FROM EDOMITE TO LATE ISLAMIC: JABAL AŞ-ŞUFFĀḤA NORTH OF PETRA

by

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Introduction

The archaeological potential of the Jabal aṣ-Ṣuffāḥa region only c. 15 km north of Petra had previously been overlooked due to its limited accessibility (Fig. 1). The surveys carried out by teams of the Naturhistorische Gesellschaft Nürnberg (NHG), directed by M. Lindner in 1994, 1995, 1996 and 1997 used a combination of landrover, pick-up truck, donkey, hiking and climbing at all times assisted by the friendly al-'Amārīn families.¹

The Routes to Jabal as-Suffāha

The routes to Jabal as-Suffāha are ancient and coming from Petra, Nabataean-Roman relics abound around al-Bayda, Siq Umm al-Ḥīrān, the Jabu plain and the al-Ba'ja range (Lindner 1986: 112-130). Opposite Siq Umm al-'Alda, on a natural hill and dominating the surrounding plain, a Nabataean farmstead has a rock-cut wine press with an unusually sophisticated mustshaft (Fig. 2). On the way from the al-'Amārīn Housing Project at 'Atnūb, no less than seven such installations were noted. In antiquity the sun-heated sandstone rock was used to transmute the must of freshly trodden grapes into an alcohol-rich wine.² The region north of Petra was apparently producing the wine for the whole of Greater Petra. Umm al-'Alda, as the area is called locally, is crowded with tumbled ruins of houses and walls, graves, surface pottery

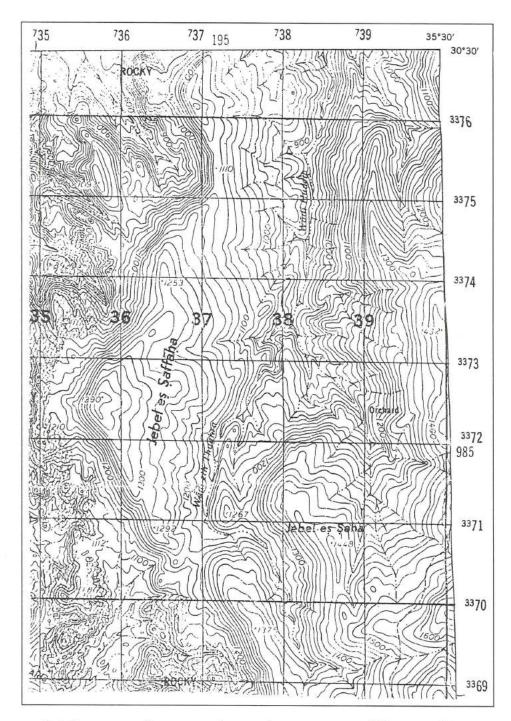
and a typical Nabataean troglodyte house where a rock-cut staircase runs up to a "roof" (Fig. 3). Looking down, another wine press appears, which cannot be seen from the valley behind (Fig. 4). Nabataean, Late Roman, Byzantine and Late Islamic sherd scatters mark the main phases of occupation.

Below and in plain sight of the ridge of Jabal aș-Şuffāḥa, a camp was installed in 1994. The area proved to have been settled. Big juniper trees (Juniperus phoenicea) indicate a large catchment area where there may be cisterns. Houses were built against rows of rock faces. Two abutments belonged either to a cistern or a house. Small channels along rocks diverted and conducted water. The access to Wādī Nemala is dominated by a 6 x 6 m structure of finely dressed ashlars and a few steps. The presence of Nabataean fine ware may indicate that the installation was of a cultic nature. The sandstone area is quite different from the Cretaceous ridge of Jabal as-Suffāha rising from the plateau where it geologically

Another survey of Jabal aṣ-Ṣuffāḥa followed a bedouin track from Umm al- 'Alda which may have been an ancient route from Wādī Mūsā to ash-Shawbak. The wusum engraved in a white sandstone boulder heralded at some time the border between the ash-Shawbaki tribes and the people of the Greater Petra area (Fig. 5).

 During one survey the NHG group was accompanied by the representatives of the Department of Antiquities, Suleiman Farajat and Hani Fallahat, who also supported the surveys in other respects.

Wolfgang Graf zu Castell-Castell has to be thanked for the suggestions that making wine in the heated stone presses did not take long. The wine would have been rather rich in alcohol but not too flowery. The must shaft had to be partly covered and animal skins were not useful for being filled with fresh wine. The lack of vessel fragments by the wine presses poses a problem yet to be solved.

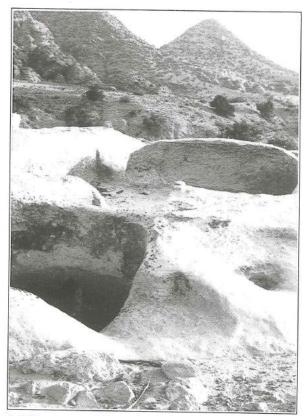


 Jabal aṣ-Ṣuffāḥa. Map of Palestine 1:50 000

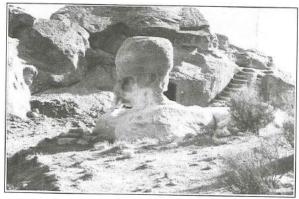
Driving up to the mountain as close as possible, the shortest, if not most convenient access is beside a steep terraced wadi to the east of the ridge.

This ridge consists of different kinds of hard Cretaceous limestone. In its upper part, the mountainside drops steeply toward the west and gently toward the east. The sloping plateau is covered with heaps of piled stones, terrace walls and field boundaries.

Most standing stones are not of a cultic or sepulchral significance but the remains of stone and brushwood fences. They are found all over the level areas of Jabal aṣṢuffāḥa outside the settlements. Few house ruins of an average of 5 x 5 m and stone pens of large boulders (one of 10 x 5 m, another of 9 x 9 m) seem to be the remains of installations for animals as well as agriculture and horticulture. A thin scatter of



2. Wine press at Umm al-'Alda.



3. Nabataean hamlet with staircase to roof.

Iron II sherds beside Nabataean, Roman and Byzantine sherds may be collected from the surface.

An Islamic Sanctuary

The highest point of the mountain (1390 m) is marked by an open sanctuary of ash-Shaykh Ahwar with a courtyard of 7.5 x 11



4. Wine press behind cave dwelling.



5. Wussum by the footpath to Jabal as-Suffāḥa.

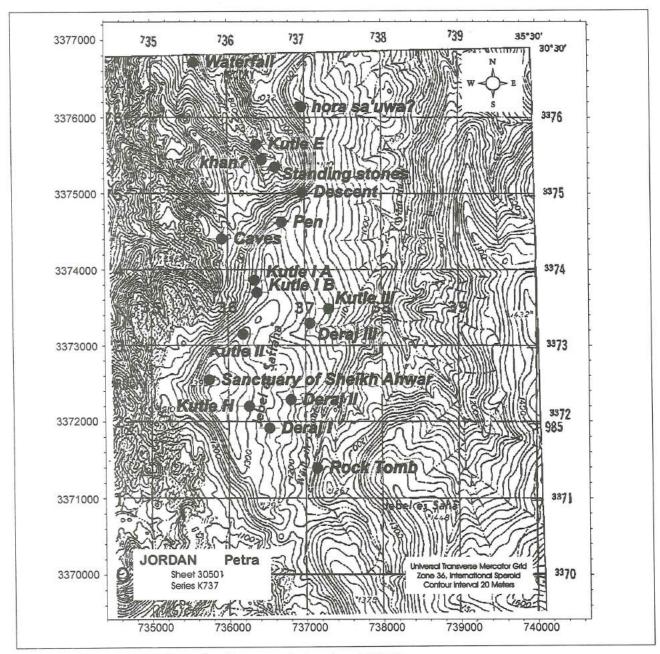
m and a *miḥrāb* directed toward Mecca. At some time in the recent past the modest structure was repaired. According to Musil (1908: 58) the grave of 'Abdallah, ancestor of the 'Amrani ('Amārīn) was venerated in a similar manner, and visitors left small gifts there. The holiness of this prominent place may go further back in time: Iron II, Roman-Nabataean and Late Islamic sherds were collected at the spot.

The Settlements of Jabal aṣ-Ṣuffāḥa (Figs. 6 and 7)

Further down to the north, east and south, are ruins of settlements of the size of small villages, farmsteads or "estates" built, at different times, on rocky outcrops with stone and surounded by many massive terraces and cultivable fields.³

the inhabitants. Were they families of one tribe or did land owners, leaseholders or tenants live there with their families and slaves and does one have to imagine different set-ups for different periods?

^{3.} How the settlements of Jabal aṣ-Ṣuffāḥa should be called, depends of course, on what they actually were. The sizes are reminiscent of villages or "estates". And we do not know whether they were agricultural centres. Nor do we know anything about



6. Map (1:50 000) with locations of settlements and other sites (J. Hübl).

Kutle II - An Edomite Settlement⁴

To the north-east of ash-Shaykh Ahwar's weli, directly at the eastern side of the as-Suffāḥa ridge, a ruined settlement of considerably large ashlars at 1290 m was first noticed in 1994. Due to its size and the mass of cut stones in the ruin field, it was difficult

to detect the ground plan. Kutle II, as it was called by the NHG team, was photographed from the air (Fig. 8), visited a second time, and properly surveyed by GPS in 1995 (Fig. 9). The houses, walls and terraces were destroyed by earthquakes and natural deterioration, once the roofs were caved in.

new names, except numbers and letters. Unfortunately, the names could not be changed or adapted to the phases or periods later, because they were already reported to the Department of Antiquities and in the Annual of NHG.

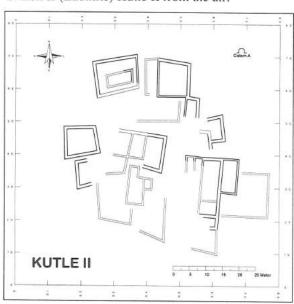
^{4.} The settlements' names originated from two sites, i.e. Deraj I, where steps or terraces recommended the name for local bedouins, and from Kutle I, with the previously known name of 'Ayn Kutle. Sites later discovered offered no opportunity for

Locality	Easting [m]	Northing [m]	Elevation asl [m]
Kutle II	736191	3373154	1290
Kutle III	737307	3373486	1150
Kutle I A	736345	3373863	1190
Kutle I B	736375	3373700	1200
Descent	736970	3375020	1090
Standing stones	736617	3375350	880
khan ?	736445	3375448	860
Kutle E	736379	3375650	850
Waterfall	735573	3376717	710
Caves	735925	3374410	1030
pen	736700	3374625	1160
hora sa'uwa	736965	3376140	1170
Deraj III	737062	3373295	1180
Kutle H	736266	3372202	1300
Deraj I	736527	3371915	1260
Deraj II	736807	3372286	1230
Rock Tumb	737143	3371395	1170
Sanctuary of Sheikh Ahwar	735750	3372550	1390

 List of coordinates of Jabal aș-Şuffāḥa sites 1995/ 97 (J. Hübl).



8. Iron II (Edomite) Kutle II from the air.



9. Plan of Kutle II.

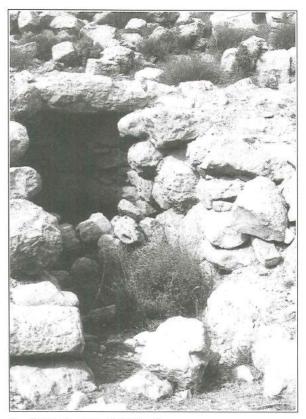
Stone-robbing from villages located further down the slope has to be considered. Still, walls up to 2.50 m are still standing, and

many walls seem to be in their original state (Fig. 10). On the whole, Kutle II was a compound of 6 or 8 square houses on terraces, extending over c. 50 x 50 m with partly double massive walls built in the header-stretcher technique using roughly worked limestone ashlars. Three terrace walls border its lower (eastern) side.

There was no spring at Kutle II. Although 'Ayn Kutle is, at least nowadays, visible from here, the inhabitants for some reason or other relied on cave cisterns. Cistern A at the north-east corner is entered by a small "dromos". The interior is 5 m long and 3 m high. Cistern B, located in the southern part of the settlement at about the same elevation, is 6.5 m long and 1.6 m high. Both cisterns are fortified with inserted stones and were at some time entirely plastered. Two other cisterns were built in the same way (Fig. 11). All of them were filled from the surface run-off and possibly from cracks in the limestone. Two frag-



10. Original wall of Kutle II.

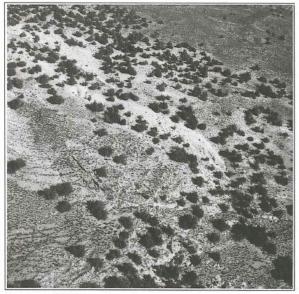


11. Cave cisterns of Kutle II.

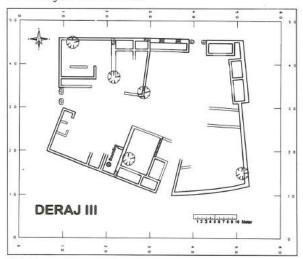
ments of millstones but no architectural pieces were noted. The most striking discovery was the high percentage of Iron IIC pottery fragments. The past of Kutle II is represented by the distribution of surface wares: 53 Iron II, 1 Nabataean, first century AD, 22 Nabataean - Roman -Byzantine and 30 Late Islamic sherds, the latter mostly at one of the cisterns. The Iron II pottery consisted of household and storage ware with a few finer fragments.

Deraj III: An Iron II Fortress

The settlement called Deraj III by the NHG team was discovered in 1994, seen from the air and subsequently visited in 1995 and 1997 (Figs. 12 and 13). It is located at 1180 m and surrounded by more trees than other sites of Jabal aṣ-Ṣuffāḥa. The stone which could be taken from and out of the ground not far away is more brownish than gray. The *khirba* of c. 45 x 40 m is built on and surrounded by a lot of sturdy terraces. Massive enclosure walls in the



12. Deraj III from the air.

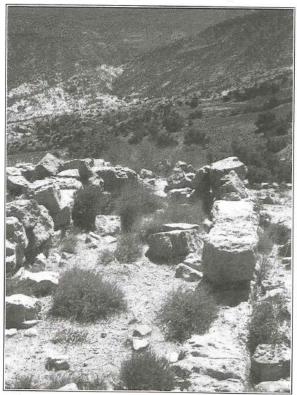


13. Plan of Deraj III.

north-west (32 m) and in the south-west (30 m) were examined (Fig. 14). Due to the size of the ashlars of up to 0.90 x 0.60 x 0.60 m and 1.50 x 1.50 x 0.50 m the were not doubled. Part of the north-west wall is restacked to form a rounded pen. The southwestern wall with three casemates of c. 5 x 2 m, two of them divided by a monolith of 2.40 (!) x 1.10. x 0.70 m is part of a wall which originally enclosed the whole place (Fig. 15). The size of the masonry and a tower-like projection of the eastern wall indicate a fortress. The slope above, where quarrying large ashlars would have been easy, is terraced with similarly built massive walls. Some of them form semi-circles



14. Massive wall of large ashlars of Deraj III.



15. Casemates of Deraj III.

and might indicate the catching of floods or even of non-perennial springs. To the west, traces of flowing water were observed. Whereas around and in the ruin field most of the soil had disappeared, there was more than 0.30 m good, loose soil to be found in the interior. Beside the mentioned walls, the *khirba* is astonishingly empty.

The surface pottery of Deraj III is peculiarly scarce. There are Iron II and Nabataean-Roman sherds besides a small scatter

Kutle H was discovered by Ulrich Hübner who surveyed the rim of the western escarpment and of Late Islamic ware. An Iron II storage jar with two handles stuck out near an interior casemate wall (Fig.16). Fragments of a large bowl with a ring base found outside the walls belong to the Iron II period. Unfortunately no part of the rim is preserved.

A steep trail runs down to a narrow wadi with massive terracing and damming and a cave cistern, ostensibly to guarantee the water supply.

The details of Deraj III point to a Late Iron II fortress. The massive wall structure and the lack of a habitation area except the casemates could thus be explained. The scarcity of ceramics might be due to its brief use.

Kutle H - A Nabataean-Roman Settlement

From the Islamic sanctuary or weli described above, a wadi originates which was in its descent systematically and efficiently terraced at intervals of 5-15 m by walls still extant up to more than 2 m. Walls to both sides of the terraces acting as conduits led rainwater to four natural but artificially modified caves to the right and left of the wadi (Fig. 17). The lower terraces are broken but the cave cisterns are preserved. One of them is 2.5. x 3.5 m and 2 m high, another, equipped with a lintel and covered with 4 layers of large ashlars, has a somewhat higher ceiling. Two other cave cisterns behind their entrances of laid stones measure c. 3 x 3 m.5



16. Iron II storage jar in the ruin field of Deraj III.

was able to overlook the mountainside almost as well as from a helicopter.



17. Cave cistern of Kutle H.

To the south of the terraced wadi at 1300 m, a settlement extends over c. 50 x 80 m (Fig. 18). Of the houses which were built on ledges in the hard limestone, only a few walls are still standing. The surface pottery is not less scarce than in other settlements of Jabal aṣ-Ṣuffāḥa but more widely spread and predominantly Nabataean-Roman. Kutle H may have been planned and then built in the late first century AD.It is situated in plain view of Deraj I which after its Edomite phase, was reoccupied in the Late Roman period.

Deraj I - An Iron II-Late Roman-Byzantine Village

In 1994, from the footpath to Siq Umm al-Ḥirān and from an exploratory trip to Juheir at the ash-Shawbak road, a khirba was spotted on the slope of the aṣ-Ṣuffāḥa massif at 1260 m. The access from the Wādī



18. Settlement of Kutle H with Jabal aş-Şaha and Jabal ash-Sharā in background.

Mūsā - ash-Shawbak road was difficult and a footpath from Umm al-'Alda proved to be more convenient. Deraj I, as the ruined settlement of c. 30 x 40 m was called, derives its name either from the steps leading up to a main building or simply from the numerous terraces around. The building is a 12 x 12 m dry-stone structure of regularly laid and carefully trimmed ashlars of a sharp-cornered flinty limestone (Fig. 19). Walls are standing up to 2.30 m. Three steps and a threshold belong to an entrance in the east which together with the walls of this part of the building is destroyed. Its interior is divided into three rooms by walls which might be secondary. Similar to Kutle II and Kutle H, there are cave cisterns. Cistern A with an opening of 2.5 m is 5 m long and in a dome-shaped ceiling 2 m high. In the humid interior, fireplaces and the skeleton of a goat were found. Cistern B, further west, is 4 m long and about 3 m high. Both caves were partly completed with fieldstones. Entrances and interiors were originally plastered.

The 12 x 12 m structure, situated on a shoulder of the gentle slope, was (and is) dominating the whole settlement and its surroundings. Except for the steps and the threshold no architectural pieces were noted. Two wadis to the north sport old specimens of *Juniperus phoenicea* and *Pistacia atlantica*. The vegetation is due to massive terrace walls.

The surface pottery of Deraj I does not entirely correspond with its architecture. A

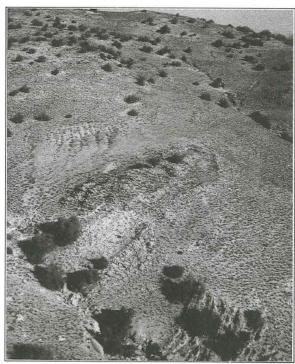


19. Main structure of Deraj I.

first occupation is proven by Iron II pottery. similar to the assemblages of Kutle II, Tawilan and Khirbat al-Mu'allaq. The fragments represent about 30 % of the total. About 50 % of the sherds were of the Late-Roman-Byzantine periods. The ceramics are mostly cooking pots and a few cups. The Nabataeans under Obodas II, Aretas IV and Rabb'el II are less well represented, in fact only with c. 10 %, as is the Late Islamic period. Typical sherds collected close by one of the cisterns show a use by pastoralists rather than an occupation of the site. The main building cannot be traced back to the Edomites. It might have been a villa rustica of the Late Roman-Byzantine period.

A Late Roman "Estate": Deraj II

Located at 1230 m, some 100 m to the north-east of Deraj I, Deraj II was examined in 1994 and photographed from the air in 1995 (Fig. 20). The ruin field situated in a north-east, south-west direction is somewhat smaller than Deraj I. The stone material is light brown and on the whole smaller cut than in Deraj I. A particular main build-



20. Deraj II from the air. Terraced wadi in fore-ground.

ing is lacking. Compared with Deraj I, the site is less well preserved and more walls are restacked. Like Deraj I, it is close to a wadi, in fact, with pincer-like walls and some barrages built right into it. Mudflats running toward the wadi indicate a good water supply. The settlement, rather an "estate" or a large farm regarding its size, was inhabitable during the whole year. Given lots of massive terrace walls and correspondingly much ground for agriculture and gardening, Deraj II probably produced more food than it consumed. An Iron II occupation of Deraj II could not be ascertained. The surface pottery (less than at Deraj I) consists of ca 80 % Late Roman household ware and a few Late Islamic sherds. The main occupational phase can thus be dated to the third-fourth centuries AD.

Kutle III: An Iron II - Byzantine "Estate"

Kutle III located at 1150 m north-east from Kutle II and rather close by Deraj III was first seen during an low-altitude flight, and subsequently visited in 1995. Its size is c. 70 x 30 m, with a pistacia on top of the khirba. The rocky surroundings are as well dotted with a lot of trees as those of Derai III. This richness is partly due to the large terraces on the slope above the settlement. There is more stone material than on Derai I and II, but the place shows more destruction than the other khirba. A heap of building stones to the east reveals the former existence of a larger building. At the southern end, original wall stones are restacked to form a pen. Three walls the length of the ruin field are tumbled down the slope. There, only pastures and ancient fields without large terraces are to be seen. In a wadi to the south, a reservoir of 8 x 8 m and two more catchments for spring and rain water are remnants of old and perhaps more recent endeavours to store water.

The surface pottery is mostly crushed.

The *khirba* has been trodden over by pastoralists to whom the restacked pen has to be ascribed. The pottery consisted of 40 % Iron II, 40 % Byzantine fragments, very little Nabataean ware of the first centuries AD and some Late Islamic sherds. There were two main occupational phases, an Iron II phase and a Byzantine one.

A Late Islamic Village Kutle I A/B (1190/1200 m)

First visited from a campsite above the village of Kutle IA (the name Kutle has been given by the local al-'Amarin families and derives from 'Ayn Kutle) is built of limestone ashlars of medium size, covering c. 80 x 35 m (Fig. 21). From its northern house walls on a rocky outcrop it dominates an overflow spring⁶ south of it and the recognizable remnants of a khān. To the west, Kutle IA was protected by the escarpment of the as-Suffāḥa ridge and to the east by a steep embankment of an especially hard limestone, where fossilized (and crystallized) starfish were observed. A dangerously narrow trail winds itself between the escarpment and the village to the west. Anybody approaching the spring was in stonethrow or arrow-shot distance from the house walls. The overflow of the spring runs (and ran) down the perpendicular escarpment



21. Kutle I (A) from the air.

The spring or well was neglected when the first survey reached Kutle IA, but cleaned and newly surrounded with stones the second time. The water stays always on the same level, no matter how where a rich plant life was examined by I. Künne in 1995. House walls in the village are still standing up to 2 m (Fig. 22). When seen from the air or from the embankment to the east, house squares and lanes show an orderly layout. The interiors have masonry pillars for the support of beams. One of the houses measured 5.0 x 3.5 m on the inside. The gap between the double walls was filled with rubble. Generally, Kutle IA is a village in the Ayyubid-Mamluk-style.

The surface pottery includes different styles within the Late Islamic period. Excepting one Ayyubid fine ware sherd, most sherds belong to the hand-made village ware without decoration, whilst there is a small percentage of painted ware with linear and criss-cross decoration. Flour was made with millstones with the upper parts preserved.

The top of the embankment in the east, in fact a plain, was probably used as summer dwellings and groves (Arabic: al-ḥaūṭa). A threshing floor between the embankment and the village indicate cultivation of grain fields that could be located directly east of the village and on the plain above.

In 1997, a second village was discovered at the same escarpment to the north. With a size of c. 30 x 30 m, it is a little smaller than the one described previously. Ac-



22. Walls of Kutle I (A).

much of it has been taken out. Originally, the spring may have been located further to the north-east, from where a small gully descends to the present hole.

cording to the surface pottery which includes a small percentage of linear painted decoration, it is contemporary with Kutle IA, at least to a certain extent. However, more walls are standing higher up, and a small wadi may have run through the village. The interior of one of the houses is 5 x 3 m with an anteroom of a further 3 x 3 m. A surprising equipment is a mortar in a large immovable boulder. The utensil of 0.45 m depth was probably for communal use. For everyday use in a family, millstones were used.7 There are broad similarities between the village and Kutle I. Therefore as a habitat compound by itself it was called Kutle I B and consequently the other village not Kutle I but Kutle IA.

Kutle E: A Late Islamic Settlement

Kutle E was reached from Kutle IA on a steep but structured path, sometimes with rock-hewn steps, in 1997, after the site had been made out with binoculars from the as-Şuffāḥa ridge in the previous year.8 Its beginning is marked by a large and massive dam. As the further examination of the site showed, without the dam no habitation would have been possible in the gorge-like valley. Now that the dam is broken, flash floods submerge the ruins. A little above, an "avenue" between standing stones at 880 m extends over c. 100 m. without a marked entrance or an end.9 The first built structure of the settlement is less damaged than the rest of the ruin field. Situated at 860 m it is 20 m long, and partly built of well-cut and dressed ashlars. It may have been a khān. There are two parts of the ruin field at 850 m: One to the right (30 x 25 m) is built over a small rise, another (25 x 25 m) on a plain

The very scarce surface pottery was identified as Late Islamic. Below the settlement proper, the wadi disappears in a narrow canyon with high straight walls. The footpath to the left of it leads through a passable valley down to a swamp and a spring ending in a waterfall at 710 m which descends toward Wādī 'Arabah.

The people who came here during the Middle Ages, apparently overestimated the possibilities of the marginal and vulnerable site. It is true, they closed a few gullies in the rock walls of the valley with built barrages. However, it has to be noted that the dam had to be planned and built before settling was possible. A few flash floods and the destruction of the dam (perhaps by an earthquake?) were enough to force the people to seek refuge in another place.

The Ridge Survey of 1996/97

The ridge of Jabal aṣ-Ṣuffāḥa from Kutle IA to its end in the north was surveyed in 1996/97. Right by the rim of the mountainside a round structure of 7m in diameter with double walls of massive boulders up to 1.20 m in width was a pen or an enclosed garden. The survey proved that even this marginal area was used agriculturally and for the herding of goats. Fieldstones were collected in smaller and bigger heaps. To the right of the old footpath there are ter-

between, at least nowadays, two wadi courses. Two houses or rooms of 4 x 4 m revealed seemingly poorly worked building stones, and doubled walls. In one spot, where some digging had been done non-weathered building stones of a better quality were observed. In fact the appearance of the ruin field may be totally deceptive.

These mills are found in almost every Late Islamic village around Petra. Even in present-day Wādī Mūsā they serve for special preparation now and then.

Elisabeth Schreyer looking for further settling on and around Jabal aṣ-Ṣuffāḥa saw and verified the site. Due to her insisting it was visited next year and called Kutle E after her name.

^{9.} Its function cannot be explained. Standing, intentionally erected unworked stones on Jabal aş-Şuffāḥa never turned out to be of a cultic or sepul-cral significance, but were rather parts of a house, a pen or a field wall. Besides, Kutle E was visited only once, and one day was not sufficient to do more than a preliminary prospecting.

races of hewn stones. Of several additional pens or gardens, the largest measures 15 x 12 m with a few ruined huts nearby. A disturbed tomb is marked by an originally standing stone not of the area (Fig. 23). Directly by the rim, the ruin of a house of 5 x 3 m was, at some unknown time, turned into a grave facing east-west, and later pilfered. In its vicinity were found two fine yellowish Iron II body sherds (of the same vessel) the only indication so far of Edomite presence on the ridge. In the same area, a structure of very massive boulders of 4 x 4 m with a depression and a pillar lying in the interior may have been a tomb. The one Late-Roman sherd found there does not allow a dating.

The ridge is, at its western side, blown out by strong and steady winds. Right by the abyss, cold air can be felt in small holes in the rock, early signs of further deterioration of the mountain. Near the end of the ridge, a great heap of piled fieldstones shields an interior of only 2 x 2.5 m with a single rectangular stone lying in it (offering place or tomb?).

A shepherd called the place at 1170 m hora sa'uwa, allegedly the name of ash-

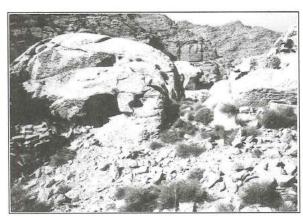


23. Disturbed tomb with worked (originally standing ?) stone.

10. While inspecting the edge of Jabal aṣ-Ṣuffāḥa in the north, two different layers of the Cretaceous limestone were observed. In contrast to the outblown and crumbling-up stone material at a place called "hora sa'uwa"(?) by the bedouins, in the north and south the limestone breaks away Shaykh Ahwar's sister. On the whole, the ridge shows the same system of large terraces, heaped fieldstones, small houses and large pens as all over Jabal aṣ-Ṣuffāḥa outside the settlements.

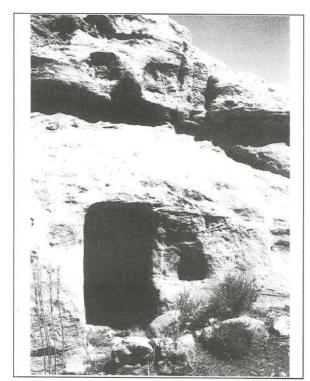
The Western Slope of Jabal as-Suffāḥa

The western slope of Jabal aş-Şuffāḥa was diagonally crossed from Kutle IA to the foot of the mountain in the south and also diagonally from Kutle E to Kutle IA. Below Kutle IA at 1030-1080 m a farmstead was spotted behind large rocks. 12 Roman-Byzantine and 4 Late Islamic sherds were found. The place at 1080 m in a particular greyish (ad-Dīsī?) sandstone also harboured a nest of porcupines. Further down and to the south-west a Nabataean settlement included a few house ruins as well as several cave chambers and cisterns (Fig. 24). Water was conducted through channels. One of the entrances sports an inserted lintel, another has a basin in the Nabataean style cut into the rock wall (Fig. 25). The terraces on this side of the mountain are especially massive. They had not only to preserve the soil for agriculture and gardening but also to protect the habitats. Surrounded by caves and house



24. Ruin field in front of rock shelters on eastern Jabal as-Suffāḥa.

in thick slabs. Further down thick layers of clay and marl were (artificially?) opened up. A finely grained sandstone observed at the western escarpment might have been ad-Disi sandstone revealed unter the Cretaceous limestone.

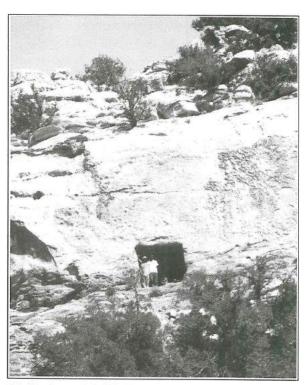


 Nabataean-style rock work on eastern Jabal aş-Suffāha.

ruins, a wide open place was at one time agriculturally used.

A Rock-Cut Tomb Opposite Jabal aș-Suffāha

Separated from Jabal aș-Şuffāḥa by the steep and stony Wadi ath-Thughra, a sandstone range to the east belongs geologically to the "rocks" surrounding the isolated massif. A rock-cut tomb was cut into a vertical wall of the range at 1170 m and had been robbed (Fig. 26). The opening of 3 x 4 m, located 30 m above the wadi bed, is devoid of any decoration. No closing can be conjectured. In the interior of also 3 x 4 m, two graves of 0.45 width are cut into the ground, one parallel to the sides, the other in a right angle to them. The walls lack fine trimming. A lot of debris, sand, dust, birds' droppings, (with one fine Nabataean body sherd) cover the floor. There was, however, a significant scatter of Nabataean to Byzantine sherds to be noticed all the way from Kutle II to the tomb and further on to a house ruin in a steppe area with large Juniperus phoenicea



26. Rock tomb in Wādī ath-Thughra.

trees, Artemisia Sieberi bushes and even annual yellow grass. Here, everything bears witness to relatively plenty of winter rain and a continuous agricultural and pastoral use of the area since antiquity. From here across a divide at 1200 m with a view of Baboul Ba'ja, the road to Ba'ja and further to Petra-Wādī Mūsā may be reached. As to the dating of the rock-tomb one should be careful. There is only one other rock tomb outside Petra known to the authors, that is the tomb of al-Mukhayfir to the west of Sabra with all indications of probably Late Roman origin. But a comparison is futile; the tomb of al-Mukhavfir despite its simple design, was elaborately cut out of the mountain top, decorated with relief pilasters at the corners and elevated by a second (masonry) storey (Lindner 1986: 180-183).

Three Main Occupational Phases of Jabal aș-Şuffāḥa

Summarizing the results of the 1994-1997 surveys of Jabal aṣ-Ṣuffāḥa by NHG teams, the region was occupied at elevations of c. 850 - 1290 m during three main phases.

The Iron II (Edomite) Phase

In this phase, on the eastern slope right by the rim of Jabal as-Suffāḥa, the settlement of Kutle II was built and inhabited around the seventh century BC according to the surface pottery. Judging by its architecture, Deraj III was built as a fortress around the same time. Again according to the surface pottery and to the lack of habitats in the interior it was not occupied for very long. The water supply was, due to its favourable location, much more sophisticated than that of Kutle II. The other settlements on Jabal aş-Şuffāḥa, Deraj I and Kutle III were occupied around the same time. It seems possible that Deraj III was built as a fortress to protect the Iron II inhabitants against aggressions from the east. We do not know when exactly the Edomite settlements were left. It was probably at the time when the Edomite state perished.

The Nabataean-Roman-Byzantine Phase

The second occupational phase is represented by the settlements of Kutle H, Deraj I, Deraj II, Kutle III and the western slope of Jabal as-Suffāḥa. In analogy to the Iron II habitation one would have expected a general Nabataean settling activity all over the mountain. Such an activity would have been sponsored by the "court" and/or rich families around the first century AD. The reading of the surface pottery provides, however, quite different results. Each of the settlements, farms, villages or "estates" has it's own story to tell. Kutle H with its ingenious water supply was inhabited since the first - second century AD, after the Iron II phase, whereas Deraj II was built in the Late Roman period, that is third - fourth century AD. Deraj I was reoccupied in the Late Roman-Byzantine period, during the time when Deraj I had been already inhabited for a longer time. Kutle III, belongs

exclusively to the Byzantine period. It was reoccupied after a temporal gap of almost 1000 years.

The people who worked on the slopes of Jabal aş-Şuffāḥa were perhaps descendants of the Edomites and Nabataeans of the region. The pottery of the latest village still preserves first century AD traditions of the Nabataean culture. The contrast between the pottery and the modest architecture of the inhabitants is reminiscent of Petra, where people lived in simple houses but indulged in seemingly luxurious pottery. There is no doubt, people living (and making a living) on Jabal as-Suffāha in the Nabataean to Byzantine periods were agriculturists and according to their terrace-farming methods pastoralists only in second place. The large pens protected the livestock from predators and may have enclosed gardens. Not much can be said about the social status of the people who lived here. In an agricultural system of collective terracing it seems unlikely that small families tilled their own ground. They were probably in bondage to rich owners who resided either in a villa rustica on the mountain or more luxuriously at Petra or elsewhere.

The Late Islamic Phase

The Late Islamic phase (12th - 16th centuries AD) is in the Jabal as-Suffāha region represented by the villages of Kutle IA,B and Kutle E. Additionally, there was an overall reuse (but less reoccupation) of the region, the latter proven by Late Islamic pottery finds without, though, a single geometrically painted Mamluk sherd. Kutle I AB, preliminarily datable by surface pottery only, is roughly comparable to several strongholds or enclaves or defensible villages in the Greater Petra area, for example Anajil, ar-Ruwayshid (medieval at-Tayyiba), Seyl Batha, an-Naqqa II and the Wādī al-Mudhlim site at Petra, all of them are being prepared by M. Lindner for publication in the near future. Reuse was also observed

atop Jabal al-Qṣeir, where the defensibility of an Iron II mountain stronghold was exploited in Late Islamic times (Lindner *et al.* 1996) and on Jabal al-Khubtha were lately an Iron II occupation was discovered (Lindner *et al.* 1997).

We do not know exactly how long the Late Islamic reuse of Jabal aṣ-Ṣuffāḥa lasted, but the impression prevails (supported by the lack of geometrically painted Mamluk pottery) that settled habitation petered out long before the Ottoman conquest, and that nomadic bedouins took over to this day. In October 1995 and 1997 one or two al-'Amārīn families with a lot of goats and a few camels were encountered on Jabal aṣ-Ṣuffāḥa.

The Settling Fluctuation on Jabal aș-Șuffāḥa

The fluctuation of settling activities on Jabal aṣ-Ṣuffāḥa cannot be overlooked. Settlement and resettlement prove that by agriculture and husbandry the mountainside was habitable. There were, of course, raids, despoiling of natural resources (firewood!) and natural catastrophies like droughts, epidemics and locusts. Of one catastrophy there is definite proof, that is earthquakes. Less visible but as undeniable are political changes and subsequent lack of contacts to markets and urban centres.

Acknowledgements

The authors are greatly indebted to the Director-General, Dr Ghazi Bisheh of the Department of Antiquities of Jordan for permitting and, through the local representatives Mr Suleiman Farajat and Mr Hani

Fallahat, supporting the surveys of Jabal as-Suffāḥa. Thanks are due to J.P. Zeitler for helping to analyze the ceramics, to Ingrid Künne who combined botanical studies with archaeological exploration and to Elisabeth Schreyer who beside the surveys was responsible for such different tasks as organization, catering and camping. Our friend Dakhilallah Qublan of Petra was mentor and guide at the same time. Without his assistance, most discoveries would not have been made. The authors are also thankful for the friendly help of the local al-'Amarin families who proved themselves as loyal and reliable, quite contrary to Musil who labelled (or libelled?) them as "berüchtigte Räuber" ninety years ago (1908: 59).

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^{11.} M.Lindner "The Settling Fluctuation on Jabal as-Suffāḥa" Paper submitted to the 7th Conference

on the History and Archaeology of Jordan at Copenhagen, June 1998.

Bibliography

Lindner, M.

1986a Archäologische Erkundungen in der Petra-Region 1982-1984. Pp. 87 - 188 in M. Lindner. (ed.), *Petra-Neue Ausgrabungen und Entdeckungen*. München.

1986b Petra - Neue Ausgrabungen und Entdeckungen. München.

Lindner, M. and Knauf, E. A.

Between the Plateau and the Rocks. Edomite Economic and Social Structure. Pp. 261-264 in SHAJ V Amman: Department of Antiquities.

Lindner, M., Knauf, E.A., Zeitler, J.P. and Hübl, H.

Jabal al-Qseir: A Fortified Iron II (Edomite) Mountain Stronghold in Southern Jordan, its Pottery and its Historical Context. *ADAJ* 40: 137-166.

An Iron Age (Edomite) Occupation of Jabal al-Khubtha (Petra) and Other Discoveries on the "Mountain of Treachery and Deceit" *ADAJ* 41:177-188.

Musil, A.

1908 Arabia Petraea III. Ethnologischer Reisebericht. Wien.