

## Tomb Maqt2

Position: 706620; 2525840, altitude: c. 1600 m

On the edge of the plateau at 1590 m altitude where the descent begins two Hafit tombs are located.

## Tomb Maqt3

Position: 707350; 2525450, altitude: 1650 m

On the High Plateau at the edge of the abrupt descent two cairns are located. The southernmost is 5.5 m in diameter. The inner wall of the structure is recognisable by stones which are still in situ. The northernmost one measures only 3.5 m in diameter, and on one side is preserved to a height of 0.80 m.

## Maqta'ah fort Maqt4

Position: 705100; 2526120

A 1.20–1.40 m thick wall extends in a south-easterly/north-westerly axis for over 30m. The direction is not straight but is accommodated to irregularities in the topography. The wall is constructed in a double-faced technique with a rubble filling. Black, weathered, gabbro, fine debris serves as fill, and is covered with limestone debris. Limestone boulders and blocks served as building material. Pottery sherds were not in evidence. Presumably such lay beneath the eroded alluvium. But their lack is curious.

This site is not a plateau, but rather a steep slope which is defended below by means of a wall. The crest itself extends in a north/south direction. On the crest there are no traces of fortifications. In the north-western corner it is preserved to a height of 1.80 m. In the south a second wall is traceable. A layer of debris has accumulated behind this wall.

## Plateau Maqta'ah hail, Maqt5

Position: 703583; 2525566

This plateau was formed by eroded sediment washed down from the surrounding hills and mountains (sediment trap). There are ruins of Early Iron Age hut tombs and of houses. To judge from their manner of construction the latter may date to the third millennium BC.

## Trilith Sha1

Position: 694768.03; 2532152.55

Near Isma'iyah 400 m east of the edge of the village al-Shāriq a trilith was discovered and designated Sha1. 300 m to the east a second was also visible. They were not located in the sail-wādī, but rather higher up on the upper edge. The

triliths both point in the same direction (east/west) as the wādī. The more westerly trilith (Sha1) was destroyed recently during the course of the bulldozing of the track. None of the stones stood in situ. Only eight of the once vertical stones were approximately in their original positions. One still stood but appeared to have been secondarily used as a vertical *shawāhid*-stone of an Islamic burial. Aside from the area between the two triliths the surrounding area was covered with fist-sized stones.

## Tomb Sha2

Position: 695476; 2532759

Sha2 was one of the numerous destroyed "Hafit"-tombs in the area. In this cairn, 200 m from Sha3, sherds of a bottle of the Samad Period (DA 12702) were strewn. They show the impressed zig zag decoration typical of this culture. This is one of the southernmost occurrences of this kind of pottery.

## Trilith Sha3

Position: 695017.27; 2532057.31

The easternmost trilith measured 15 m in length. Only one stone still stood *in situ* at the western end. The stones of the eastern end were all disturbed. One of them lay horizontally south of the others in a secondary position. Preserved vertical stones measured 0.60 m in height. Six stones remained in situ and the remaining ones so that their original position was still recognisable. Three groups each of four stones could be made out. The vertical stones were set shallowly (0.40 m) into the ground. Both triliths were fashioned of a dark limestone. Local informants recount that at the turn of the 20th century riders used to hitch their mounts to the stones of the triliths.

## Tomb Sha4

Position: 696170.00; 2531460.00

The tomb on the south-western side of the track, lies south-east of the village before the track cuts across the sail wādī (when moving east). This tomb fell victim to concentrated stone robbing because the low hill upon which it is located is accessible to small lorries. All stones which were not too small or too heavy were carried off. Only a small pile remained above the foundation of stones of a circular double-wall structure.

## Tomb Sha5

Position: 697700.00; 2530600.00

This Hafit tomb is located atop one of the hills south of the track which follows the wādī. Particularly on the south-western side a double-wall construction is recognisable. The entrance is oriented south-south-east (140°). The outer

facing stands to a height of over 1.0 m. On the south side the outer wall curves slightly inward. The chamber was oblong and covered with large flat stones.

#### Tomb Sha6

Position: 695878.00; 2531527.00

Just west of the track from Maqṭa'ah toward al-Shāriq on a small hill a cairn with steep walls is preserved to a height of 3.50 m. Beside is a second one 0.70 m in height. Both are caved in. Their building material, irregular blocks of grey klinky limestone, derives from the hill on the other side of the track. Mixed in are white limestone stones as large as a human head which derive from the terrace. The tomb is relatively well preserved, and the uppermost stones still lie

in situ. One can look inside the collapsed part of the interior. One of the 1.0 m long roof stones lies on top of the interior.

#### Tomb Sha8

Position: 700115; 2535782, altitude: 1120 m

In the immediate area of the trilith (Sha3) two Hafit tombs which show intensive stone robbing are situated on a low hill west of the track. The one located west measures a scant 3 m in diameter. It is of single-wall construction. The width of the wall measures 0.60–0.70 m. A second and large cairn has an entrance which is oriented southeast. On the eastern side it measures 1 m in height. The material of both cairns is quarried limestone.

### The tower tombs at Shir/Jaylah

#### Tomb Shi1 (Fig. 33–35)

Position: 710909.23; 2524518.61, High Plateau, altitude: 1758.47 m

Diameter of the base: 6.07 m

Preserved height: 5.47 m

Inner wall and facade

Orientation of the entrance: 90° (east)

Finds: Pottery sherds of Lizq/Rumaylah type (DA 12721, 12722) in front of the entrance, pounding stone (DA 12726)

Aside from Shi2 and Shi10, Shi1 is the best preserved tomb on the mountain. It lies 45 m south-western of the road on the south and west of a 6 m high rock precipice. P. Yule attempted to remove some of the fallen stones from the tomb in 1992 during a visit. The immediate vicinity also was cleared of loose stones and trash. This tomb is built of locally occurring klinky limestone. It was noticed that among the stone debris lay black stones (sandstone with iron colouring)<sup>41</sup> of various sizes. Traces of striking on some of these stones suggest a use as a hammer stone although an unequivocal identification for all of these stones is not possible.

With the exception of the partly collapsed corbelled vault the conical tower is in a good state of repair. At the top an oculus measuring some 49 x 31 cm is manifest. Partly as a result of weathering, the limestone has taken on a light grey to grey brown colour. The outer stone facing stands to a height of 50 courses. The south-western side showed the poorest preservation, and here the ruined wall stood only 43 courses high. The north-west side was also damaged. At a height of 1.50 m a 0.40 x 0.50 m disturbance is visible in the outer masonry which was repaired before our arrival.

The outer stonework consists of stones which differ in size. Their exterior surface has been convexly worked. On

the west side of the tower marks from the working of the stone are readily recognisable, but on the north side the results of weathering ("pecking scars") have obscured them. The largest stones (on the average 0.50 x 0.20 m seen from the outside) were used in the base. The superstructure consists of stones measuring c. 0.35 x 0.12 m toward the outside. The working of the stone facing and the way in which it is laid are more careful than in the case of the neighbouring and larger tomb Shi2. Thus in the outer facing there are few gaps which were filled with small stone shims.

The approximately isosceles-shaped entrance consists of neatly laid stone of about the same size. The threshold is formed by three stones of average size relative to those of the tomb. The flooring of the entrance, which tapers toward the interior, lay partially in situ. While on the outer south-western corner of the entrance stones were missing, no other sign of disturbance was visible here. Indications for a possible use of stones to close the tomb were not evident.

Approximately 5 m<sup>3</sup> of stone and sediment were removed from inside and from the immediate vicinity of the tower. The sediment seems to have accumulated over the centuries by means of wind. A north/south section perpendicular to the axis of the entrance shows that the tomb did not harbour subterranean galleries, and rested directly on the bedrock. At the same height as the entrance flooring lay flat stones varying in width – probably of the interior flooring. Since the bedrock in the middle of the tomb stood somewhat higher than that at the periphery, extra stones were laid below the wall to assure a horizontally flat floor. Moreover, some of the floor stones were bound into the interior wall. As visible in the cross section<sup>42</sup> the interior vault was as

41=hematite rich ferruginous sandstone. The authors thank I. Guba for this information.

42 Given the height of the tomb, it was possible to draw the cross section only to a height of 4 m.

Fig. 33. Photogrammetrically rectified photo of tower tomb Shi1 (M. Bertges).



Fig. 34. Cross section of tomb Shi1.

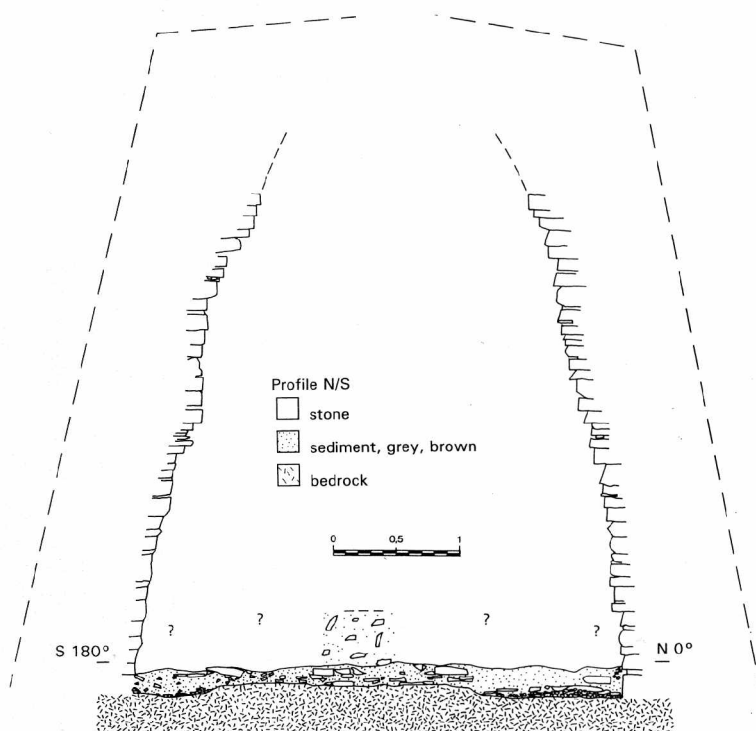


Fig. 35. Tower tomb Shi1.  
a) top of the tomb, the double wall construction is difficult to recognize because of the many stone chips; b) floor of the tomb seen from above, light of the entrance below; c) corbelled vault in the interior seen from below.

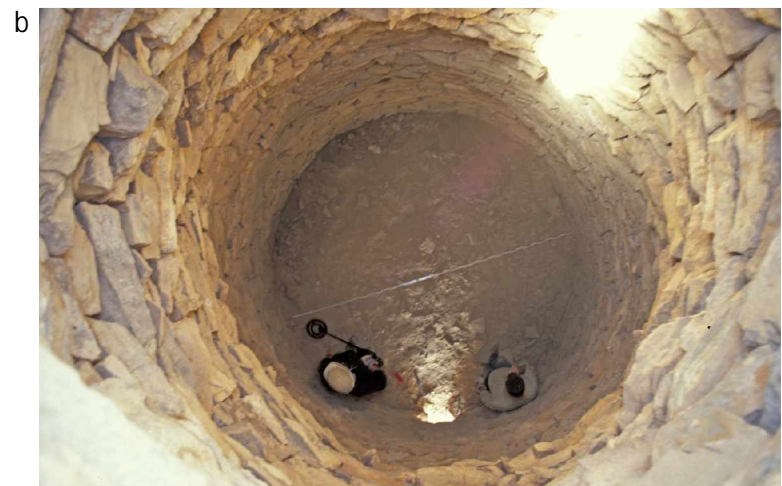




Fig. 36. Tower tomb Shi2.

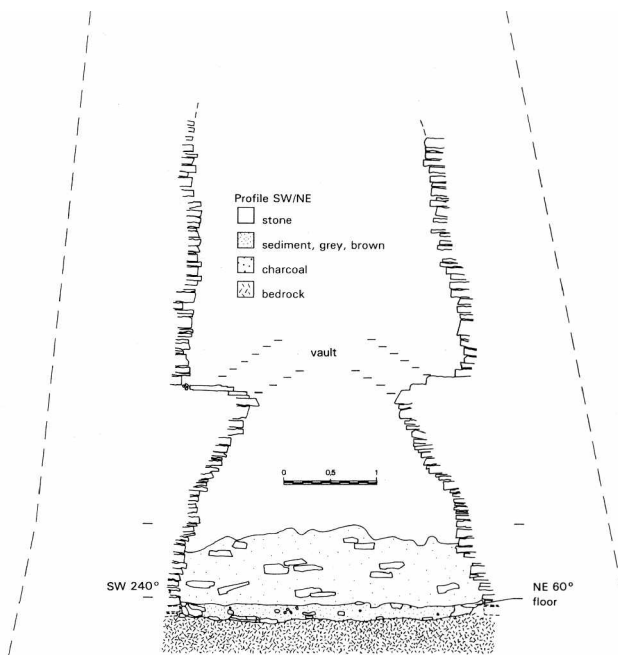


Fig. 37. Cross section of tomb Shi2.

carefully laid as the facade stone. Particularly on the inner south side in size and form the stones were homogeneous, and neatly laid to a height of 1.5 m. When rectified photogrammetrically (Fig. 33), the true proportions of the tower are broader than appear in a conventional photo.

Shi1 was completely plundered. It and its neighbours probably sheltered herders from the raw weather for many centuries<sup>43</sup>. In the debris and wind-laid sediment lay isolated bits of charcoal. In the crevices between the floor stones the remains of bone and a fragment of a mollusc were visible. Aside from a bead fashioned from a mollusc (DA 12722), three cowries (DA 12722) and a fragmentary bivalve, only a subrecent glass sherd (no DA no.)<sup>44</sup> came to light. The only pottery sherds (DA 12721) lay 1.0 m north-east of the entrance. Outside of the tomb a hammer stone was found (DA 12726, Fig. 16.2).

#### Tomb Shi2 (Fig. 36–40)

Position: 710923.27; 2524633.28, High Plateau, altitude 1751.80 m

Diameter of the base: 7.34 m

Preserved height: 7.50 m

Inner wall and facade

Orientation of the entrance: 150° (south-east)

Finds: Early Iron Age pottery sherds (DA 12723, 12724), pounding stones

20 m north-east of the road and 115 m north-west of tomb Shi1, Shi2 stands atop a 2 m high rock ledge. This conical structure was built directly on the limestone bedrock, of which it was built. The conical silhouette is slightly concave.

With the exception of the upper and lower collapsed vaults, the tower is essentially intact. The north face is more weathered than the others. Occasional stones are missing in the facing (see below).

Similar to Shi1, the facade consists of light coloured stone slabs of differing size and often convexly worked on the exterior surface. The measurements of these slabs vary in the lower three courses between 30 x 10 cm and 50 x 15 cm. But stones as large as 75 x 15 cm also occur. The size of the facing stones above this course ranges between 35 x 8 and 50 x 10 cm, but larger and smaller stones occur. Small gaps in the stone facing were shimmed with splinters from 2 to 5 cm in length which resulted in an exterior masonry uniform in its appearance.

The width of the entrance tapers toward the interior, and seen from the outside has the shape of an isosceles triangle. The threshold consists of a single slab which measures in length, height and breadth 66 x 7–16 x 25–33 cm. Inside the chamber remains of a stone flooring was visible. In the direct vicinity of the entrance, but not in situ, lay two large roughly hewn stone blocks which may well have blocked the entrance of the tomb. On the sides of the entrance visi-



Fig. 38. View in tomb Shi2 from above through the upper vault into the collapsed lower vault.

ble was a 2 m thick wall formed by two vertical walls.

The interior was filled by a 0.70 m high layer of debris fallen from the vault and bourn by wind into the chamber. A few charcoal fragments lay amid the debris. A section imposed from the south-western to the north-east revealed traces of the original flooring which was bound into the interior masonry.

As opposed to Shi1, here a double corbelled vault roofed the tomb<sup>45</sup>. The interior stonework is irregularly laid, the mostly roughly formed stone slabs are irregular in size. The tower seems to have been built in one phase and not first built as a low, then later as a high

<sup>43</sup> On 6.05.1995 in a puddle a layer of ice of 1 cm thickness accumulated.

<sup>44</sup> Finds such as hammer stones were left undisturbed at the site.

<sup>45</sup> It was possible to draw a profile only to a height of 5 m.



Fig. 39. Top of Shi2 showing the inner (right) and the facade wall (left).

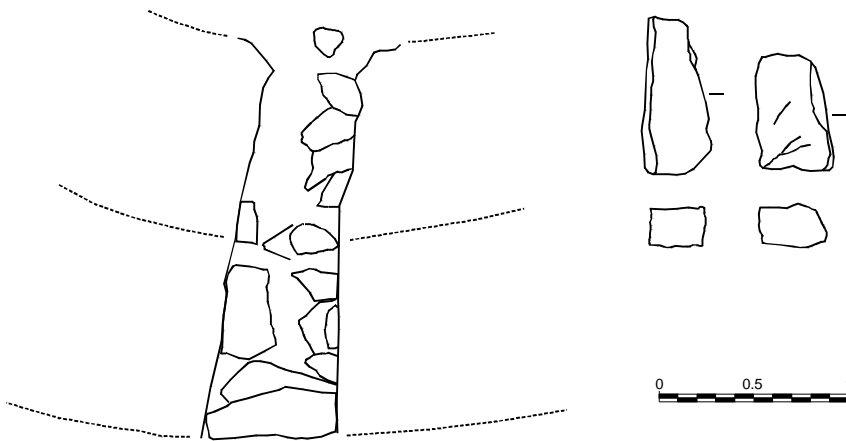


Fig. 40. Plan of the entrance to Shi2 (above) and sketch of the large stones which probably once blocked the entrance (below).

tower. Above the level of the bedrock the lower vault was preserved to height of 2.20 m in which an oculus was formed where the stones had collapsed. A second higher corbelled vault was formed by stone which in the interior was as irregularly set as in the lower vault. The upper vault also was collapsed resulting in an oculus above.

Measured to the north/south and to the east/west the oculus measured 1.26 and 1.10 m in diameter. The outer facing is unequal in its thickness. To the east it measures 0.74 m (tipping in 1.10 m); to the south-east 0.67 m; to the east 0.78 m; to the south-western 0.70 m, and to the north-east 0.75 m.

Two undecorated Early Iron Age pottery sherds (DA 12723.1, 2) and roundish stones are the only finds which came to light. The stones derive from the level

of debris above the flooring. To judge from the use-wear on one of them, a use as a pounding or hammer stone seems likely. They were not inventoried.

#### Tomb Shi3

Position: 711054.27; 2524485.75, High Plateau, altitude 1766.08 m

Diameter of the base: 5.07 m

Diameter above: 3.60 m

Preserved height: 2.24 m

Inner wall and facade

Orientation of the entrance: 140° (south-east)

As is the case with Shi4 this tomb stands on a terrace east and above of Shi1. Its west side is best preserved, and the

Fig. 41. Tomb Shi4.



east side is 1.0 m lower. Variability in wall thickness can be observed. At the lowest point in the east a thickness of 1.10 m can be measured. In the west the exterior facing stones measure 0.75 m in thickness, and the interior ones 0.90 m. The thickness of the wall increases in the upper reaches. The corbelling curves in strongly. The facade is not constant in its thickness. On the north side the wall is preserved to 2.10 m in height. The incline of the outer wall is very steep, and at 2.0 m height comes to 0.30 m deviation from the vertical. On the west side stone debris has accumulated. Here the wall measured 1.60 m in height. The incline is steeper and at 1.60 m height it amounts to 0.30 m. The outer stone mantle is missing on the east and south sides. It otherwise stands to a height of 1.0 m. The outer facing measures 0.60 m in thickness on the east side. The interior wall curves inwardly and measures 1.10 m in thickness. The vault has collapsed in an area measuring 1.20 x 1.25 m. From the northern outer edge of the facade to the middle of the oculus a distance of 2.0 m can be measured, to the south it measures 1.60 m. Thus the diameter of the preserved upper wall is 3.60 m. Since the building stone is hardly dressed there are no stone chips in the filling between the inner and outer walls. The unworked exposed surfaces are very rough. The stone slabs are covered with mineral accretions. Considering the entire amount of the debris the tomb must have stood over 3.0 m in height.

#### Tomb Shi4 (Fig. 41)

Position: 710991.28; 2524501.30, High Plateau, altitude 1766.33 m

Diameter of the base: 6.12 m

Diameter above: 4.40 m

Preserved height: 2.83 m

Inner wall and facade

Orientation of the entrance: 120° (southeast)

Finds: pottery sherds (DA 12704)

Shi4 is located east of the large tomb Shi1, on a 6 m high rock ledge, 2 m from its edge. The facade consists of coarse slabs laid in an irregular and slovenly manner. The exterior is tapered to such a degree that the tower easily can be climbed. The stones selected as material are heterogeneous in size and shape. Slabs measuring 20 cm in length and 3 cm in thickness are numerous, but they also can be more than 50 cm long and 10 cm thick. None of the slabs showed signs of shaping. Stone plates are readily available in the immediate vicinity. Despite the poor preservation, indications exist for a double wall construction. The wall thickness amounts to 0.70 m in the west and as much as 0.80 m for the course on the whole. Particularly on the north side the stone is pocked from the weathering. Since it neither begins at floor level nor does it penetrate to the burial chamber a hole in the facing on the east side seems to have originated from an attempt to break into the tomb. The facade in the upper por-



tion is well-preserved and represents the outside of the inner wall. The facade partly has been dismantled. The damage to the tomb seems to have occurred from above. The chamber is quite small.

The uppermost preserved wall is 1.80 m in thickness, owing in part to the corbelled vault. In the eastern wall some of the stones are irregularly laid. A walled up entrance may have existed here. The oblong east/west oriented burial chamber is filled with fallen stone, and the uppermost preserved wall stands 1.3 m above the debris. The preserved uppermost course of stone inclines inwardly, and outside to the south is 0.40 m and to the north 0.25 cm higher than in the centre.

#### Tomb Shi5

Position 710933.68; 2524599.47, High Plateau, altitude 1753.91 m

Diameter of the base: 3.86 m

Diameter above: 2.90 m

Preserved height: 1.88 m

Inner wall and facade

Orientation of the entrance: not visible

On its eastern side this tomb has totally collapsed. A small segment of the facade is visible here. The western half of the wall is partly intact. Here the preserved interior wall down to the collapsed interior measures 1.20 m in height. In the south the outer wall stands to a height of 1.50 m, and rises toward the east where it reaches 1.90 m. In the south a small part of the outer wall (0.30 x 0.40 m) is missing. To judge from the amount of fallen rubble, this tomb stood not much higher than at present. Toward the centre on the north side the vault is preserved nearly to its original height. On the northern side the slope of the outer wall at 2.0 m height amounts to 0.45 m. The conical silhouette is slightly concave. The building material consists of broken limestone slabs with many horizontal lacunae.

#### Tomb Shi6

Position: 710920.12; 2524674.52, High Plateau, altitude 1750.78 m

Diameter of the base: 6.37 m

Diameter above: 4.70 m

Preserved height: 2.55 m

Inner wall and facade

Orientation of the entrance: c. 90° (east)

This tomb lies north of Shi2. The upper portion of its wall inclines strongly toward the centre. It resembles Shi2 in its construction which also has two vaults, one above the other. The vault is pierced by a small oculus, and the lower chamber is filled with fallen stone. Slightly concave is the conical silhouette. To the east the inner wall of the tomb is preserved to a height of 2.10 m. The thickness of the wall varies

between 0.80 and 1.10 m. Also on the eastern side the facade is preserved to 2.0 m in height. At this height the incline amounts to 0.60 m. At the same height on the north side the incline amounts to 0.80 m. Here the wall is preserved to 2.50 m in height. The west side collapsed recently. The wall is built of coarse limestone blocks pocked from weathering. For this reason it is impossible to see any traces of the stone working. Two large portions of the wall on the western side are broken out (0.40 x 0.40; 0.40 x 0.30 m), and lay here collapsed, as also holds for the south-eastern side (0.30 x 0.15 x 0.50 m). The core stands to a height of 2.50 m.

#### Tomb Shi7

Position: 710833.80; 2524774.02, High Plateau, 1751.78 m

Diameter of the base: 5.38 m

Diameter above: 4.25 m (originally at this height)

Preserved height: 2.56 m

Inner wall and facade

Orientation of the entrance: 100° (east)

Find: potsherds near the tomb (DA 12684)

Although this tomb belongs to those of the High Plateau, it stands on a 6.0 m high cliff above the others. Most of the debris lies in the eastern part of the tomb in the area of the entry. Only on the northern side is the facade preserved. On the south-eastern side it is preserved to a height of 1.0 m of which 0.7 m projects out of the collapsed stone. The facade, today 0.55 m in thickness, spirals upward. Because of the vaulting, the inner wall measures 1.10 m in thickness. An oculus measuring nearly 0.70 m in diameter perforates the roof of the vault. Seen along a north/south axis, the chamber itself measure 1.0 m, and east/west 1.18 m. The facade is best preserved on the north-western side and is nearly 0.55 m thick. On the south side the wall tips in 0.90 m above the collapsed debris which is piled higher on the northern side. A good deal of debris also lies outside the tomb on the south-western side. On the south side the outer wall is preserved to a height of 1.0 m, while the inner wall stands 1.5 m high. On the north-west side the outer wall is preserved to a height of 2.3 m. Here at 2.0 m height the incline amounts to 0.55 m.

The entrance has a mighty door lintel 1.22 m in length. Because of the accumulated debris the entrance 0.44 m wide entrance is measurable only to a height of 0.33 m. On the sides of the entrance the wall measures 0.97 m in thickness of which the outer wall accounts for 0.60 m.

#### Tomb Shi8 (Fig. 6)

Position: 710701.17; 2524723.95, High Plateau, altitude 1746.04 m

Diameter of the base: 5.07 m

Diameter above: 4.00 m (originally at this height)

Preserved height: 2.87 m



Fig. 42. Tomb Shi9 with a double wall construction.

#### Inner wall and facade

Orientation of the entrance: 80° (east)

The entrance is open to its original height. The inner wall and the facade contrast clearly with one another. The facade has been pulled down and/or collapsed to such a degree that the upper edge winds up from the south obliquely. On the east side it is preserved to a height of 1.9 m. The inner wall projects here a further 0.7 m. The facade of the south and south-western sides has collapsed. But on the western side it remains preserved to a height of 2.05 m. On the northern and eastern sides a good deal again is missing. With 2.15 m height preserved in the south-western and south-east, the preservation is better.

The inner wall consists of coarse blocks on the western side 0.5 m thick. The vault has caved in. One can reconstruct 1.0 m to it additionally, so that originally the tomb stood about 4.0 m in height. The highest place in the superstructure lies in the north, 2.2 m above this debris. The layer of debris on the floor of the tomb is not thick. The interior of the corbel vault is rather coarse and uneven with many stones projecting into the interior. The long axis of the oval oculus

is oriented to the north-east/south-western and measures 1.1 x 0.70 m in diameter. On the south-eastern side of the outer wall a hole 0.60 x 0.40 m wide is formed by the missing blocks.

The rectangular entrance measures 0.70 m in height, has a heavy lintel and a threshold. The northern side of the entrance measures 1.55 m, the south side 1.59 in total thickness. Of this the outer wall amounts to 0.60 m in the north and 0.70 m in the south.

#### Tomb Shi9 (Fig. 42)

Position: 710641.84; 2524729.18, High Plateau, altitude 1746.78 m

Diameter of the base: 5.54 m

Diameter above: 4.00 m (originally at this height)

Preserved height: 4.52 m

Inner wall and facade

Orientation of the entrance: 120° (south-east)

Finds: potsherds outside the tomb (DA 12684)

This tomb was built of relatively small slabs carefully fitted with each other, although the outer wall bulges



Fig. 43. Rectified frontal view of tower tomb Shi10 (M. Bertges).

outwardly in places. In the east the facing wall is preserved to a height of 3.9 m which falls in the south and south-western to a height of 1.2–1.3 m. Gradually it rises to 1.55 m and on the north side rises to 3.9 m. This tomb had two chambers one above the other. The vault of the lower chamber is intact but the upper vault collapsed to a 1.0 m deep funnel-shape. Shi9 once stood at least 1.5 m higher than it now does, thus making it some 6.0 m high originally. The completely intact lower vault measures 2.15 m in height. The circular chamber measures 2.0 m in diameter. The high trapezoidal entrance lies to the south-east, in a direction which is somewhat atypical. At its base the width measures 0.56 m and above 0.30 m. In the south and the north the outer wall measures 0.56 m in thickness from a total thickness on the south side of the entrance of 1.62 m and 1.68 m on the north side. Of the 10 cm thick flooring only two stones remain in situ. As opposed to most of the tombs, which have a horizontal ceiling in the entrance from the exterior to the interior, in this tomb toward the centre it slants down in small steps. The entrance height of 0.76 m is maintained only by two lintel stones 0.6 m wide. It then steps down 0.30 m and again 0.10 m, thus leaving only 0.34–0.36 m in internal height and 0.45 m width. The interior lintel is 0.9 m long. There can be no question that here the entry to the chamber intentionally was made difficult.

#### Tomb Shi10 (Fig. 43–46)

Position: 712372.99; 2523605.04, High Plateau, altitude 1832.41 m

Diameter of the base: 5.75 m

Diameter above: 3.69 m

Preserved height: 5.85 m

Inner wall and facade

Orientation of the entrance: 120° (south-east)

Finds: pounding stone (DA 12725); fireplace to the north

Tombs of this group lie aligned along the edge of the High Plateau at over 1800 m in altitude, for which reason they are visible from a great distance. Shi10 is the most prominent and the best preserved tomb of all. Of the 58 tombs it is the most carefully constructed, and its double superimposed vaults are the best preserved. Since it is large and positioned at the highest point on the mountain it is visible at a greater distance than the others. A foundation of some 16 cm supports the facade. All of its stones have been dressed. Despite this care flaws in the facade are evident. It is laid in 64 courses, 55 of them above the entrance. For each course the builders attempted to use slabs of the same thickness (4–16 cm). For this reason few shims were necessary to maintain horizontality in the courses. The careful masonry results in the impression of optical harmony. The superstructure is endangered by several cracks. In the vicinity of the entrance lies 1 m<sup>3</sup>

Fig. 44. Intact lower vault Shi10.



Fig. 45. Entrance of Shi10 from the interior.



Fig. 46. Detail of exterior masonry of Shi10.



of stone, evidently removed from the tomb. Because the vault is intact, the interior is dark. Its height measures 4.85 m, and the diameter of the interior floor 3.55 m.

The upper corbel vault has collapsed onto the lower vault. The distance from the edge of the oculus (diameter 0.65 m) to the upper edge of the tower measures an average of 1.4–1.5 m, and from here to the fallen debris 0.70 m. The diameter of the upper vault at the height of the debris is 1.6 m in width. From the upper vault 10 to 11 layers are visible.

The triangular entrance to the tomb is formed with the help of slabs which each are laid successively 3–5 cm inward that below. At floor level the width is 0.60 m wide, and the height measures 0.65 m. The wall is 1.1 m thick on the north side; the wall opposite is 1.02 m in thickness. Between the stones of the flooring a splinter of a hammer made of dark stone came to light. Above the entrance the outward thrust of the wall was repaired unprofessionally but with some care. On the southern side a 0.6 m irregularly formed plinth protrudes which probably owes its existence from the levelling of the building site. It does not result from a further wall. Perhaps it is at the same height as the interior flooring. Dark "hammer stones" and their flakes lay around the tower.

#### Tomb Shi11

Position: 712393.71; 2523524.19, High Plateau, altitude 1831.36 m

Diameter of the base: 3.20 m

Diameter above: 2.05 m

Preserved height: 2.51 m

Inner wall and facade

Orientation of the entrance: 80° (east)

This tower belongs to the smaller ones, but is built of large slabs, 0.50 m in length and 10–15 cm in thickness are common. They are barely worked, and usually only a corner has been chipped off. Despite this, the masons laid the stone with few shim stones. Many slabs are covered with a layer of sinter. For this reason the impression arises of coarse lackadaisical work. With exception of the western side a plinth visible around the foot of the tomb without a rounded outer edge, as one would expect for an outer wall. The narrow gap between the inner and outer walls is filled with naturally formed stone chips. The vault of the tower is partially caved in, allowing light into the chamber. The vertical thickness of the vault measures at least 0.60 m.

The entrance is trapezoidal and tapers toward the centre from 0.53 m to 0.43 m in width. The thickness of the wall at the entrance comes to 0.83 m on the south side and 0.89 m on the north side. Between the lintel and the 0.43 m wide threshold the height measures 0.71 m. In the entry the first and second courses

of the foundation served as a flooring. During a visit in October 1996 new damage to the upper portion of the tomb was noted.

#### Tomb Shi12 (Fig. 47)

Position: 712417.99; 2523475.72, High Plateau, altitude 1828.87 m

Diameter of the base: 4.31 m

Diameter above: 2.40 m (originally at this height)

Preserved height: 3.78 m

Inner wall and facade

Orientation of the entrance: 95° (east)

Finds: south of the tomb a large grey pounding stone

This tomb is positioned on the edge of a cliff where stone slabs are readily available. It is largely intact including the vault despite the fact that the latter is filled with loose stones. The coarse stones are uncarefully laid and their outer faces not bevelled. One of the slabs has a straight exterior face measuring 0.72 m in length. The vertical thickness of the stones varies, and does not take into consideration the thickness of the courses. Also slabs covered with accretions were used as building material, mostly on the east side. At 2.0 m in height the outer wall inclines 0.50 m inward. On the eastern side there are some slabs built in the same way as the plinth.

At its highest preserved point the facade is 0.60 m in thickness and that of the entire wall 1.5–1.6 m. The well preserved facade covers a layer of stone debris. The northern half of the facade has collapsed. Through a hole in the interior wall the following measurements could be taken: At 0.85 m above the inner sediment the wall is 0.87 m thick. Since the base outside is approximately 1.0 m deeper, the sediment is 0.15 m thick. The distance from the interior edge of the entrance to the opposite interior wall of the chamber amounts to 1.5 m, the long dimension of the elliptical floor. The interior vault is not uniformly curved and in cross section is vaulted to a height of 0.90 m and then inclines steeply to upward for the remaining 0.7 m. The uppermost slab lies 1.6 m above the sediment. The entire structure stood originally 3.5 m in height.

The tomb has a small trapezoidal entrance with a wide now fractured lintel. It is positioned 0.77 m above the sediment in the interior. A second slab above lies at 0.86 m above the sediment. Both span the entire thickness of the wall. On the southern side of the entrance, taken from the total thickness of 1.34 m the interior wall measures 0.84 m and the outer 0.44 m. The space between the two comprises the remaining thickness. For the 1.27 m northern side the corresponding figures are 0.72 m and 0.56 m.

#### Tomb Shi13

Position: 712431.02; 2523440.33, High Plateau, 1828.72 m

Diameter of the base: 5.12 m

Diameter above: 4.60 m (originally at this height)

Preserved height: 2.36 m

Inner wall and facade

Fig. 47. Frontal view of tomb Shi12.



Orientation of the entrance: presumably east, not visible. Finds: 2 outer stones brought to the Department of Antiquities (DA 12685)

This tomb belongs to the most carefully built of the towers, but unfortunately is not well preserved. On the north-eastern side the facade is intact to a height of 2.36 m. The eastern half is preserved to 1.30 m. Up this height the chamber is filled with stone predominantly from the interior wall. It seems that the loose filling between the two walls led to an instability, and the tower collapsed. Later some of the stone was removed in order to build Shi14. The stone of the facade was carefully selected and worked. Its outer surface is badly weathered. The slabs of each layer respectively have a uniform thickness of 6–15 cm. The filling between the walls consists of chips from the working of the facade stones. At the highest preserved point the wall measures 0.95–1.05 m in thickness. The debris stands to a height of 1.30 m where the wall is 1.20 m thick, and here the interior measures 2.73 m in diameter. From the highest point on the interior measuring down 1.40 m, the wall corbels inwardly 0.45 m. The exterior incline amounts to 0.30 m at 2.0 m height.

#### Tomb Shi14

Position: 712437.33; 2524430.18, High Plateau, 1828.15 m  
Diameter of the base: 3.77 m  
Diameter above: 3.40 m

Preserved height: 1.27 m  
Single-wall construction  
Orientation of the entrance: no entrance

This cylindrical tomb, approximately 2.0 m from the edge of a steep cliff, and resting on a flat limestone bank, is not a tower tomb. It has the shape of a low cylinder. One can look into the structure. It is well preserved, but there is no entrance. The exterior wall is loosely constructed and laid by means of blocks 10 or more centimetres thick and usually 20–25 cm broad which are relatively homogeneous in size. The stones of the wall are laid in an irregular fashion. On the east side 11 and on the tallest side 18 layers can be counted. Since the vault has collapsed it is possible to measure the oval chamber which is 1.60 x 1.80 m in breadth. It is not very high and on the floor wind-born loess has accumulated. The thickness of the vaulted wall measures 0.6–0.8 m. The 1.2–1.4 m high structure closes horizontally at its uppermost part. Originally it stood 1.5 m high.

#### Structure Shi14a

Position: High Plateau, altitude c. 1828.0 m  
Preserved height: 0.70 m  
Orientation of the entrance: 80° (east)

This 2.5 m long structure lies 80.0 m east of Shi14, and is preserved as a flat, long pile of stones with a chamber covered by slabs. Like many of the others the entrance lies in the east.

## Tomb Shi15

Position: 712373.81; 2523712.62, High Plateau, altitude 1824.13 m

Diameter of the base: 3.87 m

Diameter above: 2.40 m

Preserved height: 1.68 m

Inner wall and facade

Orientation of the entrance: not visible

This tomb belongs to those with an interior wall and facade. Between the two walls a filling is comprised of small stones from the surrounding weathered rock. No anthropogenic stone chips were found. The coarse building material occurs abundantly in the immediate area. If at all worked the edges of the stones are vertically bevelled. On its west side the tomb is best preserved, and stand 17 layers high. On the opposite side the condition is poor. In the stone from the collapsed wall in the east a lacuna is visible where the entrance is believed to have been located. Since the wall is surrounded by stone debris its original height can only be estimated. At the highest preserved point the western wall projects to 1.60 m above the remains of a 0.50 m high outer wall. This wall measures 0.67 m in thickness. The corbelled vault increases coming to 1.0 m in thickness. The preserved width of the uppermost part of the tomb (inner wall only) measures 2.4 m in diameter.

## Tomb Shi16

Position: 712369.09; 2523698.59, High Plateau, altitude 1826.19 m

Diameter of the base: 3.80 m

Diameter above: 2.40 m (inner shell)

Preserved height: 1.56 m

Single-wall construction

Orientation of the entrance: not visible

On the south side the wall stands to a height of only 0.8 m and on the north side to 1.35 m. This tomb corresponds exactly to Shi14. That is it is formed as a stone circle with a corbel vault and without a recognisable entrance. The lowermost layers are intentionally thick, and irregularly laid stone slabs. At a height of 0.9 m the overhanging wall measures 1.1 m. At 1.2 m height in the north the wall is 1.1 m in thickness. In the middle of the tomb lay long slabs in a disorderly heap from the collapsed vault. The chamber wall is circular in plan.

## Tomb Shi17 (Fig. 5)

Position: 711742.13; 2524898.04, High Plateau, altitude 1824.08 m

Diameter of the base: 4.65 m

Diameter above: 3.45 m

Preserved height: 2.89 m

Single-wall construction

Orientation of the entrance: 340° (north-north-west)

This tomb lies a short distance away from the others, directly beside the track which traverses the area. It is largely intact or at least completely reconstructable, although the facade shows signs of being outwardly thrust. The chamber is vaulted, intact, and measures 1.7 m in height. The interior is therefore dark.

The isosceles shaped entrance at its base measures 0.5 m in breadth and 0.8 m in height. On the floor of the entrance three large slabs lie next to each other which presumably remain from the door of the chamber. On the west side the entrance wall is 0.9 m and on the east side 0.8 m thick. In front of this entrance lies an accumulation of stones, presumably the flooring. No plinth is visible.

The east side the tomb has collapsed. The three other sides are in a better condition, even if some of the stones are missing. Taken from the floor of the tomb, the interior height measures 2.66 m. In the north-eastern corner of the entrance lie stones which were dressed. A few more occur in the outer wall. But most of the stones are unworked. The partly insufficient static reveals itself in the outward swelling of the outer stone casing, particularly on the west side.

## Tomb Shi18

Position: 711530.83; 2525415.41, North Ridge, altitude 1749.56 m

Diameter of the base: 3.31 m

Diameter above: < 3.20 m at 1.30 m height

Preserved height: 1.86 m

Single-wall construction

Orientation of the entrance: not visible

This tomb lies above a 0.8 m high embankment on a sloping bank formed of limestone. While on the west side is preserved to a height of over 1.8 m, to the east only the lowest course remains, the rest having been quarried in order to build Shi18a. No entrance is visible. The incline of the preserved western portion is not steep. Originally the height must have been between 0.5 and 0.7 m more than its present condition which results in a presumed original height of 2.5 m.

The wall consists of a single shell built of the local stone. The stones on the "viewing side" are hardly worked. In the east the remaining wall measures 0.7 m in thickness. The remaining superstructure, owing to the corbelling the wall has a thickness of 1.2 m. At 1.1 m height the wall is 0.9 m thick.

## Structure Shi18a (Fig. 8)

Position: North Ridge, altitude c. 1749 m

Preserved height: c. 1.0 m

Single stone walls

Orientation of the entrance: 60° (north-east)

This structure lies 0.60 m southeast of Shi18. It is poorly built from the stone occurring on the eastern-most side of the latter tomb. Positioned on the bed-rock, this structure differs completely in its manner of construction from the others and resembles Shi14a. In plan it has a rectangular chamber. Horizontally laid stone slabs form two more or less vertical long walls which bear large longish slabs as a roofing. These slabs were covered by further slabs. Both narrow ends are completely open. This structure measures 3.0 m in length, 0.5–0.6 m in breadth, and is preserved to a height of 1.0 m. The entrance was located probably in the north-east, where two slabs laid on their edges define an access. This structure measures at the base only 0.30 m and above 0.22 m breadth. In the north and south remains of a stone flooring are in evidence.

#### Tomb Shi19 (Fig. 48)

Position: 711480.09; 2525487.16, North Ridge, altitude 1756.84 m

Diameter of the base: 3.60 m

Preserved height: 2.32 m

Single-wall construction

Orientation of the entrance: 100° (east)

This tomb is located 5.0 m away from from a steep cliff. It is built of stones so coarse that they do not form flat courses. On the south and southeast sides the wall is convex. Many of the stone slabs are covered a layer of sinter. They measure 2.0–11.0 cm in thickness, and bear a sinter which occurred prior to the building. Few of the stones are worked in any way. The western and northern portions of the tomb have collapsed, filling the tomb completely. At the maximum height preserved the wall measures 1.08 m in thickness. At this height the thickening of the corbel vault is manifest.

The rectangular entrance lintel is formed by a 0.90 m long stone slab. It measures at the base 0.56 m and in the middle 0.50 m in height. The entrance lies directly to the east. The thickness of the wall at the entrance at both sides is 0.74 m.

#### Tomb Shi20

Position: 711432.73; 2525557.22, North Ridge, altitude 1772.55 m

Diameter of the base: 3.70 m

Preserved height: 2.50 m

Single-wall construction

Orientation of the entrance: 120° (south-east)

This tomb is preserved on all sides, but the vault has collapsed partly. The building material consists of stone slabs covered with a layer of sinter. One stone above the entrance was roughly dressed, and one corner was broken away. The space between the double face wall is filled with small broken stones of local origin.



Fig. 48. Frontal view of tomb Shi19.

The entrance is of irregular form. Probably it was planned to be trapezoidal although no lintel is in evidence. At the floor the entrance measures 0.50 m breadth and 0.82 m in height. On the south side 0.60–0.65 m and on the north side c. 0.70 m wall thickness were measured. Originally this tomb stood to a height of c. 2.70 m.

#### Tomb Shi21 (Fig. 49)

Position: 711271.44; 2525682.36, North Ridge, altitude 1746.35 m

Diameter of the base: 5.46 m

Diameter above: 2.90 m (inner walls)

Preserved height: 4.51 m

Inner wall and facade

Orientation of the entrance: perhaps 120° (south-east)

In terms of its height and the double wall construction this impressive tomb differs from the others on the North Ridge. Since the eastern side has collapsed, the entrance is probably buried here. The outer wall is only 0.50 m thick and built in such a way that where the stones do not reach this size, the cavity is filled with small stones. The stone slabs from 3.0–12.0 cm thickness are rarely covered with sinter and are unworked.

On the southern and north-eastern sides the outer wall is preserved to a height of 3 m. In the north-west,





Fig. 49. Tomb Shi21 showing the double wall construction.

however, it attains a height of only 2.70 m. The interior wall is preserved to its highest point in the east and falls steeply to the west. The presumed original height was c. 5.00 m.

Approximately 7.00 m from the presumed entrance grey and reddened stones indicate that a fire once burned there.

#### Tomb Shi22

Position: 711256.58; 2525692.45, North Ridge, altitude 1745.63 m

Diameter of the base: 5.68 m

Diameter above: 4.20 m

Preserved height: 2.53 m

Single-wall construction

Orientation of the entrance: south-western or north-eastern side

Finds: pounding stones

This tomb has collapsed to a pile of stones measuring some 2.2 m in height. Only the eastern side was partly intact. In the south the debris falls nearly directly over the adjacent precipice. Also in the north-east the stones lie unordered. On the south side the wall measures 2.0 m in height and 0.7 m in thickness. To the west, owing to the corbelled vault, the wall reaches a thickness of 0.90 m. The space between the inner and outer wall faces is filled with stone chips. Some of the splinters show clear traces of being the débitage from the facing stones. This use of the mason's debris cannot be found in the immediate area of the tombs. On

the other hand, the pounding stones used for this operation occasionally are identifiable.

The entrance must lie beneath the debris on the south-western or north-eastern side. The profile of the outer wall distinguishes itself from the otherwise more or less straight contours in that it tapers toward the top in an igloo-fashion. The slabs from which the tomb was built measure 15 cm in thickness and are exceptionally thick. The shims and thin slabs are particularly numerous relative to the other tombs.

#### Tomb Shi23 (Fig. 50–52)

Position: 710919.60; 2524513.47, High Plateau, altitude 1759.55 m

Diameter of the base: 4.72–4.92 m

Preserved height: c. 0.90 m

Inner wall and facade

Orientation of the entrance: 90° (east)

Finds: unidentified small bone fragments (DA 12705), charcoal (DA 12706)

5.0 m east of Shi1, this tomb stands like the others directly on massive rock, the same as that from which the tomb is built. The inner and outer walls were partly dismantled. Prior to the beginning of the excavation the tomb entrance appeared to be blocked with stone slabs. The entrance is located in the east. The foot of the tomb lay beneath a layer of sediment of 0.2 m in thickness. The inner wall is preserved somewhat higher than the outer one. The burial chamber was filled with the debris of the vault to a height of 0.4 m below the highest preserved point of

Fig. 50. Tomb Shi23 during excavation.

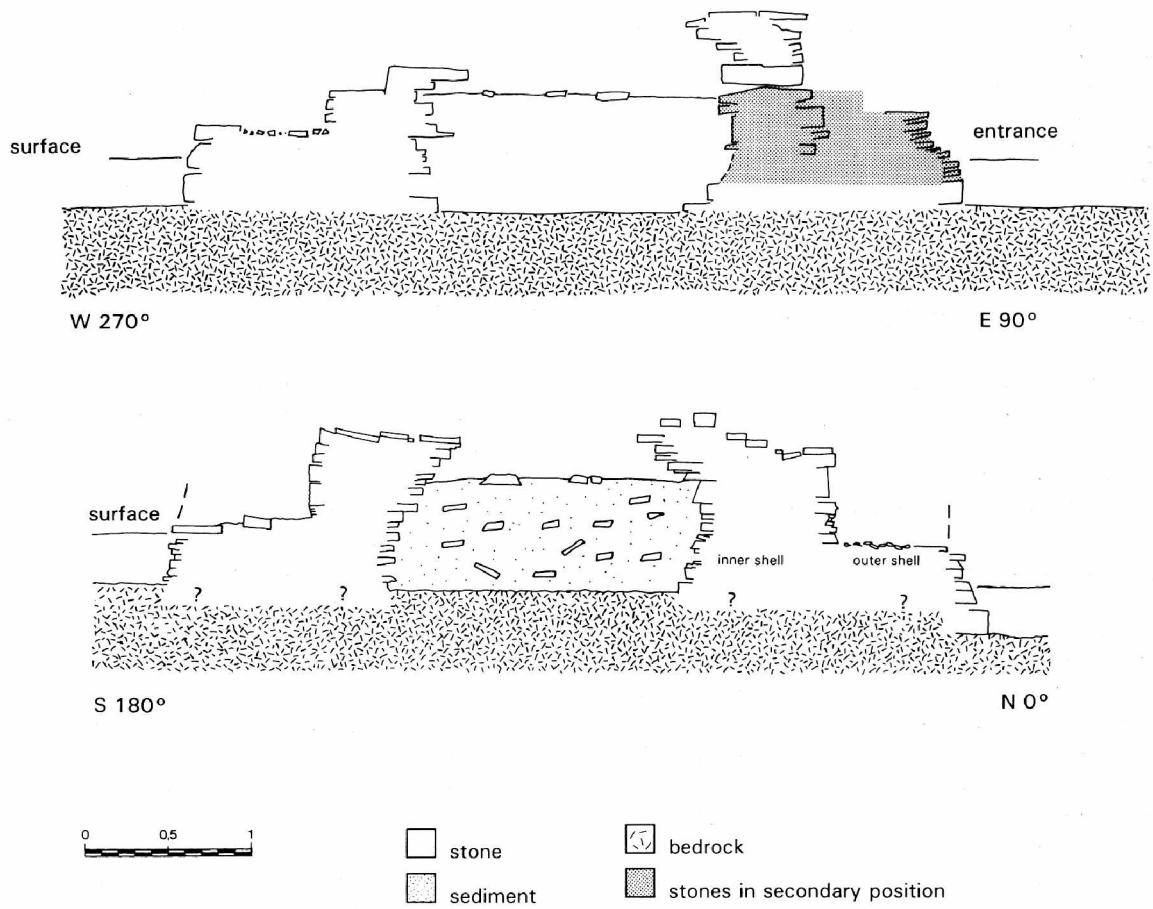


Fig. 51. Cross sections of tomb Shi23.



Fig. 52. Clearing of the blocked entrance of the interior of tomb Shi23.

the wall. The inner wall stood higher than the outer one.

The facing stones are rough and little worked. They are thus irregular in their form and size, measuring on the average 60 x 30 cm breadth. The inner wall consists of stones of the same form and size as the facade. They are irregularly laid. Between the outer and inner walls small stone splinters served as fill. From the interior the entrance was visible as a vertically positioned rectangle. In its upper portion the stones lay in secondary slanting position. The entrance appears to have been walled up following having been trespassed. The floor of the chamber is of sufficient dimensions to accommodate two bodies.

The floor and the area surrounding the tomb were cleared. The only finds which came to light were splinters of bone in the interior of the entrance.

#### Tomb Shi24

Position: 708273.13; 2525801.93, High Plateau, altitude 1768.57 m

Diameter of the base: 6.38 m

Preserved height: 2.16 m

Two interior walls and facade

Orientation of the entrance: not visible

Finds: Potsherds of Lizq/Rumaylah type (DA 12684), pounding stones

This tower lies isolated to the north-west of the others, in the vicinity of the track on the upper escarpment. It is the first that one views upon driving up to the site. Beside it stands a shelter for goats built of stone from the tomb.

This tomb is built of large unworked blocks, since here the stone slabs do not occur. The material of

which the tomb is built occurs naturally at the site. The shape of the stones has little influence on the ultimate shape of the structure, and both roundish and oval stones occur. But whereas the two inner walls were built of any locally available stone, the facade consists of more consistently flat slabs. Unfortunately it is only visible in one place where it measures 0.6 m thickness. The stones of the inner wall of the tomb are nearly 0.2 m thick. The tomb is partially covered with a large amount of stone debris. Above this 14–18 courses of stone are visible. The facade has been dismantled so that the original height must be calculated from that of the debris. The tomb projects 1.5 m above the level of the fallen stone, which measures 0.7 m in height. In the south some of the stones of the inner wall recently have been relaid. Variations in the thickness of the outer wall from 0.8 to 0.9 m result from the poor building material used. The inner wall is markedly inclined. The entrance to the tomb lies hidden beneath the debris. The corbelled vault is nearly intact, and only a small area of 0.7 m (south-western/north-east) x 0.40 m (west/east) has collapsed and therefore is open. The middle wall-shell is in the north 0.6 to 0.8 m in width. In the south the innermost wall, in its present state of preservation, measures 0.7 m, the middle wall 0.6–0.7 m, and the plinth of the outer wall 0.8–0.9 m. The entire burial chamber is filled with debris. The three walls indicate a tomb of Hafit type. Thus Shi24 belongs to the series of Hafit tombs ascending from the Wādī Khabbah (Sha4–Sha7, 600 m), to Maqt1 (980 m), Maqt2 (1600 m), and Maqt3 (1650 m). Shi24 is more similar in its type to these tombs than to the tower tombs. Nevertheless, it was the first to occupy the High Plateau.

To the north and north-east of the tomb tiny Early Iron Age pottery sherds were found, especially 11 m

to the north. Also to the north pounding stones (no DA no.) came to light.

#### Tomb Shi25

Position: 711372.04; 2524724.83, High Plateau, altitude 1728.67 m

Diameter of the base: 5.14 m

Preserved height: 2.05 m

Inner wall and facade

Orientation of the entrance: 90° (east)

Finds: 2 tiny Lizq/Rumaylah potsherds (DA 12684)

This tomb rests above and on the edge of a narrow mountain ledge which measures 0.6 m in width. Evident is a link between the material used for the construction and the natural material locally available. Since the inner wall of the tomb is destroyed and no exact measurements are possible. The entrance is on the east side. Its southern edge measures 1.3 m in thickness, but opposite it the thickness is not clear.

The trapezoidal entrance is open 0.56 m in height but since the floor is filled with stone debris, the threshold lies beneath this level. In the interior the entrance measures 0.7 m in breadth and 0.5 m in height. A large slab forms the lintel, which measures 0.25 m in width. In the west, the tower reaches its highest point with the outer wall. To the north this wall is preserved to a low level, while in the south it is not recognisable and cannot be distinguished from the inner one. To the north the outer wall is 0.70 m thick, and the inner one measures more than 0.8 m. In the south the facade swells outwardly.

East of this tomb the two potsherds were found. Within a few metres lay ash from a fire place.

#### Tomb Shi26

Position: 711289.83; 2524605.45, High Plateau, altitude 1737.38 m

Diameter of the base: 3.73 m

Diameter of above: 2.40 m

Preserved height: 2.83 m

Single-wall construction

Orientation of the entrance: 105° (east)

Finds: Two potsherds of Lizq/Rumaylah type, pounding stones (no DA nos.)

This nearly intact tower stands directly on the side of the track. In several places the facade stones are missing. The entrance was formed by means of a heavy lintel. Presumably to hinder the goats from entering, the entrance was filled secondarily with stone. Before the entrance a simple pavement is visible which hardly can be taken as the remains of an outer wall of the structure. The stone slabs used to build the tomb are available in the immediate vicinity. The upper portion of the tomb is nearly completely intact. Only a small opening in the south-western wall allows a look into the interior. Inside 2.0 m is open from

the roof to the stone debris at the bottom. The corbelled vault steps strongly inward. To prevent goats from falling into the tower, the oculus was filled with stone. Originally this tomb may have stood as high as 3.3 m.

The door lintel measures 0.87 m in breadth, and the trapezoidal entrance is in its width 0.67 m below and 0.46 m above. The entrance is 0.53 m in height.

In the loose fallen stones on the south-western side a pottery sherd with new breaks came to light. On the western side where the bulldozer dug further sherds came to light. Pounding stones of a material not locally available also were found. To the north-west a campfire of uncertain date reddened the earth.

#### Tomb Shi27

Position: 710492.79; 2526096.10, North Ridge, altitude 1687.58 m

Diameter of the base: 3.45 m

Diameter above: 2.50–2.60 m

Preserved height: 2.36 m

Single-wall construction

Orientation of the entrance: 80° (east)

Finds: potsherd near the tomb (DA 12684)

This tomb is located on the sloping edge of a small cliff away from the main groups of tombs. In order to make room for the tomb it was necessary to terrace this surface in the south 0.5 m deeper. Thus the entire height amounts to 2.7 m. The building material is of a very coarse size and form. On the western side 19 courses were tallied. Owing to the corbelling, the upper portion of the wall measured 1.0 m in thickness. The vault of the tomb has collapsed, and an oculus of 0.4 x 0.7 m has been formed in this way. Deep and long vertical fissures endanger the structure.

The entrance is trapezoidal in form, and is paved. Its width measures 0.75 m below and 0.45 above. Its height comes to 0.73 m. The lintel stone is only 0.60 m wide. At the entrance the wall thickness amounts on the south side to 0.66 m and to the north 0.62 m. The entrance is located on the east side. As the case with all of the nearly closed tombs the interior is darkened owing to the growth of algae.

Approximately 2.5 m west of the tomb alongside the cliff a recent tomb was formed by a pile of stones.

#### Tomb Shi28 (Fig. 53)

Position: 710794.87; 2523971.84, Lower Plateau, altitude 1686.24 m

Diameter of the base: 3.98 m

Preserved height: 2.0 m

Single-wall construction

Orientation of the entrance: 120° (south-east)

This tomb stands on the terrace below Shi1 directly to the south. The upper edge of the truncated cone is preserved to a lesser height on the western side. Here the wall thickness measures 1.05 m.



Fig. 53. Frontal view of Shi28.

To the north-west 0.5 m higher it measures only 0.9 m. On the east side only the outer wall is preserved to this height. At the entrance it still stands 2.0 m high. At the height of the debris in the interior of the tomb the east/west diameter measures 2.0 m and the north/south 1.8 m. The inner entrance lintel is visible.

The rectangular opening of 0.47 m breadth has a lintel which measures 0.82 m breadth. Taken from the sediment which covers the floor to the lintel the distance measures 0.56 m. The slightly swollen incline of the straight outer wall from the vertical amounts to 0.35 m at 1.80 m height. In the entrance the south wall measures 0.86 m in thickness and the north wall 0.83 m. The stone debris fills the entire chamber. Sintered slabs served partly as building material.

#### Tomb Shi29<sup>46</sup>

Position: 710988.52; 2523928.14, Lower Plateau, altitude 1698.07 m

Diameter of the base: 4.44 m

Diameter above: 3.20 m

Preserved height: 1.20 m

Inner wall and facade

Orientation of the entrance: not visible

The tomb stands on the landscape terrace below Shi1. On the north side the inner and outer walls are clearly visible. The facade measures 0.78 m in thickness, but on the south side only 0.55 m. On the south-western side, where a levelling course was necessary owing to the unevenness of the terrain, the facade stands to a height of 1.20 m. On the western to the

southern to the south-eastern sides the preservation is generally good. But from the west to north to the south-eastern side the wall is badly broken, and surrounded by a heap of fallen stone. Here the basic form is difficult to recognize. In the depressed centre grows a bush. Stone slabs with sinter also were used as building stone.

#### Tomb Shi30

Position: 710943.86; 2523834.54, Lower Plateau, altitude 1687.75 m

Diameter of the base: 2.84 m

Preserved height: 0.93 m

Orientation of the entrance: not visible

This cairn lies 100 m south of Shi29. It is coarsely built and does not belong to the series of tower tombs. No entrance is visible. The building stands 1.0 m above the immediately surrounding area. The north-west side is most badly damaged, and here a good deal of fallen stone lies. The tomb seems to be made of more or less horizontally laid stones.

<sup>46</sup> In passing it may be noted that as the crow flies in a line between Shi1 and Shi 29 250 m from the latter a flint napping site was found. The majority of the stone is unworked but also some finished artefacts (blade fragments) occurred. Locally available reddish flint was used.

## Tomb Shi31

Position: 711592.04; 2523361.58, isolated on the Lower Plateau, altitude 1660.0 m  
 Diameter of the base: 5.65 m  
 Diameter above: 4.20 m  
 Preserved height: 2.94 m  
 Inner wall and facade  
 Orientation of the entrance: not visible

The tombs Shi31 and Shi32 lie directly on the edge of a cliff between the tombs on the upper plateau around Shi1 and the other tombs in the 30's sequence. In spite of their relatively good preservation no entrance is recognisable. From the south Shi31 appears as a relatively regularly truncated cone with a vertical deep fissure in the outer facing. Particularly damaged is the southern side. Measured from the top, the vault has collapsed to a depth of 1.0 m. The thickness of the facade measures 0.70 m, and that of the inner wall 0.75 m. Between the inner and outer facing a brown stone rubble occurs.

## Tomb Shi32

Position: 711600.06; 2523352.33, isolated on the Lower Plateau, altitude 1660 m  
 Diameter of the base: 5.23 m  
 Diameter above: 4.60 m  
 Preserved height: 2.60 m  
 Inner wall and facade  
 Orientation of the entrance: not visible  
 Finds: pounding stones

This tomb resembles Shi31 in its appearance, is also preserved to a respectable height, and has no visible entrance. Like Shi31 the vault has collapsed. The stone debris stands to a height of about 1.0 m below the preserved wall. The north-east side has become a large heap of fallen stone. On the western side a rarity occurs. One of the dark brown stones is used as a building stone; a second one lies in the debris. 100 m north of the tomb an outcropping of this stone is to be found, and it is readily available. Between both tombs lie the fragments of a pounding stone<sup>47</sup>.

## Tomb Shi33

Position: 712080.97; 2522936.25, Lower Plateau, altitude 1655.35 m  
 Diameter of the base: 6.24 m  
 Diameter above: 5.10 m  
 Preserved height: 2.78 m  
 Inner wall and facade  
 Orientation of the entrance: not visible

This mighty tomb is located on the edge of a cliff. The steeply inclined facade is slightly convex. A hole on the north side is secondary. On the north-west to the north-east sides a good deal of stone debris lies scat-

tered about. The double wall construction is visible particularly on the west side. The outer wall measures on the west side 1.20 m, the inner one only 0.70 m thickness. On the south-western side the facade is badly damaged, but on the east and south-western sides it is better preserved. The stones of the interior show little inward curvature which indicates that the tomb was planned to stand much higher than it does now.

## Structure Shi33a

Position: Lower Plateau, altitude c. 1655.0 m  
 Orientation of the entrance: south-western

15 m east of Shi33 a further "wolf trap" is located. As usual the entrance stones also stand here on edge.

## Tomb Shi34

Position: 712216.54; 2522869.62, Lower Plateau, altitude 1660 m  
 Diameter of the base: 3.36 m  
 Diameter above: 2.76 m  
 Preserved height: 1.06 m  
 Inner wall and facade  
 Orientation of the entrance: none

This building in the shape of a truncated cone is built of unworked stone slabs from 16 to 18 cm in thickness. At a height of 1.0 m the wall draws inwardly.

## Tomb Shi35

Position: 712182.21; 2523022.12, Lower Plateau, altitude 1674.01 m  
 Diameter of the base: 7.00 m  
 Diameter above: 4.70 (originally at this height)  
 Preserved height: 2.72 m  
 Inner wall and facade  
 Orientation of the entrance: not visible

This tomb lies on a terrace higher in elevation than Shi33 and Shi34. Seen from the east it appears as a cairn of large dimensions. Only on the south-western side in an area of 1 square metre the coarsely set stone wall is recognisable. On this part of the tomb the ring-like construction of the wall is visible. In the east the upper wall is preserved to the same height. Here the outer

<sup>47</sup> 300 m north of the tomb is located a circle of stones of c. 3.0 m in diameter which is certainly all that remains of an old grave. It stands to a height of 0.40 m. To its eastern side is a fireplace. - Returning to Shi31, a painted Lizq/Rumaylah sherd came to light above the Wadi Hamleh. At the end of the wadi lies a small shelter beneath trees with a terrace. As building material for the "houses" a few large boulders were set up vertically and the space between them filled with small stones. The limestone there shows white coral dots.



Fig. 54. Upper courses of Shi38. Facade (left, below scale) and inner wall visible. Scale 0.5 m.

wall measures 1.08 m and the inner one 1.0 m in thickness. The western portion of the wall stands lower than the others. The inward curvature of the burial chamber is very gradual, to the extent that it can be seen owing to the filling with fallen stone. In its preserved height the chamber measures 1.44 m north/south and 1.25 m east/west in width.

#### Tomb Shi36

Position, 712034.51; 2522361.05, Lower Plateau, altitude 1588.52 m

Diameter of the base: 4.11 m

Diameter above: c. 4.5 m

Preserved height: 0.69 m

Inner wall and facade

Orientation of the entrance: not visible

This tomb is destroyed. What remains of it is a large heap of stone at the edge of a very deep wādī.

#### Tomb Shi37

Position: 712242.60; 2522527.06, Lower Plateau, altitude 1584.48 m

Diameter of the base: 5.45 m

Diameter above: 4.65 m

Preserved height: 2.48 m

Inner wall and facade

Orientation of the entrance: not visible

The tomb stands on a terrace lower in altitude than that of the 50's tombs. It has the form of a slightly vaulted cone with a considerable diameter. On the east side lies a pile of fallen stone. There a wall was

built recently presumably a hiding place for hunting. On the south and west sides the remains of a plinth are visible. The north side is built of coarsely formed stone slabs up to 0.6 m in length and over 0.2 m in thickness. Some of the slabs seen from above show a slight curvature of the outer surface. 25 courses of stone are preserved. In the western half of the interior the fallen stone stands higher than the intact wall. The facade measures on its southern face 0.8 m, and the inner wall on the west side 0.7 m in thickness.

#### Tomb Shi38 (Fig. 54)

Position: 712315.78; 2522485.69, Lower Plateau, altitude 1588.08 m

Diameter of the base: 3.79 m

Diameter above: 3.50 m

Preserved height: 0.95 m

Inner wall and facade

Orientation of the entrance: not visible

The tomb is situated higher than the previous ones and is preserved to a height of only 1.0 m. An inner and outer walls are visible. It seems to have been one of the smaller tombs. At a height of 0.80 m the outer wall measures 0.56 m on the south side, and the inner ring 0.60 m. The stones are not worked. The oculus is 0.70 m in diameter.

#### Tomb Shi39

Position: 712361.91; 2522440.42, Lower Plateau, altitude 1582.27 m

Diameter of the base: 3.61 m

Diameter above: 3.20 m

Fig. 55. Tomb Shi41. Scale  
0.5 m.



Preserved height: 1.40 m  
Single-wall construction  
Orientation of the entrance: not visible

The tomb lies on the same steep cliff as Shi38. It is especially damaged on its east side. But the west side is better preserved. On the south and the west side the total thickness of the wall measures 0.80 m which is insufficient for a double-wall construction. 13 courses of the outer wall measuring 1 m in height are visible.

#### Tomb Shi40

Position: 711333.52; 2525163.57, High Plateau, altitude 1755.55 m

Diameter of the base: 3.62 m

Preserved height: 1.81 m

Single-wall construction

Orientation of the entrance: 90° (east)

This slightly convex conical tomb is preserved on its western side to a height of 21 courses, that is 1.80 m. The wall falls then to its deepest elevation just opposite to the entrance. To the north and south the wall is dilapidated and its fallen remains surround the tomb. None of the stones show any trace of working. It seems that the vault collapsed a short time ago, and an oculus measuring 1.0 x 0.80 m (west/east) arose. The wall thickens toward the top as a result of the corbelling.

The entrance is trapezoidal in form, the lintel measures 0.85 in length. In height it measures 0.56 m; at its base 0.60 m and above 0.42 m in width. It is positioned to face the east. Originally the tomb may have been as high as 4.40 m.

#### Tomb Shi41 (Fig. 55)

Position: 712756.01; 2522414.68, Lower Plateau, altitude 1620 m

Diameter of the base: 5.24 m

Preserved height: 1.88 m

Inner wall and facade

This tomb lies on the edge of a small plateau near an enormous stone. The descent from the track at 1800 m altitude through a wādī is an hour's walk. The tomb appears as a relatively low heap of stones with some layers of well preserved stones. This tomb was of a better quality than most of the others.

The north and north-west sides are covered with fallen stone. Only on the south and south-western sides six courses are made of well-fashioned slabs emerge from the c. 0.60 m high debris surrounding the tomb. More debris lies on the east side. Unusual are the stones stacked up in the centre of the tomb. Many of the building stones are so badly weathered that their instability lead perhaps to the collapse of the tomb. The inner wall measures 0.30 m in thickness, the outer one 0.60 m and more.

#### Tomb Shi42

Position: 712727.38; 2522671.36, Lower Plateau, altitude 1621.27 m

Diameter of the base: 3.68 m

Preserved height: 1.28 m

This ruin lies two terraces higher than Shi41. The tomb was not investigated.



## Tomb Shi43

Position: 712685.16; 2522691.98, Lower Plateau, altitude 1630.34 m

Diameter of the base: 4.11 m

Preserved height: 1.62 m

This tomb was not investigated.

## Tomb Shi44

Position: 712447.08; 2522760.98, Lower Plateau, H. 1623.63 m

Diameter of the base: 4.64 m

Diameter above: 3.0 m

Preserved height: 1.94 m

Inner wall and facade

Orientation of the entrance: not visible

This conical tomb is preserved to a height of nearly 2.0 m. An oculus in the vault is as large as a dinner plate. Thus it is clear that the vault need only have been a little higher than preserved today to be complete: The chamber was c. 0.50 m higher. The chamber is filled with stone. Fallen debris was scattered particularly from the north and the west to the southeast. Only in the north-east is the wall intact. The facade stands on the south side three courses high.

## Tomb Shi45

Position: 712344.75; 2522812.47, Lower Plateau, altitude 1655 m

Diameter of the base: 5.37 m

Diameter above: 3.90 m

Preserved height: 2.72 m

Inner wall and facade

Orientation of the entrance: not visible

This tomb is formed like a truncated cone and more inclined than usual, especially on the south side. At 2.00 m height the inclination measures 0.60 m. To the east fallen stones lie in a dishevelled manner. From the north-west to the east the outer wall is 0.65–0.70 m in thickness. A plinth is visible on the south and west sides. The upper part of the tomb is broken in to a depth of 0.80 m. Owing to the corbelling the wall is relatively thick in its upper courses. The stones are not dressed.

## Tomb Shi46

Position: Lower Plateau, altitude c. 1650 m

Diameter of the base: c. 5.4 m

Diameter above: c. 4.5 m

Preserved height: c. 0.9 m

Single-wall construction

Orientation of the entrance: not visible

This ruined tower lies approximately south-east of Shi45. Preserved is a low cairn of less than 1.0 m height, the sides of which corbel inward and the upper courses of which are flat. The upper part of the corbel vault is destroyed, the chamber filled with stone. The structure is very coarsely built of unevenly laid stones.

## Tomb Shi47

Position: 712367.37; 2522535.37, Lower Plateau, altitude 1602.69 m

Diameter of the base: 4.59 m

Diameter above: 2.70 m

Preserved height: 1.11 m

Single-wall construction

Orientation of the entrance: not visible

This ruined truncated cone is preserved to a height of 1.10 m. Stone debris has accumulated particularly on the east side. The wall is strongly slanted. Large rough blocks served as building material. The north-south diameter measures 2.70 m, for which reason the existence originally of an outer wall is unlikely. In any case a plinth is visible on the west side.

## Tomb Shi48

Position: 712361.68; 2522545.05, Lower Plateau, altitude 1603.04 m

Diameter of the base: 6.68 m

Diameter above: 4.50 m

Preserved height: 3.37 m

Inner wall and facade

Orientation of the entrance: presumably east

This tomb belongs to the better preserved towers with a double-wall construction. The facade has collapsed on the east side where the entrance is expected. On the other sides in more than 20 courses it is preserved to a considerable height, particularly in the south. The thickness of this wall varies between 1.0 m in the west to 0.80 m in the south. The uppermost part of the tomb is filled to the level of the wall. Little fill material occurs between the inner and outer walls. At 2.00 m height the inclination amounts to 0.45 m.

## Structure Shi48a

Structure Shi48a, 2.0 m to the north of Shi48, a "wolf trap", was constructed from the debris of the tomb.

## Tomb Shi49 (Fig. 56)

Position: 712447.71; 2522668.08, Lower Plateau, 1630.00 m

Diameter of the base: 5.66 m

Diameter above: 3.20 x 2.60 m

Preserved height: 3.00 m

Inner wall and facade

Orientation of the entrance: 90° (east)



Fig. 56. Tomb Shi49 with Shi51 in the background.

This tomb stands on a terrace 10 m higher than that of the 50s series. It is preserved to a height of 3.0 m. The facade has been removed, and is preserved to a height of 0.40 m.

The rectangular entrance in the east has a lintel 1.12 m in length. The height of the opening is 0.52 m, its breadth 0.44 m. The foundation stone of the entrance on the north side measures 0.9 m, and is wider than the thickness of the wall, which comprises 0.76 m. The wall on the south side measures only 0.64 m in thickness. The interior of the vault is 2.57 m high and closed. The diameter of the burial chamber measures 2.15 m from the west to east and 2.58 m from north to south, the floor is covered with aeolic sediment.

#### Tomb Shi50

Position: Lower Plateau, altitude 1625 m

Preserved height: 1.0 m

Inner wall and facade

Orientation of the entrance: not visible

This tomb lies in a saddle between Shi48 and Shi49. The eastern wall stands preserved to a height of 1.15 m, a stone heap in the middle to 1.75 m. On the south, north, and especially west sides the walls are destroyed. On the north side the remains of a double wall construction are visible in 13 courses. On the north side individual stones are well-dressed and the outer surfaces are rounded. On the south side a plinth (?) can be seen.

#### Structure Shi50a

2.0 m north of the tower Shi50 lie remains of a "wolf trap" with a length of c. 2.5 m and a breadth of 1.5 m. At the entrance large stones stand upright.



Fig. 57. Shi51 represents an unusual tomb.

#### Tomb Shi51 (Fig. 57)

Position: 712430.00; 2522668.25, Lower Plateau, altitude 1635 m

Diameter of the base: 5.36 m

Diameter above: 2.65 m

Preserved height: 3.0 m

Possibly inner wall and facade

Orientation of the entrance: 90° (east)

This unique type of tomb at Shir is well preserved and has an entrance 1.90 m in height. The height of the entrance diminishes toward the interior from 1.90 to 1.50 m and then to 1.30 m. The entrance, with its thick walls accounts for a large part of the tomb. It measures 1.50 m thickness in the south and 1.60 m in the north. The floor of the entrance tapers from 0.60 m at the front to 0.36 m in the interior. The circular floor of the tomb chamber itself lies approximately 0.40 m below the fallen stone debris. It measures east/west 1.10 m and north/south 1.0 m. In the entrance a single long stone shows five impressions from hammer strokes. The distance from the debris on the floor to the uppermost preserved stone of the vault accounts for 1.25 m. The tomb is 3.0 m in height, for which more than 1.50 m vault can be assumed. Bordering the wall a plinth is visible. At one

point two slabs lay one above the other, perhaps the remains of an outer wall. Stones reach lengths up to 0.6 m. The building stone is coarsely formed and partly sintered.

#### Tomb Shi52

Position: 712421.33; 2522679.65, Lower Plateau, altitude 1650 m

Diameter of the base: 4.80 m

Diameter above: 3.15 m

Preserved height: 1.80 m

Inner wall, facade, and a plinth

Orientation of the entrance: presumably east

This tower appears as a 1.80 m high cylindrical wall posed on the edge of a cliff. Only on the north side is the structure intact. The previous entrance was located presumably on the east side where the most debris lies accumulated. Measured from north to east, the inner wall is 0.80 m thick. The fallen stone reaches a height of 1.66 m in the middle. Recognisable here are also the remains of a plinth beneath the debris.

#### Tomb Shi53

Position: 712382.86; 2522747.88, Lower Plateau, altitude 1635 m

In the immediately vicinity of Shi52 three subterranean tombs are built into the cliff. They neither are tower tombs nor do they appear to be of recent date. The wall measures 0.45 m in thickness. Perhaps belonging to the same undetermined period is a temporary shelter with an enclosure for goats under trees beneath the cliff.

#### Tomb Shi54

Position: 712211.92; 2522751.59, Lower Plateau, altitude: 1609.78 m

Diameter of the base: 6.40 m

Diameter above: 3.70 m

Preserved height: 1.27 m

Orientation of the entrance: 90° (east)

This tomb is of the same type as Shi56. It is a cairn built of carefully laid stone slabs with a roof. Its appearance is not that of the usual tower tombs.

#### Tomb Shi55

Position: 712186.28; 2522767.58, Lower Plateau, altitude 1612.46 m

Diameter of the base: 4.84 m

Preserved height: 2.04 m

Inner wall and facade

Orientation of the entrance: not recognisable

This structure is poorly preserved. On the east side the inner wall is clearly visible. The tomb has a conspicuously

Fig. 58. Tomb Shi58 stands beside a path which descends from the High to the Lower Plateau.



narrow diameter. On the east side the facade measures 0.55 m in thickness, but it reaches 0.7 m in other places. On the south side it is well preserved, but reaches its maximum height on the north-eastern side. In the middle of the ruin a 0.60 m depression is manifest. Since the walls at this height are not thickened to support a corbel vault, the height must have been originally 1.50 m higher. It originally stood c. 3.5 m high.

20 m further to east lies a low pile of stone for an unknown purpose.

#### Tomb Shi56

Position: 712058.00; 2522836.21, Lower Plateau, 1640 m  
Diameter of the base: 7.59 m  
Preserved height: 1.60 m

This tomb stands on a deeply situated terrace. It appears as a conical pile of stone which differs in its original form from the other tombs. Stone slabs form the roof slanted in the same direction as the surface of the hill. In the west a flattish heap of stone suggests the presence of an additional burial. In the cairn neither the structure nor the entrance are visible.

#### Tomb Shi57

Position: 712519.10; 2523867.05, High Plateau, altitude 1760 m  
Preserved height: 1.5 m  
Inner wall, facade, and plinth  
Orientation of the entrance: 120° (south-east)

This tomb stands alone c. 300 m north-north-east of Shi10 in a sink. For this reason in the time allotted it

could not be surveyed. This ruin is preserved to a height of 1.50 m. Two facing walls and a well-built plinth are visible. The entrance is rectangular, and the lintel is 0.65 m in breadth.

#### Tomb Shi58 (Fig. 58)

Position: between High Plateau and Lower Plateau  
Diameter: > 4.0 m  
Diameter above: 3.80 m  
Preserved height: 1.20 m  
Inner wall and facade

50 m upward from Shi42 and Shi43, this tomb is located between two small eroded fissures. It is badly damaged and the vault has caved in. In the interior stone from the exterior wall are visible. The thickness of the outer wall measures c. 0.45 m. Owing to the fallen stone, the interior wall can only be estimated to be 0.4 m. The building material of the outer wall consists of nearly rectangular limestone slabs, as used for other tombs. These stones have a thickness of 17–20 cm. Traces of stone working are not visible. The inner wall consists of the same kind of stone with the exception that the stone is thinner (0.9–0.12 m). Between these slabs small shim stones were used to even the individual courses.

The facade is lacking at certain points. On the west side 0.46 m of it are still visible, but the south-western side has completely collapsed and partly has been eroded down into the wādī. On the east side there are several lacunae. The inner wall shows a slight inward curvature. Whether this is the intention of the builders or the result of the collapse of the structure remains unknown. Traces of the entrance were not visible.

## Summary

In 1995 a brief campaign was undertaken in the Sultanate of Oman with the purpose of monitoring damage to archaeological monuments – a first step in an ongoing process, in order to preserve them. Thus the towers were mapped and catalogued. The work centred on a large group of tower tombs at Shir (Wilīyat ṣūr) within a larger area which bears the same name. Although these tombs were known amongst the local population, there was little public notice of them until the early 1990's. The tombs lie on the rounded mountain crest some 1700 m above sea level. The find area is located at the watershed between the north (Wādī Shāb and Tīwī) and the south (Wādī Ṭayīn/Khabbah). Three of the tombs were cleared of fallen stone and wind-laid sediment. There can be no doubt that they are tombs as they have neither fortifications nor stairs. On top of the mountain little grass is available for subsistence grazing. The ancient builders of the towers may have been from the area outside Shir.

Five kinds of tombs were observed: 1) simple conical towers built of rough stones, with a single wall, and a corbel vault; 2) those with an inner and outer wall, smooth facade stone, and sometimes with a double vault, one above the other; 3) those with squat vertical walls; and no entrance; 4) a beehive tower with a large triangular entrance; 5) simple cairns which seem to have a simple form. The towers are positioned in rows, at the edges of promontories. The majority of the tomb entrances face approximately east. The largest are preserved to a height of over 7 m. Best preserved is the tower Shi10 which is located at the highest point in the area.

In their form and manner of building the towers are most closely related to the so-called beehive tombs of the Hafit Period from the beginning of the 3rd millennium BC. These have a single small burial chamber and stand to a height of 3 m. The edges of the exterior wall slabs were struck on their outer edges in such a way that they became

bevelled. Hammer stones used for this dressing were collected on the site near the tombs. The stone layers even of the simpler towers were carefully positioned in order to get courses of even height. This was not ever intended in the Hafit Period. As opposed to these, the collective ossuaries of the succeeding Umm an-Nar Period (2700–2000 BC) are usually far larger, may measure up to 10 m in width, and may contain over 100 individuals. Such tombs seem to have the form of a truncated igloo, and may show figural representations in low relief on the exterior. The white facade stones are smoothed to such an extent that they are referred to as "sugar lump stones". Aside from the dressing technique of the stone most of the tower tombs at Shir resemble strongly in the double wall construction and the careful laying of the stones in courses to those tomb ruins e.g. at Bāt which contain Umm an-Nar pottery. Tombs with only a single wall, as most on the North Ridge at Shir, are also not unusual for the Umm an-Nar Period, as for example at al-Maysar. Only a few of the Shir towers show the characteristics of the Hafit tombs, and most of them belong to the Umm an-Nar tombs.

Several comparisons exist for the towers in the Sultanate. The best of these are the towers in the Wādī al-‘Ain, Ḥalbān, and near Zukait. The variety of Umm an-Nar tombs is slowly emerging. Many dilapidated "beehives" originally may have been tower tombs. The tower tombs of Shir enlarge the body of this spectrum considerably.

The finds excavated were mostly Early Iron Age potsherds from a secondary use.

The damage to the towers seems to be recent and only partly a result of weathering. It may be connected with a fear of Jinns on the part of the local population. Legend has it that the towers were built by Shayṭan named Kebir keb, a Jahil of Early Islamic times.

The towers at Shir bear some resemblance to the nawāmis in Sinai, which date to the late Chalcolithic/Early Bronze Age (3500–2500 BC). The resemblance to these and to free-standing tombs in the Yemen (for example at Makaber al-Akzam) is difficult to discuss historically, and need not be taken as evidence for interconnections.

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## تلخيص / خلاصة

### أبراج قبور ما قبل تاريخية في شير/جيلة، سلطنة عمان

أجريت عام ١٩٩٥م حملة أثرية قصيرة تمثل هدفها في بحث ودراسة الأضرار المحتملة للمعالم الأثرية في سلطنة عمان وتدوينها. ويعتبر ذلك أول خطوة بحثية لمعرفة سلامة القاعدة التحتية لتلك الأبراج وحالتها. بدأت هذه الأعمال برسم أبراج القبور الأثرية ووضع خرائط لها وتصنيفها. وخلال هذه الحملة البحثية الأثرية ركّزنا جهودنا واهتمامنا على مجموعة كبيرة من مدافن ومقابر هذه الأبراج في شير التابعة لولاية صور وسط أكبر منطقة سكانية في جيلة. ورغم أن هذه المقابر كانت معروفة لدى سكان المنطقة بقيت حتى بداية التسعينات مجهولة عن العالم الخارجي. تنتصب الأبراج الحجرية خلف قمة جبل يبلغ ارتفاعه ١٧٠٠ مترا. وتقع منطقة الأبراج هذه في ملتقى أودية تجري في اتجاهات مختلفة وذلك بين الشمال (وادي الشاب وطيبوي) والجنوب (وادي الطائيين وخبّاه). وقد تم تنظيف ثلاثة أبراج وجمع حجارته المندثرة وإخراج بقايا ما أتت به الرياح العاصفة. هذه الأبراج هي عبارة عن قبور لا تتوفر داخلها درجات تؤدي إلى القمة بالإضافة إلى أنها لا تحتوي على ركائز للتحصن. وعلى سفح هذا الجبل القاحل يمكن فقط تربية

الحيوانات. لذا ومن المحتمل أن مشيّدِي هذه الأبراج كانوا ينتمون إلى المنطقة بأكملها.

يمكن تصنيف أبراج القبور إلى خمسة أصناف: ١- أبراج بسيطة مشيدة بحجارة خشنة وحائط خارجي واحد وقبة مخروطية عالية؛ ٢- أبراج بحائط داخلي وحائط خارجي واحد مصقول وأحيانا بقبة مزدوجة؛ ٣- أبراج قصيرة بحوائط عمودية وبدون مدخل؛ ٤- أبراج على شكل أبراج خلايا النحل بمدخل ثلاثي الزوايا مرتفع؛ ٥- أبراج على شكل أكوام بسيطة من الحجارة. تنتصب وتنتشر هذه الأبراج في صفوف متباعدة على سفح الجبل الحجري. ومعظم مداخل القبور تتجه نحو الشرق. ويزيد ارتفاع أكبر برج عن ٧ أمتار وأحسن برج يحتفظ بشكله الأصلي هو البرج المسجل تحت رقم ١٠ والمنتصب في أعلى موقع.

من حيث الشكل والفن المعماري تشبه هذه الأبراج أبراج خلايا النحل التي يعود تاريخها إلى عصر حفيت من بداية الألفية الثالثة قبل الميلاد. ولهذه الأبراج مستودعا واحدا ويبلغ عرض البرج ٥ أمتار. وهي عبارة عن صفوف من قطع الحجارة الخشنة المبنية والمرصوفة فوق بعضها بصفة محكمة. واستعملت معدات القطع والكسر للحجارة من نفس الموقع. وقد تم وضع الحجارة بصورة أنها تكون أفقية. وهذه ليست خاصية من قبور وأبراج عصر حفيت. ومقابل هذه الأبراج نجد الأبراج المستديرة من عصر أم النار (٢٥٠٠ - ٢٠٠٠ ق م) يبلغ عرض البرج

الواحد منها ١٠ أمتار ويمكن أن تحتوي قبورها على بقايا موتى لحوالي ١٠٠ شخص. تشبه هذه القبور البيوت المبنية من الثلوج وكأنها مقطوعة. وعلى حجارتها البيضاء اللمعاء تظهر من حين لآخر نقوش ورسوم بأشكال مختلفة. تسمى الحجارة البيضاء اللماعة بـ "قطع السكر" نظرا الى لونها ونعومتها. وعلاوة على نعومتها هناك العديد من الأبراج في شير بنيت بحوائط داخلية وخارجية كما هو الشأن لأبراج بات التي تحتوي على خزف يعود تاريخه الى عصر أم النار. لا يعرف عصر أم النار الأبراج المبنية بحائط واحد. وفي شير نجد بعض الأبراج التي يعود تاريخها الى عصر حفيت من حيث الارتفاع والشكل والموقع. وبعض الأبراج الأخرى تشبه من حيث قطع الحجارة وكيفية استعمالها والفن المعماري أبراج عصر أم النار. تم العثور داخل الأبراج على القليل من شظايا الأواني الفخارية من أوائل العصر الحديدي.

توجد أيضا أبراج قبور مشابهة للمذكورة أعلاه في وادي العين وحلبان وبالقرب من زكيت. ويعتقد أن العديد من الأبراج المهتمة والمندثرة حجارتها كانت في الأصل أبراج قبور. وتذكر أبراج القبور في شير بالنوامس في سيناء التي يعود تاريخها الى العصر النحاسي/بداية العصر البرونزي (٣٥٠٠ - ٢٥٠٠ ق م). ولا يمكن تفسير ذلك التشابه بينها وبين هذه النوامس وتلك القبور المفتوحة في اليمن (مثل مكابر الأقزام). لا يمكن بسهولة تحديد العلاقة بينها خاصة وأن تاريخ القبور اليمنية غير مؤكد.

ان الأضرار وما تم تسجيله وتدوينه من حالة رديئة في هذه الأبراج لا تعتبر قديمة.. بل هي ناجمة جزئيا من آثار التقلبات الجوية. وربما أيضا لها علاقة بخوف السكان من الجن حيث يقال ان هذه الأبراج بنيت وشيدت من قبل شيطان يدعى "كبير كب". جاهل عاش في صدر الإسلام.

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