

THE INTERNATIONAL WĀDĪ AL-FARASA PROJECT (IWFP) EXPLORATION SEASON 1999

by

Stephan G.Schmid

I. Introduction

The International Wādī al-Farasa Project (IWFP) is carried out in collaboration between the Department of Antiquities of Jordan and the Association for the Understanding of Ancient Cultures (AUAC), based in Basel (Switzerland), sponsored by the Palestine Exploration Fund (PEF, London) and is jointly directed by Fawzi Zayadine and the author. During an exploratory visit to Wādī al-Farasa in May 1999, a first examination of the state of the different monuments was elaborated, leading to a detailed project study that will form the base for the five seasons of fieldwork that are planned.¹

Wādī al-Farasa, one of Petra's side valleys, is divided into two separate parts, Wādī al-Farasa West and Wādī al-Farasa East.² The present study will focus only on Wādī al-Farasa East and will point out just a few aspects of the project.

The principal monuments of Wādī al-Farasa East are located on two big and some smaller terraces that are connected to each other by different means (Fig. 1). The entire Wādī al-Farasa East can be considered as a small unit or system where the work of Nabataean town planners can be observed in a singular way because here not only were buildings constructed but also nature, on the one hand, and the monuments created by man on the other hand merge into a kind of domesticated natural environment. The different monuments of Wādī al-Farasa East

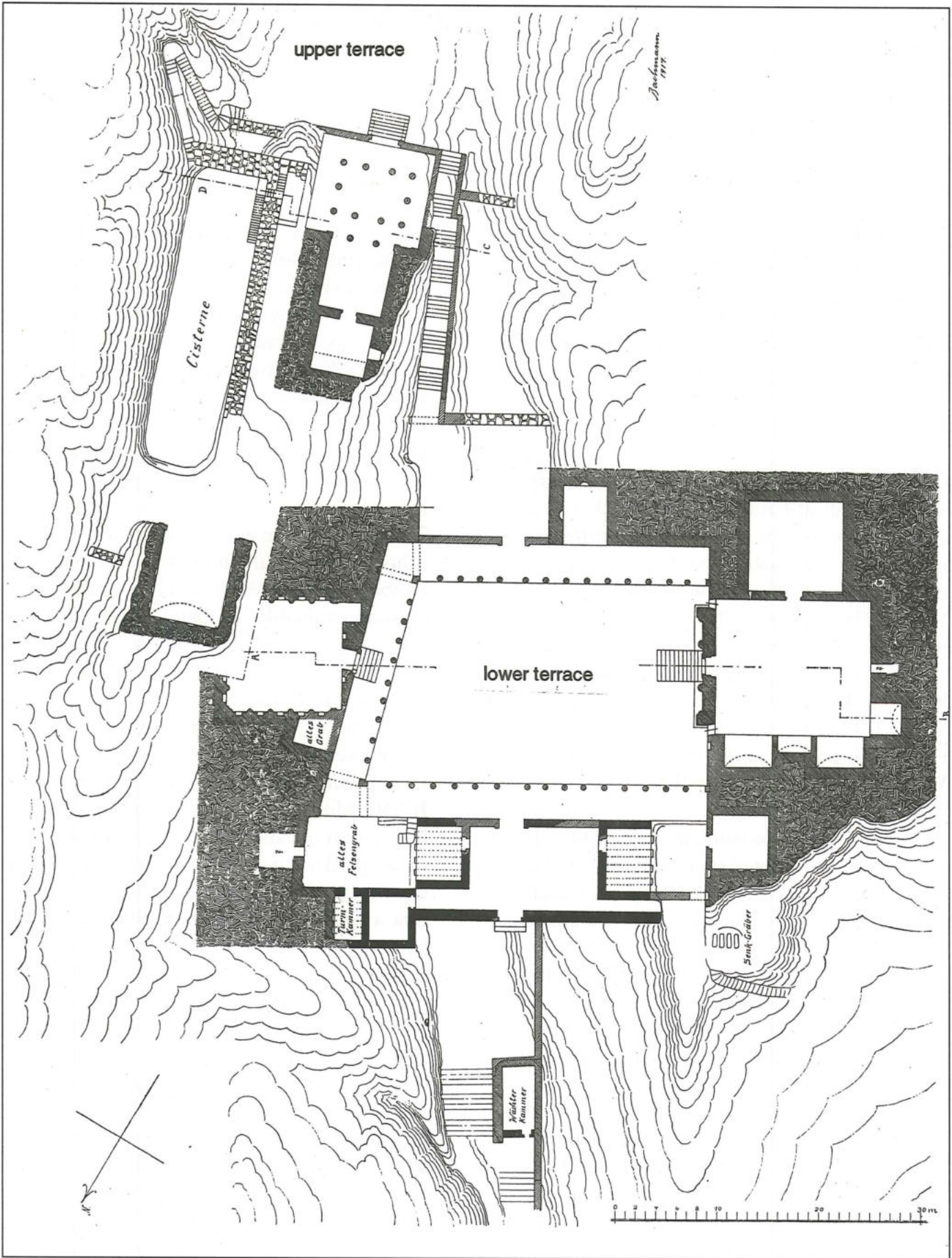
were systematically listed already at the end of the 19th century and published shortly afterwards (Brünnow and Domaszewski 1904: 271ff.). A few years later G. Dalman added some supplementary information (Dalman 1908: 188ff.). However, it is the merit of the *Deutsch-Türkische Denkmalschutzkommando* that visited Petra in December 1916 to have recognised the importance and the context of the different monuments in this part of the ancient city (Bachmann *et al.* 1921: 75ff.). The discoveries made by the German scholars are still the basis for any serious attempt to study Wādī al-Farasa East. Particularly valuable is their observation that most of the installations of Wādī al-Farasa East have to be considered as a whole and that they form the best archaeological confirmation for sophisticated Nabataean funeral complexes as described by the Turkmaniyya inscription (Bachmann *et al.* 1921: 89f.; CIS II 350; McKenzie 1990: 35 with n. 30). The inscription attests tombs, a courtyard, living areas, gardens, a garden *triclinium*, wells and even a grotto as being part of this complex that was devoted to Dushara. None of this has survived as evident in the area of the Turkmaniyya tomb, except for the tomb itself. The Wādī al-Farasa East is probably the only one, but for sure the best illustration for such multifunctional installations in the Petra area.

Connecting the mentioned inscription with the rock-cut installations on the lower terrace of Wādī al-Farasa East, namely the so called Roman Soldier Tomb (Fig. 2), that

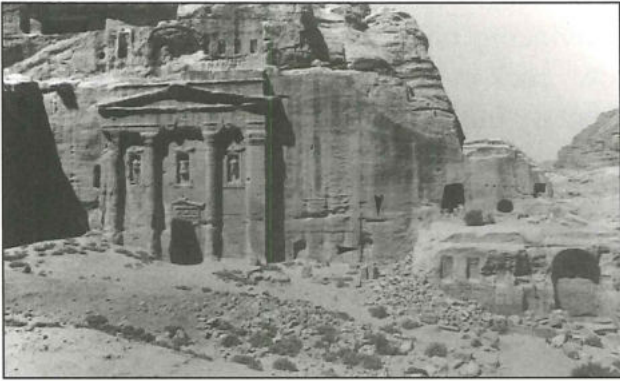
1. Besides the writer, the following persons participated at the different tasks of the 1999 exploration season (in alphabetic order): U. Bellwald (Amman/Berne), A. K. Heyne (Basel), D. Keller (Amman/

Basel), B. Kolb (Basel) and F. Zayadine (Amman).

2. A short description and detailed bibliography on both parts of Wādī al-Farasa can be found in Wenning 1987: 249-253.

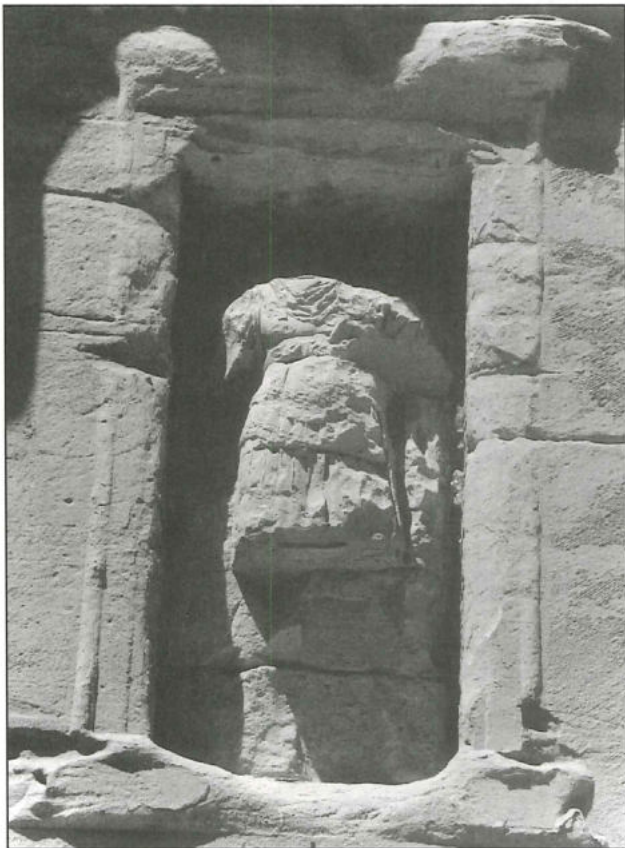


1. Petra, Wādi al-Farasa East. Main monuments on lower and upper terrace (after Bachmann *et al.* 1921: Fig. 66).

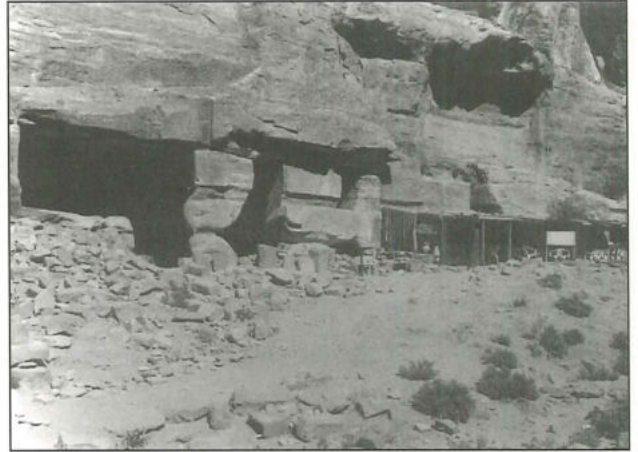


2. Petra, "Roman Soldier" tomb and hypothetical peristyle courtyard in front of it (photo by the author).

got its name after a cuirassed statue in the central niche over the doorway (Fig. 3) and the opposite *triclinium* 235 with its richly carved interior architecture (Figs. 4-5), a single unit was supposed, reconstructing a courtyard with three *stoai* between them (Fig. 6a) (Bachmann *et al.* 1921: 75ff.). This reconstruction has been widely accepted and based on it, further reflections on how the lower terrace of the Wādī al-Farasa East could have looked like in antiquity were



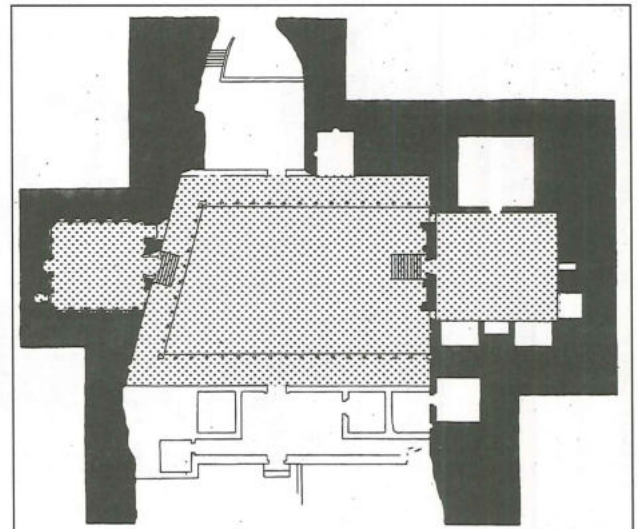
3. Petra, "Roman Soldier" tomb. Cuirassed statue in central niche (photo by the author).



4. Petra, *triclinium* 235 opposite the "Roman Soldier" tomb and collapsed architecture in front of it (photo by the author).

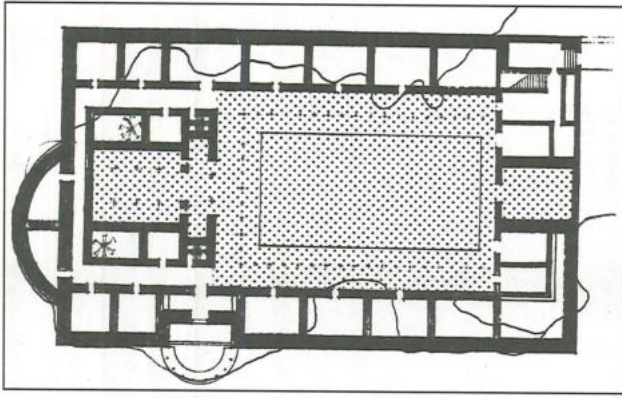


5. Petra, *triclinium* 235 (photo by the author)

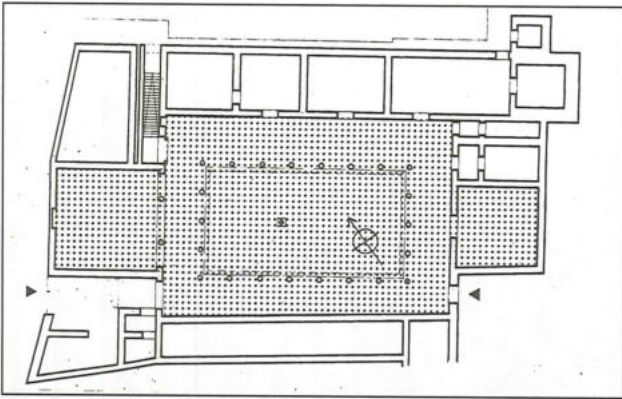


6a. Petra, the complex of the "Roman Soldier" tomb and *triclinium* 235 (after Bachmann *et al.* 1921: Fig. 66; modified by Schmidt-Colinet 1981: Fig. 78).

added (Fig. 7). However, it is often forgotten that this reconstruction - although a very

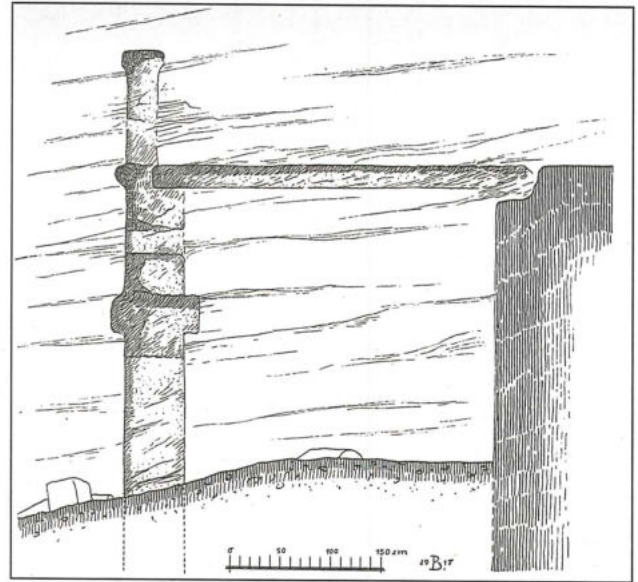


6b. Caesarea, Herod the Great's promontory palace (after Netzer 1999: Fig. 157).

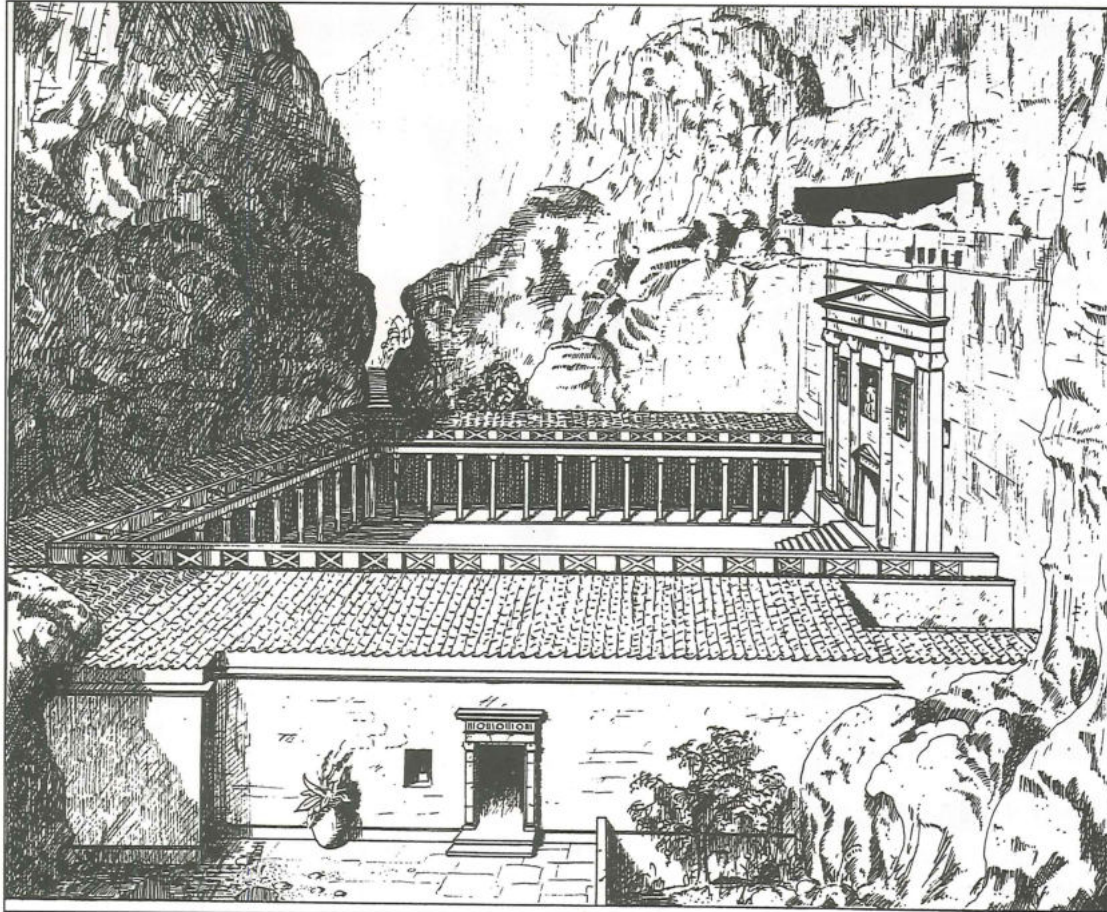


6c. Pergamon, house of Attalos (after Pinkwart and Stammnitz 1984: Fig. 15c).

convincing one - is based exclusively on a few rock-cut traces of possible supplementary built architecture (arrows on Fig. 2) that were interpreted as columns and a roof by Bachmann *et al.* (1921) (Fig. 8). In the 1930s both, the Roman Soldier Tomb and



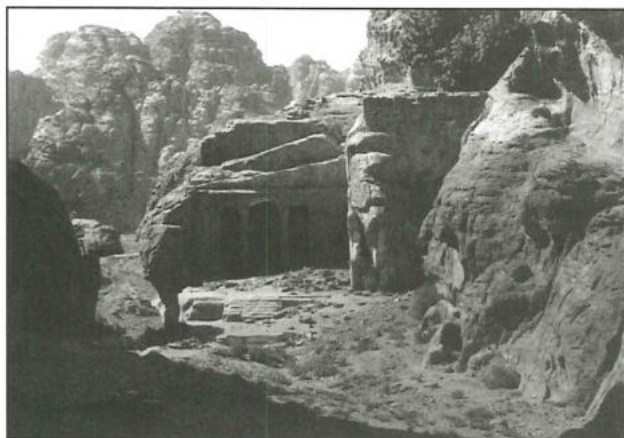
8. Petra, rock carvings near the Roman Soldier Tomb (after Bachmann *et al.* 1921: Fig. 73).



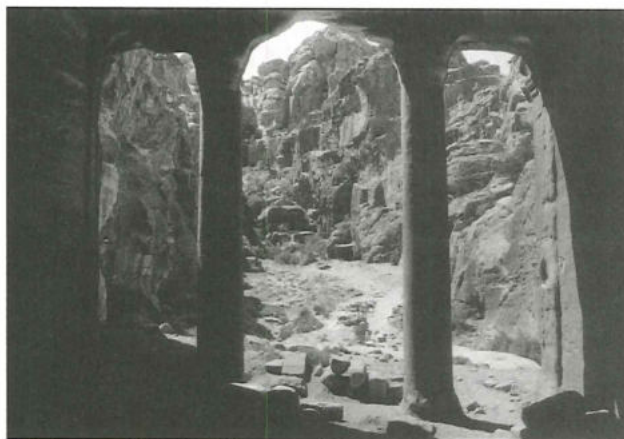
7. Petra, the complex of the "Roman Soldier" tomb and *triclinium* 235 (after I. Browning, *Petra*. London: Noyes Press, 1973: Fig. 135.).

triclinium 235, were cleaned by the Department of Antiquities (Horsfield 1938: 40 with nn. 5. 7). However, the large space between them has never been the object of any study.

The main constructed monument of the upper terrace is the so-called Garden Temple (Fig. 9). Its exact function is not known but as it contains no *loculi* -spaces to place coffins- it was probably not a tomb, and as its architecture recalls temple structures, it is supposed that it was used for cultic purposes.³ From inside the Garden Temple the entire upper terrace of Wādī al-Farasa East is visible (Fig. 10). Indeed, the rich vegetation in this otherwise very arid region re-

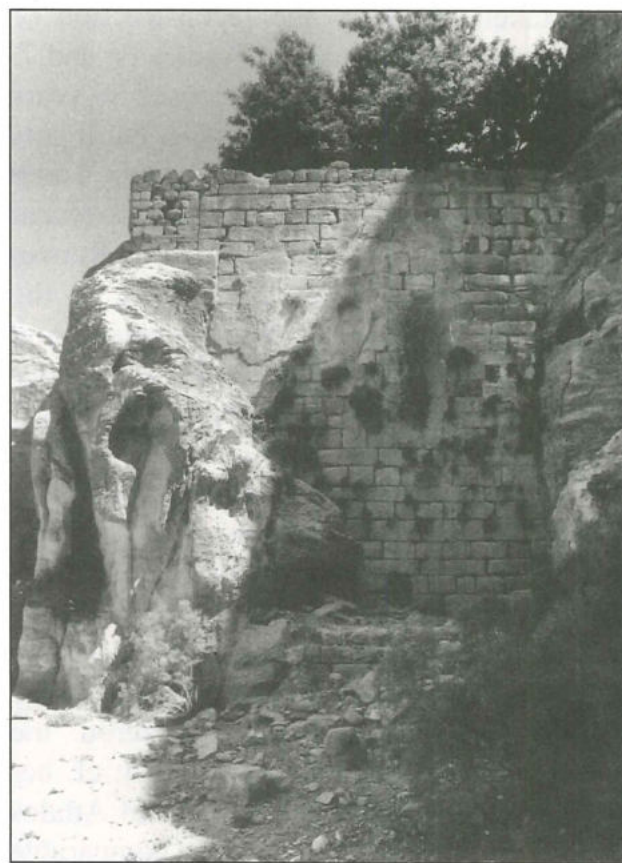


9. Petra, Wādī al-Farasa East. Upper terrace with "Garden Temple" and cistern (photo by the author).



10. Petra, Wādī al-Farasa East, Upper terrace seen from the "Garden Temple" (photo by the author).

minds one of a garden. But this garden or park was a well maintained one. Many steps lead up the steep rocks, some of them towards sophisticated water channels, collecting rain water and bringing it over many kilometres to cisterns and fountains. One such cistern is located to the right of the Garden Temple (Fig. 11), consisting of a huge stone-built wall and once covered on both sides with a thick layer of hydraulic mortar and therefore water-impermeable. Steps lead up to the cistern that once collected the water from different channels, including the one that higher up fed the Lion's Fountain (Wenning 1987: 219). The smaller terrace with the cistern is the highest point of the main installations in Wādī al-Farasa East and from here the lower areas were supplied with water.⁴



11. Petra, cistern on the upper terrace of the Wādī al-Farasa East (photo by the author).

3. On the other hand Wenning 1987: 252 interprets the "Garden Temple" as a funeral installation.

4. For further monuments in Wādī al-Farasa East, not mentioned in this short report, see Nehmé 1997a:

1040; Nehmé 1997b: 285; Wenning 1987: 249ff.; Dalman 1908: 188ff.; Brünnow and Domaszewski 1904: 271ff.

II. Preliminary Results and Reflections for Further Investigations

II. 1. Lower Terrace: Central Courtyard

Such an extravagant installation as the two main terraces of Wādī al-Farasa East with their smaller secondary terraces must have been quite extraordinary, even for the rich upper class of ancient Petra. The main beneficiary of the water supply system starting from the huge cistern on the upper terrace, must have been the Roman Soldier Tomb complex on the lower terrace of Wādī al-Farasa East, connected to the upper terrace by a series of small steps.

Especially as the Roman Soldier Tomb complex is rather outstanding within the installations of Petra, it is all the more surprising that no serious attempt has ever been undertaken to verify the reconstruction of the monuments such as on Figures 6a and 7. Indeed, the reconstruction proposed 80 years ago not only is a very logical one, but it puts the complex of the Roman Soldier Tomb into a very prominent company. In recent years research on Hellenistic and Roman palaces as well as on the houses of the wealthy upper class of the Hellenistic and early Roman Mediterranean improved considerably (for example Meyer 1999; Hoepfner and Brands 1996; Barton 1996; Nielsen 1994; Zoppi 1991-92; Raeder 1988; Jung 1984). The central courtyard is a common feature of most of such luxurious constructions and that the two most important rooms are usually located in a common axe on the smaller sides of that courtyard. Such is the arrangement for instance at Herod the Great's palace at Caesarea (Fig. 6b; cf. below) as well as in the huge house of Attalos in Pergamon (Fig. 6c).⁵ Further comparable

examples include for instance the "Palazzo delle Colonne" in North Africa and other palaces or palatial like buildings.⁶ But also, some of the palaces of the Roman emperors show exactly the same features, as does Domitian's palace on the Palatine hill in Rome (Barton 1996: 102ff.; Gibson *et al.* 1994). In most of the quoted parallels, one of the rooms axially flanking the central courtyard was used as a dining room, a *triclinium* or *andron*, as is the case at Wādī al-Farasa East (Meyer 1999: especially 113ff.; Hoepfner 1996; Barton 1996: 104; Gibson *et al.* 1994). The opposite room usually is interpreted as either an other dining room or as a reception hall, where the owner of the house, i.e. the king or the emperor in the case of the palaces received his visitors. In the case of the lower terrace of Wādī al-Farasa East, this room is replaced by the central hall of the Roman Soldier Tomb. It seems, therefore, that in a symbolic way, the entire complex offered to its deceased owner all the important functions of his former residence. This is especially interesting as it has been proposed that the Roman Soldier tomb may be the burial place of one of the later Nabataean kings (Wenning 1987: 251).

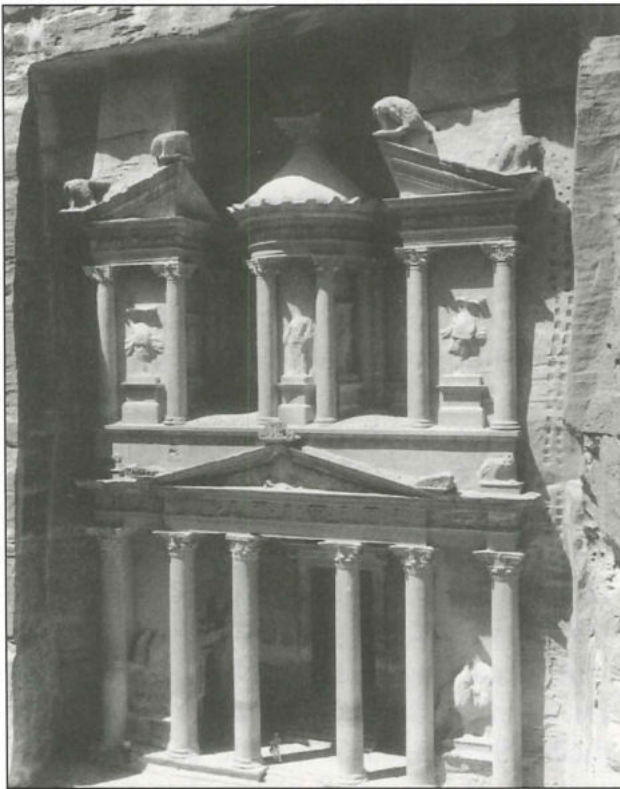
According to the proposed reconstruction (Figs. 1, 6a and 7), the original level of the courtyard between the *triclinium* and the Roman Soldier Tomb should be on a lower level as are the two monuments themselves (Bachmann *et al.* 1921: Fig. 68). Nowadays, considerable amounts of sand and dumped stones completely cover this space (Figs. 2, 4 and 18) and the modern level is clearly higher outside than inside the rock-cut installations. Therefore, already with a small scale cleaning, the hypothesis of a peristyle courtyard could easily be verified, and this

5. Wulf 1999: 168f. 174ff.; Radt 1999: 95ff.; Pinkwart and Stammnitz 1984: 36ff. The house of Attalos got its name not after one of the Pergamene kings, but after its last owner, a consul from the Roman imperial period. However, the original building goes back to the Hellenistic age.

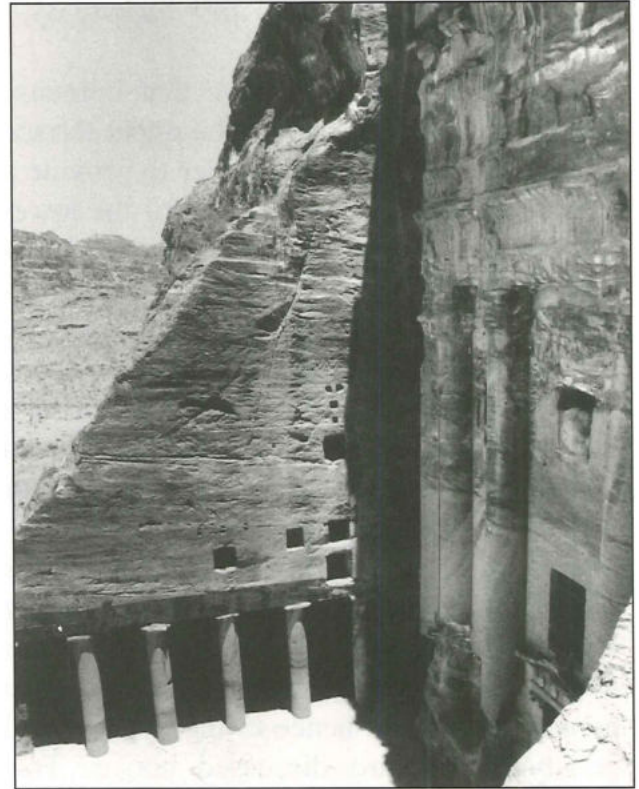
6. These and other examples are illustrated in S. G. Schmid, *The Hellenisation of the Nabataeans*. In *SHAJ VII* (in press) and in S. G. Schmid, *The Nabataeans. Travellers between Lifestyles*. In P. Bienkowski and B. MacDonald (eds), *The Archaeology of Jordan* (in press).

shall be one of the tasks of the IWFP.

This is all the more important as the aspect of what could be called the “third dimension” of Nabataean rock cut tomb façades has so far been neglected in most cases. There are, of course, obvious examples like the Khaznat Fir‘aun (Fig. 12) where a real propylon was indeed built or rather cut out of the rock, or, the Urn Tomb (Fig. 13) where on two sides *stoai* like the ones reconstructed at the Roman Soldier Tomb complex are still clearly visible (cf. Schmidt-Colinet 1981: 77ff.). Other examples, although not much did survive of the *stoai*, could be added, such as ad-Dayr (McKenzie 1990: 161). Not only such richly decorated tombs offer comparable structures, but rather “traditional” monuments (still with a pediment) too, as does Tomb 813 (Ch. Bockisch, in: Lindner and Zeitler 1991: 89-97; McKenzie 1990: pl. 163f.; Zayadine 1974; 1986: 229-237). Most probably, many more tombs would turn out as containing three dimensional features if they



12. Petra, Khaznet Fir'aun (photo by the author).



13. Petra, Urn tomb (photo by the author).

would not have been eroded or covered by sand and earth. Therefore, it would seem likely that most Nabataean funeral installations once evoked built architecture such as houses or, in the more elaborate cases, even palace-like structures. The same adoption of architectural features of the living for the resting places of the dead has convincingly been pointed out for most of the installations at the necropolises of Alexandria in Egypt (Hoepfner 1999: 469ff.; Pfrommer 1999: 93-124, especially 120ff.; Grimm 1998: 41, Fig. 39; McKenzie 1990: 51ff.) or at Nea Paphos in Cyprus (Mlynarczyk 1990: 87-94, 223-232; 1996: especially 200ff.; on connections with Nabataean monuments see Schmidt-Colinet 1981: 81).⁷

Therefore, the careful cleaning and documenting of the area of the central courtyard in front of the Roman Soldier Tomb will provide us with important information about Nabataean funeral architecture and its interpretation in general.

7. Similar observations were also made in the case of Italian atrium houses: Jung 1984: 73. 90.

II. 2. Lower Terrace: Water Supply System

It is clear from the above that immense work was accomplished on the upper terrace of Wādī al-Farasa East in order to provide a very comfortable water supply for the lower terrace too. After the lower terrace, i.e. to its Northwest, the water channel leading towards az-Zanṭūr, or the inner city in general, is still clearly visible (see also below). However, for the moment the question that remains open is how the water was lead through the lower terrace. Neither upon nor inside both rock-cut monuments, i.e. the Roman Soldier Tomb and *triclinium* 235, traces of a water channel or any other water supply installation are found. Therefore, the water was necessarily brought through the space between them and hence to the hypothetical peristyle courtyard discussed above. This seems logical all the more as water installations like fountains or pools played an important role in the courtyards and *triclinia* of the rich houses and gardens during the Hellenistic, and more specifically the Roman imperial period all over the Mediterranean (Broise and Jolivet 1998; Farrar 1998: 64ff.; 1996: 20ff.; Andersson 1990; Salza Prina Ricotti 1987; 1998; Jung 1984: 100ff.).

If indeed a water basin once embellished the central courtyard on the lower terrace of Wādī al-Farasa East, the entire installation would become a convincing parallel for some of the above quoted palaces, as for instance at Herod the Great's seaside palace at Caesarea (Fig. 6b) the central courtyard showed a pool (Lichtenberger 1999: 122ff.; Netzer 1999: 109ff.; Gleason *et al.* 1998: 38ff.). But also in a closer geographic neighbourhood we may suppose similar features. During recent work in the Siq of Petra and the connecting wadis, different water supply systems were discovered, all apparently leading towards the space in front of Khaznet Fir'aun. The excavators, therefore, suggest a kind of pool or artificial lake in front

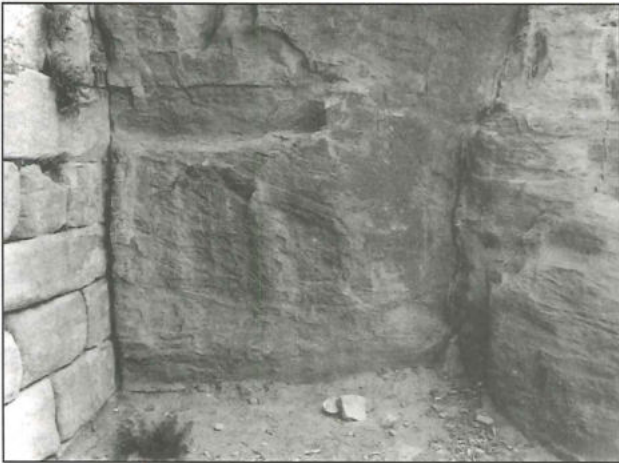
of al-Khaznah (personal communication by U. Bellwald and D. Keller). If this is correct, al-Khaznah would indeed become one of the best examples for Hellenistic luxury architecture such as the *thalamegos*, the river boat of Ptolemy IV of which nothing survives (Athen., Deipn. 5, 203eff.; the basic study still is Caspari 1916; cf. further Grimm 1981: 17; Nielsen 1994: 136ff.; Pfrommer 1996a: 177ff.; Pfrommer 1996b). Recently, a huge pool was suggested as being the central part of the so called lower market flanking the colonnaded street in Petra, and, therefore, turning the entire complex into a big garden-like installation (Bedal 1999, see also below).

Again, the lower terrace of Wādī al-Farasa East may be the best and the easiest opportunity to find out whether such installations did really exist in Petra.

II. 3. Upper Terrace: Water Supply System

The water supply system of the upper terrace consists primarily of the huge cistern (Fig. 11) that collected the water for further use on both, the upper and the lower terrace of Wādī al-Farasa East. It can, however, not be ruled out that other water channels led to and through the upper terrace, coming from south and south-eastern directions.

The cistern next to the Garden temple has a small fountain at its bottom that was originally built on a small podium just in front of it. A few courses of stones and some remains of a small basin are still visible as shown on Fig. 11. Beside this, rock carvings on both sides of the lower level in front of the cistern, especially to its right, make clear that the fountain once showed built architecture as well (Fig. 14). On Fig. 14 a horizontal carving that was used as an impost for a small roofing is clearly visible. Immediately beneath it are the badly corroded remains of two small niches that most probably contained carved representations of deities related to the precious liquid or the



14. Petra, rock carvings related to a fountain in front of the cistern on the upper terrace of Wādī al-Farasa East (photo by the author).

place. Very similar carvings can be found at 'Ayn ash-Shallalah in Wādī Ramm, that are also related to a fountain, in that case a spring with manifold built architecture related to it (Savignac and Ryckmans 1934: especially 586ff.).

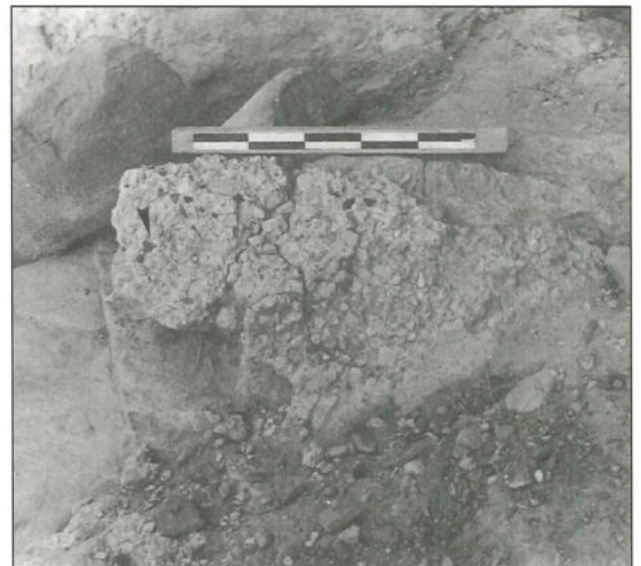
It therefore seems that on the upper terrace of Wādī al-Farasa East, a kind of natural environment was sometimes created by using artificial means such as built architecture. One of the targets of the IWFP will be to uncover the original plan and function of this water installation and the way it was connected to the lower terrace.

II. 4. Chronology

So far, we have discussed only aspects related to the construction and reconstruction of the different monuments in Wādī al-Farasa East. Another important point concerns the chronology of these installations. The previous research has mainly considered stylistic and iconographic criteria of the cuirassed statue (see Fig. 3) in the central niche of the Roman Soldier Tomb (Schmidt-Colinet 1981: 79f. with n. 25), or rather abstract typological criteria of the architectural decoration (McKenzie 1990: 147f.).

During the 1999 exploration season of the IWFP, the first archaeological link leading towards a chronology was discovered. At

the bottom of the huge cistern on the upper terrace (Fig. 11), a small fountain was installed that in antiquity showed also built architecture (cf. above). The basin in front of the fountain, where the water sparkling out of it was collected, was once entirely covered with hydraulic mortar, part of which still remains *in situ* (Fig. 15). To create and improve the hydraulic quality of mortar, volcanic earth or pulverised bricks and pottery fragments must be added. One of the pottery fragments used for this purpose at the small basin in front of the cistern clearly shows painted decoration (arrow on Fig. 15; Fig. 16). The painted decoration belongs to one



15. Petra, hydraulic mortar from a fountain in front of the cistern on Fig. 11 (photo by the author).



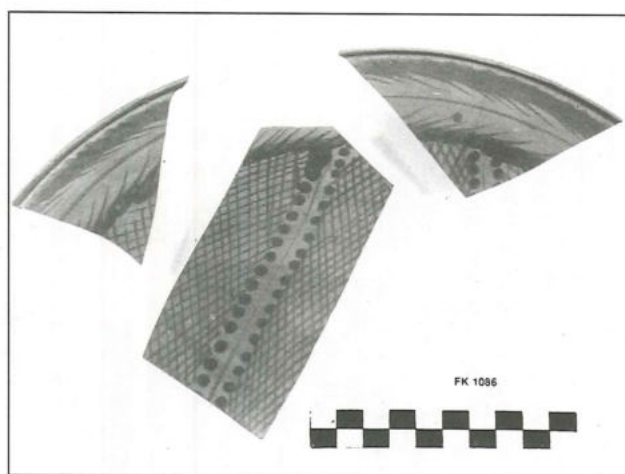
16. Petra, painted potsherd in mortar on Fig. 15 (photo by the author).

of the very well known categories of Nabataean fine ware pottery and a better preserved example with similar decoration from az-Zanṭūr is shown on Fig. 17. Recently it has been possible to establish a firm chronology of Nabataean fine ware pottery (Schmid 1996a; 1996b; 2000). The fragment on Figure 16 belongs to phase 3a that can be dated from ca. AD 20 to AD 70/80 (Schmid 1996a: 168 pl. 5, 2; 1996b: 128f. pl. 29, 1; 2000: 28f. 38).

Therefore, a last phase of the basin can be connected with a *terminus ante quem non* of AD 20. Whether this terminus can be applied to a construction phase of other monuments in Wādī al-Farasa East has still to be verified, but this small discovery makes us confident that with further investigations a precise chronology for this important complex can be established.

II. 5. Wādī al-Farasa East - Between Microcosm, Landscape Management and City Planning

With its sophisticated water supply system and gardens, the combination of sacred areas and spaces for the dead with installations for the living, Wādī al-Farasa East must have once offered a very impressive picture, a kind of paradise on earth, that is often described as an ideal utopia in



17. Petra, painted pottery from az-Zanṭūr (photo Swiss-Liechtenstein excavations, courtesy B. Kolb).

ancient literature (in general see Günther and Müller 1988; Bisconti 1990: *passim*, especially 62ff.). Especially in the late 1st century BC and the early first century AD this “golden age” played an important role in Roman literature (Brisson 1992; Schneider 1995: 118ff.). Similar romantic ideas have been recognised in the necropolises of ancient Rhodes on the Greek island with the same name, but they are by far less well preserved than the remains in Wādī al-Farasa East (see below).

The aspect of a paradise-like construction, a domesticated landscape that unifies gardens, installations for living, worshipping the gods and funerary monuments, bears some very interesting aspects regarding Hellenistic and Roman philosophy. The Greeks and Romans often used “barbarians”, i.e. people living far away and in different social and spatial organisations as themselves, to describe or rather evoke such utopias (Günther and Müller 1988: 75ff.). Precisely some of these terms also occur in the descriptions of the Nabataeans by ancient Greek and Roman authors. For example Diodorus of Sicily (19, 94, 2ff.) states that the Nabataeans had deliberately chosen to live as nomads because this gave them much bigger independence from major powers. Further, he stresses their big love for freedom and that they were sufficiently nourished by what the soil produced without further human impact. In general terms, Diodorus mentions places in Arabia where the natural growing of plants and fruits, as well as natural springs allow living in abundance (Diod. 3, 42). Terms of social utopia can be found in Strabon’s description of the Nabataeans (Geography 16, 4, 21ff.): The Nabataeans are well governed and are living peacefully, not carrying out any lawsuits with each other. He also notes that “since they have but few slaves, they are served by their kinsfolk for the most part, or by one another, or by themselves; so that the custom extends even to their kings (...). The

king is so democratic that, in addition to serving himself, he sometimes even serves the rest himself in his turn. He often renders an account of his kingship in the popular assembly; and sometimes his mode of life is examined". The use of such topics must have made the Nabataeans and their lifestyle the perfect incarnation of what may be called a golden age in the eyes of Greeks and Romans (Günther and Müller 1988: 94ff.). With the monuments of the upper and lower terrace of Wādī al-Farasa East, as well as the adjacent areas on smaller terraces - although we do not know yet much about their original look- it seems that a veritable *paradeisos* was created. Water apparently existed in abundance, irrigating gardens in front of and between the different monuments, funeral complexes existed together with installations for the living, such as *triclinia* and also caves where people used to live regularly base (Nehmé 1997b: 285), and monuments that were used for the worshipping of gods.

The installations in Wādī al-Farasa East are a very good example of the kind of "built" nature with a slightly romantic impact as it was very prominent in the Hellenistic and early imperial periods. On the island of Rhodes, for instance, during the Hellenistic period entire parks were created, making use of natural grottoes, sometimes enlarging them by artificial means and using them for religious purposes as well as for profane uses such as *triclinia* (Rice 1995; Mette 1992; Lauter 1972). Further in the same area, funeral monuments were built, some of them providing good comparisons to Nabataean tomb monuments.⁸ The scanty surviving remains of Hellenistic parks like the ones on Rhodes may give us just a hint regarding the lost installations of the gardens, parks and built monuments within them related to the palaces of the Hellenistic

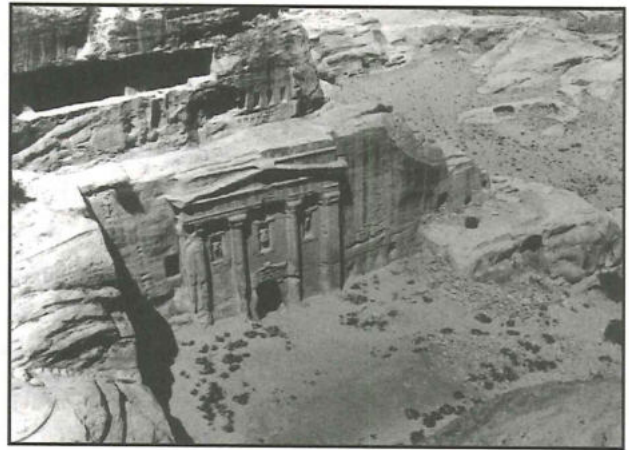
kings, known in most cases exclusively by literary sources (Sonne 1996). Artificially created aspects of nature or a kind of domesticated nature can consequently also be found in Roman villas (Farrar 1998: 27ff. and *passim*; 1996: 13ff.; Schneider 1995: *passim*; Jashemski 1987; Jung 1984: 106ff.). Within the best examples surely are the Sperlonga cave and the imperial villa at Castel Gandolfo, where natural grottoes were modified into *triclinia* with rich sculptural decorations (Strocka 1999; Darwall-Smith 1994; Licht 1974; Balland 1967). But also in densely occupied urban areas, like Pompeii or Rome, the houses of the wealthy often contained gardens with *triclinia*, *nymphaea* and artificial grottoes, evoking aspects of nature (Jashemski 1998; Liljenstolpe and Klynne 1997-98; Andrae 1996; Andersson 1990; Lavagne 1988; Jung 1984: 106ff. and *passim*; Neuerburg 1965; Rakob 1964). As in the case of the Hellenistic palaces, some of the abundantly luxurious gardens and parks of the Roman upper-class are only known by literature (Littlewood 1987). Water used to play a very important role in such installations, as it is the case in Wādī al-Farasa East (Broise and Jolivet 1998; Farrar 1998: 64ff.; 1996: 20ff.; Salza Prina Ricotti 1987; 1998). Especially in the luxurious Roman seaside villas, the *villae maritimae*, manifold efforts were undertaken in order to merge nature with elaborated construction activities (Lafon 1981; 1996). Finally, in some of the Roman gardens, or rather parks, funerary monuments were placed and, therefore, putting them in a similar tradition as the above mentioned Hellenistic examples (Verzár-Bass 1998; Jashemski 1998: 201f.). The Roman emperors finally created entire landscapes within their huge palaces, such as Domitian's palace on the Palatine hill, or Nero's "golden house" in Rome, and Hadrian's famous villa at Tivoli and many

8. For the Rhodian monuments see Patsiada 1999; Mette 1992: 6-60; Lauter 1988; Fedak 1990: especially 83-87; Konstantinopoulos 1986: 229-231;

for their connection with some Nabataean tombs see Schmid, *Hellenisation* (above note 6).

more (Barton 1996; Purcell 1996; MacDonald and Pinto 1995: 170ff. and *passim*; Tomei 1992; De Franceschini 1991: 637ff. and *passim*). In simple words, it seems as if the rich upper class of the late Hellenistic, or late republican and early imperial periods used their villas and palaces in order to create themselves the paradise on earth that apparently most social and political systems were not able to create.

As the installations in Wādī al-Farasa show, by the first century AD the very latest, the Nabataeans, too, had reached a so completely settled and urban lifestyle - at least in Petra - that the *paradeisoi* had to be created by artificial means, involving all possible aspects of city planning and space management. A parallel development can now be observed at the so called lower market, where recent investigations made likely that a big pool, with plants around and an artificial island in the middle of it, created also a similar kind of artificial natural environment (Bedal 1999). How such a controlled interference in terms of landscape management worked, can be exemplarily studied within Wādī al-Farasa East. Most of the installations there are likely to belong to an overall planning including much wider impacts related to the growing of the entire city. This is for instance true for the water supply system of the Wādī that is connected to the residential areas of az-Zanṭūr, or more generally, to the western part of the city's central habitation quarters (see below). It is likely that also the construction of the Roman Soldier Tomb complex, including the opposite *triclinium* 235 and the space in between them, was part of that planning. At this spot (Fig. 18) the natural bedrock was cut away in an immense work, offering space for what is believed to be a peristyle courtyard (cf. above). Compared to the size of the monuments that finally were cut out of the rock, the complex of the Roman Soldier Tomb is one of the most luxurious installations in Petra, easily comparable to



18. Petra, Wādī al-Farasa East. The lower terrace from above (photo by the author).

monuments such as ad-Dayr. Even such huge monuments like Khaznat Fir'aun (Fig. 12) did not exceed the cutting away of such a high percentage of bedrock relative to its final size.

This huge amount of stone was of course used in the building of the architecture that once stood between the Roman Soldier Tomb and *triclinium* 235. However, by far not all of that material was needed to construct the supposed *stoai* and other eventual architectural features (cf. Fig. 7). Therefore, the creation of the Roman Soldier tomb complex offered considerable building material for other construction activity in its neighbourhood, for example in the nearby residential areas around and on top of az-Zanṭūr. We may conclude, therefore, that the work in Wādī al-Farasa East, at least in its final stage, was part of a widespread city planning that affected entire parts of the city, as the creation of this microcosm included within other sophisticated water supply systems that reached the residential areas further down, as well as the providing of huge amounts of construction material. How far Wādī al-Farasa East's implication into wider city planning and management may go, is eventually again reflected by the lower market. As has been pointed out by the excavator, the water that filled the huge pool of that installation necessarily came from above it, i.e. the area of az-Zanṭūr (Bedal

1999: 233). However, as the only supply of water for this general area is the one that comes out of Wādī al-Farasa East, reaching an aqueduct at its end and a small *castellum divisorium* a few hundred meters further north,⁹ approaching az-Zanṭūr, most probably the water supply of the lower market has to be connected with Wādī al-Farasa East.

All these implications of Wādī al-Farasa East into major planning and building programs affecting big parts of the city of Petra, as well as the above mentioned clear affinities of the installations to late Hellenistic and Roman palatial structures are clearly pointing towards a very prominent member of the Nabataean upper class as being the owner of that complex.

III. Aspects of Site Management and Preservation

Although the Roman Soldier Tomb complex and also the cistern and the Garden Temple on the upper terrace belong to the most sophisticated monuments of Petra, they are visited only by a relatively small number of people compared to the overall quantity of tourists that visit the Petra area. It is clear that in order to attract more visitors to Wādī al-Farasa and therefore to encourage them to spend another night at Wādī Mūsā, the infrastructure of the area must improve considerably, which is another goal of the International Wādī Farasa Project (IWFP). However, before the infrastructure can be ameliorated, first a complete scientific study of the area under exploration is needed.

The entire area of the supposed courtyard between the Roman Soldier Tomb and the *triclinium* is now covered with dumped stones, most of them once belonging to the architecture of the complex itself (Figs. 2, 4 and 18).¹⁰ The same is true for the space in

front of the Garden Temple (Figs. 9 and 10), where also built structures are supposed to have existed but not yet proven, and for the fountain in front of the huge cistern (Fig. 11). These three points are the most crucial for the reconstruction of the ancient structures, but as long as they have not been cleaned and studied in detail, spectacular reconstructions such as that represented in Figure 7 have to remain hypothetical.

A systematic cleaning and documentation of the architectural remains of the space between the Roman Soldier Tomb and the *triclinium* will therefore furnish important answers about the reconstruction of the entire complex. The same is true for the Garden Temple and the fountain beside it. After the exploration season in spring 1999, five more campaigns of the IWFP are planned. Four of them, beginning in 2000, will be devoted to the above mentioned works of cleaning and documentation in order to create the necessary basis for a complete scientific study of the area, including a detailed - at least virtual - reconstruction of all possible aspects of the antique situation. The fifth season will be entirely devoted to conservation and if possible restoration work that will start already during the first four seasons. In some areas these conservation works are not only necessary in order to improve the infrastructure of the site but also in order to prevent further damage. For instance, the main northern supporting wall that was used as a barrage of the wadi itself, is directly menaced by seasonal rainfall which creates rivulets in the valley, washing and breaking out the stones of the wall (Fig. 19). Another point of focus are the few remains of the original decoration of the monuments. Most of the rock-cut monuments of Petra were originally covered with stucco and then painted. On both the Garden Temple (Fig.

9. I am very grateful to U. Bellwald and B. Kolb for bringing this to my attention; on such installations in general see Hodge 1991: 279ff.; Kek 1996: 118ff.

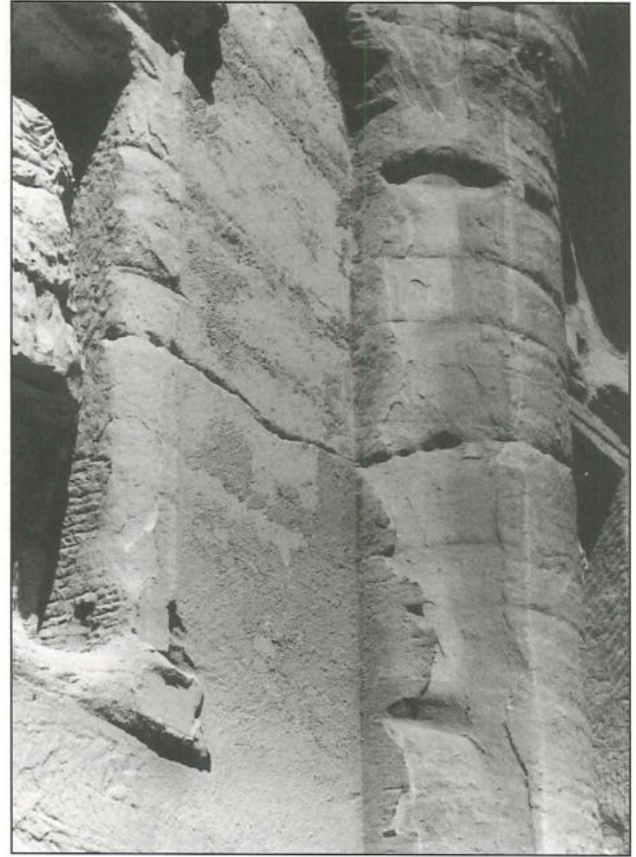
10. Some of these dumps are the result of the cleaning of the Roman Soldier Tomb and *triclinium* 235 in the 1930s; cf. Horsfield 1938: 40 with nn. 5. 7.



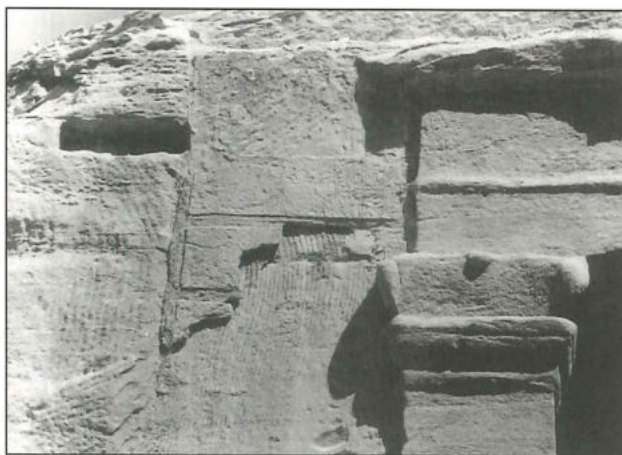
19. Petra, Wādī al-Farasa East. Main retaining wall of the lower terrace (photo by the author)

20) and the Roman Soldier Tomb (Fig. 21), some scanty remains of the stucco applications survive but are badly threatened by wind and rain. Further stucco decoration can be found in *triclinium* 235' (Fig. 5). Therefore, a systematic documentation (drawing; photography) of all remains and - if possible - conservation by technical means are urgently needed (cf. also McKenzie 1990: 147ff. 171; Zayadine 1987: 131f. and *passim*).¹¹

Therefore, after having cleaned and documented the area during the first four seasons, the fifth season will include conservation of the main retaining and supporting



21. Petra, Wādī al-Farasa East. Remains of stucco decoration at the "Roman Soldier" tomb on the lower terrace (photo by the author).



20. Petra, Wādī al-Farasa East. Remains of stucco decoration at the "Garden Temple" on the upper terrace (photo by the author).

walls and the establishment of a permanent solution for the evacuation of winter rainfall. Ideally, the ancient water channels and drainage systems may be re-used, at least in part. Furthermore, information panels will be set up throughout the entire Wādī al-Farasa East district. During the four field work seasons, These panels will be of a temporary nature informing visitors about the actual state and progress of work. During the fifth season permanent panels will be set up to provide an introduction to Wādī al-Farasa and its monuments, together with plans, drawings and reconstructions of the different monuments.

The installation and development of a well organised overall planning and management of huge archaeological and tourist sites all over Jordan will become in-

11. See also the report by Heinrichs and Fitzner 1999 on the impact of weathering on rock cut monu-

ments at Petra, especially p. 341 on the Roman Soldier Tomb.

creasingly important in the near future.¹² Therefore, the IWFP would also like to contribute its share to such aspects as well as to the proper scientific exploration of Wādī al-Farasa East. With a controlled development of infrastructure in Wādī al-Farasa East, the visitors path leading from the theatre to the so-called High Place on top of Zib 'Atūf and through Wādī al-Farasa would gain a lot of attraction. Such a track would lead the visitor across funeral monuments, cultic installations, aspects of ancient city and landscape planning, and back to the proper

residential area of the city, represented in this case by the luxurious buildings on top of az-Zanṭūr where also a part of the water supply system of Wādī al-Farasa East leads to (on the buildings at az-Zanṭūr see Kolb *et al.* 1999; Kolb 1997 with further references).

Stephan G. Schmid
Swiss School of Archaeology
Skaramanga 4b
GR-104 33 Athens
Greece

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12. See for instance a layout for such a site management at Gadara/Umm Qays by Bührig and de Haen 1999.

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