The occupational group of the *piscicapi* (fishermen) at Pompeii is known epigraphically (*CIL* 4.826, 71-74 CE).

<sup>&</sup>lt;sup>48</sup> For a systematic survey of the Luna marble architectural members still scattered across the area, see JACOBELLI, PENSABENE 1995-96, recognizing Corinthian capitals of larger module dated stylistically to the mid-to-late Augustan period (from the portico colonnade), and other of smaller module dated stylistically between late Augustan and Tiberian periods (from the cella or a second order in the portico).

<sup>&</sup>lt;sup>49</sup> CURTI 2008b (Augustan/Tiberian date).

<sup>&</sup>lt;sup>50</sup> Cf. CARROLL 2010: 94-95; BATTILORO, MOGETTA 2021: 52-53.

<sup>&</sup>lt;sup>51</sup> BATTILORO *et al.* 2018: 4-5; BATTILORO, MOGETTA 2021: 50-51.

<sup>&</sup>lt;sup>52</sup> PAPPALARDO, GRIMALDI 2008: 25, n. 15; STEFANILE 2017: 611.

<sup>&</sup>lt;sup>53</sup> On Nero's possible intervention in these efforts, see DE CARO 1998: 242-243.

## APPENDIX: COINS CATALOGUE

This catalogue presents the coins found during the 2018-2019 seasons. The materials are organized by issuing authority (or mint) and coin type. Each entry is identified by the Special Find number assigned by VPP at the time of discovery (inventory numbers have not yet been generated by the Archaeological Park of Pompeii). Reference to the findspot is also provided. For each entry, metal type, weight, diameter, and die axis (in degrees) are specified.

[G.P. – Translated by Brittany Proffitt]

## Greek coins

*Massalia*, Æ unit, 150-100 BCE *obv.* Head of Apollo, laureate, r. *rev.* Bull butting r., above [MAΣ]ΣA, below exergue line  $\Delta\Delta$ FEUGÈRE-PY 2011: 127, PBM-47-9

Æ, 1.59 g, 12.7 mm, 340°
 VPP 2018, SU 3034, s.f. no. 95
 rev. Bull butting r., above [ΜΑΣΣΑ], in exergue line ΔΔ.

2. Æ, 2 g, 13 mm, 265° VPP 2019, SU 3051, **s.f. no. 113** *rev.* Bull butting r., above [.]**A**[...], below **[Δ]A**.

3. Æ, 1.76 g, 14.2 mm, 165° *VPP* 2019, SU 3051, **s.f. no. 111** *rev.* Bull butting r., above [**M**]ΑΣΣΑ.

Neapolis, Æ unit, ca. 270-250 BCE obv. Illegible. rev. Bull, manfaced r., crowned by Victory in flight. TALIERCIO MENSITIERI 1986: Group IIIa, nos. 1-56, pls. XIV-XVI

4. Æ, 7.41 g, 22.1 mm, --° *VPP* 2018, SU 2999, **s.f. no. 91** 

*Ebusus, Æ* ¼ Calco, ca. 218-100 BCE *obv.* Bes, front. *rev.* Bes, front. CAMPO 1976, 127-130, period II, Group XVIII, nn. 50-70; CAMPO 1993, 153, period II Group XVIII; CNH2, 94-96, nn. 26-44.

5. Æ, 2.94 g, 18.1 mm, 320° VPP 2018, SU 3034, **s.f. no. 97** 

6. Æ, 2.67 g, 15.6 mm, 30°

VPP 2018, SU 3026, s.f. no. 101

*Ebusus*, Æ ¼ Calco, ca. 218-100 BCE *obv.* Bes, standing, front, symbol in field to I. *rev.* Same type. CAMPO 1976, type XVIII.62

7. Æ, 2.94 g, 15.9 mm, 205° *VPP* 2018, SU 3002, **s.f. no. 71** 

<sup>•</sup>*Campanian Atelier*<sup>•</sup>, Æ unit, ca. 130/120-90/80 BCE *obv.* Head of Apollo, laureate, r. *rev.* Bull butting r., above traces of legend. STANNARD 2013: 151, TC-3

8. Æ; 1.68 g, 14.9 mm, 145° *VPP* 2018, SU 2999, **s.f. no. 80** 

9. Æ; 1.4 g, 12.2 mm, 250° VPP 2018, SU 3021, **s.f. no. 72** 

'*Campanian Atelier*', Æ unit, ca. 130/120-90/80 BCE *obv.* Head of Apollo, laureate, r. *rev.* Bull butting r., no legend. STANNARD 2013: 151, TC-3

10. Æ; 0.94 g, 12.1 mm, 45° VPP 2018, SU 0, s.f. no. N/A

11. Æ; 0.98 g, 12 mm, 70° VPP 2018, SU 2999, **s.f. no. 89** 

12. Æ; 0.87 g, 12.3 mm, 285° VPP 2018, SU 2999, **s.f. no. 82** 

13. Æ; 1.46 g, 12 mm, 55° *VPP* 2018, SU 3032, **s.f. no. 98** 

14. Æ; 1.3 g, 12.8 mm, 90° VPP 2018, SU 2999, **s.f. no. 77** *obv.* Illegible.

<sup>•</sup>*Campanian Atelier*<sup>•</sup>, Æ unit, ca. 130/120-90/80 BCE *obv.* Head of Apollo, laureate, r. *rev.* Bull butting r., above **[AOMΣ]**. STANNARD 2013: 151, TC-3

15. Æ; 1.3 g, 12.8 mm, 90° VPP 2018, SU 2999, **s.f. no. 81** 

'Campanian Atelier', Æ unit, ca. 130/120-90/80 BCE obv. Head, to I.?.
rev. Traces of type.
STANNARD 2013: 151, TC-3(?)
16. Æ; 1.2 g, 12 mm, --°
VPP 2018, SU 2999, s.f. no. 78

'Campanian Atelier', Æ unit, ca. 130/120-90/80 BCE obv. Bes, front. rev. Bes, front. STANNARD 2013: 151, TC-27

17. Æ; 1.52 g, 15 mm, 255° VPP 2018, SU 3027, **s.f. no. 93** 

18. Æ; 1.52 g, 14 mm, 200°? VPP 2018, SU 2999, **s.f. no. 83** 

19. Æ; 1.52 g, 15 mm, 255° VPP 2018, SU 2999, **s.f. no. 99** 

20. Æ; 2.12 g, 16.2 mm, --° VPP 2019, SU 0, **s.f. no. 128** 

*Campanian Atelier*, Æ unit, ca. 130/120-90/80 BCE *obv.* 'Rudimentary' Bes, front. *rev.* 'Rudimentary' Bes, front. STANNARD 2013: 152, TC-28

21. Æ; 2 g, 15 mm, 195° VPP 2018, SU 11015, **s.f. no. 68** 

22. Æ; 2.02 g, 15.3 mm, 35° VPP 2018, SU 2999, **s.f. no. 90** 

23. Æ; 2.86 g, 17.6 mm, 200° *VPP* 2018, SU 0, s.f. no. N/A

24. Æ; 1.9 g, 16 mm, 330° VPP 2018, SU 11001, **s.f. no. 62**  '*Campanian Atelier*', Æ unit, ca. 130/120-90/80 BCE *obv.* Bes in 'rudimentary' style, front, with hand slightly raised and serpent held in r. hand; 'T' (stylized cornucopia?), r. *rev.* Bes in 'rudimentary' style, front, with hand slightly raised and serpent held in r. hand; 'T' (stylized

cornucopia?), r. STANNARD 2013: 152, TC-28.1

25. Æ; 1.87 g, 14.7 mm, 350° *VPP* 2018, SU 2999, **s.f. no. 73** 

'*Campanian Atelier*', Æ unit, ca. 130/120-90/80 BCE *obv.* Bes in 'rudimentary' style, front, with hand slightly raised and serpent held in r. hand; 'T' (stylized cornucopia?), r. *rev.* Same type with crown in I. field and 'T' in r. field.

STANNARD 2013: 152, TC-28.2

26. Æ; 2.6 g, 14.3 mm, 270° VPP 2018, SU 2999, **s.f. no. 88** 

'Campanian Atelier', Æ unit, ca. 130/120-90/80 BCE obv. Bes, front. rev. Illegible. STANNARD 2013 TC-27 or TC-28

27. Æ; 1.59 g, 13.3 mm, --° VPP 2019, SU 3060, **s.f. no. 123** 

'Campanian Atelier', Æ unit, ca. 211-208 BCE obv. Laureate head of Zeus, r. rev. Warrior advancing to r. with spear and circular shield (symbol not identified), in I. field **[BPETTIΩN]**. HNI, n. 1988, p. 160, pl. 33

28. Æ; 7.48 g, 22.1 mm, 40° VPP 2018, SU 2985, **s.f. no. 63** 

*Campanian Atelier*', Æ unit, ca. 130/120-90/80 BCE? *obv.* Head of Artemis, r., with quiver behind the neck. *rev.* Butterfly. No comparanda

29. Æ; 1.47 g, 14.1 mm, 295° *VPP* 2019, SU 3037, **s.f. no. 132** 

Massalia or 'Campanian Atelier', Æ unit, 150-100 BCE, or ca. 130/120-90/80 BCE obv. Head of Apollo, r.

*rev.* Bull butting, r. PARDINI 2017

30. Æ; 1.4 g, 12.9 mm, 10° *VPP* 2018, SU 2999, **s.f. no. 79** 

*'Unidentified Mint*', Lead tessera, unknown date *obv.* Traces of type. *rev.* Illegible.

31. PB; 2.72 g, 14.7 mm, --° VPP 2019, SU 3055, **s.f. no. 114** 

'Unidentified Mint', Æ coin, unknown date obv. Illegible.
rev. Illegible.
32. Æ; 1.85 g, 13.1 mm, --°
VPP 2019, SU 3517, s.f. no. 127

## Roman Republican coins

Roma, Æ Sextans, after 211 BCE- first half 2<sup>nd</sup> century BCE(?) obv. Head of Mercury with petasus, r., above •• denomination mark. *rev.* Below •• denomination mark, above [ROMA]? *RRC* n.56/6, p. 159, pl. XII

33. Æ; 4.32 g, 20.2 mm, 0° *VPP* 2018, SU 2985, **s.f. no. 61** 

*Roma*, Æ Quadrans, second half 2<sup>nd</sup> century- beginning 1<sup>st</sup> century BCE

*obv.* Head of Heracles, r. To right in vertical, ••• denomination mark.

*rev.* Prow, r. Unidentified letters above, below [RO-MA], in r. field, in vertical, ••• denomination mark.

34. Æ; 3.97 g, 17 mm, 180° VPP 2018, SU 2999, **s.f. no. 100**  Roma, Æ As, 169-158 BCE obv. Head of two-faced Janus. rev. Prow, r. In field to r. [I], star above, below [RO]MA. RRC n. 196/1

35. Æ; 22.68 g, 33 mm, 240° VPP 2019, SU 3051, **s.f. no. 112** 

Roma, Æ/AR serrated Denarius, 85 BCE obv. Laureate head of Apollo, r. [MN ·FONTEI]. rev. Cupid on a goat, r. Two pilei above, thyrsus in exergue; surrounded by laurel wreath. RRC n. 353/1a c, p. 369, table XLVI.13

36. Æ/AR; 1.59 g, 20.6 mm, 200° VPP 2018, SU 2999, **s.f. no. 84** 



## Roman Imperial coins

*Roma*, Cu As, 68-69 CE *obv.* IMP SER GALBA CAESAR AVG TR P. Head of Galba, bare, r.

*rev.* LIBERTA[S] – PVBL[ICA]. In field S-C. Libertas standing facing I., holding pileus with r. hand, leaning forward.

RIC I, p. 249, n. 373

37. Cu; 10.81 g, 26.1 mm, 170° VPP 2019, SU 0, **s.f. no. 119** 

Marcello Mogetta University of Missouri E-mail: mogettam@missouri.edu

> Ilaria Battiloro Mount Allison University

> > Ivan Varriale Archeologia a Napoli

Daniel P. Diffendale Scuola Superiore Meridionale, Napoli

> Giordano lacomelli Independent Scholar

Mattia D'Acri University of Missouri

Chiara Corbino Laboratorio di Ricerche Applicate "Annamaria Ciarallo", Parco Archeologico di Pompei Chiara Comegna Laboratorio di Ricerche Applicate "Annamaria Ciarallo", Parco Archeologico di Pompei Giacomo Pardini Università di Salerno

## **BIBLIOGRAPHY**

- ANDERSON M.L., 1987, 'Pompeian Frescoes in the Metropolitan Museum of Art', in *The Metropolitan Museum of Art Bulletin*, 45, 3, New York.
- Atlante II, 1985, Atlante delle forme ceramiche, II. Ceramica fine romana nel bacino mediterraneo (tardo ellenismo e primo impero), Rome.
- BAILEY D.M., 1980, A Catalogue of the Lamps in the British Museum, II. Roman Lamps made in Italy, London.
- BARBET A. 1981, 'Les bordures ajourées dans le IVe style de Pompéi. Essai de typologie', in *Mélanges d'archéologie et d'histoire de l'École française de Rome. Antiquité*, 93, 2: 917-998.

BASTET F.L., and DE VOS M. 1979, Proposta per una classificazione del terzo stile pompeiano, Rome.

BATTILORO I., and MOGETTA M. 2018, New Investigations at the Sanctuary of Venus in Pompeii: Interim Report on the 2017 Season on the Venus Pompeiana Project, in FOLD&R Italy 425: 1-37.

- BATTILORO I., and MOGETTA M., 2021, 'Il santuario di Venere. Scavi 2017-2019', in M. OSANNA (a cura di), *Ricerche e scoperte a Pompei. In ricordo di Enzo Lippolis*, Rome: 35-56.
- BERG R. 2005, 'I saggi archeologici nell'insula dei Casti Amanti', in P. GUZZO and M.P. GUIDOBALDI (eds.), Nuove ricerche archeologiche a Pompei ed Ercolano, Naples: 200-215.

BERGAMINI M. (ed.), 2007, Scoppieto IV/1. I materiali. Terra sigillata decorata a rilievo, Florence.

BLANCKENHAGEN P. H. v., and ALEXANDER C. 1990, The Augustan Villa at Boscotrecase, Mainz am Rhein.

- BRECCIAROLI TABORELLI L. 2005, 'Ceramiche a vernice nera, in D. GANDOLFI (a cura di), *La ceramica e i materiali di età romana. Classi, produzioni, commerci e consumi, Quaderni della Scuola Interdisciplinare delle Metodologie Archeologiche, 2*, Bordighera: 59-103.
- BUSTAMANTE M., FAGA I., HUGUET E., KRAJŠEK J., RAMÓN A., RIBERA A., SALAVERT J.V., and SCHINDLER-KAUDELKA E., 2011, 'Un contexto cerrado de mediados del siglo I d.C. de la Casa de Ariadna de Pompeya', in *SFE-CAG. Actes du congrés d'Arles 2011. Contextes de consommation à Arles: le point des connaissances*

céramiques; Contextes de villes portuaries et fluviales: commerce, économie et société (Arles, 2-5 juin 2011), Marseille: 517-546.

- CARROLL M., 2010, 'Exploring the sanctuary of Venus and its sacred grove: politics, cult and identity in Roman Pompeii', in *Papers of the British School at Rome* 28: 63-106.
- CHIARAMONTE TRERÉ C., 1984, 'Ceramica di impasto; Ceramica grezza e depurata; Ceramica a pareti sottili', in *Ricerche a Pompei* 1984: 71-75; 140-140-192; 193-214.
- CHIOSI E., 1996, 'Cuma: una produzione di ceramica a vernice rossa interna', in M. BATS (ed.), Les céramiques communes de Campanie et de Narbonnaise (ler s. av. J.- C.- IIe s. ap. J.-C.). La vaisselle de cuisine et de table, Naples, 27-28 mai 1994, Naples: 225-233.
- COLETTI F., and STERPA G., 2008, 'Resti pavimentali in cementizio, mosaico e sectile dall'area del tempio di Venere a Pompei: i dati di scavo', in C. ANGELELLI and F. RINALDI (a cura di), *Atti del XIII colloquio dell'associazione italiana per lo studio e la conservazione del mosaico (Canosa di Puglia, 21-24 febbraio 2007),* Tivoli: 129-143.
- COLETTI, F., PRASCINA C., STERPA G., and N. WITTE, 2010, 'Venus Pompeiana. Scelte progettuali e procedimenti tecnici per la realizzazione di un edificio sacro tra tarda repubblica e primo impero', in S. CAMPOREALE, H. DESSALES, and A. PIZZO (eds.), *Arqueología de la construcción, 2. Los procesos constructivos en el mundo romano. Italia y provincias orientales.* Certosa di Pontignano, Siena, 13-15 de noviembre de 2008 (Archivio Español de Arqueología suppl. 57), Madrid: 189-211.
- COLETTI, F., 2020, 'Ceramica a vernice nera a Pompei. Il caso dei depositi votivi del santuario di Venere Fisica: produzioni, circolazione, mercati', in M. OSANNA and L. TONIOLO (a cura di), *Fecisti Cretaria: dal frammento al contesto. Studi sul vasellame ceramico del territorio vesuviano.* Atti del Convegno (Pompei, 17-18 giugno 2016), Rome: 77-97.
- COOPER, J.G. and DOBBINS, J.J., 2015, 'New Developments and New Dates within the Sanctuary of Apollo at Pompeii', in FOLD&R Italy 340: 1-7.
- COTTON M.A., 1979, The Late Republican Villa at Posto, Francolise, London.
- CRAWFORD M.H., 1974, Roman Republican Coinage, Cambridge.
- CURTI E., 2008a, 'Il tempio di Venere Fisica e il porto di Pompei', in P.G. GUZZO and M.P. GUIDOBALDI (a cura di), *Nuove ricerche archeologiche nell'area vesuviana (scavi 2003-2006)*. Atti del Convegno Internaziona-le, Roma 1-3 febbraio 2007, Roma: 47-60.
- CURTI E., 2008b, 'La Venere Fisica trionfante: un nuovo ciclo di iscrizioni dal santuario di Venere a Pompei', in *Le perle e il filo. A Mario Torelli per i suoi 70 anni*, Venosa: 57-71.
- DE CARO S., 1986, Saggi nell'area del tempio di Apollo a Pompei. Scavi stratigrafici di A. Maiuri nel 1931-32 e 1942-43, Naples.
- DE CARO S., 1998, 'La lucerna d'oro di Pompei. Un dono di Nerone a Venere Pompeiana', in S. ADAMO MU-SCETTOLA and G. GRECO (a cura di), *I culti della Campania antica*. Atti del Convegno Internazionale di Studi in ricordo di Nazarena Valenza Mele (Napoli, 15-17 maggio 1995), Rome: 239-244.
- DI GIOVANNI V., 1996, 'Produzione e consumo di ceramica da cucina nella Campania romana (II a.C. II d.C.)', in M. BATS (ed.), Les céramiques communes de Campanie et de Narbonnaise (ler s. av. J.- C. - Ile s. ap. J.-C.). La vaisselle de cuisine et de table, Naples, 27-28 mai 1994, Naples: 63-103.
- DI GIOVANNI V., and GASPERETTI G. 1993, 'Materiali per l'elaborazione di una tipologia della ceramica comune di Pompei, in 'Société française d'étude de la céramique antique en Gaule', in L. RIVET (éd.), Actes du Congrès des Versailles, 20-23 Mai 1993: production et importations dans la région parisienne, actualité des recherches céramiques en Gaule, Marseille: 267-280.

DYSON S.L., 1976, Cosa: the utilitarian pottery, Rome.

- FAGA I., 2008, 'Ceramica a pareti sottili nella Campania romana tra età tardo-repubblicana e prima età imperiale. Nuovi dati dal porto di Neapolis', in *SFECAG, Actes du Congrés de L'Escala-Empuriés*, Marseille: 643-654.
- FERRANDES A.F., 'Circolazione ceramica e approvvigionamento urbano a Roma nel I secolo a.C. Nuovi dati dall'area degli Horti Lamiani', in *Rei cretariae romanae fautores. Acta*, 43: 353-366.

- FERRANDES A.F., 2016, 'Sequenze stratigrafiche e facies ceramiche nello studio della città antica. Il caso delle pendici nord-orientali del Palatino tra IV e III secolo a. C.', in A.F. FERRANDES, and G. PARDINI (eds.), *Le regole del gioco. Tracce Archeologi Racconti. Studi in onore di Clementina Panella* (LTUR, Supplementum VI), Rome: 77-112.
- FEUGÈRE M., and PY M., 2011, Dictionnaire des monnaies découvertes en Gaule méditerranéenne (530-27 avant notre ère), Montagnac.
- FREY-KUPPER S., and STANNARD, 2018, 'Evidence for the Importation and Monetary Use of Blocks of Foreign and Obsolete Bronze Coins in the Ancient World', in B. WOYTEK (ed.), *Infrastructure and Distribution in Ancient Economies*. Proceedings of a conference held at the Austrian Academy of Sciences (28–31 October 2014), Vienna: 283-354.
- GIULIANI F.C. 2018, L'edilizia nell'antichità, Rome.
- HESNARD A., RICQ M., ARTHUR P., PICON M., and TCHERNIA A., 1989, 'Aires de production des gréco-italiques et des Dr. 1', in *Amphores Romaines*: 21-65.
- HOBBS R., 2013, Currency and exchange in ancient Pompeii: coins from the Anglo-American Project in Pompeii excavations at Regio VI, Insula 1, (BICS Suppl. 116), London.
- JACOBELLI L., and PENSABENE P., 1995-96, 'La decorazione architettonica del tempio di Venere a Pompei. Contributo allo studio e alla ricostruzione del santuario', in *Rivista di Studi Pompeiani* 7: 45-76.
- KING A., 2002, 'Mammals. Evidence from wall paintings, sculpture, mosaics, faunal remains, and ancient literary sources', in W. JASHEMSKI and F. MEYER (eds.), *The natural history of Pompeii*, Cambridge: 401-450.
- LEOTTA M.C., 1993, 'Alcune classi ceramiche dall'anfiteatro romano di Tivoli', in *Atti e Memorie della Società Ti*burtina di Storia e d'Arte, 66: 13-48.
- LEOTTA M.C., 1997, 'Fornaci tiburtine della tarda repubblica, 1. Le coppe di ceramica ellenistica a rilievo', in *Atti e Memorie della Società Tiburtina di Storia e d'Arte*, 70: 13-70.
- LEOTTA M.C., 1998, 'Fornaci tiburtine della tarda repubblica, 2. Le coppe di ceramica ellenistica a rilievo', in *Atti e Memorie della Società Tiburtina di Storia e d'Arte* 71: 7-64.
- LEPONE A., 2017, 'Il tempio di Venere', in E. LIPPOLIS and M. OSANNA (a cura di), *I Pompeiani e i loro dei*. Atti della giornata di studi. Sapienza Università di Roma, 15 febbraio 2015, Roma: 89-109.
- MARABINI MOEVS M.T., 1973, The Roman Thin-Walled pottery from Cosa (1948-1954), Rome.
- MARABINI MOEVS M.T., 2006, Cosa. The Italian Sigillata, Ann Arbor.
- MARTIN-KILCHER S., 1999, 'Karthago 1993. Die Füllung eines frühkaiserzeitlichen Pozzo', in F. RAKOB (ed.), Karthago III. Die deutschen Ausgrabungen in Karthago, Mainz am Rhein: 403-434.
- MEYER F.G., 1988, 'Food plants identified from carbonized remains at Pompeii and other Vesuvian sites', in R.I. CURTIS (ed.), Studia Pompeiana & Classica in honor of W. F. Jashemski, New Rochelle, N.Y: 183-230.
- MOREL J.P., 1994, 'Caleni (vasi)', in *Enciclopedia dell'arte antica classica e orientale, Secondo supplemento (1971-1994), I*, Rome: 817-818.
- MOREL J.P., 2009, 'Le produzioni ceramiche a vernice nera di Arezzo', in G. CAMPOREALE, and G. FIRPO (a cura di), *Arezzo nell'Antichità*, Rome: 125-134.
- MURPHY C., THOMPSON G., and FULLER D.Q., 2013, 'Roman food refuse: urban archaeobotany in Pompeii, Regio VI, Insula 1', in *Vegetation History and Archaeobotany* 22: 409-419.
- NARDI-BERTI R., 2006, La struttura anatomica del legno ed il riconoscimento dei legnami italiani di più corrente impiego, Sesto Fiorentino.
- NICHOLSON R., ROBINSON J., ROBINSON M., and ROWAN E., 2018, 'From the Waters to the Plate to the Latrine: Fish and Seafood from the Cardo V Sewer, Herculaneum', in *Journal of Maritime Archaeology* 13: 263-284. https://doi.org/10.1007/s11457-018-9218-y.
- NICODEMO M., 2005, Un deposito rituale di fine II secolo a.C. nell'area del Tempio di Venere a Pompei. Tesi di Specializzazione in Archeologia Greca e Romana, Università degli Studi della Basilicata, Polo di Matera (unpublished).
- OLCESE G., 1997, 'Notizia preliminare sulle analisi di laboratorio della ceramica "italo megarese" di Tivoli', in *Atti* e Memorie della Società Tiburtina di Storia e d'Arte: 71-74.
- OLCESE G., 2003, *Ceramiche comuni a Roma e in area romana: produzione, circolazione e tecnologia* (tarda età repubblicana-prima età imperiale), Mantova.

- OLCESE G., 2015, 'Produzione e circolazione mediterranea delle ceramiche della Campania nel III secolo a.C. Alcuni dati della ricerca archeologica e archeometrica', in *La Magna Grecia da Pirro ad Annibale*. Atti del LII Convegno di Studi sulla Magna Grecia (Taranto, 27-30 settembre 2012), Taranto: 159-210.
- PANELLA C., and FANO M., 1977, 'Le anfore con anse bifide conservate a Pompei: contributo ad una loro classificazione', in *Méthodes classiques et formelles*: 133-177.

PAPPALARDO U., GRIMALDI M. 2018, Pompei. La Villa Imperiale, Naples.

PARDINI G., 2017, Rinvenimenti monetali e circolazione a Pompei. Le monete dalla Regio VIII,7,1-15, Paestum.

- PAVOLINI C., 1977, 'Le lucerne fittili romane del Museo Nazionale di Napoli', in *Instrumentum domesticum*: 33-51.
- PEACOCK, D.P.S., 1977, 'Roman amphorae: typology, fabrics and origins', in *Méthodes classiques et formelles*: 216-278.
- PESANDO F., and GIGLIO M., 2017, *Rileggere Pompei V. L'insula 7 della Regio IX*, Rome.
- PUPPO P., 1995, Le coppe megaresi in Italia, Rome 1995.
- QUERCIA A., 2008, 'Le ceramiche comuni di età romana', in F. FILIPPI (ed.), Horti et Sordes. Uno scavo alle falde del Gianicolo, Rome: 197-232.
- RAMÓN TORRES J., 1995, Las ánforas fenicio-púnicas del Mediterráneo central y occidental (Instrumenta, 2), Barcelona.
- RESCIGNO C., 2017, 'Il santuario di Apollo tra vecchie acquisizioni e nuove prospettive di ricerca', in E. LIPPOLIS and M. OSANNA (a cura di), *I Pompeiani e i loro dei.* Atti della giornata di studi. Sapienza Università di Roma, 15 febbraio 2015, Roma: 37-70.
- RICCI M., 1973, 'Per una cronologia delle lucerne tardo-repubblicane', in *Rivista di studi liguri* 39, 2-4: 168-234.
- RICCI M., 2001-2002, 'Le lucerne nei relitti sottomarini', in Rivista di Studi Liguri, 67-68: 305-420.
- SCHWEINGRUBER F., 1990, Anatomie europäischer Hölzer. Ein Atlas zur Bestimmung europäischer Baum, Strauch- und Zwergstrauchhölze, Berna.
- SIGGES B., 2002, Vita cognita: die Ausstattung pompejanischer Wohnhäuser mit Gefäßen und Geräten untersucht an ausgewählten Beispielen, PhD Thesis, Universität zu Köln.
- STANNARD C., 2013, 'Are Ebusan and pseudo–Ebusan coins at Pompeii a sign of intensive contacts with the Island of Ebusus?', in A. ARÉVALO GONZÁLEZ, D. BERNAL CASASOLA, and D. COTTICA (eds.), *Ebusus y Pompeya, Ciudades Marítima. Testimonios Monetales di una relación.* Atti dell'Incontro scientifico tenutosi presso la Escuela Española de Historia y Arqueología en Roma CSIC (Roma, 12–13 novembre 2010), Cádiz: 125-155.
- STEFANILE M., 2017, 'La schedatura dei tituli picti pompeiani per EDR. Novità sulla cronologia di Suedio Clemente e di alcuni candidate', in S. ANTOLINI, S.M. MARENGO and G. PACI (a cura di), *Colonie e municipi nell'era digitale. Documentazione epigrafica per la conoscenza delle città antiche.* Atti del Convegno di Studi, Macerata, 10-12 dicembre 2015, Tivoli: 601-613.
- TCHERNIA A., and ZEVI F., 1972, 'Amphores vinaires de Campanie et de Tarraconaise à Ostie', in *Recherches amphores*: 35-67.
- TONIOLO L., SÁEZ A.M., TOMASELLA E., and BUSTAMANTE M., 2019, 'Catalogo delle anfore Pompei Impianto Elettrico 1980-81', in D. BERNAL-CASASOLA and D. COTTICA (eds.), *Roman and Late Antique Mediterranean Pottery 14*, Oxford: 229-313.
- TUFFERAU-LIBRE M., 2004, 'La céramique romaine de la maison I,99 à Pompei', in SFECAG Actes du Congrés de Vallauris 2004 (20-23 mai 2004): 315-327.
- VAN DER WERFF J.H., 1989, 'L. Eumachi. À propos d'une marque d'amphore trouvée à Nimègue,' in *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 39: 357-376.
- VEAL R., 2009, The Wood Fuel Supply to Pompeii: an environmental, historical and economic study: 3rd c. BC to AD 79, Sydney.
- ZAMPINI S., 2011, 'Lo scavo della cisterna del Foro di Cesare: lo studio del materiale ceramico', in *Scienze dell'Antichità* 6: 321-333.