# SUPPLEMENT TO THE PROCEEDINGS OF THE SEMINAR FOR ARABIAN STUDIES VOLUME 42 2012

# THE NABATAEANS IN FOCUS: CURRENT ARCHAEOLOGICAL RESEARCH AT PETRA

Papers from the Special Session of the Seminar for Arabian Studies held on 29 July 2011

edited by

## Laïla Nehmé and Lucy Wadeson

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c/o the Department of the Middle East, The British Museum London, WC1B 3DG, United Kingdom *e-mail* seminar.arab@durham.ac.uk The British Foundation for the Study of Arabia: www.thebfsa.org

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### Transliteration

This *Supplement* to the *Proceedings of the Seminar for Arabian Studies* employs the following transliteration for Arabic and Nabataean (see table below).

Note that personal names, toponyms, and other words which have entered English in a particular form are used in that form when they occur in an English sentence, unless they are part of a quotation in the original language, or part of a correctly transliterated name or phrase.

Names of sites, archaeological periods, and types of pottery, which have entered archaeological usage in a particular form, are used in that form.

Arabic	Transliteration	Nabataean	Transliteration
١	с	б	c
ب	b	Ĵ	b
ت	t	7	g
ث	th	7	d
ج	j	Л	h
۲	ķ	9	W
ć	kh	1	Z
د	d	Ц	ķ
ć	dh	6	ţ
ر	r	5	У
ز	Z	Ľ	k
س	S	6	1
ش	sh	J	m
ص	ş		n
ض	ģ	Ð	S
ط	ţ	У	с
ظ	Ż	Ŋ	р
ع	c	ſ	ş
غ	gh	ſ	q
ف	f	٦	r
ق	q	F	Š
ك	k	Ŋ	t
J	1		
م	m		
ن	n		
٥	h		
و	W		
ي	у		

#### Other:

• short vowels are transliterated as **a** i **u** and long ones as  $\bar{a} \bar{i} \bar{u}$ ;

- diphthongs are transliterated as **aw** and **ay**;
- initial *hamzah* is omitted;
- *alif maqsūrah* is transliterated as ā;
- the *lām* of the article is not assimilated before the 'sun letters', thus *al-shams* not *ash-shams*;
- $t\bar{a}$ <sup>3</sup> marbūtah is rendered -ah, except in a construct, where it is -at.

### Preface

The 46th Seminar for Arabian Studies was held at the British Museum on 28–30 July 2011.<sup>1</sup> This annual conference is an important forum for British and international scholars to meet and present their latest research in the humanities on the Arabian Peninsula, from the Palaeolithic period to the end of the Ottoman empire. While the Seminar was originally created to focus on new archaeological research in Arabia, it now encompasses a broad range of subjects including epigraphy, art, architecture, history, literature, linguistics, ethnography, and sociology.

From 2007, the Seminar has begun to include 'Special Sessions' aimed at focusing on specific topics for which it was felt there have been significant advances in research and findings. The first Special Session (2007) focused on *The Palaeolithic of Arabia*, and the second (2009) dealt with *The Development of Arabic as a written language*. Following on from their success, a third Special Session, *The Nabataeans in Focus: current archaeological research at Petra*, was held at the 2011 Seminar on Friday 29 July. This day-long session was organized by myself with the indispensable guidance and support of the Steering Committee of the Seminar, and in particular Ardle MacMahon. Special thanks are also due to Michael Macdonald and Rob Carter.

With an international mix of scholars working in Nabataean studies, eleven papers were presented on the themes of 'Religion and Status', chaired by Laïla Nehmé, 'Tombs and Burial Customs', chaired by John Healey, and 'Environs and Hinterland' chaired by Peter Parr.<sup>2</sup> Papers dealt with the Nabataeans and Petra from the earliest traces of settlement in the Hellenistic period to the thriving community in the city in late antiquity. We were lucky enough to hear the latest results from excavation and survey projects that were fresh out of the field. They dealt with key sites within the city such as Umm al-Biyārah, al-Khubthah, and the Qaşr al-Bint, as well as important locations in the outer suburbs and environs such as the Bāb al-Sīq, Jabal Hārūn, Wādī Slaysil, and Baydā. The day concluded with a panel discussion on 'Developing an Agenda for Nabataean Archaeology' lead by Laïla Nehmé and myself. The challenges still facing Nabataean studies were raised, provoking some interesting feedback from the participants. We are hugely grateful to all the speakers and the chairpersons (John Healey, Laïla Nehmé, and Peter Parr) for stimulating important discussions and making the session a great success.

A suitable introduction to the Special Session was provided by Laïla Nehmé, who delivered the MBI Al Jaber Foundation Public Lecture at the British Museum on the evening of 28 July. The subject of her lecture was 'From the capital of Petra to the provincial city of Hegra: new insights on the Nabataeans'. I have been fortunate to have Laïla Nehmé as my co-editor in the publication of the Special Session papers as a Supplement to the *Proceedings of the Seminar for Arabian Studies* Volume 42, 2012. I benefitted greatly from working with Laïla and would like to express my gratitude to her for all the help and advice she gave me along the way and for working with me. I would also like to thank Helen Knox, Rajka Makjanić, and Janet Starkey for the thorough and efficient work they undertook during the preparation of this Supplement. Any outstanding errors in this volume remain the responsibility of the editors.

The Special Session was made possible through the generous financial support of the Seminar and the MBI Al Jaber Foundation, to whom we offer our deepest thanks. This volume aims to provide new results of recent research at Petra, which will have an impact on our understanding of the Nabataeans, especially in areas where information has been lacking in the past, such as 'early' Petra, funerary practices, and religion. As a result of this volume, we hope that a more multi-disciplinary approach to the subject can be encouraged, as well as more collaborative work between different projects. Given the great expansion and popularity of Nabataean studies today, this current publication may well lay the groundwork for plans to establish a scholarly periodical dedicated to this topic in the future.

Lucy Wadeson Oriental Institute, Pusey Lane, Oxford OX1 2LE, UK *e-mail* lucy.wadeson@orinst.ox.ac.uk 17 March 2012

<sup>&</sup>lt;sup>1</sup> See Proceedings 42 and www.thebfsa.org.

<sup>&</sup>lt;sup>2</sup> A list of the papers presented is provided at the end of this volume.

### The palaces of the Nabataean kings at Petra

STEPHAN G. SCHMID, PIOTR BIENKOWSKI, ZBIGNIEW T. FIEMA & BERNHARD KOLB

#### Summary

According to ancient literary sources, the Nabataean kings had royal quarters in the city of Petra in southern Jordan. No further details are available. Can the sources be trusted? And, if so, what exactly did these royal quarters look like? Recent fieldwork at Petra revealed two distinctive sites as being the most probable candidates for royal residences. The first is on Umm al-Biyārah, best known for its Iron Age village. A survey in recent years has shown that during the first century BC the Nabataeans constructed spectacular buildings on that prominent spot, overlooking the entire area. While these buildings can be considered as a royal residence, due to various factors, they most probably should not be identified with the main palace of the Nabataean kings, since that structure is likely to be located within the city of Petra. There is however another location, at the foot of al-Khubthah, where all the prerequisites for such a structure are fulfilled. A new survey corroborates the hypothesis of the main palace of the Nabataean kings being located there and, consequently, not in any of the other locations proposed to date.

Keywords: Nabataeans, Petra, Umm al-Biyārah, royal residences, basileia

#### Introduction

'Once Antipatros had received this confirmation, he returned to Jerusalem to Hyrkanos and left the city together with him shortly afterwards at night. After a long journey he brought him to the city called Petra, where the residence of Aretas was.' (Flavius Josephus, AJ 14, 16 [14, 1, 4], translation by the authors)

'After he had prepared both of them [Hyrkanos and Aretas], he fled the city at night taking with him Hyrkanos and, hurrying at great speed, safely arrived in the city called Petra; this was the royal city [capital] of Arabia.' (Flavius Josephus, *BJ* 1, 125 [1, 6, 2], translation by the authors)

These two passages from the Jewish historian Flavius Josephus are to be considered in the context of the conflict between the two Maccabean brothers, Johannes Hyrkanos II and Aristoboulos II, in which the Nabataean king Aretas III became involved in the year 65 BC.<sup>1</sup> These passages also provide significant information concerning the subject of this paper. Apparently, Petra was considered to be a city in the mid-first century BC,<sup>2</sup> more

precisely as the royal city and, therefore, the capital of the Nabataeans, where their kings resided. The Greek word ta basileia (τα βὰσίλεια), that is translated as 'residence' in the first passage above, does not only designate a 'palace' as the living area of a king, but rather entire areas of a city where the royal quarters, administration, cultic installations, etc. were concentrated. This is especially, although not exclusively, true where rulers from the eastern Mediterranean and the Near East were concerned.<sup>3</sup> Despite these rather explicit indications, the residences of the Nabataean kings at Petra were not a major focus of modern research until very recently. Theodor Wiegand used to call an area near the Temple of the Winged Lions a 'palace' but, as becomes clear from certain passages in his writings, he was not too convinced about this himself.<sup>4</sup> Recently, several scholars proposed that the complex formed by the so-called 'South' or 'Great Temple' and the paradeisos (Fig. 1/3), i.e. a luxurious garden and water installation in the centre of the city, is part of the Nabataean basileia (Kropp 2009; Bedal 2003: 171-185; Schluntz 1999: passim; see also below, p.82.

<sup>&</sup>lt;sup>1</sup> For an analysis of the texts and the background see Hackl, Jenni & Schneider 2003: 477–480, 540–542; Kokkinos 1998: 94–139.

<sup>&</sup>lt;sup>2</sup> There are earlier testimonies, both historical and archaeological, mentioning built structures in Petra or naming the place; see the occasionally controversial discussion in a series of contributions: Tholbecq 2009; Mouton, Renel & Kropp 2008; Parr 2007: 275–293; Graf 2006. We shall not deal in this paper with the question of the

date from which Petra can be considered a city. Rather, we consider here Josephus' account as a confirmation that around 65 BC this was apparently the case. For a short overview see Schmid 2008*a*: 360–366; Hackl, Jenni & Schneider 2003: 36–43, 70–71.

<sup>&</sup>lt;sup>3</sup> As was convincingly shown by Funck 1996.

<sup>&</sup>lt;sup>4</sup> Bachmann, Watzinger & Wiegand 1921: 68–72; Wiegand also tentatively identified the building which features a single column, commonly known as 'Zibb Firaoun', as a palace (1921: 64).



**FIGURE 1.** Petra: the city centre from the top of Umm al-Biyārah. In the background: the modern village of Wādī Mūsā (no. 1) and the Sharā Mountains (no. 2). In the centre: the 'Great Temple' and paradeisos (no. 3) and the area of the presumed Nabataean basileia (no. 4) (S.G. Schmid).

The recent interest in the *basileia* in Petra has contributed to the development of several fieldwork projects in Petra, which form the basis of this paper. Specifically, since 1999, the International Wādī Farasah Project (IWFP) has been exploring one of Petra's most spectacular and significant funeral complexes, the so-called Soldier's Tomb complex in Wādī Farasah East.<sup>5</sup> The core of the complex is composed of the tomb itself, with its richly decorated facade, several banqueting halls, and other rooms, all arranged around a peristyle courtyard. The plan and the functioning of such complexes have been shown to be very closely related to the luxury architecture of the Hellenistic and the early Roman Mediterranean, i.e. to rich villas and palaces. The question as to what the residences of the Nabataean kings looked like also arises, therefore, from the perspective of funerary architecture. It seems unlikely that the Nabataean elite would have used the examples of rich residences of their Egyptian (Ptolemaic), Syrian (Seleucid), and Roman counterparts only for their funerary architecture, and not for their own residences.

<sup>&</sup>lt;sup>5</sup> See the preliminary reports in the *Annual of the Department of Antiquities of Jordan*, Volume 44 (2000) onwards; see also Schmid 2009*a*; Project website: www.auac.ch/iwfp



FIGURE 2. An aerial view of the city centre of Petra, with the presumed area of the Nabataean basileia indicated in dark grey (Institut Géographique National, modifications by S.G. Schmid).

#### A royal hilltop residence

Umm al-Biyārah ('the mother of cisterns'), the large mountain *c*.1200 m above sea level, which dominates the centre of the ancient Nabataean capital Petra (see Figs 1 & 2), is mainly known for the Iron Age settlement on its summit, partially excavated in the 1960s by Crystal-M. Bennett.<sup>6</sup> Although already known for some time,<sup>7</sup> Nabataean structures on top of Umm al-Biyārah have been the focus of systematic research only since 2010 when the International Umm al-Biyārah Project (IUBP) began (Schmid & Bienkowski, in press; forthcoming; Project website: auac.ch/iubp). After one survey season and one season of limited excavation, the results already show the key significance of the site in the context of Petra in the Nabataean period. The survey noted and recorded approximately thirty — presumably Nabataean — structures (Fig. 3). While eight of them are the eponymous cisterns for the crucial water supply system, nineteen others were identified as major buildings. The chronological frame of these buildings ranges — at the present time<sup>8</sup> — from the late first century BC to the late Roman period. Most of the buildings seem to have collapsed during the notorious earthquake of AD 363. The construction period of the structures on the hilltop

<sup>&</sup>lt;sup>6</sup> On these excavations, see Bienkowski 2011.

<sup>&</sup>lt;sup>7</sup> For a short history of research and description of these remains, see Schmid 2011.

<sup>&</sup>lt;sup>8</sup> One has to bear in mind that these are the results of survey work that may be modified through subsequent excavation.



FIGURE 3. A map of Umm al-Biyārah with structures surveyed in 2010 (G. Teltsch & W. Kennedy).

— the later first century BC — coincides with major building activities throughout the city centre of Petra. Notably, the Nabataean kings utilized Umm al-Biyārah as the cornerstone for controlling the area, at least from the moment they decided to found a permanent stone-built settlement in Wādī Mūsā, between the rock massifs of al-Khubthah and Umm al-Biyārah.<sup>9</sup> Surrounded by high mountains, this settlement was effectively hidden from the outside but was therefore deprived of means of early warning against approaching enemies. As a result, the Nabataeans built a series of watchtowers along the Sharā Mountains and around Petra on the other sides. Most of these, however, do not provide direct visual contact with the city centre of Petra. This visual connectivity is thus provided by the plateau of Umm al-Biyārah, from which most of these watchtowers (as well as the entire city of Petra) can easily be seen (see Fig. 1). Thus, Umm al-Biyārah was a veritable central point of Petra and, as such, was the rock of Petra in every sense of the word. Control of the plateau of Umm al-Biyārah was vital in the decision to settle in the Petra Valley.

Hence, it seems very probable that not everybody would have been allowed to construct buildings on top of Umm al-Biyārah, and the new excavations further strengthen this assumption. Apart from some structures on the western side of the plateau, probably representing watchtowers, the main Nabataean buildings

<sup>&</sup>lt;sup>9</sup> This situation and, therefore, the following arguments, may be different in the case of a non-permanent settlement of nomads (using tents).



FIGURE 4. Umm al-Biyārah: Structure 26 overlooking the city centre from the west (S.G. Schmid).

are concentrated on the eastern side and constructed on the very edge of the rock. They offered a superb view all over the city of Petra and were visible from the entire city centre and beyond. These buildings, therefore, share a common factor: maximizing their visual impact on all permanent or temporary occupants of the region of Petra and this impression is confirmed by their layout, architecture, and decoration.

As a *pars pro toto* we shall consider some of the features on the north-eastern tip of the plateau of Umm al-Biyārah. It is significant that the most luxurious buildings on the summit are located slightly below the level of the cisterns carved into the rock on the eastern side of the plateau, sloping sharply downwards from west to east. In this way, the cisterns benefitted from a maximized rainwater catchment. On the other hand, the buildings — through a highly sophisticated system of water channels and basins, based on gravity — enjoyed a substantial supply of water, a particularly spectacular achievement considering the location on top of the highest elevation and in an arid climate.

One installation that benefitted from the water supply was Structure 26 (no. 26 on Fig. 3), built at the very edge of a promontory protruding towards the city centre (Fig. 4). This is the structure already investigated by Morton in the early 1950s (1956: 30–31) and, therefore, the same that had been interpreted as a Nabataean temple by Bennett (1966; 1980: 211). Verification of that structure by the IUBP indicates that it is only a part of a more



FIGURE 5. Umm al-Biyārah: Structure 26, floor slabs and pedestals, looking from the east (S.G. Schmid).

substantial building continuing on at least three sides Nabataean technique. Within the main structure, i.e. (north, south, west), while towards the east the steep cliff made a further extension impossible. The regularly cut-off rock, however, previously interpreted as steps, suggests instead the siting of a major wall constructed of both built and rock-cut elements: the built wall was connected to the rock wall through a zigzag-like contact, a classical of a rectangular pillar. Perfectly aligned with it, but a few

that already mapped by the British in 1965, parts of the original floor slabs are still visible in situ. In the southeastern part of that room, a rectangular structure built of two ashlars and measuring 66 x 80 cm stands directly on the floor slabs. This structure is probably the lowest course



FIGURE 6. Umm al-Biyārah: various marble and limestone slabs from Structure 26 (S.G. Schmid).

metres to the west, stands an ashlar structure of similar construction. Within this structure, several fragments of Nabataean horned pilaster capitals were found; another one of the same type and with the same dimensions (21 cm high) was collected from the rubble which originates from the same building and which slopes down the cliff on the south side. The pilaster capitals, therefore, are likely to have decorated the back walls of a supposed courtyard. While excavating the north half of the visible structure, it turned out that the back wall has a row of pedestals (Fig. 5) very similar — although smaller to the pedestals of the temenos gate in the Qasr al-Bint area (McKenzie 1990: 36, 132-134, pls 55, 56). Most probably, these pedestals served as bases for the pilasters. Indeed, several fragments of pilaster bases and the abovementioned capitals were found. This means that the room was considerably high, i.e. up to 5 m. Surprisingly, nothing was found in the northern half of the room that might correspond to the above-mentioned pillar base that is visible in the southern half. This would indicate that there was a very wide colonnade, and therefore that the room must have been much larger than the remains visible today. Indeed, traces of retaining and supporting walls are visible on the steep slope to the south, and this would again point to an impressive size for that room. Access to this nicely paved room was possible through a doorway at its north-western corner (Fig. 5, bottom right), measuring 1.25 m in width. Whether this was the main entrance or not cannot be clarified at this time, especially as a large part of the room has collapsed down the steep slope in a southerly direction. Another doorway, however, provides access to this paved room. A very narrow (50 cm wide) opening, located between the two most northern pedestals on the back wall, leads to a small staircase leading first in an east-west direction and then turning to the north (Fig. 5, centre). This is yet another indication that the original organization of this space was far more complex than what is visible today.

Moreover, the difference between the very precisely cut floor slabs of large dimensions (up to 100 x 200 cm; see Fig. 5) and the rather carelessly constructed walls is immediately striking. This may possibly be explained by the selective use of the construction materials. While the available rock on the top of Umm al-Biyārah can easily be quarried into slabs, it is not very suitable for quarrying ashlars and therefore, walls were mostly built of smaller stones and even of rubble, and then carefully plastered over to hide the inferior construction. Only in exceptional cases, e.g. for structurally important architectural elements, were substantial ashlars used that most probably had to be carried up the hill from the city centre or from further away.

The partial excavation of Structure 26 has also revealed some insights into its original interior decoration. Several fragments of yellowish limestone with small shell inclusions were found, belonging to very carefully cut slabs (Fig. 6, bottom row). These slabs are of excellent quality and, because of the shell inclusions, show a pleasing natural decoration pattern when wet. As well as rectangular examples, there are several fragments of triangular shape. They most likely come from an opus sectile decoration combining different types of stones of different colours. This hypothesis is supported by the presence of several fragments of white marble slabs (Fig. 6, top row) as well as marble slabs with greenish and bluish veins (Fig. 6, central row). No definitive indication as to the construction date of Structure 26 has been found so far, although the construction technique, as well as the types of architectural elements, would suggest a date somewhere within the second half of the first century AD. Equally important are the indicators concerning the end of the active use of that room. The pattern of debris of the collapsed walls would indicate destruction by an earthquake and, in addition, several fragments of late Roman-early Byzantine lamps were found,<sup>10</sup> one of them directly on the floor slabs. It would seem, therefore, that the structure to which the nicely paved room belonged was still in use until one of the devastating earthquakes that hit Petra, most likely the one in AD 363.<sup>11</sup>

The manner in which the Nabataeans used water is clearly evident within a building recorded as Structure 20 (Fig. 7; see also Fig. 3). It consists of several rooms and its features demonstrate a high degree of luxury. Water was brought to the building by a small aqueduct, partially cut into the rock and partially built in masonry (Fig. 7/1). It fed a rectangular water basin on the southern side of the building (Fig. 7/2). Remains of a hypocausttype, floor-heating system were discovered in one room built directly on the edge of the rock (Fig. 7/3; Figs 8 & 9), in line with the water basin but on a slightly lower level. Hypocaust installations, widespread in the Roman period, used the heat generated from the burning of wood or other combustibles in a separate compartment, the praefurnium. In our case, the heating system was also incorporated into the walls of the room, as is indicated by the large number of *tubuli*, hollow bricks that allowed the hot air to circulate (Fig. 9). If the conduction of water

<sup>&</sup>lt;sup>10</sup> On the lamps, see Grawehr 2006: 340–349.

<sup>&</sup>lt;sup>11</sup> On the earthquake, see Russell 1980.





FIGURE 7. Umm al-Biyārah: plan of Structure 20 (G. Teltsch & W. Kennedy).

FIGURE 8. Umm al-Biyārah: a room with hypocaust heating (no. 3) within Structure 20 (S.G. Schmid).



FIGURE 9. Umm al-Biyārah: flat tiles, round and rectangular suspensurae, tubuli, and bricks from the heated room (S.G. Schmid).

in buildings located on the highest elevation in the area can already be described as clearly a luxury feature, heated rooms must be considered an almost provocative flaunting of money and power. While rainwater filled the cisterns during the rainy season, the combustibles for the heated rooms had to be carried up the hill.<sup>12</sup> It is thus all the more surprising that the heated room of Structure 20 is not an isolated small room, but belongs to a complex bathing installation, attesting to a high quality of living.

In a wide hall to the west of the heated room (Fig. 7/4), a massive debris layer was found, consisting of the ashlars of the collapsed upper parts of this room. Its roof was supported by at least two pillars, the collapsed

remains of one of them being clearly visible in Figure 10. Under the collapsed pillar, several fragments of various marble statues were discovered. One of them (Fig. 11) belongs to a fairly well known type of fountain - or basin — figure: a young boy holding a jar on his left shoulder, out of which flows water. It belongs to the same type as a better-preserved example from the Ny Carlsberg Glyptothek in Copenhagen (Fig. 12).<sup>13</sup> The type of young boy holding a jar is known in several variations. For example, the addition of small wings would transform him into Amor. Also interesting is the fact that, although all known examples of the type were used as fountain/ basin figures, in all cases they were first conceived as 'ordinary' marble statues. The association with water could be a later, custom-made addition. The customer could decide on specific details, such as the direction from which the water was conducted into the jar and so on. These statues and the related water installations are typical of the luxurious residences of the upper classes of the Roman Empire, especially in the area of Tivoli.<sup>14</sup>

Other fragments of marble sculptures confirm the rich statuary decoration of our complex. Interestingly, at least one statue, or rather a statuette, shows a Dionysiac link. The torso of a boy, approximately 30 cm high, features a feline skin (Fig. 13), as can be seen by the paw on his left chest. Despite its fragmentary state of preservation, an interpretation as a follower of Dionysus seems the most probable, although it could also be a Herakliskos or a small *putto* disguised as Herakles (see also Koppel 1985: 54-55, cat. no. 78). Dionysus, the Greek god of wine and fertility, would of course fit well into the luxurious ambience of this hilltop residence, as can be confirmed by the strong Dionysiac component of the sculptural decoration of rich villas of the late Hellenistic and Roman periods.<sup>15</sup> Furthermore, Dionysus is the Mediterranean equivalent of Dushara, the chief god of the Nabataeans

<sup>&</sup>lt;sup>12</sup> Even if we assume that the plateau of Umm al-Biyārah was covered by substantial vegetation in antiquity, including trees and bushes, these would not grow fast enough in order to guarantee a regular supply of fuel for the hypocaust heating system. Alternative fuel, i.e. dung of sheep, goats, camels, etc. also had to be carried up the hill or, if the animals were kept on top of the hill, their food. In either case, the investment always exceeds the result.

<sup>&</sup>lt;sup>13</sup> For this type, see Kapossy 1969: 41–42; since then, several new examples have been discovered, such as two more statues from Sagalassos (not yet published). The statue from Copenhagen is illustrated in Moltesen 2005: 344–346, no. 183. The subject is also treated in general by Aristodemou 2011.

<sup>&</sup>lt;sup>14</sup> Two replicas of this type come from the Villa d'Este in Tivoli; most sculptures initially came from the nearby Villa of Hadrian. Especially in the case of the two boys with water jars, it is not possible to establish the exact provenance, but they clearly come from one of the pleasure villas of the area: Raeder 1983: 202 V 32. 33; Lippold 1956: 214 no. 81; 220–221, no. 85. A third replica of the type was found in the Villa of Cynthia in Tivoli, see Neudecker 1988: 56, 236–237, no. 68.7.

<sup>&</sup>lt;sup>15</sup> See, for instance, Neudecker 1988: 47–54. Sculptures of Dionysus/ Bacchus and his followers are also found in great numbers in Roman baths (Manderscheid 1981: 31–32).



FIGURE 10. Umm al-Biyārah: a wide hall (no. 4) with a collapsed pillar within Structure 20 (S.G. Schmid).



**FIGURE 11.** Umm al-Biyārah: a marble torso of a boy with a water jar found under the collapsed pillar seen in Figure 10 (S.G. Schmid).



FIGURE 12. Copenhagen, Ny Carlsberg Glyptothek: a marble statue of a boy with a water jar (courtesy Ny Carlsberg Glyptothek).



FIGURE 13. Umm al-Biyārah: a marble torso of a boy wearing a feline skin (S.G. Schmid).

(Hackl, Jenni & Schneider 2003: 77, 83-84; contra Kropp 2011: 180). Dushara ('the one from the Sharā mountains') had his home in the mountains just opposite Umm al-Biyārah (see Fig. 1/2), and he too clearly featured fertility aspects since the water for Petra, bearing blessings and destruction at the same time, also came from the Sharā mountains. Interestingly, the small torso shows a rather large opening for the insertion of the head that was separately carved. This technique, very common in large statues, is otherwise rather unusual for small-scale sculptures and there must be a specific reason for it. As discerned from the statue of the boy with the water jar, the sculptural decoration of the building complex seemingly used standard types of Graeco-Roman sculptures from the international art market. Perhaps the head of the small feline skin bearer, separately sculpted, was an attempt to give the sculpture a specific local or regional connotation, possibly being the portrait of a member of the Nabataean

royal dynasty who were often depicted with iconographic elements belonging to Dionysus/Dushara.<sup>16</sup>

Towards the north, the Structure 20 complex shows further interesting installations. From the huge hall mentioned above, visitors had access to two separately constructed bathtubs, a smaller one offering comfortable space for one person (Fig. 7/5) and a larger one which could comfortably accommodate up to three individuals (Fig. 7/6). The bathtubs had a direct water supply in the form of a clay pipe that was inserted into the western wall of the hall. Beyond the bathtubs and on a slightly lower level, a final room was built (Figs. 7/7 & 14). With regard to the shallow water conduit integrated into its floor and the 60 cm-deep evacuation channel, this room corresponds perfectly to typical Roman-style multi-seat latrines (see Jansen, Koloski-Ostrow & Moormann 2011; Hobson 2009). Water flowed into this room after its use in the bathing installations. From the larger of the two bathtubs, a lead pipe embedded into a clay pipe led into the evacuation channel of the latrine, and thus water used in the bathtubs could end up flushing the latrine.<sup>17</sup> From the evacuation channel, the water left the building through an opening that ran further downwards. Since the latrine was situated on the outermost northern tip of the structures, the toilet water ran down the hill at a point where no buildings in the lower city were constructed, and was then directed to the Wādī Mūsā depression (see Fig. 2).

<sup>&</sup>lt;sup>16</sup> Statues of members of the ruling dynasty are not uncommon as decoration for fountains and other water installations in the Hellenistic and Roman periods (Kapossy 1969: 66. 71-72, 76-77; Letzner 1990: 261). On the close connection between Dushara and the Nabataean royal dynasty, see Kropp 2011: 197. In his argument as to why the representations of Dushara should rather be modelled after the depictions of Alexander the Great and show no connections with the (coin-)portraits of Nabataean kings, Kropp overlooks an important iconographic detail. Both the head of Dushara on Roman period coins and the portraits of Nabataean kings (with the exception of Malichus II and Rabbel II) have their ears covered by their long hair. This is typical for non-Greek Arabs, and no ruler or god in any way connected to the Hellenistic tradition was depicted that way. Alexander, as well as all his successors from Greece to Afghanistan, always has his ears visible under his hair (see Schmid, forthcoming, a). One has carefully to distinguish between stylistic features (and indeed depictions of Dushara as well as portraits of Nabataean kings can show stylistic features similar to depictions of Alexander the Great) and iconographic features. <sup>17</sup> Indeed, in Roman public bathing installations, latrines are often found near the frigidaria (cold-water basins), since it was there that the largest amount of water was used that could be reused for flushing the toilets: Van Vaerenbergh 2011: 78-80; Garbrecht & Manderscheid 1994: 66-67. A particularly sophisticated installation of this kind was discovered in the large baths of Colonia Ulpia Traiana (Xanten) in Germany (Zieling 2009).



FIGURE 14. Umm al-Biyārah: latrine (no. 7) belonging to Structure 20, from the north-west (S.G. Schmid).

The structures and rooms that have so far been partially exposed indicate a magnificent residence with all the sophistication of luxury features found in late Hellenistic-early Roman architecture. Based on the construction technique of the buildings, and especially on a few potsherds found in small-scale soundings below the floor slabs of the latrine, the bath complex was probably built in the second half of the first century AD. It will be interesting to see, once the overall plan of the bathing complex is understood, whether the installation as a whole follows Roman prototypes or whether it follows them only in particular aspects, such as floor heating, sculptural decoration, and sanitary installations.<sup>18</sup> The considerable amounts of surface pottery dating to the last quarter of the first century BC and to the first quarter of the first century AD, collected in the immediate neighbourhood of

structures 20 and 26, makes it likely to assume building phases that go back at least to that period. No architectural remains, however, can be assigned to it, most likely due to the very limited surface excavated so far. Based on what we noted above concerning the strategic importance of Umm al-Biyārah, we can conclude that this was not the residence of an average member of the Nabataean upper class. This hypothesis is confirmed when comparative installations in the region are considered. The best parallels can be found in the hilltop residences built by Herod the Great (40/36-34 BC), who is well known for his obsession with new constructions and buildings in his kingdom of Judaea. Within his numerous palaces and residences, luxury bathing plays an important role. In Masada, Herodeion, Kypros, and Machaerus (Machairous), heated rooms, usually as part of Romanstyle thermae, are an outstanding feature.<sup>19</sup> As well as

<sup>&</sup>lt;sup>18</sup> On bathing installations in Roman private residences, see De Haan 2010.

the pools etc. of major bathing installations, individual bathtubs are common in most of these Hasmonean and Herodian structures. No bathtubs for two or three persons, such as the one mentioned above in Structure 20, however, seem to be attested in Herodian buildings.

We can assume that these Herodian installations were not only generally known to the Nabataean elite (see Schmid 2009b) but, also that, the palace at Machaerus, situated on the eastern shore of the Dead Sea, must have been, in many ways, a sort of 'provocative statement' for the Nabataeans. It seems, therefore, perfectly appropriate to suggest that the building on top of Umm al-Biyārah consisted of something like the Nabataean 'response' to the Herodian hilltop palaces. The best overall comparison is offered, for the time being, probably by the Herodian palaces at Masada (specifically on Masada, see Netzer 1991). The general locational situation is the same, i.e. the Herodian buildings are located all over the plateau of the massive rock that is Masada and, as on Umm al-Biyārah, there is no common orientation for all buildings. Rather, they form smaller clusters, following the topography and according to their successive dates of construction. There, too, the most luxurious and at the same time the most private structures, i.e. the ones known as the North Palace, are located opposite the main access to the hill. As is the case at Umm al-Biyārah, these Herodian structures are 'playing' with visibility, incorporating the splendid panoramic view into the architectural display, and this is especially true for the three levels of the Northern Palace. Likewise, they feature lavishly decorated bathing installations.

Whereas Masada offers the best overall comparison to our structures on Umm al-Biyārah, smaller details in most of the other Herodian residences can also be compared. For instance, the deliberate toying with visibility is very prominent within Herod's third palace at Jericho (Netzer 2001: 231–286). The triclinium B70 (2001: 239) and the courtyard B55 (2001: 251–254) from Jericho can be compared to our Structure 26, with its extreme location, literally at the edge of the cliff. Since the southern wall of courtyard B55 in Jericho fell into Wādī Qelt and cannot be reconstructed securely, as is the case with the eastern wall of our Structure 26, a direct and open view across the natural landscape is possible in both cases.

It is entirely reasonable, therefore, to interpret the splendid buildings on Umm al-Biyārah as being part

of a residence of the Nabataean kings, perhaps their response to Masada. Notably, the relations between the luxury architecture of the Nabataeans and the Herodians can be easily demonstrated by several other examples. In more general terms, the two dynasties cultivated an intense exchange, although not exclusively peacefully. For instance, the Jewish aristocrat Antipatros (Antipater), mentioned in the two texts by Flavius Josephus quoted at the beginning of this contribution, who mediated between the Maccabee Hyrkanos and the Nabataean king Aretas III, was no less than the father of Herod the Great.<sup>20</sup>

# The *basileia* of the Nabataean kings — some considerations

Despite the tentative identification as a Nabataean royal residence, the buildings on top of Umm al-Biyārah most probably were not the *basileia* mentioned by Flavius Josephus, i.e. the principal royal quarters of the Nabataean kings. More likely, these should be located within the city of Petra. At least when considering the Hellenistic neighbours of the Nabataeans, such main royal residences seem to follow certain rules. Winfried Held (2002) has demonstrated that within the Seleucid kingdom, which stretched from the Mediterranean coast to Central Asia at its peak, and therefore necessarily providing more than one residence for its kings, these *basileia* always tend to show the same basic characteristics:

- they occupy roughly a quarter of the space of the city;
- they are constructed at a corner or at least in a location peripheral to the city centre;
- they are surrounded by water (sea, rivers, artificial channels) at least on two sides;
- in addition to the residential and representative quarters of the royal family, they contain administrative and infrastructural installations, sanctuaries, gardens, and parks as well as tombs or *heroa* of the worshipped founders of the dynasty and/or the city.

These criteria fit not only the *basileia* of the Seleucid kings such as Antiocheia, Seleukeia, Babylon, or Aï Khanoum, but also the most famous royal city of the Hellenistic period, Alexandria in Egypt, founded by Alexander the

see Japp 2000; Lichtenberger 1999; Roller 1998; Nielsen 1994: 181–208; Netzer 1991. Especially on their bathing installations, see Netzer 1999; Hoss 2005: 45–49 and the relevant catalogue entries.

<sup>&</sup>lt;sup>20</sup> Kokkinos 1998: 95–139. Antipater was married to Kypros, an Arab princess, possibly a member of the Nabataean royal dynasty. If this is correct, Herod the Great himself was half-Nabataean.

Great and greatly expanded by the Ptolemaic dynasty (McKenzie 2007: 32–146, esp. 66–71; Hoepfner 1999: esp. 462–464; Nielsen 1994: 130–133, 280–282).

When looking for comparable elements within the city of Petra, one location seems to fulfil these criteria. At first, to make the valley of the Wādī Mūsā depression between al-Khubthah and Umm al-Biyārah adaptable for a permanent settlement, the Nabataeans had to divert the Mūsā stream from its inlet to the entrance to the Sīq. This they achieved by constructing a dam and the tunnel diverting the stream into a side valley (Wādī Mudhlim) that crosses the Khubthah massif (see Fig. 2) (Bellwald 2008: 67-73; Petra National Trust 2004). From there, towards the city centre, the water flowed through Wādī Matāhah in order to return to its original bed in the middle of the city centre. This resulted in draining the Sīq and the former riverbed from water. Especially in the area of the outer Sīq, the former riverbed was probably used for evacuating the rainwater cascading down from the rocks of the Khubthah massif. As a second result of the diversion project, a separate quarter (in the true sense of the word) of the city emerges at the foot of al-Khubthah, being defined by Wādī Matāhah, Wādī Mūsā, and the face of al-Khubthah (Fig. 1/4; in dark grey on Fig. 2). In other words, this arrangement closely resembles that described for the basileia of the Seleucids and the Ptolemies. This area of Petra - apparently consisting of several large ruined architectural complexes - is located directly north-east of the confluence of the Wadī Mațaḥah and Wādī Mūsā drainages, on the high hill overlooking the eastern end of the Colonnaded Street, and west of the Palace Tomb in Petra. The site measures c.250 m (eastwest) x 150 m (north-south). Its northern extremity is occupied by Umm al-Harjal and the eastern one by Rujm Umm al-Sunaydig, the latter seemingly being the name of the entire area. It is apparent that the site contains several buildings as well as some surprisingly 'empty' spaces (Fig. 15). It is our hypothesis that the area described here may possibly be considered as the basileia of the Nabataean kings.

A further extraordinary feature of this area is the presence of the monumental steps to the top of al-Khubthah, that begin in the north-eastern corner of the sector marked in dark grey on Figure 2, a few metres to the north of the huge water basin north of the Palace Tomb (see Fig. 15). Their primary goal was to give access to the cultic and other installations on top of Jabal al-Khubthah (see Nehmé 1997: 1035–1036; Lindner et al. 1997; Dalman 1908: 332–336). At the same time, however, the steps might have served as a kind of emergency exit from

the city, since the top of Jabal al-Khubthah can also be used as a stronghold, from where eventually one could leave the city towards the Sīq and Wādī Mūsā. Although among the numerous side-valleys and cliffs of Petra other such possibilities might have existed, our example is especially interesting since it combines a monumental aspect with a restricted access. Specifically, in order to use the steps leading up to Jabal al-Khubthah, one had to pass through the area that was topographically and architecturally clearly separated from the rest of the city centre.<sup>21</sup> This means that the people controlling this area had a privileged 'secret' access to and from the city centre.

Furthermore, the area of interest here is directly connected to one of the six freshwater aqueducts of Petra, namely the al-Khubthah water conduit, which starts several kilometres higher up at the Mūsā spring in modern Wādī Mūsā, ancient al-Gī. The al-Khubthah aqueduct enters the area of the city precisely at the point of our presumed basileia and there joins, among others, a huge cistern collecting the water from a highly sophisticated water catchment system that covers most of the Khubthah massif (Bellwald 2008: 49-53 [al-Khubthah conduct], 87-90 [generally on runoff water collection]; Gunsam 1997). Detailed observations indicate that the two systems (freshwater aqueduct and runoff water collection) could be used both separately and together. In other words, as long as there was sufficient output from the freshwater aqueduct, the two systems were probably separated and used for different purposes. If the freshwater aqueduct did not carry enough water, the collected runoff water could be used even for drinking purposes.<sup>22</sup> A series of basins and water pipes indicates the potential abundance of water in the area marked in dark grey on Figure 2, as illustrated here by a small water basin (Fig. 16) located on the line between squares F7 and G7 on Figure 15.

This direct access to drinking water, provided by an exclusive use of one of the city's aqueducts, is highly notable and it distinguishes the area of our presumed *basileia* from any other place in the city, including the area of the so-called 'South Temple' and *paradeisos* (see Fig. 1/3), that has also been suggested as being part of the royal palace. Apart from the fact that there is some

<sup>&</sup>lt;sup>21</sup> Lindner et al. (1997: 182–184) have already attributed a defensive character to these features (the steps to al-Khubthah).

<sup>&</sup>lt;sup>22</sup> The use of runoff water for drinking is not uncommon in Petra. The installation of elaborate water treatment systems, including settling tanks, enabled the Nabataeans to clean runoff water until it reached drinking quality, e.g. as was shown in the case of Wādī Farasah East (Schmid 2008*b*).



(M. Holappa & J. Falkenberg).



FIGURE 16. NEPP: small water basin between squares F7 and G7 on Figure 15 (S.G. Schmid).

disagreement as to the function of the South Temple, it does not demonstrate such an exclusive access to fresh water as one would expect in the case of a royal residence. That area was supplied with water by the <sup>c</sup>Ayn Brāq aqueduct that entered the city centre from the Jabal al-Madhbah (Bellwald 2008: 56-58; Schmid 2008b: 110–113; Hübl & Lindner 1997). Although there were, of course, substantial quantities of water arriving from that source to fill the huge basin of the *paradeisos*, both the garden and the South Temple were not the first or exclusive users of this water supply. After leaving the rocky massif of Jabal al-Madbah, the aqueduct ran at first on top of the hills south of Wādī Mūsā until it entered a small castellum divisorum. From there, it split in order to provide fresh water to the installations on both sides of the al-Zantūr summit, including the huge Nabataean mansion on the southern terrace of al-Zantūr.<sup>23</sup> It is only afterwards that this conduit brought water towards the city centre and to the area of the South Temple and the paradeisos. Bearing in mind that Petra is situated in an arid zone and that the Nabataeans developed a specific pride in displaying their aptitude for water management, it seems quite inconceivable that the main royal residence was a secondary or even tertiary water receiver from the <sup>c</sup>Ayn Brāq aqueduct. This does not exclude the South Temple from belonging to the royal buildings in general, but not as part of the main residence.<sup>24</sup>

Despite the existence of imposing and extensive ruined architectural structures at the site of the presumed basileia (see Fig. 1/4; dark grey on Fig. 2), neither an exhaustive description nor proper surveying and mapping have been conducted there, as has been stated on previous occasions (e.g. Wenning 1987: 245-246). For example, although this is one of the largest, most densely occupied spaces within the city centre, which significantly included several monumental buildings, R.E. Brünnow and A. von Domaszewski, the early explorers of Petra in the early twentieth century, report only briefly and without any further commentary on the discovery of a statue and some 'ruins' featuring a few wall lines (Brünnow & von Domaszewski 1904: 318-319 nos. 412-415). Alois Musil indicates several buildings on his map of the Petra city centre (Musil 1907: map following p. 343),

but these are very schematic sketches, and he does not discuss any of the structures in detail. Gustaf Dalman devoted an entire chapter to the area 'under al-Khubthah' but his observations focus exclusively on rock-cut structures, and do not mention the clearly visible ruins located further west (Dalman 1908: 314-329). The most concise indications come - once again - from the Deutsch-Türkische Denkmalschutzkommando, the early twentieth-century German-Turkish project, which noted the existence of several buildings above a structure they interpreted as a small theatre. Furthermore, the German scholars pointed to the existence of a large, monumental 'room', c.30 m long, and a lengthy corridor with columns (for both structures, see Bachmann, Watzinger & Wiegand 1921: 32-33; see also North-Eastern Petra Project (NEPP) website: www.auac.ch/nepp).

A systematic exploration of the area of the presumed basileia in Petra began in Spring 2011 under the aegis of the NEPP (www.auac.ch/nepp). This project intends to conduct several seasons of archaeological survey at the site. Even with the relatively limited amount of information obtained so far, it appears that most of the criteria recognized as significant in defining a basileia will be fulfilled. A substantial number of large, often monumental structures once existed on different terraces of this area, which offers a dominant view over the entire city centre. Everybody in Petra, from the outer Sīq down to the Qasr al-Bint, must have seen the buildings erected at the spot where Wadī Mūsā and, therefore, the main axis of the city, is engaged in a 90° curve (see Fig. 2). As with Umm al-Biyārah, the argument of visibility works in both directions.

The dimensions and the architectural decoration of the various buildings underline the working hypothesis of a royal residence in the area. Typically, there seems to be no common orientation of the buildings themselves. Rather, they follow the topography of the site. This easily conforms to the various functions that the structures and installations within the *basileia* had to fulfil (see above). For the time being, we shall focus on three representative buildings:

Structure 1 is located in squares C–D/5–6, at the western tip of the survey area (see Fig. 15). It consists of a clearly identifiable building whose main components are two major rooms in alignment, built of well-set walls made of substantial ashlars.<sup>25</sup> At the northern

<sup>&</sup>lt;sup>23</sup> On the Nabataean houses at al-Zantūr, see Kolb 2007: 156–158, 163– 168; 2003.

<sup>&</sup>lt;sup>24</sup> Schluntz (1999) argues that the 'Great Temple' could have been the main audience hall of the Nabataean kings. Although at first sight it seems strange to place the main audience hall in a different sector of the city than the royal residence, there are several good arguments for her hypothesis; on this see Schmid, forthcoming, *b*.

<sup>&</sup>lt;sup>25</sup> According to the description and the photograph in Bachmann, Watzinger & Wiegand 1921: 33, fig. 16, our Structure 1 is what the Denkmalschutz-Kommando took as 'a building of about 30 m in length,



**FIGURE 17.** NEPP: an overall view of Structure 1 overlooking Wādī Mūsā. In the centre, the presumed courtyard with the column in situ indicated by an arrow (S.G. Schmid).



**FIGURE 18.** *NEPP: a small capital with floral decoration and acanthus leaves from Structure 1 (S.G. Schmid).* 

side of this long rectangular area, two more rooms can apparently be located, indicating that the building continued northwards. Besides the still standing walls, there are clearly distinguishable areas where the debris and tumbles of stones are standing at a considerable height, and other areas where major depressions are visible (Fig. 17). Altogether, these form rectangles that correspond fairly precisely to the shape of the rooms that can be identified so far. The considerable difference in height between these areas is likely to suggest a twostorey construction, at least for the two main rooms or areas within Structure 1. Within the building, the main space is situated at its eastern end and measures  $c.10 \times$ 15 m. Inside, one column, consisting of a base and two drums, still seems to be standing *in situ* (Fig. 17, arrow).

consisting of two rooms'. They also mentioned the one column that still seems to be *in situ* (see Bikai & Perry 2000).



FIGURE 19. NEPP: an overall view of Structure 2 from the north-west. In the background, the socalled Royal Tombs (S.G. Schmid).



FIGURE 20. NEPP: one of the presumed courtyards of Structure 2 from the south-west, overlooking Wādī Maṭāḥah (S.G. Schmid).



**FIGURE 21.** NEPP: a huge Nabataean capital and other architectural elements from Structure 2 (S.G. Schmid).

It is therefore likely that this area was once a courtyard. Within this supposed courtyard lay a huge monolithic column — or at least a fragment of it — of bluish granite stone, of the same type as the one used in the so-called Blue Church at Petra (Bikai & Perry 2000). In both areas, column drums, capitals, and other architectural elements of different sizes were found, clearly indicating an upper storey in both parts. Furthermore, a small area in the south-west corner of the structure may well be a staircase.

We may, therefore, visualize a huge, two-storey building with substantial structures built around courtyards. The inner facades of the two areas were probably once lavishly adorned, as indicated by several fragments of architectural decoration located within the piles of debris. To these elements, which seemingly originated from the upper storey, belong fragments of small capitals in the round and pilaster capitals with floral decoration and acanthus leaves (Fig. 18). These closely resemble similar capitals (in style and size) from Alexandria and especially from the 'Palazzo delle Colonne' in Ptolemaïs, where they were used for an *aedicula* facade in the upper storey of the palace.<sup>26</sup> The size, organization, and architectural features of Structure 1 clearly indicate that it must belong to an outstanding building.

Structure 2 (Figs 19 & 20) is located in the northern part of the NEPP area (Fig. 15, squares D-E/4-5), roughly parallel to the course of Wadī Mațahah. Its overall dimensions — even larger than Structure 1 described above — are roughly 40 x 30 m. In order to occupy the prominent spot overlooking Wādī Maţāḥah, the construction of huge substructures was necessary (visible on Fig. 19). As in Structure 1, several areas of high-standing debris and lines of walls underneath can be distinguished from areas almost free of fallen stones or characterized by considerable differences in depth (Fig. 20). Fallen column drums and several columns apparently in situ indicate the existence of courtyards, at least partially of a peristyle-type. Within this large, ruined architectural complex, the huge main building is clearly recognizable. It is characterized by massive walls facing north, i.e. towards Wādī Maţāhah (see Fig. 15), and shows two protruding, small rectangular structures on its southern side, as well as a small water basin at its central southern tip. Inside the building, the remains of a large colonnaded courtyard are marked by three columns apparently forming a right angle in the centre. Immediately to the north of that courtyard, there is a very interesting combination of rooms (square E5 on Fig. 15): specifically, the central vestibule-like room provides access to two large rooms located to the east and west of it. The

<sup>&</sup>lt;sup>26</sup> On the typology of similar capitals from Petra and the comparative examples from Alexandria and Ptolemaïs, see McKenzie 1990; 2007: 80–118; most recently on the 'Palazzo delle Colonne', see Bonacasa 2009.



FIGURE 22. NEPP: a small Nabataean blocked-out pilaster-capital from Structure 2 (S.G. Schmid).

western room was accessible through a passage between two columns, while the eastern room opened through a substantial doorway. This combination of rooms strongly resembles a structure in the luxurious Nabataean mansion on al-Zantūr IV (Kolb 2007: 167-168; 2003: 234), being the representative banqueting halls of the villa and clearly modelled on the prototypes provided by Hellenistic palaces, i.e. the so-called 'Flügeldreiraumgruppen' in the specialized literature.<sup>27</sup> Even more probable than in the case of Structure 1 is the existence of the second storey, as exemplified by the different sizes of columns as well as the numerous fragments of architectural decoration of the highest quality (Figs 21 & 22). This is also underlined by the existence of a small, rectangular structure within the irregularly shaped west part of the complex, strongly resembling the so-called staircase towers, popular in the architecture of the region, including the palaces of the Hasmoneans and of Herod the Great (Negev 1973; Netzer

<sup>27</sup> See Vössing 2004: 101–102 (critical about the widespread diffusion) with further references; Hoepfner 1996: *passim*, esp. 13–15.



FIGURE 23. NEPP: the upper part of Structure 3 from the south-east (S.G. Schmid).

2001: 155, 167–168; 1991: 156, 170, 263, 601).

Structure 3 is situated along Wādī Mūsā in the south part of the NEPP area (Fig. 15, squares E-F/7; Fig. 23). It is a narrow, but very long, building, constructed on massive substructures built in a chequerboard manner on the steep slope of the Wādī Mūsā depression. Apparently, the main structure was built on two levels. A long gangway is located on the higher, rear part of the structure (Fig. 23), and a colonnaded hall opening towards Wādī Mūsā is located on the lower foreground of it. Some of the columns are still standing in situ.28 The clearly representative character of Structure 3 is further underlined by the large number of slabs cut from a variety of white and polychrome marbles, basically the same types as those reported from Umm al-Biyārah (see Fig. 6). A building such as Structure 3 can hardly be interpreted independently, but rather as an integral component of a larger architectural entity. Most probably, Structure 3 served as a monumental, representative facade for the eastern part of the NEPP area, facing the Wādī Mūsā depression, where the main communication axis of the ancient city was located. This again confirms the interpretation of the NEPP area as the site of a large complex of interrelated buildings and installations, which displays a strong monumental and representative character.

It is striking that in addition to the densely occupied areas, there seem to be other sectors within the NEPP area that are seemingly deprived of any significant structures visible on the surface. These are situated on top of the area, specifically in the flat and featureless north-eastern corner (see Figs 2 & 15). There, one could expect the gardens and water basins as they are known from other palaces in the Near East, especially from the royal residences of Herod the Great, for example in Jericho and Herodeion (as compiled in Bedal 2003: 162–183).

Last but not least, it is worth pointing out that exactly at the spot where the Khubthah massif meets the area of the presumed *basileia*, the so-called Palace Tomb is carved into the rock, the largest rock-cut facade in Petra and the one with the richest architectural decoration (Fig. 19, left). Ideally, this could be the tomb and/or *heroön* of the kings of Petra within the *basileia*, exactly as in other Hellenistic royal quarters. As for the chronology of the structures described above, surface pottery covers

<sup>28</sup> It is very likely that our Structure 3 is the 'columned corridor open towards the south that was closed in the Byzantine period' of the Denkmalschutz-Kommando (Bachmann, Watzinger & Wiegand 1921: 33). the most prominent phases of Nabataean Petra, i.e. from the second half of the second century BC to the early second century AD. Further detailed observations may be possible for specific buildings and structures, but this needs to be verified during the second season of this project, planned for 2012.

#### Conclusions

The conclusions derived from the initial fieldwork conducted by the IUBP and NEPP should be considered as tentative and preliminary. Nevertheless, for the first time in the history of archaeological explorations in Petra, they demonstrate a feasible indication of the existence of Nabataean royal residences, spectacularly located, and of the design and affluence which may only be related to the highest level of Nabataean society. It is not accidental that these two areas utilize not only the most prominent locations, notably situated at each end of the Petra Valley, but equally feature a potentially defensive character. Further exploration of the structures located in these areas should therefore yield not only a wealth of material culture, but equally help to understand the patterns of the political geography of Petra in the Nabataean period.

Furthermore, the continuation of these projects has great potential in terms of understanding the spatial and temporal development of Petra, a city that so far has been mainly known for its tombs, temples, and churches. For example, it will be of great interest to attempt to visualize the phases of the gradual expansion of the settlement in the Petra Valley, with the knowledge of where, when, and how the most important structures evolved. The NEPP site itself holds great promise in terms of its intra-site spatial organization and development. Equally important will be the investigation of the IUBP and NEPP structures with regard to their utilization in the Roman period, i.e. after the end of Nabataean monarchy. Finally, the projects open a new avenue for research in Petra, which will be concerned with the placing of the Nabataean royal quarters within a larger framework of comparable structures in the Hellenistic and Roman worlds.

#### Sigla

AJ

BJ

Flavius Josephus, *Antiquitates Judaicae*. Flavius Josephus, *Bellum Judaicum*.

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#### Authors' addresses

Stephan G. Schmid, Winckelmann-Institut, Humboldt-Universität, Unter den Linden 6, 10099 Berlin, Germany. e-mail stephan.g.schmid@culture.hu-berlin.de

Piotr Bienkowski, School of Arts, Histories and Cultures, University of Manchester, Oxford Road, Manchester M13 9PL, UK.

e-mail piotr.a.bienkowski@manchester.ac.uk

Zbigniew T. Fiema, Institutum Classicum/Dept. of World Cultures, PL 24, Unioninkatu 40a, FIN-00014 Helsinki University, Helsinki, Finland.

e-mail zbigniew.fiema@helsinki.fi

Bernhard Kolb, Departement Altertumswissenschaft, Klassische Archäologie, Petersgraben 51, 4051 Basel, Switzerland.

e-mail bernhard.kolb@unibas.ch

website www.auac.ch