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## **The Northeastern Petra Project: An Assessment**

### **Introduction**

This presentation concerns the final results of the survey phase of the Northeastern Petra Project (NEPP). The project is sponsored by Deutsche Forschungsgemeinschaft, the Cluster of Excellence “Topoi” and Humboldt University in Berlin, and is directed by the three co-authors. The survey area is located NE of the confluence of the Wādī al-Maṭāḥah and the

Wādī Mūsā, on the high hill overlooking the eastern end of the Colonnaded Street, and directly west of the Palace Tomb in Petra (FIG. 1). The site is *ca.* 450 x 400 m and is generally known as Rujum Umm aṣ-Ṣunaydīq. Although a number of large structures once existed in this area, these were only briefly reported by the explorers of Petra in the early 20<sup>th</sup> century (*e.g.* Brünnow and von Domaszewski 1904: 318-



1. The Petra Valley: 1. Town of Wādī Mūsā; 2. The Shara mountains; 3. The so-called “Great Temple”; 4. The NEPP Area (by S. G. Schmid).

319; nos. 412-415; Musil 1907, map following P. 343; Dalman 1908: 314-329; Bachmann *et al.* 1921: 32-33), and never properly documented. To redress this significant omission, the NEPP conducted six intensive survey campaigns between 2010 and 2016. Specifically, the activities included the description, the measuring and photographing of the ruined structures, the documentation of the ruins using the advanced, electronic methods in order to provide a reliable map of the area, the documentation of extant architectural decoration blocks, and the collection of surface ceramics. The preliminary results of the fieldwork have already been published (Schmid *et al.* 2012; Fiema and Schmid 2014; Schmid *et al.* 2015).

### Site Description

The NEPP area enjoys a unique location in the valley, dominating the entire city center and its main communication axis, and being visible from all over the city. Four significant factors characterize the area. The Nabataean diversion of the Mūsa stream from the Siq into the Wādī Mudhlim and then through the Wādī al-Maṭāḥah into its original bed in the city center resulted in the creation of a separate quarter of the city, defined by the Wādī al-Maṭāḥah, the Wādī Mūsā and the facade of al-Khubtha. Secondly, the monumental steps to the top of al-Khubtha, that begin in the NE corner of the NEPP area, provided access to the cultic installations on top of Jabal al-Khubtha but could also have served as an emergency exit from the city. Thirdly, the area is directly connected to one of six aqueducts of Petra, the al-Khubtha conduit, which starts in modern Wādī Mūsā town, leads directly to the NEPP area and meets there a huge cistern which utilizes the water catchment system of the Khubtha massif. These two systems (aqueduct and runoff collection) could be used separately and together. Finally, at the spot where the Khubtha massif borders the survey area, there is the Palace Tomb - the largest and most decorated façade of Petra.

Except for the central-eastern and the NE parts of the area being relatively flat, the ground generally slopes down toward the surrounding wadis, featuring an uneven, disarticulated and often very steep surface. Altogether 19 structures were identified, generally marked by considerable stone tumbles (FIG. 2). Structures 1-13 and 19 are large, multi-roomed buildings or tight clusters of rooms and walls, with numerous architectural elements on the surface, while Structures 14-18 are smaller clusters of walls and rock-cut features. Basically, only Structure 5 and, to a certain degree, Structures 2 and 7 are located on a relatively even ground, the other 16 structures are on the slopes. Yet this difficult terrain was most successfully adapted through the massive use of retaining walls and artificial terracing, in order to create an area both convenient for construction and visually attractive.

A number of water-related structures, often partly built, partly rock-hewn, indicate that water was used not only for practical reasons but also for landscape-decoration. Examples include the distribution tank (WS 1 - *castellum divisorum*), interconnected basins set on different levels, whether as a progression of settling tanks or purely decorative (*e.g.* WS 2), and basins or small pools (WS 4-7) lined with hydraulic mortar, presumably utilitarian but also perhaps decorative or even cultic.

The NEPP recorded 943 architectural decoration elements inside or around the structures. The blocks range from numerous doorjambs, through column drums, bases and capitals, including blocked-out Nabataean types and highly decorative Attic-Ionic types, pilaster bases and capitals, to the elements of entablature (FIG. 3). The majority of the surface ceramics dated to the later 1<sup>st</sup> century BC-1<sup>st</sup> century AD, including large number of Eastern *terra sigillata* ware. Decorative marble fragments and mosaic tesserae were also found during the survey. Combined with the stylistic dating of architectural blocks found in the area, the construction and the main occupation phase of



2. The final (2016) plan of the NEPP architectural complex featuring large, monumental structures (ST 1-13, 19), smaller structures (ST 14-18) and larger water installations (WS 1-7) (by M. Holappa and J. Falkenberg).



3. Nabataean pilaster capital found during the NEPP explorations (by M. Dehner).

structures in the NEPP area should be dated to the late 1<sup>st</sup> century BC - end of the 1<sup>st</sup> century AD, although the presence of post 1<sup>st</sup> century ceramics indicates that the area continued to be occupied after the annexation of Nabataea in AD 106.

### Preliminary Interpretation and Parallels

Although the interpretation of the site can only be improved by excavations of some structures, a tentative hypothesis can be offered here. Important is the determination of the nature of occupation in the NEPP area, and of the function of the structures there. At first, the area enjoys unusual, isolated yet strategically superior location within the city centre, is self-sufficient in terms of water-supply and is easily defensible. Secondly, and as compared against other areas in the Petra Valley, the occupation in the NEPP area appears distinctly uniform with regard to the utilized architectural design, the decorative repertoire, as well as to surface ceramic material, all datable to the late 1<sup>st</sup> century BC-1<sup>st</sup> century AD. Thirdly, the majority of the NEPP buildings are characterized by the monumental architectural design which consistently



better reflects a high degree of ostentatious display, representation and opulent life-style rather than purely utilitarian habitation. Finally, the architectural decoration is of the highest quality, most favourably comparing with that of other public structures in Petra while mirroring the prevalent trends in the luxurious architecture of the eastern Mediterranean. It is then plausible to suggest that the NEPP area enjoins characteristics which are unique in Petra, potentially reflecting social distinction of the residents as well. Thus the interpretation of the area invites a single overarching hypothesis rather than separate ones offered to each structure. Rather than isolating the NEPP structures, it is more reasonable to consider these as components of a single architectural complex, ostensibly of a palatial type and presumably occupied by the Nabataean elites.

Regarding Nabataean aptitude for syncretic architectural solutions and their ability to absorb and successfully transform or modify foreign cultural influence, it may be expected that Nabataean palatial-type residences would combine the dominant and most fashionable elements of architecture and decoration prevailing in the Mediterranean at that time (see Schmid 2009A: 337-341; Tholbecq 2007: 137-138, for foreign influences on Nabataean architecture). Such proposition is supported by the results of the International Wādī Farasa Project which, since 1999, has been exploring one of Petra's most remarkable and significant funerary complexes, the so-called Soldier's Tomb complex (*e.g.* Schmid 2009B). The excavations there demonstrated that the overall design, decorative program and the functioning of such complexes were apparently very closely related to the luxury architecture of the Hellenistic and the Early Roman Mediterranean, *i.e.* rich villas and palaces. It is therefore reasonable to assume that if the Nabataeans consciously patterned the architecture of their major funerary complexes on examples of opulent palatial residences of the Ptolemies, Seleucids, Herodians

or Romans, the residences of Nabataean elites should at least partially reflect the same external influences and fashion.

It is thus further suggested that the NEPP complex could possibly be identified with the Nabataean royal quarters. Notably, the passages in Flavius Josephus (*JA* 14, 4 [16]; *BJ* 1, 2 [125]) imply that by the mid-1<sup>st</sup> century BC, Petra was considered a royal city where their kings resided. With regard to the main *urbanistic* features of the area, *i.e.* being a large sector separated from the rest of the city, and enjoying clear advantages in terms of the dominant location, water supply, visibility, defensibility, access, the NEPP complex strongly resembles the *basileia* - the royal quarters - in the Hellenistic cities such as Antiochia, Seleukia, Babylon, Aī Khanoum, and Alexandria in Egypt (see Hoepfner and Brands 1996; Held 2002, for the characteristics and examples of Hellenistic *basileia*). In such case, the Palace Tomb would ideally be the tomb and/or heroön of the kings of Petra within the *basileia*, as in other Hellenistic royal quarters.

Generally, Hellenistic *basileia* displays a relatively compact, orthogonal spatial design set in rectangular frame. However, the NEPP complex features no common orientation, symmetry or axuality enjoined by major structures; rather they follow the topography of the area, being dispersed throughout, and generally without any compelling functional connection between each other although there are some exceptions to the latter (*infra*). Perhaps an orthogonal design and a formal spatial relationship were never fully intended in Petra due to the difficult terrain. Only the southern buildings, located in the sloping area, display a certain degree of spatial and functional association, as well as gradual changes in their orientation corresponding to the orientation of the valley. If then the *basileia* at Petra was designed in an intentionally dispersed form, the influence of other types of luxurious palatial residences of the period must be considered (*e.g.* Nielsen 1994; Foerster 1996),

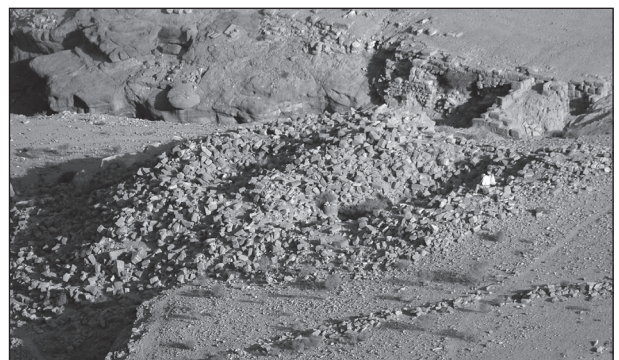
such as the Hasmonean-Herodian palaces. For example, the Herodian palaces in Jericho, the Western Palace at Masada and the Herodium complex feature dispersal of structures but only to a certain degree (for discussion, see Netzer 2001, 2009; Förtsch 1996). In fact, some Late Republican /Early Imperial Roman palaces and suburban villas designed for *otium* may provide good parallels in terms of more dispersed arrangements of leisure buildings and a more informal overall design. Such examples may include the late 1<sup>st</sup> century BC large *villa marittima* Pausilypon near Naples (Günther 1913; Varriale 2007), Domitian's *villae* at Castel Gandolfo and by Lago di Sabaudia (Mielsch 1997, 70-74; Hesberg 2009), as well as other luxurious residences of the Roman elites. Evidently, the scattered location and lack of common orientation for most of the NEPP structures is intentional as it brings a relaxed informality to the design. Such solution, allowing for seemingly “Empty” B spaces, invites gardens, parks, pools, porticoes and pavillions, for which parallels can also be found in Achaemenid royal residences (see, e.g. Nielsen 1994: 49-51, 2001; Mielsch 1997: 117-128).

With the underlying assumption that the NEPP architectural complex may be interpreted as a palatial, possibly royal, quarter, the individual structures invite some preliminary interpretation. Structure 1 enjoys the best location in the NEPP area, overlooking the entire valley (FIG. 4). Furthermore, considering the probability of the second storey accommodating the architectural members of the smaller size, the building, in its early phase, could have been a large, rectangular hall, which might have served as a main reception/banqueting space of the complex and the structural as well as decorative parallels include the Palazzo delle Colonne in Ptolemaïs and the First Herodian Palace in Jericho (for discussion of these, see Förtsch 1996: 83-87).

Structure 2, probably the principal building at the site, might have served a number of re-

presentational functions (FIG. 5 Left). Its central part resembles the “compact” form of the main structures at Masada and the First Winter Palace at Jericho, the Ptolemaïs “Palazzo” and some Seleucid governors’ palaces, characterized by linear, closed architecture, a multitude of small rooms often associated with corridors, and only a few larger *oeci* (Nielsen 1994: 204). The standard element in the Hellenistic palatial architecture, *i.e.* the peristyle courtyard, usually two storey high and with the upper order in smaller size, is relatively small in Structure 2. It appears here in combination with two rooms flanking a central space, all located in the northern part of the structure and a large room on the eastern side, perhaps the main audience hall. The latter, being also two storey high and with two orders of different size, may recall opulent palatial *oeci*, just like the great andron in the Palace of Pella, Baugruppe II, (Hoepfner 1996: 33-36, figs. 25, 29; Nielsen 1994: 88-91) although in Structure 2 it is entirely open on its western side.

Structure 9 is a decorative, leisure pavillion (possibly a nymphaeum), located exactly in the point of Petra's topography where the N-S approach axis from the outer Siq is dramatically changed into a more E-W axis of the center of the city. Therefore, the main function of Structure 9 was to visually ease the change in the axuality of the area through the skillful 3-dimensional combination. The visually pleasing transition from the straight into the perpendicular perspective is furthermore underlined by the overall design of the building, its elegant



4. Structure 1. View from SE (by M. Dehner).

internal appearance and marble decoration. The building is not a perfect semicircle, as previously reconstructed, but rather a somewhat flattened “Teardrop” – again an intentional visual effect (FIG. 5 Right).

For other structures there is a preference for utilizing hill slopes by creating massive substructures and artificial terraces. These devices dramatically accentuated the constructions on several levels, but were equally practical solutions to exhibit the raised buildings. The southern buildings (3, 10, 12, 13, 19) obscured the slope through a series of façades set on different levels, and played an important rôle in defining this complex against the overall design of the city (FIG. 6). Structure 10 might have been the central element in the design of the southeastern part of the NEPP complex, *i.e.* a monumental stairway to the complex, associated with a propylon and the façade-buildings mentioned above, possibly reflecting such structures in some Hellenistic palaces, as, for example, the southern façade of the *basileia* at Pella (see Brands 1996: 62-67, for relevant examples).

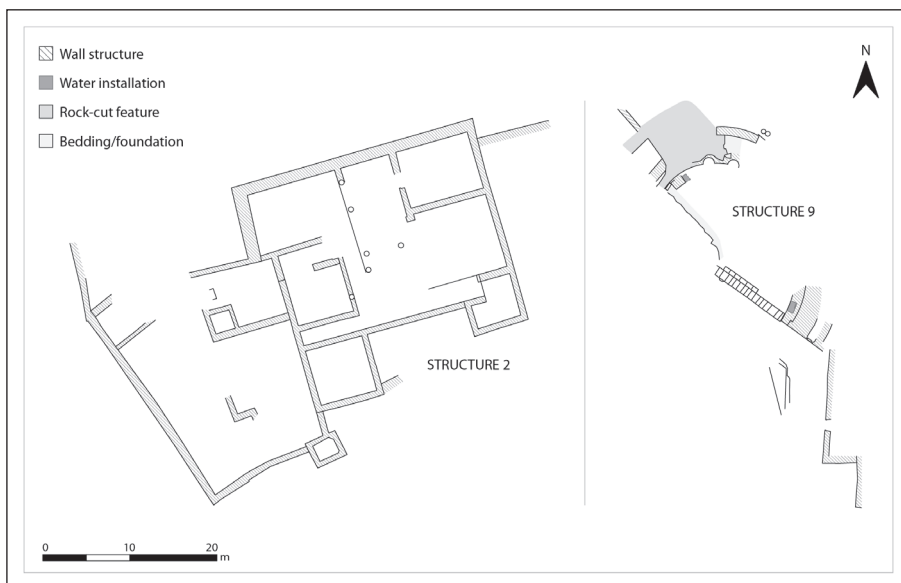
Residential/Recreational buildings or pavilions include Structures 6 and 4. The central location of Structure 5 is indicative of its importance even though its appearance and function are ambiguous. Perhaps it was an elevated, open-air sanctuary platform approached

by staircases, a kind of a Semitic *motab* ostensibly associated with the abundance of water. If so, it would manifest the Nabataean propensity for mixing fashionable foreign influences with native traditions and symbolic meaning.

## Conclusions

The NEPP complex appears as an unique hybrid. Its location and function point to a connection with Hellenistic *basileia*. The spatial organization, which includes a “Theatrical” layout, an organic use of landscape, an emphasis on the views generated, a setting of structures on slopes or cliff-edges, and a multitude of recreational installations, finds reflection in some Hasmonean/ Herodian country palaces and Late Republican–Early Imperial *otium* structures. Yet, the comparison is more with the *concept* than with the specific design. This means that Structures 1 and 2 find affinities with some Hellenistic prototypes and the Judean palatial residences, but neither the type nor the organization of such palaces provide a comprehensive parallel, even if the architectural decoration repertoire of NEPP complex reflects the styles and fashion characteristic of that *milieu* (1<sup>st</sup> century BC-AD in the East).

As for the urban hierarchy at Petra and the current opinion on the royal residence there, the “Great Temple” complex (the royal au-



5. The plan of Structure 2 (left) and Structure 9 (right) (by M. Holappa).





6. Structure 3 (Center) and Structure 10 (Right). View from SE (by M. Dehner).

dience/banqueting hall and *paradeisos*) in the city center was possibly intended as a more ostentatious, public and “official” display of Nabataean kingship while the NEPP complex, if indeed royal, appears more as a private and the habitual residence of the king. The former displays traits adopted from Herodian and Hellenistic architecture while deliberately demonstrating Nabataean kingship as rooted in the tradition of the Achaemenids and Alexander (for discussion, see Kropp 2009: 55-57; Schmid 2013: 261-264). On the other hand, the hypothetical royal residence in the NEPP area was also meant to impress through its exceptional location and appearance, but the monumentality lay more in the overall development of the area rather than in specific structures. Its isolated and defensible context points to a degree of seclusion, as if underlining a desire for privacy and relaxed elegance. The components appear to combine the official, utilitarian, recreational, and traditional, perhaps cultic, aspects. Despite its fashionable Hellenistic-Roman veneer, manifested in the architectural design and decoration, the complex also harks back to previous traditions (e.g. Achaemenid) mixed with local elements such as the use of water and the landscaping of the rocky terrain.

The results of the NEPP investigations also encourage a re-examination of the nature of occupation in the valley. Undoubtedly, the location and the actual arrangement of the palatial

complex on the NE hill bore heavy impact on the development of the overall urban concept in Petra. Despite its seemingly “Isolated” location, the NEPP complex clearly dominated the entire valley, and its architectural design served to define the fast-growing urban center. For anyone proceeding down from the Siq and continuing along the Colonnaded Street, the appearance of the complex must have produced an unforgettable impression of a single, preeminent feature. In addition to its dominance in the urban fabric of Petra, the NEPP complex would have instilled awe and admiration and would, undoubtedly, generate clear message referring to the Nabataean monarchy and its cultural heritage and allegiance. Undeniably, the “Cityscape” of Nabataean Petra, dominated by a single street with important display buildings on each side may allude to the wealth generated by mercantile enterprise while highlighting spectacular religious establishments serving both locals and visitors. But there seems to be more to it than just a commercial success turned into a flourishing metropolis. Josephus’ designation of Petra as a “Royal City” should mean more than just a city where a king resided, one adorned by temples, public buildings and palaces. The Nabataean Petra then becomes more like a physical embodiment of Nabataean kingship, one which, in the context of the political and cultural aspirations of the Nabateans, should be seen as a showcase of Hellenization.

## Bibliography

- Bachmann, W., Watzinger, C. and Wiegand, Th. 1921. *Petra*. Wissenschaftliche Veröffentlichungen des Deutsch-Türkischen Denkmalschutz-Kommandos, Heft 3. Berlin/Leipzig: Walter de Gruyter and Co.
- Brands, G. 1996. Halle, Propylon und Peristyl - Elemente Hellenistischer Palastfassaden in Makedonien. Pp. 62-75 in W. Hoepfner and G. Brands (eds.), *Basileia. Die Paläste der hellenistischen Könige*. Mayence.
- Brünnow, R.E., and von Domaszewski, A. 1904. *Die Provincia Arabia, I. Die Römerstrasse von Mâdebâ über Petra und Odruh bis el-Akaba*. Strassburg: Trübner.
- Dalman, G. 1908. *Petra und seine Felsheiligtümer*. Leipzig: Hinrich'sche Buchhandlung.
- Fiema, Z.T. and Schmid S.G. 2014. Nabataean Basileia and the Earthquake of AD 363 in Petra: Some Considerations. *Mediterraneo Antico* XVII- 2: 419-432.
- Foerster, G. 1996. Hellenistic and Roman Trends in the Herodian Architecture of Masada. Pp. 73-119 in K. Fittschen and G. Foerster (eds.), *Judaea and the Greco-Roman World in the Time of Herod in the Light of Archaeological Evidence*. Göttingen.
- Förtsch, R. 1996. The Residences of King Herod and their Relations to Roman Villa Architecture. Pp. 55-72 in K. Fittschen and G. Foerster (eds.), *Judaea and the Greco-Roman World in the Time of Herod in the Light of Archaeological Evidence*. Göttingen.
- Günther, R.T. 1913. *Pausilypon. The Imperial Villa near Naples. With a Description of the Submerged Fore-shore and with Observations on the Tomb of Virgil and on Other Roman Antiquities on Posilipo*. Oxford: University Press.
- Held, W. 2002. Die Residenzstädte der Seleukiden. Babylon, Seleukeia am Tigris, Ai Khanum, Seleukeia in Pieria, Antiocheia am Orontes. *Jahrbuch des Deutschen Archäologischen Instituts* 117: 217-249.
- Hesberg, H.V. 2009. Le Ville Imperiali dei Flavi: *Albanum Domitiani* Pp. 326-333 in F. Coarelli (ed.), *Divus Vespasianus. Il bimillenario dei Flavi*. Milano: Montadori Electa.
- Hoepfner, W. and G. Brands. 1996. *Basileia*. Die Paläste der Hellenistischen Könige: Mayence.
- Kropp, A.J.M. 2009. Nabataean Petra: the Royal Palace and the Herod Connection. *Boreas* 32: 43-59.
- Mielsch, H. 1997. *Die Römische Villa. Architektur und Lebensform* (Munich).
- Musil, A. 1907. *Arabia Petraea, II. Edom. Topographischer Reisebericht, I. Teil*. Vienna: Hölder.
- Netzer, E. 2001. *Hasmonean and Herodian Palaces at Jericho. Final Reports of the 1973-1987 Excavations, I. Stratigraphy and Architecture*. Jerusalem: Israel Exploration Society.
- 2009. Palaces and Planning of Complexes in Herod's Realm. Pp. 171-180 in D.M. Jacobson and N. Kokkinos (eds.), *Herod and Augustus*. Papers Presented at the IJS Conference, 21<sup>st</sup>-23<sup>rd</sup> June 2005. Leiden: Brill.
- Nielsen, I. 1994. *Hellenistic Palaces. Tradition and Renewal*. Aarhus: Aarhus University Press.
- 2001. The Gardens of the Hellenistic Kings. Pp. 165-188 in I. Nielsen (ed.), *The Royal Palace Institution in the First Millenium BC*: Aarhus.
- Schmid, S.G. 2009a. Nabataean Royal Propaganda. Pp. 325-360 in D.M. Jacobson and N. Kokkinos (eds.), *Herod and Augustus*. Papers Presented at the IJS Conference, 21<sup>st</sup>-23<sup>rd</sup> June 2005. Leiden: Brill.
- 2009b. Überlegungen zum Grundriss und zum Funktionieren nabatäischer Grabkomplexe in Petra. *Zeitschrift des Deutschen Palästina-Vereins* 125: 139-170.
- 2013. Foucault and the Nabataeans – or What Space Has to Do with It. Pp. 251-269 in M. Mouton and S.G. Schmid (eds.), *Men on the Rocks. The Formation of Nabataean Petra*. Berlin
- Schmid, S.G., Bienkowski, P., Fiema, Z.T. and Kolb, B. 2012. The Palaces of the Nabataean Kings at Petra. Pp. 73-98 in L. Nehmé and L. Wadeson (eds.), *The Nabataeans in Focus: Current Archaeological Research at Petra*. Supplement to the Proceedings of the Seminar of Arabian Studies 42. Oxford: Archaeopress.
- Schmid, S.G., Fiema, Z.T., Bienkowski, P., and Kolb, B. 2015. Documenting Nabataean Royal Residences in Petra. Pp. 166-181 in Z. Weiss (ed.), *Ehud Netzer Volume*. Eretz-Israel, vol 32. Jerusalem: Israel Exploration Society.
- Tholbecq, L. 2007. Nabataean Monumental Architecture. Pp. 103-143 in K.D. Politis (ed.), *The World of Nabataeans*. Volume 2 of the International Conference "The World of the Herods and the Nabataeans" held at the British Museum, 17-19 April 2001: Stuttgart.
- Varriale, I. 2007. La Villa Imperiale di Pausilypon. Pp. 147-165 in R. Ciarello (ed.), *La Villa Romana*. Naples: L'Orientale.