

NEW EXPLORATIONS OF THE DEIR- PLATEAU (PETRA) 1982/1983

by

Manfred Lindner, Elisabeth Gunsam,
Ingo Just, Antonie Schmid and
Elisabeth Schreyer

Several visits to the Deir-Plateau of Petra made it certain that former examinations and descriptions of this impressive part of the Nabataean metropolis have been exact only to a certain extent. Important details and over-all views are missing. Therefore, the authors, members of the Natur-historische Gesellschaft Nürnberg, repeated the exploration of the plateau, including the mountain range towering over it in 1982 and 1983 (Figs. 1 and 2).

The most striking monument of the Deir-Plateau is the rock/hewn temple ed-Deir or, as others — especially the Bedouin, — say, el-Fatuma (Pl. XVIII: 1), Léon de Laborde and his draftsman Linant¹ thought themselves the first to visit it. As a matter of fact, the Englishmen Irby and Mangles did see the rock facade from the lofty height of Djebel Harun, but were not able to reach it.² Laborde described a steep rock opposite ed-Deir with a row of column bases in front of a large rock chamber (Pl. XVIII: 2). R. Brünnow and A. V. Domaszewski showed little interest in the Deir Plateau.³ They documented what travellers and explorers had published before, some of these reports are rather puzzling,⁴ all they did was to describe ed-Deir, some cisterns, rock chambers and the rock opposite ed-Deir, which was later called “Burgberg” by G. Dalman. It was with much more accuracy that

the Austrian A. Musil explored the Deir-Plateau.⁵ But the most precise examination of the site was done by G. Dalman, who published his results in 1908 and 1912.⁶ It seems there have not been other noteworthy explorations.⁷ In the tracks of the aforementioned, therefore, the Deir-Plateau was explored again.

The “Burgberg” (Dalman) of the Deir-Plateau

A substantial and outstanding rock opposite ed-Deir⁸ numbered M 23 by Musil⁹ was named “Burgberg” by Dalman because he regarded the ruins on its top as the remains of a castle which protected the northern entrance to Petra¹⁰ Actually the rock exhibits distinct traces of stone cutting (Pl. XIX:1). On its northern end, after a wall with a supposed former door, a flight of diagonally tooled steps lead to a platform, 28 m. x 12 m., which is partly rock-hewn, partly built of ashlar blocks. Under it a very large cistern (D 489) is hollowed out of the rock, (Pl. XIX: 2). In some places its original plaster of 0.05 m. thickness is still preserved. Two round openings and a few channels led rain water from the platform and the top into the cistern. A broad entrance at the foot of the rock was either closed originally or opened later on. Inside, two bases of columns

¹ L. de Laborde et Linant, *Voyage de l'Arabie Pétrée*, Paris, 1830, p. 59.

² Ch. L. Irby and J. Mangles, *Travels in Egypt and Nubia*, Syria and Asia Minor, London, 1823.

³ R. Brünnow and A. von Domaszewski, *Die Provincia Arabia*, I, 1904-1909, p. 331-338.

⁴ *Op. cit.* p. 333.

⁵ A. Musil, *Arabia Petraea II*, 1 (Edom), Wien 1907, p. 134-150.

⁶ G. Dalman, *Petra und seine Felsheiligtümer*, Leipzig, 1908, p. 20-22; 57; 76; 262-281. *Idem*, *Neue Petra-Forschungen und der Heilige Felsen*

von Jerusalem, Leipzig, 1912, p. 28-31.

⁷ D. Nielsen, *Journal of the Palestine Oriental Society XI*, 1931, p. 234; XIII, 1933, p. 13. The author concludes that there are no “sanctuaries” on the Deir-Plateau, respectively only one out of the seven mentioned by Dalman.

⁸ The name is spelled differently in different languages, in German, for instance, ed-Der.

⁹ The letters before the numbers of the monuments refer to Musil (M), Brünnow (Br) and Dalman (D).

¹⁰ Dalman, 1908, p. 277.

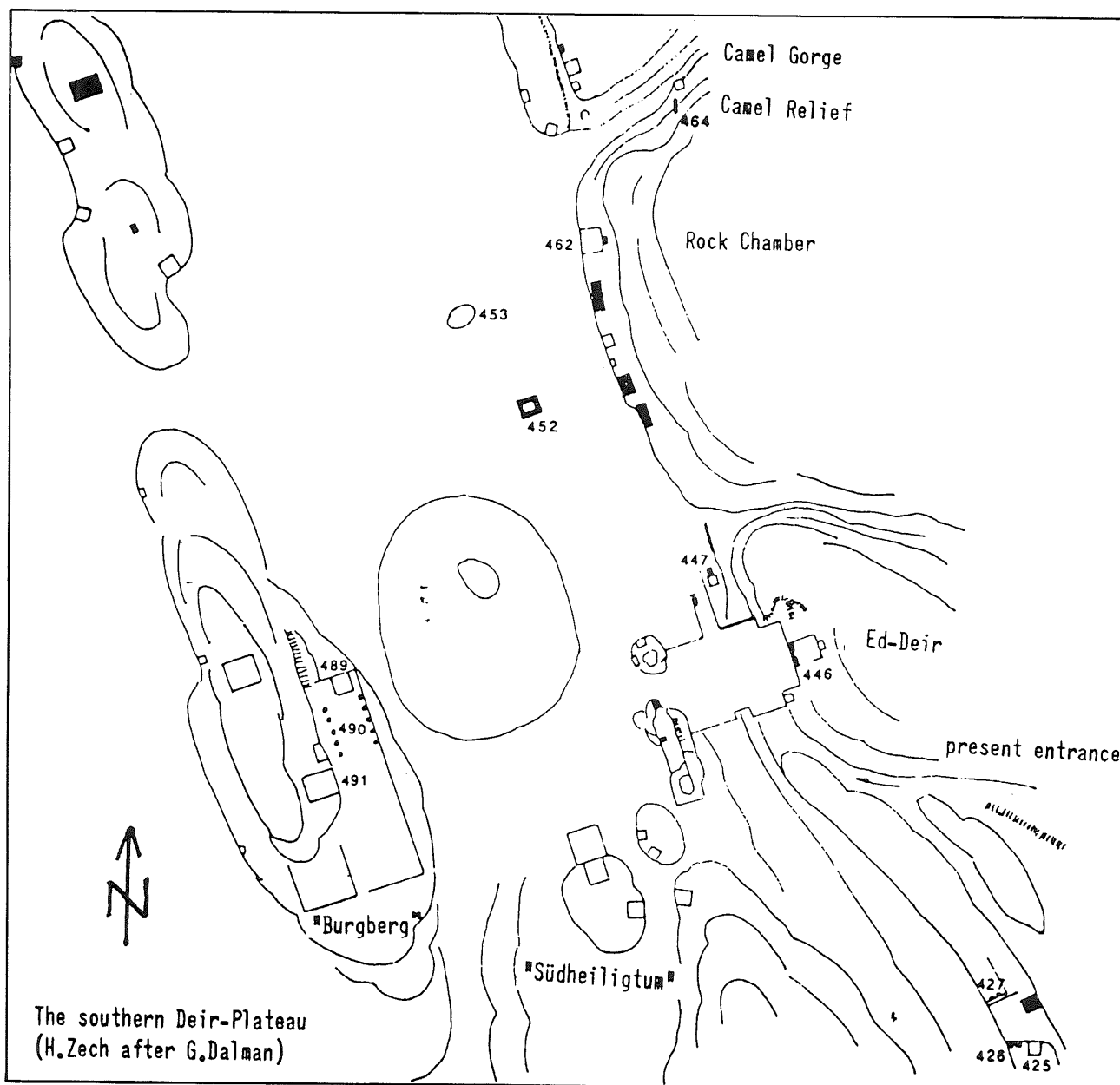


Fig. 1: Sketch Map of the southern Deir-Plateau

(58/65 cm Ø) have rolled down from above. They are diagonally tooled in order to make a stucco covering stick and they may belong to the platform. In the flight of steps (Pl. XX: 1) beside a column drum (58 cm Ø) and an architrave the tumbled fragment of a Nabataean pilaster capital, a "Hörnerkapitell" of 100 m. upper, 0.80 m. lower length and 0.36 m. height, matches another one in the middle of the platform.¹¹

Where a water channel from the top meets the flight of steps at the beginning of the staircase, thin slabs replace the stepping stones (Pls. XX: 2, XXI: 1-2). Looking from this spot to the opening of the cistern, a Nabataean letter (SH) incised in a tumbled building stone was detected.

Over the debris-covered steps, it is easy to reach the platform. Kennedy regarded it as the foundation of a Roman

¹¹ About the "Petraean" or "Nabataean" "Hörnerkapitelle" see A. Jaussen and R. Savignac (*Mission archéolog. en Arabie II*, 1914, p. 396 ff.). Dalman saw a Nabataean invention in the capital (Dalman, 1908, p. 47). He did not acknowledge the explanation of A. Kohl (Kasr Firaun in Petra, 1910, p. 26) and O. Puchstein (AA, 1910, Sp. 10)

who called it a "bosse" of a Corinthian capital. For him it was a special form invented as a pilaster capital, but modified for the use in high tomb facades (Dalman, 1908, p. 267-269; idem, 1912, p. 20-22). P. Hammond calls the "Hörnerkapitell" the "classical Nabataean plain capital" (*BASOR* 226, 1977, p. 50).

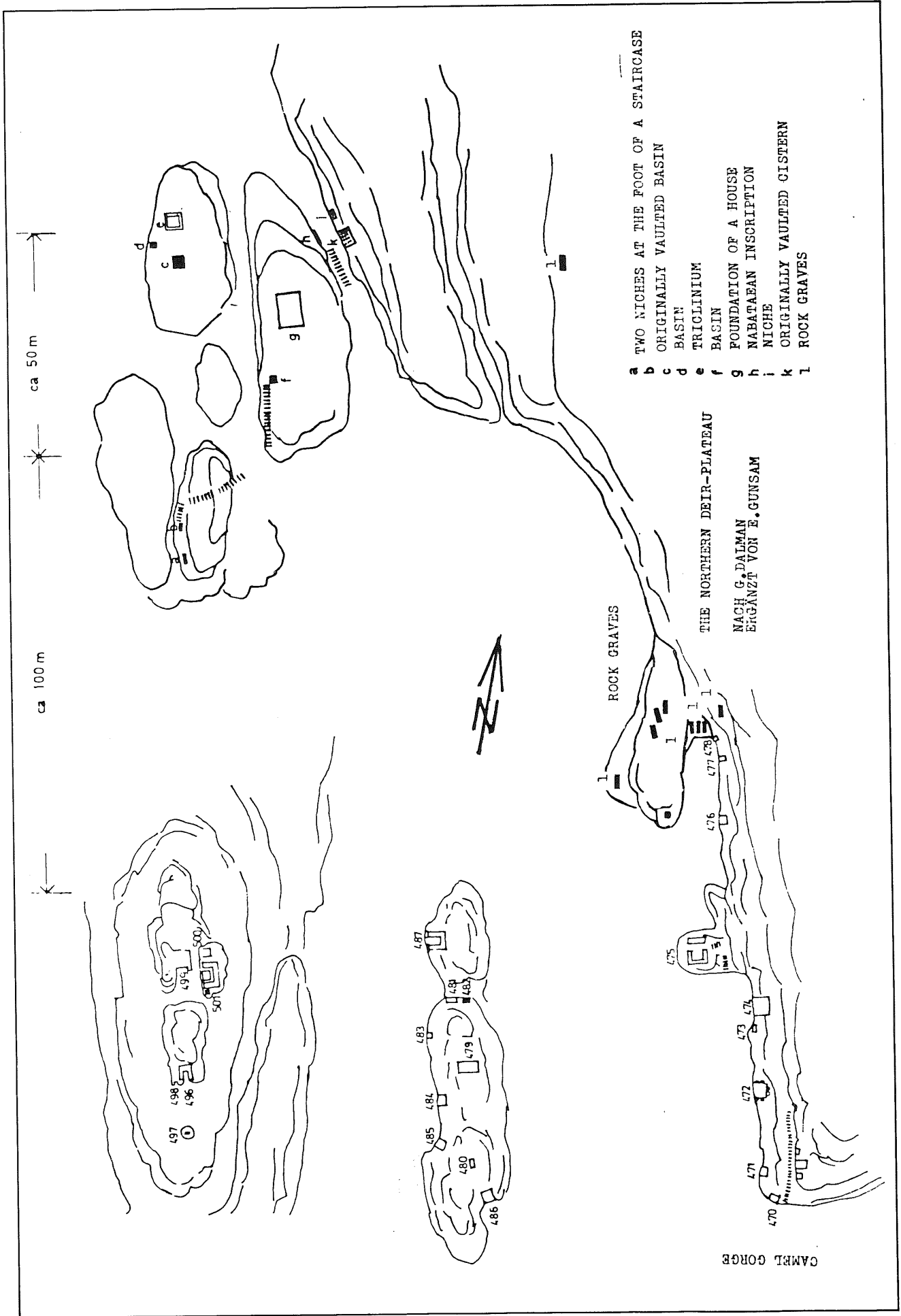


Fig. 2: Sketch Map of the northern Deir-Plateau

temple.¹² There is no doubt, however, that it served as a columnated front-court, a peristyle, for the cella (D 491) at its back,¹³ now a yawning hole without any attraction for passing visitors.

On the E-side was a row of columns with a built circuit around it. The bases and even some drums are still *in situ*. (Pl. XXII: 1). The first and the last one were engaged columns on either side of a pilaster. The columns (58-61 cm Ø) are 2.80 m. distant from each other (from centre to centre) with a roughly quadrangular stone of 0.48 m. x 0.44 m. between every two columns, maybe remains of a balustrade. The row of columns begins on the NE-corner of the platform and ends opposite the entrance of the cella. Its continuation there was a built wall. Apart from the remains of these columns, there are only six more drums *in situ* in the W-part of the platform. Surprisingly a drum (?) of 0.72 m. has been found in the debris of the platform. On the foot of the rock three drums and one base of a 0.58 m. column once were part of the peristyle (Fig. 3).

Contrary to Musil's notes,¹⁴ we could not find any traces of columns *in situ* on the S-side. A single second architrave left between the debris of the platform signals the connection of the columns over Nabataean capitals.

Observations in the Cella

Only on the right wall of the cella is the "Rankenkapitell" (Pl. XXII: 2) is still inserted which Dalman saw on both sides.¹⁵ It belongs to the type known from the Khazne and the thermae of Petra, recently described by Z. Safar.¹⁶ K. Ronczewski called these capitals "italisch beeinflusste Varianten einer spät-hellenistisch-alexandrinischen Kapitellform der frühen Kaiserzeit"¹⁷ A Schmidt-Colinet, by the monotonous, and at the same time chasting

character, is reminded of the Ara pacis-foilage in Rome, Consequently advises a date into the late first century B.C.¹⁸

A simple pillar under the capital seems unlikely, because a second recess of the same size nearer to the ground indicates some kind of frame for a massive door (Pl. XIII: 1) Former visitors (besides scrawling their names everywhere) were impressed by rectangular plugholes far up to the ceiling of the back wall. Nobody is clear about their purpose, but in the Kasr el-Bint and some rock chambers there are similar holes. In neither case could they have served for a lining of marble. In the cella of the "Burgberg" the highest plugholes still contain metal hooks. Similar to customs all over the world and throughout the times, single inscribed slabs of marble or metal, lamps, carpets, clothes, garlands, weapons and devotional objects were probably hung on these hooks. In the interior of the niche in the middle of the back wall the bottom is hollowed out for plugs or clamp-irons. They correspond rather to a statue of life-size than to an idol block (Pl. XXIII: 2). Later hunters have punched the outlines of ibexes into the smooth surface of the niche. The pedestal of the supposed statue, by the way, has no perpendicular edges. With the sand in the cella removed, it corresponds to the pedestals in the front of ed-Deir.

Summing up the traces of the past, instead of a yawning hole in the face of an otherwise nondescript rock we have to picture a most impressive row of white or red-white stuccoed columns crowned with architraves over Nabataean capitals. From the cistern at the foot of the rock, priests (?) and pilgrims got the water for ablutions and as a refreshment. Behind the peristyle in a mysterious room the rays of the morning sun may sometimes have illuminated the idol block or the statue of the revered deity. A propos to the sunset Dalman has speculated that the portal of

¹² A. Kennedy, *Petra*, 1925, p. 65-66, p. 80.

¹³ See Dalman, 1908, p. 277.

¹⁴ Musil *op. cit.* p. 146.

¹⁵ Dalman, 1908, p. 277.

¹⁶ Z. Safar, *Les Chapiteaux de Petra*. In: *Petra - La*

cité rose du désert, "Le Monde de la bible", Paris, 1980.

¹⁷ See AA, 1932, p. 37 ff.

¹⁸ *BJb* 180, 1980, p. 190.

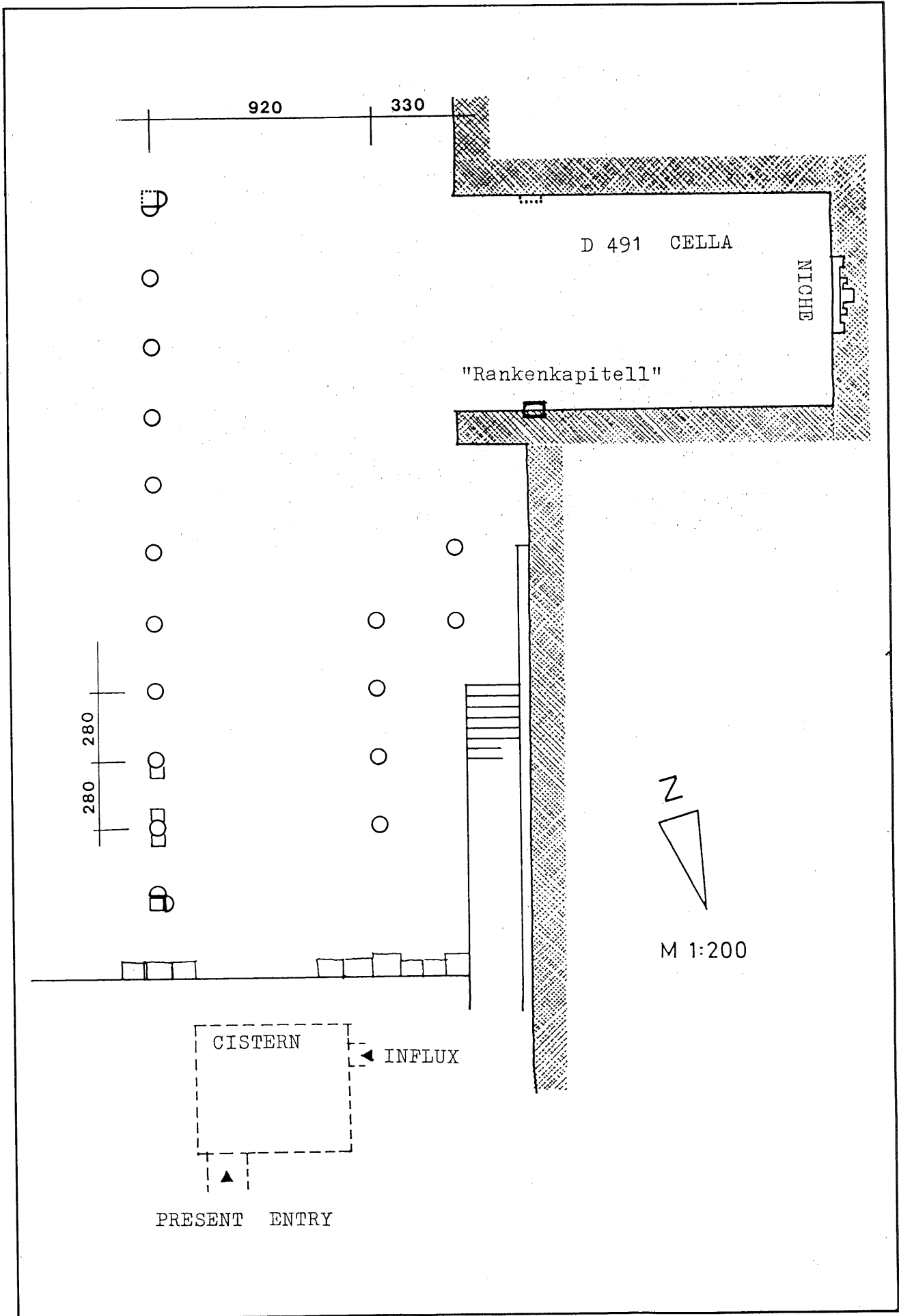


Fig. 3: Plan of the 'Burgberg'-Sanctuary

the temple of ed-Deir was deliberately shifted in order to have the sun shine on the niche in the middle¹⁹ The same may have happened in a cave sanctuary on es-Sela' near Buseira, described by N. Glueck and the author.²⁰

What happened when the pilgrims or worshippers had reached the Deir-Plateau? As in Mekka today, processions of the faithful have to be imagined wandering from one sanctuary to the other, either for the purpose of praying to different deities or performing some pseudohistorical or mythical ritual in different places.²¹

There is nothing on the surface of the platform to prove conclusively a late Roman date or Byzantine buildings or later rebuilding. Only the fact that every available space, every promontory, every spot of rock has been built on remains of a fortress (Pl. XXIV: 1). But a similar style of building can be found on that side of the summit of Umm el-Biyara where no aggressor could climb up. It may have been a Nabataean fad. Even the original temple on the top of Djebel Harun covered the whole summit as far as one can make out today.

When did the "Burgberg"-Sanctuary originate? The answer is not difficult. Nothing indicates a reverence of non-Nabataean deities. The "Rankenkapitell" associates the "Burgberg" - Sanctuary with the Khazneh, the temenos of Kasr el-Bint Fara'un, the thermae and the Lion Triclinium.²² The Nabataean "Hörner-Kapitelle" are also found in the facade of ed-Deir, dated in the reign of Rabel II (75-106 A.D.) by F. Zayadine.²³ Topographical reasons also speak for the contemporaneity ed-Deir and the "Burgberg"-Sanctuary. Both cultic places are as exact as the rock formation allows.

Two Circular Buildings on Top of the "Burgberg"

On the way to the top of the "Burg-

berg" Dalman had seen and briefly mentioned one "circular building".²⁴ During the 1982 exploration, two such buildings or rather their ruins were discovered. The more conspicuous one, which was probably seen by Dalman, consists of massive grey sandstone blocks (0.45 m. x 0.40 m. x 0.40 m.) in the northern half, and smaller, carefully tooled yellowish sandstone blocks in the southern half of the circular foundation. The inner diameter is 2.20 m. In the interior and on the slope below, fragments of handmade roof tiles 0.02 m. thick and 0.12-0.15 m. broad were found. With these pottery fragments were made on a wheel and rectangularly bent (to pipes?), and pieces of a greyish chalk mortar without visible connection with the inner walls of the building.

A few metres higher up, near the edge of the sheer cliff, the foundation of a circular building, the second but evidently the more important one, was found. It consists of smooth slabs, 0.10 m. thick, 4.90 m. across, and worked stones which include bases, respectively higher up and drums of engaged columns, at their inner circumference. Only two of the original nine bases have fallen down the cliff but are not to be found there. One of the bases has been cleared of the debris. As the inner surface of the foundation stones it is plastered with stucco of 0.01 m. in thickness (Pls. XXIV: 2, XXV: 1; Figs. 4, 5).

It is not difficult but uncertain, to picture free-standing columns from a certain height on, set up on the engaged columns which were eventually covered by a roof. Of circular monuments with columns only the three tholoi in relief of the Khazneh, the "Corinthian Tomb", the Deir-Temple, and the thermae near the Arched Gate are known.²⁵ A free-standing tholos has not been found in Petra so far.

The Top of the "Burgberg"

Above the circular building are the

¹⁹ Dalman, 1908, p. 212, 207.

²⁰ N. Glueck, *BASOR* 65, 1937, p. 28; *BASOR* 18-19, 1939, p. XXI, p. 26-32; M. Lindner, *Petra*⁴, 1982, p. 261, 264-265, 271.

²¹ See J. Wellhausen, *Reste arabischen Heidentums*², 1897, with many descriptions, e.g., p. 109-112.

²² See A. Schmidt-Colinet, *BJb* 1980, p. 220 ff. and P. Hammond, *BASOR* 226, 1977, p. 47-51.

²³ F. Zayadine, *BJb* 180, 1980, p. 244.

²⁴ Dalman, 1908, p. 278.

²⁵ As to descriptions see A. Schmidt-Colinet l.c., p. 221 ff.; F. Zayadine l.c. p. 240; M. Lindner, *Petra*⁴, 1982, pp. 17-37.

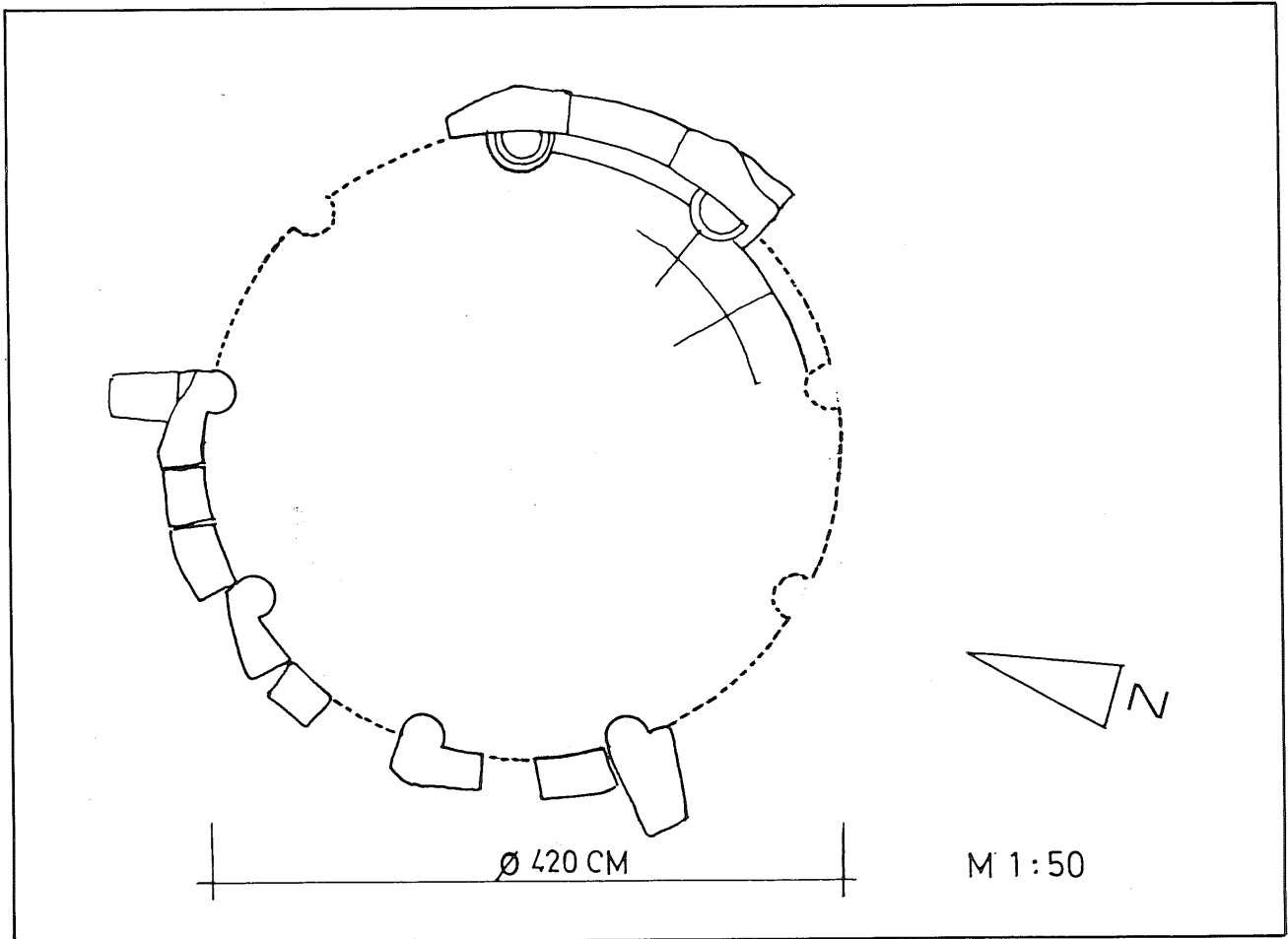


Fig. 4: Plan of the circular building with engaged columns

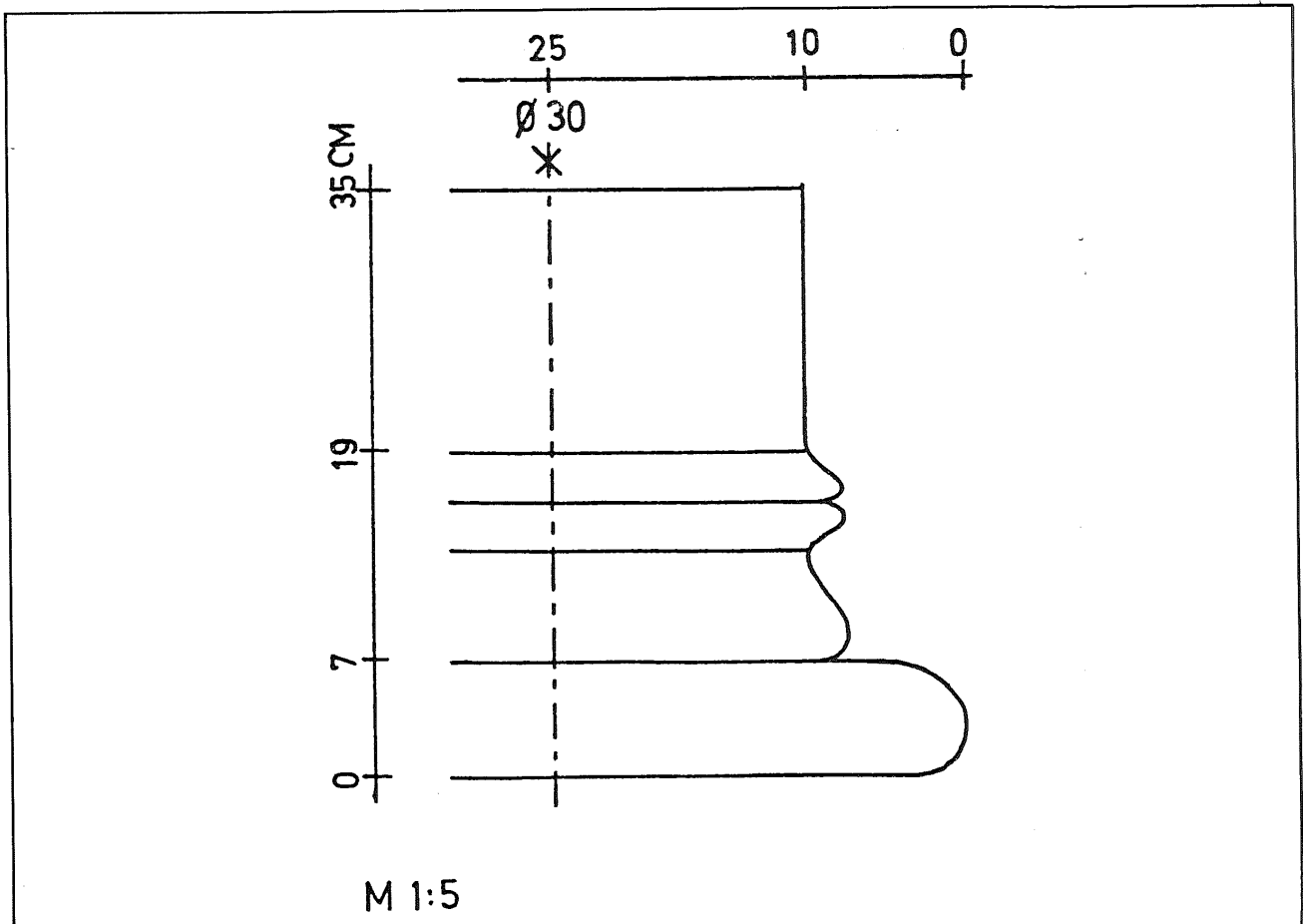


Fig. 5: Drawing of the column base

ruins of another one with interesting details. Musil drew and described the rectangular foundation of a building directed towards the east.²⁶ These ruins are covered with tesserae of one cubic centimetre, made of fine limestone. These are the same kind of tesserae that can be found on the summit of Djebel Harun²⁷ There is a pit of ca. 2.00 m. x 1.00 m. in the middle of the small platform, maybe a carelessly dug grave or an illegal excavation. Among the tumbled stones the capital of a pilaster (0.57 m. x 0.53 m. (50) is conspicuous (Pl. XXV: 2).

Dalman called Musil's sketch of the presumed building²⁸ "little realistic,"²⁹ Actually, there is almost nothing to confirm the drawing. Today the foundation of two heavily plastered rooms of ca. 3.00 m. x 2.00 m. each are to be seen. We miss them in Musil's sketch, where only the direction of the walls can be verified today. These small rooms are similar to others on the southern end of the rock, where every, even the smallest spot was built on. Because of these alterations the "Burgberg" can be ascended only over the above-mentioned staircase.

Do we have to assume that the "Burgberg" actually was a castle? We would not hesitate to think so, if the splendid building of Umm el-Biyara did not reach to the edge of the abyss where no aggressor was to be awaited. The careful inspection of the ruins on top of the "Burgberg" led to several surprising results. On the east side, facing ed-Deir, 2.60 m. below the summit, (Pl. XXVI: 1) a pavement of hexagonal slabs (0.41 m. Ø) protrudes for over 8.00 m.³⁰

The pavement is covered by a cement flooring; and higher up, a few diagonally tooled building stones, 0.60 m. long, may have belonged to a staircase or to the walls

of a building. Without excavation little can be said: perhaps there was a building of several stories; or, much more likely, a succession of buildings. From them might have fallen a flat round stone (0.78 m. Ø) with a smoothly cut hole of 0.28 m. in its centre found in the *wadi*.

The northern part of "Burgberg" is a few metres lower. Here are four tumbled column drums (ca. 0.46 m. Ø). They may or may not have fallen from the southern top. Between pieces of red and yellow painted stucco, fragments of painted Nabataean bowls of the first century A.D. were found (Fig. 6). Remains of walls as drawn by Musil³¹ are not to be seen.

Summarizing, it can be said that the "Burgberg" was completed with walls and buildings like a castle. But originally above the columned "Burgberg" - Sanctuary another complex of buildings arose with columns and a circular building of an unknown purpose, altogether a much more complex finding than the cella with its peristyle below it.

Ed-Deir, the Rock Temple on the Deir-Plateau

The rock-hewn temple ed-Deir has been visited so often that there seemed to be no hope to discover anything new. Most tourists and some experts, however, have overseen the remains of a row of columns on the south side of the court in front of ed-Deir.³² Where Musil saw only a low wall to protect the sparse soil from being carried away,³³ a mighty substructure is easy to recognize. Today, column drums (0.75 m. Ø) can be seen in the debris with conspicuous and durable stucco ornaments beside some column bases *in situ*, which are interspaced with rectangular stones like on the opposite platform (Pl. XXVI: 2).

²⁶ Musil, *op. cit.*, p. 146, 112.

²⁷ M. Lindner, J. Mitt *NHG* 1978, p. 95 (Jahresmitteilungen der Naturhistorischen Gesellschaft Nürnberg). P. Hammond has found tesserae in an anomalous stratum. He explained the find as a fabrication site of tesserae out of former capitals, possibly for a Byzantine church. *AAJ* 20, 1975, p. 28-29.

²⁸ Musil, *op. cit.*, pp. 146, fig. p. 112.

²⁹ Dalman, 1908, p. 278, footnote 1.

³⁰ A similar pavement of smaller slabs has been found, but not published yet by the University of Jordan between el-Habis and Zibb Fara'un in Petra.

³¹ Musil, *op. cit.*, p. 143, fig. p. 112.

³² E. Wilson, *The Century Magazine*, New York, 31, 1, 1885, pp. 3-27.

³³ Musil, *op. cit.* p. 142.

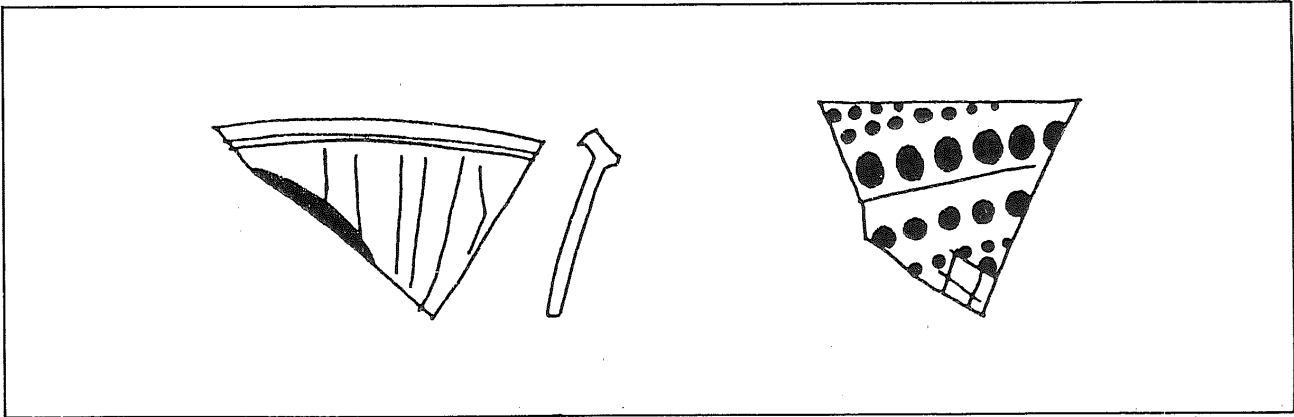


Fig. 6: Fragments of painted Nabataean bowls from the surface of the "Burgberg (Redbrown on red 1:1)

The same stucco ornaments have been described by P. Hammond,³⁴ who found them on the columns of the Winged-Lion-Temple, built during the reign of Aretas IV (9 B.C.-40 A.D.). It seems that rows of columns on the sides of the court in front of ed-Deir were planned, maybe realized. The two outer wings must have joined or were supposed to join the rock wall on both sides of the monument, where engaged columns of the same diameter as the above-mentioned columns are hewn out of the rock. The southern row should have been the more important one because here the pilgrims entered the court of ed-Deir. The processions probably did not pass through the rock corridor as today, but following the well-known procession way³⁵ from Petra across the large *wadi* which was filled with rock and debris in the high-time of ed-Deir.

The people of those days did not see ed-Deir as an isolated rock monument or as a "phantasielose Kolossalwand"³⁶ but as a temple or a tomb facade behind a columned court. On entering or standing before it, they had also before them the rock altar³⁷ which does seem a little "offsides", if one forgets the original arrangement and unless the flight of steps leading to the altar did not belong to an altar at all, but to the staircase up to the urn.³⁸ Pl. XXVII: 1)

A Rock-Carved Geometrical Design on the Roof of ed-Deir:

After many former ascents, one of the authors (Lindner) discovered in 1982 a geometrical design scratched in the rock of the southern roof of ed-Deir (Pl. XXVII: 2). Maybe it has been overlooked or disregarded by former visitors. The drawing shows an almost equilateral quadrangle open towards the back of the monument. A drawn out middle line is directed to the visible summit of Djebel Harun. Other lines and sectors seem to be as purposefully drawn as they are unintelligible to the authors. An architect's plan should be in the right place here, but also an astronomical design is possible (Fig. 7). The alignment of ed-Deir with Djebel Harun could confirm the thesis of one of the authors (Lindner) about the religious significance of the mountains in the Nabataean period³⁹

A Nabataean Dwelling in the NW of the Deir-Plateau

Dalman's sketch map with the ingeniously entered rock monuments⁴⁰ ends rather abruptly towards the N-end of the Deir-Plateau. Already in 1980 (together with G. and W. Müller) and again in 1982 and 1983 the slopes and gorges beyond the "Rundbogenheiligtum" (D 469)⁴¹ were

³⁴ P. Hammond, *AAJ* XX, 1975, p. 23, Pl. 5,1 (p. 149); *AAJ* XXII, 1977/1978, Pl. 62,1 (p. 248).

³⁵ First described by L. de Laborde *op. cit.* p. 59; see also Dalman, 1908, pp. 247-252.

³⁶ Th. Wiegand, *Petra*, Wissenschaftl. Veröffentlichungen des Deutsch-Türkischen Denkmalschutzkommandos, Heft 3, Berlin und Leipzig

1921, p. 10.

³⁷ Dalman, 1908, p. 271.

³⁸ D. Nielsen, *JPOS*, XI (1931), p. 235.

³⁹ M. Lindner, *JMitt NHG*, 1978, p. 94-95; idem, *Petra*, 1982, p. 277-278.

⁴⁰ Dalman, 1908, p. 276.

⁴¹ Dalman, 1908, 279.

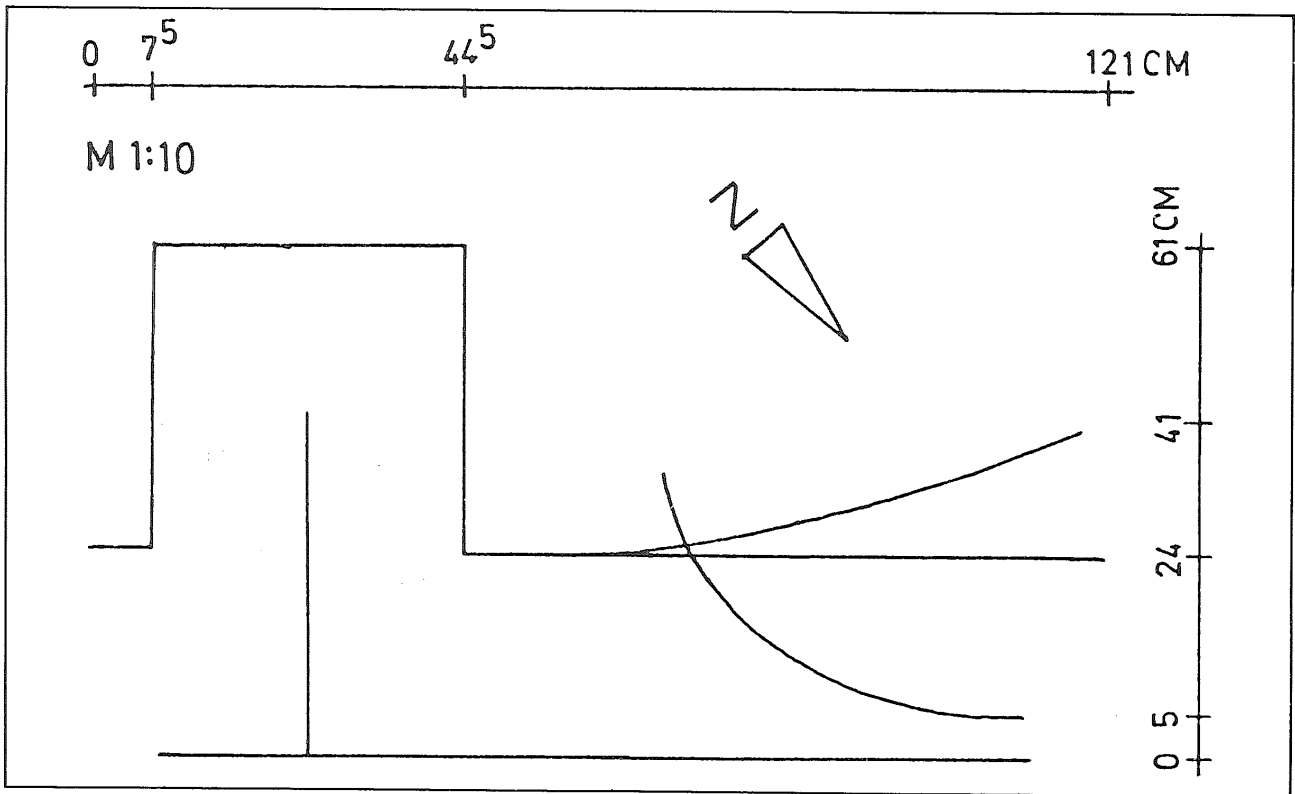


Fig. 7: Drawing of the geometrical design

carefully explored. Some 100.00 m. NW of it, at the foot of a rocky slope are two rounded niches without any traces of idol blocks (Pl. XXVIII: 1). Over three flights of winding stairs and another flight of ten rock steps on the top of a protruding spur of rock, the rectangular foundation (5.50 m. x 4.00 m.) of a house with a cement flooring can be reached. Rain water was collected in a rectangular basin (0.70 m. x 0.60 m.) at the head of the stairs.

The former inhabitants of the house did not have to rely on this water alone. In the NW, below their house, a gorge, which is an easy walk, led to an open-air triclinium (2.40 m. x 2.20 m.) which, collected rainwater for a deep rectangular cistern of 2.00 x 1.00 m. (Pl. XXVIII: 2). There are abutments for two arches, the walls are coated with thick plaster. During the two years that passed since the first visit, a Bedouin had cleared the cistern and the channels so well, that the reservoir was full of drinkable water. From afar, Horsfield⁴² had taken a picture of the supposed triclinium. From nearby, the second use as a

water collecting device was evident.

Apparently the water problem was not solved easily on the Deir-Plateau. On the other side of the dwelling a second gorge leads to a much larger cistern (5.70 m. x 5.20 m.) with abutments for four arches, (Pl. XXIX: 2). The space between them was covered of course, as in the cistern below the summit of Djebel Harun. A flight of steps, each 1.20 m. long, facilitated the descent as well as the drawing of water. Above the steps a short Nabataean inscription is engraved in the rock (Pl. XXX: 1). Two thirds of the cistern were built of diagonally tooled ashlar. The lower wall which fitted into an incision in the rock has been torn away. A rectangular idol niche (1.25 m. x 0.60 m.) on the same wall is empty but shows a horizontal cut for a cross-beam. Beside it a semi-circle with a radius of 0.30 m. is scratched into the rock. Maybe there was a thought of carving a second niche at some time. In the cistern, filled with debris, Nabataean sherds reaching back to the first century B.C. were found (Fig. 8).

⁴² G. and A. Horsfield, Sela-Petra, *QDAP*, VII, 1938, 11.

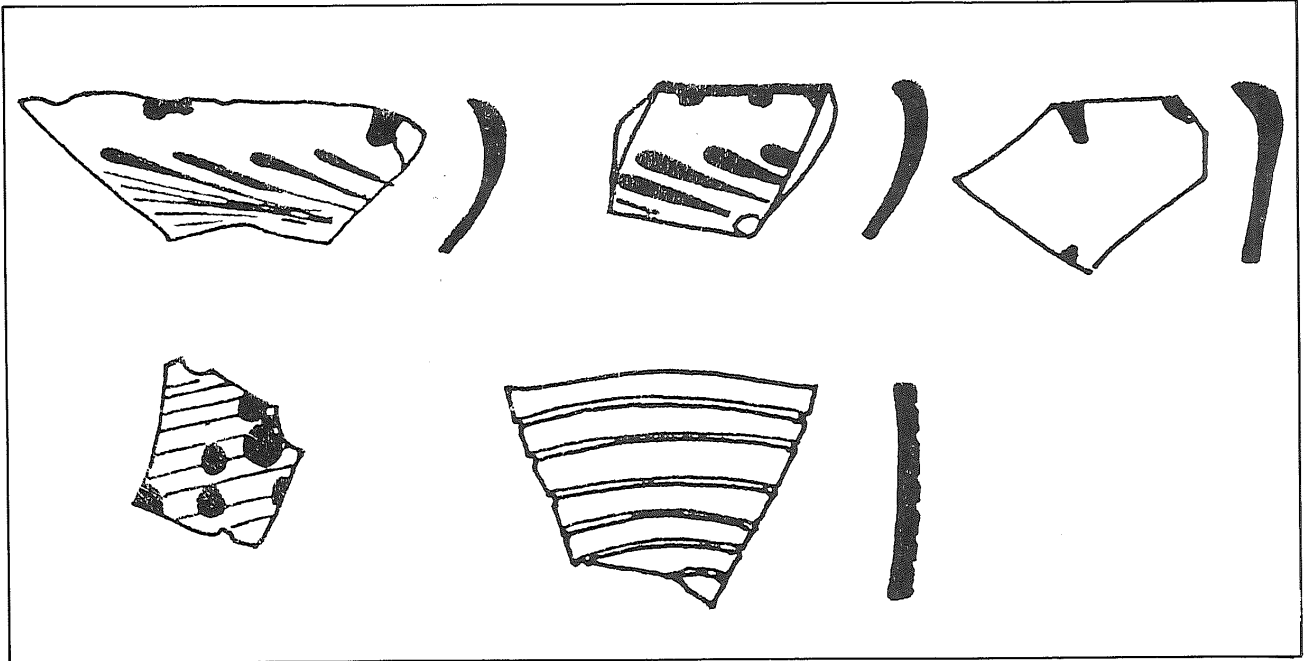


Fig. 8: Painted Nabataean pottery sherds from the surface of the cistern (1:1)

A Necropolis on the Deir-Plateau

The number of tombs on the Deir-Plateau is small. But exactly at the spot where Dalman stopped his inquiries, because "there were no tombs to be found,"⁴³ 40.00 m. south of two Nabataean inscriptions on a tumbled boulder mentioned by Musil⁴⁴ a necropolis of almost uniform rock graves begins (Pl. XXX: 2). First a grave of the usual size is cut in the rock-bottom of the *wadi*. There is no ledge for cover stones and the compass point is roughly NS. 10.00 m. farther in the same direction, a round cistern marks the end of a small gorge. Following its way, 5.00 m. higher, a spacious yard with worked walls which, opens toward the south is entered. In the foreground are two drums of halved columns (1.00 m., 0.50 m. Ø). Their origin and purpose are a mystery. They were never quarried here, nor is a use in this place easy to imagine. The site is, however, a necropolis without any doubt. Actually, on the rising slope we find more graves, partly fitted out with ledges for covering stones. Some of these are still *in situ*, but no grave has remained completely covered. Above some of them are cup holes, presumably used for sacrifices, one for each dead person. 10.00 m. farther up, two

others are more isolated near the sheer, there are three graves side by side (Pl. XXXI: 1), slope of the Deir-Massiv. All of them are more or less in a NS direction. In the midst of the necropolis on a patinated wall, a well preserved, short Nabataean inscription can be read.

Cliff-Dwellings on the Slope of the Deir-Massiv

If, from the upper part of the necropolis one follows the W-slope of the Deir-Massiv towards the south, there are a few Nabataean inscriptions, one above the rock chamber D 472 with the six cupboards Dalman has described.⁴⁵ Higher up on the slope the visitor is surprised to see eroded cuts in the rock associated with cisterns, apparently rock-cut back walls of built cliff-dwellings (Pl. XXXI: 2). The highest up of these houses owned a pear-shaped, plastered cistern with a round opening. Here an idol niche does not necessarily signal a sanctuary. The houses seem to have been ordinary dwellings. They may have been two-storied or their roofs were used for some purpose, because there are rope holes ("Anbindlöcher") and tool-marks in appropriate positions. As further signs of occupation, Nabataean sherds lie

⁴³ See note 40.

⁴⁴ Musil, *op. cit.*, p. 149.

⁴⁵ Dalman, 1908, p. 275.

littered about the surface. It might be of interest that among the surface finds on the Deir-Plateau including the "Burgberg" there were definitely no fragments of 'Ayyūbid-Mamlūk pottery.

The Water Channeling System of the Camel Gorge

For want of a traditional name the gorge on the Deir-Plateau which is well marked by the Camel Relief (D 464)⁴⁶ will be called "Camel Gorge" in this context. This gorge narrows towards the mountain range into two canyons which carry large quantities of water during the rainy season. In order to lead and collect that water, to protect the plateau from torrents and to make agriculture feasible, a water channeling system was installed by the former inhabitants which does honor to its architects.

The system has four main channels. In the N part of the mountain range one channel (I) of 130.00 m. receives the water from the cliffs and carries it into a large basin which has been noted by Dalman (D 469).⁴⁷ (Pl. XXXII: 1). Into the same basin, however, flows water from a second channel (II) of 80 m. length coming out of a ravine of the Camel Gorge. From the basin the channel comes out in a twice angled line and ends, it seems, in the open. Probably it crossed the gorge over an aqueduct which has disappeared but whose abutments can be seen on both sides. The presumed channel then joins two other channels (III, IV) coming from the ravine. The resulting channel V ends in the void opposite the basin. (Fig. 9). A little farther, a round shaft (0.70 m. Ø) extends 2.00 - 3.00 m. into the rocky *wadi* bed and opens towards the middle of the *wadi*. The hissing of a viper at the bottom of the shaft prevented further examinations. But, a Bedouin confirmed that he had entered a spacious cistern under the *wadi* bottom.

Also above channel II, on the ramps of the overhanging cliff, carved foundations of houses are to be found. Above channel I rock steps lead up to these ramps. A good example of a well preserved, comfortable dwelling is located at the foot of a flight of steps. Here two rock chambers (470, 471) were noticed by Dalman,⁴⁸ who overlooked the original front buildings making the caves habitable. Bedouin have lately cleared the opening of a pear-shaped cistern nearby which contained good water in 1982. (Pl. XXXII: 2).

A Newly Discovered Idol Niche Above the Camel Relief

During the drawing and measuring of the Camel Relief by E. Gunsam one of the authors (E. Schreyer) discovered a hitherto undescribed idol niche above the relief (Pl. XXXIII: 1). In front of it, a rock-cut installation looking like a biclinium may have served as a sitting place as well as a water collecting device. In the cliff, four rock steps lead to a rectangular vaulted niche with an eroded idol block. The idol has a rounded cavity in its lower half, similar to idols in the Sidd el-Ma'jin.⁴⁹ Above the niche the cliff is cut into radiating gutters.

A Stone-Built Temple on the Deir-Plateau?

In front of the Camel Gorge,⁵⁰ with the well-known relief (D 464)⁵¹ and the big rock chamber D 462⁵² with a middle niche and numerous Nabataean inscriptions, Dalman mentioned and entered into his sketch map two small ruins.⁵³ He measured the smaller one of the two (4.15 m. x 3.90m). The other (D 453) was explored in 1982. Because of the rectangular ground-plan and the numerous columns a temple is to be supposed. One of the middle axes is directed towards Djebel Harun, as can best be seen from a spot above the ruin on the slope of the mountain range (Pl. XXXIII:

⁴⁶ Dalman, 1908, p. 274, fig. 218.

⁴⁷ D 469, Dalman, 1908, p. 275.

⁴⁸ Dalman, 1908, p. 275.

⁴⁹ Dalman, 1908, p. 308-314. There is nothing known about the meaning of these "hollowed-

out" idols.

⁵⁰ Dalman 1908, p. 273-275.

⁵¹ See note 46.

⁵² Dalman 1908, p. 274.

⁵³ Dalman 1908, fig. 206, p. 264.

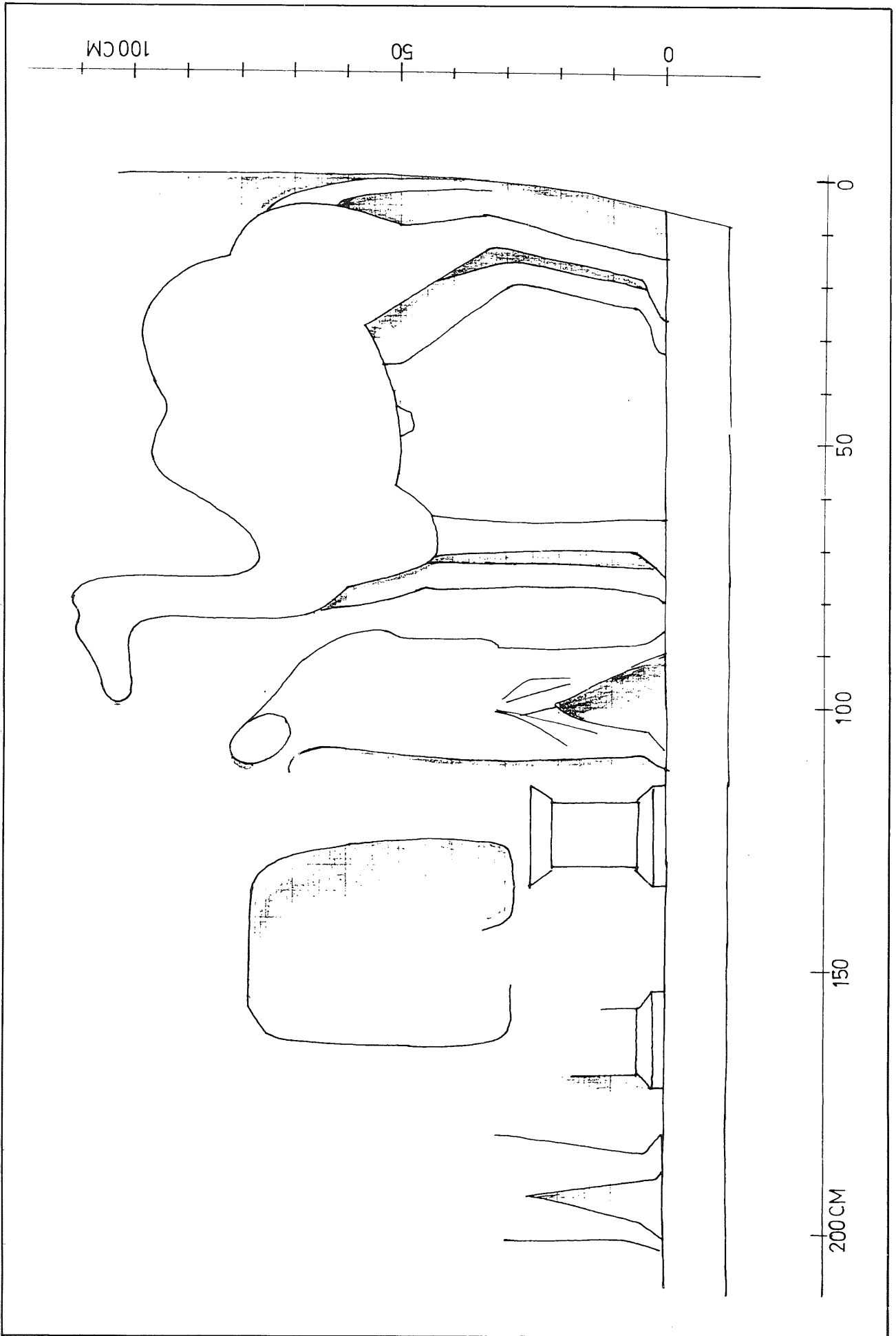


Fig. 10: Drawing of the Camel Relief

2; Fig. 11).

Apparently the entrance was located on the E-side with remains of steps under a portal which has to be imagined. Foundations were found and measured only on the N-side. An unevenness of the site near the NE-corner seems to have been equalized by arches. On a raised platform in the middle of the ruin two bases of columns may be *in situ*. (Pl. XXXIV: 1). There are fragments of architraves, drums of columns, and engaged semi-columns, partly eroded, partly diagonally tooled and well-preserved building stones with bits of stucco (Pl. XXXIV: 2). The bulk of the material is tumbled towards the north, but the direction is not definite. Maybe several quakes or changing shock waves have destroyed the building. Considering the location, not much of the building material has been carried away.

With its *ca.* 19.00 x 13.00 m. the building or the ruins looks small in the relatively wide plain. Actually it is not far from the size of the Winged-Lion Temple (17.42 x 17.42) in the centre of Petra.⁵⁴ In front of the assumed entrance, especially at the NE-Corner, densely packed sherds belong to the first, perhaps second century A.D. of Nabataea⁵⁵ (Fig. 12: 1-10). The mostly thin and partly painted pottery marks a place of sacrifice. Even if it were washed in from higher up, for instance from the rock chamber D 462, the building must have been there before. Unfortunately the exact ground-plan cannot be seen without excavation, but that it was a temple seems reasonable.

A Restored Nabataean Cistern on the Deir-Plateau

Behind the rock altar ed-Deir a gorge, mentioned by Dalman,⁵⁶ extends towards the east. It narrows to a ravine of less than 1.00 m. and is filled with sand. From there a channel of 0.60 m., lately repaired, leads

into a large round cistern which former visitors did not notice (Pl. XXXV: 1). A Bedouin succeeded in restoring the cistern and its intake. It contained drinkable water; as a matter of fact, the drinking water for the exploration team. As is typical with Nabataean cisterns, there are several intakes. One of them is a flight of steps. Apparently the builders counted on a big influx of water in the rainy season. The described channel transported the surplus water farther on to a series of other cisterns on the W-slope of the Deir-range (Pl. XXXV: 2).

On both sides of the gorge are many Nabataean inscriptions, well known to the experts, and a few petroglyphs of animals. They prove either the popularity or the holiness of the place. Pilgrims and workers on ed-Deir and the channels may have been the writers on the orderers.

The Big Cisterns of the Deir-Plateau

There exists a relation between the amount of stored water in a certain locality and the number of people living or coming to the place. The hitherto mentioned cisterns on the Deir-Plateau are already numerous and spacious. But there are bigger reservoirs to be found. The described channel from the restored cistern near ed-Deir follows the cliff face of the Deir-Massiv in a NNW-direction. Nabataean inscriptions signal the importance of the water channelling system. The remains of not less than twenty-one (!) arches and their abutments demonstrate how the channel was covered. In other places simple covering stones like those over graves were used. The double cistern 454 (7.50 m. x 5.00 m. each) has been only superficially described by Dalman.⁵⁷ Actually the walls are thickly plastered. There are the abutments of ten arches. Nine plastered rock steps lead to the interior of the northern cistern and here, above the fifth step, a

⁵⁴ P. Hammond, *AJAJ* XXII, 1977-1978, p. 236.

⁵⁵ As to the chronology of the pottery see P. Parr, *A Sequence of Pottery from Petra, Near Eastern Archaeology in the XXth Century*, New York 1970; P. Hammond, *Pottery from Petra, PEQ*, 1973, p. 31-32, 45-46; K. Schmitt-Korte, *Die*

bemalte nabatäische Keramik: Verbreitung, Typologie und Chronologie. In: M. Lindner, *Petra*⁴, 1982, p. 174-195.

⁵⁶ Dalman, 1908, p. 273-274.

⁵⁷ Dalman, 1908, p. 274.

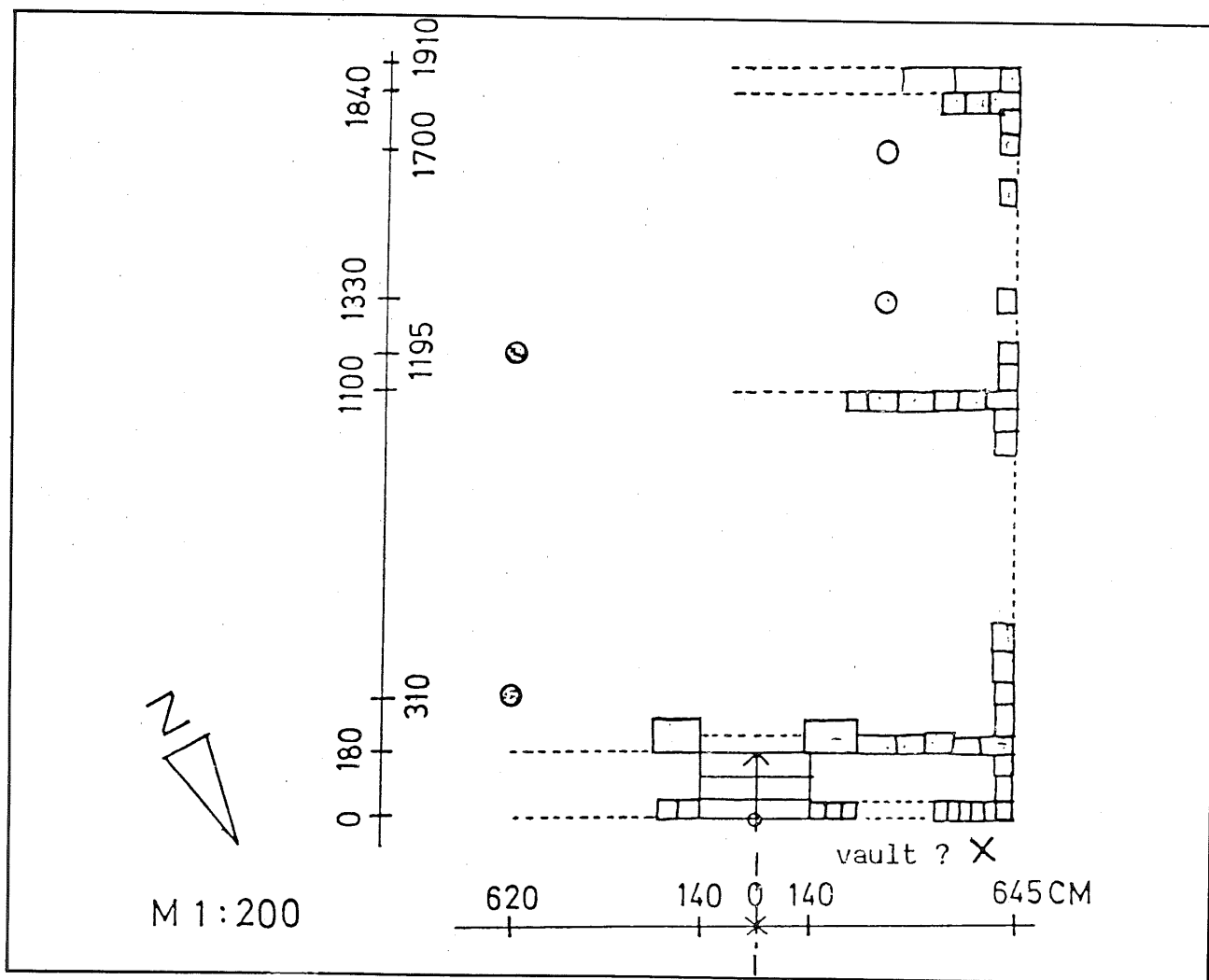


Fig. 11: Plan of the supposed temple

small niche with an idol block is so engraved that everybody who came to get water had to touch it. In a small chamber above the cistern which is difficult to reach now and does not contain anything remarkable, the custodian of the cisterns may have attended to his duties. (Pl. XXXVI: 1).

Directly after the double cistern another one, 9.00 m (!) long and 4.50 m. deep, is followed by the biggest cistern of the Deir-Plateau (D 458). Its measurements are 8.50 m. x 7.00 m. Here, too, Nabataean inscriptions and niches on the cliff mark the importance of the installation. This cistern 458 received its water from the Camel Gorge and its channels in a way that all the water from the slopes could be caught and stored. It seems to the authors that such an amount was not meant alone for the pilgrims coming to worship

on the plateau. There must have been people living up there under much better conditions than the Bedouin, and the explorers, of today.

The "Südheiligtum" (Dalman) on the Deir-Plateau

In 1912 Dalman called a complex of rock chambers and courts in the S of the Deir-Plateau "Südeiligtum". On the front of one cave he discovered a short Nabataean inscription.⁵⁸ During his stay at the site in 1982, one of the authors (E. Schreyer) discovered a second inscription in a cave opening towards the urn of ed-Deir and visible from there (Pl. XXXVI: 2).

The two week stay at the "Südheiligtum", together with a Bedouin family of eight people, demonstrated how a big

⁵⁸ Dalman, 1912, p. 28-30.

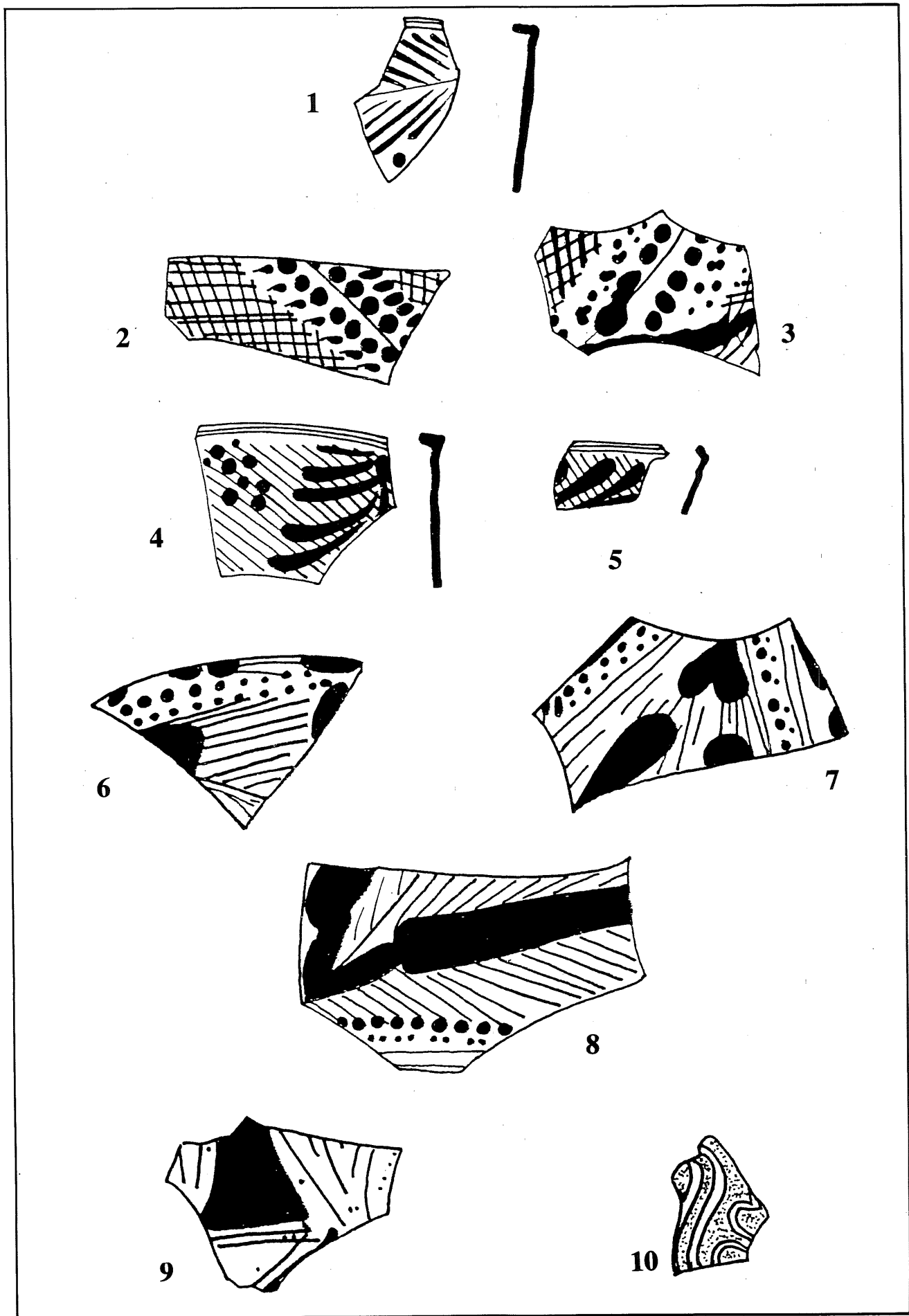


Fig. 12: Fragments of painted Nabataean bowls and of a Nabataean oil lamp (ca 1./2. Cent. A.D.) found in a densely packed collection near the supposed entrance of ruin D 453 (1:1).

family lives and could once have lived in such a dwelling place. The terrace makes it possible to cook, sit around the fire and eat. In the court a large tent is, and could be, erected, under which it is cool and comfortable on hot days and nights. During cold, sandstorm and rain, according to the weather, different rock chambers are, and were, used. The "Guest Cave" is off limits for children, donkeys, cats, dogs and goats. One room is reserved for the female members of the family. The hill above the dwelling place contains platforms and staircases. Their main purpose was not to pray, but to collect water and to prevent it from spilling down unguided to the living quarters. One gorge was closed with a wall of nine layers of ashlar to store rainwater for the rainless season. Near a break in the lower part of the wall a big stone vessel was discovered. There is no reason to assume a "sanctuary" despite the fact that the "Südheiligtum" is located near ed-Deir. Even today the Bedouin sell beverages to the thirsty visitors of the temple. Some Nabataean might have done the same 2000 years ago, and afterwards sacrificed to his god on top of the hill. Maybe he was the custodian of the sanctuary nearby.

Summary and Conclusion

The Deir-Plateau above and N of Petra was explored by orientalist in the beginning of this century. A more precise examination of the site in the springs of 1982 and 1983 resulted in several new discoveries. The "Burgberg" opposite the rock temple shows no definite traces of a fortification or a castle. There are, however, impressive signs of its former role as a splendid sanctuary. A circular building with bases of columns near the western cliff has not been described so far. The same applies for a pavement of hexagonal slabs and another one which is tessellated. Columns' drums, some of them *in situ*, some tumbled, remind one of peristyles on the E-platform as well as on the "Burgberg" proper, where a succession of buildings seems to be possible. It was one of the aims of the exploration by the members of the Naturhistorische Gesellschaft Nürberg to

ascertain what the monuments and installations on the Deir-Plateau looked like in ancient times. The rock-hewn temple ed-Deir was not meant to stand isolated on an empty plain. It seems that a peristyle of stuccoed columns confined the place and that the pilgrims or worshippers entered the precinct from the then rock-filled *wadi* and not from the narrow corridor which is now in use. On the roof of ed-Deir a geometrical design was discovered that may have been an architect's plan or an astronomical design. A middle line is directed to the visible summit of Djebel Harun. Beyond the monuments described by Dalman in the N of the plateau, a dwelling with triclinium and cisterns and a necropolis of rock graves were found. In the slope of the Deir-massiv remains of cliff houses are further signs of a populated area. Above the Camel Relief which was painstakingly measured and drawn, an idol niche was discovered. Channelling systems begin already in the cliff walls high above the plateau and channels conducted the water of the rainy season into a many spacious cisterns. The ruin of a columned building, most probably a temple was examined.

The pottery fragments found nearby belong to the first centuries of our era. As to the chronology of the big cisterns, some of which are being cleaned and restored by Bedouin right now, there are enough Nabataean inscriptions in close contact with the water channels to date them to Nabataean times. The stay of the exploration team in the "Südheiligtum", a sanctuary according to Dalman, showed an even now usable dwelling place, but in spite of a newly discovered Nabataean inscription nothing that has to be considered as holy or belonging to a cult place was found. It is the result of the exploration that the Deir-Plateau in the high-time of the Nabataean Kingdom or somewhat later was a place of worship as were most of the mountain tops of the region. Compared, however, with other places like Umm el-Biyara, Djebel en-Nmer, Zibb Atuf and Djebel el-Hubta, the sanctuaries here have been more numerous and more splendid. Maybe this was the reason for the equally

numerous traces of ordinary dwellings which seem to belong to an important place of worship.

Acknowledgements

The authors would like to thank the Department of Antiquities, especially the

Director, Dr. Adnan Hadidi, Dr. Fawzi Zayadine and the representatives and helpers of the Department at Petra for their co-operation which made the exploration possible.

Manfred Lindner
NaturHistorische Gesellschaft
Nürnberg, Germany