

# JABAL AL-QŞEIR: A FORTIFIED IRON II (EDOMITE) MOUNTAIN STRONGHOLD IN SOUTHERN JORDAN, ITS POTTERY AND ITS HISTORICAL CONTEXT

by

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## Introduction

In recent years, several Iron II (Edomite) sites have been discovered and described, among them Ba'ja III (Lindner and Farajat 1987) and Umm al-'Ala (as-Sadah) (Lindner *et al.* 1990) by teams of the Naturhistorische Gesellschaft Nürnberg (NHG). The discovery of more Edomite sites in southern Jordan was anticipated. Actually, during another archaeological expedition in October 1992, the team of NHG was able to reach and to explore another Iron II site, previously unknown to the archaeological community, on the Edomite plateau south of Petra, and, like Ba'ja III and Umm al-'Ala, a mountain stronghold. Whereas the new site was visited twice by only two members of NHG and a local guide in 1992, it was surveyed by a team of five in October 1993. The rather complicated project was performed by land-rover, donkey and on foot with Sa'idiyīn bedouins acting as loyal helpers for the five days' expedition.

## Location and Access (Figs.1 and 2)

The new site, called Jabal al-Qşeir, is located at c. 1140 m asl (Map of Jordan 1:50 000 35° 26' 33" East, 30° 14' 23" North) c. 2.5 km WWS of aţ-Ṭayyiba and 2 km SSW of Sayl Bathah, the latter being a valley which took its name from Wādī Bathah traversing it (Glueck 1934/35:80; Lindner in preparation). Jabal al Qşeir is a mass of domeshaped hill tops or "cupolas" in grey Ordovician sandstone towering upon a red-brown Cambrian sandstone foundation (Fig.3:1, 2)). It can easily be seen, but not discerned as a stronghold, from the new road north and south of aţ-Ṭayyiba, running along the encircling lime-

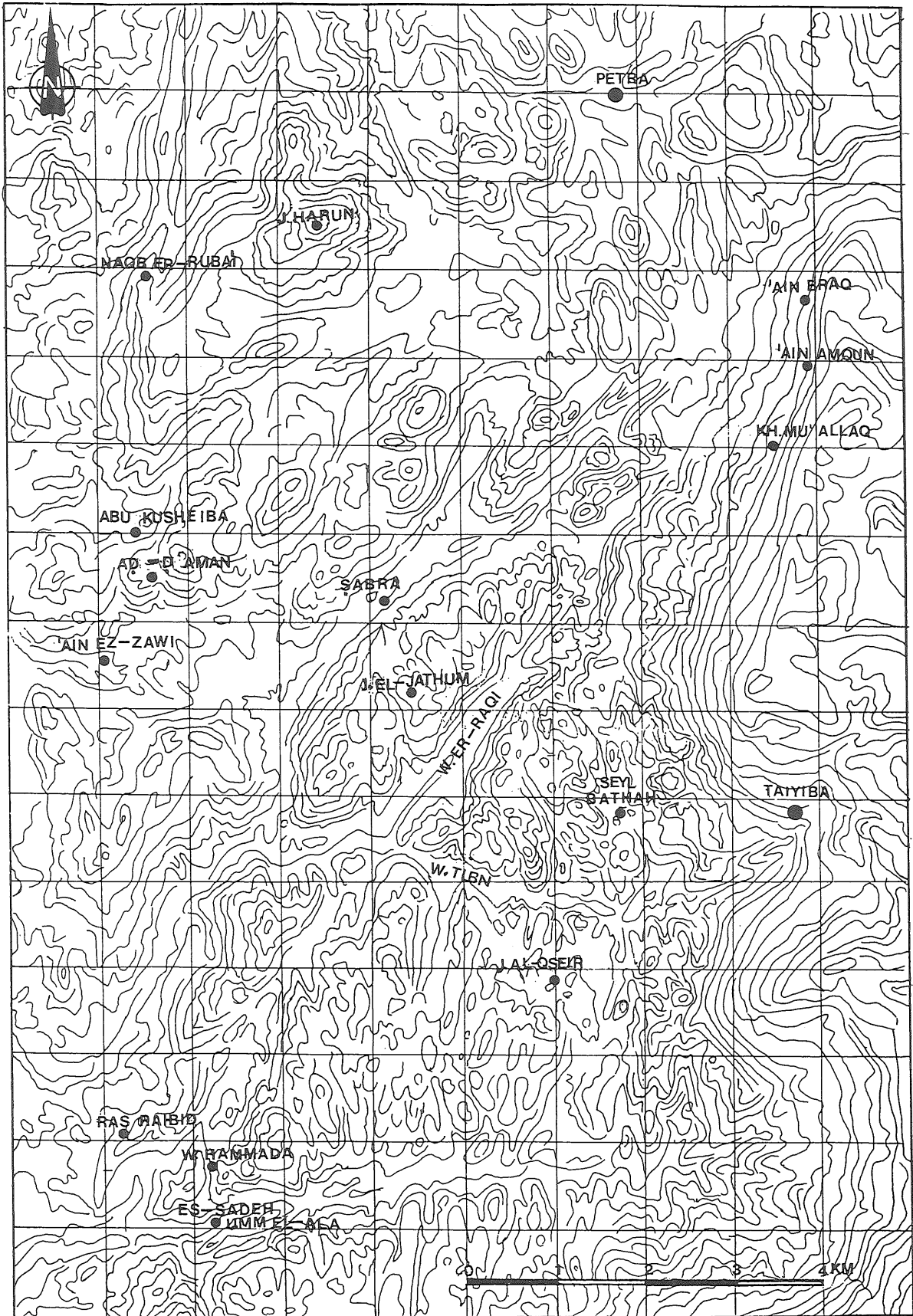
stone massif of Jabal ash-Sharā. Jabal al-Qşeir had to be reached from Sayl Bathah. Following a goat track, a limestone slope was used the first time in 1992. In 1993, a zig-zag path with apparently ancient substructures, better to be seen from its end in the wadi, allowed donkeys to transport the luggage but not the surveyors down to Wādī Tibn. From the deep, gravel-filled gorge with steep slopes, stout walls are to be observed at the Cretaceous scree further east above the northern bank. They do not seem to belong to another built pathway but to ancient agricultural activities. At the southern bank of Wādī Tibn, a circular foundation, probably of a kiln (4 m in diameter), was noted.

From the wadi bed upward, there is no easy path to follow, in fact none at all. Deep clefts in the Cambrian sandstone, where the donkeys failed in 1993, and a boulder-strewn slope have to be managed before one enters the foothills and then the white "cupolas" of upper Jabal al-Qşeir.

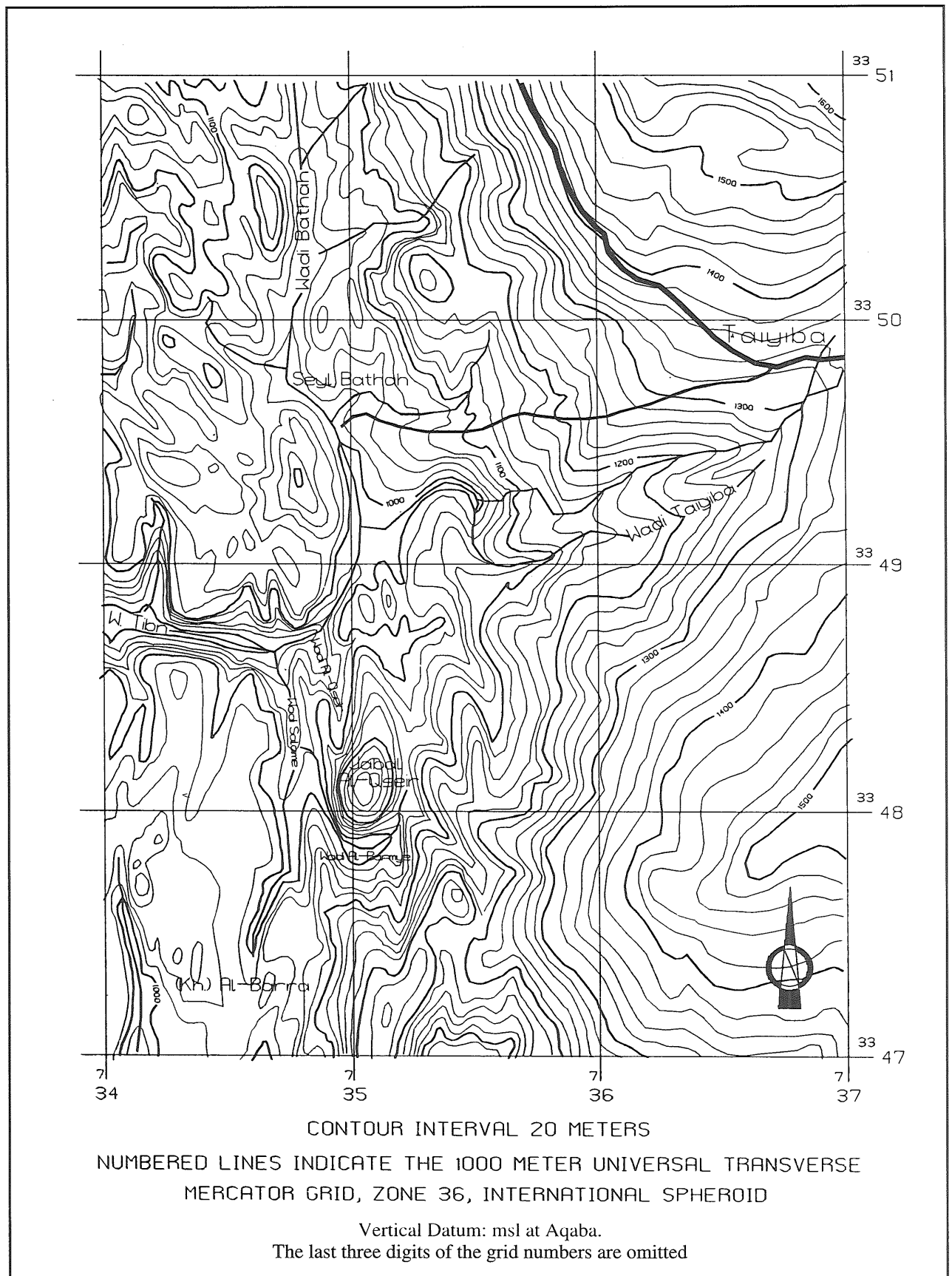
## Description of the Jabal al-Qşeir Site

### *Entrance and Walls*

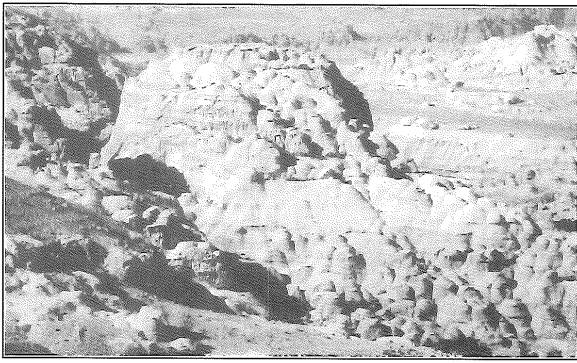
Climbing over weathered slopes of increasing steepness, a narrow rock defile with juniper trees, a gate of sorts (recognised by rock cuttings) is entered. The front of a "cupola" to the left is fortified with a masonry wall. To the right, impressive remnants of a long wall across a gentler slope section mark a gap in the natural defence and therefore a place of a possible attack (Fig. 4). The walls, built of non-descript brownish ashlar of different sizes, were originally higher than the scant 1 m of today. The front courses of larger and more regular stones were laid on ar-



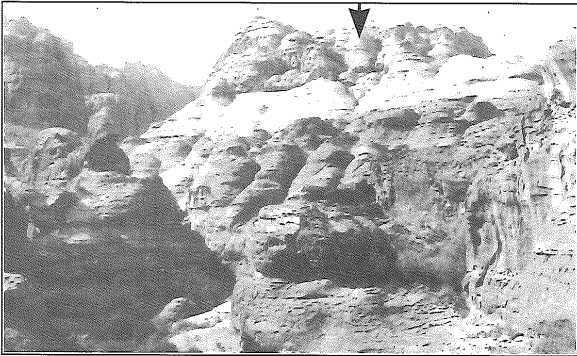
1. Sketch map of the region west of the ash-Sharā escarpment.



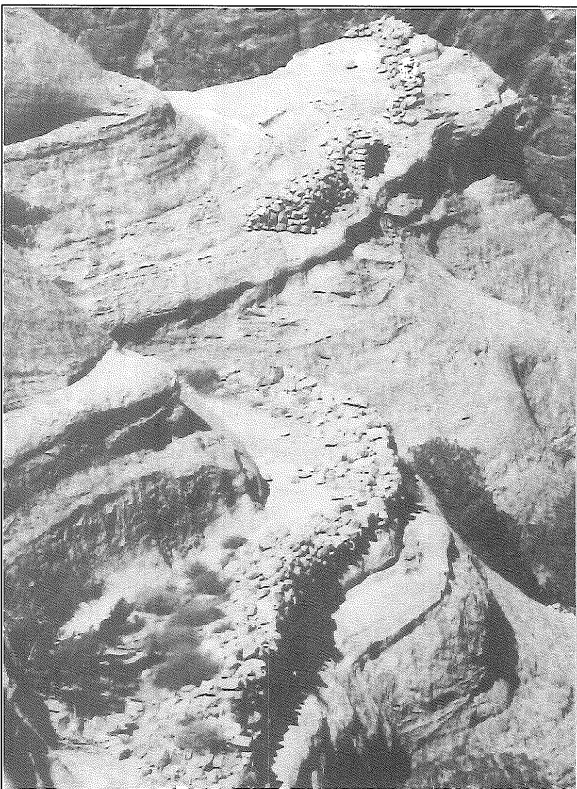
2. Map with the location of Jabal al-Qseir and its surroundings (H. Hübl).



3:1. Jabal al-Qseir jutting out of a mass of more sandstone hillocks.



3:2. Seen from Wādi Tibn, Jabal al-Qseir towers upon a foundation of red-brown Cambrian sandstone. The walls are marked by an arrow.



4. Line of defence walls above the entrance gorge of Jabal al-Qseir. Note the empty ledges between the preserved wall sections.

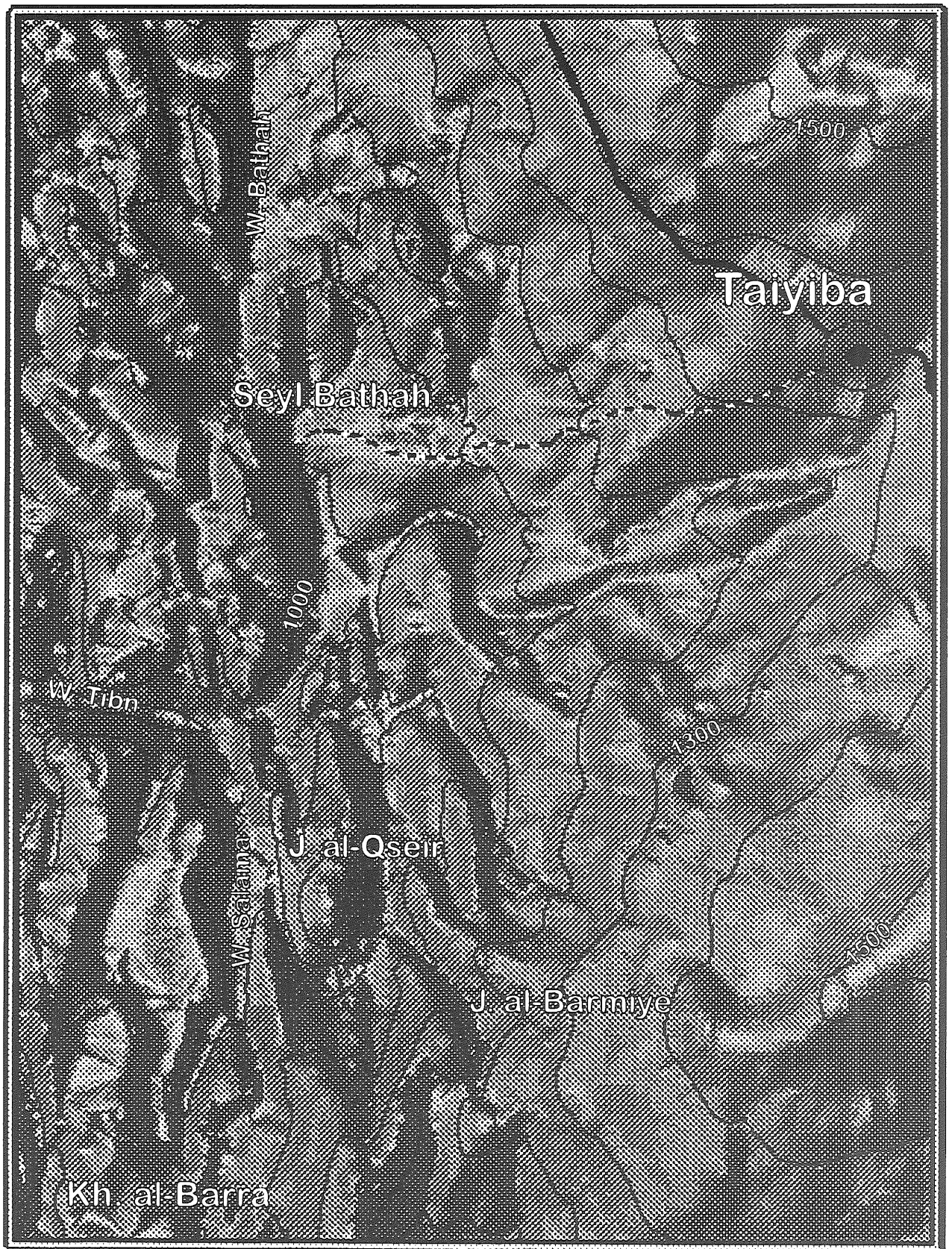
tificial ledges the space behind was filled with smaller ones. Where the wall towers above the “gate”, a small section fell down from the ledge, visible at this spot with the tumbled stones still lying below it. Further on, two more wall sections are missing, but remnants, abutments and empty ledges, show that there was once a continuous wall, bridging gullies and gorges and running all around the gentler slope. Anchored at a square abutment the wall also crossed the “gate” area, possibly with a regular door or gate, and a rock shelter above it (Fig. 5).

#### A Second Access to the Site (Fig. 6)

After the survey of 1993 it was possible to expand the scope of inquiry and to leave Jabal al-Qseir massif by another route which has to be regarded as a second point of entry or exit. A trail, running around Jabal al-Qseir to its southern flank, follows a wadi, called al-Barmiye after Jabal al-Barmiye towering above it. Terraces and barrages of large blocks controlling winter flash floods cannot be attributed to bedouin populations of modern periods. There are no defence works. The rock wall of Jabal al-Qseir is inaccessible from the wadi. An aggressor from this side had to cross the upper defence line and the “gate” area, and that entrance was most carefully guarded. Further upward, along first the southern, then the western cliffs of Jabal al-Qseir, remnants of an ancient road lead to a plateau with traces of multi-phase occupation. The place, unre-



5. The walls of Jabal al-Qseir.

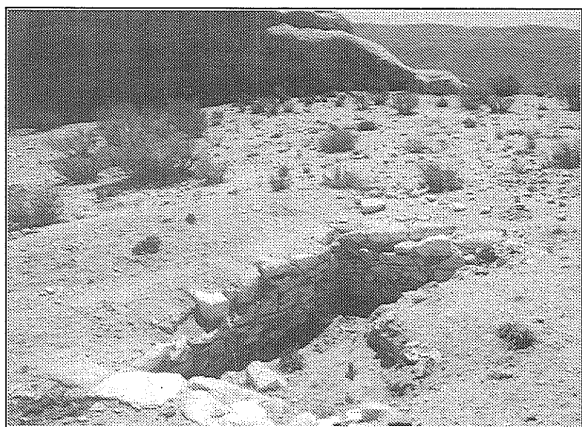


6. Computerized location of Jabal al-Qseir with Sayl Batha, Wadi Tibn, Jabal al-Barmiya and Khirbat al-Barra (H.Hübl).

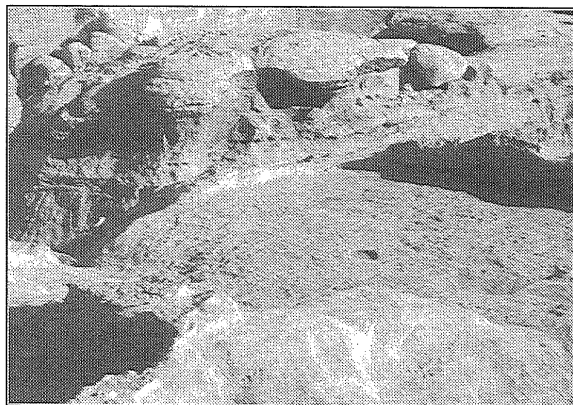
corded so far, is called (Khirbat) al-Barra. The chronology of two houses is uncertain, the surface finds include Epipalaeolithic stone implements (for the diagnosis H.G. Gebel has to be thanked), Nabataean and medieval pottery sherds (Fig. 7).

### Rock-Cut House Foundations

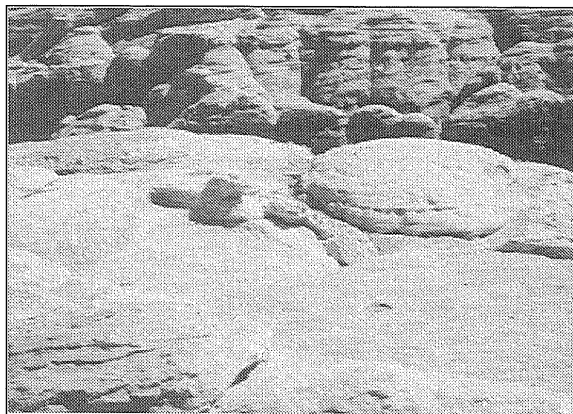
Distributed over the space behind the walls and above the unwallled steep sites, rectangular rock-cut foundations on different levels or “storeys” are typical for the site. Only in a few places, dry-stone masonry fragments still cling to their original foundations, which are mostly swept clean by rain and wind. The authors regard them as house or tent (hut) foundations. Level places were hard to find on the mountain. Therefore, foundations had to be cut into or out of the extant dome-shaped hillocks. Some are cut to find a level place, others are modelled with upright sides, an entrance and steps leading to it. A round hole in the centre of one of them suggests a pole for supporting a roof or a propped-up tent-like covering (Fig. 8:1,2). One foundation indicates three rooms, one bigger and two smaller ones (Fig. 9:1). The other foundations show only one room each. The inner space of one of the ‘rooms’ on the summit area measures 4.30 x 3.00 m, the rock-cut walls are c. 0.50 m wide, the diameter of the central pole-hole is 0.15m. There are two steps leading to an en-



7. Undated house ruins at al-Barra, a possible access point to Jabal al-Qseir.



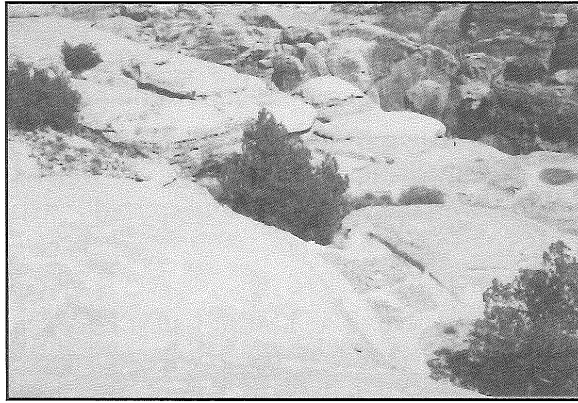
8:1. Tent or hut foundation with a hole for an erector pole on upper al-Qseir.



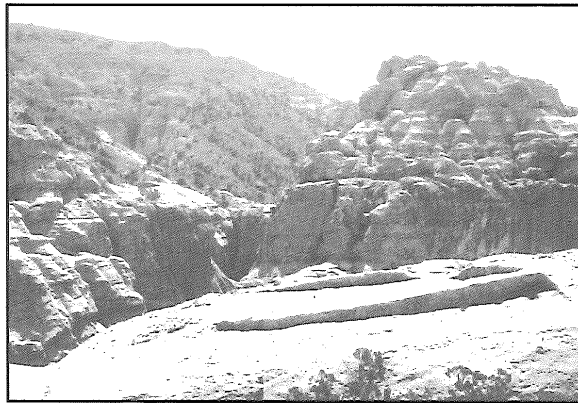
8:2. Hut or tent foundation. At-Tayiba in left upper corner.

trance at the northern side. The house or tent was located at a lofty place above one of the deep basins (see below) with rainwater being diverted around the foundation (Fig. 9: 2).

Nearby but not directly at some house foundations, potholes of 0.30 to 0.50 m in diameter and with a depth of c. 0.20 to 0.30 m were noted. A natural origin as well as the use as a waterhole cannot be considered. In one case a cistern, now with a carob tree growing in it, is only a few metres away. Strange as it may sound, the potholes might have been used for making wine. “Cup-holes” contrary to “cup-marks” were perhaps mortar presses for a small quantity of grape juice (Duncan 1931: 40). “The must created by the static weight of the grapes collected within the cupholes was deemed a valuable commodity during ancient times” (Forbes 1956: 132). However, the potholes might have served only to set up a large jar.



9:1. Rock-cut house foundation with three partitions.

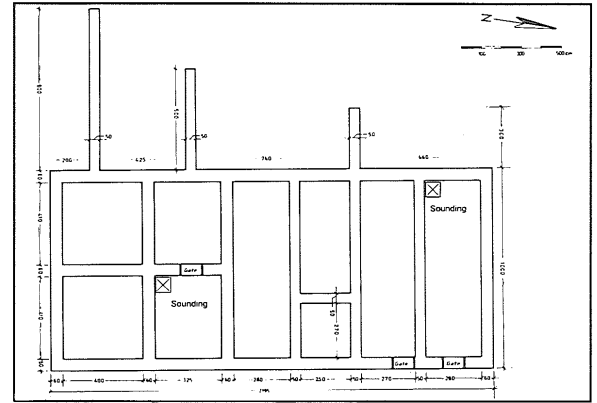


9:2. Rock-cut foundation with Jabal Barmiya and Jabal ash-Sharā in background.

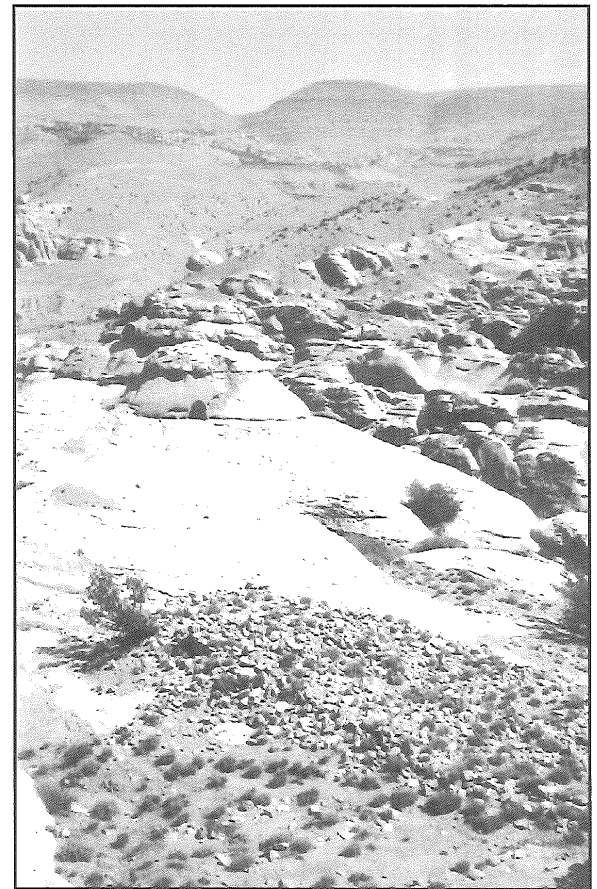
### Preserved House Ruins

In only one area of the whole site was it possible to build a larger structure. It is a compartmentalized longhouse of 22 x 10 m with walls above ground up to 0.50 m and reaching into the ground for another 0.75 m (Fig. 10). The building stones seem to be tumbled, but most of them appear to be *in situ*. The upper courses of the wall might have been rearranged later on (Figs. 11, 12: 1). The longhouse style is reminiscent of the longhouses on top of the Umm al-'Ala plateau (Lindner *et al.* 1988: 73-83). On Jabal al-Qseir, the longhouse together with a few more individual houses built on a rock-cut level at the sloping terrain toward east (Fig. 12: 2) constitutes a small dwelling cluster with a piriform cistern, a presumed resting place (used as the team's campsite in 1993) and a possible lookout north of it.

Where, on the west rim of Jabal al-Qseir, the mountainside drops nearly perpen-

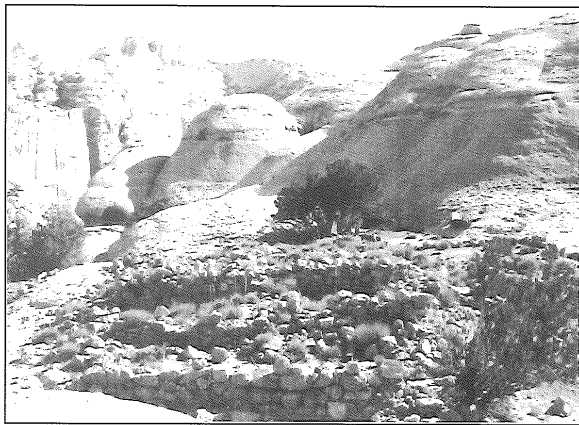


10. Groundplan of the long-house on Jabal al-Qseir with the location of two soundings.

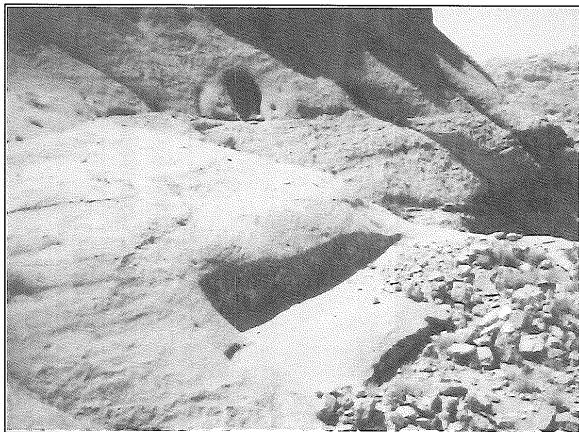


11. The long-house of Jabal al-Qseir with a few more house ruins. At-Ṭayiba and at-Ṭayiba-Batha road in upper left.

ularly toward West Salame and the plateau of al-Barra, three houses were built upon rock-cut levels. A *Ceratonia siliqua* grows in a cistern nearby; another cistern 10m further down was filled with water and covered with branches in 1992 and 1993. Right in front of the house ruin closest to the brink of



12:1. Long-house of Jabal al-Qseir with the "high place" in right upper corner.



12:2. Levelled ground for a house with building stones still about. Cistern at back of it.

the abyss, fragments of large storage jars, half covered with tumbled building stones were observed on the surface. The roots of a juniper tree (and its predecessors) had grown through the ceramic material, altering thereby the fabric of the ware considerably.

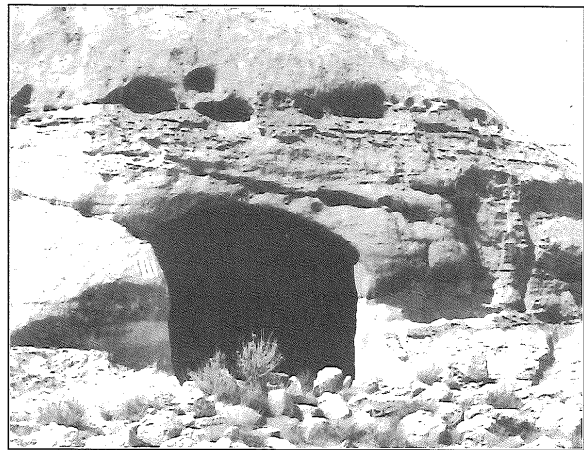
### Rock Chambers and Rock Shelters

The several man-made rock chambers and shelters do not exhibit a straight horizontal lintel. The entrance to one cave is slightly rounded. Building stones at its front are the remnants of a house with the cave used as a backroom. The entrance is marked with three bold chisel strokes (Fig. 13: 1). A rubbing stone and a quern of 25 x 25 cm were noted in front of another cave chamber with a rounded entrance. Rock shelters

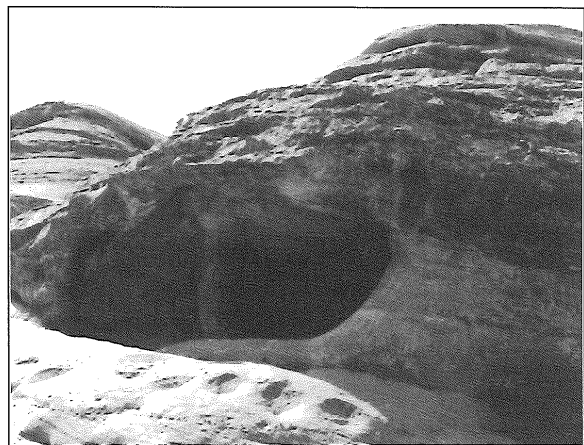
above the walls were perhaps part of the defence system. Another shelter looking northward reveals a man-made partition and cuts for an attached front building (Fig. 13: 2). In all cases, the tooling of the rock walls is coarse with the strokes widely spaced.

### A Cave Tomb ?

A cave of c. 2 x 2.50 m and a height of 1.30 m is protected by an upright three-cornered stone and by a short double wall. With its blackened ceiling, it was obviously used as a dwelling over centuries. A few bones were the remnants of meals. The location at a distance from the houses suggests an initial function as a tomb; at other times it may have been a lookout for a guard (Fig. 14).

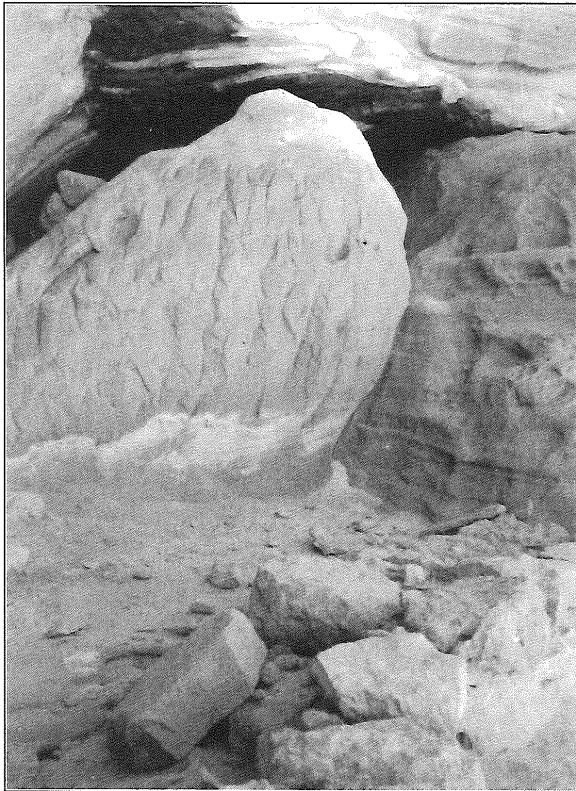


13:1. Cave chamber with rounded lintel, chisel strokes and ashlars of a front building.



13:2. Cave chamber with partition and remnants of a front building.



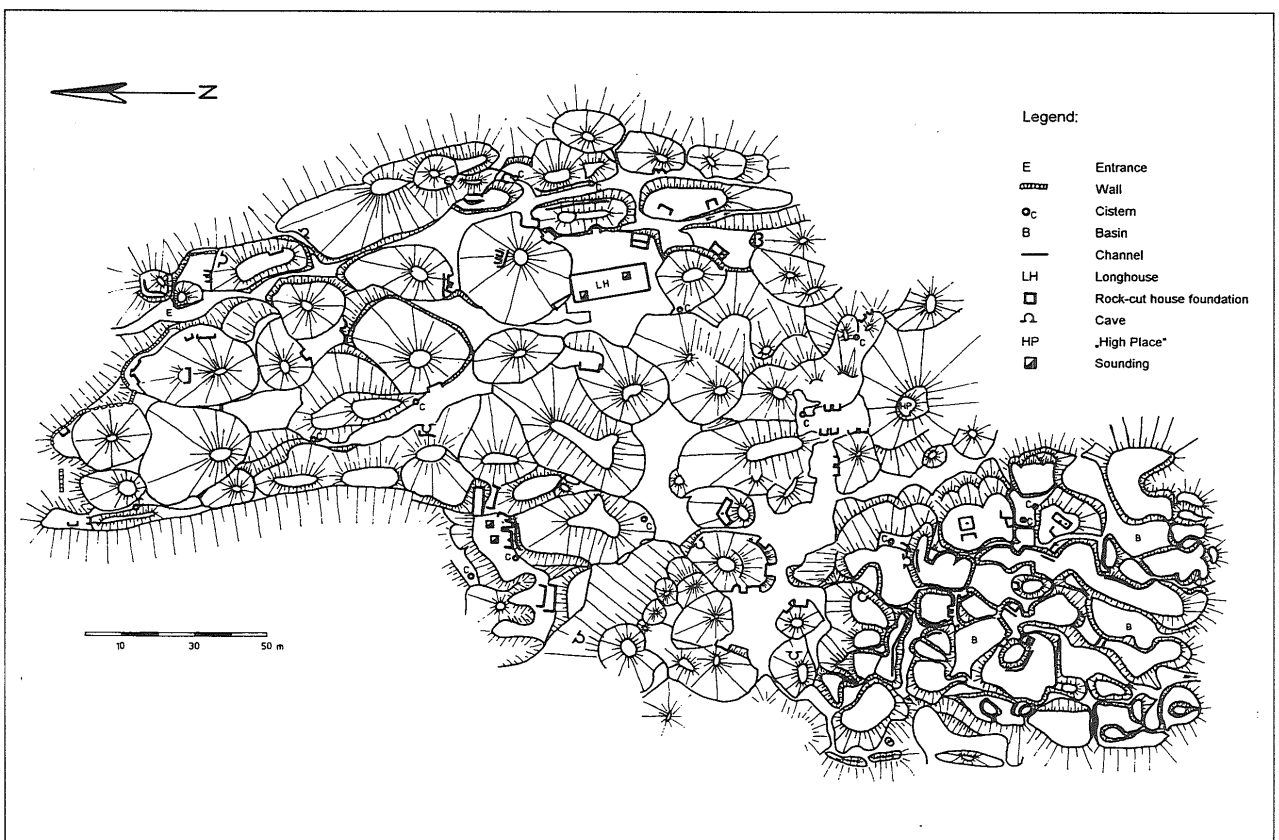


14. Three-cornered rock-slab protecting a small cave with a damaged double wall in front.

### Cisterns - the Water Supply of Jabal al-Qseir (Fig. 15)

About 20 piriform cisterns with circular openings, originally plastered interiors and eroded channels leading to them, were placed where rainwater flowed naturally between the "cupolas". One was noted near the longhouse, two of them below the "high place" (see below), others near other house ruins. Some other cisterns may be filled with sand and debris and are therefore not visible. Only one piriform cistern at the western flank of the mountain contained water. The precious reservoir is used by goat-herding pastoralists who laid branches across the opening and a rope with a tin container next to it (Fig. 16: 1).

With most of the channels and grooves originally conducting water to the cisterns eroded and most of the waterproof plaster gone, the reservoirs are empty today. However, trees (*Ficus spec.*, *Ceratonia siliqua*, *Pistacia cf. khinjuk*, carob) growing in sev-

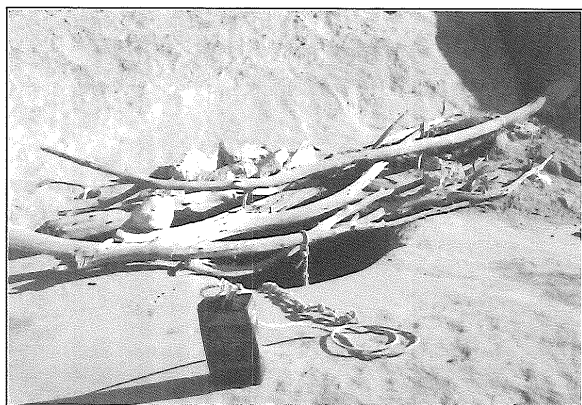


15. Bird's-eye view of the summit area of Jabal al-Qseir (H.Hübl).

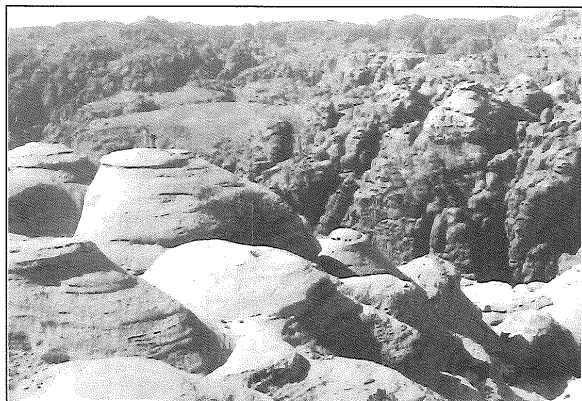
eral of them demonstrate that water still flows into them when it rains. Contrary to the long aqueducts of the Nabataeans, only short channels are to be seen, and no channel with a rectangular cross-section or a covering. Significantly, almost every hillock is equipped with at least one channel, in several cases even with two of them, conducting rainwater into different directions. Number, size and form of the cisterns indicate an excellent water-supply. A surplus of rain in one year supplied water even in dryer years, commented H. Hübl while accessing the groundplan of the stronghold (Fig. 16: 2).

### Steps, Footholds and Pathways

Worn footholes and single steps in the rocky surface facilitate walking in the stronghold. What might have been used as communication or as defensive pathways between the hillocks and the different levels



16:1. The only piriform cistern of Jabal al-Qseir containing water in October 1992 and 1993.

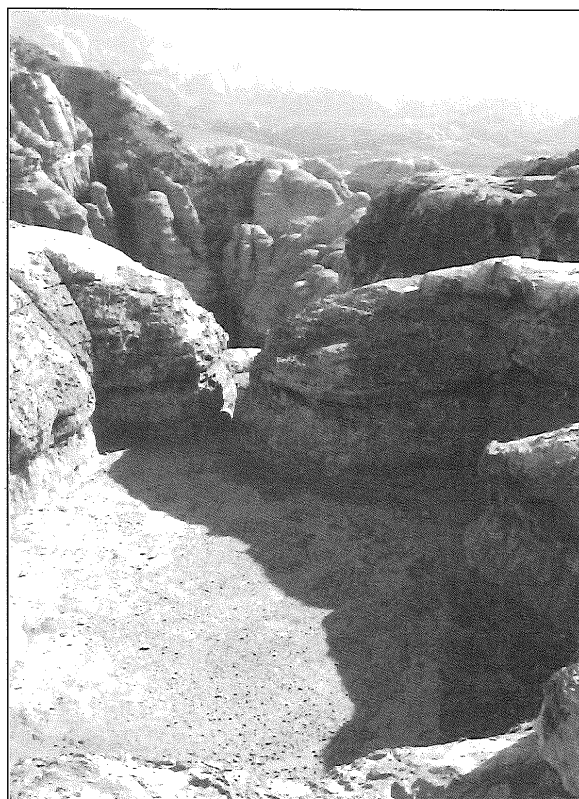


16:2. Surveying Jabal al-Qseir: H. Hübl and Dakhilallah on top of one of the hillocks.

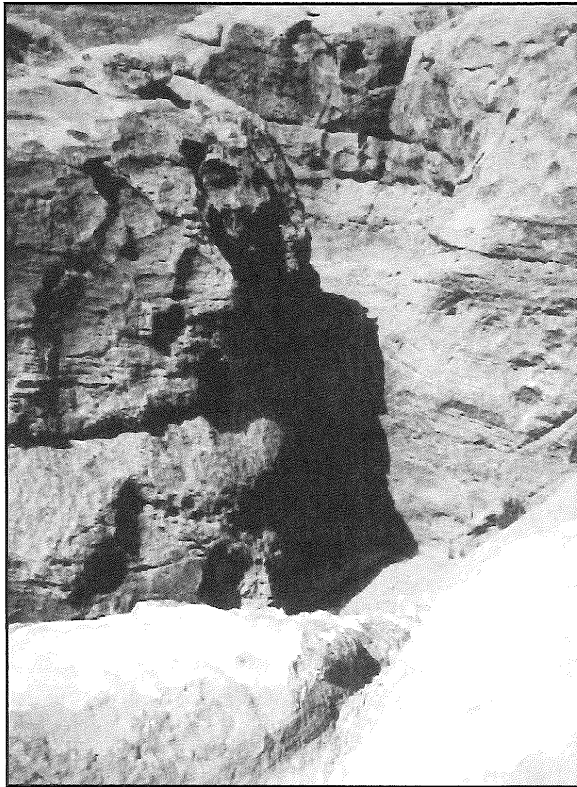
of the settlement, are mostly narrow gullies, water channels or short flights of steps which also conduct water. One gully is furnished with footholds on either side where stepping stones might have been inserted.

### Deep Basins in the Summit Region of Jabal al-Qseir

Large basins, some 6 m deep with almost perpendicular sloping walls, are notable at the uppermost part of Jabal al-Qseir (Fig. 17). They filled easily with water when it rained. In one case a channel conducted water into a basin (Fig.18: 1). Remnants of closing walls were noted at some outlets. If used as reservoirs, the evaporation grade must have been high. Therefore other purposes might be imagined, even gardening where now only ratam bushes thrive. The authors are convinced that the basins, an originally natural phenomenon, were artificially enlarged. Similar basins were noted at Adnub north of Petra, hitherto unrecorded.



17. One of the deep basins on top of Jabal al-Qseir. The outlet in the back could be closed.



18:1. Wide channel conducting water into one of the basins.

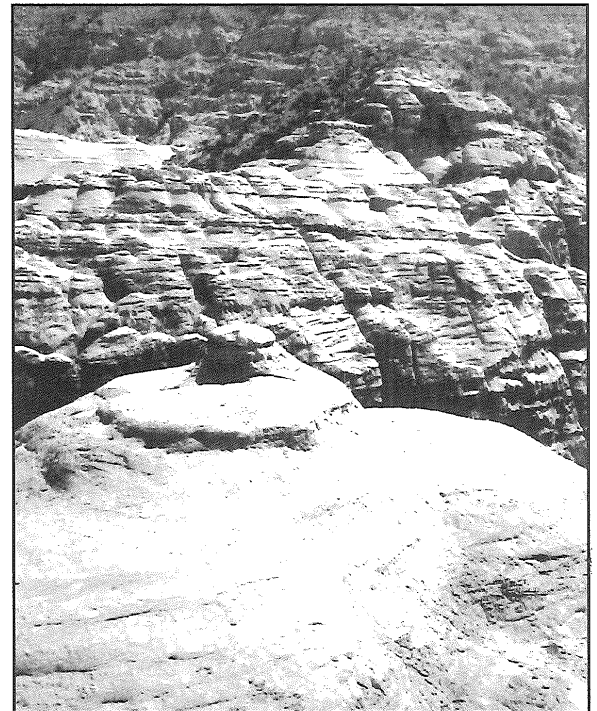
**An Edomite High Place ? (Figs. 18: 2; 19)**

Halfway up toward the east of the site, there is a small open area with the foundations of a few houses. Worn steps are leading up to an isolated, particularly shaped “cupola” of 1.50 m height. Two wings protruding from its foot toward north where also the steps go up, protect a small upright hole in the right corner with a semi-circular groove in front of it (Fig. 20: 1), apparently an offering place. The “cupola” stands out from the area and is visible from far away. It is reminiscent of another prominent rock between Siq Umm al-Hiran and Ba’ja I (Lindner 1986: 112-115). In both cases, despite the fact that nothing tangible about Edomite “high places” is known, the idea of a natural shrine, modified or not modified by human hands, cannot easily be dismissed.

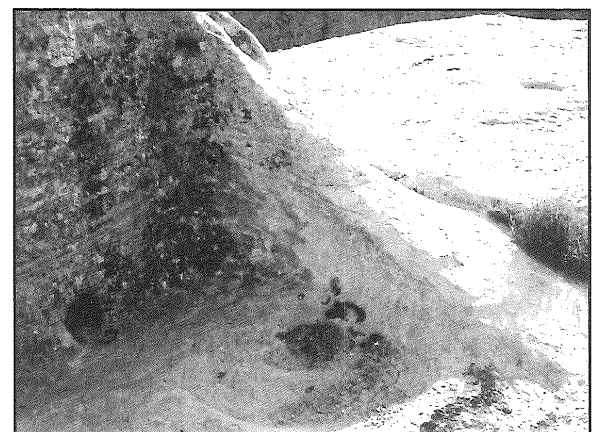
The same may be said about a carefully carved but undecorated stone protruding from a rock-cut place with a strange couple of holes at the top (Fig. 20: 2).



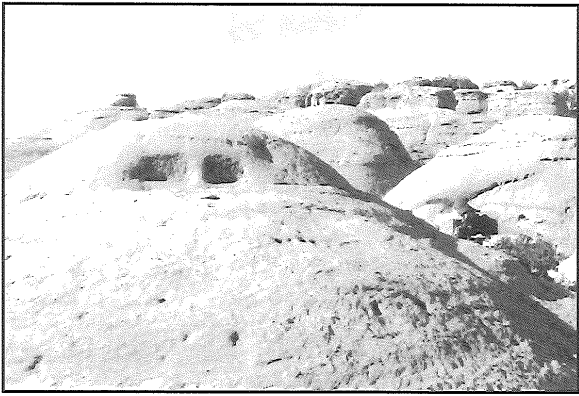
18:2. “High place” of Jabal al-Qseir with eroded steps leading up to the offertory hole.



19. “High place” of Jabal al-Qseir with Jabal al-Barmiya and Jabal ash-Sharā in background.



20:1. Offertory hole with semi - circular hole at the “high place”.



20:2. Rock-cutting of unknown significance with "high place" in background.

### The Stronghold of Jabal al-Qṣeir in Antiquity

The notable number of juniper trees and the thriving of a carob tree, with eatable pods, even now indicate quite a different state of the mountain when people lived there. More trees and shrubs would have grown around dwellings and given shade for the inhabitants. In spite of an average rainfall of not more than 50 - 100 mm, with not a single drop of water wasted but conducted towards cisterns and basins, even gullies and small gorges would not have been entirely barren. Regular "gardens" in the basins of upper Jabal al-Qṣeir are conceivable. There is one gully on the mountain where the density of ratam bushes even today makes it impossible to walk through. When it rained, running water could be diverted to small patches of sown ground with any outlets closed or with a small wall fencing it in as long as necessary. With goats and sheep kept out of the stronghold, living on the mountain might not have been so difficult as it seems to the visitor of today.

### The Finds

#### Surface Finds

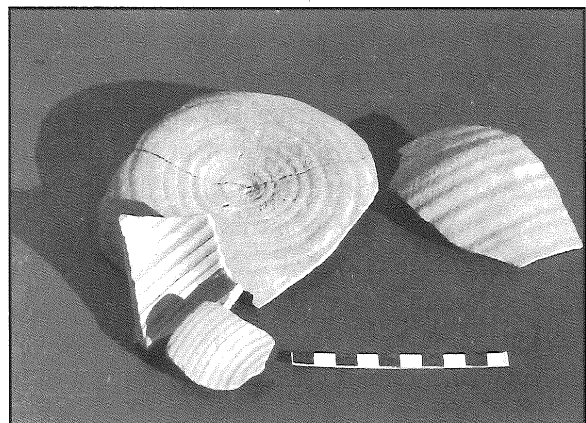
Some pottery finds came from house ruins, but due to the limited number of areas to be excavated, mostly dispersed surface pottery was collected. Among the numerous fragments, Iron II pottery of the type found at other mountain strongholds like Umm al-

Biyāra, Umm al-‘Ala and Ba‘ja III was predominant.

A few very finely ribbed sherds of water jugs (Fig. 21: 1) and a few sherds of cooking pots are probably of Nabataean or Byzantine ware. Generally, very little ceramics from the Nabataean to the Byzantine periods, and no diagonal tooling of ashlar were noted. One lamp fragment is Late Roman or Byzantine. The only ancient inscription on the site is a Nabataean "salam" pecked into a rock-shelter at the foot of the mountain.

It was a surprise when, in addition to two fragments excavated in the upper stratum of Area 1 at the longhouse (see below), a remarkable scatter of a later Arab ware, mostly fragments of cooking pots, was discovered in 1993. The coarse handmade pottery had been found in abundance before by one of the authors (Lindner *et al. infra*), at the site of Khirbat al-Mu‘allaq.

Interestingly, a fragment of a lid, with radiating lines of punctured holes, from the surface of Jabal al-Qṣeir, is a duplicate of a complete lid, excavated together with the pot belonging to it, at Khirbat al-Mu‘allaq (cf. Lindner *et al. infra*). The chronology of the "al-Mu‘allaq ware" is not absolutely certain yet. However, a C-14 test of charcoal, excavated at Khirbat al-Mu‘allaq together with a *tābūn* and the afore-mentioned vessel and lid gives a calibrated date of AD 785-1015. If old wood was used indeed to fire the *tābūn*, the "al-Mu‘allaq ware" might well be



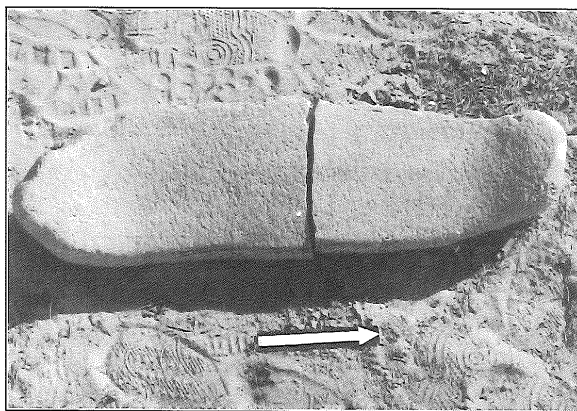
21:1. Ribbed ware from Jabal al-Qṣeir.

dated to the period of the Crusaders in the region. That date is likely to be the same as of an apparently similar or related pottery found at al-Wu‘ayra (Petra) by Brown (1987: 284; 1989: 629) and Vanini and Desideri (1995).

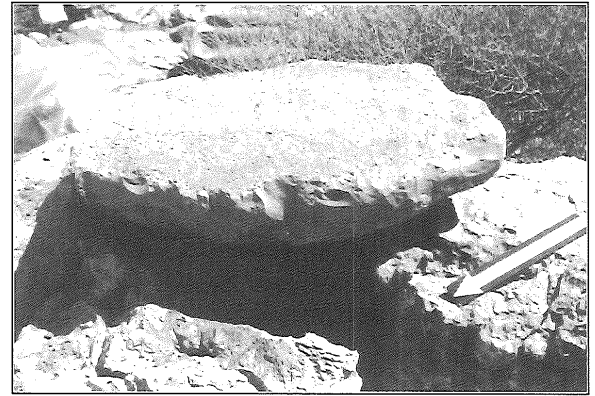
Beside a quern unearthed in Area 1 (D) (see below), and another in front of a cave, only two stone mills of 30 and 50 cm lengths made of a finely grained quartzite, were found by the longhouse (Fig. 21: 2). The disparity between the amount of surface pottery and querns is surprising and not easy to explain.

### Soundings

With the exception of two “al-Mu‘allaq ware” sherds (fragments of the bottom part of a cooking pot are exactly like those found at Khirbat al-Mu‘allaq) the results of soundings in four areas of the site corroborated what the surface had already indicated, that is the Iron II date of the stronghold. Area 1 (D) at the southern compartment of the longhouse revealed Iron II sherds of household and storage vessels and a carefully worked oval quern of 30 cm length (Fig. 22: 1). After 0.85 m from the top of the extant wall, bedrock was reached. No different strata could be observed. Area 2 (E) at the northern wall of the longhouse, beside the two “al-Mu‘allaq ware” sherds, had Iron II sherds of household and storage vessels which were heaped upon each other without



21:2. Quern of fine red quartzite (arrow 10 cm).



22:1. Quern from a sounding in the long-house.

indication of any stratigraphy. A fireplace in its upper part attested to the reuse of the area by herders/squatters. Because Iron II sherds were noted between the upper layers of the wall of Area 2 (E) and because the stone material and building method of the following layers were of a better quality, at any rate, the northern part of the longhouse was presumably later (repaired or rebuilt), coinciding with the presence of the users of the “al-Mu‘allaq ware”.

Two soundings of 0.30 m down to bedrock were made at the block of buildings (with cisterns and storage jar fragments at the western rim of Jabal al-Qṣeir), where the sherds had been observed. Apparently, the vessels together with the house walls were moved toward the edge of Jabal al-Qṣeir when an earthquake destroyed all installations of the stronghold. In Area 4 (D) was a fragmented storage jar of c. 0.80 m in diameter with a threefold everted rim. In Area 3 (E) a similar jar together with smaller ones was unearthed. Under the sherds, the rock wall was levelled and furnished with a rock-cut frame. In its exact centre, there was an almost circular 5 cm deep depression of 0.50 m in diameter surrounded with a bulge or lip. The roughly rectangular frame of the installation measures 1.10 x 2.10 m and is c. 0.25 m deep. From the depression a “cake” of humus was dislodged. Eight cowrie shells of different sizes were found among the sherds. The authors are not certain about the purpose of the rock-cut installation, because

no direct parallel is known to them, but the resemblance to Palestinian presses should be mentioned. A press with “a circular hole surrounded by a ‘lip’, also used for olives” was interpreted as a wine press by Ahlström (1978:54, Fig. 24) during his Jenin-Megiddo survey. On the other hand, the rock work might have been nothing but the standing place for a particular jar with a rounded bottom (Fig. 22: 2).

**The Food Supply of Jabal al-Qṣeir in the Iron II Period**

The grain ground with the querns of Jabal al-Qṣeir had to be brought to the mountain. Strongholds cannot live without being provisioned from outside. Ancient terraces show that grain was grown in many fields around the mountain, some of them being cultivated again today.

Seasonal agriculture as well as ambulatory pastoralism might have been practised by people actually living constantly on the mountain (cf. Knauf 1988: 64). The inhabitants of undefended villages or non-settled people (see Bienkowski 1992:3) may be imagined to have sought refuge in the stronghold only when necessary. In that case, a small number of caretakers would hold the fort most of the time.

A similar scenario may be proposed for Khirbat as-Sela‘ with a rich spring on the opposite range at the present-day village of as-



22:2. Rockwork with a frame and a flat circular centre under broken storage jars.

Sela‘ (Lindner 1973, 1986, 1992); for Umm al-Biyāra (Petra) with a spring in Wādī aṣ-Ṣiyagh at the foot of the mountain and the open village of Ṭawilān a couple of hours away; for Ba‘ja III, where the fields and hypothetical farmsteads/hamlets (Ba‘ja I and perhaps Ba‘ja IV) were down in the fertile plains (Lindner and Farajat 1987); and finally for Umm al-‘Ala separated from the spring in the upper Wādī as-Sadah and with fields at the foot of the mountain (Lindner *et al.* 1988, 1990).

**Comparison with other Iron II Mountain Strongholds**

In order to define the position of Jabal al-Qṣeir in comparison with four other indisputable Edomite sites, all of them explored by or (in the case of Umm al-Biyāra) well-known to the authors, five typical aspects shall be listed.

**Table 1.** Archaeological characteristics of Iron II (Edomite) mountain strongholds compared with Jabal al-Qṣeir.

	rock-cut foundations	long-houses	piriform cisterns	defence walls	Iron II pottery
as-Sela‘	+	-	+	(+)	+
Umm al-‘Ala	-	+	+	+	+
Umm al-Biyāra	-	+	+	-	+
Ba‘ja III	+	-	+	+	+
Jabal al-Qṣeir	+	+	+	+	+

Interestingly, Jabal al-Qṣeir combines all the characteristics of the five sites: Iron II pottery, defence walls, piriform cisterns, long-houses, rock-cut foundations. There are reasons for such a unique setup.

*Rock-cut house foundations* cannot be made from a ground of sandstone eroding in flat fragments as is the case on Umm al-Biyāra and Umm al-‘Ala. They are useful and therefore typical in regions where homogeneous sandstone erodes in cones and “cupolas” as on as-Sela‘, al-Ba‘ja III and Jabal al-Qṣeir.

*Longhouses* were discovered on the plateau

of Umm al-‘Ala (Lindner *et al.* 1988: 71-83). They were not to be found or were not noticed on as-Sela‘. Umm al-Biyāra has not been entirely excavated. Ba‘ja III is too small for such installations. Even on Jabal al-Qṣeir there is only one place where a longhouse could be built.

*Piriform cisterns* were noted at all five sites assuming that the cisterns of Umm al-Biyāra are of Iron II origin. Due to the similarity of the pear-shaped cisterns, one of the authors has already suggested the activity of ambulatory cistern makers analogous to itinerant blacksmiths or carpenters (Lindner 1982: 146). There might be a chronological difference between cisterns with circular and with square openings. Both types were seen on as-Sela‘ but as-Sela‘ is a multi-period site. On Ba‘ja III, however, both types were noted despite the fact that no pottery was found which is later than Iron II.

*Defensive walls* may have connected the rock-cut tower foundations of as-Sela‘. A strong tower at the “khandig”, the access stairway, was part of a defence system. Umm al-Biyāra was a natural fortress and did not need defence walls. The stone and rock works in the lower part of the mountainside, for example steps, stairs, gates, ramps are firmly rooted in Nabataean tradition. They belong rather to a cultic than a defensive installation (Lindner 1989: 293-303). Ba‘ja III was a tower fortress in itself. It was sufficient to cut away a section of the northern rock wall to make it virtually impregnable. Yet, the access from that direction with cisterns and gardens was closed by a wall (Lindner *et al.* 1987, 1988). There is no reason to attribute the walls of Jabal al-Qṣeir to later occupants of the site. Otherwise, more pottery of that later period should be found. In any case, the ledges cut in the rock in order to hold the ashlar of the walls are eroded exactly to the same extent as the other rock works of the site.

*Iron II Pottery* of the kind generally associated with the Edomites, mentioned in

the Hebrew Bible and by Neo-Assyrian sources (lately compiled by Bartlett 1989, Knauf 1992 and Bienkowski 1992), was found at all five sites. Only on as-Sela‘, the connection between Iron II pottery and the architecture is not obvious (Lindner 1986, 1992). Seemingly, there is not much difference in the pottery assemblages and their chronologies. A few sherds of thin and simply painted “fine ware” was found on the surface and at the slopes of Umm al-‘Ala. Such a refinement seems to be lacking at the other sites, but the search for pottery was not equally intensive at all four sites (cf. Zeitler). A few words have to be added concerning as-Sela‘, recently described again by one of the authors (Lindner 1992), before Jabal al-Qṣeir had been discovered. At that time, rock-cut foundations of tower-like structures and of houses had no striking parallels with other presumably Edomite sites. We still do not know the significance of the supposed “high place” on as-Sela‘ (or was it a house foundation after all?) with what resembles a processional stairway leading up to it (Lindner 1989: 273-285; 1992: 144). But other remnants of half-built, half rock-cut houses and “towers” stand in the Iron II tradition and are clearly paralleled by the architecture of Jabal al-Qṣeir.

#### Density of Edomite Settlement Sites

Considering the latest state of knowledge, the distances from Jabal al-Qṣeir to other Edomite sites in southern Jordan are surprisingly small. With Iron II (Edomite) pottery lately found on Jabal al-Khubta (9 km) (Lindner 1986: 133-35), at Khirbat al-Mu‘allaq (6 km) (Lindner, in preparation) and at Khirbat al-Minye (9 km), already noted by Glueck (1935: 78) and verified by Suleiman Farajat (unpublished), a high density of Edomite settlement activity in southern Jordan emerges. Hart, after his first Edom survey of 1984/85, noted a significant number of unfortified villages in contrast to as-Sela‘ and Umm al-Biyāra with their nat-

ural defences (1987: 287). Later, he saw the Edomites as a group of people beleaguered from all sides (1986: 54). Mountain strongholds fortified by man or nature controlling their environs but undiscovered up to now due to their limited accessibility, may eventually even outnumber undefended places.

**Table 2.** Distances of Iron II (Edomite) sites from Jabal al-Qšeir in southern Jordan.

al-Ba‘ja III	20 km
Ṭawilān	14 km
Ghrārah	14 km
Umm al-Biyāra	9.5 km
Jabal al-Khubtha	9 km
Khirbat al-Minye	9 km
Khirbat. al-Mu‘allaq	6 km
Umm al-‘Ala (as-Sadah)	4.5 km

Speaking of density, one has to look especially at the distances between Jabal al-Qšeir and the known sites from al-Ba‘ja III to Umm al-‘Ala. Although measured approximately as the crow flies, and in spite of the difficult terrain, those Edomite sites are not more distant from each other than hours or maximally two days.

### Strongholds near Commercial Routes

Jabal al-Qšeir poses the question of why (at least some) Edomites lived (at least for some time) on an uncomfortable windy mountain top (no disadvantage in summer!) without access to spring water, when ca. 2.5 km to the east the village of aṭ-Ṭayyiba offered certainly the same abundant springs in antiquity that made the settlement persist through Ottoman times (as a general rule, established by the geographer W.D Hütteroth, each Palestinian village which subsisted during the 16th-18th century AD existed already in the Iron Age). Were the inhabitants of Jabal al-Qšeir, in their choice of a dwelling-place, guided by tribal custom? Were they forced into this marginal area by military threats from Judah, Aram-Damascus,

Ashur or the desert Arabs? Does the settlement reflect the eternal opposition between a central government and a tribal population (Knauf 1992: 52) or conflict between the tribes themselves? Did the mountain strongholds meet military requirements of the Edomites’ Assyrian suzerains? Were the inhabitants of Jabal al-Qšeir highway brigands who sought refuge at their “eagle’s nest” (Obadja 3f.) after having intercepted and looted caravans traversing the neighbourhood with precious goods (cf. Ezekiel 27:16)? Or was it rather their task to watch over and protect those commercial enterprises in the service of the Edomite king and his Assyrian overlord?

First answers to these questions will be formulated by E.A.Knauf (see below). As a matter of fact, the sites discussed here, were never far away from important routes between Syria, southern Arabia and Gaza. That is true for as-Sela’ near the (later) Sultani Road (Starcky 1966: 890); for Um al-‘Ala near a route from Wādī ‘Araba to the (later) Desert Road (Lindner *et al.* 1990); for Ba‘ja III near the route between Faynān and (later) Petra; and finally for Jabal al-Qšeir near the routes west and east of the ash-Sharā escarpment, both equally important commercial highways in Nabataean and Roman times. According to the pottery finds at Khirbat al-Mu‘allaq and Khirbat al-Minye they were already in use during the Edomite period.

### Chronology of the Jabal al-Qšeir Stronghold

The authors do not doubt that the Jabal al-Qšeir site was planned and executed as a stronghold from the beginning. There is nothing to indicate an origin during a Jewish-Edomite struggle before the eighth century BC (Bartlett 1972: 26-37; Weippert 1982: 294), specifically not during a legendary garrisoning of Edom by David in the early tenth century BC (2 Sam 8: 14; Bienkowski 1992:1). There is no architecture in Edom before the eighth/seventh century



BC (Knauf 1988: 67). For Bienkowski, according to present evidence the bulk of the Edomite settlement sites does not precede the seventh century BC (1992 A).

Thus, the original occupation of Jabal al-Qṣeir might reasonably stem from a period when the erecting of houses and defence walls was already customary in Edom, and when it was necessary and/or favourable to stay on the mountain even without the presence of spring water and without cultivable soil right at the spot. That may have been when in the course of the vassal-dom to Assyria since 732 (734) BC (Bartlett 1989: 128) the Edomites, formerly mostly pastoralists up to 700 BC were induced or forced by Assyrian control and capital (Knauf 1992: 50) not only to become settled but also to mine, process and trade copper (Hauptmann 1986: 37; Hauptmann and Weisgerber: 1992: 61-66; Knauf 1992: 51). They certainly had to do with the Arabian trade at the northern end of the incense road (Knauf 1988; Bienkowski 1992: 9), all of it leading to the maximum of Edomite settling activity in the seventh/sixth century BC (M. Weippert 1982: 295), more specifically under a succession of kings since c. 735 BC (Bartlett 1989: 129).

If the stronghold of Jabal al-Qṣeir is not dated in the beginning of Edomite settling activity, the Edomites did not dwell very long on their "eagle's nest". They may or may not have survived the end of their civilization brought about by Nabonidus (553/552) (Bartlett 1979: 53; Weippert 1987: 101) until they were forced to resume their nomadic-pastoral life which most probably had never entirely disappeared. Perhaps the people returned then to the springs of aṭ-Ṭayyiba, leaving houses, walls and cisterns they did not need anymore. At any rate, the time span of Edomite use of Jabal al-Qṣeir was not very long. According to what Bienkowski (1990) stated about the life time of other Edomite sites in the region, an end of Edomite Jabal al-Qṣeir together with the end

of the sixth century BC can preliminarily be assumed.

### **The Pottery of Jabal al-Qṣeir** (John P. Zeitler) (Figs. 23-27)

The Jabal al-Qṣeir survey revealed a large amount of Iron II pottery, commonly known as "Edomite". Similar pottery from other sites within the Petra region have already been described elsewhere (Zeitler 1992), and it will be sufficient to refer to the typological groups which had been previously defined (Lindner *et al.* 1990: 206 ff; Zeitler 1992: 167 ff). A total of 121 pieces fit within this typological frame, while more than 500 sherds are plain pieces without rim or decoration and will not be dealt with in detail here.

#### *Group 1*

20 fragments of jugs with high necks could be identified within the sample (Fig. 23:1-3, 5-6). They show a typologically poor variability, most of them monotonously repeating the simple thickened rounded rim. Only one example has a smoothed surface (Fig. 23: 3). Functionally, they most probably had been in use as simple water jugs.

#### *Group 2*

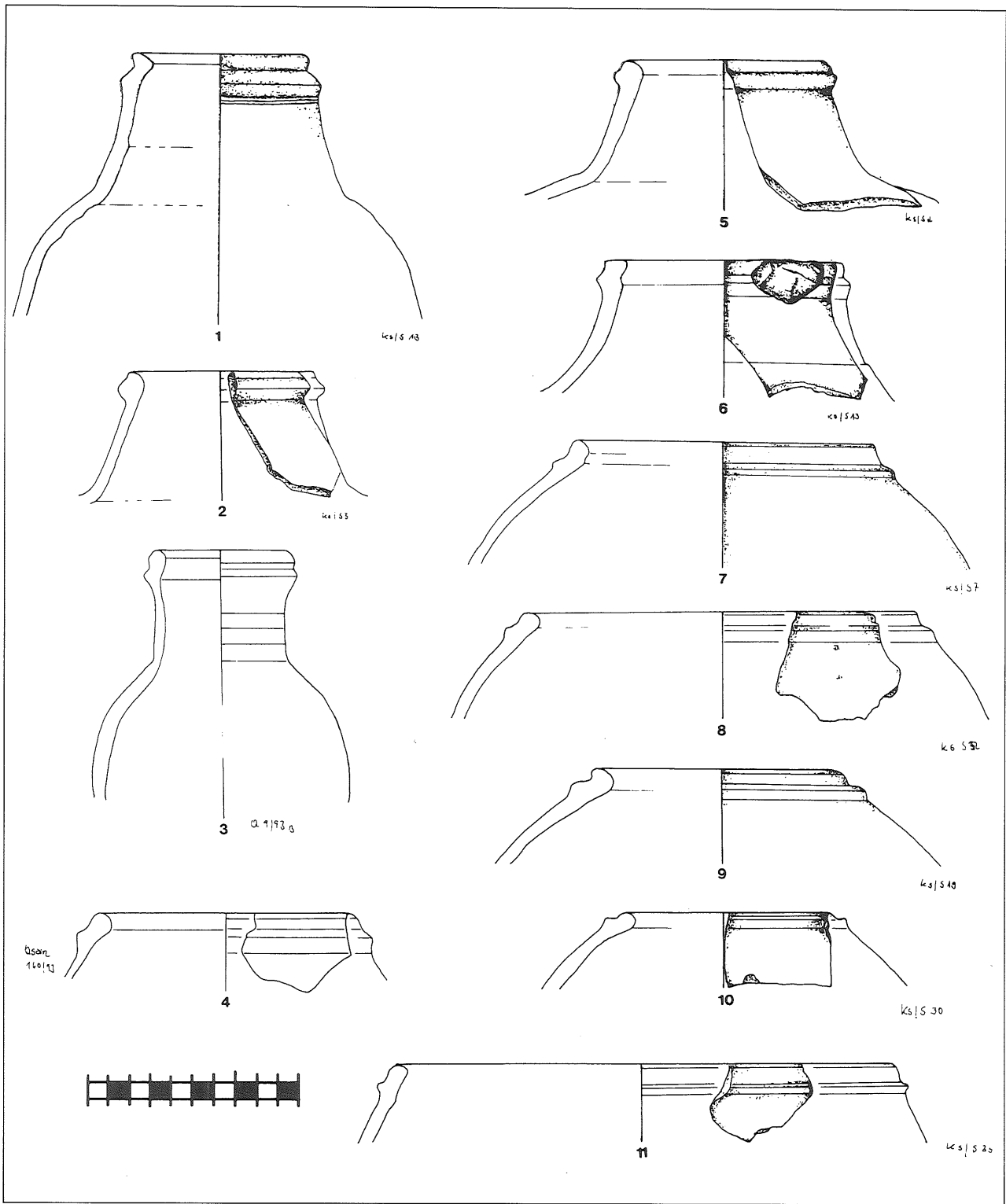
21 sherds belong to the large group of cooking pots with profiled rims (Fig. 23: 4, 7-11). The handles are usually broken, but some pieces show the point of attachment.

#### *Group 3*

Within the sample, there are seven rim sherds of large storage jars with short necks and everted rims (Fig. 24: 1-4). The typological range is small, variations occur in the profiles of the rims.

#### *Group 4*

14 pieces are attributable to this group of large and deep bowls, commonly called craters (Figs. 24: 5; 25: 1-3). The function is not

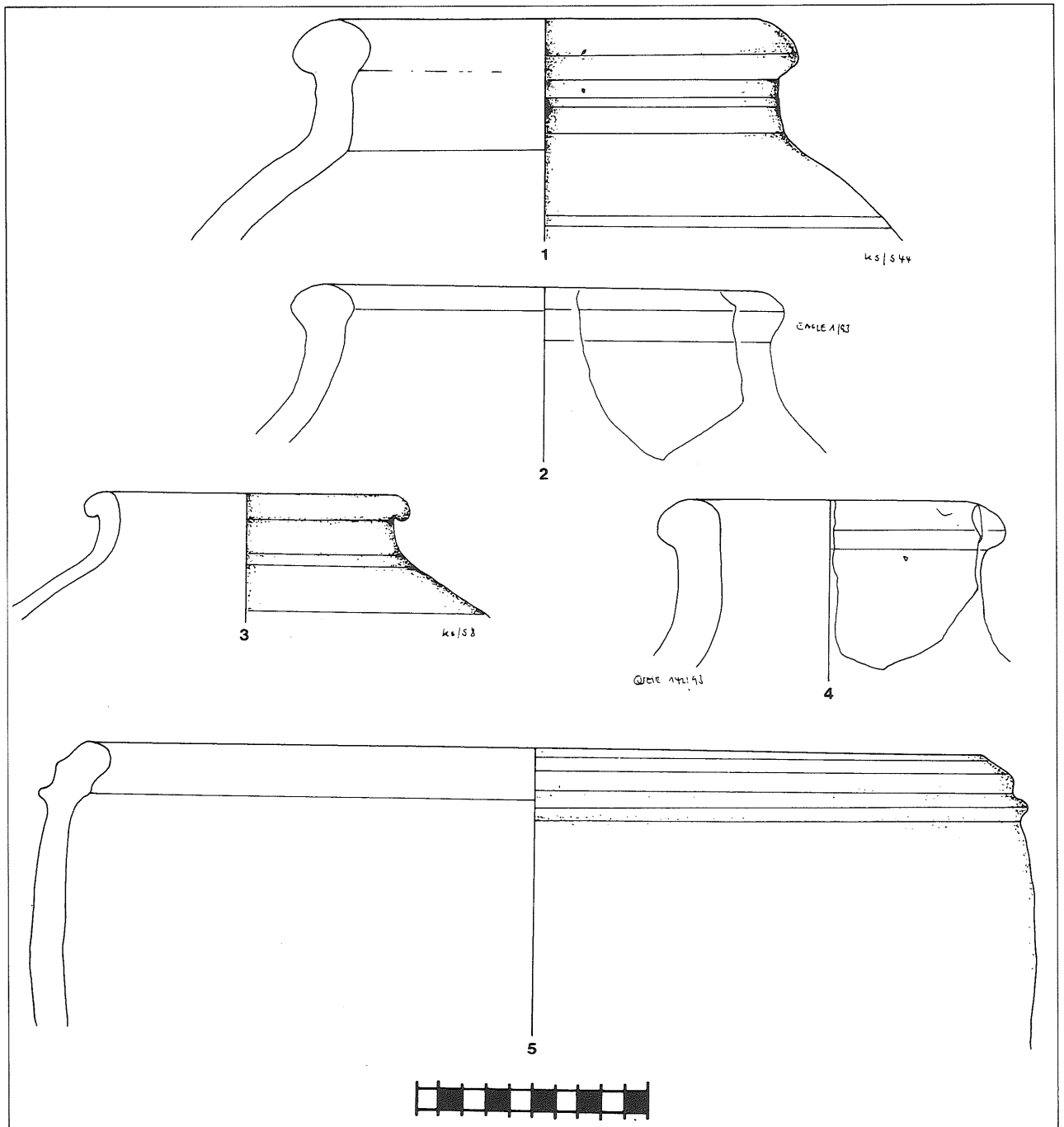


23. Iron II (Edomite) pottery from Jabal al-Qseir.

necessarily fixed on large mixing vessels. The large volume and the great number within the sample might also indicate a use for storage of dry food.

*Group 5*

Only two pieces of medium sized bowls with flat, thickened rims occur within the sample (Fig. 25: 6). They would have been



24. Iron II (Edomite) pottery from Jabal al-Qseir.

useful both for preparation and serving of food.

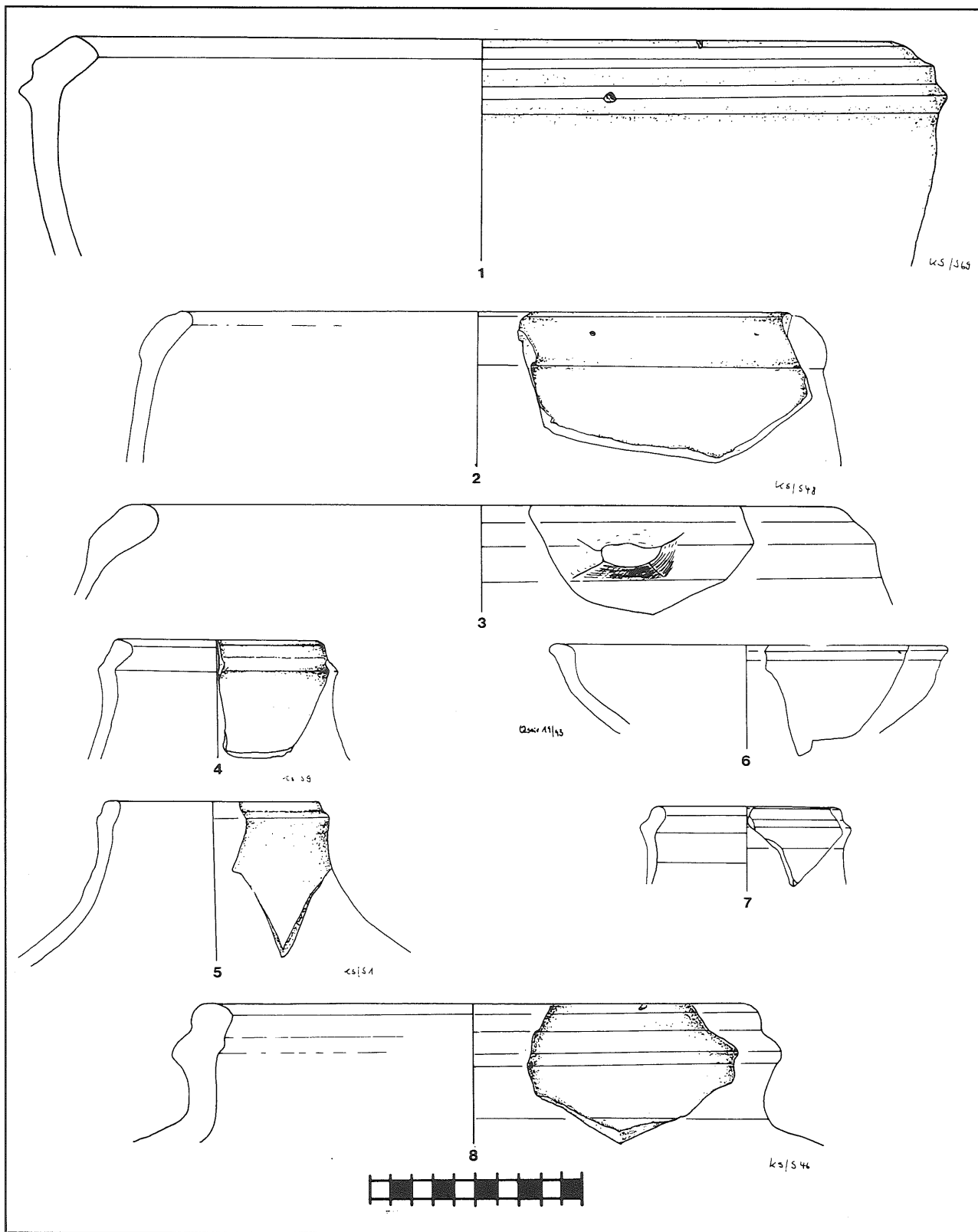
*Group 6*

This type of jars showing a straight and collared rim is only present in three examples (Fig. 25: 4-5, 7). They seem to form a variant of group 1 and should be connected

functionally with storage in a wider sense.

*Group 7*

These large vessels with rilled rims are the most common type of Iron II pottery from southern Jordan. The 31 pieces from Jabal al-Qseir show, that they come in different sizes (Figs. 25: 8; 26: 1-4), most prob-

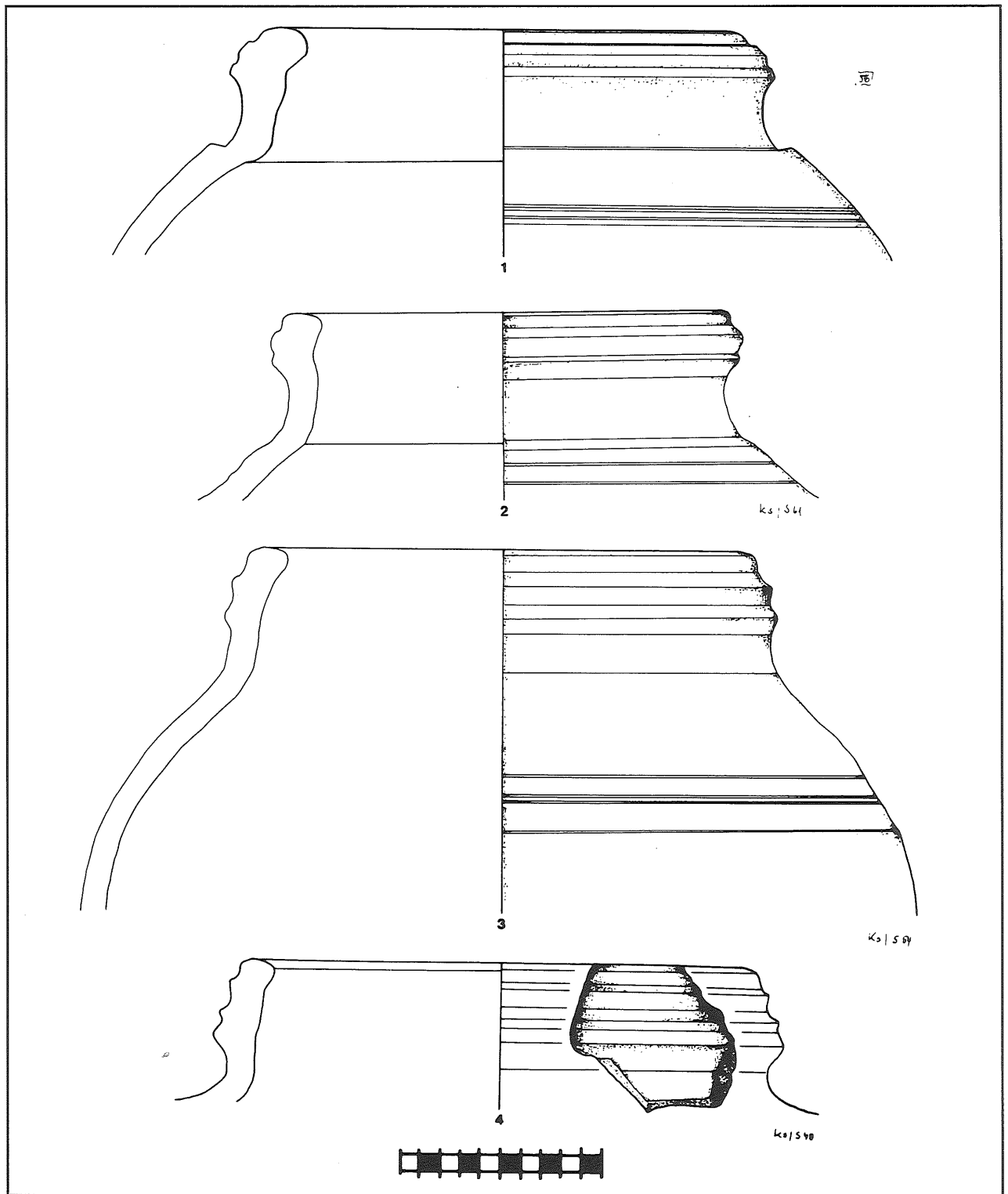


25. Iron II (Edomite) pottery from Jabal al-Qseir.

ably to serve different demands of storing smaller and larger amounts of liquid.

*Group 8*

Bowls with high profiled rims, serving as

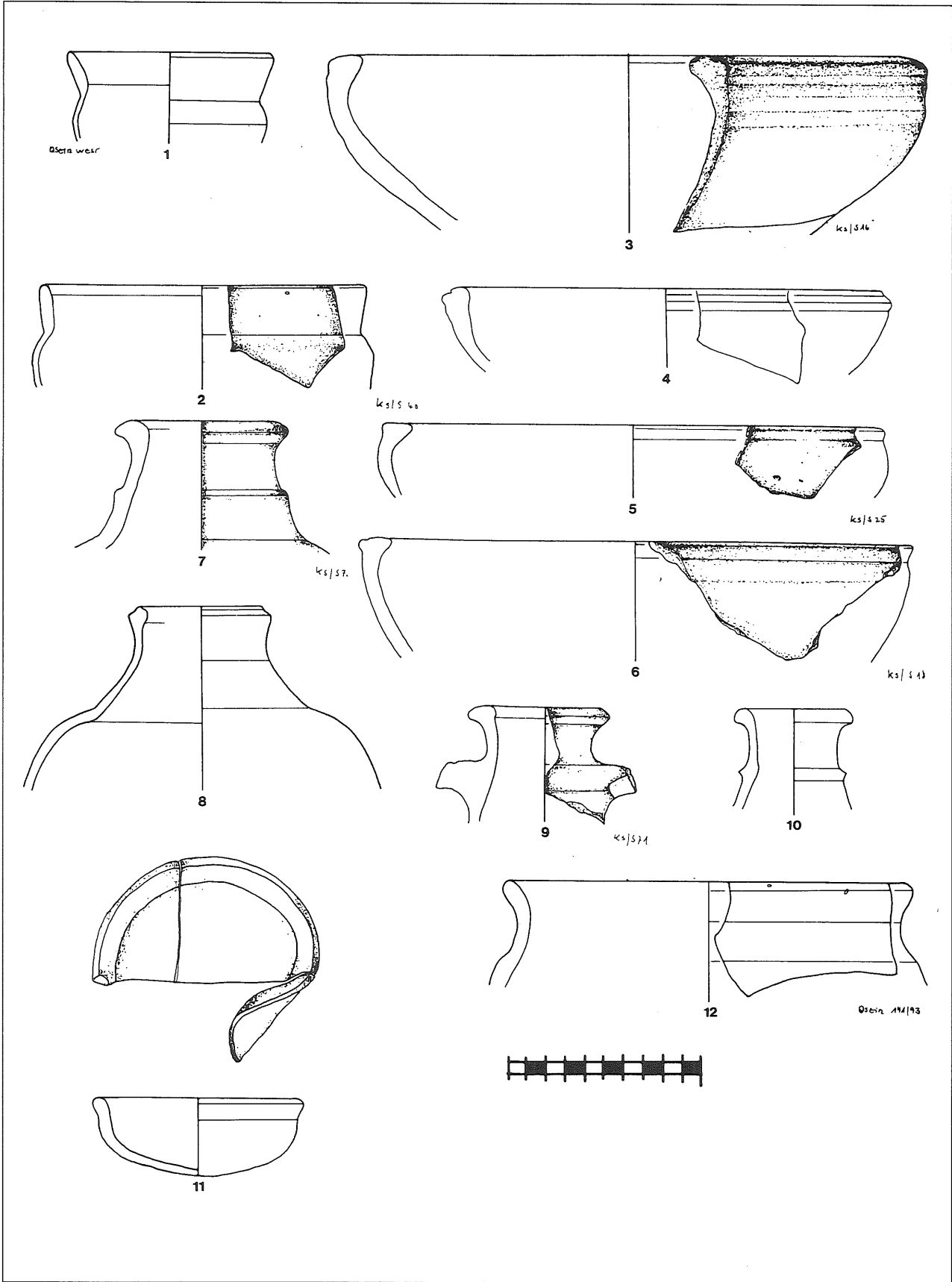


26. Iron II (Edomite) pottery from Jabal al-Qseir.

fine table ware, are absent in the sample from al-Qseir. The shape and quality suggests that they were part of the group of status and luxury goods.

*Group 9*

Only two pieces of bowls with a high, slightly everted rim are represented in the sample (Fig.27: 1,2). They are usually of a



27. Iron II (Edomite) pottery from Jabal al-Qseir.

medium fine quality and although being rather thin, the surface is only randomly smoothed. They belong to the table ware and were probably used for the consumption of food.

#### *Group 10*

Large bowls with profiled rims (Fig. 27: 3-6), probably part of the kitchen equipment for the preparation and serving of food, are represented with seven examples.

#### *Groups 11 - 14*

Not a single piece of these groups was found in the Jabal al-Qṣeir sample. They are rather fine than coarse and usually painted with parallel bands of medium brown paint. Compared with other Iron Age types from southern Jordan, they could be classified as status and luxury goods.

#### *Group 15*

Jugs with straight, profiled necks and everted lips (Fig. 27: 7-10), are represented by ten pieces. These seem to be a specific type similar to Group 1, but with a more elaborate shape. As the profiling of the neck could be taken as a minimum of "design", they could be classified within the table ware.

#### *Group 16*

Within the al-Qṣeir sample, four pieces of a type unknown on the other sites appear. They are classified as a new group of medium sized bowls with a high neck and rounded rim (Fig. 27: 12). Although rather coarse, the shape and the smoothed surface argue for a qualification as table ware.

#### *Lamps*

Two large pieces of Iron II oil lamps were collected. They show no specific characteristics (Fig. 27: 11).

It is unnecessary to discuss again the problems of dating "Edomite" pottery. All necessary facts were presented during the Liverpool Conference (Bienkowski 1992:

108, Zeitler 1992: 171). Although our Groups 3 and 7 belong to the types argued by Finkelstein as being Iron I (Finkelstein 1992: Fig. 2), Bienkowski has already pointed out the problems of Finkelstein's chronology (Bienkowski 1992: 108, Bienkowski 1992b: 167ff.). The types suggested as Iron I by Finkelstein create a serious problem if his chronology would be accepted: they all represent water storage containers. If they would be extracted chronologically from the Iron II occupation, the scenario would be of a community only storing water in a hypothesized Iron I era, as no other types of pottery can be ascribed to an Iron I settlement. This is, of course, impossible and only the product of a theoretical construction, disproved by functional considerations on any given site. It is therefore sufficient to state that the homogeneous finds from al-Qṣeir fit into the large complex of Iron II pottery from southern Jordan.

Despite its lack of chronological distinction, the real value of Iron II pottery from the Petra region is its functional indications. It has already been stated (Zeitler 1992: 172 ff), that different site locations produced different pottery assemblages. This again is proved with the hitherto unknown assemblage from al-Qṣeir. Contrasting to Tall al-Khalayfi (Glueck 1967; Pratico 1985), Ṭawilān and Buṣayra (see Bienkowski 1992: 111 and Zeitler 1992:176 for full bibliography of Ṭawilān and Buṣayra), not a single piece of painted pottery was found on al-Qṣeir. This is not a result of the sampling technique – many small pieces were collected for a thorough and methodical survey of the surface. Sites with a very small amount of painted pottery are common in Edomite archaeology, hitherto represented by Umm al-Biyāra, al-Ba'ja III and as-Sadah. In this context, it is remarkable that some types are rare but present in the Umm al-Biyāra and as-Sadah assemblage, but absent in the considerably large collection from al-Qṣeir. It is even more striking, that

the missing types do represent a specific function. All five of them (Groups 8, 11, 12, 13 and 14) belong to the group of fine table ware, usually painted and with a smooth or even polished surface. As coarser table ware is represented in the assemblage (see below), this seems to indicate a further differentiation of the function of the sites.

Analysing the given assemblage, there are vast differences in the percentages. The largest group (31 pieces) are huge vessels (Group 7). They could only have been used for storage purposes, as their sheer weight makes it impossible to carry them over a long distance. An example from Khirbat al-Mu'allaq shows, that these vessels were sunk into the floor and used for storing liquids, most preferably water, wine or oil. According to the large number of different rim sherds in al-Qṣeir, the storage of liquids must have been an important purpose within the site. This is underlined by the presence of 20 large jugs (Group 1), allowing the storage of smaller units. The exact function of Group 4 is unknown. They could have been used as mixing bowls as well as containers for food such as grain or dried legumes. The first possibility would argue for an acute awareness of the need to store quantities of liquid while the second simply shows a necessity of daily life.

Another aspect of daily life, food preparation, is well illustrated by the high number of cooking pots (Group 2). 21 pieces, nearly 20 % of the whole assemblage, are attributed to this group. The total of the hitherto discussed groups, serving storage and food preparation, reaches a number of 86, that is 70% of the whole assemblage. This is a clear indicator, that basic functions played the major role at al-Qṣeir. Looking at the general pattern, storage dominates with a rate of 61 % of the pottery while preparation and consumption of food reaches 37 %. This indicates a settlement, where the life-style of the community is best shown by the total absence of painted pottery and the rare occurrence

of fine table ware (Groups 9 and 16).

A striking parallel in the pottery assemblage with Ba'ja III must be noted. Both sites lack painted pottery, although one has to keep in mind, that the total of the Ba'ja III finds collected during the survey is rather small and therefore not necessarily representative (Zeitler 1992: 167). On the other hand, both Ba'ja III and al-Qṣeir show jugs of Group 15 (Zeitler 1992: 171) and, as indicated above, both show rock-cut foundations of buildings spread irregularly over the hill surface (cf. Fig. 17 with Lindner 1992: Fig. 13:23).

The typical assemblages of "Edomite" pottery in the Late Iron Age of southern Jordan indicate a functional grouping of the different sites. With only a good handful of observed sites, it is, of course, too early for definite models about the hierarchy of Edomite settlements. But combined with the building types and the setting within the landscape, some structures become clear. It has already been noted, that sites in a favourable position produce a large amount of painted pottery. The most prominent site is Buṣayra, also showing a unique architecture, where buildings A and B are considered as palaces (Bienkowski 1992b). Therefore, it is reasonable to suggest that Buṣayra was an administrative center. On a minor scale, Ṭawilān probably had a similar, regional function.

With the results from al-Qṣeir, a differentiation of settlements on high mountain sites seems to be possible. As-Sadah and Umm al-Biyāra can be grouped together, showing a dominance of large rectangular buildings with long corridor-like rooms. On these sites, a minimum of painted pottery occurs. A second group would be formed by Ba'ja III and al-Qṣeir, showing a conglomerate of smaller buildings and, in the case of al-Qṣeir, also a large rectangular building. No painted pottery is present. A fourth group of Edomite settlements is represented by Ghrārah. There a building with a central



court which is situated on a small plateau (Hart 1987: Fig. 7; 1988). The site produced painted pottery. It is most likely to be interpreted as a farmstead.

In conclusion, two trends appear. The first is the high individualism of Edomite settlement layout and structures, arguing against a strong centralized administration. The second is the low grade of urbanisation during the Late Iron Age in southern Jordan. All sites in the Petra region, Ṭawīlān, Umm Biyāra, as-Sadah, Ba‘ja III and al-Qseir are located within rich arable lands, marginal to poor rock outcrops. This offers opportunities of mixed farming, using the arable land for crop production and the hills for pasture. All sites have cisterns, arguing for a long-term domestic use. If, as suggested by the author (Zeitler 1992: 176), sites like Umm al-Biyāra and as-Sadah can be interpreted as places of regional control—either of a “central government” or a local clan—sites like Ba‘ja III and al-Qseir represent the local farming communities.

#### **Edomite Settlement Structure in the Greater Petra Region: First Thoughts toward an Explanation (E.A. Knauf)**

The Edomite mountain strongholds, discovered by Manfred Lindner and his team in the course of the past ten years, should not have come as a great surprise to the students of Edomite history who are, of course, familiar with Obadja 3 and 4: “You who dwells in the hollows of cliffs, establishes yourself on the mountains, and says to yourself ‘Who will bring me down to earth?’ - even if you placest your nest as high as the eagle’s nest, even if you establish yourself among the stars, I will bring you down from there, says the Lord”. At least for the Judaean prophet of the early sixth century BCE, the mountain abodes were typical rather than exceptional for Edomite settlements.

On the other hand, nobody who ever ven-

ured to ascend one of these natural fortresses (and be it the most accessible among them, Umm al-Biyāra) can help wondering why the Edomites, or at least part of the Edomites, established themselves in such bothersome retreats while they supposedly had the Edomite plateau with its springs at their disposal. One may look for an explanation by both a diachronic and a synchronic approach.

#### **Historical Observations**

Throughout the Near and Middle East, mountain areas served (and serve) as areas of retreat for populations under pressure, for North Africa’s Berber inhabitants as well as for south-east Arabia’s Mahra and related groups, and the last remnants of Aramaic-speaking communities in Syria, Turkey and Iran. In northern and central Transjordan during the fifth and fourth centuries, that is in the cases of Ammon and Moab, settled life seems to have retreated from the plateau and to have withdrawn to the edge of the plateau and into the wadis of the mountain precipice; Rabbat Moab was superseded by al-Karak as the region’s political and economic centre, Rabbat Ammon was an isolated outpost amidst bedouin country, linked to the west by a series of watch-towers; a similar line of towers, often mistakenly attributed to the Ammonites, defended the western wadis against the eastern plateau (Hübner 1992: 155 n.141; 210-212; Knauf 1992). Thus became true (though not in its entirety) what the prophet Ezechiel forebode: “Therefore, I now am giving you (Ammon) as a possession to the people of the east, who will establish their corrals and spread their dwellings in your place; it will be they who eat your fruits and drink your milk. I will transform Rabbah into a pasturage for camels, and Ammon into a thrift for small stock” (Ezek. 25: 4-5; cf. also Ezek. 25: 10).

One may, then, regard the Edomite mountain strongholds as refuges from the very end of Edomite history, when hostile Arab tribes

flooded the plateau and dispossessed its former inhabitants. This interpretation, however, encounters several obstacles: (a) Edomite pottery does not (yet?) allow to differentiate between “early” and “late” ware; as far as the ceramic evidence is concerned, the mountain strongholds, Buṣayra, Ṭawilān and other Edomite sites have to be regarded as contemporaneous. (b) Edom’s “friends” who suddenly turn against him are usually regarded as formerly allied, now hostile Arab tribes (Obad 7). This interpretation, however, is highly doubtful. Most probably, the “friends” are the Neo-Babylonians, with whom Edom had loyally cooperated (and thereby, prospered) and who, in 553/2 BCE, probably without much reason, conquered Bozrah and annexed the country. The relationships between Edom and the Arabs seem to have been predominantly friendly (cf. Gen 28: 9; 36: 3); when the Nabataeans rose to power, they still venerated the Edomite god Qaus, a fact that betrays prolonged and peaceful contact between the two groups (Knauf 1989a). (c) The verses Obad 3 and 4, which mention the Edomite mountain strongholds, do not date from the period of Edom’s devastation, but rather from its prosperity (cf. vv. 2-3).

Although it is conceivable that Edomite groups dwelling in the mountains survived the disappearance of settled life from the plateau for some time, it is advisable to look for the *raison d’être* of the mountain installation somewhere else than in political history. In general, archaeological facts, features and installations have little to offer to the student of political events; they testify, however, to economic and social structures, to which our attention should now turn.

### A Structural Approach

Regarded as contemporaneous, the natural fortresses of the mountain strongholds contrast with the man-made (and Assyrian influenced) fortresses like Buṣayra (and, e.g., Ghrārah) on the plateau. They testify, in

all their inconvenience, to that proud strive for independence which is characteristic of tribalism, in this case opposed to the new (and Assyrian induced) Edomite state. It is by no means impossible that each settlement formed the “citadel” of an individual clan or tribe who constantly fought all its immediate and some of its more distant neighbours, if not prevented from doing so by some “colonial occupation force”. Such things happened and are, incidentally, reported in an Assyrian letter from Transjordan (Mittmann 1973; Knauf 1989b: 41 n. 185); another primary example of tribal discontent is provided by the Arabian oasis town of al-Jof in the 19th century, when each quarter of that settlement stubbornly fought its neighbours (Knauf 1989b: 71 with n. 356).

Differences in size, inventory and ceramic repertoire between the sites do, however, suggest that they formed part of a somewhat broader system which can partially be reconstructed. We assume that the presence of Edomite fine ware (or Palace ware) at a given site indicates its centrality (within a number of satellites) and thus, the interface between the local clan and the state administration. Concomitantly it is to be supposed that sites with an extremely small ceramic repertoire (comprising, in most cases, only storage jars and cooking utensils) were satellites which were only temporarily inhabited. Store houses, if such could be identified, would also point to a mobile population (in analogy to recent, Ottoman and 20th century store houses possessed by pastoralists and part-time migratory agriculturalists throughout central and southern Jordan). It seems that sites on the western escarpment of the plateau, like Khirbat al-Mu‘allaq and at-Ṭayyiba, served as central places for one or more mountain strongholds. With such a settlement system, the villages on the plateau provided a secure water supply and a fairly secure source for cereals (given that all of Edom, more or less, forms an agriculturally marginal area). The mountain strong-

holds, on the other hand, provided security to the villagers in case of foreign invasion. Keeping in mind the difficulties that extensive goat-herding can cause for agriculture and horticulture (Köehler-Rollefson 1988), one does not indulge in extreme speculation by assuming that the mountain area was predominantly used by the pastoral segment of the Edomite village population. After all, the economic (i.e., basically agricultural) revolution that Edom underwent in the course of the seventh century can only be explained by the need of food surplus production caused by Edom's participation in world trade and industry. The more marginal a country is, the larger the area of agricultural production must be in order to ensure even a meagre surplus. The precarity of Edom's economic position may serve as an additional explanation for the construction of the mountain strongholds as a last and desperate attempt to increase the area of crop and meat production.

The peculiar installations discovered by Manfred Lindner and his teams of NHG find their explanation in the dichotomy of state and tribes, in the dichotomy of farmers and herders, in the opposition of fertility and security (operative not only on the Edomite plateau) and finally, in the demands of the world economy on the marginal country of Edom which both fed and integrated the various dichotomies identified on the local level.

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