

SWISS-LIECHTENSTEIN EXCAVATIONS ON AZ-ZANTŪR IN PETRA, 1998

by

Bernhard Kolb, Laurent Gorgerat and Matthias Grawehr

Introduction (B.Kolb)

The ninth excavation campaign in Petra by Basel University, under the patronage of the Swiss-Liechtenstein Foundation for Archaeological Research Abroad (SLFA), took place from August 15 till October 20 1998. The staff included the archaeologists Yvonne Gerber, Daniel Keller and Christoph Schneider, as well as the students of archaeology André Barmasse, Laurent Gorgerat, Matthias Grawehr and Annegret Reber. Jacqueline Studer of the Musée d'Histoire Naturelle in Geneva analysed the osteological material, while Christiane Jacquet and Olivier Mermoud of the ETH Zuerich took care of the archaeobotanical remains. The small finds were restored by Christine Pugin, drawn by the draughtswoman Irma Haussener and documented photographically by Othmar Jäggi. The analyses of the restored coins was again possible thanks to the numismatist Markus Peter. The 1:20 scale top plan was completed by architect Ulrike Mayer and by Annegret Reber. Ulrich Bellwald was again responsible for the consolidation and preservation of the structures on the sites EZ III and EZ IV.

I would here like to thank all members of the team for their zeal and devotion. Special thanks are due to Prof. Dr R.A. Stucky, who, despite his withdrawal from the direction of the excavation in 1995, has remained closely associated with the project. He has, through his continued support and helpfulness, remained the irreplaceable patron of these excavations. Throughout the campaign we were accompanied and supervised

in an exemplary manner by Suleiman Farajat, as representative of the Jordanian Department of Antiquities.

The 1998 excavation campaign would not have been possible without the financial support of the SLFA (Zuerich), the University of Basel, the Max Geldner Foundation (Basel), the FAG (Basel) and Novartis International (Basel).

EZ III

The excavation on EZ III was limited to the exposure of room 121 which had been started in 1997 (see plan of EZ III in Kolb 1998: 266, Fig. 11). The interstice of a blocked door in wall BS was discovered, which had originally connected room 121 with room 120 which lies just to the north of it, and thus with courtyard 111. A floor of beaten earth only a few centimetres thick lay directly over the rock of the outcrop. Three Nabataean coins, found at floor level, cover the period from 4/5 BC to 106 AD¹ and give further proof of the first phase of the structures on EZ III which had been analysed by Maxime Boillat recently².

Important finds in the form of a fragmentary wall painting and cornice mouldings came to light in the lower starta of the collapsed walls. The wall painting, as far as it is possible to tell, represented satyrs and erotes at the vintage. The figures move within a scrollwork of vines and acanthus and are reminiscent of the well-known paintings in house 849 in neighbouring Bayḍa (McKenzie 1990: Figs. 113-115). The recovered stucco mouldings are all of the same

1. EF 1334: Aretas IV (5-4 BC); EF 1341: Aretas IV-Rabbel II (18-106 AD); EF 1339: Nabataean.

2. M. Boillat, *De la roche, des murs, des hommes. Essai de compréhension des structures archéo-*

logiques de la terrasse inférieure d'ez Zantur à Petra / Jordanie (unpubl. MA, Basel University 1998)

type and, taken together, reach a length of 3m. They were probably part of the cornice, which, when the room was intact, formed the upper border of the wall decoration. Another well-represented moulding consists of a simple stucco fillet with a fascia underneath decorated with a very nicely preserved painted white scrollwork on a dark green background.

Restoration and Consolidation

The completion of the excavation on EZ III allowed us to begin with the urgent task of consolidating the walls. The uppermost courses of the dry stone walls were freed of the remaining sandy core and then filled with a mortar consisting of local sand, unslaked lime and a small quantity of white cement. The mortar was mixed with small stones, firstly to reduce the amount of mortar needed, and secondly to ensure that the crown of the walls would look as authentic as possible at completion. After 9 weeks of work an approximately 60 m length of wall had been consolidated in this manner by the architect Urs Hüsey and his team³. The other part of the consolidation work consisted of removing the dump material from EZ I and EZ III which had accumulated over the last 10 years along the northwestern edge of the terrace. The terrain below the northern face of az-Zanṭūr was thus restored to the state in which it was found in 1988.

The intention is to complete the consolidation of the walls on EZ III during the 1999 campaign and to make the site as attractive and safe as possible for future visitors.

EZ IV: The Nabataean Mansion

The continued excavation in 14 grid squares (350 m²) of the large Nabataean building on EZ IV produced important new findings concerning the layout and function of the rooms. The excavation area from the

1997 campaign was extended to the south, east and west (Fig. 1).

Room 6

In square 90/AQ-AR the remaining small area of ca. 3x2m was excavated so that room 6 is now completely clear. At the western end of wall K we came across a doorway which had been blocked off at a later date, but had originally opened northwards onto corridor 11 (Fig. 1). Huge quantities of stucco wall panelling in an extraordinary good state of preservation were found in loci 3081 / 3085. It is impossible to tell whether the room was completely redecorated when the doorway was walled up, or whether the existing panelling was simply extended over the new wall space. Fragments of painted stucco which had been used as fill for the repair in a wide crack in the masonry of pillar P1 indicate that the walls of room 6 had been redecorated at least once.

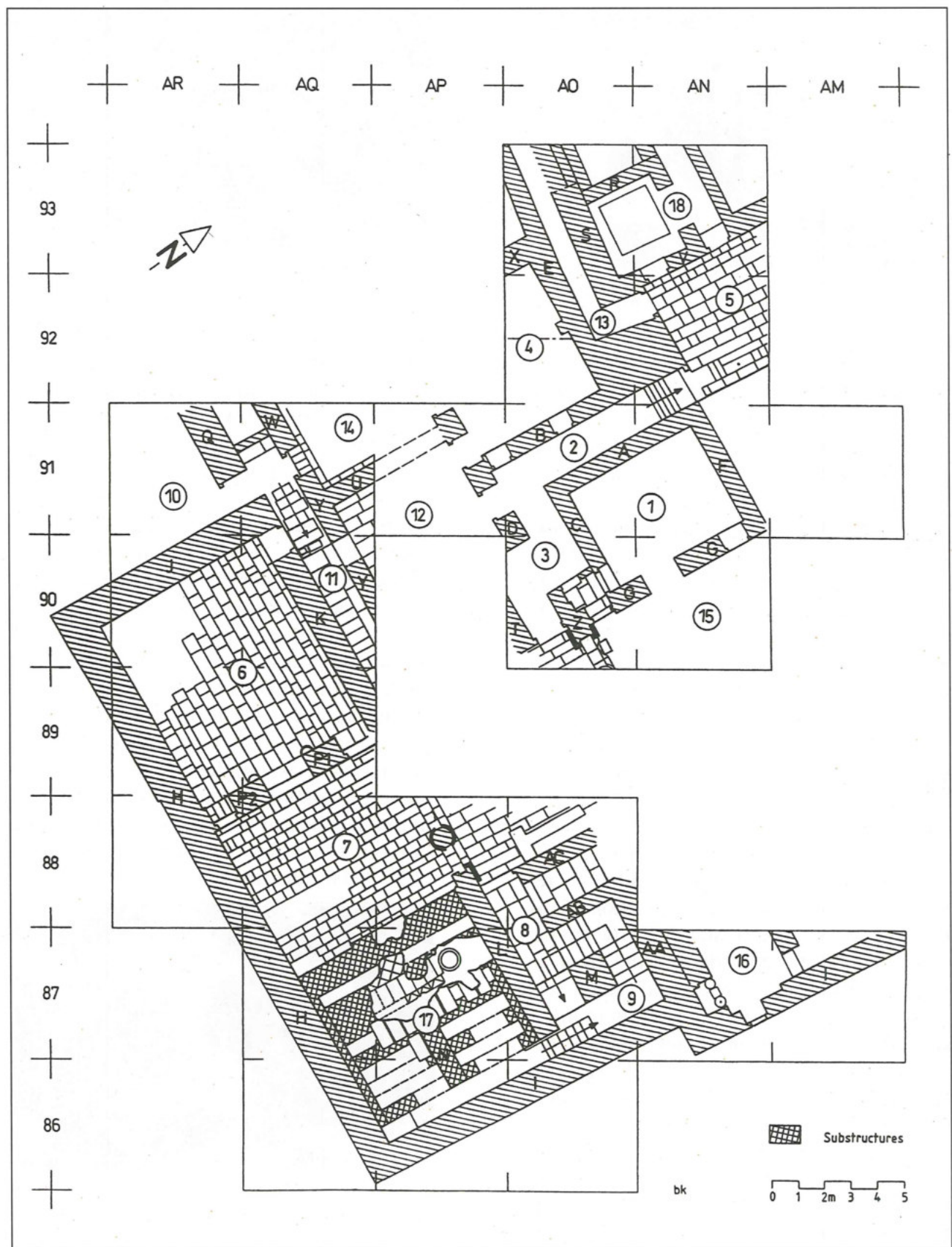
The rich finds from the last phase of use in the fourth century AD, sealed beneath the debris of walls ruined during the earthquake of 363 AD⁴, are worthy of special mention; pieces of wood were found together with bronze and iron fittings (EF 3091: Fig. 2), a bronze key and an iron bowl. It seems therefore, that various wooden boxes with metal fittings were stored, together with pottery vessels, in the northwest corner of the room, possibly on a wooden shelf.

Restoration and Consolidation

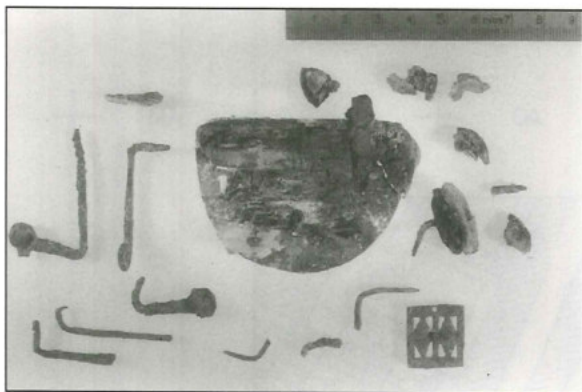
After the work in room 6 was finished the restorers rebuilt the southwestern corner H/J which was in a very poor state of repair, using ashlar from the excavation. The threatened continued collapse of the structure and the loss of further flagstones was thus halted. The remains of the rough plaster on the walls of room 6 were secured with a neutral retouch.

3. Walls AB, AF-AH, AM-AO, AR, BB - BC, BK - BO, BS, BX - BZ, CM, CY and CZ.

4. Russell 1980: 47ff.; Peter 1996: 112ff.



1. EZ IV. Schematic plan of the structures. (drawing: B. Kolb).



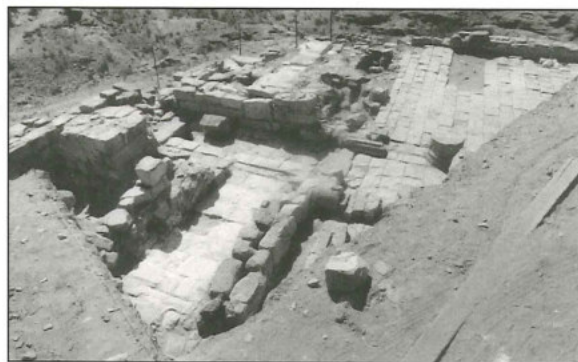
2. EZ IV, room 6. Bronze fitting of a lock, bars and nails of a wooden chest. (photo: O. Jäggi).

Rooms 7 and 17

The investigation of square 87/AP brought clear evidence that room 7 did not extend as far eastwards as wall I, as was supposed last year, but that it is actually a squat *exedra* measuring 6.5 x 7.4 m (Figs. 1 and 3). An Attic column base (diam. of base: 1.00 m; diam. of column: 0.74 m) exposed at the northern edge of the *exedra* and a similarly formed pilaster base at the western end of wall L suggest that room 7 ended with 2 columns *in antis* to the north. The "openings" in the bipartite bases and the traces of scraping from the doors on the flagstones to the west of the stylobate, are witnesses to the doors which had once been mounted between the supports.

Although the dividing wall between rooms 7 and 17 has almost completely disappeared (see Fig. 3) it is possible to reconstruct at least the original position of the entrance: a five-piece band of narrow paving stones at the eastern edge of the floor in room 7 marks the position and length (ca. 2.1 m) of the lost threshold between rooms 7 and 17. This passageway lies opposite the central entrance to room 6, which was also "open plan", and shows that the three rooms 6, 7 and 17 were planned as an ensemble.

The parts of the arched substructure of room 17 exposed in last year's campaign, which had collapsed in places, had given little cause to hope that there would be any in-



3. EZ IV. View of the rooms 7, 17, 8 and 9 from the north - counter-clockwise. (photo: D. Keller).

tact flooring in the unexcavated area of square 87/AP. The 1998 findings were therefore particularly welcome: in the western portion of room 17 we came across a 2 x 3 m segment of a plundered *opus sectile* pavement with its substructure intact (Figs. 1, 3 and 4). The pattern in the mortar bedding left by the tiles, which had been removed at a later date, bear witness to three decorative zones running north-south. Diamonds in squares in the western zone give way to a row of rectangular pavers which are bordered in the east by a narrow band of triangles. The fragments of marble and alabaster, which came to light by the dozen, give an indication of how opulent the floor decoration was originally. Fragments of phase 3a painted Nabataean pottery in the mortar bedding of the *opus sectile* pavement in room 17 confirm the *terminus post quem* of 20 AD for the first building phase⁵.



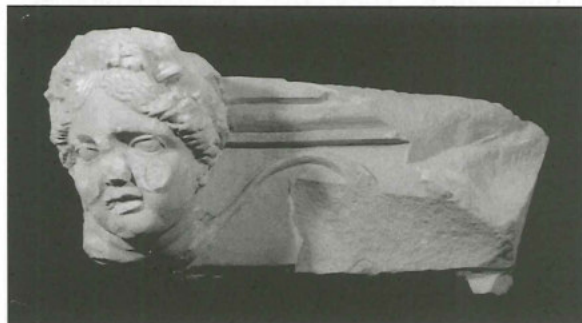
4. EZ IV, room 17. Mortar bedding of *opus sectile* pavement with fragments of marble tiles. (photo: D. Keller).

5. For the typology and chronology of the painted Nabataean ware see Schmid 1997: 131ff.

A selection of well preserved capital fragments belonging to McKenzie's floral type 1⁶ give an impression of the beautiful crownings of the supports in room 7 (Figs. 5 and 6). The *cauliculi* of the pilaster capital in Figure 5 are entwined with vines and grapes that hang from the corner volutes. Vines in low relief also decorate the abacus and transmute into a finely worked Medusa head just above the volutes. A similar capital fragment, of unknown provenance, stands on the northern retaining wall of the Burckhardt Centre in Petra. A fragment of an abacus with a female head in high relief, which appears to grow out of a vine, is shown in Figure 6. Her abundant curly hair is parted in the middle, combed back behind her ears and plaited at the back of her head. The plaits are wound around her head and knotted over her forehead. *Pathos formulae*, such as the head leaning to the left, the mouth slightly open, together with the rather fleshy



5. EZ IV, room 7. Fragment of a Nabataean pilaster capital of the floral type. (photo: O. Jäggi).



6. EZ IV, room 7. Abacus fragment of a Nabataean capital with a female head in high relief. (photo: O. Jäggi).

cheeks are reminiscent of Near-Eastern Hellenistic prototypes and the remarkable Aphrodite relief in Petra (Zayadine 1981: Pl. 1.3). The capital fragments, of excellent workmanship, and the column and pilaster bases found *in situ* show that the luxurious decoration on EZ IV was not limited to wall painting and stuccoed architecture.

Parallels for the room ensemble 6 / 7 / 17, consisting of a central *exedra* with two flanking rooms, are to be found in Herodian and Ptolemaic architecture. The room combination 458 and 521 in the early Herodian core of the Western Palace on Masada, dated to the 30's of the first century BC (Netzer 1991: 232f.), is comparable, although lacking one of the flanking rooms. The reception/banqueting room 458 has, like room 6, one central and two side entrances. It is also remarkable that the ground plans of the two *exedrae* 521 (7.1 x 6.9 m) and 7 (7.4 x 6.5 m) are almost identical and that they both open northwards with two columns *in antis*. The only difference between the two *exedrae* worth mentioning is that the intercolumniations in room 7 were furnished with doors.

Three room groups of the described type are to be found in the Macedonian palatial architecture from the end of the fourth century BC onwards (i.a. Nielsen 1994: 84ff.). In this context it is quite revealing that in the late Hellenistic *Palazzo delle Colonne* in Ptolemais (Cyrenaica) a three room group is to be found to the north of the garden peristyle (Pesce 1950: Fig. 11). One would like to interpret the *Palazzo delle Colonne* as a geographical and chronological link between the Macedonian architecture of the late fourth century and the Judaeon/Nabataean buildings from the first centuries BC and AD. It can be assumed that the three room group was well established in Ptolemaic architecture and that the Herodian Western Palace as well as the Nabataean mansion on

6. See McKenzie 1990: 116f. with 190, diagram 14.f.

EZ IV must be seen in conjunction with Ptolemaic prototypes, which themselves were inspired by Macedonian architecture.

Rooms 8, 9 and 16

The exposure of staircase 9 was completed in 1998 (see Fig. 1). The stairwell has a quadratic ground plan of 4.23 x 4.26 m and is constructed around the central staircase pillar M (1.43 x 1.52 m). One is reminded of the Nabataean staircase towers as described by Avraham Negev e.g. in the phase III temple at Iram (Tholbecq 1998: 242, Fig. 1), or in "building II" in Mampsis (Negev 1973: 367, Fig. 2). Only the foundations are preserved of the steps which once descended from corridor 8 in two flights. The steps were removed during a later phase of occupation and reused elsewhere. An explanation for the removal of the steps may be a collapsed section in the southern face of wall AA. Areas of repair in the northern face of wall AA prove that the damage must have occurred before the final destruction of the building in the earthquake of 363 AD. These structural findings are supported by the pottery finds from the last phase of use of the staircase, which date from the late third / early fourth centuries AD. Three excellently worked steps were found just below the surface in the debris between wall A and staircase pillar M. They certainly belonged to an upper flight of stairs which had originally led up to the first floor. The steps are about 1.30 m long and show clear signs of wear at the exposed edge. It is possible, on the basis of these steps and the *in situ* foundations, to reconstruct a stairwell which connected the ground floor with the basement rooms under room 17 and the as yet intangible rooms of the upper storey.

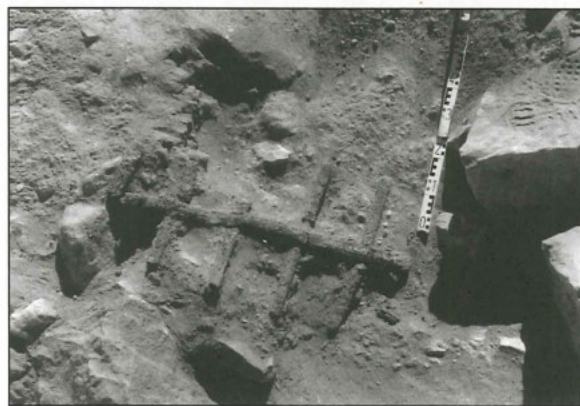
Room 16 that is still only partially investigated, has a very badly preserved and carelessly laid floor of split flagstones in a variety of sizes. The room has a peculiarly narrow doorway of only 50 cm breadth in its east wall I. It is rather astonishing that there

is no sign of steps in the excavated strata to the east of and below the threshold despite the fact that wall I reaches down ca. 1 m deeper than that part currently visible.

The floor of room 16 was covered with a thick layer of ash mixed with fourth century AD pottery - again documenting the final destruction of the building during the earthquake of 363. Two well preserved iron window grates lay in the debris to the east of wall I in square 87/AM (Fig. 7). Traces of mortar on the ends of the main strut and the bars indicate that the grates were embedded in the wall to a depth of about 7 cm on all four sides. The grate visible in Figure 7 consists of a central iron strut onto which short bars are riveted at regular intervals. The second grate has two vertical struts close together and is correspondingly somewhat wider. The narrow slit windows which had been protected by these grates measured ca. 0.3 x 0.9 m and 0.45 x 0.9 m respectively. These two finds will be a great help in the reconstruction of the building since until now no wall has been found that is preserved to a height where windows would have been positioned.

Rooms 10, 11 and 14

The westerly corridor 11 is 1.2 m wide and runs along the same axis as corridor 8 in the east (see Fig. 1). The flagstones from the original building context are still *in situ* along wall K. They cover a canal which was



7. EZ IV. Iron window grate as found east of room 16. (photo: D. Keller).

probably connected to a cistern in the central area of the house (squares 89/AN-AP), which has not yet been investigated. The corridor ends in a poorly constructed flight of steps in its western extension (Fig. 8). Hewn areas in the bedrock beneath the threshold of the blocked door in wall K and below wall Y which is opposite, show that the flight of steps originally started just east of the door and was far steeper: a height difference of a metre had to be spanned by the steps in a length of just 1 m⁷. In the course of cleaning the canal, which also runs through room 10, the steps in room 11 were removed to be shoddily reconstructed later out of spoils. This process is particularly clearly visible in the *opus sectile* pavement of the preserved part of room 10; the pavers of white limestone and slate, which had been ripped out from the simple *opus sectile* floor, were not returned to their original position after the canal had been cleaned but were reused to cover the canal (Fig. 9).

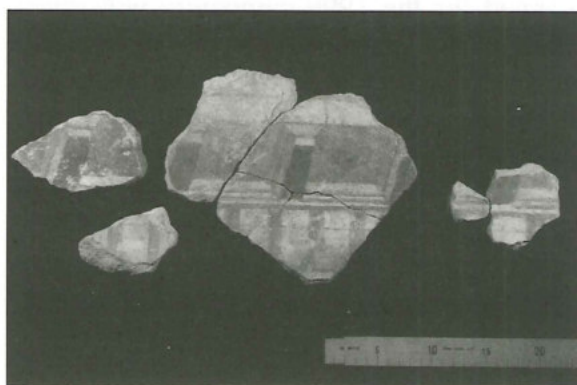
A few interesting fragments of wall painting (Fig. 10) lay in front of the walled-up door in wall K. A polychrome painted modillion cornice is recognisable. Over dentils painted in white, yellow and brown follow the modillions which are painted bright red underneath. The dark blue cassettes between the modillions are decorated with golden rosettes. It is no longer possible to tell which



8. EZ IV, rooms 11, 12 and 14 from the north. (photo: D. Keller).

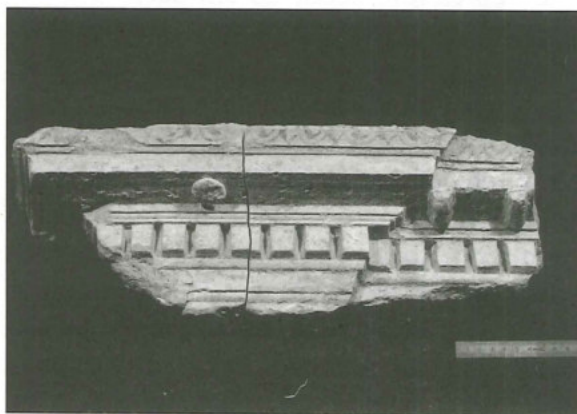


9. EZ IV, room 10. Canal and remains of *opus sectile* pavement from the east. (photo: D. Keller).



10. EZ IV, room 11. Fragments of an illusionistic architectural painting. (photo: O. Jäggi).

wall was originally decorated with these paintings because no other fragments were discovered in corridor 11. A comparison with a moulded stucco modillion cornice from room 6 (Fig. 11) shows how closely related the painted and moulded decoration of



11. EZ IV, room 6: Dentile cornice with modillions and rosettes. (photo: O. Jäggi).

7. Level of the eastern corridor: 923.75 m; level below the steps: 923.76 m.

the building were. The dentils are set off from the geison with an identical profiled fillet followed by modillions and rosettes or discs.

Room 14 opens onto corridor 11. It is furnished with a floor of hexagonal sandstone paving (see Figs. 1 and 8). The floor has collapsed in two places and the substructure is visible: the floor lies on tiles placed at right angles to one another - a manner of construction typical for the hypocausts of Roman *caldariae* (Adam 1984: 291, Figs. 628-9). The complete exposure of the room, planned for the 1999 campaign, will reveal whether the mansion was really furnished with a Roman style bath, as was house V 1 in Nabataean Khirbat adh Dharih which was also of a comparable size (Al-Mouheisen and Villeneuve 1991: 751f. with Fig. 8). Significant remains of the wall decoration with stuccoed corner pilasters decorated with cassettes were retrieved along walls U, Y and W.

Rooms 5, 13 and 18

The small, simply furnished rooms around courtyard 5 were probably part of the household tract. The floor space of room 18 is dominated by a quadratic basin (2 x 2.1 x 0.8 m) lined with flat stones. The pool is sealed with grey hydraulic mortar. In the west corner of the basin is a round, bowl-like depression, about 20 cm deep. The basin was not fitted out with a drain but there are also no apparent signs of a feed pipe. The installation was certainly not connected to the two channels which run below the pavement of courtyard 5: one of the channels drained southwards in the direction of room 2, the other runs westwards below the pavement of courtyard 13. The question as to the function of this basin cannot be answered at the moment, especially since it was filled with sterile material later on. Room 18 opened onto corridor 5 through two doorways in the first building phase; these were then walled up in a later phase.

28 kg of amphora sherds were collected in the strata above and next to the basin. It is quite possible that room 18 was used as a rubbish dump after the two doors had been sealed off. The coin and pottery finds date the last use of this group of rooms to the fourth century AD.

Room 15

The partially exposed flagstone floor and pilaster Z in square 90/AO were probably two elements of the centrally placed courtyard which borders on room 7 to the north (see Fig. 1). The bipartite Attic pilaster base and a column base of the same type can be seen in Figure 12. Both bases stand on a stylobate which runs east-west and have counterparts on the northern side of room 7 (see Fig. 1). The space between pilaster Z and the column base (0.98 m) is the same as that between the pilaster and column bases of room 7. The openings in the two bipartite pilaster bases are also identical but the width of the opening in the base of pilaster Z (0.48 m) is significantly wider than that of the column base in room 7, which can be reconstructed with wooden door frames. The findings indicate a reconstruction of the north side of the courtyard with screen walls between the supports.

A number of unusual findings and finds came to light in square 90/AN. The east face of wall G which was only preserved to the height of two courses of ashlar, revealed a blocked up doorway from the first building



12. EZ IV, room 15. Bipartite Attic base of pilaster Z and column base in the bulk. (photo: D. Keller).

phase. The fact that the lowest 20 cm of the fill in the door consists of layers of stucco mouldings is rather surprising. The sealed up doorway is hidden by the wall painting on the western face of wall G. One can conclude from these findings that the wall painting preserved *in situ* in room 1 does not belong to the first phase of the building, but to a second phase which is also present in room 6 (see above). There is no direct evidence for the dating of this second building phase. The phase 2 repairs to the damaged pillar P1 in room 6 could be taken as an indication for an earthquake due to the limited structural damage and changes as well as redecoration of certain rooms.

Clues to the Dating of the First Building Phase

The earliest stratigraphically secure pottery finds are homogenous and belong to phase 3a (20-70/80AD; see Schmid 1997: 134f.). They all come from the mortar beddings of the *opus sectile* pavement in rooms 1, 10 and 17. It seems rather unlikely that the floors in three rooms would have been replaced with an *opus sectile* pavement during a renovation; we can assume that these sherds are dating evidence for the first phase of building unless contrary evidence appears. Light may be thrown on the dating and interpretation of the mansion by the building inscription of a cavalry commander, which is dated to the 18th year of the reign of Aretas IV (10 AD). Dr Fawzi Zayadine was kind enough to draw attention to this inscription which was discovered in the late 60's close to EZ IV (Starcky 1978: 50, No. 44).

A Hoard of Bullae from the Second Century AD from Room 15

The 1996 and 1997 campaigns brought almost no finds from the second and third

centuries AD to light, which is not particularly surprising considering the fact that the structures were in use up until the earthquake of 363. However, we were lucky enough to uncover a hoard of about 80 clay impressions (*bullae*) from official Petraean seals of the second centuries AD which lay buried in room 15 beneath the debris of the natural catastrophe of 363 (Fig. 13). This find is the first evidence of its kind to have come to light in Petra. The only three published *bullae* from Petra, are those from the necropolis in Mampsis (Negev 1969: 90). Dr Haim Gittler from the Israel Museum in Jerusalem kindly drew my attention to another, unpublished Petraean *bullae* which was found in Moa. The most common type within the hoard shows the Tyche of Petra⁸. Three sub-types can be distinguished (Fig. 13 from left to right): 1) Tyche with turreted crown and veil, sitting on a rock facing left. In her outspread right hand she holds a stela (?) and with the left she shoulders a *tropaeion*; 2) Bust of Tyche with turreted crown and a veil, facing right; 3) Frontal bust of Tyche with turreted crown and veil. The Greek legends are unfortunately mostly lost or severely worn. The reverses of the *bullae*



13. EZ IV, room 15. The three main types of *bullae* of the 2nd century AD (photo: L. Gorgerat).

8. A sculptured head of Tyche was found in the excavation of Martha Sharp Joukowsky in the so-

called South Temple in Petra. See Basile, *ADAJ* (1997) 41: 255; Joukowsky 1997: 86, Fig. 85.

have the definite imprint of the papyrus documents which they originally sealed. The small holes from the lost cords which originally bound the papyrus documents can be seen on a few of the *bullae*. Tyche representations appear on Petraean coins for the first time under the Emperor Hadrian (117-138; Wenning 1997: 104, Fig. 113a-b). Hadrian visited Petra in 131 AD and bestowed the status of a metropolis on the town. Official seals could only have been made in imitation of this coin design from the Hadrianic period onwards. If the reading of "col" being for *colonia* on one of the *bullae* is correct, then the series continues into the 3rd century because Petra was only raised to the status of a colony under the Emperor Elagabal (218-222).

Since room 15 has not yet been completely excavated the analysis of the hoard within its context has to be delayed. The fact that the *bullae* were closely packed, showing no traces of burning, and that none of the papyri which they had originally sealed were found suggests that they had been ripped off the documents and stored in some sort of receptacle. The only comparable hoard of *bullae* is one which was stored in a vessel and was found near the Solar Shrine at Lachish and is dated to the seventh century BC (Usishkin 1993: 909f.).

Nabataean Fineware from Room 15 (L. Gorgerat)

An interesting pottery ensemble came to light on a floor level of beaten earth in room 15 east of wall G (Figs. 1 and 14)⁹. The ensemble consists of EF 3194, a complete juglet (Fig. 15a); EF 3195, fragments of a painted bowl with handles (Fig. 16: a, b) and EF 3196, a complete small bowl (Fig. 15b).



14. EZ IV, room 15. Nabataean fine ware-ensemble *in situ*. (photo: D. Keller).

Juglet and Small Bowl

The intact juglet has an opening of 4 cm diameter (Fig. 15a). The base ring is clearly set off from the rounded body which reaches a maximum diameter of 6 cm in the lower third of the vessel. The transition between the body and neck is smooth and ends in a protruding lip. The pointed spout is also unusual. The handle, which is disproportionally small in comparison to the rest of the juglet is attached to the lip and neck.

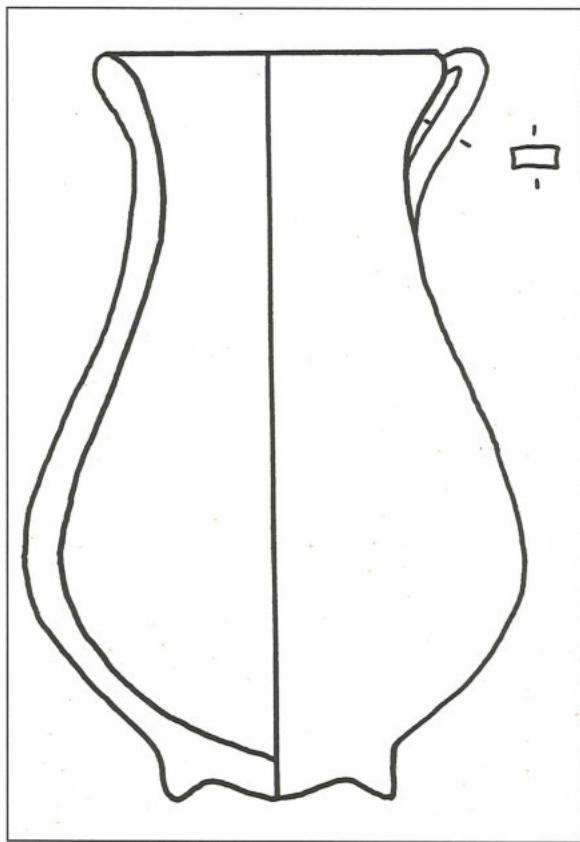
Juglets or pitchers with slender necks and protruding lips were already found on EZ I (Schmid 1995: 137f.). Although most of the examples on EZ I were significantly larger than the vessel presented here, its form is similar to that of type G 9a 291 (Schmid 1995: 137). The problem of dating this type of closed form lies in their relatively long span of production. The type mentioned appears in phase 1 (second half of the second century BC - ca. 50 BC) and 2a (50 BC-20 AD) but still appears in phase 3 (20-100 AD)¹⁰.

A complete bowl was found in the same locus (Fig. 15b). The opening of this vessel

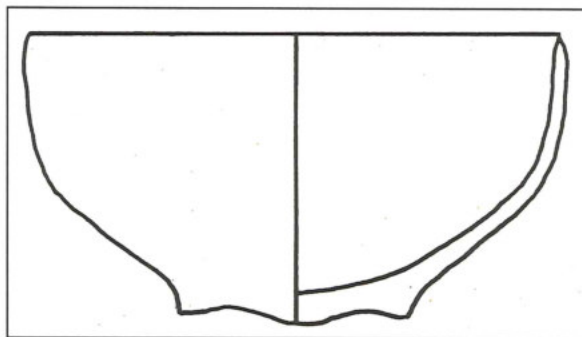
9. Locus 3158: the juglet came to light during the cleaning work on wall G. It was decided that the ensemble would be excavated immediately in order to prevent any further damage to it. Since the excavation of locus 3158 is not finished there are no precisely datable finds yet such as coins avail-

able from this locus.

10. The final date of this phase is particularly clearly defined - it finishes with the destruction level on the lower terrace of EZ I around 100 AD. See *Petra - Ez Zantur I*: 163f.

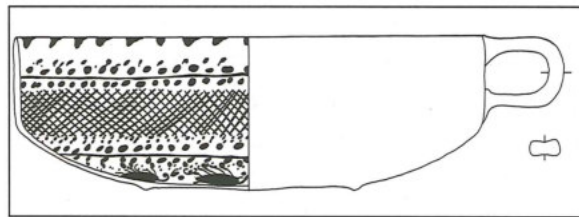


15a. EZ IV, room 15. Plane Nabataean fine ware.
(drawing: L. Gorgerat)
EF 3194 : juglet light red reddish yellow (Munsell 2.5 YR 6/8 – 5 YR 7/8)
Diam. Open: 4.0 cm
H.: 9.1 cm

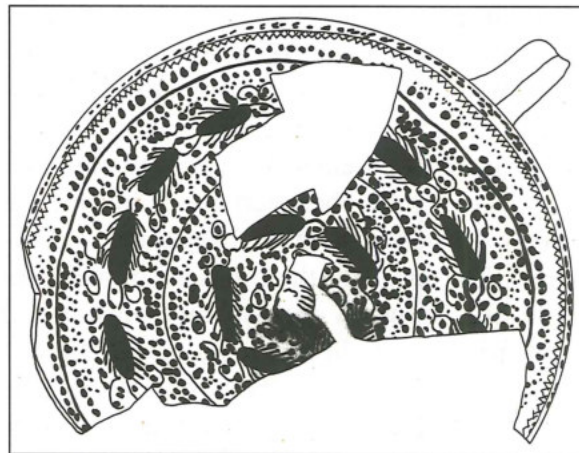


15b. EZ IV, room 15. Plane Nabataean fine ware.
(drawing: L. Gorgerat)
EF 3196: bowl light red (Munsell 2.5 YR 5/8)
Diam. Open: 7.2 cm
H.: 3.9 cm

measures 7.2 cm in diameter; it is 3.9 cm high. The unprofiled stand ring supports a slightly bulging body which transforms into a vertical, sharp edged rim, from the middle



16a. EZ IV, room 15. Painted Nabataean bowl.
(drawing: L. Gorgerat)
EF 3195 red (Munsell 10 R 5/8)
Diam. Open.: 11.4 cm
H.: 7.7 cm



16b. EZ IV, room 15. Painted Nabataean bowl.
(drawing: L. Gorgerat)
EF 3195 Decoration scheme.

of the vessel. The profile of this vessel places it in group 8 of the unpainted main forms from az-Zanṭūr (Schmid 1996: 155 Figs. 659-662). The type E 3a 2¹¹ within this group, which belongs to phase 3, is especially close to the bowl described.

Painted Bowl

About 2/3 of a painted bowl with handles (Fig. 16: a, b) could be reconstructed from the numerous fragments in locus 3158. The vessel has a diameter of 22.8 cm and a wall thickness of 0.3 cm. The profile of the bowl (Fig. 16a) is slightly rounded and is topped with an inset vertical rim. The slightly concave handle is joined to the vessel just above the bend between the wall and rim and at the sharp edge. Given the large diameter of the vessel it seems probable that it had two such handles. A bowl similar in

11. Small bowls of this type were excavated on EZ I (EF 872 and 886-889).

form but somewhat smaller is found in a private German collection¹². So the closest parallel to our vessel does have two handles.

The most striking feature of the painting are the two concentrically arranged rows of zoomorphic figures (Fig. 16b). One can assume that the centre of the vessel was painted with a similar creature whose extremities are preserved. These zoomorphic creations are characterised by a long oval body which is sometimes completed with one or two projections. The extremities are attached along the length of the body and sometimes end in a dot. The zoomorphic decoration of this bowl is complimented by rows of dots and eyes. The border between the wall and the rim is decorated with an irregular grid pattern¹³. The inside of the rim is decorated with blob-like drops. A fragmentary unstratified find from Horsfield's excavation has similar drops around the edge (Horsfield 1942: 179, Fig. 39, 342). It is also painted with concentrically arranged rows of dots. The rim profile with a bend and handle is also similar to that of the bowl in room 15. The ornamental decorative elements of the bowl found in room 15 and the brownish tone of the paint are typical for the group of bowls belonging to decor phase 3a (20-70 AD)¹⁴.

Zoomorphic figures are rare on the painted ware from az-Zanṭūr (Schmid 1995: 170). That they do occur on phase 3a ware is however known from finds from other places. The closest parallel is from N. Khairy's excavation on al-Katūta and is now exhibited in the museum in Petra (Khairy 1990: 39 No. 9 Fig. 42,9 Table 23,8). The handleless bowl is decorated with grid patterns, and rows of dots and eyes enclosed by a row of drops along the rim, in addition to the concentrically arranged zoomorphic creations and is thus very close to the bowl from EZ

IV 4. The bowl in the private German collection mentioned before (Schmitt-Korte 1980: 184 No. 35) has two zoomorphic representations set in an asymmetric decorative field. That these representations can reach sizeable dimensions is shown by the fragment of a bowl from a pottery workshop in Oboda¹⁵. A. Negev dates the installation in Oboda, on the basis of the coin finds, to 30 BC-50 AD (Negev 1974: 45). It can therefore be said that our fragment also dates from this period and this substantiates its attribution to decor phase 3a (20-70 AD).

An Ensemble of Lamps from Room 121 (EZ III) (M. Grawehr)

An ensemble of lamps was found in Room 121 on site EZ III. The latest coin found on the floor dates from the reign of Commodus (180-191 AD) and provides a *terminus post quem* for the abandonment of the room at the end of the second century AD. The evidence of fine and coarse ware supports this date. This discovery provides the opportunity to survey a part of the repertoire of lamp types in circulation at the end of the second century AD at Petra. This ensemble deserves special attention because it may throw light on the otherwise poorly understood pottery chronology of the Nabataean/Palestinian region during the second and third century AD.

Nabatean Lamps of the Negev Type 1

Two lamps have been recovered nearly intact, and two additional fragments belong to one or two other examples. These sherds are of the variety of the well attested Nabataean lamps - Negev's Type 1¹⁶. Its chronological range is generally set within the 1st century AD, although it persists into the first half of the second century AD. Lamps of

12. Schmitt-Korte 1976: 42, 44, Fig. 20,27.

13. A similar grid pattern over the transition from wall to rim occurs on one of the handleless bowls from EZ I; see Schmid 1995: E 18a 379.

14. *Petra- Ez Zantur I*, Pp. 166-168, Table 5,2, Fig.

699.

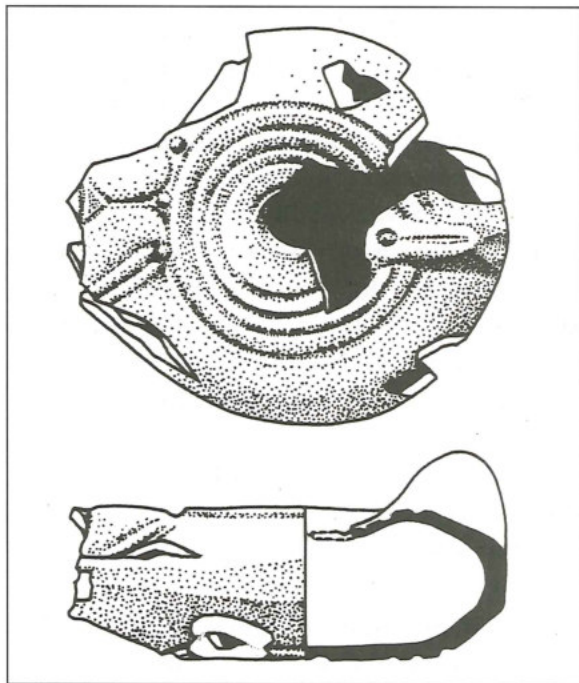
15. Negev 1974: 18, no.32 Table 11, 32.

16. Negev 1986: 134ff; other designations: Elgavish 1962, type 4; Amr 1987: 30, type 2.

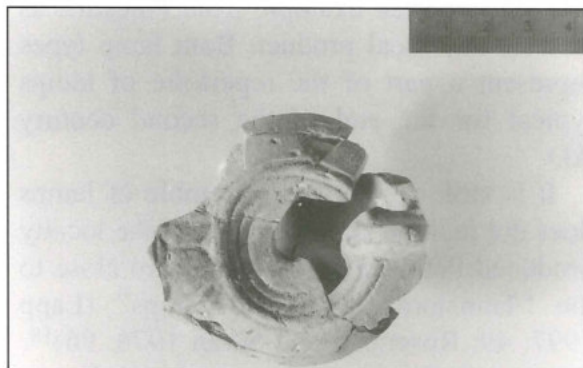
Type 1 are found for example in the destruction level of EZ I dating to the early second century AD (Stucky 1996: 21), as well as slightly later in the destruction level of Khirbat adh Dhariḥ (Villeneuve 1990: 370-371, 375).

Imported Lamp of the Second Century AD

It was possible to reconstruct one lamp from 14 fragments (Fig. 17: a, b). Only a few sherds are missing, most conspicuously



17a. EZ III, room 121. Imported lamp of the 2nd century AD (drawing: I. Haussener).



17b. EZ III, room 121. Imported lamp of the 2nd century AD (photo: O. Jaeggi).

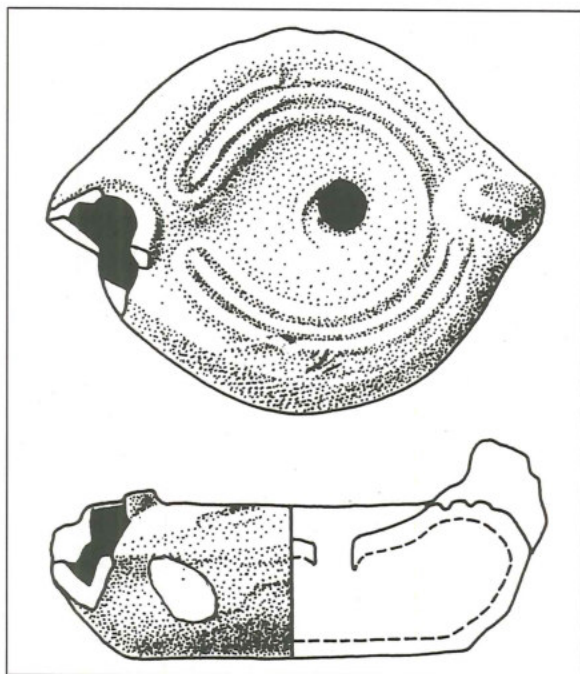
the nozzle. The body of the lamp is pear-shaped, and its width of 6.4 cm with a preserved length of 6.8 cm that is average for a lamp of this type. The shoulder is decorated with a plain impressed motif. The handle is positioned mainly on the shoulder, although it overlaps slightly onto the disk of the lamp. It is not pierced, but it is decorated with one groove. Three concentric circles are pressed into the bottom of the lamp. The clay is pink in colour (Munsell 7.5YR 8/4) with white grits. No traces of a slip survive. This lamp can be placed in the type commonly called "northern stamped"¹⁷, which is found in Northern Palestine. The center of production for these lamps was most likely in Galilee. The example in discussion is definitely an import, not only because the clay is uncommon to this area, but also because the lamp represents the only discovery of this type in Petra to date. The subtype to which this example belongs is the earliest of the "northern stamped" class and can be dated to the second half of the second century AD (Sussmann 1989: 23-55).

Local Lamp of the Later Second Century AD

The third lamp is almost completely intact (Fig. 18: a, b). Its form is almond-shaped; the handle and nozzle are placed slightly over the circle of the shoulder, but remain fully integrated into the design. The profile of the lamp consists of a large flat base, steep sides and, due to this, a relatively flat top. The shoulder rises in a slightly convex curve and the disk forms a shallow round concavity. The nozzle extends a little bit higher than the body. The handle lies on the shoulder and is a steep amorphous knob; it is unperforated and lacks a rim. It is reinforced on the side with a small support. At the transition from the shoulder to the disk there are three raised fillets. The outer and

17. Sussmann 1989, Lapp 1997; other names: Avigad 1976: 184-189, Beth Shearim; Fernandez 1983:

Types L 10.1, L 10.2, L 14.



18a. EZ III, room 121. Local lamp of the later 2nd century AD (drawing: I. Haussener).



18b. EZ III, room 121. Local lamp of the later 2nd century AD (photo: O. Jaeggi).

the inner fillet meet at the nozzle, forming a channel-like composition. The base of the lamp is flat and undecorated. The filling-hole is slightly off center and measures approximately 0.9 cm in diameter. The diameter of the entire lamp is 6.4 cm; the length is 8.2 cm. The clay is light red in colour (Munsell 10R 6/8) and relatively coarse in texture. Traces of a red slip (Munsell 10R 5/8) survive.

To date, this type is not well attested in

Petra. A possible example of the same type was excavated in Tomb 64B in Petra (Zayadine 1982: 371). Four additional fragments found hitherto in the excavations at az-Zanūr (loci 1071/1135/1146, 1206), as well as the one intact lamp originating from the as-Siq at Petra (Keller forthcoming), prove that this type is a local product. The fact that local features figure in the production means that this type cannot be compared directly with lamp types outside Petra or Nabataea. Roman lamps (Broneer 1930: 83ff.: Type XXV; Bailey 1980: 293, 336: Types O or Q) can be considered a common archetype. The example under consideration is typologically closer to the well-attested production from Petra of the late first century AD (i.e., Rosenthal and Sivan 1978: 97f.), than to the again well-attested Petraean-Early Byzantine lamps of the fourth century AD (Zannoni 1996: 319). Interestingly, the lamps of the type discovered in room 121 did not appear in the destruction level dating to the end of the first or the beginning of the second century AD. The appearance of this type should thus probably be placed approximately in the middle of the second century AD; the lamp exposed in room 121 would then have been buried in the course of the second half of the second century. This ensemble contains, beside the two Negev 1 lamps, already out of fashion in the second century AD, an imported example from Palestine as well as one local product. Both lamp types represent a part of the repertoire of lamps typical for the end of the second century AD.

It is striking that this ensemble of lamps does not include any specimen of the locally produced Petraean lamps which are close to the "Transjordanian round lamps" (Lapp 1997: 49; Rosenthal and Sivan 1978: 96)¹⁸. The typical feature of these lamps is the enlarged filling-hole, or, put another way, the

on display in the museum at Petra.

18. Khairy 1990: 143, Nr. 39; another nice and intact example with floral design from the same site is

diminished disc; a development that foreshadows the Petraean-Early Byzantine lamps in the fourth century AD. Lamps of this type often bear a stylised floral design on the rim. The stylistic tendency mentioned above and the absence of this type of lamp in the ensemble of Room 121 may indicate that they can be dated to the third century AD. However, if one does not wish to over-emphasize the evidence, a production of these lamps in the late second century AD cannot be ruled

out, as a parallel development to the aforementioned examples.

Bernhard Kolb
 Laurent Gorgerat
 Matthias Grawehr
 Archäologisches Seminar der
 Universität Basel
 Schönbeinstrasse 20
 CH - 4056 Basel
 Switzerland

Bibliography

- Adam, J.-P.
 1984 *La construction romaine. Matériaux et techniques*. Paris: Grands Manuels Picard.
- Al-Mouheisen, Z. and Villeneuve, F.
 1994 Découvertes nouvelles à Khirbet edh-Dharîh (Jordanie), 1991-1994: autour du sanctuaire Nabatéen et Romain. *CRAI* : 735-757.
- ‘Amr, K.
 1987 *The Pottery from Petra: A Neutron Activation Analysis Study*. Oxford: BAR Int. Ser. 324.
- Avigad, N.
 1976 *The Catacombs 12-23*. Beth She’arim Vol. III. Jerusalem: Masada Press.
- Bailey, D.M.
 1980 *Roman Lamps Made in Italy*. A Catalogue of the Lamps in the British Museum, Vol. II. London: Cambridge University Press.
- Basile, J.J.
 1997 A Head of the Goddess Tyche from Petra, Jordan. *ADAJ* 41: 255-266.
- Bignasca, A. *et al.* (eds)
 1996 *Petra- ez Zantur I. Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen 1988-1992*. Terra Archaeologica Bd. II. Mainz: Philipp von Zabern.
- Broneer, O.
 1930 *Terracotta Lamps*. Corinth. Vol. IV, Part II. Cambridge: Harvard University Press.
- Elgavish, J.
 1962 *The Art of Lamps in Israel in the Roman and Byzantine Periods*. Jerusalem: University Press.
- Fernandez, F.D.
 1983 *Ceramica Comun Romana de la Galilea: Aproximaciones y diferencias con la ceramica del resto de Palestina y regiones circundantes*. Madrid: Ed. Biblia y fe Escuela Biblica.
- Horsfield, G. und A.
 1942 Sela-Petra, The Rock of Edom and Nabatene, IV: The Finds. *QDAP* 9: 105-204.
- Joukowsky, M.S.
 1997 Antike Säulen - moderne Technik. Der neu ausgegrabene Südtempel. Pp. 84-86 in Th. Weber and R. Wenning (eds), *Petra: Antike Felsstadt zwischen arabischer Tra-*

- dition und griechischer Norm.* Mainz: Philipp von Zabern.
- Khairy, N.I.
1990 *The 1981 Petra Excavations.* Abhandlungen des Deutschen Palästinavereins 13. Wiesbaden: Otto Harrassowitz.
- Kolb, B.
1998 Swiss-Liechtenstein Excavations at az-Zanṭūr in Petra 1997. *ADAJ* 42: 255-267.
- Lapp, E.C.
1997 *The Archeology of Light: The Cultural Significance of the Oil Lamp from Roman Palestine.* Ann Arbor: UMI.
- McKenzie, J.
1990 *The Architecture of Petra.* Oxford: Oxford University Press.
- Negev, A.
1969 Seal-Impressions from Tomb 107 at Kurnub (Mampsis). *IEJ* 19: 89-106.
1973 The Staircase-Tower in Nabataean Architecture. *RB* 80: 364-383.
1974 *The Nabatean Potters Workshop at Oboda.* Acta rei creariae Romanae fautorum. Suppl. 1. Bonn: Habelt.
1986 *The Late Hellenistic and Early Roman Pottery of Nabatean Oboda, Final Report. Qedem 22.* Jerusalem: Ahva Press.
- Netzer, E.
1991 *Masada III. The Yigeal Yadin Excavations 1963-1965. Final Reports. The Buildings: Stratigraphy and Architecture.* Jerusalem: Israel Exploration Society.
- Nielsen, I.
1994 *Hellenistic Palaces, Tradition and Renewal.* Studies in Hellenistic civilization 5. Aarhus: Aarhus University Press.
- Pesce, F.G.
1950 *Il "Palazzo delle Colonne" in Tolemaide di Cirenaica.* Rom: "L'Erma" di Bretschneider.
- Peter, M.
1996 Die Fundmünzen. Pp. 91-114 in A. Bignasca et al. (eds), *Petra- ez Zantur I: Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen 1988-1992.* Terra Archaeologica Bd. II. Mainz: Philipp von Zabern.
- Rosenthal, R. and Sivan, R.
1978 *Ancient Lamps in the Schloessinger Collection. Qedem 8.* Jerusalem: Ahva Press.
- Russell, K.W.
1980 The Earthquake of May 19 A.D. 363. *BASOR* 238: 47-64.
- Schmid, S.G.
1997 Eierschalendünne Tongefässe und grobe Ware. Pp. 131-137 in Th. Weber and R. Wenning (eds), *Petra: Antike Felsstadt Zwischen arabischer Tradition und griechischer Norm.* Mainz: Philipp von Zabern.
forth-coming Die Feinkeramik der Nabatäer. Typologie, Chronologie und kulturhistorische Hintergründe, in B. Kolb and S.G. Schmid (eds), *Petra- ez Zantur II.* Terra Archaeologica 3. Mainz: Philipp von Zabern.
- Schmitt-Korte, L.
1976 *Die Nabatäer. Spuren einer arabischen Kultur der Antike.* Ausstellungskat. Frankfurt am Main. Veröffentlichungen der Deutsch-Jordanischen Gesellschaft e.V.
1980 Die bemalte nabatäische Keramik. Verbreitung, Typologie und Chronologie. Pp. 174-197 in M. Lindner (ed.), *Petra und das Königreich der Nabatäer.* Delp: Mu-

- nich.
- Starcky, J.
1978 Langue, Ecriture et Inscriptions. Pp. 47-52 in *Un royaume aux confins du désert. Pétra et la Nabatène*. Exhibitioncat. Lyon. Lyon: Tixier & Fils.
- Stucky, R.A.
1996 Die Nabatäischen Bauten. Pp. 13-49 in A. Bignasca *et al.* (eds), *Petra-ez Zantur I. Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen 1988-1992*. Terra Archaeologica Bd - II. Mainz: Philipp von Zabern.
- Sussmann, V.
1989 Northern Stamped Oil Lamps and Their Typology. *Michmanim* 4: 22-58.
- Tholbecq, L.
1998 The Nabataeo-Roman site of Wadi Ramm (*Iram*): a new appraisal. *ADAJ* 42: 241-254.
- Ussishkin, D.
1993 Lachish. Pp. 897-911 in E. Stern (ed.) *The New Encyclopedia of Archaeological Excavations in the Holy Land*, Vol. 3. Simon & Schuster: New York.
- Villeneuve, F.
1990 The Pottery from the Oil-Factory at Khirbet edh-Dharieh (2nd Century AD), *ARAM* 2:1+2: 367-384. Oxford: University of Oxford.
- Wenning, R.
1997 Das Münzsystem der Nabatäer. Pp. 101-104 in Th. Weber and R. Wenning (eds).
- Weber, Th. and Wenning, R. (eds)
1997 *Petra. Antike Felsstadt zwischen arabischer Tradition und griechischer Norm*. Mainz: Philipp von Zabern.
- Zanoni, I
1996 Tonlampen. Pp. 311-330. in A. Bignasca *et al.* (eds), *Petra-ez Zantur I: Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen 1988-1992*. Terra Archaeologica Bd. II. Mainz: Philipp von Zabern.
- Zayadine, F.
1981 L'iconographie d'al 'Uzza-Aphrodite. Pp. 113-118 in L. Kahil und Ch. Augé (eds.), *Mythologie Gréco-Romaine, Mythologies Périphériques. Actes du colloque international du Centre National de la Recherche Scientifique No. 593*. Paris: Editions du CNRS.
- 1982 Recent Excavations at Petra (1979-1981). *ADAJ* 26: 365-393.