

# SPARC Project Short Report: Marzuolo Archaeological Project

**Project Name:** Marzuolo Archaeological Project (MAP)

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## I. Summary of work undertaken in collaboration with SPARC

On July 30<sup>th</sup> 2016, MAP's international team successfully completed its first season of excavation at Podere Marzuolo, a Roman-period rural site in inland Tuscany where evidence for experimental and standardized phases of *terra sigillata* production was previously discovered. MAP seeks to understand the conditions and modalities of the innovation process of one of the Roman world's most iconic products from the perspective of a local community of practice. Innovation is a much-debated topic in the study of the Roman economy, but is traditionally associated with the introduction of new types of large-scale machines such as watermills and not with ceramic production, which, by the Roman period, was a millennia-old craft. *Italian terra sigillata* pottery (*TSI*), the paradigmatic Roman fine ware, however, was an innovative product, with regard to both its style and its production techniques.

The confirmed presence of both an experimental and a standardized phase of *TSI* production at Marzuolo offers a unique opportunity not only to better understand the methods of *TSI* production, but also to fundamentally rethink the process of innovation and its role in the Roman economy from a bottom-up perspective. To fulfill this potential, MAP's conceptual framework of embodied knowledge and communities of practice needed to be realized through a micro-spatial recording strategy. Such an approach is all the more important on a rural site such as Marzuolo that lacks the clear archaeological footprint left behind by monumental remains. This is where CAST came in: a SPARC grant facilitated the recording of micro-spatial data in the field and their use in later analyses, through provision of a Total Station/GIS, photogrammetry, and development of a web-hosted database linked to this spatial platform. Dr Rachel Opitz guided the development of these combined recording strategies, in collaboration with the

project directors, and was aided in its implementation by two graduate students in archaeology at the University of Arkansas, Chris Fletcher and Forrest Follett.

MAP's pilot season aimed to clarify the chronological phasing and spatial layout of the site by opening two ca. 10 x 10 m areas for open-area excavation. Topsoil was removed mechanically, and after manual removal of the mixed interface layers, the spatial location of every single 'small find' (objects in metal, worked bone, etc.) was recorded. The spatial distribution of nails, for instance, could be crucial to interpreting phases of occupation and collapse and the organization of space (e.g. shelving) in an architecture constructed with stone plinths and pisé elevations.

A series of photogrammetry photos were made of every single Stratigraphic Unit, both before and after removal, with a view to volumetric and 3D reconstructions. The photogrammetric models were processed in Agisoft Photoscan, and were georeferenced based on the inclusion of RAD targets, whose positions were measured in the field.

The extent of each SU was surveyed and mapped in GIS, while drawing of features and profiles was done directly in the GIS from the photogrammetric models, by two lab-based students, based on Total Station measurements of the outline of each Stratigraphic Unit (again top and bottom).

## **II. Summary of Results**

Excavation in the westernmost Area 16000 revealed a structure consisting of two rectangular rooms (ca. 10 x 5 m) with wide-open doorways fronting south. The alignment, layout, building technique, and phasing of the structure joins it to a strip-row building previously excavated ca. 80 m to the east, where evidence for experimental *terra sigillata* production was discovered. The linking of these structures demonstrates that the site was deliberately planned, and not the result of organic growth.

Moreover, the occupation levels in area 16000 have yielded the first evidence of domestic activities at Marzuolo, including cooking wares and bone and bronze dress and toilet instruments. These finds are of utmost importance for understanding how a community of practice formed around a shared place, product, and sense of craftsmanship. Further study of the spatial distribution of small finds, based on the micro-spatial recording strategy, is planned.

Based on previous excavations, we anticipated capturing the extension of a large building in *opus reticulatum* masonry in easternmost Area 15000, in order to document its date and function. Instead, a highly complex stratigraphy was found. The oldest feature, a massive, ca. 1 m deep carefully constructed wall foundation, was possibly part of the *opus reticulatum* building. The wall itself, however, had been dismantled and reused in at least three subsequent walls superimposed on the foundation. Dating material was scant but provided an early imperial TAQ (to be refined) for construction of the foundation.

Both the possible *opus reticulatum* foundation and two cruder foundations without mortar, on a different alignment but almost equally deep, were cut into a remarkably homogeneous, thick chocolate-brown layer of silty-clay. The strip-row structure in Area 16000 and the *opus reticulatum* building found in previous excavations had also been cut into the same layer. The layer's uniformity, its inclusion of some (albeit very few) archaeological material, its remarkable level surface, and its notable absence in the eastern part of the site suggest a deliberate levelling layer. The new excavations allow us to relate this levelling activity to large-scale, planned building activity across the site in the early imperial period.

Finally, area 15000 adds important questions regarding the diachronicity of the site. Both the dismantling and recycling of walls and the later occupation phases – including foundations and burials probably associated with an early medieval church building to the north and a large drain cutting across all structures – invite consideration of what continues to attract people to a particular site.

In sum, this season fulfilled its promise of detailing the site's chronology and layout. With a view to MAP's overall research question of innovation and community, these results allow us to consider aspects of investment and planning. Further research will fold these findings back into the narratives of production activity at Marzuolo and the site's full diachronic profile. The SPARC grant helped design and implement a strategy and workflow with which to tackle excavation and recording of production facilities, for which the micro-spatial recording will be crucial.

### **III. Presentations and Publications Completed**

Official report submitted to the Soprintendenza Archeologia, Belle Arti, Paesaggio at Siena, September 2016.

#### IV. Presentations and Publications In Press / Planned

- Presentation at the 2017 Annual Meeting of the Archaeological Institute of America, Toronto (paper abstract submitted);
- Publication of the general aims and methods of the project and the results of the 2016 season in the *Papers of the British School at Rome* (article in preparation);
- Pluri-annual grant proposal to *National Science Foundation* planned for 2017.

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