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Nabataean Funerary Complexes: their Relation with the Luxury Architecture of the Hellenistic and Roman Mediterranean

I. Introduction

Since 1999 the International Wādī Farasa Project (IWFPP) has been carrying out the exploration of the so-called Soldier Tomb complex in the outskirts of Petra, the ancient Nabataean capital in southern Jordan (www.iwfp.ch.vu). The goals of this project are not limited to the excavation of the complex of the Soldier's Tomb proper, but include a thorough study of comparable phenomena within the Nabataean culture and an understanding of the areas from which ideas and architectural prototypes of such complexes were influenced (for preliminary reports and some further reflection see Schmid 1999; 2000a; 2001a; 2002, 2003; Schmid 2001b; 2004). Therefore, the results obtained so far not only allow us to establish a precise chronology of the different installations under investigation, but also to place the complex of the "Soldier Tomb" in a wider context, first within the Nabataean culture and secondly within the Greek and Roman Mediterranean.

In 1921 the results of a two weeks visit to Petra by the "Deutsch-türkische Denkmalschutz-Kommando" during December 1916 were published (Bachmann and Watzinger and Wiegand 1921). Although the small team of German scholars did not carry out any excavations, their observations and plans remain a valuable source and important departure point for research on the monuments of Petra. The discovery of the Nabataean funerary complexes as sophisticated installations with went well beyond the famous rock-cut façades can probably be considered one of the main contributions of the "Denkmalschutz-Kommando" to the field of Nabataean studies. It was precisely the analysis of the complex of the Soldier Tomb and related structures that let the German scholars to their discovery (Bachmann and Watzinger and Wiegand 1921: 75-94). In short, the general outlook of the Soldier Tomb (Brünnow

and Domaszewski 1904: 273 no. 239; McKenzie 1990: 147-148), the opposite *triclinium* (Brünnow and Domaszewski 1904: 272-273 no. 235; McKenzie 1990: 148-149) and surrounding structures as well as observations of rock-cut traces of roofing, probably belonging to the implantation of a peristyle courtyard in the space between the two main elements, led to the proposal of an overall plan as visible in **figure 1**. This study also included the installations on the upper terrace of the Wādī Farasa East, the so-called "Garden Temple", "Garden Triclinium" or even "Garden Tomb" according to other scholars (Brünnow and Domaszewski 1904: 275 no. 244; McKenzie 1990: 171). Meticulous observation of rock-cut remains belonging to additional features and detailed knowledge of Graeco-Roman architecture let to a reconstruction as a living area, in other words a typical Hellenistic peristyle house, adapted to the local conditions and therefore partially cut into the sandstone (Bachmann and Watzinger and Wiegand 1921: 85-88; cf. here FIG. 1). We will not focus on the structures of the upper terrace in this paper, however in general terms the results of the Denkmalschutz-Kommando were confirmed though slightly modified (cf. Schmid 2001a; 2002; 2003). The last step, already completed in 1916, consisted in the combination of the monuments within Wādī Farasa East with the features mentioned in the inscription of the Turkmaniya tomb and their comparison with other remains of Hellenistic type luxury architecture, for instance in Alexandria (Bachmann and Watzinger and Wiegand 1921: 89-94).

Although mentioned from time to time in modern research, the results obtained by the "Denkmalschutz-Kommando" have not yet found the attention they deserve. This may be partially linked to the fact that a definitive confirmation of the pro-

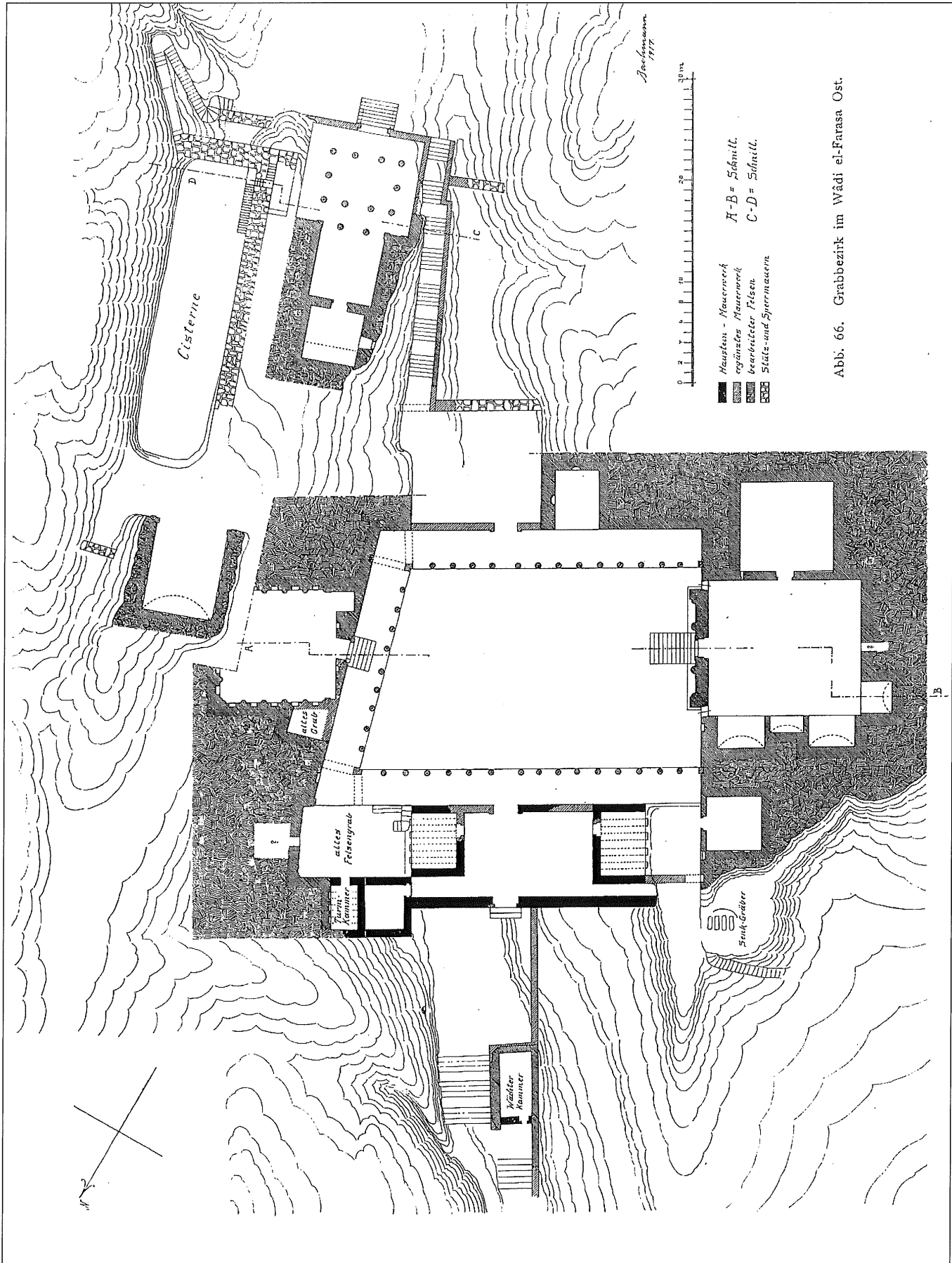


Abb. 66. Grabbezirk im Wadi el-Farasa Ost.

1. Plan of the structures in Wadi Farasa East as recorded by Bachmann, Watzinger and Wiegand 1921: 76 fig. 66.

posed hypothesis was still missing and needed further investigation, i.e. excavation. This is why during the first stage of the International Wādī Farasa Project (IWFP) the crucial points of the reconstruction proposal by the German scholars were verified. Another crucial point that has to be investigated is the chronology of the complex. Since the “Denkmalschutz-Kommando” did not carry out any excavation, and since knowledge of the material culture of the Nabataeans still was at its beginnings, the date of the various structures remained far from clear until very recently.

II. The Archaeological Data

One of the first objectives related to the verification of the proposed reconstructions for the complex of the “Soldier Tomb” was the presumed peristyle courtyard. Since the amount of sand is at its lowest level on the northern side of the area and since this is also the area of the main entrance to the complex, excavations were focused on the northern portico of the courtyard and the structures to the North of it, forming the entrance building to the entire complex (cf. FIG. 1 and FIG. 12).

Several columns belonging to the northern portico, or at least their remains, have been found so far, revealing a standard *intercolumnium* of 187cm, a bay of 247cm and a width of the portico of 3.65m (FIG. 2). The columns have a diameter of 60cm. However, it is possible that the columns were covered by a layer of applied stucco and measured 62cm in diameter. Initially, the floor of the portico as well as the floor of the courtyard proper were covered with stone floor slabs at a level of about 930.60m asl. However, most of the original floor slabs had been taken away, most probably in an-

tiquity. Since most of the fallen column drums and other architectural fragments were standing and lying on several centimeters of earth accumulated directly on the foundations of the slabs, the slabs had already been robbed out at the time when the columns collapsed.

From the architectural fragments found in the debris, several interesting pieces of information can be gained. From one of the columns, most probably belonging to the central entrance way according to its position, the uppermost column drum, the capital and the first block belonging to the roofing construction were found in a row (FIG. 2 no. 1 [column drum]; no. 2 [capital]; no. 3 [roofing construction]). Surprisingly, the stone just above the capital clearly shows the beginning of two arches. When looking closer, one realizes that there are small differences in the degree of inclination of the two arches, and, therefore, one of them was wider with the same height or one was higher with both of equal width. Two possible solutions can be proposed at this stage of our investigations. Either the colonnade had a front of columns crowned by arches, or we have to propose a second colonnade, at least for the northern part of the complex. Indeed, one could easily imagine a second colonnade of a slightly reduced height. There is further supporting evidence in favor of a second colonnade: with just one colonnade at the northern side of the complex, the façade of the Soldier’s Tomb is clearly decentralized, with just 2.40m space between the southern portico and the façade of the tomb, while there are 6.00m space between the northern portico and the façade (cf. FIGS. 1 and 12). With a second portico at the northern side, measuring 3.65m as the first one, the space would be reduced to rather exactly 2.35-2.40m and, therefore, offer a perfect symmetry! However, for the time being there is no physical evidence for a second colonnade at the northern side and there would be a mathematical problem: the joining of the second colonnade from the northern side with the one on the eastern side in front of the *triclinium*. Meanwhile, there are other arguments that seem to speak in favor of just one colonnade at the northern side. Since the *intercolumnium* of the two columns forming the entrance indeed is wider as the above-mentioned standard of 187cm (224cm), the different inclination of the arches could be due to this. When reconstructing arches above the already excavated colonnade, the southernmost arch would be positioned directly on the rock cuttings visible



2. Wādī Farasa East, lower terrace. Northern portico of Soldier Tomb’s complex with fallen columns (S.G. Schmid).

in the southwestern corner of the portico (FIGS. 3 and 4) and, therefore, find a perfect inset avoiding any problems pressure of the arch on the column. Further, this solution would explain why there is a difference of 90cm between the top of the capital and the rock-cutting for the roofing, both clearly visible on figures 3 and 4. These observations lead to a reconstruction of the portico (figure 5) with one colonnade covered by arches.

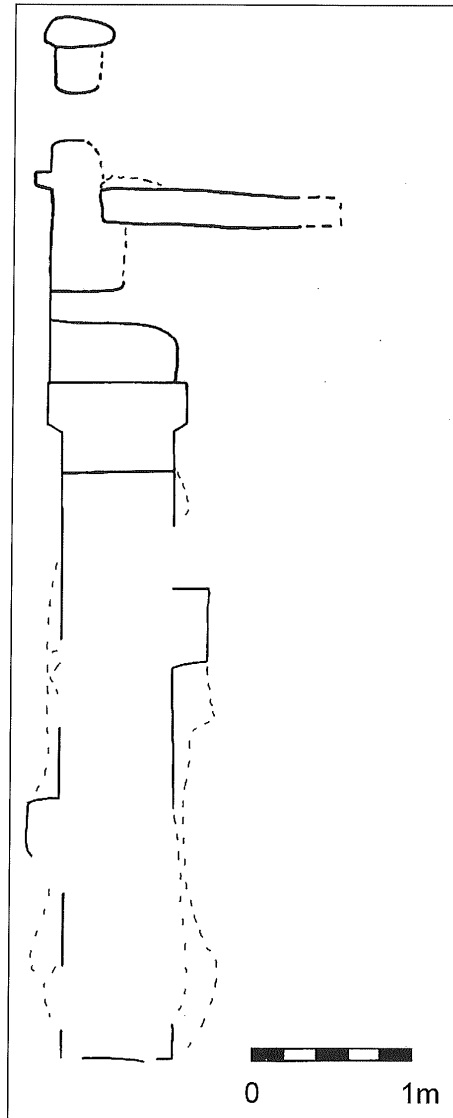
As became clear above, another area of interest is the western corner of the courtyard, where the northern portico began. The first column of the north portico is a half column abutting the rock cut surface, which had already been posited by Bachmann and Watzinger and Wiegand (1921: 75ff.). In trench 3 several drums and the capital of the half column were found which have provided the missing elements to explain the carved out rock features (FIG. 6; cf. FIGS. 3 and 4). In addition,

their relationship is confirmed by the corresponding measurements of the carved out space on the one hand, and the half column and the half capital on the other. In two cases, the rock carvings show a lateral enlargement. Into these enlargements fit analogous enlargements of two half column drums, of which one was actually found (center on FIG. 6). The height of the columns to the capitals can be calculated by comparing the plinths (930.71-73m above sea level) with the rock carvings for the half capital (lower level: 934.74-79m, top level: 935.04m above sea level): this comes to a height for the columns of ca. 4m without capitals and with capitals of about 4.27-4.30m. The different capitals and the half capital from trench 3 found so far measure between 27cm and 29cm in height.

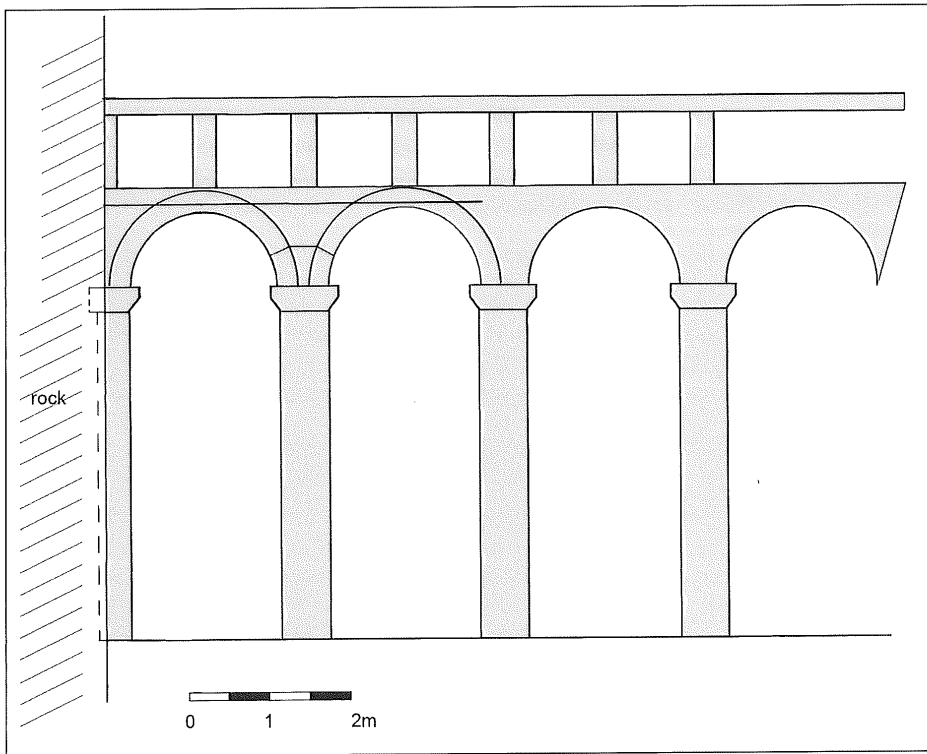
Most of the capitals discovered so far are badly corroded and, therefore, let to the initial hypothesis of a simple, not decorated Doric order (Schmid



3. Wādī Farasa East, lower terrace. SW corner of northern portico of Soldier Tomb's complex with rock cuttings for first column and roofing (S.G. Schmid).



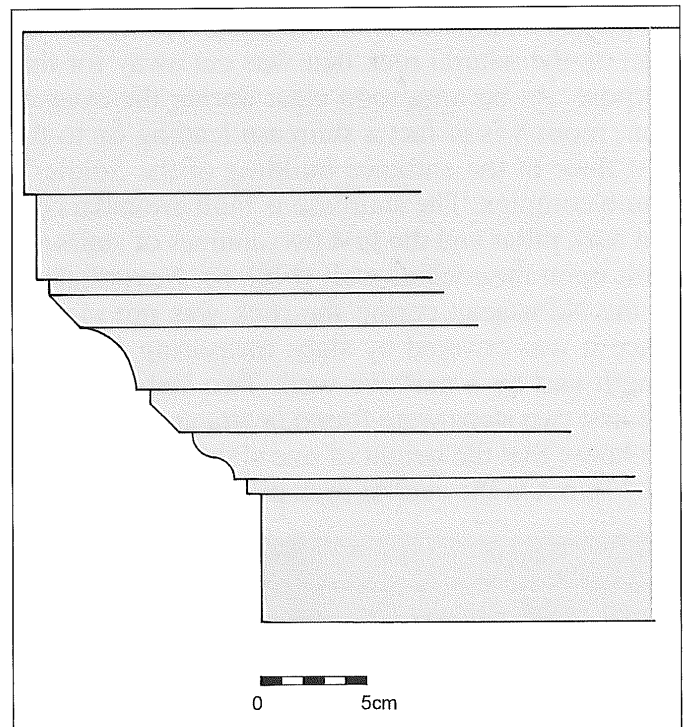
4. Wādī Farasa East, lower terrace. SE corner of northern portico of Soldier Tomb's complex with rock cuttings for first column and roofing (M. Seyer and S.G. Schmid).



5. Wādi Farasa East, lower terrace. Tentative reconstruction of SW corner of northern portico of Soldier Tomb's complex (S.G. Schmid).



6. Wādi Farasa East, lower terrace. SW corner of northern portico of Soldier Tomb's complex with second column in situ (left), first fallen half column (center), fallen first half capital (right) of the colonnade (S.G. Schmid).



7. Wādi Farasa East, lower terrace. Profile of moulded capital from N-portico (S.G. Schmid).

2000a), whilst Bachmann, Watzinger and Wiegand proposed a Corinthian order according to the huge opening for the first half capital carved into the rock (Bachmann and Watzinger and Wiegand 1921: 75ff.; cf. below). As one better preserved capital shows (FIG. 7; cf. no. 2 on FIG. 2), we are in real-

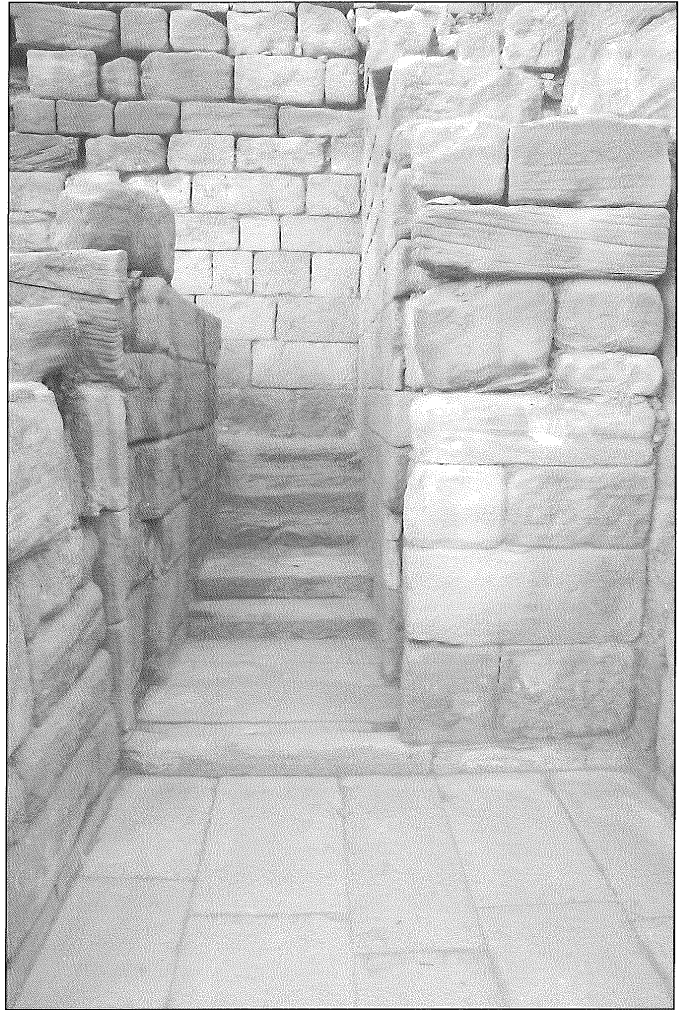
ity dealing with a form of richly moulded capitals (on different types of capitals used by the Nabataeans, cf. Netzer 2003: 159-164; on modeled capitals especially p. 159 fig. 222, 2 and p. 164). This observation is also interesting in terms of the overall planning of the complex. So far, three different ar-

chitectural orders are identified within the complex of the “Soldier Tomb”. The tomb properly shows Nabataean capitals, in the *triclinium* 235 another variant is on display that is called either pseudo-Ionic (McKenzie 1990: 149) or pseudo-Doric (“dorisiert”: Schmidt-Colinet 1983: 309f.). With the newly found examples we witness yet another type within the same overall installation. This variety is all the more astonishing as the entire complex is clearly the product of a well planned and organized building program (see below). Therefore this emphasises the deliberate handling of different architectural features by the Nabataean architects and craftsmen in order to create new compositions.

The next important element of the entrance building was revealed by the excavation of room 8 (cf. location on FIG. 12). Room 8 is a stunning combination of rock cut and built up architecture. Its maximum outer dimensions are of 4.30m x 5.60m (FIGS. 8 and 9). Whilst its southern and western parts are freely constructed of well set, high quality blocks, the northern and eastern walls, although constructed from the same type of blocks, lean on the natural rock that was cut away for that purpose. As became soon clear during the excavation, room 8 is in fact a staircase leading up to the first floor of the entrance building of the Soldier’s Tomb complex. The staircase is built around a central rock pillar and the first two courses of stairs are built upon the rock as well (FIG. 8). Nevertheless, in the Nabataean period the rock was not visible, since it was covered by slabs measuring 1.10m in length and by a massive wall. Two slabs forming the first two steps were found *in situ* and, therefore, we know that the height of one slab corresponds to 16-17cm. On the central rock pillar, a small rectan-



8. Wādi Farasa East, lower terrace. Room 8 (staircase) from above (S.G. Schmid).



9. Wādi Farasa East, lower terrace. Room 8 (staircase) from SW (S.G. Schmid).

gular zone is visible, that was carefully cut away (FIG. 8, on the spot of the meter). This is a first indication for additional courses of steps, as the staircase most probably was continuing: the bottom of the staircase is at 930.73m asl; the top of the rock pillar in the middle is at 932.90m asl, plus the 16cm of the slabs (now lost) brings us to 933.06m asl; therefore, the difference is of 2.33m. Interestingly, the rock on the top of our structure, i.e. the bottom of the first floor, is at 935.26m asl, plus the 16cm of the slab (now lost) gives 935.42m asl and, therefore, a supposed difference between the middle of the staircase and the top of it of 2.36m, almost exactly the same one than for the first half. One can suppose that the staircase was used in order to give a discrete access to the first floor, probably for private purposes, while the official visitors to the complex were directly led through the central *propylon* into the courtyard and then into the tomb or the opposite banqueting hall. The construction of the

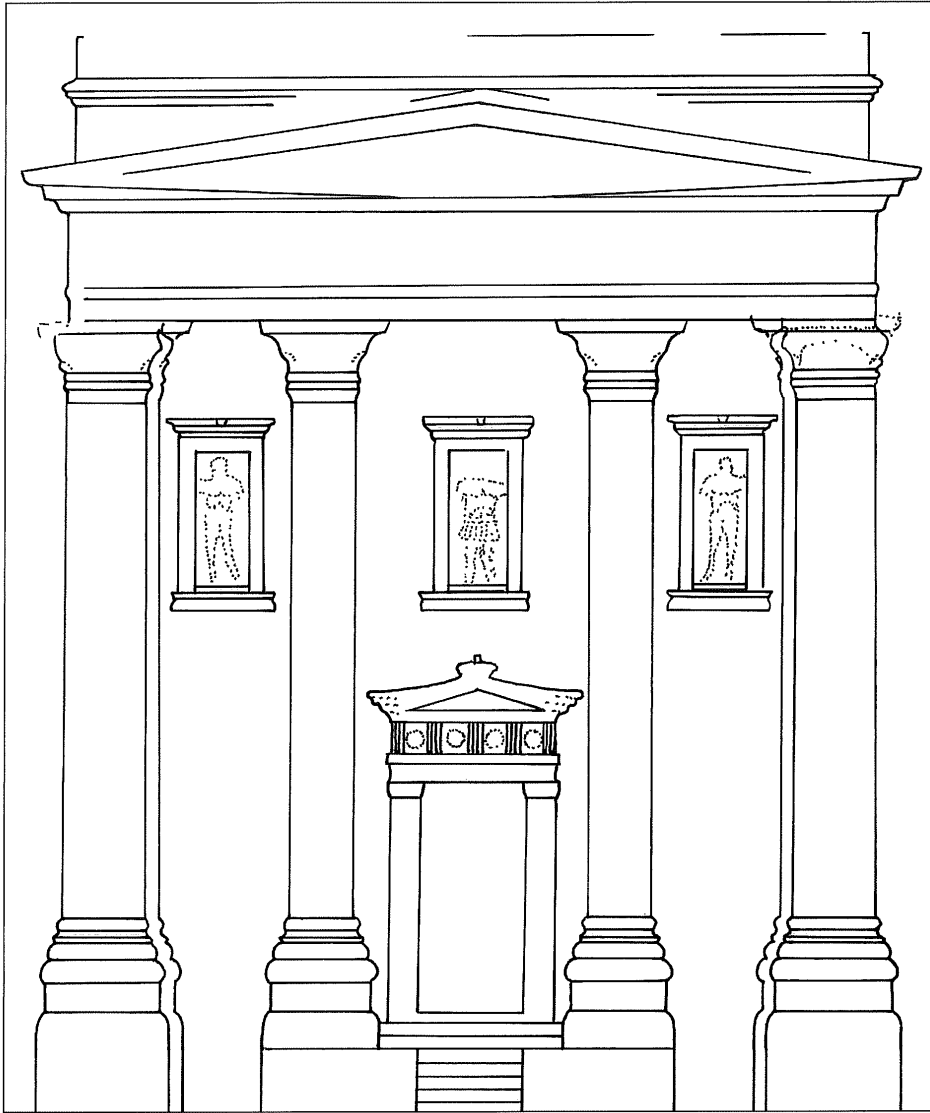
staircase strongly recalls similar installations within free built Nabataean architecture, usually called staircase-towers (Negev 1973). Although rather frequent in Nabataean architecture, such structures are not limited to the Nabataean area. In several of the palaces of the Hasmonaeans, and of Herod the Great, similar staircases constructed around a central pillar were found and are even a characteristic common feature of these buildings (cf. Netzer 2001A: 155, 167ff; 1991: 156, 170, 263, 601)

The central entrance hall, or propylon, measures roughly 10m x 9m and is built in a very accurate technique (room 1 on FIG. 12). In its initial, i.e. Nabataean phase, the room was covered by four vaulted arches, on each side of which the pillars remain, each measuring 80cm in width. In the first phase the room must have been entirely covered by huge floor slabs, of which a single one remains *in situ* in the SW corner of the room and two more or less complete rows on the W side of the room. The second one of these rows served as a water drainage at the same time, as is suggested by a water channel leading into the room on the southern side, by the slightly depressed middle part of the entire row of slabs due to the floating water during a considerable period of time, and finally by the gully on the NE corner of the room leading downwards. Most probably the gully is connected to a rock cut water channel that was discovered in 2001 immediately outside the main terrace wall, leading further down the Wādi Farasa (Schmid 2001a). The careful installation of this water drainage system shows once again how perfectly organized the water management in the entire complex was. Not only the complete area above the rock cut installations was covered with water channels and cisterns, but also the central part of the area, as is underlined by the newly discovered installation. Due to the long history of use and re-use — the complex of the “Soldier Tomb” was probably destroyed by the earthquake of 363AD but saw an important reuse during the Medieval period — only a few indications for the interior decoration and installation were found, mostly out of context. On the one hand, small fragments of painted stucco and polychrome *opus sectile* floors point to lavishly decorated rooms. On the other hand, fragments of hypocausts and *tubuli*, used for floor and wall heating systems respectively, indicate that one or several rooms of the complex were heated, either in order to be used in winter or as part of Roman style baths (on these finds

see Schmid 2001a: 261). Although by the mid-first century (see below for the chronology of the Soldier Tomb’s complex) such heating installations must have been more or less common within the luxury architecture of the Nabataean upper class. Their introduction probably occurred in the very late first century BC or at the beginning of the first century AD, and one could argue that the Nabataeans adopted such Roman style heating systems as a kind of reaction to similar features in Herodian luxury architecture (for similar heating systems in the Nabataean and Herodian realm cf. Kolb and Keller 2001: 319; 2000: 361-363; Netzer 1999).

The above-mentioned floor slabs measure usually about 40cm x 80cm, with the exception of the slabs forming the water drain that measure about 60cm x 80cm. All the slabs are bedded into a foundation layer consisting of smaller and broken fragments of slabs and clay containing earth — the so called *samaga*. The same construction technique is applied for all the floor slabs of the complex belonging to its first building phase. More specifically, this foundation technique was observed in rooms 1, 7 and 8 (cf. plan on FIG. 12) as well as within the northern portico and inside the courtyard. On the other hand, rooms 2 and 4 show a different foundation for their floor slabs. In both latter rooms, a layer of whitish mortar was used for the bedding of the slabs, a technique otherwise not known from the Nabataean period.

Some additional information regarding the façade of the “Soldier Tomb” and its relation to the rest of the complex, more specifically to the courtyard, were also obtained. A small sounding immediately in front of the entrance to the tomb furnished important details regarding different aspects of the lowest part of the façade, never visible since antiquity (Schmid 2002). The new elements allow us to propose a complete reconstruction of the façade as on figure 10. Further, the excavation revealed a rock-cut podium in front of the entrance, measuring 3.5m in width. For the moment it is not known how large the podium was, but it seems reasonable to propose an extension corresponding to the inner half columns of the façade (cf. FIG. 10). The interior of the “Soldier Tomb” is at 932.23-27m asl; two steps give access to the podium being at 931.55-62m asl (the surface of the podium shows some irregularities and was probably covered with slabs analogous to the courtyard). The courtyard is at approximately 930.60m asl (small variations in the



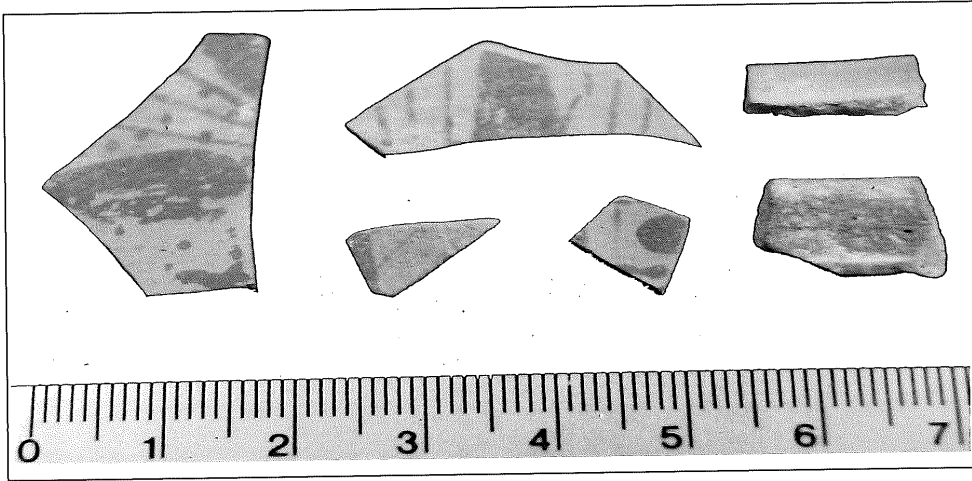
10. Wādī Farasa East, lower terrace. Tentative reconstruction of Soldier Tomb's façade (S.G. Schmid).

actual levels do occur and were probably compensated by the — now mostly missing — floor slabs); finally, the interior of the opposite *triclinium* is at 931.58m asl. In other words, the podium in front of the “Soldier Tomb” is at the same level as the *triclinium* BD 235 and both were accessible from the courtyard by a flight of steps. If we take the height of the preserved steps within the staircase of the *propylon* building (cf. above), i.e. 16-17cm, six steps would conveniently cover the difference of levels. However, nothing excludes the possibility that the steps leading to these principal installations were somewhat higher. For instance, the two rock-cut steps leading from the podium into the “Soldier Tomb” measure 21cm in height.

Finally, we have to consider the question of the chronology for the complex of the “Soldier Tomb”. On several occasions it was possible to carry out small soundings beneath the level of the original

floor slabs and, thereby, obtain chronological indications for the date of the construction.

Such was the case in rooms 1, 2, 4 and 7 (one sounding each) as well as inside the portico (two soundings) and inside the courtyard (two soundings) (cf. locations on FIG. 12). The floor slabs of the Nabataean period as described above are bedded in a layer of clay containing earth, the so-called *samaga*. The pottery from the *samaga*-layer that was found on all occasions in rooms 1 and 7 as well as in the portico and the courtyard (FIG. 11 shows a small sample) belongs to the second and third quarter of the first century AD (phase 3a of Nabataean pottery according to Schmid 2000b). Although only small samples, the fact that there were corresponding results from all six different soundings means that the complex of the Soldier Tomb must have been built somewhere around the middle of the first century AD, during the third quarter of that



11. Wādī Farasa East, lower terrace. Nabataean pottery of second and third quarters of the first century AD from below floor slabs (S.G. Schmid).

century the latest.

The picture was slightly different in rooms 4 and 7, i.e. the two rooms with a different kind of foundation for the floor slabs (cf. above). Within the mortar bedding described above fragments of pottery and lamps were found belonging already to the second century AD. In other words, the area of these rooms underwent substantial changes after the Roman annexation of the Nabataean kingdom in 106AD. This impression was confirmed by corresponding observations related to the main retaining wall of the entire complex (Schmid 2001a).

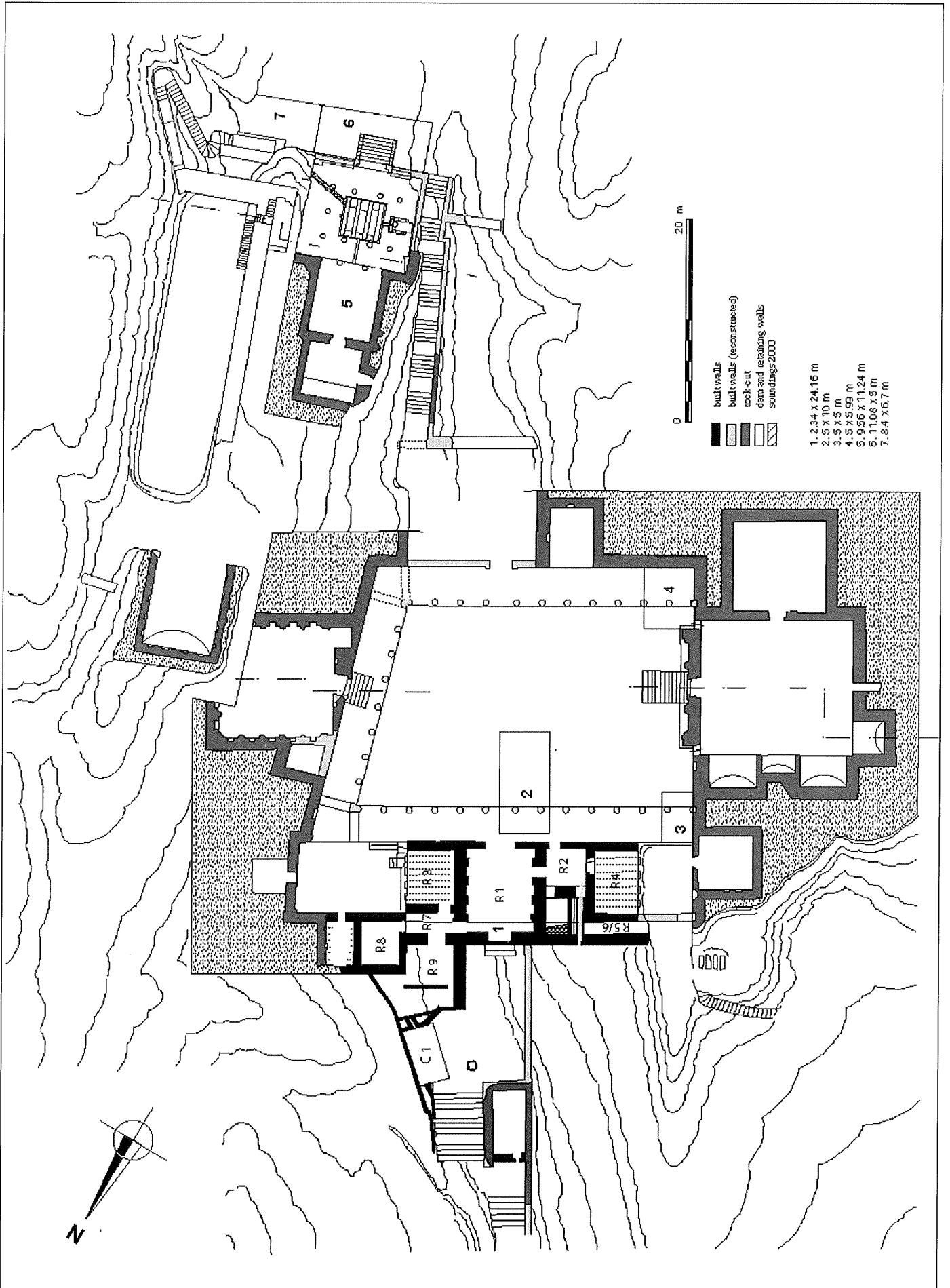
III. Comparative Material

Although for sure the best-preserved and most easily understandable exponent of a multifunctional Nabataean tomb complex, the installations related to the Soldier Tomb are by no means the only such complex, as is already suggested by the inscription of the Turkmaniya tomb (cf. above). The overall plan of the Soldier Tomb's complex as provided by the recent investigations (FIG. 12) can be found, slightly modified, within other installations at Petra as well.

Prominent other examples of such complexes include the Urn Tomb (Brünnow and Domaszewski 1904: 393-398 no. 772; McKenzie 1990: 144-147), ad-Dayr (Brünnow and Domaszewski 1904: 331-335 no. 462; McKenzie 1990: 159-161) and al-Khān (Brünnow and Domaszewski 1904: 195-197 no. 4), now serving as a restaurant at the entrance of the archaeological site of Petra (on these and a few more see Schmid 2001b; 2004; Netzer 2003: 51-57). But the list can easily be lengthened and includes also less spectacular tombs, i.e. tombs of simpler types. Such is the case for instance with tomb no. 676 in the Wādī al-Maṭāḥa on the eastern boundary of the

city (FIG. 13; cf. Brünnow and Domaszewski 1904: 373-375 no. 676; Lindner 1978: 88; Wenning 1987: 273). So far this tomb was mentioned mostly for its façade and the inner space, showing 15 rock-cut *loculi*. Lindner pointed out a vaulted cistern some 15m in front of the façade. This cistern, measuring 4m x 4m is a very good parallel of the vaulted cistern in front of the "Garden Triclinium" in the Wādī Farasa East (cf. Schmid 2002; Schmid 2004). Nobody so far has mentioned the remains of built walls in front of the façade, clearly visible especially from above (FIG. 14). These form two porticoes around a courtyard, apparently including other built structures. A preliminary plan and reconstruction (FIGs. 15 and 16) reflect a general similarity with the lower terrace of the Wādī Farasa East and other structures mentioned above. Without the results from the International Wādī Farasa Project one could question the contemporaneity of the rock-cut structures of Tomb 676 and the built ones in front of it, especially since no excavation has been carried out yet. However, as pointed out above, the entire complex of the "Soldier Tomb", including porticoes, courtyard, *triclinium* and other structures, was constructed in the second or third quarter of the first century AD and was the result of a well planned and organized building program. Therefore, one can suggest with some confidence the planned unity of façade and built structures in the case of Tomb 676 in the Wādī al-Maṭāḥa.

Another similar case is tomb no. 649 (Brünnow and Domaszewski 1904: 369 no. 649), the so-called tomb with the armour (FIG. 17). Until now almost exclusively known for the decorations in its Attica-zone, representing a frieze of weapons and heads (McKenzie 1990: 168 being one of the rare authors realizing that their may have been colon-



12. Wādi Farasa East. Overall plan of lower and upper terraces, as provided by recent investigations (A. Barmasse and S. Fachard after Bachmann, Watzinger and Wiegand 1921).



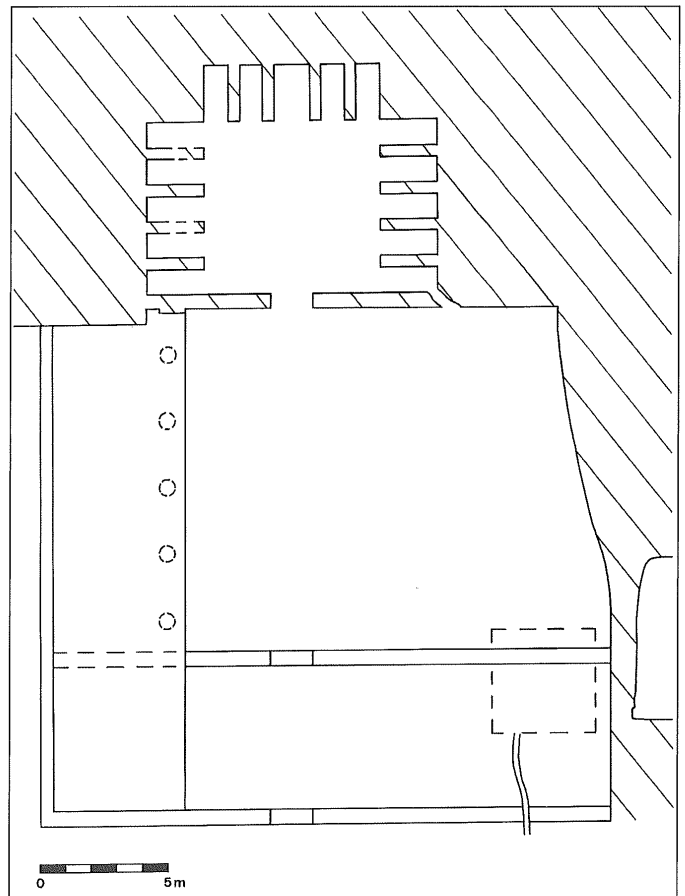
13. Petra, Wādi al-Maṭāḥa. Complex of tomb BD 676, general view (S.G. Schmid).

nades on both lateral sides of the courtyard), the huge courtyard in front of the façade as well as the

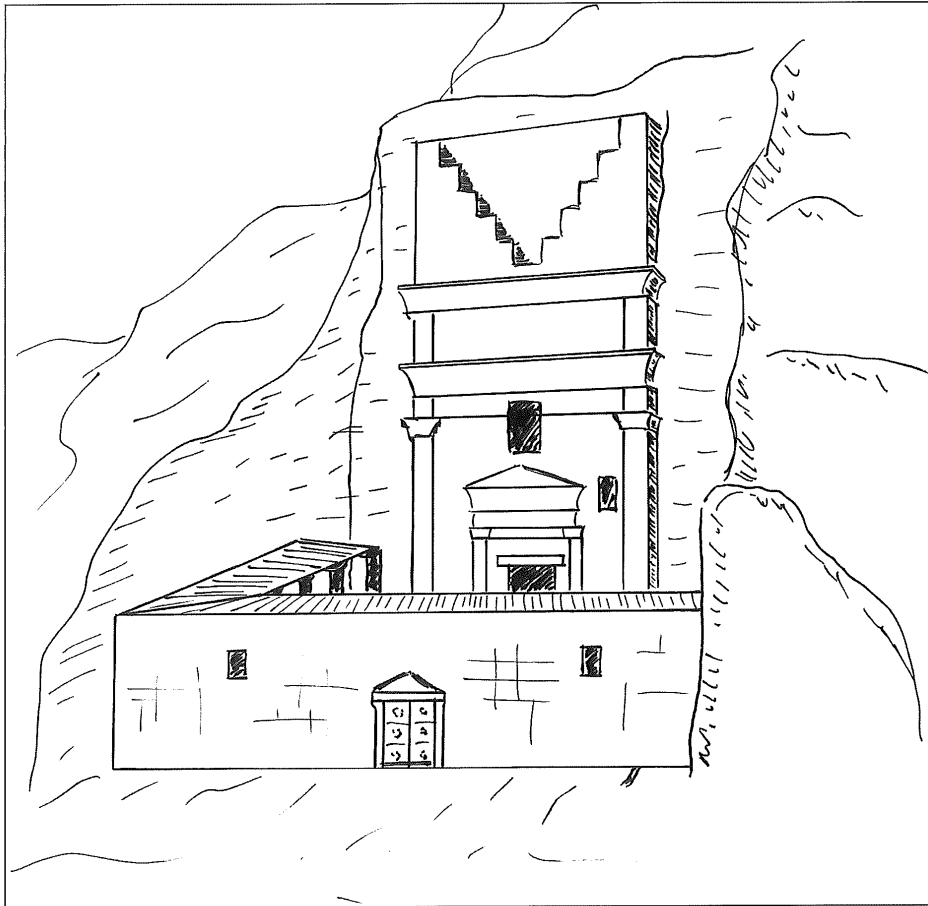


14. Petra, Wādi al-Maṭāḥa. Complex of tomb BD 676 from above (S.G. Schmid).

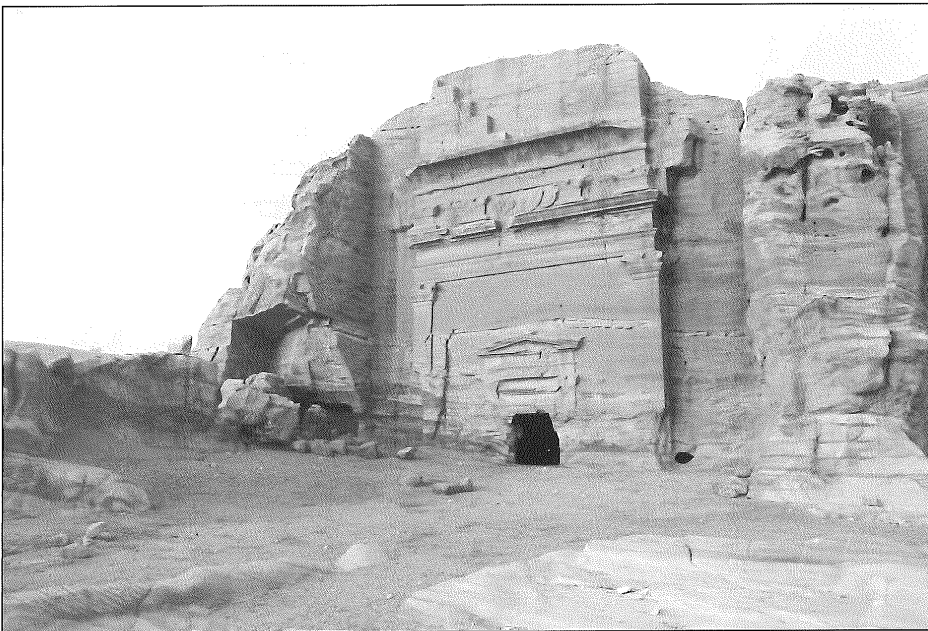
different adjacent rooms, clearly outlined on the ground, surely belonged to a complex very similar to the ones above described (FIG. 18). Since there is a substantial rock-cut water channel leading to a huge underground cistern a little bit further away,



15. Petra, Wādi al-Maṭāḥa. Complex of tomb BD 676, plan with additional structures (S.G. Schmid).



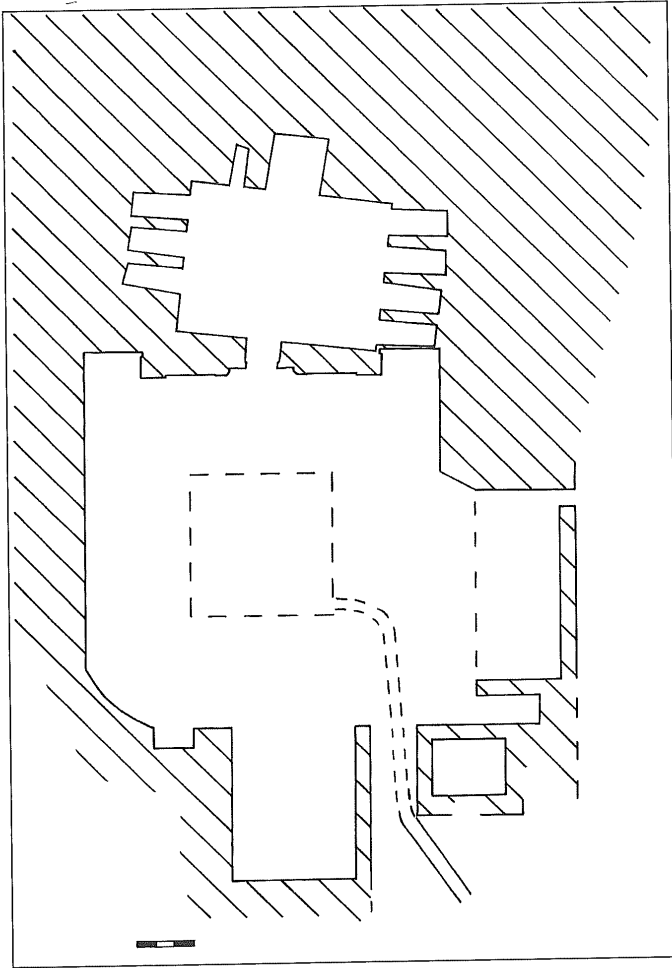
16. Petra, Wādī al-Maṭāḥa. Complex of tomb BD 676, tentative reconstruction (S.G. Schmid).



17. Petra, complex of tomb BD 649 (tomb with armour), general view (S.G. Schmid).

As far as the Roman sphere is concerned, influences of Hellenistic architecture within the rich private buildings start considerably before the late first century BC as pointed out above. However, a clear intensification of these influences, as well as a clear influence of Roman innovation in the luxu-

ry architecture of the eastern Mediterranean can be observed during the period we are dealing with. It is probably not a pure coincidence that these phenomena of intercultural exchanges increase immediately after the Roman conquest of Ptolemaic Egypt in 30BC. Some of these aspects can prob-



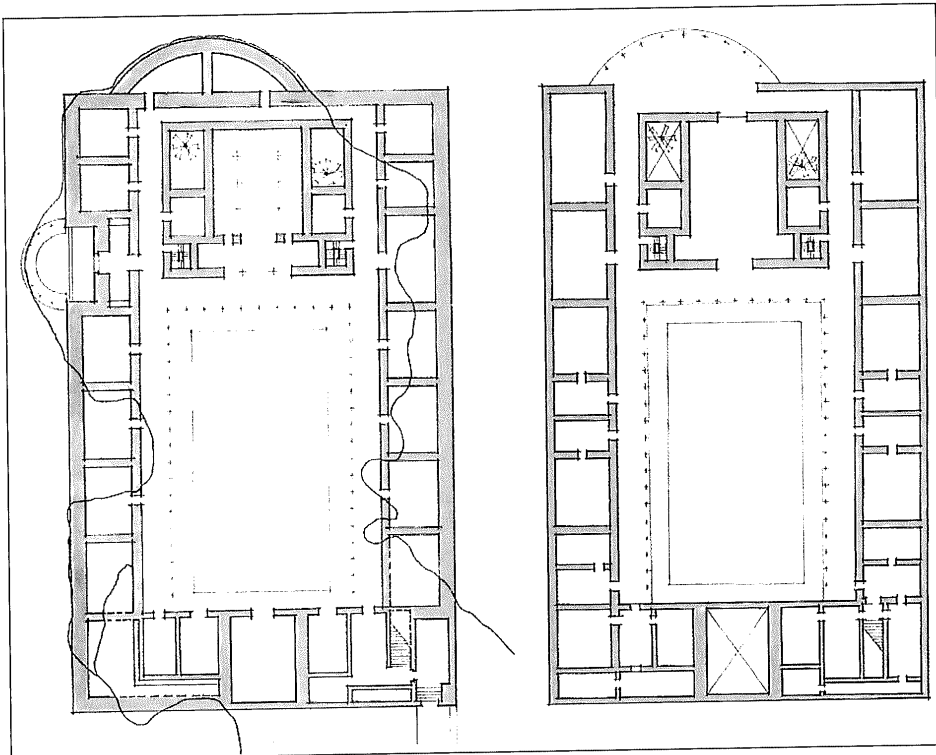
18. Petra, complex of tomb BD 649 (tomb with armour), plan (S.G. Schmid).

ably be explained by simple fashion, but others go beyond such a superficial explanation and seem likely to be the result of a kind of architectural rivalry between Herod and the Nabataean realm. It is probably not a coincidence either that the monumentalization of Nabataean public and private architecture starts taking place from the last quarter of the first century BC onwards: after the annexation of Ptolemaic Egypt by Rome in 30BC, Alexandrian artists and artisans went to Italy and to Rome as is widely known. It is possible that others found new clients on both sides of the river Jordan. The intercultural contacts between different areas of the eastern Mediterranean and Roman Italy finally led the way to the creation of such spectacular buildings as the palaces and *villae* belonging to the imperial family on the island of Capri, e.g. Tiberius' "Villa Iovis" (on the "Villa Iovis" see Krause 2003; on other *villae* on Capri cf. Lafon 2001: 406 CAP 1-10 with further bibliography).

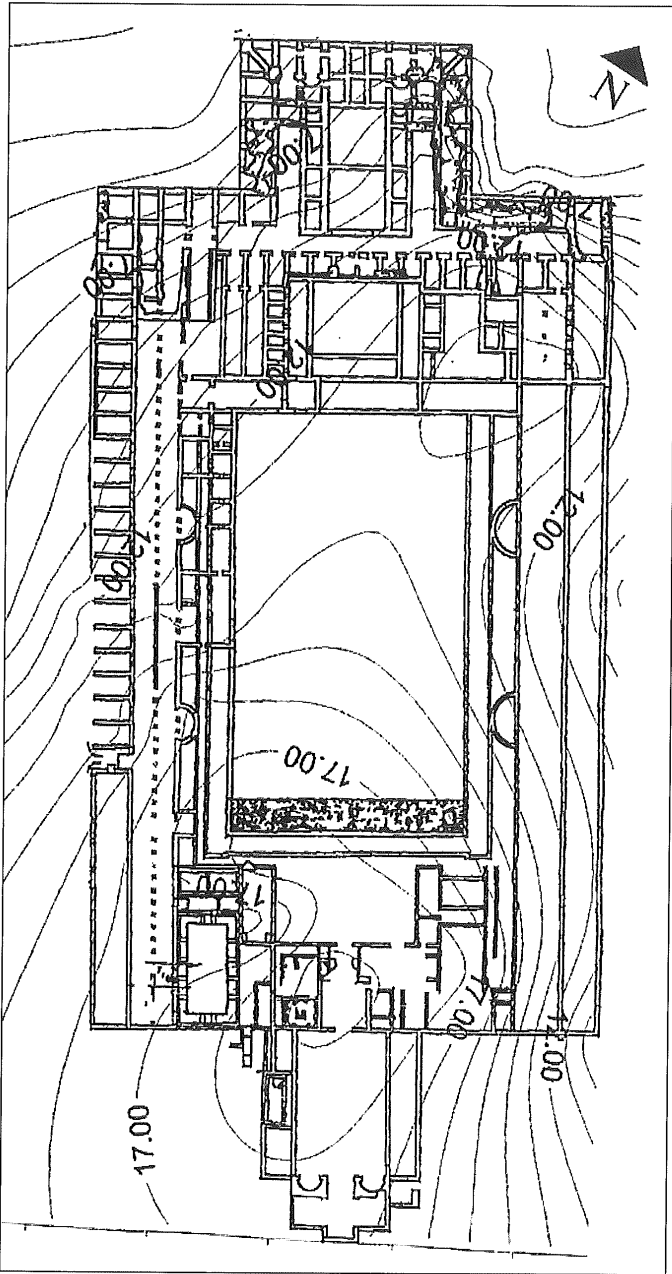
In this respect, research focusing on structures like the "Soldier's Tomb" complex at Petra will contribute to a better understanding of above mentioned developments and, last but not least, lead the way for the localization and interpretation of the Nabataean royal residences, yet to be identified.

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