

SWISS-LIECHTENSTEIN EXCAVATIONS AT
EZ-ZANȚUR IN PETRA 1991
THE THIRD CAMPAIGN *

by
Rolf A. Stucky *et al.*

The third campaign of the Archaeological Institute of the University of Basel and the Swiss-Liechtenstein Foundation of Archaeological Research Abroad (SLFA) on the terrace beneath ez-ZanȚur was carried out between August 21st and October 23rd 1991. Participants were — besides the Director of the excavation — as archaeologists: B. Kolb (field assistant and architect), R. Fellmann Brogli, Y. Gerber, A. Bignasca, R. Born, O. Jaeggi, D. Keller, St. Schmid and Ch. Schneider, as osteologists A. Kress and J. Studer, as archaeobotanist S. Karg, as specialists for wall and stone conservation H. Hugi and U. Bellwald, as restorer Ch. Pugin and as preparator for animal skeletons J.-M. Zumstein.

As during the last years, we were happy to enjoy the active support and hospitality of the Jordanian Department of Antiquities. Special thanks are due to Prof. Dr. S. Tell, Director General of the Department of Antiquities, Dr. F. Zayadine, Assistant Director and Mr. S. Farajat, Inspector of Antiquities at Petra. During the third campaign he was the representative of the Department of Antiquities and assisted us in all concerns. During the preparation and the accomplishment of the 1991 campaign we had once again the pleasure to be able to rely on the kind help of the Jordanian Embassy in Berne and the Swiss Embassy in Amman. The expedition wishes to thank especially H.E. Ambassador A. Barakat, Berne and H.E. Dr. D. Sciolti, Amman.

In this place we would also like to thank the following institutions for their financial support: Erziehungsdepartement Basel-Stadt, Fonds für Lehre und Forschung, Basel, Freiwillige-Akademische Gesellschaft, Basel, Ciba-Geigy, Basel, Jubiläumsstiftung der Schweizerischen Bankgesellschaft, Zürich,

Landis & Gyr, Zug, Royal Jordanian Airlines, Amman. Besides that, private sponsors helped in a generous way to realize our project. We are particularly grateful to Mr. H.-H. Coninx, Zürich, and to Drs. O. and E. Coninx, Zürich.

The following persons have contributed to the present report: R. Fellmann Brogli (Late Roman pottery), M. Peter (coins), St. Schmid (Nabataean pottery) and S. Karg (archaeobotany).

Continuing the work of the two preceding campaigns, we resumed the excavations in the three following areas:

- the excavation on the upper terrace of ez-ZanȚur.
- the excavation on the lower terrace of ez-ZanȚur.
- the stratigraphical trench on the eastern slope of the upper terrace.

Excavation on the Upper Terrace

Nabataean Building Structures (Figs. 1-2; Pl. I:1-2)

The work of the two preceding campaigns was carried on. It was possible to clarify, in several areas, the stratigraphy of the large Nabataean house built on the upper terrace: Deep soundings in Rooms 17 and 19 gave us a sequence of layers, containing in the lowest strata the early painted types of Nabataean cups with the wavy lines painting together with the thick-walled pottery of the Late Hellenistic types and in the upper strata the light brown painted Nabataean pottery. A stamped handle of a Rhodian wine amphora and sherds of Eastern Sigillata will be precious help in indicating an approximate date for the foundations of the earliest external wall of the Nabataean house.

The succession of three different external

* The following abbreviations will be used:

Campaign 1988: R.A. Stucky, 'Schweizer Ausgrabungen in ez-ZanȚur, Petra. Vorbericht der Kampagne 1988' in *ADAJ* 34 (1990), p. 249ff.

Campaign 1989: R.A. Stucky *et al.*, 'Swiss-Liechtenstein Excavations at ez-ZanȚur in Petra 1989 — The Second Campaign' in *ADAJ* 35 (1991), p. 251ff.

Munsell: *Munsell Soil Color Charts*, Baltimore 1975.

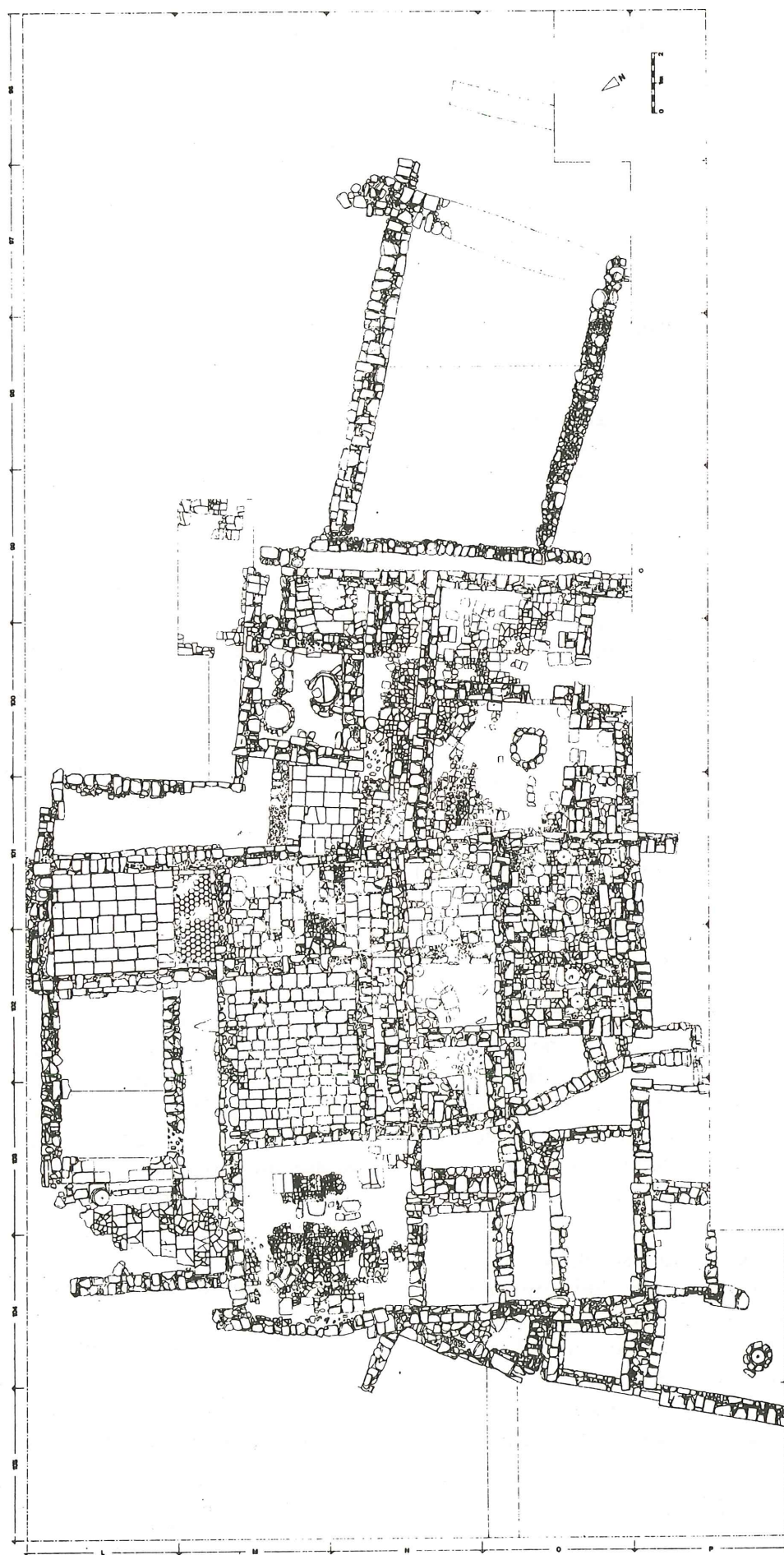


Fig. 1. Ez-Zanţur 1991.

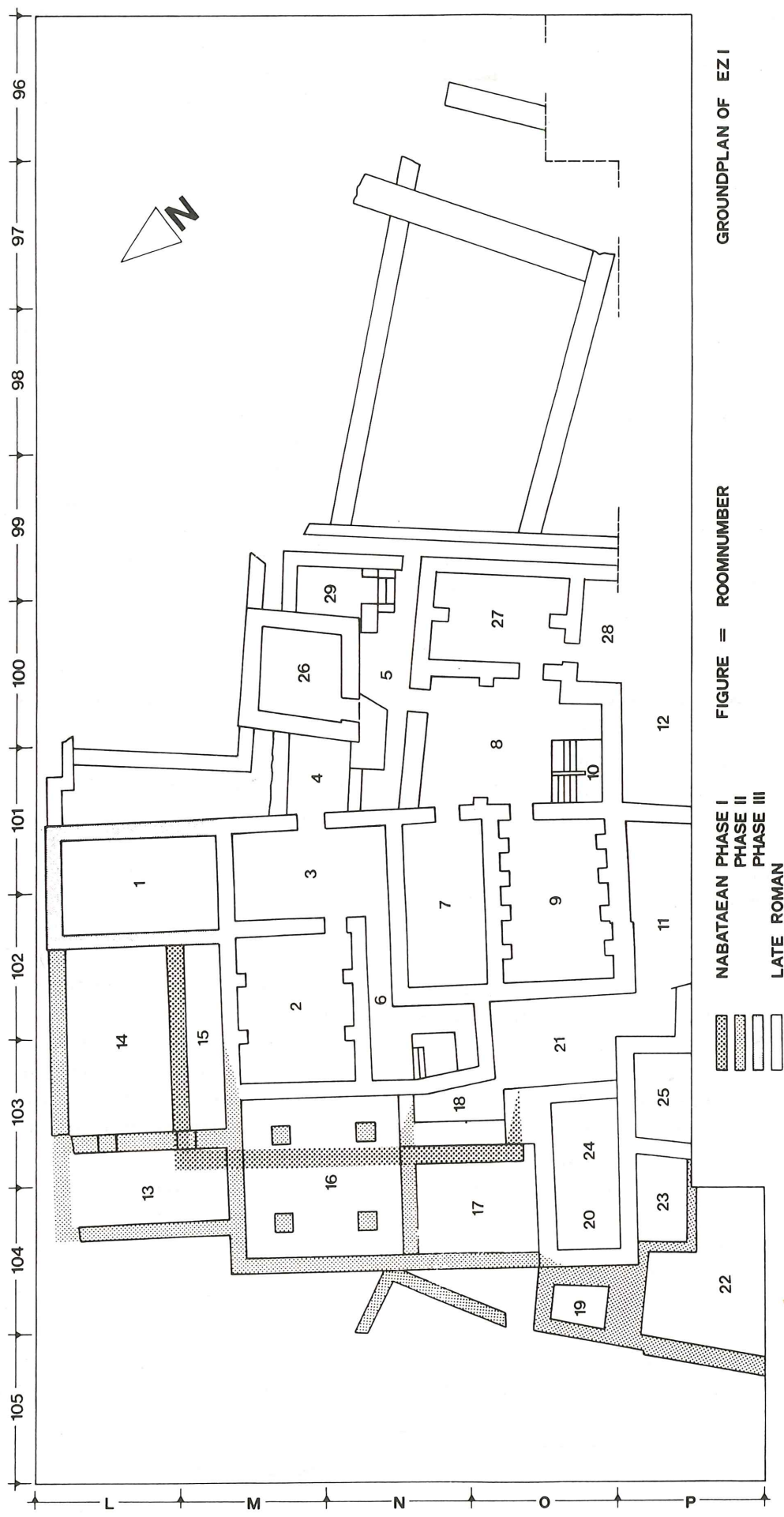


Fig. 2. ez-Zantur 1991.

and retaining walls on the north-western side of the building has been examined in a small trench in O/104-105: Two years earlier we excavated there the different stages of the respective outer wall but only the campaign of 1991 gave us the opportunity for a better understanding of this sequence. After a first collapse, the outer wall was strengthened by a bipartite retaining wall constructed at a right angle (Figs. 1-2)¹. The space between the external wall and the retaining wall that was attached at an acute angle has been filled in the lower part with earth and in the upper part with heavy quarry-stones — contrary to the laws of statics. The consequence of this peculiar kind of fill was the collapse of the retaining walls.

In the trench in O/104-105, a small part of the building's north-western facade was cleared. The wall reaches down to a much deeper level than we expected and has an — as yet — not explainable niche (Pl. I:2). Digging down, we cut the thick destruction layers that we already knew from the second campaign. They contained extraordinary quantities of sherds, which allow an approximate dating to the early second century A.D. An answer to the question whether the destruction was related to the Roman sacking of Petra in A.D. 106 or to the earthquake of A.D. 114² may possibly be given after detailed analyses of the pottery and the small finds.

A not precisely datable but most interesting small find is a panther's head that must have originally been part of a stone basin's figural decorated handle (Pl. II:1). A few remarks on another interesting small find that was made in this area: In P/104 — just outside of the Nabataean house — a lead weight of 114 grammes was found. It shows on the main sides the Greek letters *Delta* and *Gamma* (Pl. II:2).

When the building of the smaller house units on the remaining structures of the Nabataean house was started in the late third or early fourth century A.D., the construction labourers must have cleared the ground of the not reusable debris by depositing the

said material outside the building site, i.e. in front of the former north-western facade of the Nabataean house. We hope to lay bare these walls down to the foundations in the future in order to get a fuller understanding of the methods of construction used by the Nabataeans for their domestic architecture.

Like the northern corner of the Nabataean house, the equally exposed north-eastern corner is not preserved. Because of the weak foundations, the corner could not withstand the continuous thrust of the walls and was literally pushed over the edge of the natural terrace. For the southern part of the building, we are fairly sure to have reached the respective outer wall of the building in M-O/99 (Figs. 1-2; Pl. I:1, marked with arrow). The large sounding in N-O/98 brought further confirmation of this supposition: The stratigraphy shows clearly that the relevant strata with the typical Nabataean pottery, i.e. the strata that follow the terrain of the natural terrace sloped steeply downwards more or less along the outer wall of the Nabataean building in M-O/99 (Fig. 1; Pl. III:1). In other words there are no further Nabataean structures to be expected to the south. As on the northern side, the house covered the terrace to its outermost limits. The extreme positioning of the walls relative to the edge of the terrace seen together with the omission of stabilising retaining walls sealed the fate of this otherwise sumptuously built house. This observation confirms the impression that the constructors of this building were familiar with ground-plans of Hellenistic palaces and villas and the respective interior decoration but had no thorough grasp of the immanent static problems. There is reason to believe that we are dealing here with a phenomenon that has to be explained with the Nabataean nomadic tent tradition. In these times the laws of statics were laws of experience — which had to be made first.

Roman Building Structures (Figs. 1-2; Pls. I:1; II:3; III:2)

Rather surprising was the fact that the supposedly freestanding bakehouse 26 has on

1 See: Campaign 1989, Pl. V:2.

2 See: K. W. Russell, 'The Earthquake Chronology of

Palestine and Northwest Arabia from the 2nd through the mid-8th Century,' *BASOR* 260 (1985), p. 39ff.

its south-western side the adjacent Room 29 (Fig. 2; Pls. II:3; III:2) in which a coin-hoard of 26 Late Roman coins was discovered³. The floor covering of this small room is situated on a considerably higher level than the corresponding and contemporary level of the *tawabeen* in Room 26. The analyses of the coins and pottery (Tables 1-2; Pls. III:2; IV:1-2)⁴ indicate that the room was destroyed in the earthquake of A.D. 363 and was not restored afterwards as in the case of, for instance, Room 26.

As mentioned above, during the period of the Nabataean house the terrace was sloping down steeply on its south-eastern

side. This depression of the terrain was filled — on account of the numismatic evidence — in the late third / fourth century and two parallel retaining or terrace walls were built in N-P/96-99 from the Late Roman houses to the south-east. A third, roughly built wall connects t̄ls in N-O/97 (Figs. 1-2; Pl. I:1). These walls can probably be seen in the context of a garden area for the adjacent houses.

Some Notes on the Coins Found in Room 29

The composition of the small hoard find in Room 29 corresponds fairly well with the hitherto recovered hoards of 1988 and 1985⁵. Tables 1 and 2 show that we can once again

Table 1: Catalogue of the coins⁶

Nr.	Av.	Nom	Mint	Dat.	Rv.	Quotation
1)	For Divus Claudius II. Antoninian (imitation), 270-?					RIC V. 1,233,261(K)
2)	Cs	AE3	Constant.	351-355	FTR/FH	RIC VIII,458,123
3)	Cs	AE3	Thessal.	355-358	FTR/FH	RIC VIII,421,208
4)	JCaes	AE3	Cyzicus	355-358	FTR/FH	RIC VIII,499,116
5)	Cs	AE3	Antioch	355-358	FTR/FH	RIC VIII,528,191
6)	Cs	AE3	Antioch	355-358	FTR/FH	RIC VIII,528,191
7)	Cs	AE3	?	355-358	FTR/FH	
8)	Cs	AE3	?	355-358	FTR/FH	
9)	Cs	AE3	?	355-358	FTR/FH	
10)	Cs	AE3	?	355-358	FTR/FH	
11)	Cs	AE3	Antioch	350-358	FTR/FH	RIC VIII,524/528,152 or 187A
12)	Cs	AE3	Alexandria	351-358	FTR/FH	RIC VIII,544f.,80 resp. 82
13)	Cs	AE3	?	350-358	FTR/FH	
14)	Cs	AE3	?	350-358	FTR/FH	
15)	Cs	AE3	?	350-358	FTR/FH	
16)	Cs	AE3	?	350-358	FTR/FH	
17)	G/JCaes	AE3	?	351-358	FTR/FH	
18)	Cs	AE4	Arelate	360-361	SR	RIC VIII,227,298
19)	Cs	AE4	Rome	358-361	SR	RIC VIII,279,318
20)	Cs	AE4	Cyzicus	358-361	SR	RIC VIII,499,121
21)	Cs	AE4	?	358-361	SR	
22)	Cs	AE4	?	358-361	SR	
23)	Cs	AE4	?	358-361	SR	
24)	Cs	AE4	?	358-361	SR	
25)	Cs	AE4	?	358-361	SR	
26)	Cs(/JCaes?)	AE4	?	358-361	SR	

³ See *infra* 'Some Notes on the Coins found in Room 29'.

⁴ See *infra* 'Examples of Late Roman Pottery out of Room 29'.

⁵ Compare: Campaign 1988, p. 249ff. and Campaign 1989, p. 258f.

⁶ Abbreviations:

Avers Cs: Constantius II; JCaes: Julian Caesar, GCaes:

Constantius Gallus Caesar.

Revers FTR/FH: FEL TEMP REPARATIO Soldier to the left stabs tumbling knight; SR: SPES REI-PUBLICAE Soldier to the left.

Quotations RIC V.1: *The Roman Imperial Coinage*, Vol. V, Part 1, London 1927⁽¹⁾; RIC VIII: *The Roman Imperial Coinage*, Vol. VIII, London 1981.

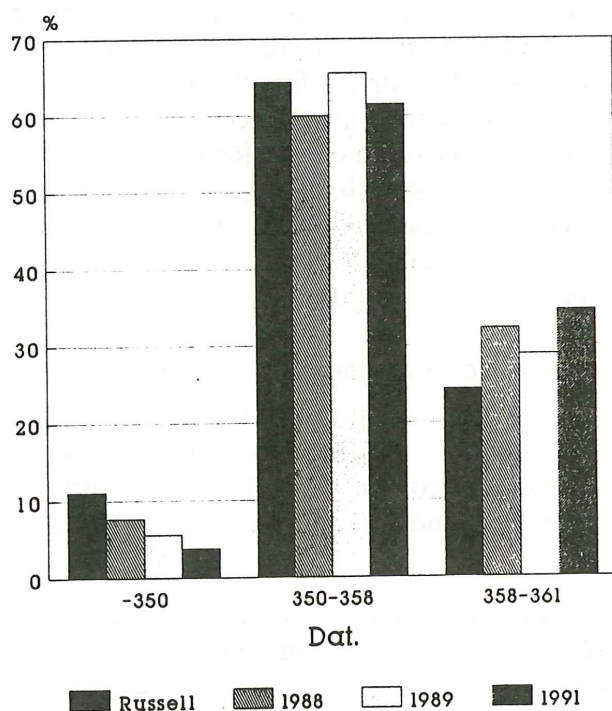


Table 2: Frequency diagram of the coin hoards

distinguish three groups of coins: the most frequent are the bronze coins of the years A.D. 350-358 followed by those of the years 358-361, which are the latest examples of the hoard. The share of older coins is constant too. The conformity is also true for what concerns the provenance of the coins: Antioch appears most frequently, followed by Alexandria and other eastern mints.

The striking analogy bearing on the composition of all these hoard finds points to the fact that they were left for the same reason — the earthquake of 19 March A.D. 363 — and that we are not dealing with savings in the proper sense of the word but with small amounts of money used in everyday life just before the catastrophe — a very important fact for numismatics.

Examples of Late Roman Pottery from Room 29 (Figs. 3-4; Pl. IV:1-2)

As mentioned above, we discovered in Room 29 further evidence for the earthquake of A.D. 363⁷. In the north-eastern part, of the room, we recovered 26 bronze coins⁸ which probably were originally kept in a purse made

of organic material. Close to the coins two completely preserved vessels and fragments of other pottery were lying directly on the pavement of the room.

K.312.468 (Fig. 3; Pl. IV:1) was not damaged during the earthquake, whereas the other vessel K.312.469 (Fig. 4; Pl. IV:2) was recovered broken.

The small bottle K.312.468 has a profiled rim, a narrow, slightly domed neck and a globular body with ridges. K.312.469 has a body similar to a small bowl with a simple rounded lip and three horizontal ridges on the outside, a spout and a horizontal handle. Since the vessel bears no signs of having been used on fire, it might not have served as a cooking pan but probably as a sort of ladle.

The two vessels seem to be of rather rare types within the Late Roman pottery repertoire, as no parallels could be found up till now. Complete vessels are rarely found, therefore, it may well be that among the published fragments of small bowls, some specimens might be comparable to K.312.469.

The two vessels are important and of interest because they expand our knowledge of the pottery from ez-Zanţur of the years before A.D. 363 by two yet unknown types.

In the detailed excavation report, to be published in 1993, the main emphasis will be put on the Late Roman settlement and the associated finds — ceramics, coins and other small finds.

Excavation on the Lower Terrace

As we proposed two years ago, the Nabataean structures on the lower terrace were undisturbed during the later days of the city. Up to now parts of two buildings have been excavated. The state of preservation of the exposed walls is generally better than on the upper terrace, where practically the whole Nabataean architectural substance was dismantled to its foundations and re-used in one way or another for the construction of the Late Roman dwellings.

The poorly preserved house corner in

7 For earlier discovered traces of the earthquake of A.D. 363 on ez-Zanţur and the associated pottery see Campaigns

1988 p. 258ff and 1989.p. 256ff.
8 For the coins see *supra* M. Peter's analysis.

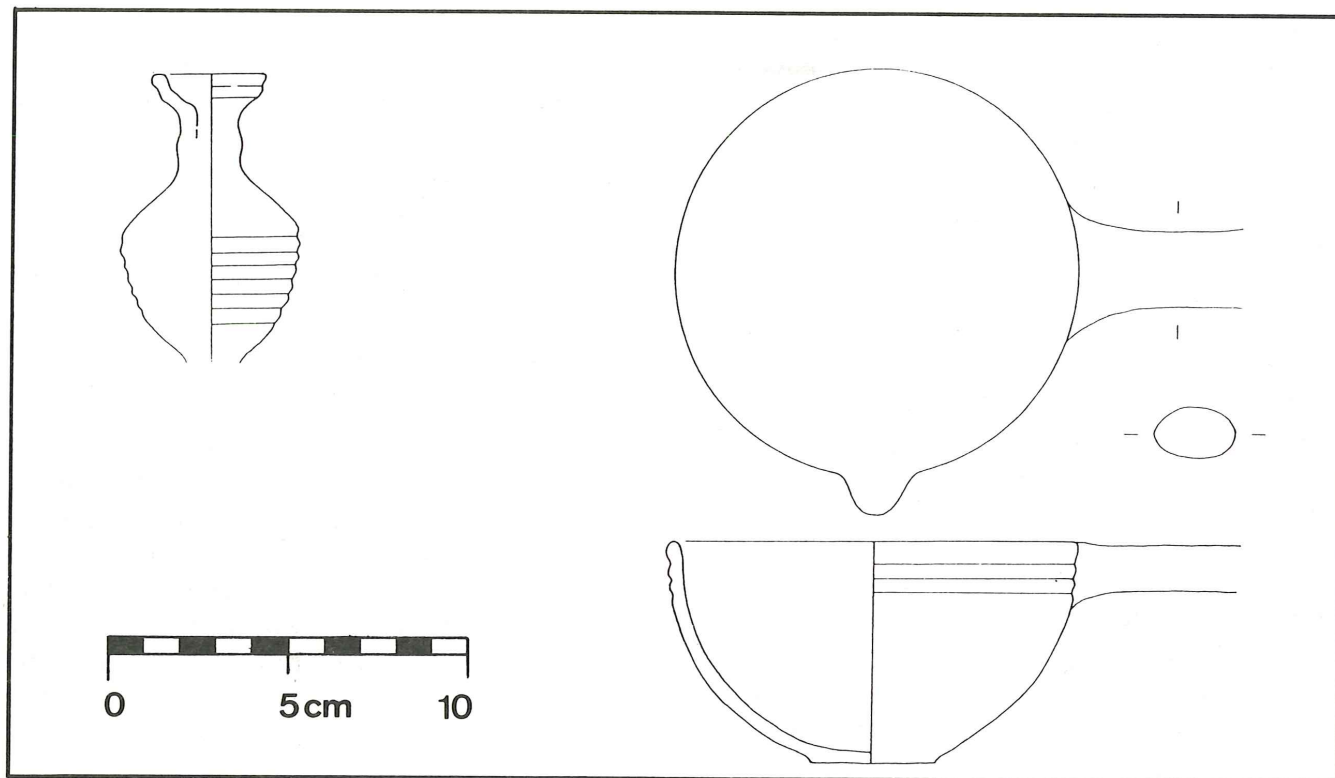


Fig. 3. K. 312.468

Pinking gray (Munsell 7.5YR 7/2); H.: 8.2 cm; Diam. Open: 3 cm; Diam max.: 5.2 cm.

Fig. 4. K.312.469

Outer surface: pinkish white (Munsell 7.5YR 8/2); ware, inner surface: pink (Munsell 7.5YR 7/4); H.: 6.1 cm; Diam. open.: 11.2 cm. Handle: 4.6 cm.

K/114 on the lower terrace stands as another witness for the Nabataeans' unawareness of the immanent static problems of permanent — i.e. stone-built house. The few significant finds point to the probability that the houses on the lower terrace were also destroyed in the early second century A.D. We still do not know if the destruction was caused by war (A.D. 106) or by an earthquake (A.D. 114)⁹. After the total collapse of the main wall of the houses, a thick layer of ashes was washed in. The structure of this layer and the pottery found in astonishing quantities indicate that the ashes probably originate from the upper terrace, where a similar layer was discovered in front of the Nabataean house. One of the most important finds from the discussed layer was a knife-handle cut out of bone (Pl. V,1). This meticulously carved piece shows a beast

of prey baring its teeth in the wide open mouth — a motif that obviously stands in the ancient oriental tradition. On Neo-Assyrian reliefs, genii and kings bear similarly decorated instruments in their garments. In the times of the Persian reign over Syria, Phoenicia and Palestine — from the sixth to the fourth centuries B.C., handles decorated with protomes of either lions, bulls or goats were especially popular¹⁰. The reduction to the head of the lion and the style of this piece refer to the climax of Nabataean culture, i.e. to the first century B.C. or the first century A.D.¹¹.

Figurally Painted Nabataean Fine Ware (Figs. 5-9; Pls. V:2; VI:1)

The known painted Nabataean fine ware very rarely shows figural decorations¹². All

⁹ See *supra* note 1.

¹⁰ Compare R.A. Stucky, *Antike Kunst* 28 (1985), p. 7ff, 19ff and Pl. 9-12.

¹¹ Ibidem, Pl. 12: 8-9.

¹² See F. Zayadine, 'Ein Töpfereikomplex am Rande von Petra', in: M. Lindner, *Petra, Neue Ausgrabungen und Entdeckungen*, 1986, p. 266, Fig. 75 (on the right); The

excavator dates the fragment with the squat bird in Late Roman times. See also F. Zayadine, *ADAJ* 26 (1982), p. 380ff, especially p.389f. and Pl. 138. Figural paintings highly tied up in ornaments are also known from the excavation of N. Khairy in Petra; see N.I. Khairy, 'The Painted Pottery from the 1981 Petra Excavations', *Levant* 19 (1987), p. 167-181.

the more interesting is the fragmented bowl *A1* that was found during the campaign of 1991 in the excavation area of the lower terrace (Fig. 5; Pl. V:2)¹³.

The preserved fragments of *A1* indicate a partly symmetrical composition of the painted figures that allowed a tentative reconstruction (Fig. 5). In the centre of the bowl stands a squat bird with a marked beak. Around this central figure are composed two human figures and one or possible two quadripeds which are recognisable, due to their long ears, as donkeys. This scenery is framed by two rows of dots and a palmette. The meaning of the illustration remains unclear, i.e. it is impossible to say whether we are dealing with purely decorative motives or with a scenic representation¹⁴.

Another figurally painted sherd, *A2* from the lower terrace, was originally not part of a bowl but of a closed form (Fig. 6)¹⁵. A bird that looks very similar to the one on bowl *A1* is recognizable along with another animal with a curved tail — probably a feline.

The somewhat clumsily painted figures and the carelessly painted floral ornaments of *A2* may invite a dating in Late Roman times. We have actually found in a Late Roman fill in N-O/98 a figurally and an ornamentally painted sherd, *A3/A4* (Figs. 7-8) which were most certainly parts of the same bowl¹⁶. The figural painting shows once again a bird — this time with a knobby tip of the beak¹⁷. But there exist important formal differences — especially compared to the bowl *A1* of the lower terrace. *A1* shows exactly the same shape as the often found specimens without

figural decoration which have a fine and clearly set-off rim and are dateable to the first Century A.D. (Fig. 9)¹⁸. At least we may say that the fragments *A3/A4* found in N-O/98 are proper derivatives of the said shape but with a watered down profile. Furthermore the two specimens *A1* and *A2*, found in K/113 and K/114 respectively, originate from the same massive destruction layer which is dateable — on account of the eastern terra sigillata — to about A.D. 100 or shortly afterwards¹⁹.

Accordingly, we may say that the Nabataean potters had bigger problems painting the rarely used figural motives than the common palmettes and the geometric patterns. The two examples, *A1* and *A2*, found on the lower terrace, show that the figural motives set in at the latest at about A.D. 100 (Figs. 5-6)²⁰. It is possible that this observation is connected with a prohibition of figural representations²¹.

If we see this evidence together with the figurally painted fragments *A3/A4* found in a Late Roman context (Figs. 7-8), we may assume a continuity of the figurally paintings up to the third and fourth centuries A.D. — an observation that is also strengthened by a comparable specimen from Zurrabah²².

Three further fragments of Nabataean fine ware from ez-Zanţur prove that the tradition of figural painting dates back quite far in the history of the Nabataean pottery. Contrary to the above discussed specimens *A1/A2* these are painted in polychrome — in hues of black, white, pink and pale green. Above all the sherd with a bearded head of a

13 EF 633, FK 351, 114/K, Abs. 2.

14 As for painting and clay, K. Schmitt-Korte showed a very similar specimen at the Vth International Conference on the History and Archaeology of Jordan in Irbid 1992. The sherd is part of the private collection of K. Schmitt-Korte.

15 FK 339, 113/K, Abs. 2.

16 FK 268, 98/N-O, Abs. 2.

17 Possibly a bird sucking nectar out of a blossom is meant.

18 For further informations on the typology see also Campaign 1989, p. 263ff.

19 See *supra* p. 6. Comparable destruction-layers with an analogue dating and corresponding fine ware have been observed at Khirbet Edh-Dharih; compare F. Villeneuve,

'The Pottery from the oil-factory at Khirbet Edh-Dharih (2nd century AD)', *ARAM Periodical* 2 (1990) p. 367-384.

20 A bowl painted with human figures found in Masada belongs to the same chronological phase: On the basis of co-finds a *terminus ante quem* of A.D. 74 could be established; compare J. Patrich, 'Prohibition of a graven image among the Nabataeans: the evidence and his significance', *ARAM Periodical* 2 (1990) p. 188.

21 See J. Patrich, 'Prohibition of a graven image among the Nabataeans'. But in recent times the quantity of figurally painted fine ware increased considerably so that the theses of J. Patrich has to be re-examined.

22 See *supra* note 11.

male (Dionysos?)²³ recalls strongly Hellenistic vase-painting, so that one could be tempted to identify this kind of pottery as imported — but all three registered fragments are made of the same light reddish clay as most Nabataean ceramics. Any doubts in this respect were wiped out by the recently found third fragment of the polychrome type A6 (Pl. VI:1). It is a rim sherd of a painted bowl as they were found in quantities in layers dated to the second half of the first century B.C.²⁴. On the inner side of the rim a row of light red drops is visible, whereas the rest of the bowl's inner surface is painted in the same polychrome technique as the above mentioned sherd with the bearded male head²⁵. This conformity and the identical traces of the manufacturing on the outer surface point to the fact that the two fragments originally were parts of the same bowl. So we may conclude that the Nabataeans decorated the very same shapes either with the well known palmettes or with polychrome and figural paintings.

Stratigraphical Trench (Fig. 10; Pl. VI:2)

In the stratigraphical trench on the north-eastern slope of the upper terrace, eight more layers were removed and examined; seven follow the natural inclination of the slope, but the last one is roughly horizontal and has a structure very similar to the "green layers" of the trench in 103/L-M that we opened on the terrace in 1989, which we still interpret as habitation-layers of tents (Fig. 10; Pl. VI:2). All strata contain pottery of the second and first centuries B.C.: Early painted Nabataean and Late Hellenistic bowls as well as Eastern Sigillata. The horizontal layer could probably be identified as a habitation layer of a tent-camp that directly preceded the constructions of stone-built houses. So far bedrock could not be reached in either of the trenches. Therefore it would be interesting to enlarge the stratigraphical trench in the future — in order to reach bedrock, but the depth of 5.40m makes

further deepening difficult and dangerous. Apart from a further improving of our knowledge of the local pottery typology, the stratigraphical trench is on the other hand also important relative to urbanistic questions. The lack of stabilizing terrace walls points clearly to the fact that the houses of the city's residential quarters were built — where the bedrock could not easily be reached — carelessly to the edges of the natural terraces. A fact that on the one hand inevitably led to the collapse of the respective outer walls and that stands as an important indication of the lack of a Hellenistic urbanistic conception in what concerns the residential quarters.

Archaeobotany

The analysis of botanical material from archaeological sites has become a routine part of most excavations. Many questions about the economy of earlier cultures and the palaeo-environmental conditions can be answered with the results of palaeoethnobotanical studies.

On ez-Zanţur we started these studies in 1991 by collecting soil samples in locations that could clearly be defined as fireplaces, ovens or hearths. This was done to determine how the plant remains were distributed and if there were differences in their state of preservation in the various locations.

Sample size averaged 5 kg of sediments which could be dry sieved since the material wasn't compact and the grain size was very small. We used 6mm, 2mm and 0.5mm mesh sieves (a special sieving machine was imported from Switzerland). The charred remains of plants from the 6mm-mesh sieve were collected on the site of the excavation. The material that remained in the 2mm and the 0.5mm mesh sieves was taken to the field laboratory where each fraction was floated separately. The sieved organic material was then separated under a binocular microscope into the following categories: animal bones,

23 See Campaign 1989, p. 263, Pl. VI:2.

24 See Campaign 1989, p. 263, Fig. 5 and especially No. 27 and Pl. VI:3. These bowls were found in layers which are dateable from about 50 B.C. to about A.D. 10/20.

25 In this short abstract on the last result of the 1991 campaign, the third sherd will be left undocumented. It is a very small fragment of a bowl similar to A6.

Figs. 5-9:

Nabataean Fine Ware

Fig. 5

A.1: EZ 91/I, FK 351
 ware: 2.5YR red 5/6 (with yellowish grits)
 outer surface: 2.5YR red 5/6 (with yellowish grits)
 inner surface: 7.5YR reddish yellow 6.5/6
 decoration: 2.5YR dusky red 3/2

Fig. 6

A.2: EZ 91/I, FK 339
 ware: 10R (light) red 5.5/8
 outer surface: 10R (light) red 5.5/8
 inner surface: 2.5YR light red 6/8
 decoration: 2.5YR very dusky red 2/2

Fig. 7

A.3: EZ 91/I, FK 268
 ware: 5YR reddish yellow 6.5/6
 outer surface: 5YR reddish yellow 6.5/6
 inner surface: 2.5YR (light) red 4.5/8
 decoration: 5YR dark reddish brown 3/2.5

Fig. 8

A.4: EZ 91/I, FK 268
 ware: 5YR reddish yellow 6.5/6
 outer surface: 10YR very pale brown 7.5/4
 inner surface: 2.5YR red 4/6
 decoration: 2.5YR dark reddish brown 3/4

Fig. 9

A.5: EZ 88/I, FK 83
 ware: 5YR light reddish brown 6/3
 outer surface: 10R light red 6/7
 inner surface: 2.5YR (light) red 5.5/6
 decoration: 5YR dark reddish brown 3/2



Fig. 5

A1

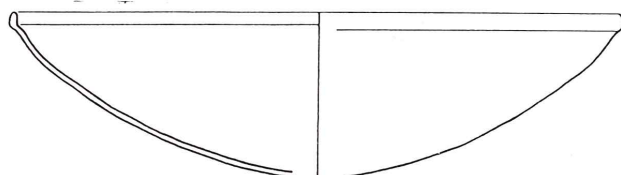


Fig. 6

A2

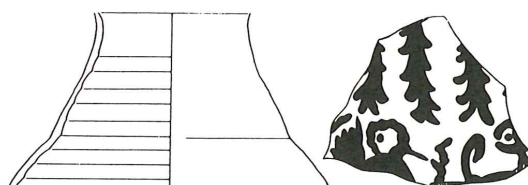
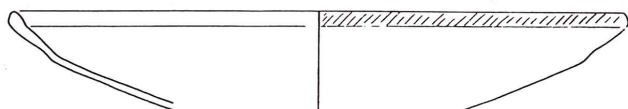


Fig. 7



A3

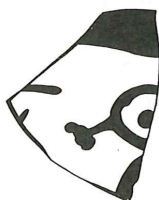


Fig. 8

A4

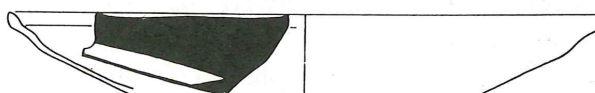
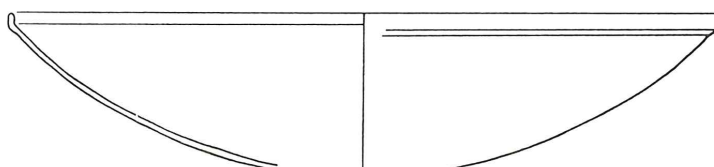
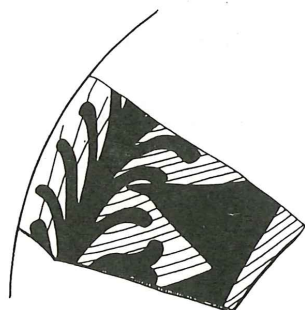


Fig. 9

A5



Figs. 5-9 Nabataean fine ware from ez-Zanţur.

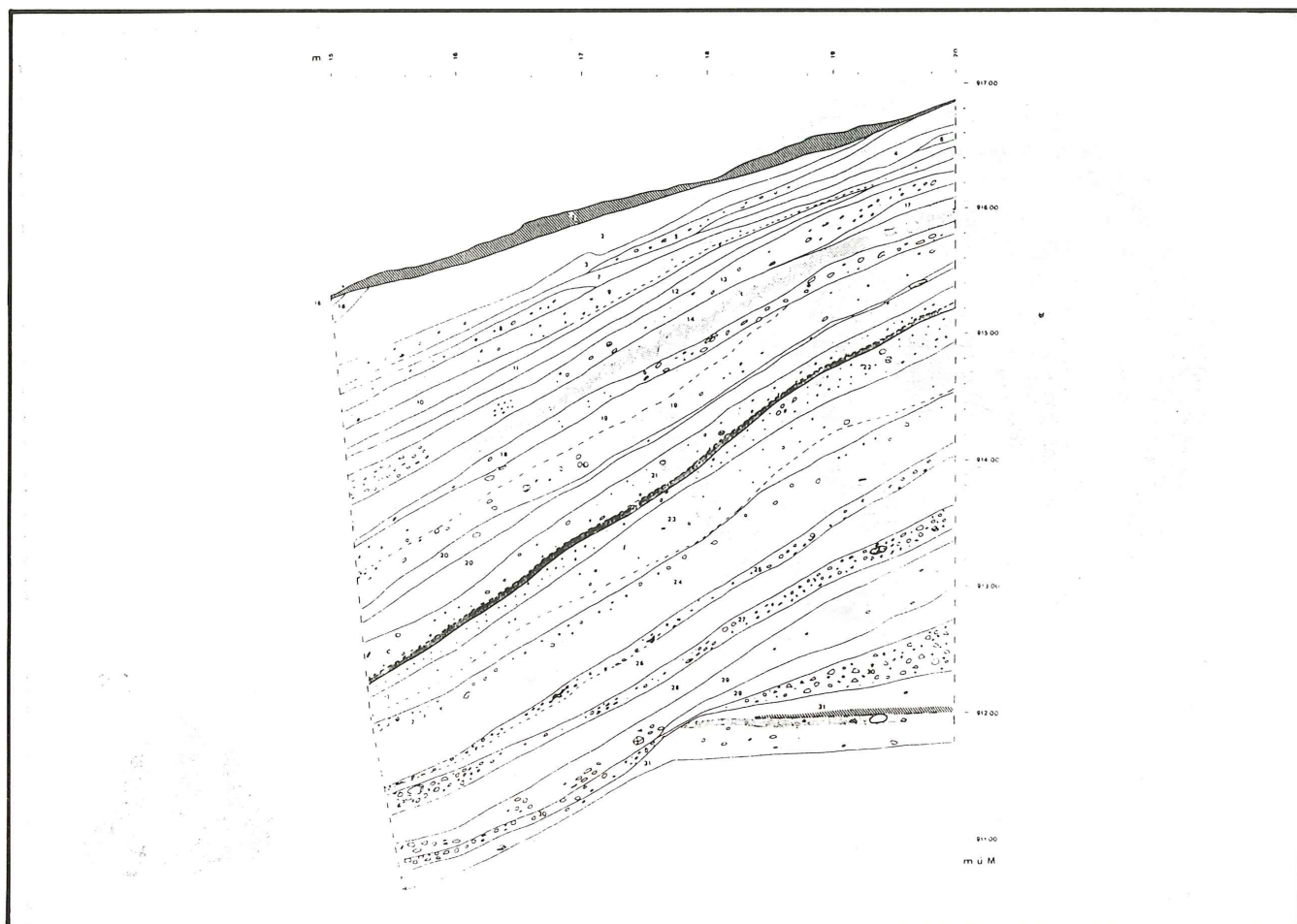


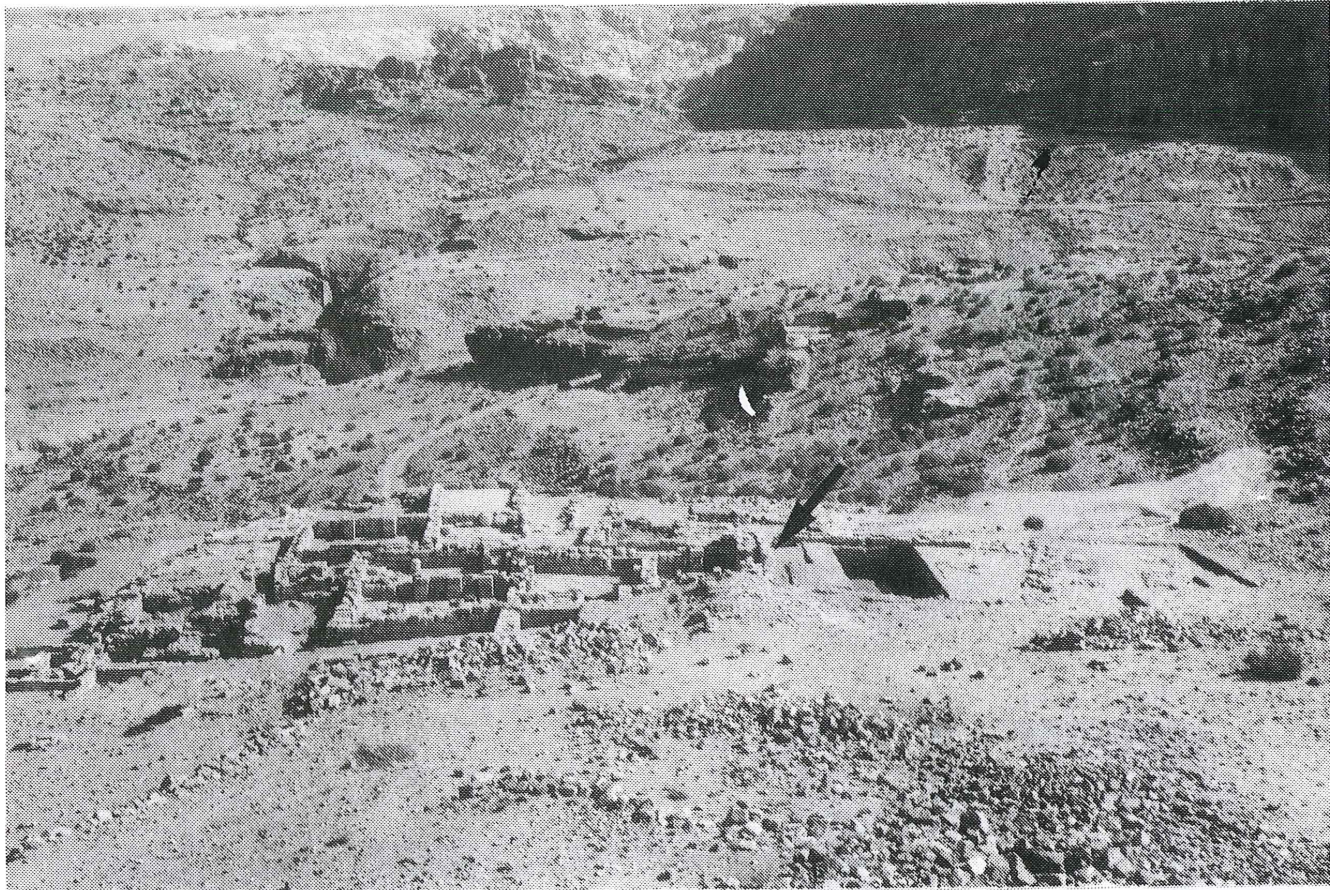
Fig. 10. Stratigraphical Trench.

fish remains, charcoal, seeds and chaff. This method allowed us to sieve and float 180 kg sediments during our three week stay.

The preliminary study showed that the state of preservation of charred plant remains is excellent. In 82% of the samples we found carbonised grains and chaff of different cereals, seeds from legumes, grapes and figs as well as entirely preserved olive pipes. Many well preserved seeds from wild plants were also found.

To answer any questions about the economy and the ecology of the inhabitants of the laid bare houses beneath the peak of ez-Zanţur the identity of all sieved plant remains must be ascertained.

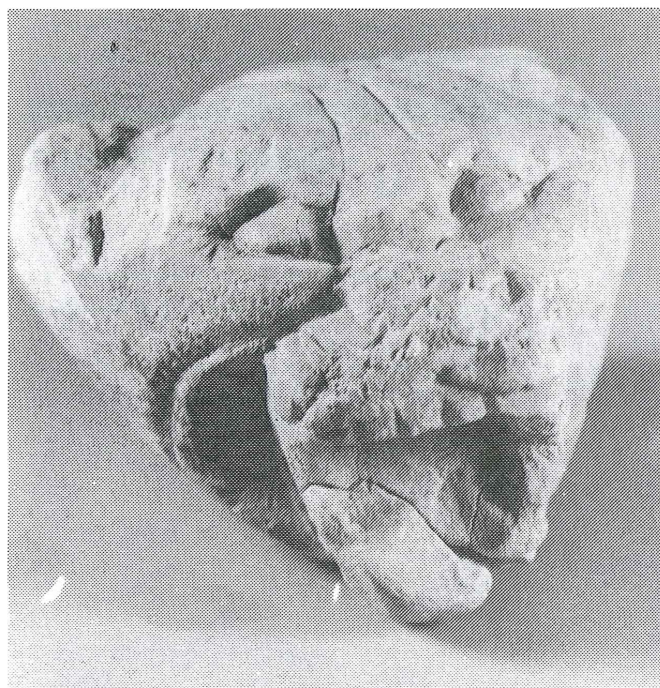
R. A. Stucky
Archäologisches Seminar der Universität
Basel
Schönbeinstrasse 20
CH-4056 Basel
Switzerland



1. General view.



2. Niche in the north-western outer wall of the Nabataean building.



1. Panther's head, stone.



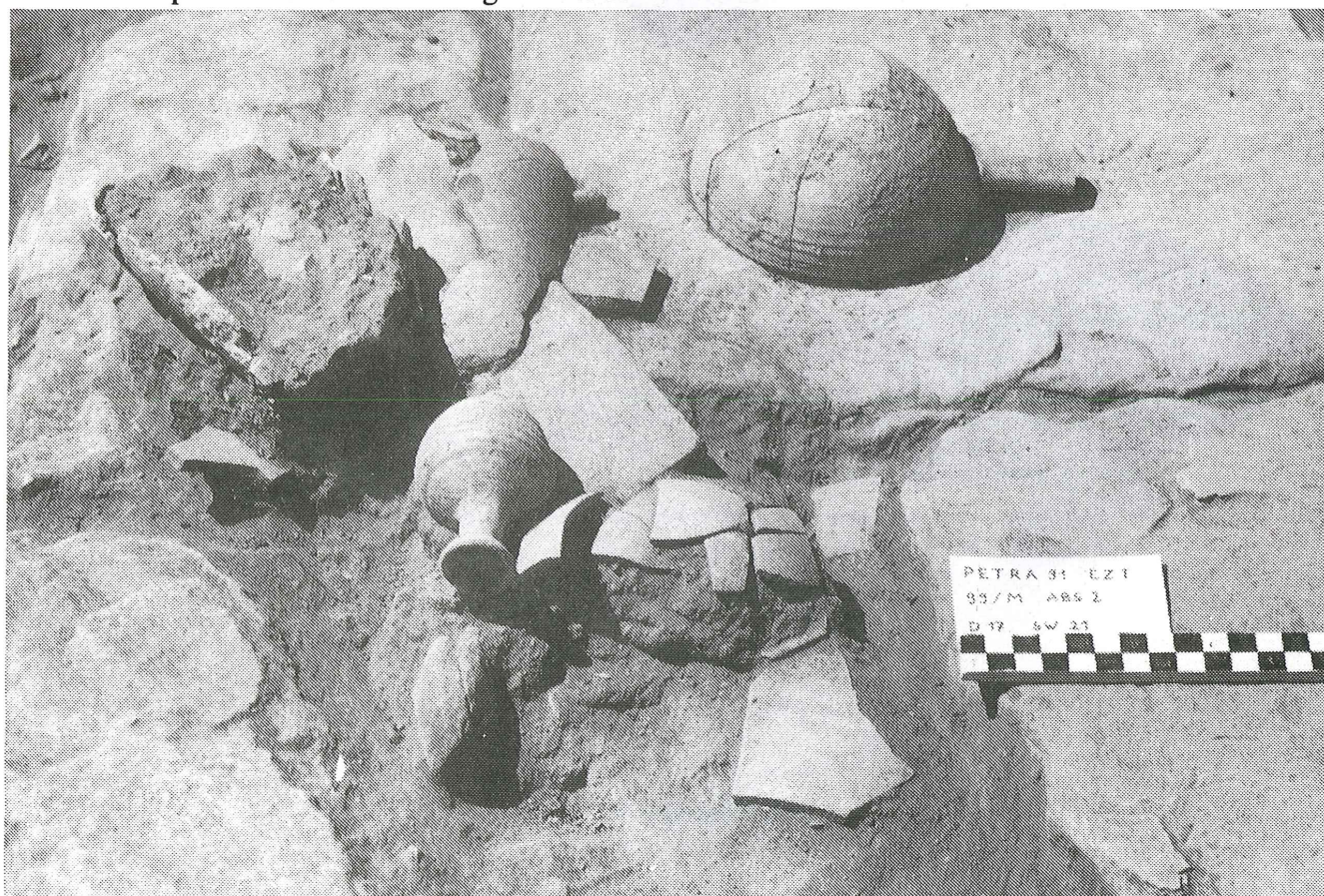
2. Lead-weight.



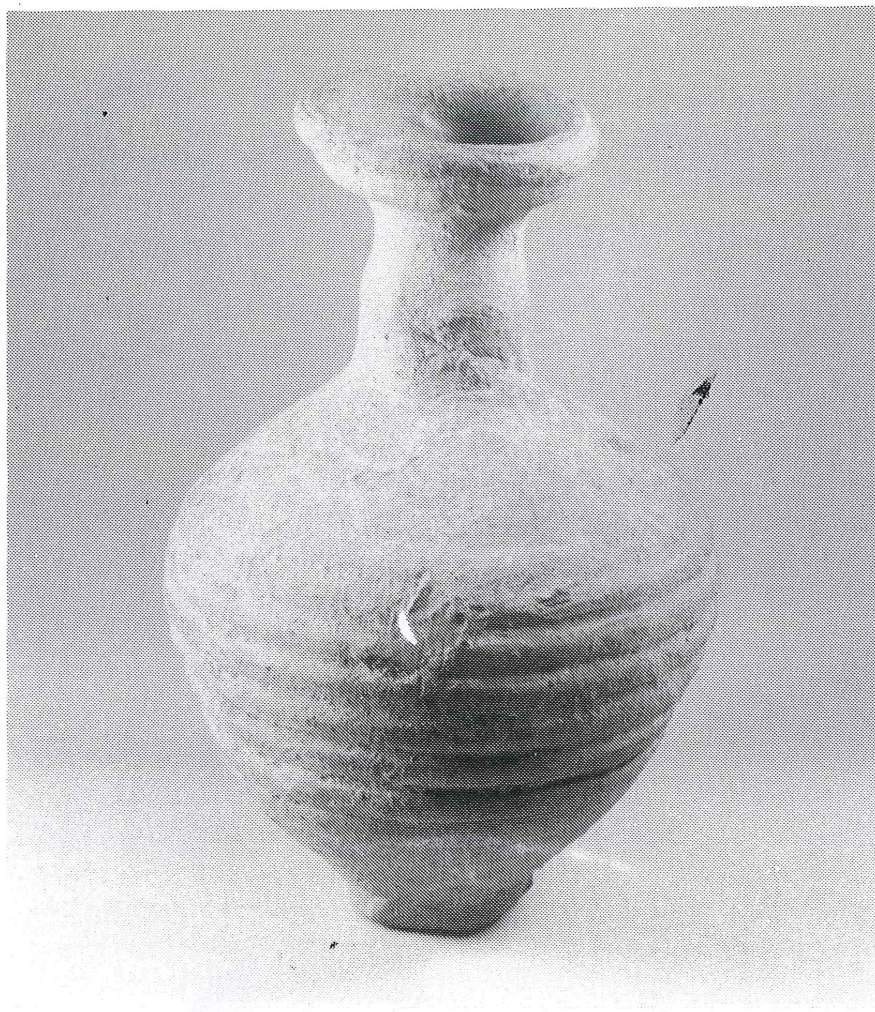
3. Room 29 seen from the north-east.



1. Eastern profile of the sounding in N/98.



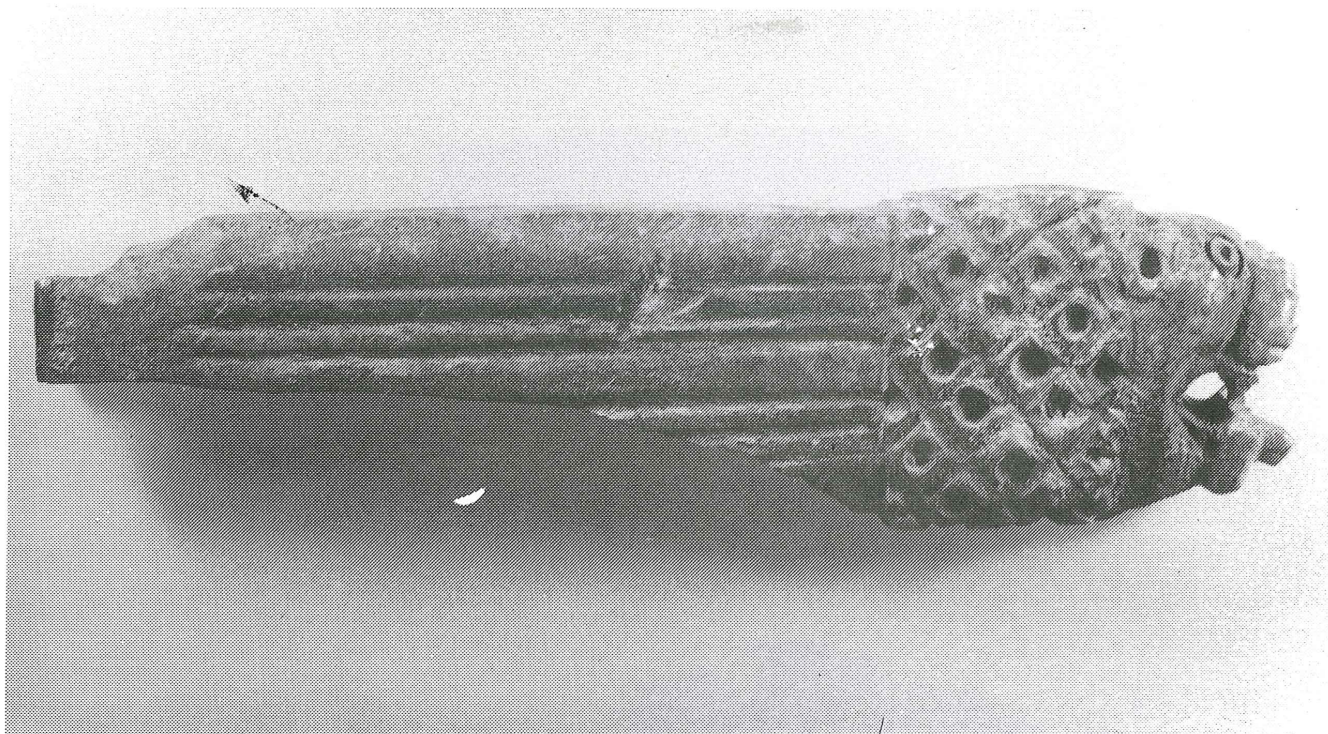
2. Room 29: Late Roman commonware pottery *in situ*.



1. K.312.468



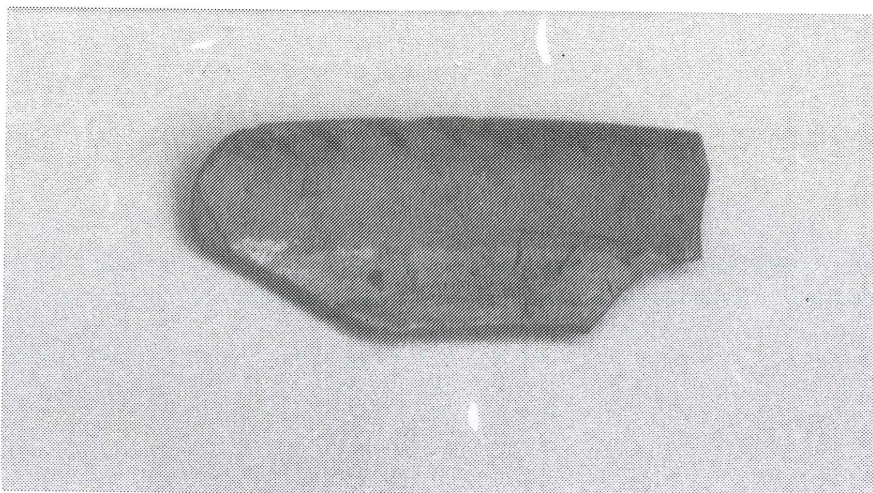
2. K.312.469



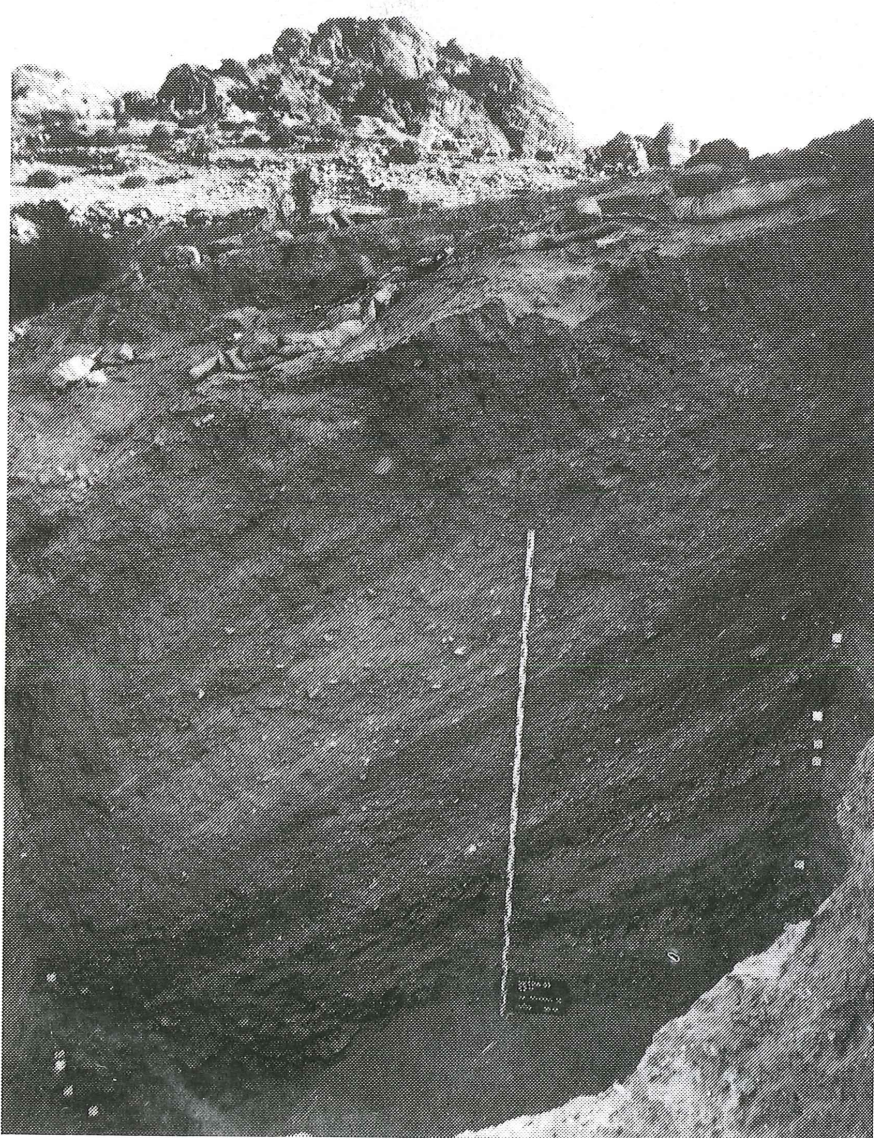
1. Knife-handle, bone.



2. Fragmented Nabataean bowl A/ with figural painting.



1. Fragment of the Nabataean bowl A6 painted in polychrome.



2. Stratigraphical trench.