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Nabataean and Late Roman Domestic Complexes at Petra

For understandable reasons, prior archaeological investigation of Petra has focused on its extraordinary public monuments. But this has resulted in a glaring ignorance of Petra's non-elite population, including domestic structures. This is not to suggest the total neglect of non-elite domestic structures at Petra. In fact, the earliest scientific excavations at Petra by Murray and Ellis and by the Horsfields excavated several cave complexes so commonly used for domestic purposes (G. and A. Horsfield 1938; Murray and Ellis 1940).

Peter Parr excavated apparent domestic structures just north of the city wall on the North Ridge but these results were never published beyond brief mention in a preliminary report (Parr 1986). In fact, Parr himself must be credited with calling for more focus on Nabataean domestic structures many decades ago (Parr 1965). In the 1980s Zeitler conducted a small-scale but significant excavation of a 1st century BC. domestic structure near al-Kubtha (Zeitler 1989, 1990).

Nehmé published an important study of a cave-house (Nehmé 1997). Nevertheless, even Judith McKenzie's 1990 monumental monograph on the architecture of Petra could devote only minimal attention to the city's domestic architecture, given how little was actually then known (MacKenzie 1990: 105-08). Otherwise, the only major published excavation of a residential area at Petra is the complex atop az-Zanṭūr (Bignasca *et al.* 1996). However the evidence uncovered by the Swiss team certainly suggests that this was originally an elite residence, interpreted as a *villa urbana*. The later Roman domestic structures from az-Zanṭūr have also been published in some detail (Kolb 2000). Kolb has also published a useful synthesis of Nabataean domestic architecture, differentiating between rupestrian and free-standing structures (Kolb 2007). Nevertheless, the need for more evidence from domestic contexts at Petra is clear. This in part led my co-director, Megan Perry, and I to organize the Petra North Ridge Project to focus on the non-elite population of Petra. It aims to address this topic by excavating apparent domestic structures and some of the fifty or more rock-cut shaft tombs that dot the ridge. This paper focuses on the former aspect of the project, summarizing selective results from three field seasons between 2012 and

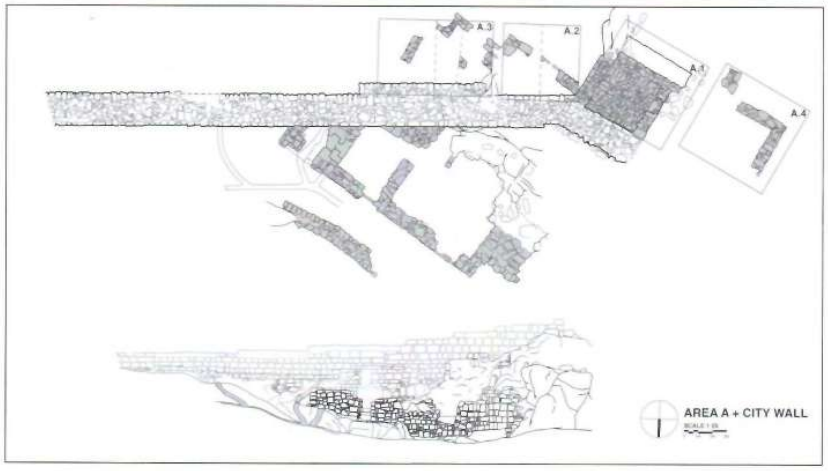
2016[1].

Thus far we have excavated portions of four domestic complexes on the North Ridge (FIG. 1). Two of these were uncovered during soundings of the city wall in Areas A and D. Excavation in 2012 in Area A uncovered several rooms constructed on bedrock in the 1st century AD. (FIG. 2). This complex straddles the later city wall, which cut through the structures. Parr had excavated the structures north of the city wall decades ago but never published anything beyond a brief preliminary report (Parr 1960). Thus we re-measured and redrew the structures Parr had exposed and added them to the plan and elevation of our newly excavated structures south of the city wall, which together originally formed one complex in the 1st century AD. The walls and doorways were built of rough stone masonry but their internal stratigraphy had mostly been removed, apparently by construction of the city wall around the turn of the 2nd century (Parker and Perry 2013).

Excavation in 2014 of two trenches in Area D, well east of Area A, also exposed an apparent Nabataean domestic structure, probably of the 1st century AD., once again heavily damaged by erection of the later city wall (FIGS. 3-5). The city wall, as in Area A, sliced right through the early domestic structure, leaving two isolated segments on both sides of the city wall. This structure lies nearly on the crest of the North Ridge.

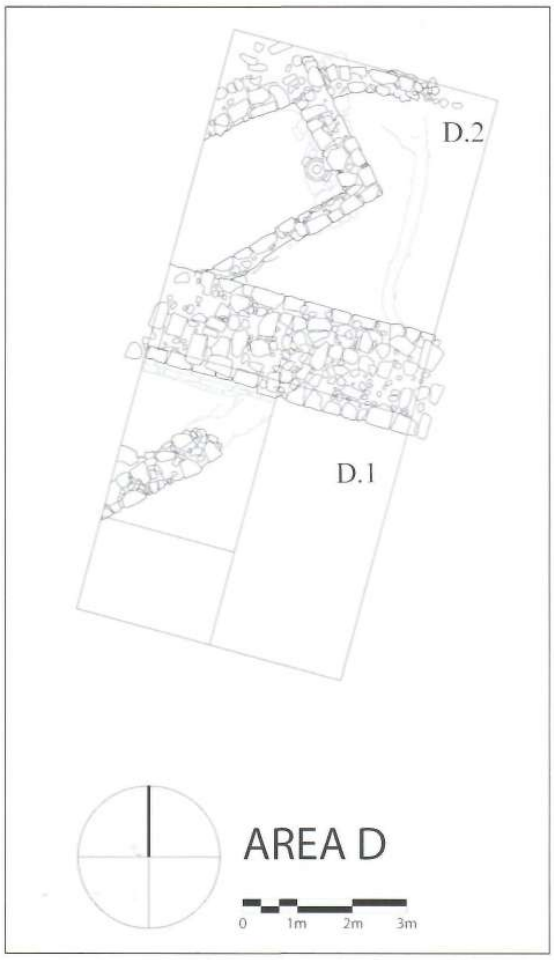
Two other domestic complexes, excavated as Areas B and C, yielded much more evidence.

1. Site plan of Petra North Ridge with excavation areas of the Petra North Ridge Project. Domestic structures lie in Areas A, B, C, and D.



2. Plan and elevation of Area A. The structures below (north) of the city wall were excavated by Parr but were essentially never published, apart from a sketch plan and brief description.

1. For published preliminary reports on the project, see Parker and Perry 2013; Parker and Perry 2014; Parker 2016; Perry 2016; Parker and Perry 2017.



3. Plan of Area D.1-D.2, illustrating early 2nd century city wall cutting through a 1st century A.D. Nabataean domestic structure.

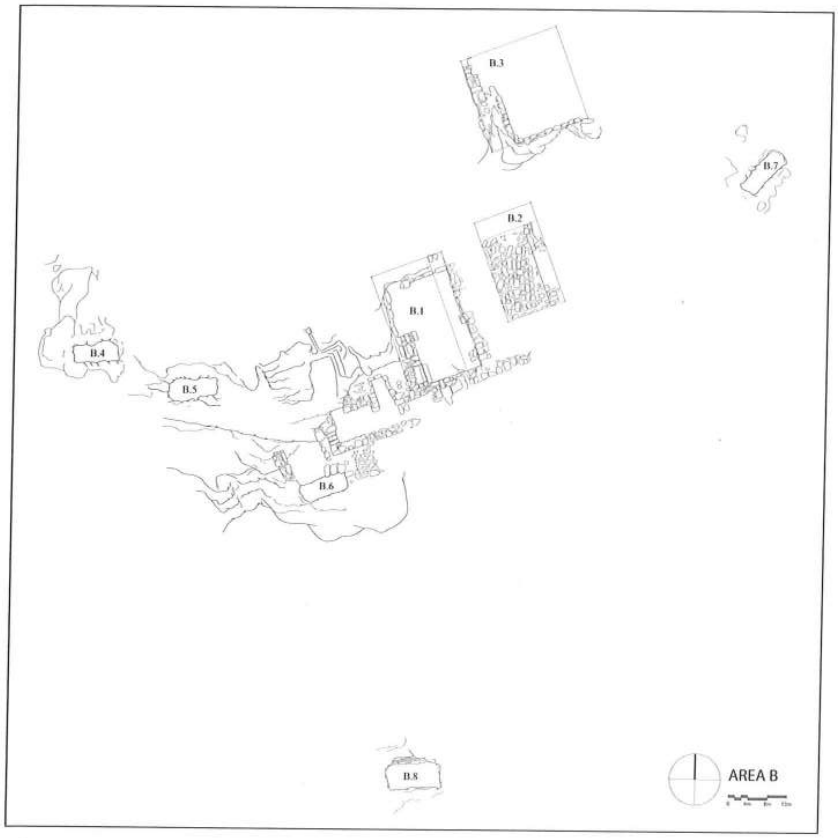
4. Photo of Area D.1, showing remnants of the 1st century A.D. Nabataean house in the foreground and the later city wall, which cut through the house around the turn of the 2nd century, in the background. View to N.

5. Photo of Area D.2, showing remnants of the Nabataean house in the foreground and the later city wall (partially resting on bedrock) in the background. A basalt millstone is visible in the lower left of the photo. View to S.

Because the salient results from the Area B complex have been published in preliminary form (Parker and Perry 2013), I will merely summarize the key results from this area and instead focus largely on the results from Area C[2].

The Area B complex lies on the southern slope of the ridge, overlooking Petra's main colonnaded street (FIG. 1). Excavation of three trenches revealed that occupation began in the early 2nd century (perhaps shortly after construction of the northern city wall) and ending in the 4th century, with massive collapse of the walls, perhaps due to the 363AD earthquake or its related aftershocks. We excavated two adjoining rooms (B.1-B.2) as well as an adjacent walled courtyard (B.3, FIG. 6). All these structures incorporated bedrock either as the foundation or in some cases serving as lower portions of its masonry walls. One room was paved by a beaten earth floor while the other room had a plaster floor, both laid directly over bedrock. A domestic function is suggested by a substantial oven constructed in B.2 by two reused ceramic storage jars, one set inside the other and filled with ash (FIG. 7). The interior room walls and/or ceilings of either this room or perhaps an upper story were once covered by white wall plaster decorated by bright red paint. The pos-

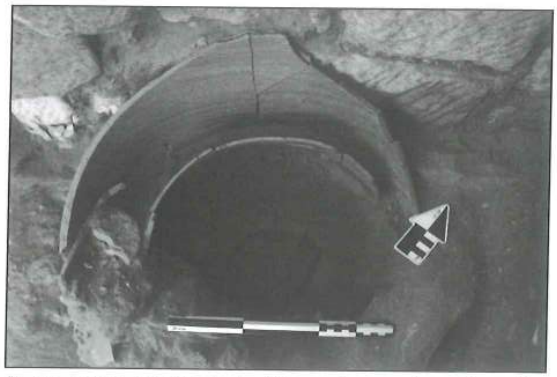
2. Area A in 2012 was supervised by Abigail Turner. Area B in 2012 and 2014 was supervised by Carrie Duncan, who also supervised Area C in 2014. Russell Gentry supervised Area D in 2014 and Area C in 2016. I am grateful to all our team members for their splendid excavation and meticulous recording in these areas that makes this paper possible.



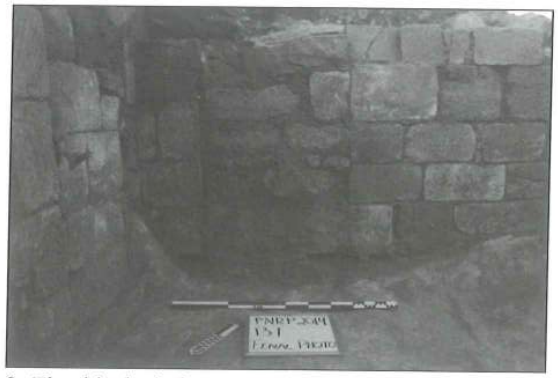
6. Plan of Area B. Note that the domestic structures in trenches B.1, B.2, and B.3 were built among earlier shaft tombs (mostly 1st century BC/1st century AD).

sibility of a second story is suggested by a stone staircase built into the SW corner of this room. A drain at the base of the common wall between the rooms permitted water to flow from the eastern room through the wall, down into a channel cut into the bedrock, and out the front door of the western room. A doorway that once connected the two rooms through their common wall was blocked with masonry at some point (FIG. 8) before a final catastrophic destruction, apparently the earthquake of 363AD (FIG. 9).

But it is Area C that has produced the most substantial and significant evidence for domestic life on Petra's North Ridge (FIG. 1). The ultimate goal in Area C was to expose the entire horizontal layout of a single, non-elite domestic structure. Four trenches (C.1-4) were laid out side-by-side, encompassing wall lines visible



7. An oven constructed of two fragmentary jars, the smaller fitted inside the larger, constructed against the north wall in Room B.1.



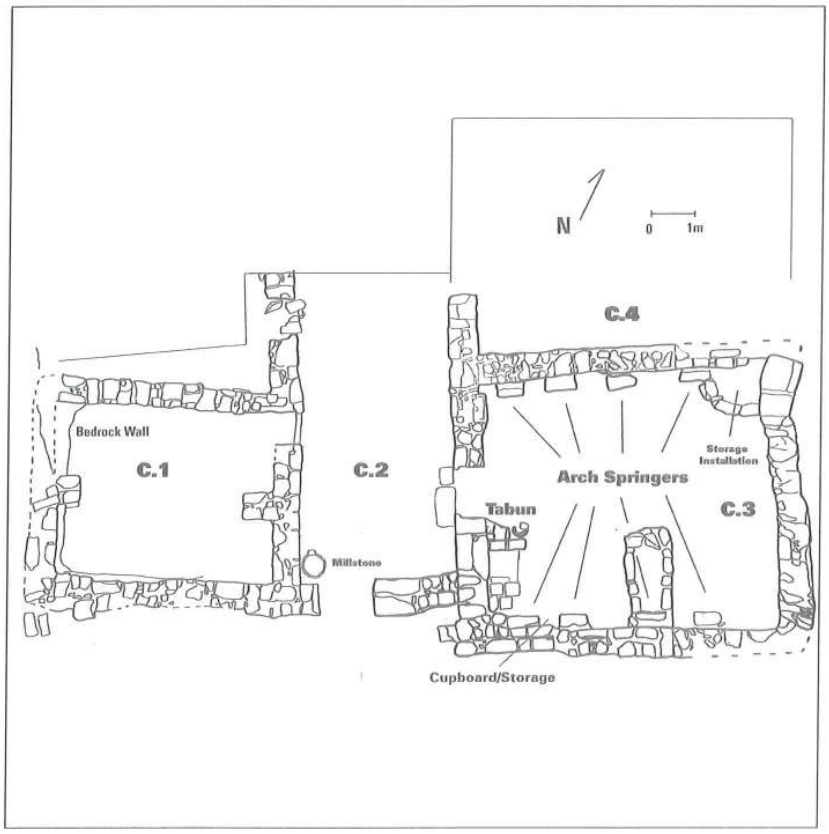
8. The blocked doorway which originally connected Rooms B.1 and B.2. View from Room B.1 to east.

9. Fallen masonry, still closely aligned, within Room B.2, probably the result of the 363AD earthquake.

on the surface prior to excavation (FIG. 10). Excavation reached bedrock in all four trenches and revealed the plan of the structure. Primary access was through a doorway in the southern wall leading into a central corridor (C.2). From the corridor one could access doorways into three rooms: one to the west (C.1) and another to the east (C.3). A third doorway on the western side of the corridor, north of room C.1, provided access to a third (unexcavated) room or perhaps served as another external entrance. Excavation in C.4 was also conducted north of C.2 and C.3 to determine the northern limit of the building and explore an exterior space associated with the house.

The structure was built of roughly coursed masonry but often incorporated bedrock outcrops as foundations for these masonry walls. Doorjambs were typically of higher quality masonry and flanked stone thresholds. Roofing arches (one in C.1, four in C.3), the paucity of roof tiles, and some 35 iron nails and spikes recovered from the building suggest flat roofs of timber planks resting on the arches.

The date of construction remains somewhat enigmatic, although probably in the early 2nd century AD Recovery of a coin of Trajan dated to *ca.* 114 from the occupation layer over the earliest floor in Room C.1 suggests that the complex was possibly erected soon after the Roman annexation of 106. The complex remained in use through the 2nd and 3rd centuries and into



10. Plan of the Area C domestic complex.

the 4th century until suffering significant damage, apparently in the 363AD earthquake. It was then largely abandoned, apart from a brief squatter occupation in the ruins of room C.3 in the late 4th century, apparently when it was still partially roofed.

The C.2 corridor provided both access to the house from the south and gave internal access with doorways to both adjacent rooms (FIG. 11). The main entrance to the complex was apparently located in the southern end of C.2. Most significantly, entrance to the complex was modified at some point after initial construction by the addition of a wall to create a doorway in the south. In the southeast corner of the corridor was a cooking installation enclosed by a stone semi-circle; faunal remains suggest household level butchery, primarily sheep and goat. In the southwest corner was a basalt grinding mill. A doorway in the western wall of the C.2 corridor gave access to the smaller western room (C.1, *ca.* 4m E-W × 3m N-S). Similar to the construction in Area B, the west wall of the western room incorporated bedrock rising up slope to the north and thus reducing the number of stones in each course towards the north (FIG. 12). The east and west walls both bonded to piers which supported a central roofing arch, after which the west wall gave way entirely to bedrock to the north. Some walls in C.1 preserved plaster on their faces.

Trench C.1 yielded significant occupational remains, including stratified ceramic evidence for construction in the early 2nd century AD. Just above bedrock was a beaten earth floor which appears patchily across the room, particularly where the bedrock is uneven or dips. An oven was built against the face of the north wall. The oven was constructed of a flat piece of limestone as its base, two unhewn boulders to brace the exterior edges and several ceramic tiles. The exterior was packed with mud mortar and sherds and the entire installation was plastered in place against the northern room wall. Adjacent to this cooking installation was an assemblage consisting of a wooden handled knife, oil lamp, and articulated fish skeleton lying on this floor (FIG. 13).

Across the central corridor to the east was

11. Photo of the central corridor (C.2), view to south. Note the doorways into C.3 (on the left), C.1 (upper right), and the unexcavated room (lower right). A basalt grinding mill is visible just to the right of the southern entrance into the corridor.

12. Photo of the western room (C.1), view to N, after removal of all deposits down to bedrock. Note the springers for roofing arches on the north and south walls and the doorway giving access to the central corridor.

the entrance to the much larger room (*ca.* 6.5m E-W×6m N-S) excavated as C.3. Some of its architectural features appear secondary to original construction but still within the Late Roman period (FIG. 10). The walls of this room were plastered. Four parallel arches springing from piers built against and extending from the northern and southern walls supported the roof (FIG. 14). A curved wall built against the northeast corner of the room apparently served as a storage installation. A plastered niche, apparently a cupboard, was constructed in the south wall between two plastered piers that served as arch springers (FIG. 15). The cupboard includes ceramic tiles plastered into the sides as shelves. The lower shelf remains *in situ*, while another tile could very well be that dislodged from the upper portion, where a slot for another shelf is clearly visible. While the construction date of the cupboard cannot be ascertained, it was clearly used right up until the destruction of the room, based in part on the presence of a 4th century cooking pot found nearby which had apparently fallen from one of the shelves in the final destruction, likely the seismic event. In the southwest corner of the room, another storage installation, floored with ceramic tiles, was built against the west wall. Just to the north of this installation was an oven (*tannur*), comprised of three ceramic jars with their original lower body removed and then one set inside another (FIG. 16). The oven was filled with ash which was removed for flotation analysis.

As seen in Room C.1, a thin layer of soil, patchily preserved, had been laid over bedrock within this room. Overlying the original floor was a sequence of thin occupation layers, the latest pottery from which was early Late Roman (2nd century). Occupation continued through the 3rd and into the 4th century, ending once again

13. Photo of the oven in Room C.1. The remnants of the oven are in the upper left of the photo. An iron knife with its partially preserved wooden handle and a ceramic oil lamp are visible just above the medium-sized meter stick. A completely articulated fish skeleton is visible just to the left of the smallest meter stick.

14. Photo of Room C.3, view to W. The entrance into the room from the C.2 corridor is visible in the upper center of the image. To the left of the doorway is a partially preserved oven and farther left is a plastered storage installation. The four arch springers are visible against the north wall on the right of the image. The semi-circular storage installation, partly obscuring the easternmost arch springer on the north wall, is visible in the lower right (northeast corner) of the room. A rectangular storage installation projects from the south wall (on the left of the image) into the room.

15. Photo of a plastered niche, apparently a cupboard, constructed in the south wall of Room C.3 between two plastered arch springers. The cupboard included ceramic tiles plastered into the sides as shelves. The lower shelf remains *in situ* where a slot for another shelf is clearly visible in the upper portion. View to S.

16. In the southwest corner of the room, another storage installation, floored with ceramic tiles, was built against the west wall. Just to the north of this installation was an oven (*tannur*), comprised of three ceramic jars with their original lower body removed and then one set inside another.

with massive deposits of tumble, likely from the 363 AD earthquake. However, it appeared that one or more of the arch springers in this room stood for some time after the seismic event, as the eastern portion of the room witnessed some squatter occupation within the ruins followed by significant evidence of dumping within the room, all still within the late 4th century.

Finally, Trench C.4 was excavated north of the complex both to determine its northern limit and, if identified, to sample some exterior space just outside the structure. Complete removal of massive layers of tumble (again dated by associated pottery to the mid- to late 4th century) revealed two soil layers, possibly created by episodes of dumping, along with a round stone press and a few other artifacts, overlying bedrock.

The stratigraphy suggests that the massive amount of tumble in the complex is likely the result of two discrete collapse events. Perhaps this is explained by two seismic events, *i.e.* the initial earthquake in 363AD and another soon after, perhaps that of 419AD which also ended occupation at az-Zanṭūr across the valley.

What does this evidence suggest about "ordinary" domestic life in Petra in this period?

A part from a rather spectacular gold ring with a garnet inlay (which it should be stressed derives from a post-occupation context), the artifactual and organic evidence from the Area C complex is rather mundane. Not surprisingly, the botanical and faunal evidence is typical for the region. Sheep and goat were the overwhelmingly predominant animal foods, with minor sources such as chicken and their eggs. Wheat and barley dominate the botanical record along with the typical fruits (olive and grape) and legumes (lentil and chickpea). In short, there was otherwise little evidence of exotic foods apart from some fish, likely imported from the Red Sea.

This picture is complemented to a large extent by the associated ceramics, recovered in large quantity from the complex. There is a notable paucity of imported pottery, both fine table ware and transport amphorae. There were only a handful of imported fine ware sherds. This includes imported fine ware from the earlier period (*i.e.* Sigillata wares, such as Eastern Sigillata A, n=13, although admittedly production of ESA was already in decline by the early 2nd century when the Area C house was constructed) but also later periods (*i.e.* African Red Slip, n=22, plus a single sherd of Egyptian Red Slip). The inhabitants seemingly preferred the local Nabataean fine ware, which the complex yielded in large quantities (n=551) and which was still in production in the 2nd to 4th centuries. Yet the vast majority of these sherds (*ca.* 90%) date before the Roman annexation and thus is likely to be residual. In short, there appears to be only limited use of even the locally produced fine ware within this house.

A similar picture emerges for the imported amphorae, presumably reflecting imports of wine, oil, and garum but virtually absent in any but token amounts from this complex. A mere 72 sherds of imported amphorae were recovered from the complex. Many of these derived from layers overlying the collapsed debris and thus may not even be associated with the occupation of the Area C house. The complex did yielded about a dozen sherds of the Peacock and Williams Class 47 amphora, presumably docu-

menting wine imported from the Aegean in the 3rd or 4th centuries (Peacock and Williams 1986: 193-195). Especially noteworthy is a puzzling virtual absence of Gaza amphorae, despite the fact that caravans routinely traveled from Petra to Gaza carrying aromatics from Arabia and could presumably have returned to Petra with amphorae filled with the famous white wine of Gaza. The inhabitants of this complex apparently relied primarily on their own local olive oil and wine.

Other associated artifacts from the Area C complex are also suggestive of domestic life. The structure yielded 34 stone mortars or grinders from both rooms and the central corridor, mostly fragmentary but a few complete and most of imported basalt. Seven stone pestles, three hammer stones, a knife and a spoon all suggest food preparation associated with the cooking installations in both C.1 and C.3. A loom weight and four spindle whorls suggest household textile production, normally "women's work". A kohl stick and a few pieces of jewelry (*e.g.,* an earring, three finger rings, three bracelets, and a fibula) also may suggest domestic occupation. The house also yielded fragments of nine ceramic figurines, both zoomorphic and anthropomorphic. Some 25 bronze coins were scattered throughout the house but were mostly too corroded for close identification. They do suggest some level of participation by the inhabitants in a monetized economy, as one would expect for an urban center in the Roman Near East.

Is all this surprising for a housing complex that sat on prime downtown real estate in this great city, directly above the main street and with a spectacular view of the civic center? In short is this evidence for the non-elite nature of the inhabitants of this housing complex? Skeptics will surely remark that Petra lacked direct access to the sea and thus one should expect fewer luxury imports at a landlocked site and thus with significantly higher transport costs. Yet this is belied by evidence from the az-Zanṭūr domestic complex directly across the valley and overlooking the main street from the south. Here the Swiss team found much more evidence of imported fine wares, even including some Western Terra Sigillata from Italy, totally absent from our Area C. The original *villa urbana* at az-Zanṭūr, with its luxurious appointments including Pompeian-style wall frescoes, must have been an elite residence. This view is lent further support given its location directly above the Royal Pool and Garden Complex and the so-called "Great Temple" (especially if, as some believe, this was originally a palace of the Nabataean kings). Our Area C domestic complex, as well as the less well preserved examples from Areas A, B, and D, all simply pale by comparison. But this is also compelling evidence, in my view, that these housed non-elite inhabitants.

One further point might perhaps explain why the North Ridge was a less desirable location for living within downtown Petra. As noted above, the ridge is pockmarked by at least 50 rock-cut shaft tombs. Our excavations suggest that these were a cemetery of family tombs in the 1st centuries BC and AD but went out of use soon after the turn of the 2nd century, *i.e.* right after the Roman annexation of 106AD. This is presumably explained by the imposition of Roman law which forbade human burials within the newly constructed city walls. One wonders what it might have been like to live among these tombs, with the constant smell of decaying corpses in the 1st and into the early 2nd centuries. No wonder the Nabataeans were famed for trafficking great quantities of incense! Some portion of these imported aromatics probably was burned to help disguise such smells when living on the North Ridge.

This argument remains tentative, as the evidence recovered to date is still undergoing analysis. For example, analysis of faunal and botanical evidence is still at an early stage. But thus far the evidence suggests that the domestic complexes on the North Ridge are in fact yielding an intriguing picture of non-elite domestic life in the heart of Petra.

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