Mediterranean Archaeology and Archaeometry, Vol. 14, No 1, pp. 103-118

RECENT DISCOVERIES IN CITY CENTER OF PETRA, JORDAN: A PRELIMINARY EXCAVATION REPORT

Adnan Shiyyab

Department of Archaeology, Al-Hussein Bin Talal University, Wadi Musa/ Jordan

Received: 12/02/2013
Accepted: 28/02/2013
Corresponding author: adnanshiyyab@yahoo.com

ABSTRACT

Despite previous and continued excavations at Petra, many questions regarding the city center are still ambiguous for the archaeologists. The ruins on the side of the valley raised many questions about the nature, the function and the dating of these structures. For these reasons an excavation has been conducted at this site. The excavation uncovered an important public building which contained a public bath, used in the Nabataean, Roman and Byzantine periods, an apse and, in front of it, a platform and a structure with marble floor. The connection among these structures is not completely clear. Further investigation and analyses is required.

KEYWORDS: Classical period, Petra, Nabataeance, Bath, Pottery, Coins

INTRODUCTION

The site chosen for excavations is located on the northern bank of Wadi Musa immediately to the west of the nymphaeum and on the lower slope of the hill that accommodates the Petra church and facing the market and colonnaded street area[1].

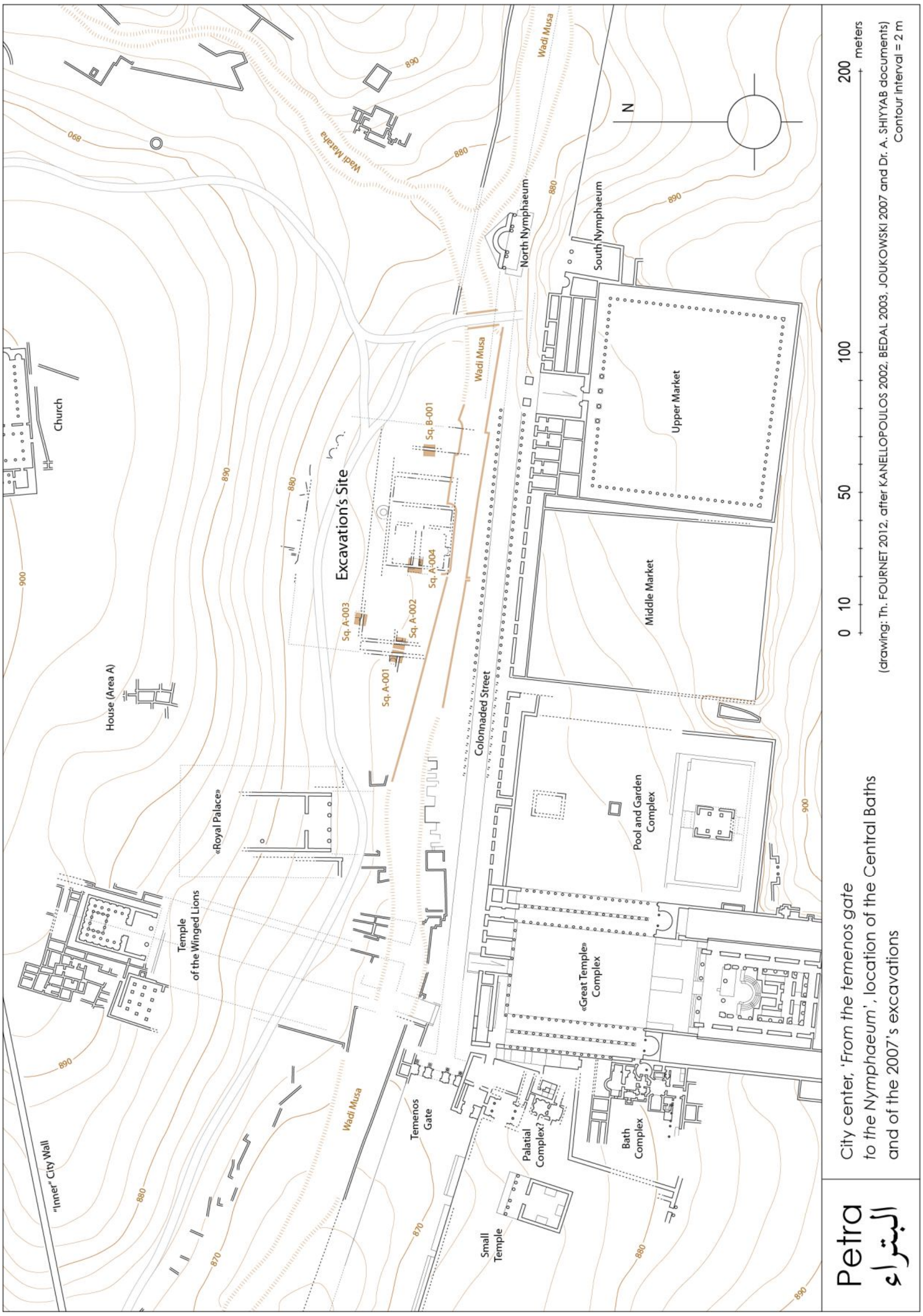

Figure 1: Map of Petra city center

[1] In order to train the students of archaeology at Al-Hussein bin Talal University/MA'AN and to uncover new archaeological materials, an unexcavated site was chosen.

Figure 2: General view of the Excavation area looking south

The excavator, through field observations, noticed pottery sherds of the Nabataean, Roman and Byzantine periods distributed on the surface. Wall lines were associated with the pottery. He concluded that this would be an important area to investigate. The work started on 28 June 2007 and continued until 10 August 2007. During this period, a surface survey was carried out, photographs were taken, surface features were documented and a contour map was made.

Figure 3: Contour Map of the Excavation area

Two areas within the site were chosen for digging five squares (5×5 m each) were planned in order to understand the nature of the site and the relation between the architectural features that can be seen on the surface or those which were still underground and to understand the stratigraphy at the site and to uncover the archaeological remains.

EXCAVATION RESULTS

Area A

This area is located directly near the embankment wall which runs along the north side of the Wadi Musa to the west of the Byzantine building (Bachmann 1921:35 and map 1) or Byzantine Tower (Browning 1982: 137, map 4), where, as elsewhere in Petra, the flood waters of the wadi do an enormous amount of damage.

Despite the destruction near the wadi, traces of walls on the surface extend both to the north and the east. This makes it easy to define the squares in this area: 001, 002, 003 and 004.

Square 001

A wall built of large dressed stones was found in the eastern side of the square. Excavation reached 2 m deep along this wall. This north-south wall intersects at a right angle with another wall uncovered in the southern side of the square, running east-west. It seems that the two walls were constructed in two different periods since the lower courses of each wall have different types of stones and the construction techniques in these courses varies from that in the upper courses.

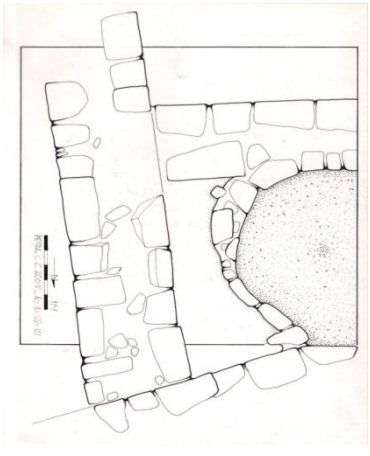

Figure 4: An oval–shaped structure inserted in the old ruins

Between the southern and eastern walls to the northwest, a small oval-shaped structure was discovered. Its walls are built of mud and undressed small stones. Considerable parts of the walls and the floor are covered with plaster. Therefore, it could have been used in a later period to collect rainwater or as a kiln to make plaster (Fig. 4).

Square 002

In this square, a wall running north-south and parallel to the wall in square 001 was uncovered. The wall is built of dressed stones linked by mortar and small stones. The lower courses of this wall were constructed earlier than the upper courses, which appear to belong to a later period (Fig.5).

Figure 5: Two phases of wall building with details of construction

The walls in squares 001 and 002 appear to be parallel and linked and could have been constructed in one period. They might represent a large structure or structural unit that could not be identified this season.

Pottery, complete ceramic objects, and a few coins were found in square 002.

Square 003

This square was chosen a little to the north of squares 001 and 002 where some architectural elements could be seen on the surface. These elements can also be linked to the architectural features in the previous squares.

In this square excavation led to the discovery of a wall that runs east-west. Nine courses of this wall were uncovered without reaching bedrock. The two upper courses are different from the lower courses in terms of their nature and the dressing method. However, they all seem to have been built in one period. The western part of the wall was constructed of dressed stones, vertically laid, while in the eastern part there is a projection in the wall that looks like an apse (Fig. 6).

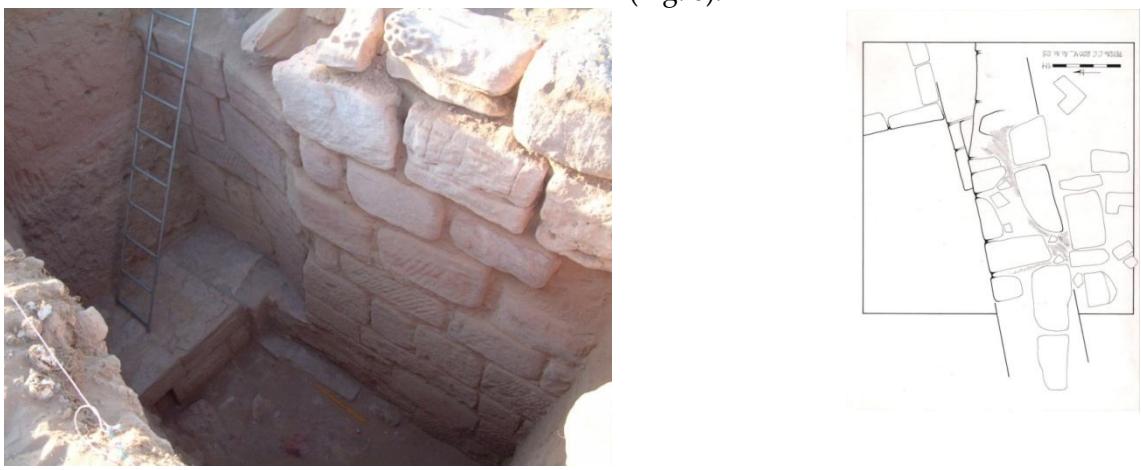

Figure 6: The so-called apse and the platform in front of it

In front of the proposed apse and on the level of the sixth course, the excavation team discovered a square platform. It was partly excavated and will be excavated further in the second season. The exposed stones of the assumed platform have some decorations. Its lower course has a square hole closed from the inside while the upper surface is covered with mortar.The presence of the platform in front of the suggested apse may indicate a functional link between the two features.

Square 004

Square 004 was located where some architectural features were noticed on the surface east of Squares 001 and 002 and southeast of Square 003. In this square, a wide rocky floor about 9 square meters in size was discovered (Fig. 7).

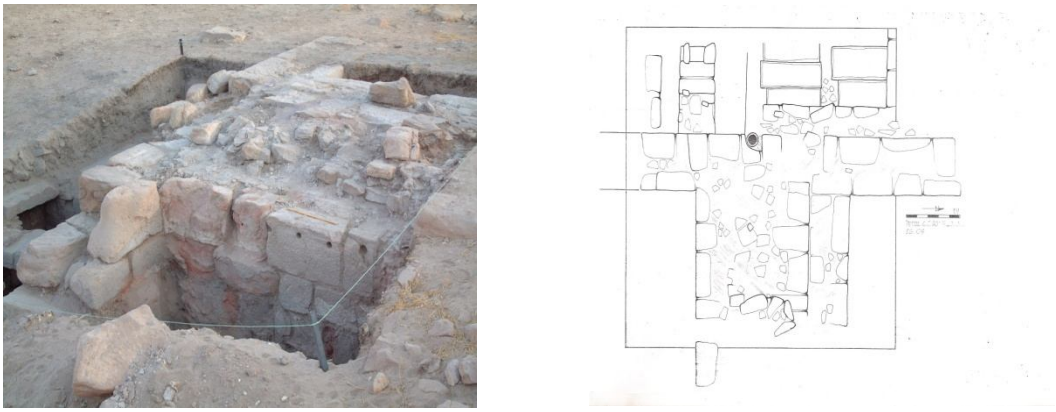

Figure 7: View of the upper part of the bath

This floor intersects a wall running east-west in the north side of the square. The wall consists of six courses built of dressed limestone ashlars. The bedrock could not be reached along this wall due to the presence of a significant amount of mud brick (Fig. 8).

Figure 8: Wall in the proposed bath with details of construction and possible mud brick floor

This wall also vertically meets another wall in the west side of the square. The latter wall was constructed of dressed stones in its southern end and was covered with mud bricks in its northern end in order to hold ceramic pipes. The pipes were laid vertically and horizontally and can be easily seen. At the level of the third course of this wall, small arches join it to the wall in the west baulk (Fig. 9).

Figure 9: Arches and ceramic pipes in the bath

Three arches are in the northern part and are built of perfectly constructed, dressed stones. The arches were laid not on the wall but on a stone beam projecting from the wall. In this season, it was difficult to trace the end of the vaulted area because it continues northward outside the square and the excavators did not have enough time to dig another square along

that side. The depth of the vaulted area is about 2.5 m and its length (within the square) is about 3.5 m. Its floor is paved with rough undressed stones. The roof of the three arches mentioned above is made of well- dressed slabs. It also extends outside the square. This kind of building appeared in the bathhouse of Wadi Musa (Twaissi 2001: 24)

The fourth arch is not consistent with the other three arches as it is wider and has different stones and is laid on the wall. That might indicate that this arch belongs to another architectural phase.

Future work will focus on this area in an effort to understand the function of the arches and their relation to the wall in the baulk.

In the southern side of the square, a wall was uncovered that is linked to the wall in the western side. This wall is built of undressed and unshaped sandstones like the stones of the walls in the western and northern sides (Fig. 10).

Figure 10: Remnants of Heating Room for the Provisional Bath

The stones in the upper part of this wall seem to have been affected by high temperatures, which strongly suggest that this part is probably a fireplace to heat what seems provisionally to be a bath. The lower part of this wall is coated with rectangular mud bricks. The latter are linked with three rows of square mud brick posts. Each row of posts consists of a number of square mud brick courses. These rows stand immediately on the floor. These rows extend eastward and southward. Work in the next season should clarify the function of this structure, which might have been a public bath in the centre of Petra. The relation between the mud brick posts and the arches resembles the plan of the bath found in al-Humeima (Oleson 2010: 223-230).

Area B

Area B is relatively isolated from Area A due to the presence of a great amount of stones resulted from the destruction of the Byzantine building between the two areas. Thus, it was quite difficult to dig in the destruction area as it would require significant manpower and special machines and equipment.

Square 001

The collapse of the wadi embankment at this point had left exposed an archaeological section. Therefore, a square was located near the destruction area. Excavation to a depth of about 1m did not come across archaeological strata but only soil and pebbles. However, continued work below led to the discovery of a wall approximately 1m thick running north-south. The external east face of this wall is built of mud bricks while the internal face is built of stones. The latter have some holes and shallow channels that run horizontally along the wall. A marble floor was also found in the western part of the square and parallel to the wall.

The marble tiles are white and grey and some are complete and have a length of 30 cm. Most of the tiles are still in place, despite the fact that the marble tiles received a great deal of damage due to the pressure from the over-burden. The marble floor extends in different directions and outside the square, which requires further work and investigation in the next season to understand the area. Rows of stones were also uncovered in this square horizontally linked to the wall, but neither the stones nor their masonry resemble the stonework of the wall. This might suggest that this feature is from a later phase (Fig. 11).

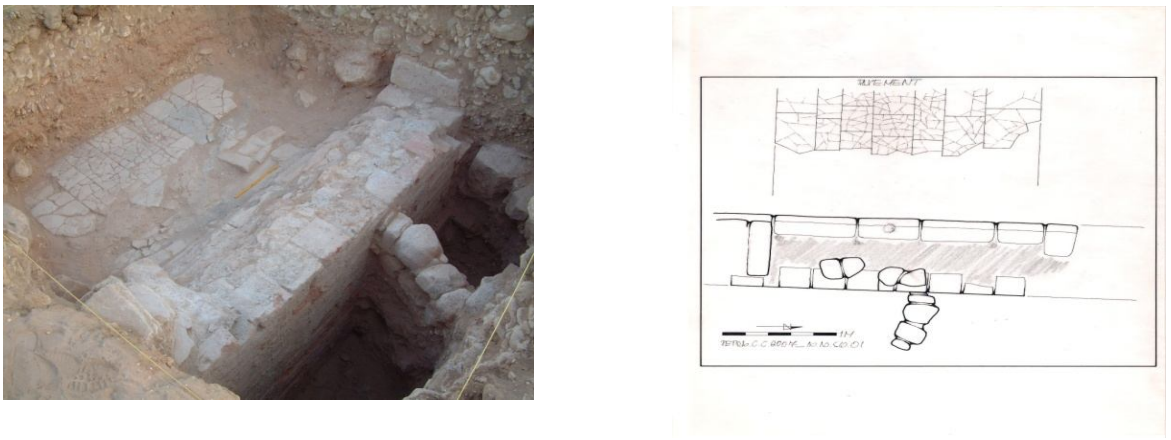

Figure 11: General view of the square 001 in Area B showing a wall building with details of construction and marble paved floor

Digging continued between the external face of the wall and the baulk for about 1.5 m but bedrock could not be reached. The area beside the internal face of the wall is paved with marble tiles.

The archaeological features in this square are difficult to understand and they seem to belong to different architectural phases. The mud brick wall is one phase, the wall which has holes and channels is another phase and the rows of stones that run horizontally towards the main wall in the square may belong to a third phase.

FINDS FROM THE EXCAVATION

Pottery

The most outstanding finds in this excavation is Nabataean pottery: the ordinary coarse–ware (unpainted) which was used for various domestic purposes (Khairy 1975: 249-94) and the painted fine-ware which is considered as one of the distinctive products that the Nabataeans manufactured. The main items utilized by the potters are the floral decorations (Schmitt-Korte 1984:13-14)

This small collection of Nabataean pottery is entirely from the first centuries BC to the end of the first century AD. A significant percentage of the pottery from this site is Nabataean fine ware, of stamped, painted and undecorated varieties. Of the thousands of sherds found, 15 vessels were either complete or could be reconstructed well enough to give a complete profile of the vessel. The most common forms were unguentaria of varying sizes, of which nine complete or semi-complete examples were found.

To shed more light on Nabataean industry, each object will be discussed below and the method will include:

1) cataloging the object including, photography, description of ware and production technique and surface treatment; and
2) dating the objects on stratigraphic and cross-cultural basis.

A complete flask (S. 004) (Fig.12): height 18.8 cm. Rim diameter 4.7 cm. Medium size, globular type, consisting of two wheel-made parts. This type was fixed together by hand when dry, then the outer surface was finished and slipped with creamy coat (some splashes still on the neck), and then fired. This technique is based on wheel and handmade, so the shape became irregular. Few grits inclusions. Grey ware 2.5Y 5/1 grey core[1] well-fired. Regular ribbing on both sides, rough surface. Handles attached from the middle of the neck to the shoulder, flattened out rim and irregular. This characteristic ware is dated to late Hellenistic period, first century BC, but this flask has a dark core full with white grits and it looks more imitate to the Hellenistic and it could be late Roman 2nd - 3rd century, the major Nabataen ceramic technology can be traced directly to Hellenistic and early Roman pottery. These flasks have been used normally for water and sometimes as a container for fish sauce (Brogli 1996: 231, Abb. 723)

[1] Color study is based on the Munsell Soil color charts revised edition 1994. 617 NZ 12553

Dated to the first century BC or second and third century AD. Parallel (Brogli 1996: fig. 723).

Figure 12: Ribbed pilgrim flask

Unguentaria

Nabataean Unguentaria are one of the most unique Nabataean ceramic products.

These pottery vessels were found in large numbers at Petra in general as well as in our excavation. Because the building is not completely excavated the function of it is still not understood but some indications revealed that the building could be a part of public path.

The number of uncovered Unguentaria in this possible bath could show that these vessels could be used as containers for the storage or the transport of perfumed oils (Murray and Ellis 1940; 13-14; Hammond 1973:67-70; Khairy 1980: 88) or store unguents **(ointments or salve)** (Kahane 1952: 176) or because of the pointed tapering bases, which do not allow the unguentaria to stand by themselves, they may have been produced to place in the discus of the oil lamps and allowed to warm, thus perfuming the place (Johnson 1990: 242) or to be used during or after bathing to massage the body.

The Unguentaria recovered from this site could be described as follows:

Unguentarium: (S. 002) (Fig.13): height 12.4 cm. rim diameter 2.1cm. small ceramic bottle, cylindrical type with long narrow neck, everted angular rim, and string-cut base with knob shape in the middle.

Wheel-made, well levigated technique and fired. Thin ware 10R 6/6 light red core, wheel trace was appeared on the surfaces of these types. These bottles were used to store frankincense, myrrh, balsam (perfume) and spices which were the main Nabataean trade items.

Dated to the beginning of first century AD. Parallel (Brechet 1981: 1066, no. 46).

Figure 13: Complete Unguentarium

Unguentarium:(S. 004) (Fig.14): height ca. 9.6 cm. small pottery bottle, broken neck, cylindrical type, and wheel-made, well levigated and fired. Thin ware 10R 6/5 red core, wheel traces on the outside of the body, and string-cut base pointed in the middle. Dated to the 1st century AD. Parallel (Johnson 1990: 237,V)

Figure 14: Unguentarium

Unguentarium: (S. 002) (Fig.15): height 9.9 cm. Part of the neck broken, small ceramic bottle, cylindrical type, wheel-made, well levigated clay (a smooth glossy surface) and fired, disk base, splash clay paste on the surface of the object. Thin and fine ware 10R 6/6 light red core. Dated to the first century AD. Parallel (Brechet 1981: 1065, no.41; Johnson 1990: 237, VI)

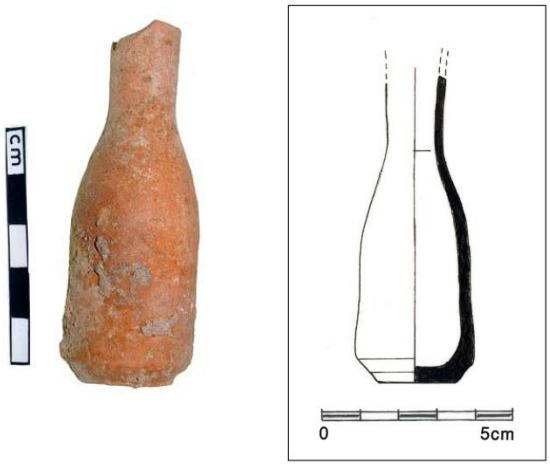

Figure 15: Unguentarium

Unguentarium: (S. 002) (Fig.16): height ca.10 cm. Broken neck, small ceramic bottle, cylindrical type, wheel-made, well levigated clay and fired string- cut base. Thin and fine ware 10R 6/7 light red core. Dated to first century AD., Parallel (Brechet 1981: 1066, no. 54).

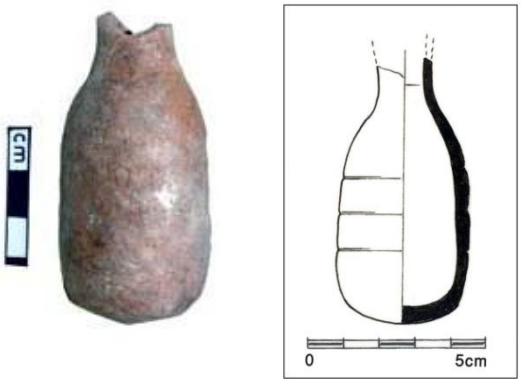

Figure 16: Unguentarium

Unguentarium: (S.002) (Fig. 17): height ca.10 cm. broken neck, small ceramic bottle, cylindrical type, wheel-made, well levigated clay and fired string-cut base pointed in the middle. Splash clay paste on the surface of the object Thin and fine ware 10R 6/6 light red core. Dated to first century AD. Parallel (Brechet 1981: 1065, no. 44).

Figure 17: Unguentarium

Unguentarium: (S.004) (Fig.18): height ca. 7.6 cm. small pottery bottle, broken neck, oval-body type, and wheel-made, well levigated clay and fired. Thin ware 10R 6/5 red core, wheel traces on the outside of the body, and string-cut base pointed in the middle. Bottle covered with a limy deposit in a decayed back color. Dated to the first century BC. Parallel (Brechet 1981: 1066, no.51), or before 27 AD (Johnson 1990: Fig.1: Form 1)

Figure 18: Unguentarium

Ungentarium: (S. 002) (Fig.19): height 14.2 cm. Small ceramic bottle, tall neck ended with everted angular rim, cylindrical type, wheel-made, well levigated clay and fired, string-cut base pointed in the middle, wheel traces on the surface of the object. Thin and fine ware 10R 6/6

light red core. Dated to the first century AD. Parallel (Brechet 1981: 1066, no. 46).

Figure 19: Unguentarium

Complete **Unguentarium**: (S. 002) (Fig.20): height 9.4 cm. Small ceramic bottle, tall neck ended with irregular simple cut rim, cylindrical type, wheel-made, well levigated clay and fired, string-cut base pointed in the middle, wheel traces on the surface of the object. Thin and fine ware 10R 6/6 light red core. Dated to the first century AD. Parallel (Brechet 1981: 1066 no. 49). The surface is covered with white a limy deposit.

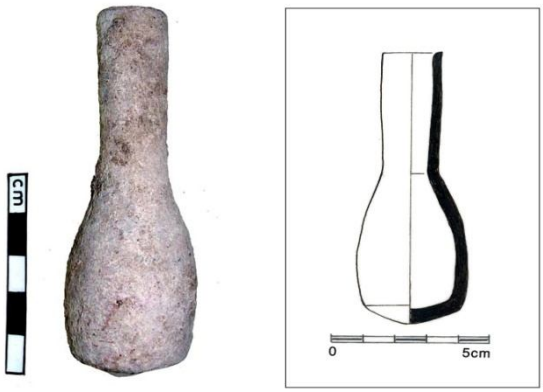

Figure 20: Unguentarium

Unguentarium: (S. 002) (Fig.21): height ca. 8.1 cm. Broken neck, small ceramic bottle, cylindrical type, wheel-made well levigated clay technique and fired string- cut base pointed in the middle. Thin and fine sandwich ware 5YR (4/1 light black core), light red from both sides. Fine inclusions Dated to the first century AD. Parallel (Brechet 1981: 1065, no. 40).

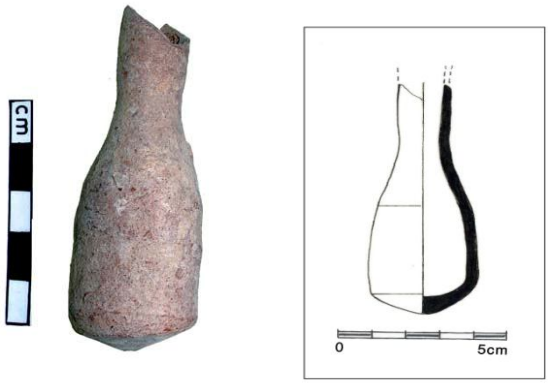

Figure 21: Unguentarium

The characteristics of these Unguentaria and the comparative study assure that these vessels occurred in the first century BC onward (Sivan 1977: 140; Khairy 1980: 85-86).

Small Jar: (S.002: Top soil) (Fig. 22): conical body, height 8.4 cm. Simple rim and broken partially. Very tiny applied strap one handle, wheel-made well levigated technique and fired, string-cut base. Thin and fine ware 10R 6/7 light red core. Dated to the first century AD.

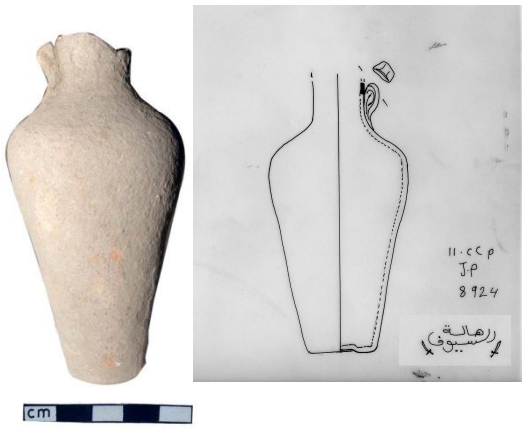

Figure 22: Small Jar

Oil lamp mold: (S. 001) (Fig. 23): Circular body with small knob handle well levigated technique and fired. Fine ware 2.5R 7/5 light reddish brown core, decorated with relief

strokes. Dated to 4th c. AD or later. (Brechet 1981: 1126, nos. 1, 2; Barrett 1998: 282). This kind of Lamp was found in Petra (Zanoni 1996: 320, fig. 910, 933) and called a Petrean-early Byzantine lamp. It is characterized by Zanoni as Pear-shaped, outlined with a snout, convex profile line, the lack of a lamb mirror, a large circular oil hole, a circular burning hole, a wide shoulder with radiation pattern and a low handle as well as a simple decoration of the snout (Zanoni 1996: 319).

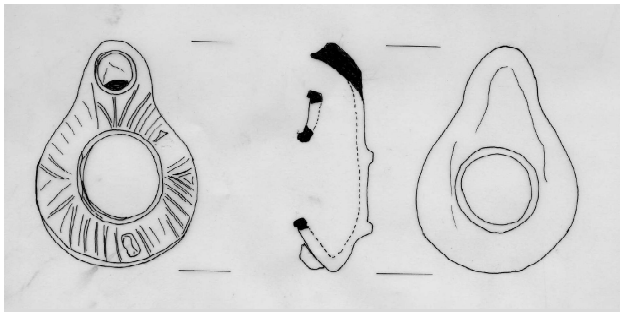

Figure 23: Oil lamp mold

Small Cup or Vase : (S.002) (Fig. 24): medium in depth; height 8.5 cm, V shape and flaring out rim, irregular warp ribbing, wheel-made, footed base, it is a typical early Roman type used for ritual purposes. well levigated technique and fired. Thin ware 10R 6/7 light red core. Dated to the second half of the first century AD (see a parallel in Bestock 1999: Fig. 5)

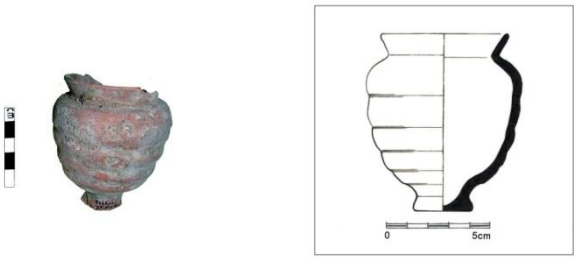

Figure 24: Cup or Vase with Ridged Exterior

The lower part of small **Cup or Vase:** (S. 002) (Fig. 25): V shape and flaring out rim, irregular warp ribbing, footed base, wheel-made well levigated technique and fired. Thin ware 10R (6/7 light red core). Dated to the second half of the first century AD. Similar to no. 8926.

Figure 25: Cup or Vase with Ridged Exterior

Short Jar (squat): (S. 004) (Fig.26) : Height 3.9 cm. Carinated body with straight rim and string-cut base, faint ribbing, wheel-made well levigated technique and fired. Thin and very fine ware 10R 7/6 light red core. Dated to the beginning of the 2nd c. AD.

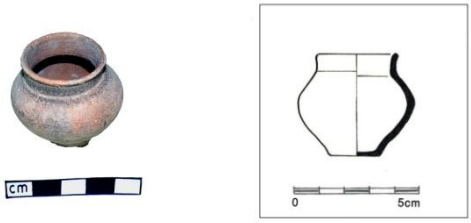

Figure 26: Short jar or small bowl

Sherds of **Open bowl rim:**(S.001) (Fig.27): some other scholars called it a **plate**. diameter ca.18.7 cm. thin egg-shell ware 10R 6/6 light red core, short and straight vertical rim, and round base, fine paste with a very few white grits. Nabataean metallic fabric, painted with stylized naturalistic leaf (palmettes) around the rim, design inside the open bowl dots like net. Dated to the period between 20 AD-ca.70/80 AD based on the painting of this period which is characte-

rized "*either by clusters of small raws and peacock-eyes in various combinations or by trellised motives of ivy- and lancet –shaped leaves in violet or light brown which cover the body*" (Schmid 1997: 413; 2000: 28)

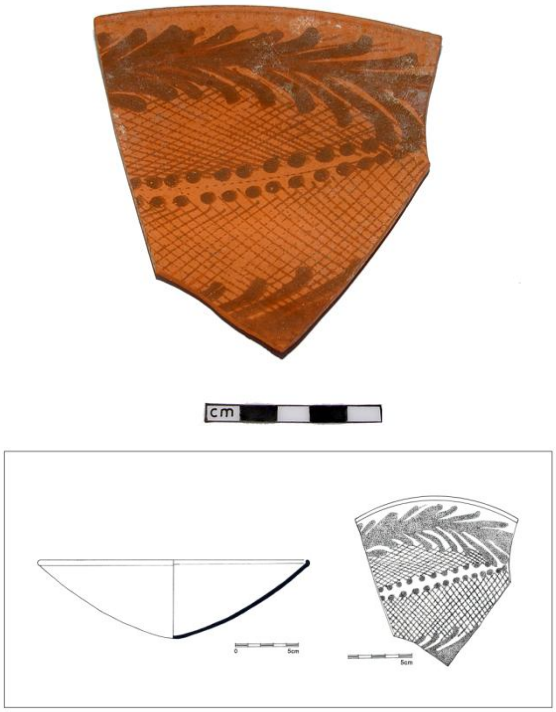

Figure 27: Fragment of a shallow Nabataean painted plate

Marble

Marble is one of the most interesting discoveries in the possible bathhouse and in the nearby area. Various marble types occurring in the excavated area which may reflect the different sources of it. These varied in exterior color and texture, ranging from pure white to light gray to yellowish white, and from fine to coarse crystalline. The analyses indicate that there are four different imported types of calcareous dimension stone at the sites studied, in addition to two local types (Abu-Jaber et al., 2012: 28)

Coins

Four bronze (copper) coins have been discovered in the area of the excavation. Three of them could be read. The others remain uncertain.

Description of the coins

From Square 002, lower level (Fig. 28: obverse). Bronze, diameter 25,47 mm, weight 9,542 g, axis 12 h (?). Bad condition (worn out).

Obverse: Head or bust to right, laureate?

Figure 28: Bronze Nabataean (?) coin

Reverse: Unclear.

Nabataean or other coin of Late Hellenistic period (from the size, slightly oval shape of the coin, and aspect of the edge): perhaps an early issue of Aretas IV (*e.g.* Meshorer 1975: Nrs. 79-79A, 83).

From Square 002, lower level. (Fig. 29, obverse and reverse)

Bronze, diameter 18 mm, weight 4,924 g, axis 12 h. Good condition.

Obverse: Jugate busts of king Aretas IV and queen Shuqaylat to right, the king wearing laurel wreath. Above, unclear traces: inscription, monogram or *basileion* (V-shaped ornament)? In lower field, Nabataean letters: to right *het* (H), to left *shin* (Sh). Border of dots.

Figure 29: Bronze Nabataean coin, King Aretas IV

Reverse: Two crossed *cornucopiae*, surrounding Nabataean inscription in three lines: *HRTT* / *ShQY* / *LT* (= Aretas, Shuqaylat). Border of dots.

Nabataean unit, Aretas IV with queen Shuqaylat (Shaqilat) between 16 or 18 AD and 40 AD. (Meshorer 1975: Nrs. 112-114).

From Square 002, lower level (Fig. 30, obverse and reverse).

Bronze, diameter 22, 04 mm, weight 12,440 g, axis 12 h. Poor condition (worn out). Obverse: Unclear: traces of circular legend, large head or bust to right. Border of dots.

Reverse: Unclear: traces of large S C within laurel-wreath, illegible symbols or letters in upper and lower field. Border of dots.

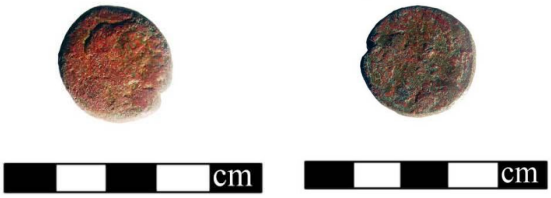

Figure 30: Bronze Roman Coin struck in Syria

Roman Provincial coin struck in Syria (Antioch). Probably 2nd century AD, perhaps Hadrianic or Antonine period (from the size of the coin, corresponding to a Roman *as*, and from the disposition of the reverse type).

(Wroth 1899: Nrs. 289-299, pp. 185-186, pl. XXII, 11-12 (Hadrian); Nrs. 306-319, pp. 187-189 (Antoninus), etc. (with various additional letters on reverse)

(Fig. 31, obverse and reverse). From Square 002, top soil.

Bronze, diameter 17,10 mm, weight 4,472 g, axis 12 h (?) Worn but legible.

Obverse: Bust of Tyche to right, wearing turreted crown (top off flan), oblique veil and earring. Behind, palm-branch. In right field, traces of symbol (murex-shell?). Border of dots. Type larger than flan.

Figure 31: Bronze Coin struck at Tyre

Reverse: War galley to left, with curved prow ornament terminating in volute (stern off flan). Above, Greek inscription in four lines: monogram *TVP* (in shape of a large T), date *K – T* or *AK-T* (= 320 or 321) / *IEPAC M* / *HTPOΠO* / *ΛEWC* (= of the Holy Metropolis). Below, Phoenician letters *L Ts R* (= at Tyre), partly off flan. Border of dots. Bronze unit (*chalkous*), Tyre, 194/5 or 195/6 AD. (Hill, 1910: Nrs. 313-330, pp. 262-264, pl. XXXI, 17-19: close to Nrs. 328-330, year *AKT,* 321 (= 196/6 AD), Baramki1974: plate 29,Nrs. 3-5)

A COMMENTARY ON THE COIN FINDS

The most legible and clear coin, Fig.29, which was uncovered on the lower level of Sq. 002, refers to the second part of the reign of the Nabataean King Aretas IV, with queen Shuqaylat (Shaqilat), dated between 16 or 18 AD and 39/40 AD. The coin belongs to plentiful issues of bronze units, probably the most plentiful in all Nabataean coinage (Schmitt-Korte and Cowell, 1987: 55; Meshorer 1975: 41). These well-known issues can easily be identified both by the Nabataean inscriptions – the names of the king and queen appear in full on the reverse, as initial letters on the obverse – and by the iconography: on obverse, the jugate portraits of king (wearing laurel wreath) and queen (often topped by the *basileion*), and on reverse two crossed *cornucopiae*, the most frequent emblem of wealth. This design became the standard iconography for the Nabataean kings from Aretas' reign onto the end of the dynasty (Schmitt-Korte 1987: 106).

The minting of these plentiful issues of large and well-struck copper units ranges over more than two decades after the beginning of Shuqaylat's reign, *ca.* 16 or 18 AD, until Aretas' death in 39/40 AD. It seems difficult to assign a specified variety and a more precise date for the minting

of this specific coin. As its state of conservation seems to be quite good, it is unlikely that it remained in circulation for a long time after minting, but it may well have been lost or left aside for some decades and then re-used in a later period. At Petra, similar coins sometimes occur in much later levels of the Roman provincial period.

However that may be, it is by far the earliest among the three identified coins, but coin Fig.28, also found in the same lower levels of Square 002, may well be assigned to a rather early period, judging from its shape and aspect.

Coin Fig. 30 comes from the well-known and plentiful issues of so-called 'senatorial bronzes' produced in Syria, mainly at Antioch, from the reign of Augustus until the 3rd century AD: they show the portrait and name of the emperor on the obverse and are characterized on the reverse by the two large Latin letters SC within a laurel-wreath. Such coins were produced for the province of Syria, but a fair number of them were also found in the Nabataean and Arabian areas, especially in Petra, where they were introduced long before the Roman annexation.

This specific coin has the size of a Roman *as*. It is worn out, but, in spite of its poor state of conservation, one can make out the contour of the SC and wreath, and even perceive an additional device in the field, probably a small Greek letter indicating the number of the issue. Surprisingly enough, this feature points at a somewhat late date, from Hadrian's time on, rather than before the creation of the province of Arabia.

Coin Fig.31 also belongs to another plentiful bronze coinage, struck at Tyre in Phoenicia, in the name and with the types of the city. These issues, formerly called 'pseudo-autonomous' or 'quasi-autonomous' by specialists (Johnston 1985:89) included several denominations. Our coin is a middle-size one, named *chalkous* (diameter *ca.* 22 mm), a denomination which was steadily and continually produced for more than 320 years, from the early 1st century BC (98/7 BC) until the beginning of Tyrian 'colonial' coinage in the 3rd century AD: *cf. BMC* Phoenicia (Hill 1910: Nrs. 252-267 and 313-330, pp. CXXXIII-CXXXIV, 255-256 and 262-264, pl. XXXI, 6-8 and 17-19).

That denomination combines two typical pictures: on the obverse, the bust of Tyche, the goddess of good fortune and symbol of the city, and on the reverse the warship, an emblematic type for a naval city. The legend is bilingual, the name of Tyre being written both in Phoenician below the ship and as a Greek monogram above, followed by the city's titles, *hiera metropolis* (Holy Metropolis), and by a date, reckoned from the beginning of the 'era of autonomy' of Tyre in 126 BC.

On this specific coin, the date can be read *K-T* (320) or *AK-T* (321), equaling to 194/5 or 195/6 AD. Thus, it was struck at the beginning of Septimius Severus' reign, some 30 years before the cessation of those issues in year 351 (= 225/6 AD). Under surface corrosion, the coin seems in good condition, slightly worn, and probably did not stay in use for a long time after its minting.

While coin Fig. 29, found in the lower level of Square 002, might refer to an early period of construction of the building, coins Fig.30 and 31 probably testify to its frequentation or use in later Roman times. Though belonging to plentiful issues, such coins, which both come from neighbouring provinces in the Levant, are rather uncommon in Arabia and thus give a quite unusual picture of the use of currency at Petra in the Roman period.

CONCLUSION

The major purposes of the fieldwork were to train students and to answer critical questions concerning the site located in the centre of Petra near the colonnaded street. The site has also archaeological remains worthwhile of investigation; nevertheless, the site had not been previously excavated.

It is quite difficult to answer questions regarding the site's function and nature according to preliminary results obtained in the first season. However, the available evidence allows some suggestions. The site in general may have been a huge public bath as indicated by the existence of the vaults and mud-brick posts in what appears to be the heating room.

There is also evidence from Square 003 indicating the presence of a possible apse in one wall. In front of the assumed apse, a platform was found. The potential apse is somehow functionally related to what was discovered in Square 004. A bath is most likely the main feature in the latter square and the use of the apse mentioned above is probably connected to the use of the bath.

All of the above conclusions are preliminary and remain subject to change and alteration according to the outcomes of the next season of excavations and the analyses of ceramics, marble, coins and soil samples. It is also worth noting that the architectural features discovered throughout the digging areas clearly point to two construction phases or three phases as in Square 001 in Area B, and this would consequently reflect the importance of the site and probably its long-term use.

From this group of pottery, the most common form is the unguentaria of varying sizes which agree very well with the unguentaria of Nabataean fine wares from other sites. It is interesting that while many intact pottery forms were found, no intact painted plates were recovered. No large fragments of painted ware were found. It is possible also that this collection helps in dating a major phase in the construction of the buildings which may be between the first century BC and the first century AD.

The analyses of the marble, referred to above, indicate that the Nabataeans imported marble from far away sources in Western Anatolia and Greece.

REFERENCES

Abu-Jaber, N. Al-Saad, Z. Shiyyab, A. and Degryse, P., (2012) Provenance of White Marbles from the Nabatean Sites of Qasr al Bint and the Collonaded Street Baths at Petra, Jordan**,** *Mediterranean Archaeology and Archaeometry* Vol. 12.

Baramki, D.C., (1974) *The Coin Collection of the American University of Beirut Museum Palestine and Phoenicia*, American University of Beirut.

Barrett, Deirdre G., (1998) The Lamps, *Petra Great Temple Volume 1: Brown University Excavation 1993-1997* (Joukowsky, Martha Sharp, ed.) Providence, Rhode Island, 275-285.

Bestock, Laurel D., (1999) Nabataean Pottery from the 'Cistern': Some Finds from the Brown University Excavations at the Petra Great Temple, *ADAJ*, XLIII: 241-248.

Brechet, R. (ed.) (1981) *Evolution De La Poterie Du Proche-Orient de la période néolithique à la période abbasside, Tome II, Amman***.**

Brogli, R.F. (1996) Die Keramik aus den spätrömischen Bauten. *Petra. Ez Zantur I* (Bignasca, A. et al, eds.), Verlag Philipp von Zabern, Mainz, 219-281

Hammond, P. (ed.) (1973) *The Nabataeans: Their History, Culture and Archaeology*, Studies in the Mediterranean Archaeology, 37, Gothenburg, Astrom.

Hill, G.F. (ed.) (1910) *Catalogue of Greek Coins in the British Museum: Phoenic*, London.

Johnson, D.J., (1990) Nabataean Piriform Unguentaria, *ARAM* 2:1&2: 235-248.

Johnston, A., (1985) The So-Called "Pseudo-Autonomous" Greek Imperial, *The American Numismatic Society Museum Notes 30*: 89-112.

Kahane, P., (1952) Pottery Types from Jewish Ossuary Tombs around Jerusalem, *IEJ*, 2: 176-182.

Khairy, N., (1975) *A Typological Study of the Unpainted Nabataean Pottery from the Petra Excavations*. Unpublished Ph.D. Dissertation, The University of London.

Khairy, N., (1980) Nabataean Piriform Unguentaria, *BASOR*, No.240: 85-91.

Meshorer, Y., (1975) *Nabataean Coins*, The Institute of Archaeology the Hebrew University of Jerusalem, (Yadin, Y. Avigad N., Aviram, J. Barag, D. Ben-Tor A., eds.).

Murray, M. Ellis, J., (1940) *A Street in Petra*, British School of Archaeology, London.

Oleson, J.P., (2010) *Humayma Excavation Project, I Resources, History, and the Water-Supply System*, American Schools of Oriental Research, Boston, MA.

Schmid, S. G., (1997) Nabataean Fine Ware Pottery and the Destructions of Petra in the Late First and Early Second Century AD, *SHAJ*, Vol. 6 :413- 420.

Schmid, S. G., (2000) Die Feinkeramik der Nabatäer. Typologie, Chronologie und kulturhistorische Hintergründe, Teil I. *Petra . Ez Zantur II*, Verlag Philipp von Zabern, Mainz.

Schmitt-Korte, K., (1984) Nabataean Pottery: A Typological and Chronological Framework", *Studies in the History of Arabia* **2:** 7-40.

Schmitt-Korte, K. Price, M., (1987) *Nabataean Coinage- Part III. The Nabataean Monetray System.*

Schmitt-Korte, K. Cowell, M., (1987) *Nabataean Coinage-Part I The Silver Content Measured by X Ray Fluorescence Analysis*.

Sivan, R., (1977) Notes on some Nabatean Pottery Vesesels**,** *IEJ*, Vol. 27, No. 2-3: 138-144.

Twaissi, S., (2001) *A Study of Nabataean Remains Excavated at Wadi Mousa in 1996***,** Unpublished MA thesis, University of Jordan, Amman.

Wroth, (1899) *Galatia, Cappadocia and Syria* (Reprint, Forni, 1960s; Elibron).

Zanoni, I., (1996) Tonlampen**,** *Petra. Ez Zantur I*, Eds. (Bignazca, A. et al, eds.) Verlag Philipp von Zabern, Mainz, 311-336.