

# JARASH: INVESTIGATION IN THE VAULTS OF THE PODIUM OF THE TEMPLE OF ARTEMIS (NOVEMBER-DECEMBER 2018)

*Ziad Ghnimat, Roberto Parapetti, Daniela Baldoni and Massimo Brizzi*

## **Introduction**

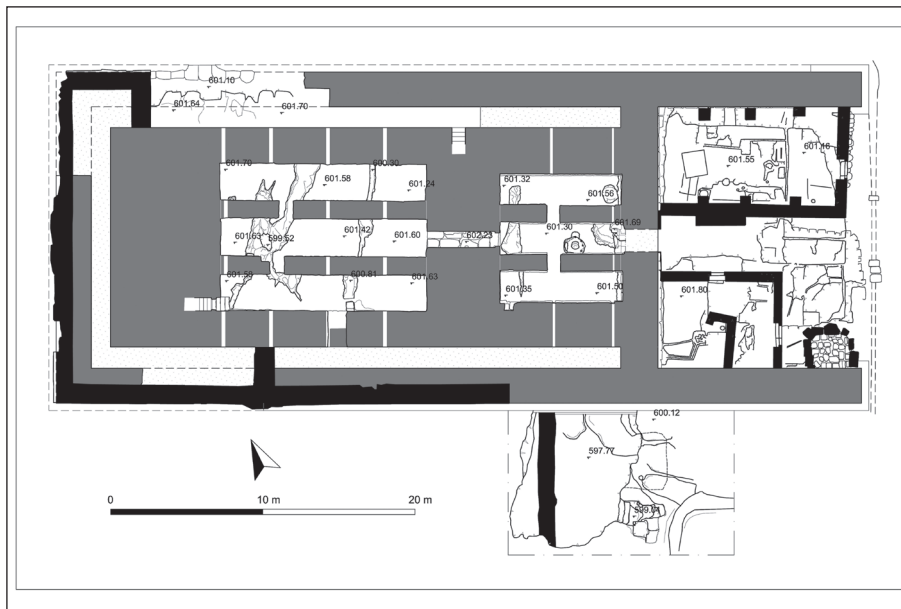
The ‘Conservation of the 2<sup>nd</sup>-Century Temple of Artemis at Jarash’ is a collaborative project between the Department of Antiquities of Jordan and Monumenta Orientalia (Rome), co-directed by Ziad Ghnimat and Roberto Parapetti, with the aim to halt or mitigate the major conservation problems of the temple; raise awareness of the site; and improve site access for tourists and local citizens. The project began in October 2018 and, after suspension due to the Covid-19 pandemic, ended in March 2022.

Since many of the more serious conditions in the structures of the podium were already identified, it was decided to proceed with the cleaning and systematic investigation of the stratifications that survived above the bedrock so as to be able to evaluate more clearly the condition of the foundations of the walls in relation to the bedrock on which they were built.

The excavation lasted one month from November 19<sup>th</sup> to December 20<sup>th</sup> 2018 and employed six workers of the Department who were directed by Massimo Brizzi. Antonio Abate was responsible for the documentation. The results of this investigation fill a long-lasting knowledge gap as the podium vaults, thanks to an ancient breach in the southern foundation, have always been accessible even after the monument and the city were abandoned, but were never investigated scientifically and documented, affecting the complete understanding of the monument.

## **The Podium of the Temple**

The podium and the foundations of the temple were built simultaneously following groundwork on the surface of the bedrock, sometimes with low foundation trenches or by a simple leveling (**Fig. 1**). The podium is a U-shaped structure open on the eastern side. It is 53.90m long, including the wings of the stairway, and 22.70m wide. The foundations of the walls of the *cella* and the colonnade of the pronaos form a rectangle inside the podium measuring 36 by 14.40m. A 1.40m wide corridor is left between the two, closed at both eastern ends. The western side of the foundation of the *cella* is made of a huge platform 7.25m thick, while the foundation of the eastern corner staircase is 4.90m thick, crossed by a narrow corridor built in the structure that links two rectangular areas: the eastern portion under the pronaos is 8 by 8.45m wide; the western portion under the *cella* is 13.60 by 9.70m wide. The masonry of both the podium and the foundations is comprised of the same pink limestone commonly called *malakiu*, whose quarries are located about 4.5km north of the city. Both were likely worked by the same stonecutters, even if the podium is obviously better finished than the foundations. To support the floors of the *cella* and of the pronaos, two systems of three parallel vaults each were built in white limestone voussoirs. The vaults are supported by two parallel walls also of white limestone ashlar and by the foundations of the *cella* within which are designed the imposts for the southern and northern vaults. The only access to these vaults was a staircase built in the western platform



1. Plan of the temple sectioned at 602.50m asl with the heights of the bedrock (survey and editing: M. Brizzi).

that connects the south-western corner of the *cella* with the southern vault. The vaults under the pronaos, on the other hand, can only be reached through the corridor mentioned above, passing through the eastern foundation of the *cella* from the central vault. After the mid-6<sup>th</sup> century, two other entrances were opened in the eastern front of the temple towards the central vault under the pronaos and along the southern side into the southern vault under the *cella*. This last breach was the access to the rooms of the podium for all subsequent centuries, even when the *cella*, the pronaos, and the pteromata had become unusable (Fig. 2). When Clarence Fisher and Chester McCown were planning their investigation of the temple in 1930, they could access all of the vaults from the breach and found “a considerable damage has been done to the walls by the scraping in the effort to obtain saltpetre” (Fisher 1938: 135) generated by the dampness and, we add, the presence of nitrogenous waste due to the prolonged stay of animals in these rooms. In the vaults, there is no record of any investigation carried out by the American team in the 1930s. The complete clearance of the monument as initially planned was not achievable. The pronaos and the southern and northern sides of the temple were cleared of debris, but the collapsed blocks in the *cella* and along the western side of the temple were left *in situ* for many years. It is likely that, like four small trial trenches identified in the *cella* and in the pteroma of the temple, some

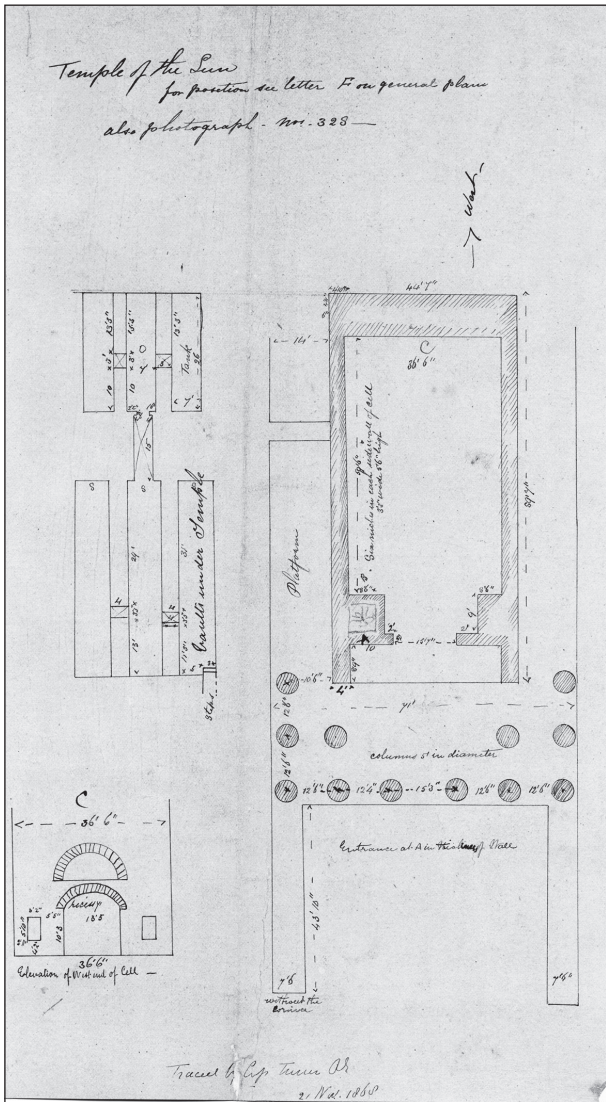
targeted trenches were also made in the podium in order to assess the surviving evidence in this area. The systematic excavation of the *cella* of the temple was carried out by the Italian mission in 1994 and 1995, together with the excavation of the western and south-western pteroma. The excavation settled that the planned raising of the western part of the *cella* was modified, leaving the extradoses of the three vaults exposed and extremely fragile, so much so that once the excavation was completed, it was necessary to repair parts of the crown. For safety reasons the two entrances to the podium rooms were blocked with temporary barriers, which were soon tampered with. This meant that in the following years access to the vaults was not controlled, which led to the consequent accumulation of rubbish and other waste. In addition to dirt, more serious damage was perpetrated during these intrusions, as the archaeological investigation has subsequently shown; the most striking damage was the visible deterioration of the wall structures. When the poor condition of the door jamb between the southern and central vaults was recorded, it was immediately clear that the assessment of the podium structures could not be carried out before a general clean-up and the excavation of deposits above the bedrock.

### The Excavation

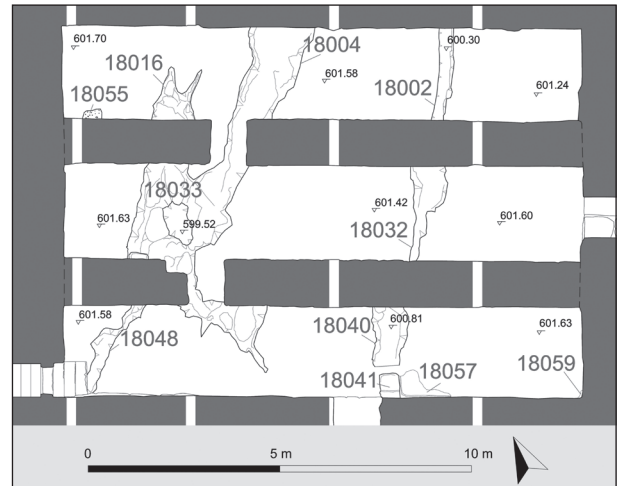
The area of the six investigated vaults is 146 square meters. The level of the bedrock in the

vaults ranges from 601.30 to 601.70m high asl; its surface is irregular, made of higher spots and depressions; the limestone is striped by natural fissures, oriented mainly north-east to south-west and filled with very compact natural deposits of sandy clay and gravel (Fig. 3). First of all, there is an extreme rarefaction of the anthropogenic traces in the bedrock when compared with the situation outside the temple recorded between the *alae* of the staircase by the American expedition in the 1930s and that of the Italians in the 1980s. They are concentrated in

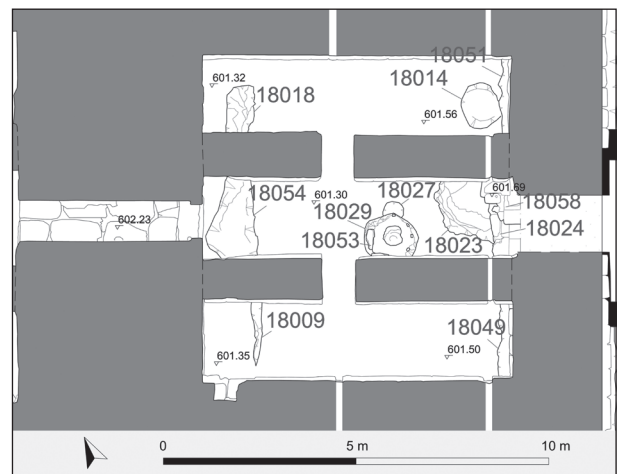
the eastern part of the vaults under the pronaos, while in the rest of the rooms only minor alterations of the rock have been recorded. In the 26m between the eastern limit of the vaults under the pronaos and the western limit of the vaults under the *cella*, three main natural fissures in the bedrock have been documented, whose irregular edges have been altered partially by both ancient and modern excavations (Fig. 4 and Fig. 5). In the eastern vaults, the crack 18018-18054-18009 crosses the three small rooms without extending further either north or south. The fissure 18002-18032-18040 in the eastern half of the vaults under the *cella* is longer and widens in its southern part. The western half of the vaults under the *cella* is



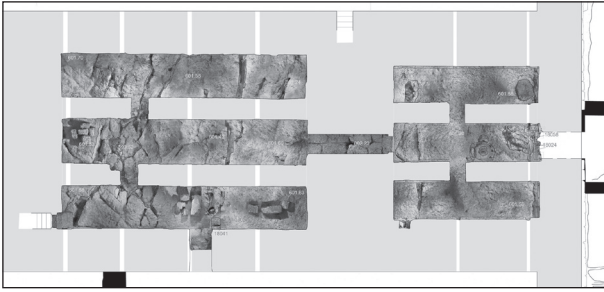
2. Sketch with measurements of the temple of Artemis at Jarash drawn by Charles Warren in 1868, likely after a visit to Jarash in 1867. Note the details in the plan of the podium vaults, then fully accessible. Warren noted the presence of a cistern, our US18041-18057-18059, but probably due to faulty memory he recorded a tank in the southern vault under the pronaos instead of the eastern end of the southern vault under the *cella* (Courtesy of the Palestine Exploration Fund).



3. Plan of the vaults in the podium of the temple and orthophoto of the bedrock after the investigation elaborated from the photogrammetric survey of the temple (survey and editing: M. Brizzi).



4. Plan of the vaults in the podium under the pronaos with the indication of the most significant contexts (survey and editing: M. Brizzi).



5. Plan of the vaults in the podium under the cella with the indication of the most significant contexts (orthophoto: A. Abate; editing: M. Brizzi).

occupied instead by the complex and articulated fissure 18004-18016-18048, subject of devastating interference by looters but already partially emptied in ancient times for uncertain purposes. Apart from some fills of cuts in the bedrock, the remnants of earthy stratigraphy not disturbed by modern excavations are almost nil. We therefore report the sequence that was possible to record during this investigation.

#### *Evidence Predating Construction of the Temple*

Understanding of activities preceding construction of the temple are limited to admittedly poor evidence in the central room under the pronaos. Here, the surface of the bedrock was uniformly lowered after construction of the temple, with the intent to create more clearance between the bedrock and the ceiling above, further aiding those walking on this surface. Despite this reduction, a deep cut in the rock was recorded in the north-eastern corner of the room. Only its western half has been exposed, since the cut continues under the foundation of the eastern columns of the temple and the threshold of a door built in a breach made during the Byzantine-period reuse. The upper filling of the cut (US18025) was disturbed by modern intrusions and contained pottery from a wide chronological range. The lowest deposit (US18026), sealed by fragments of over-fired tiles, was undisturbed. Here two fragments of Eastern Sigillata B bowls and one of African Red-Slip Ware, whose shapes unfortunately are unrecognizable, were found together with some sherds of ribbed and plain walls of cooking pots. The assemblage can be dated between the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD. It is therefore a context that can be correlated with evidence of residential use of the area shortly before the

construction of the temple already documented in the 1982 excavation between the *alae* of the temple (Bitti 1986). Although missing the upper layers, this cut was intentionally filled with materials that reveal a desire to offer solid support to what was about to be placed on top. Since there is no trace of the cut east of the temple foundation, it is likely that it does not extend far beyond the excavation limit of our investigation. The limit was imposed by the presence of the Byzantine structure that is off the western face of the foundation, so that it is impossible to know how the temple builders dealt with this depression: that is, if the rock was still reached with the lower courses or if the cut did not interfere with the masonry of the foundation. As for the function of this pit, the irregularity of its walls and the absence of any coating do not allow for a valid interpretation beyond the generic use of storage.

Other evidence from prior to construction of the temple, due to its relationship with the walls of the vaults, can be identified in the quadrangular regularization (US18018) of a natural fissure in the western half of the north vault under the pronaos. It was emptied and partially altered by modern excavations.

In the same room but at the eastern end, a circular shallow pit has been found (US18014). The pit is 1.2 by 0.95m wide and 0.35m deep and is cut by the foundation trench of the temple, showing its anteriority to the building despite the undisturbed sandy silty layers filling the pit (US18015 and US18020) that contain scarce pottery belonging to the Umayyad period. If related to the evidence of the cistern found outside in 1982 and the mentioned cut in the contiguous room, the shape and dimensions of this pit suggest that it could have been the slot for the setting of a large jar.

Finally, a smaller circular pit 0.45m wide was found in the middle of the central vault under the pronaos (US18027); it is also cut by another pit which, as we will see, has been connected to the life of the temple, placing this small cut in an earlier phase. The sandy fill didn't preserve any material. It could be the surviving bottom of a deeper pit reduced by the lowering of the walking level after the building of the vaults. Alternatively, this last evidence and the quadrangular cut adjusting a natural

fissure may refer to a clamping system of lifting machines during the construction of the temple, although these isolated traces are not exactly legible in a recognizable pattern.

*Evidence of the Construction and Life of the Temple*

As observed in various investigations carried out outside the temple building, the construction of the podium and foundations of the *cella* is always preceded by the regularization of the bedrock for the direct setting of the lower ashlars on the rock, without renouncing to adapt the footing to different levels by cutting the bare minimum from the natural rock. This strategy is the reason why real foundation trenches were recorded exclusively along the eastern sides of the two northern and southern rooms of the vaults under the pronaos.

In the northern vault, the bedrock was leveled roughly to the average height of 601.4m, sloping gently west. The linear cut (US18051) along the eastern foundation of the columns is about 20cm wide. This cut hosts at least one course of the ashlars of the foundation and it is an exception in the building procedures of the temple, where most of the foundations are set on leveled bedrock without a deep cut like this one. Such a concern is certainly attributable to the solidity of the rock that in this area was not considered reliable. The cut is filled with limestone flakes and sand, likely the debris of the chiseling of the ashlars, which has been left *in situ*.

In the southern vault the surface of the bedrock was also leveled roughly between 601.35 and 601.5m asl. The cut along the foundation of the columns (US18049, equivalent to US18051) is 22cm wide and has been partially investigated. The filling consists of sand and limestone flakes (US18050), with no other artifacts recorded in this context. The edge of the cut is irregular. Covered by this filling, about 20cm below the surface of the bedrock, the offset of the lower course of the foundation fills up the whole width of the cut (**Fig. 6** and **Fig. 7**).

Following the foundations of the *cella* along the whole exposed perimeter in the podium vaults, there is a simple leveling of the bedrock surface on which the ashlars of the masonry are settled. This is also the case in the large platforms

of the thalamos and the eastern staircase towers, without the deep surface cut of the rock as in the foundation of the eastern columns. The construction of the walls supporting the vaults



6. Southern vault under the pronaos. Detail of the foundation trench US18049 from north after the investigation of the fill, still visible in the section under the southern wall of the vault, covering the offset foundation of the eastern columns of the pronaos (photo: M. Brizzi).



7. Southern vault under the pronaos. View of the foundation trench US18049 from top where three ashlars of the offset footing are discernible after the excavation of the fill (photo: M. Brizzi).

is made instead without the same precautions of careful leveling. Even allowing for an alteration of the walking levels following the profanation of the temple, the footing of these walls appears to have been adapted to the unevenness of the rock through improvised expedients such as filling gaps with small blocks.

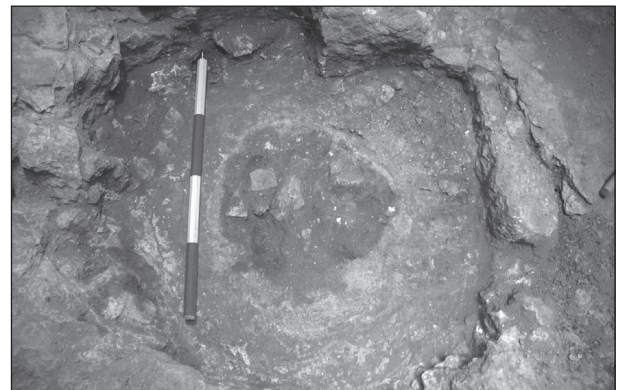
The summary leveling of the bedrock in the podium vaults can probably be explained by the planned flooring of all the rooms with a thick, beaten-earth floor that would have regularized the walking surfaces. This floor, and all those that followed over the centuries these rooms were occupied, have been lost due to looting activities. Only a small fragment is preserved in the south-western corner of the northern vault under the *cella*. It is a small patch of a beaten floor of clay and gravel (US18055), 15cm thick, pressed directly over the bedrock. Whether it belongs to the original floor of the temple vaults or to a later phase is impossible to say due to the absence of any diagnostic material, but this fragment gives an impression of how the walking surface must have appeared in ancient times on these premises.

Beyond this uncertain evidence, in the central vault under the pronaos, a context was found most likely referable to the phase of use of the building as a temple; that is, between the 2<sup>nd</sup> and 4<sup>th</sup> centuries AD. It is a circular cut (US18029) along the southern side of the room, about 25cm deep, with a diameter of 1.15m. The bottom is flat, with a deeper central circular pit, 0.40m wide (Fig. 8). The south-western sector of the cut is adjusted with two blocks bound with clayish mortar (US18053); a probable third block is missing from the southern wall of the room, while four quadrangular lodges, 10 by 5cm each, are carved along the lower eastern edge of the cut. The filling of this cut (US18030) was undisturbed. A few fragments of cooking pottery were mixed with five fragments of polychrome marble slabs, one moulded, and five fragments of alabaster. This pit cuts the earlier mentioned smaller pit (US18027). The shape of the bottom suggests the presence of a big vessel set in the central pit and surrounded by a structure half built in masonry and half realized by fixing timber laths in the rock. The sequence shows that this feature was set when the wall of the vault was already standing. Since it is

hard to imagine this structure built a few meters west of the entrance opened at the eastern end of the room after the profanation and occupying the middle of the only passage from the area, it is likely that it belongs to the phase of the temple when the three rooms under the pronaos were the most recessed rooms of the building basement. Furthermore, the fragments of marble and alabaster found in the filling, *i.e.* when this feature was dismantled, can be related to the rare contexts of the excavation of the *cella* referable to the years immediately after the systematic spoliation of the marble revetments of the *cella*. In particular, context 95174 which, in addition to many fragments of polychrome marble, contained fragments of a Nabatean alabaster capital that likely was an internal decor of the *cella* (Parapetti 1998; Brizzi 2018).

#### *Evidence of Ancient Reuse after the Profanation of the Temple*

The transformation of the temple after the interdiction of the cult of the goddess took place in successive stages, identified by the stratigraphic excavation carried out in the *cella* in 1994 and 1995. The first of these stages was the transformation of the great hall of the *cella* into a secular building, still covered by its roof although completely stripped of all marble revetments including the floor. Of this phase only a few fragments of polychrome mosaic survive, part of the new floor of the *cella* that was transformed into a reception hall for local authorities linked to the urban or provincial administration. Access to this hall had to take place through the same stairway to the temple,



8. Central vault under the pronaos. The cut US18029 during the investigation. The undisturbed context US18030 is still in situ filling the central pit. On the right, two blocks of structure US18053 (photo: M. Brizzi).

as evidenced by inscriptions (acclamations?) within crowns painted on the front columns of the portico and referable to this phase (Welles 1938, n. 337). The detail is evidence for the chronological framework of an important transformation in the vaults of the podium, *i.e.* the opening of a new access point at the center of the eastern wall of the central vault under the pronaos, which obviously implies the removal of the stairway in front of the temple. The latter was carried out at a further stage, when the roof of the *cella* collapsed, around the mid-6<sup>th</sup> century, determining another transformation in the use of the building and of the whole area. We can therefore state that in the rooms of the podium no evidence referable to the first transformation of the building has been identified so far, while with the transformation realized after the mid-6<sup>th</sup> century and the conversion of the entire upper terrace of the sanctuary into a vast production estate, important modifications are also recorded in the vaults of the podium.

The first is the mentioned opening of a new access point that transformed the vaults of the podium from the basement of the temple to the ground level of a stronghold that was the epicenter of an articulated artisan district and hosted residential, storage, and processing facilities. A breach 1.55m wide was cut in the foundation of the columns, removing the ashlars of three courses exactly in correspondence with the central intercolumniation. It is possible to discern the elements of two successive sets of thresholds and jambs belonging to two distinct phases (US18024 and US18058), the latter reducing the width of the entrance to 1.20m (Fig. 9).

Important interventions in this phase of the building have also been recorded in the southern vault under the *cella*. Here, a north to south oriented wall (US18041), built with recycled ashlars and bound with poor lime mortar, closed the eastern end of the room, isolating a space 4.70 by 2.30m wide. East of the wall, the excavation revealed the presence of a 3-4cm thick waterproof coating rich in sandy aggregates (US18057) laid both over the leveled surface of the bedrock and seamlessly over the southern and eastern walls up to a recorded height of about 85cm from the bottom. In the south-eastern corner, settled in

the coating mortar, four limestone *tesserae*, about 1.5cm wide, are the only remains of the original flooring. The creation of this cistern in the vault of the podium can be connected to the trace of a drainage running along the external southern wall of the *cella*. The drainage came out of the breach made in the southern wall of the *cella*, then transformed into an open area with small houses, where rainwater was collected and conveyed to this point of the building, flowing into the cistern through one of the slots (Fig. 11). The intentional closure of the lower part of this slot provides an indicator of the original depth of the cistern. In fact, the wall structure that delimits the western side of the cistern is almost entirely destroyed, but using the height of the slot infill as a possible maximum filling level, we obtain a capacity of over 18 cubic meters.



9. Central vault under the pronaos. The breach opened through foundations of the columns opening an access to the vaults from the area between the alae. In the foreground, the threshold US18058 overlaying the earlier doorstep US18024 (photo: M. Brizzi).



10. Southern vault under the *cella*. Detail of the SW corner of the Byzantine-Early Islamic pool in the eastern half of the vault with waterproof coating US18057 and structure US18041 (photo: M. Brizzi).

The second direct entrance from outside to the vaults, obtained by opening a breach in correspondence with a slot in the foundation of the southern wall of the *cella*, is more difficult to frame chronologically. It is immediately west of the cistern described above. The opening, 1.30m wide and just over 1.50m high, connects the southern vault under the *cella* with the corridor under the southern pteroma, which was already open and partially buried when the breach was cut. There is evidence of a swing door marking the threshold. This opening has remained a usable access point to the vaults up until today.

The deep and irregular cut (US18033) found in the western half of the central vault under the *cella* is more difficult to interpret (Fig. 12

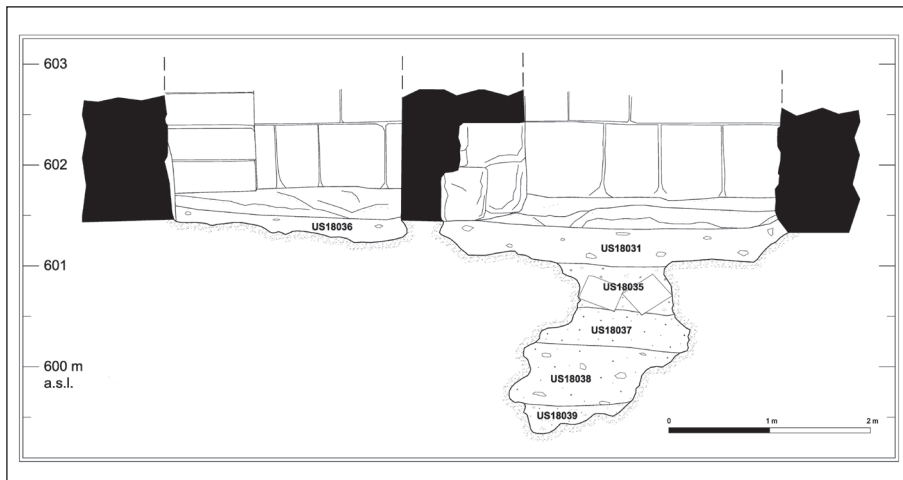


11. Southern pteroma. The inlet to the cistern through the slot in the foundation of the south wall of the *cella* (photo: M. Brizzi).

and Fig 13). It is located in the center of the long and branching fissure that crosses the three vaults in the western half, in the place where our attention had already been caught due to the dangerous condition of the door jamb. The excavation of this area revealed a deep recess in the bedrock, also identified, and partially emptied, by modern looters. Apart from the



12. Central vault under the *cella*. The cavity US18033 at the end of the investigation (photo: M. Brizzi).



13. Central and southern vault under the *cella*. N-S cross-section through the cavity US18033 and recorded stratigraphy (survey and editing: M. Brizzi).





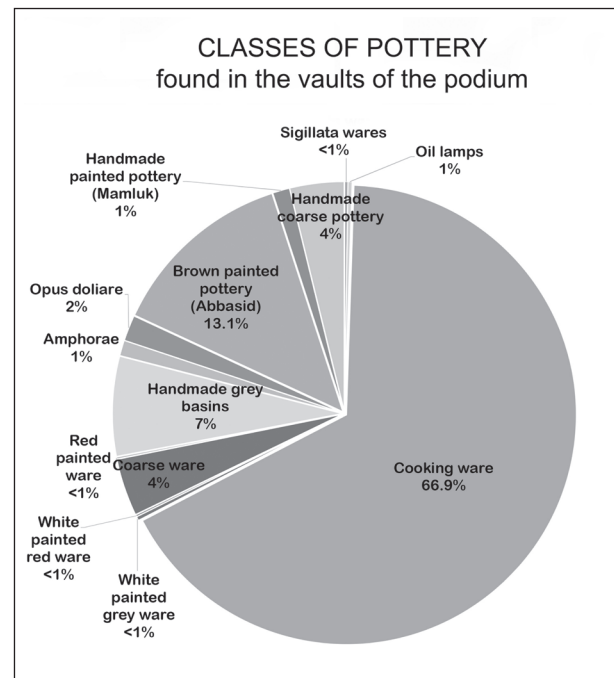
14. Central vault under the cella, cavity US1803. Bronze specillum from US18039 (photo: D. Baldoni).

damage caused by these recent excavations, the walls of the cavity show no signs of artificial cutting, indicating that we are probably dealing with a natural grotto used and filled in ancient times and then partially disturbed by looters. Under a layer of silty sand (US18031), extended to the whole western part of the room, the investigation recognized four different contexts filling progressively the cavity. The upper one (US18035) is a dump of two small limestone ashlars and sand with modern intrusions; it covers two thick sandy layers (US18037 and US18038) with few pottery, cobbles and gravel. At the bottom of the grotto, a more clayish layer (US 18039) shows a flat and horizontal surface and covers the irregular bottom of the cavity. Each of the lower three layers contained mixed pottery with a wide chronological range, from Roman to Mamluk periods, including Umayyad amphorae. At the surface of the lowest, an interesting artifact was found: an intact bronze *specillum* (Fig 14). It has a small spoon-shaped spatula on the top and a pointed circular-sectioned stem, flattened in the upper part where an arch and a double volute are incised. Only the upper of these layers fits with the characteristics of a dump following a looting, while the lower ones are undisturbed stratifications. It is therefore likely that the recent looting was limited to the upper part of the hole. Whether this cavity was opened during the reuse of the temple and closed after the Mamluk period, as indicated by the most recent pottery found in the filling, or if the activity was in turn the disturbance and reopening of an older context, is very difficult to determine. The presence of a bronze *specillum*, itself difficult to date precisely, opens legitimately the suspicion that the grotto had been used previously for religious reasons related to the temple or even for an earlier cremation burial, and then reopened, closed after the Mamluk period, and disturbed by the recent intrusion.

It has been mentioned repeatedly how most

of the earthy deposits above the bedrock have been turned over by modern use of the rooms or by looting activities. The mapping shows crudely how the few undisturbed stratigraphies are the ones laying in the recesses of the rock, especially in the vaults under the pronaos. In many cases, a stubborn perseverance in excavating natural deposits inside the rock fissures has been recorded, even under the foundations of the walls, showing how those responsible for these ravages were inexperienced “treasure hunters,” though no less dangerous to the state of the monument. Nevertheless, all the disturbed deposits were systematically excavated and recorded, and in the examination of the assemblages it was possible to recognize roughly what was originally documented in the vaults of the podium (Fig. 15).

The majority of recovered materials is related to the Late Byzantine and Early Islamic phases that are the periods in which the temple building



15. Investigation in the podium of the temple of Artemis. Distribution of the different pottery classes recorded out of the total fragments recovered in all the contexts excavated (chart by D. Baldoni).

was transformed entirely. Along with fragments of cooking and coarse ware (together more than 70% of the total pottery) they also include quite a number of sherds of large handmade basins in a grey fabric (7%), attested in different varieties and dimensions and usually decorated with combed, wavy lines.

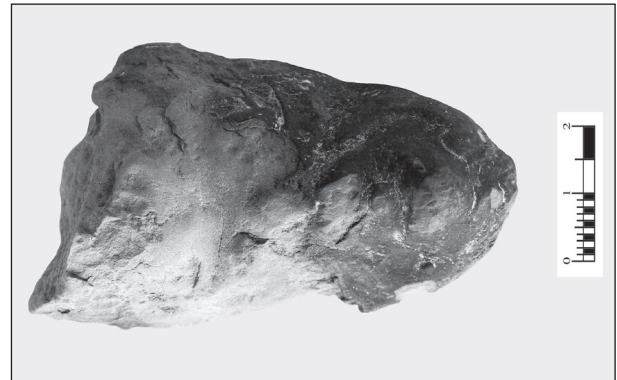
As expected, the presence of Eastern and African Sigillata Wares is limited to five fragments. Among the most ancient materials it is worth mentioning a terracotta figurine, likely an oil lamp handle, in the shape of a Satyr's head with a snub nose, long beard, and hair depicted by small engraved notches (**Fig. 16**). The surface, largely blackened, shows evident traces of use.

Particularly abundant and spread all over the vaults of the podium (more than 13% of the recovered pottery), with a higher concentration in the central and southern rooms under the *cella* (US 18036, US 18037, US 18038), is a type of pottery produced at the northern kilns of Gerasa from the early second half of the 8<sup>th</sup> century (**Fig. 17** and **Fig. 18**). All the collected fragments belong to jars, juglets, and spouted jugs with a cream or white-slipped surface and a purplish-brown painted decoration consisting of loops, spirals, wavy lines, arched patterns, and crisscrossed lines. This ware, widespread in northern and central Jordan, shares many features with the Abbasid pottery, which shows evident elements of continuity with the previous tradition, as pointed out by examples

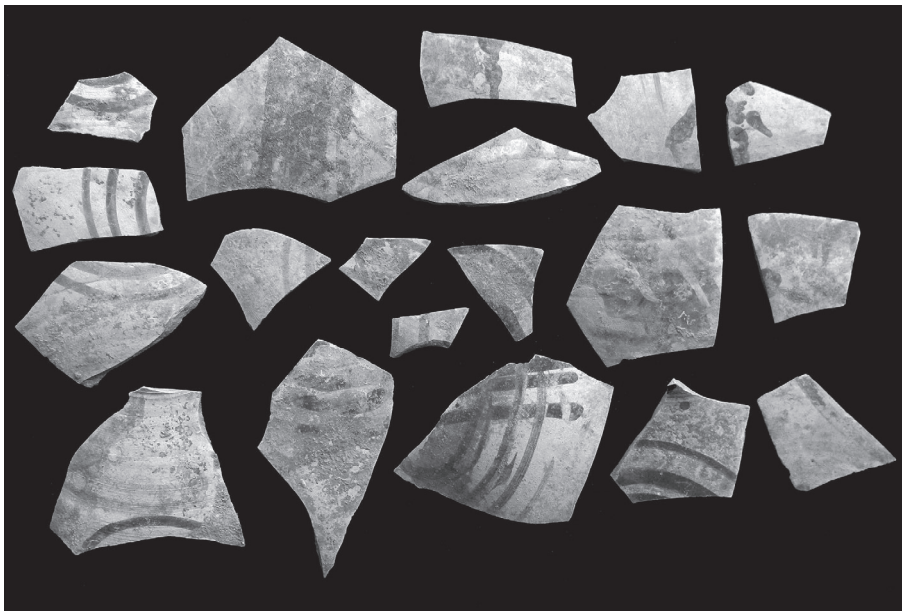
from Pella dated to the late-8<sup>th</sup> and early-9<sup>th</sup> centuries (Walmsley 1995: 661). Due to the high level of fragmentation of the diagnostic specimens and the difficulty in attributing them to known shapes, it is hard to establish whether they belong to the earliest production of this type of pottery or to a later one.

### Final Remarks

The excavation in the vaults of the podium confirmed that the area, even if reduced to that underneath the pronaos, was likely used for dwellings earlier than the construction of the temple, as already recorded in the area between the *alae* of the stairway during the investigations carried out in the 1980s. Of all the area of the vaults under the *cella*, only the cavity in the central room may have been used before the construction of the temple for a cremation burial,



16. Northern vault under the *cella*. Probable oil lamp handle in the shape of a Satyr's head from US18034 (photo: D. Baldoni).



17. Investigation in the podium of the temple of Artemis. Fragments of Early Islamic pottery with cream or white-slipped surface and a purplish-brown painted decoration (photo: D. Baldoni).



18. Investigation in the podium of the temple of Artemis. Fragments of Early Islamic pottery with cream or white-slipped surface and a purplish-brown painted decoration (photo: D. Baldoni).

but this is an inference based on ambiguous and partly disturbed evidence. The rock surface was leveled only at the foundations of the walls of the *cella*; the inner area was left with its natural irregularities probably with the awareness that it would be covered by a beaten earth floor such as the fragment found in the northern vault.

After the mid-6<sup>th</sup> century AD, the use of these rooms was totally altered with the opening of new entrances and the construction of a cistern in the southern vault. Its connection with the rooms that were built at the same time in the above open *cella* was made more clear by the opening of the north-western vault to install a trap door with a manhole cover.

Although very few undisturbed contexts with significant assemblages have been preserved, the widespread presence of classes of pottery belonging to the second half of the 8<sup>th</sup> century reflects what is documented also in the *cella*: despite the interruption of craft activities in the upper terrace after the earthquake of 749 AD, the use of the houses and the other facilities built in the temple does not cease until the dawn of the 9<sup>th</sup> century, after which we witness the progressive abandonment of the building. After the earthquake that made the *cella* and the surrounding spaces unfit for any use between the 11<sup>th</sup> and 12<sup>th</sup> centuries, the vaults of the podium continued to offer shelter to the few inhabitants of the area or to occasional squatters up until the modern age.

With its uninterrupted frequentation, the vaults of the podium could have offered a unique stratification but which, unfortunately, has only minimally survived. This investigation has highlighted dramatically the extent of the threat of clandestine excavations to Jordan's archaeological heritage, which in recent decades did not spare even a monument in the center of a protected archaeological area. As evidenced by their targets, those responsible for the unauthorized excavations in the vaults are foolish treasure hunters and certainly not professional looters; however, as we have unfortunately witnessed, the former is no less dangerous than the latter. Increasing surveillance is certainly not enough; to counter this danger, the main strategy is a constant and lasting educational commitment by the Department of Antiquities, by the organizations and professionals working in cultural heritage, and by all Jordanian and foreign archaeological missions, focused first in schools but also extended to citizens of any age.

Ziad Ghnimat  
Department of Antiquities of Jordan  
[zghnimat@yahoo.com](mailto:zghnimat@yahoo.com)

Roberto Parapetti  
Monumenta Orientalia  
[roberto.parapetti@gmail.com](mailto:roberto.parapetti@gmail.com)

Daniela Baldoni  
Monumenta Orientalia  
[danielabaldoni49@gmail.com](mailto:danielabaldoni49@gmail.com)

Massimo Brizzi  
Monumenta Orientalia  
[massimobrizzi26@gmail.com](mailto:massimobrizzi26@gmail.com)

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