The discovery of the towers

The brief 1995 campaign of the German Archaological Mission to the Sultanate of Oman took place with the purpose of monitoring the degree of danger and damage to archaeological monuments, as a first step in their protection. The work centred on the tower tombs at Shir (Wilāyat Ṣūr), within the greater area of Jaylah. The next largest town, ʿIbrā, lies 50 air km to the west-southwest (Fig. 1). But other ruins of different periods were recorded as well. These include three Early Iron Age forts, two at Ismaʿiyah¹ and one at Maqṭāḥah, as well as a burial ground of the same age at a place called Maqṭāḥah hail. A limited amount of excavation was necessary in order to get an idea of the characteristics of selected structures and their dating.

About 1985 the first track was bulldozed from the valley below up to the village of Jaylah. This allowed the transport of children to the school in Ismaʿiyah and for basic necessities such as water to the mountain villages. The track also meant that the area with its monuments would be exposed to many visitors, which is exactly what has happened since. For obvious reasons some form of protection for the monuments must take place or at least there should be some record of their present condition. Therefore, first measures were taken to protect the monuments. First the towers were mapped (Fig. 1–3) and described by G. Weisgerber and the other members of the team. Three of the towers were excavated, Shi1, Shi2, and Shi23.


² National Survey Authority, negative numbers OM 81 78 015, 017, 019; OM 81 78 115, 117, 119; OM 81 78 154, 155, 156. The map is based on Sheet NF 40-8B, scale 1:100,000 supplemented by terrestrial survey: M. Eichholz, Th. Klaus 3/95. Cartography: M. Eichholz, Th. Klaus 5/95. Owing to the partly extreme wide distances measured and the collapsed stone around the towers, an accuracy in the measurement of the diameter measured in decimeters is the maximum which seems reasonable. In the individual descriptions of the tombs measured dimensions are recorded. Here a centrally located and elevated point 1790 m altitude was identified from which most of the tombs could be surveyed directly. The tombs of the lower plateau were surveyed three dimensionally from a secondary lower point. In order to render a better impression of the valleys deeply cut into the layered landscape, aerial photos obtained from the National Survey Authority were joined by means of computer. After the identification of certain tombs in the aerial photos, the remaining surveyed tombs, walls and the track were adapted. The entrances of the tombs Shi1 and Shi2 were measured more carefully and recorded stereoscopically.

³ Shi1 was excavated by J. Schreiber, Shi2 by C. Falb, and Shi23 by P. Yule. On the average some seven locals worked as labourers. The name of Shir was abbreviated in "Shi" and a number in order to incorporate this and other sites in our database for all archaeological sites and excavations in Oman. Other examples in this study are "Ism" for Ismaʿiyah, "Maqt" for Maqṭāḥah, and "Sha" for al-Ṣharīq.
Fig. 1. Eastern Sharqiyyah showing the area of the tower tombs at Shir (see Fig. 3).
Prehistoric Tower Tombs at Shir/Jaylah, Sultanate of Oman
The first two are in excellent condition only surpassed by that of Shi10. Two signs were placed near Shi1 to inform visitors first of the antiquities law and second of the historical importance of the site. Other local monuments in this still partly inaccessible area were recorded preliminarily.

In 1991 the German Mission concluded its final campaign of fieldwork for the Samad Project. At the end of the season the book of John Nowell, A Day Above Oman, came to the authors’ attention. One of the towers (Shi10) was reproduced in Nowell’s book which gave no clear idea of the nature, location or total number of the structures. Attempts to reach the towers first from the east then from the west side were hindered owing to a lack of time. Departing from the Wādī Ṭayyīn/Khabbah on the 29th of August in 1991 P. Yule got as far as the village of Maqāmah (Fig. 5), partly by foot, and then turned back. The reason is that the villagers, upon being asked, did not know that the structures being sought were tombs. They call them “towers” (‘abrāj). Thus, when asked if tower tombs existed in the area, they replied that in the area only watchtowers were to be found. Later J. Nowell agreed to show P. Yule a track leading to the tombs. In a brief first visit on 1 November 1991 it was possible to enter a tomb and sketch the interior (Shi2). A few days later Dr ‘Ali b. Aḥmed b. Bakhit al-Shānfarī was brought to the site. Aerial photos of the towers became available to the authors (Fig. 9). During a third visit in 1992 it was possible to clear some of the rubble from the tomb Shi1. At this point the potential of this archaeological monument and the meaning of the towers to the local population became clear.

In 1990 at the conference “Arabia Antiqua” in Rome Paolo M. Costa showed slides of the tower tombs photographed from the air. The authors were not present at his talk, and it was unclear where the monuments which he talked about were located, not to mention their exact appearance. In 1992 on viewing photos, Costa confirmed that the towers were those to which he referred in his talk. The photos were made by Alan Shuttleworth in 1977.

The towers are located in a very remote part of the Sultanate. Well above the Wādī Khabbah (500 m elevation) occasional small settlements such as Maqṣaḥ (900 m) exist where falaj irrigation, date farming and herding are possible. Above this area (1400 m) on the highest rocky platform only the latter can be practiced. On the uppermost escarpment the tombs which are the subject of this paper were built (1600 m). Here is hardly any soil. Nonetheless temporary and permanent small settlements, the largest of which is Jaylah, exist. Near the tombs lie the still smaller settlements of Qarun, Faḍehe and Habil hais. They are built in caves which have been walled in with the help of mudbrick, and more recently with concrete blocks. Owing to the scarcity of water, agriculture is not possible aside from Maqṣaḥ and Jaylah.

Using in 1995 the settlement Mantāqāt al-Beḍū in al-Sh-ʳīq as our base, twice daily we covered a distance of 26 km and more than 1300 m in altitude. We considered the partial restoration of tomb Shi1 as a first step in organizing an archaeological park. The debris from inside and immediately outside the construction was to be placed on top of the tomb in order to give an idea of the original form. But in this way we also would falsify the appearance since there was no guide as to the original height other than the amount of fallen stone. Instead of piling the debris on top, we laid the stones on the ground 5.00 m north of the tower in the same diameter (3.80 m) as its uppermost. The stones reached a height of 0.50 m in addition to the 5.47 m of the preserved...
Fig. 3. Map of the tower site including the recent and also probably ancient track.
height of the actual monument. Presumably the crown originally was flat.

Observations on the archaeology of the area

To investigate the history of settlement with regard to the necropolis at Shir we surveyed the surrounding area. Time did not allow for intensive or extensive survey, and thus we can only report those sites close to the road. A fort of Early Iron Age date on Qarn Suwaich (Ism1), a hill in Ismaiyah, just south of the track to ‘Ibraq, is the most important ruin in the immediate area. The structural remains extend over a steeply inclined hill which on one side is abruptly cut by the Wadi Khabbah. From this side the fort is inaccessible. The steep slope is defended by a wall which cuts across it. The remains of foundation walls are visible. As with most Iron Age sites, large quantities of pottery occur. On the hills the remains of several Hafit tombs are visible.

The present-day Maqtaah is the closest village to the necropolis at Shir (Fig. 4). Its development is hindered by the remote position, the steepness of the landscape, and the limited amount of water available. Today it consists only of a few houses. These are built of local rounded weathered limestone, some walls are plastered with clay. The village has a watchtower of no great antiquity. Owing to the limited amount of cultivateable land, the farmers garden tiny terraced fields which are watered by a small falaj (channel) – the source of life for this village. Only a few palm trees can grow here. In the prehistoric age the plateau Maqtaah hails south-western and above the village must have played a greater role than today; presumably it could be gardened without irrigation. Only here graves can be dug into the otherwise rocky ground. Therefore it serves as the cemetery for the...
village. On the erosion fan bordered by low hills lay the ruins of tombs of the Early Iron Age. The remains of houses here may be older.

Even a village of such modest size possessed a fort, presumably of Early Iron Age date. It is located east of the valley which cuts into the plateau, atop a gabbro hill. Its limestone walls are readily visible (Maqt4).

Basic observations of the types of tombs

Five types of tombs can be observed at Shir. The first are simple conical towers with a corbel vault (Fig. 5). The incline of the walls is steeper in the case of taller towers. More elaborate are those of a second type with an inner wall and a facade (Fig. 6). The stones of this type are more carefully dressed. Some of them are double vaulted, one atop the other, as in the case of Shi2, Shi6, Shi9, and Shi10. A third type is igloo-shaped and has a clearly triangular entrance (Shi51). A fourth type (Fig. 7) has no entrance, is squat, and has a vertical wall (Shi14, Shi16, and Shi30). Since Shi14 is partly built from the dressed stones of Shi13, this type is later in date than the main series. A fifth type is a cairn represented by a low heap of stones (Shi54, Shi56). The locals explain yet another type of structure (Fig. 8) to be wolf traps (hadar māl sīb)\(^9\) Such are about 1.80 m in length and 0.50 m in height. They are designated with the additional letter "a" in the catalogue.

The majority of the tomb entrances face the east, but not perfectly so (Fig. 22). Unfortunately none of the skeletons were preserved so that their positions could not be

---

\(^9\) 'Ali b. Ahmed b. Mahāsh al-Shāhri explained that they are not to trap wolves, but rather to protect the small children of the herd-ers from wolves (orally expressed information). But by virtue of the position of these traps in isolated points, this seems unlikely.
Fig. 6. Tower tomb Shi8 shows the construction of an inner wall and a facade.

Fig. 7. Tomb Shi16 belongs to the rare cylindrical type.
noted. The tombs are positioned not in straight rows but rather on the edges of bluffs in order to be seen from a maximal distance. One of the largest tombs, Shi10, occupies the highest point. Several tombs stand aligned 30 m off on the southeast edge of a deep gully (Fig. 9).

At first the existence of a permanent modern settlement on the upper escarpment was unknown to us, and the question arose whether this site anciently was a burial ground for the inhabitants in lower areas to the west. It remains undecided whether the numerous tombs were built by a local population or by people coming from somewhere else.

The chronology of the tombs has two aspects: first the internal chronology, and second the dating of the entire complex in terms of the archaeology of south-eastern Arabia. Finds were of little help in dating the towers. In and around some of the towers potsherds of the Early Iron Age lay scattered.

However, the reuse of Pre-Islamic tombs of all periods in Oman, is well attested to. The evidence for the dating therefore must derive from the tombs themselves. Comparable tombs are known in and outside of the Sultanate; they are difficult to discuss because they are in a poor state of preservation or because they contain no datable finds. Other tower tombs exist outside the area which we mapped, for example in the direction to Šūr. In this respect the following question arises: What exactly is a tower tomb and how does it compare with other kinds of free-standing tombs?

A tower tomb is a memorial building for one, two, or possibly even more prominent deceased individuals. These buildings were intended to be landmarks visible from afar. They were positioned on the ridges and crests

---

Fig. 8. Entrance of a "wolf trap" with vertical slabs Shi18a.

Fig. 9. Helicopter view of tower tombs Shi10 (above) to Shi13 on the High Plateau (Photo N. Mylne).

10 Personal communication, J. Reade.
of plateaus, hills, or mountains. Tower tombs differ in size, height, and manner of construction. They may have single or double wall construction, finely dressed or unworked stone slabs. On the other hand Hafit tombs are not tower tombs, nor do the large Umm an-Nar communal tombs fit the tower tomb definition. The poor state of preservation of most of the Umm an-Nar tombs obscures their original appearance. Nevertheless it is assumed that most of the small Umm an-Nar tombs belong to the usual type defined above, and should be dated to the second half of the 3rd millennium BC. It is the unusually good preservation which gives importance to the tower tombs of Shir. They give an impression of how most of the ruins over the countryside once appeared.

58 tombs were visited and a small number subjected to detailed investigation. Most of them were tower tombs, and in their appearance and building technique they reveal shared and differing attributes. Common to most tombs at Shir are that all of the towers are circular in plan. All entrances lie at ground level. All tomb chambers are built by means of a false (corbel) vault. No tomb has a supporting vault-wall. No tomb is dug into the bedrock. All of the tombs are built of local limestone.

The differences among the tombs are more noticeable: The external walls of many taper toward the top; others are ogival. Certain tower tombs have two false vaults, one above the other – but most have only a single one. Many tower tombs are built from carefully dressed stone slabs, others with unworked stones. Most tower tombs have room enough only for a single burial, others have more room. There are also low tombs with a nearly cylindrical exterior wall.

Discord results if one correlates the attributes of the tower tombs with the definitions of tombs in Oman. Structures such as those at Shir were previously not available for comparison, including e.g. the piggy back vaults. The towers differ from classical Umm an-Nar ossuaries: They have neither two stories nor subterranean galleries.

B. Vogt defines the third millennium tomb types of Oman in the following manner: Hafit tombs reach a diameter of 4–8 m. The 1.0–2.5 m diameter is enclosed by one or two concentric so-called ring walls pierced by the entrance passage. The chamber is roofed by a corbel vault. The entrance is rectangular or trapezoidal seen from the front. Its lintel consists of one or more stone slabs. The entrance was sealed by the outer wall. The tombs lay on the open wadi terraces, on the outlying hill slopes, or more rarely on hill and mountain summits.

Beehive tombs measure as much as 8–9 m in diameter, and 3–4 m in height. Typical is a single chamber built of two or more concentric walls, an entrance at ground level, mostly only through the inner wall, and an igloo-like exterior form. The entrance passages are triangular. The entrance was sealed by one or more walls. The tombs lay primarily in high places.

B. Vogt arrives at the conclusion that both kinds of tombs, their architectural conception, the means of burial, and the tomb equipment seldom differ sharply from each other. Therefore he defines to the Hafit Beehive tombs as, "...freestanding tomb structures with a chamber, the diameter of which may not exceed 2 m, the lack of internal partition walls (not support walls), the construction mostly of more than one ring wall, the sealing of the tomb entrance, and the interment with at least one and maximally four to five individuals." These tombs date generally to the first half of the third millennium BC. To the Hafit Beehive tombs belong those catalogued below for Ismâyîh, Sh-al, and Maqta as well as the ruin of Shi24.

12 The distinguishing of free-standing pre-Iron Age tombs into three types hearkens back to the work of K. Frifelt (K. Frifelt 1975a, 371–373).
15 B. Vogt 1985, 103.
16 B. Vogt 1985, 103.
Fig. 10. Foundation of a Hafit tomb, al-Maysar M317. The entrance is visible in the inner wall but the outer walls seal and mask it.

Fig. 11. Ruin of the Umm an-Nar tomb M402 at al-Maysar. Different in relation to the construction are only the plinth at al-Maysar and the entrances on the ground level at Shir.
The tombs of the Umm an-Nar Period belong in the second half of the third millennium. B. Vogt defines them as circular buildings which normally are divided by partition walls into two or more chambers. Their diameter ranges from 5 to 12.5 m. Two-storey structures are likely with one of the stories sunk into the ground. The exterior wall consists of a facade which frequently is faced with carefully dressed stones. One or two entrance-like stones above ground level allow access into the interior. The collective ossuaries of the Umm an-Nar Culture are usually far larger than the Hafit Beehive tombs, and may contain over 100 individuals. The tombs are located on flat terraces, never on mountains. But Vogt also mentions about small Umm an-Nar tombs without partition walls. Other examples, such as al-Maysar tomb M402 (ø 5.4 m) and M403 (ø 5.1 m), show that there are also Umm an-Nar tombs without partition walls (Fig. 11). These examples contained Umm an-Nar pottery. The chambers of the Shir towers belong to this smaller size. They hardly could have been collective tombs.

At first glance several of the tower tombs can be assigned to the Hafit/Beehive type, but none at Shir had more than an inner and an outer wall. Other tower tombs look like Umm an-Nar tombs, but none has interior partition walls or an elevated entrance.

Tomb Shi51 (Fig. 57) comes close to the classical Beehive tomb no. 1137 in Bät (Fig. 13): The external igloo form, nearly man-sized triangular entrance, remains of a plinth.

---

19 Time allowed only for the drawing of two cross sections through the towers. In their place photos must serve.
(not simply the lowermost course of stones), and the original height are nearly identical. Both tombs show interior and facade walls. But closer inspection of the entrance reveals differences in the manner of construction. While in B-t the interior and exterior heights of the entrance are identical, in Shir the entrance is reduced in stages from 1.9 m to 1.3 m. In B-t there is a small pillar to support the vault, but not in Shir. The chamber of Shi51 measures 1 m in diameter, enough room for a single individual. That of B-t 1137 is twice as wide.

Aside from these observations in terms of its appearance, its type, and preservation Shi51 is unique. It shows the closest resemblance to the Hafit Beehive tombs.

With their carefully bevelled stones tombs Shi1, Shi2, and Shi10 bear the closest similarity to Umm an-Nar ossuaria at B-t, al-

Khashbah, or those on the island of Umm an-Nar in ‘Abū Ḫabī. Of the latter the most prominent and also the largest (e.g. Umm an-Nar and Hili) show the intention of the builders to erect facades with tightly fitting large blocks of white limestone. By means of extremely fine picking the blocks are formed with convex faces. In some cases silhouette-like reliefs also were sculptured (Fig. 14). The large blocks derive from the locally available white limestone of the "Oman Exotics". Where limestone was available only in small blocks or boulders within a reasonable distance the facade stones were fashioned into small pyramidal stones, so-called "sugar lumps", the outer face carefully dressed by picking. Such
stones occur for example in a tomb at Bät\textsuperscript{24}, but there they are rare. Smoothly dressed limestone blocks from these tombs are sometimes referred to as "sugar lump stones". Few of the tombs at Bät have stones with picked surfaces. They are built of limestone slabs to be found within the immediate area. In certain cases they are dressed differently (Fig. 15). The stone slabs were laid in horizontal concentric courses of the same thickness\textsuperscript{25}. All of the tombs which K. Frifelt recorded on the island of Umm an-Nar and at Bät evidence interior partitioning walls which divided the ossuaries into several smaller areas\textsuperscript{26}. The tower tombs of Shir differ from these in the consequent lack of partition walls. These also are lacking in some of the tombs at al-Maysar M4\textsuperscript{27}.

The study of masonry techniques provides further chronological information. The dressing of the facade stones by means of beveling is characteristic of the Umm an-Nar period, as witnessed by tombs and profane buildings. Well aimed striking with heavy hammer

\textsuperscript{24} K. Frifelt 1975a, fig. 80.
\textsuperscript{25} K. Frifelt 1975a, fig. 61, 78, 79.
\textsuperscript{26} K. Frifelt 1991, fig. 258, 260, 261.
\textsuperscript{27} G. Weisgerber 1981, 205, 204 Fig. 33.
stones (Fig. 16) forms the exterior surface of the clinky hard facade stones so that the horizontal and the vertical dimension were slightly curved. In order to achieve this, it was necessary to strike the outer face of the slabs from all four directions. Flaking marks of this kind are visible on the exterior of the tombs Shi1, 2, 10, 13, and 41 (Fig. 17).

This masoning method is used on the large stone blocks of the conical tombs which were discovered in Yānqūl (North Oman) in 1997 (Fig. 18). These tombs contain diagnostic Umm an-Nar sherds (Fig. 19). Here, thickly layered limestone is deposited and tomb A is built partly on top of it. The stone may have been used for building exactly as quarried, which forms the majority of the cases of tower tombs in Oman. In the towers at Yānqūl, however, the blocks were convexly bevelled. Where the result was not satisfactory to the builders, protrusions on the surface were evened by picking (Fig. 20). The working of the stone by flaking is a method which is in Oman only known from the Umm an-Nar Period.

The existence of two-storey double vaulted tombs are not unique at this time. Larger tombs of the Umm an-Nar Period occasionally have two storeys. On the island of Umm an-Nar itself both storeys were above ground. A second floor made of large slabs resting either on the partition walls or on the circumference walls and on the partition walls served for
Fig. 17. The dressed stones of Shi2 show traces of flaking their outer edges.

Fig. 18. Tower A at Yānqūl in the northern part of the Sultanate is built on a cliff which yields the building material.
Fig. 20. The large blocks from tower A at Yānqūl were flaked and picked (left of the scale).

Fig. 19. Typical Umm an Nar potsherds from the building tower A at Yānqūl. (Drawing A. Weisgerber).
both served for depositing the dead in two storeys. In al-Maysar M401 the lower floor was sunk into the ground. The main floor, built of heavy slabs, was incorporated both in the circumference wall and one partition wall. Similar constructions seem to have existed at Hili. It is, however, unlikely that the double vault construction at Shir should enlarge or secure the space for the dead since there was no entrance to the "second floor". Instead the double vault construction at Shir saved building material, labour, and time, as well as lending more stability to the structure.

The mapping of tower tombs with single or double wall construction (Fig. 21) reveals that while most of the tombs were built in the more elaborate manner, only five were of fine and smoothly dressed stone. Tombs with double walls are grouped together on the Main, High, and Lower Plateau, whereas the single wall tombs are grouped in general to the north and especially on the Northern Ridge. The two types are spatially separated,

Fig. 21. Map showing the distribution of tower tombs at Shir built with single, double wall and elaborate construction.

29 G. Weisgerber 1980, 92, 94 fig. 57.
but not strictly so. There is one double-
walled, elaborate tomb in the north, a single-
walled one on the High Plateau, and three
single-walled ones on the Lower Plateau.
Lacking datable artefacts for a fine chronolo-
gy by no means we can determine that the
two types follow each other. However, an-
other fact may have a special significance:
The four groups of tombs are topograpically
more distant from each other than the map
suggests. Each of the four groups has at least
one tower tomb of a higher quality: On the
Main Plateau these are Shi1 and Shi2, on the
High Plateau Shi10 and Shi13, on the Lower
Plateau Shi41. These tombs stand out be-
cause of their dressed stone. On the North
Ridge the outstanding tomb shows a double
wall construction whereas the rest were
built with single walls. This does not look
like an accidental distribution. It could be de-
bated if these four tomb-groups, each with a
building of outstanding quality among its
next neighbours may represent a kind of so-
cial grouping such as families, kinship groups
or clans.

The orientation of the tomb entrances

The graphic Fig. 22 shows the orientation of
the entrances of the tower tombs. The ma-
jority have an entrance toward the east
(n=13). Certain of the entrances point toward
the east-north-east (n=4), or the east-south-
east (n=7). The deviation from true east may
be connected with the azimuth of the sunrise
which differs at different times of the year.
It varies in Oman ±30E.

Further comparable structures

Two sites show concentrations of tombs
comparable with the tower tombs. The first,
made public in the late 1970’s, is located in
the northern part of the Sultanate in the
Wadi al- Ain (496120; 2567250=N23 12' 03.1”;
E 56E 57' 43.6") (Fig. 23)31 Here a row of 21
tower tombs graces the crest of a mountain.
Some of these measure nearly 5 m in height.
Triangular door openings all face eastward
to slightly varying degrees. Only few of the
slabs are worked. A dating for these and the
following tombs rests exclusively on the ar-
chitecture.

A second site (N23E 34' 42.8"; E58O 02'
31.7") discovered in 1993 is located 500 m
south-east of the village of Ḥalbān, 11 km
west of the Sultan Qaboos University at the
northern end of the Sama’il Pass32 The ceme-
tery is separated from the present-day vil-
lage by a wādī which was converted into a
garden in 1996. In a rocky area, the ruins of
some 35 tower tombs are visible (Fig. 24).
They are constructed with an inner and a
facade wall with a rubble filling between. In
section the bases of the tombs are far wider
than at Shir. The local soft and amorphous
limestone is badly eroded; traces of dressing
are not preserved (Fig. 25). But certain tombs
have facade stones carefully dressed as with
the most elaborate towers at Shir. White
limestone shims serve to even out the

23
32 Topographic map "Seeb". I. Guba pointed this site out.
courses formed by the somewhat irregular facade stones. One of the tombs (Hal30) measured originally 4.0 m in height (Fig. 26). These tombs have been largely pulled down. The position of the entrances is hidden from view since the east side is generally that most damaged. In other words the entrance is to be sought on this side, as in the case of the tombs at Shir. The edge of the rock outcropping is the preferred place for the tombs (Fig. 27). The only finds visible on the surface are potsherds of Lizq/Rumaylah type which evidence the reuse of the tombs.

Other tombs also can be described as towers, removing them from the nominal description of “beehives”, “cairns”, or even "pillboxes". To these belong the stately but ruined towers near Zukait (Fig. 28). While the distinction between towers and beehives is often moot, owing to the preservation and shape, the tombs at Ḥalban and Zukait can be ascribed more fittingly to the former than the latter group.

---

33 B. de Cardi/ S. Collier/ D.B. Doe 1976, 159 fig. 32.
Fig. 24. Part of the site of the tower tombs at Ḥalban (Sultanate of Oman).

Fig. 26. Attempted visual reconstruction of tomb Hal30.
Fig. 27. Sketch plan of the tower site at Ḥalban.

Fig. 28. Tower tombs at Zukait near ʿIzkī. (Photograph R. Löbbecke).
Prehistoric Tower Tombs at Shir/Jaylah, Sultanate of Oman

Outside of Oman tower-like tombs are known but so far have received little attention. Striking are the so-called "nawāmis" in Sinai which are attributed to the Late Chalcolithic/Early Bronze Age (3500-2500 BC)\(^4\). Well preserved examples (Fig. 29) lie to the north-east of the St. Catherine cloister on the road to Ain Khūdāra. These tombs reach a height of 2.0 m and a diameter of 4.0 m. The entrance lies on the west side. They are, however, dissimilar in size and in shape in comparison with the tower tombs of Shir.

Further comparisons are known north-east of Marib (N 15E 55' 00.6"; E 46E 09' 08.8") in Yemen at a place called Makāber al-Aqzām, north of the Ramlat al-Sabatain (Fig. 34, 35)\(^5\). Those on the Jabal Balāq al-Awsāt and in other places have been dubbed "turret graves"\(^6\). Built on the sides of a hill at this site some 200 of such tombs are visible combined with alignments of stones. The tombs are formed like a truncated cylinder all basically of the same type. Sometimes one or two stones project from the roofs of the tombs. More tombs exist in the vicinity, and in all up to 4000 have been estimated\(^7\). The largest have a diameter of 6 m and a maximum height of 3 m. The entrances consistently point to the west, and often are about 1 m above the ground level. These tombs are found together with alignments of stones including triliths, which to judge from their preservation, span a considerable time. The alignments of slim stacks of stones ("rays") are in a better condition than the triliths, and therefore may be later in date.

![Fig. 29. "Nawāmis" near ‘Ain Khūdāra/ Sinai. (Photograph R. Löbbecke).](image)

---

35. Cemetery of the short people. This place is also called al-Ruwākat, al-Abyad and dishma by the Bedouins. This particular cemetery does not seem to have been mapped by de Maigret on p. 334 of his article.
For the age of the "turret graves" in Yemen there are few points of references. They must not all have been built at a limited period. A. de Maigret published three 14C assays for such tombs at al-Mahdarah (830, 630, and 60 BC), and noted that the more recent interments bore traces of beads, bronze and iron fragments. On the other hand, B. Vogt has noted the occurrence of partially polished chert axes in one of the tombs, which raises the date perhaps into the 4th or 3rd millennium BC. Curiously, the tombs are neither concentrated near an obvious settlement, nor do they seem to relate to an activity which might take place in the desert, such as mining.

A. de Maigret suggests a theoretical dating for the tombs coeval with the rise of the great South Arabian states in the first millennium BC. But he also compares the turrets with the cairns at Ra’s al-Jins in Oman. Here, however, the similarity is of a general nature. The cairns, for example, in RJ6 are in a very bad state of preservation and stand only c. 50 cm high. In any case, they seem to date to the Hafit Period. To their dissimilarities belongs the position and the orientation of the entrance, and the constructional details of the walls. Essentially closer is the resemblance between these tombs and the nawâmis of Si-

38 A. de Maigret 1996, 324.
The similarity lies in the size, proportion of the height and width of the tombs, the way in which the walls are constructed, and the position of the entrance. Here the correspondence is essentially closer than that with the tombs in Central Oman. It cannot be profitably discussed on present evidence whether a relation, affinities, or convergence exists between the free-standing tombs of western and eastern Arabia.

The preservation of the tombs

Most of the towers at Shir are in a poor state of preservation in spite of their sturdy manner of construction. All but two of the towers (Shi6 and 17) have an oculus at the top. A part of the damaged condition may result from weathering, but weathering generally is usually limited to superficial erosion. More plausible, however, is destruction by pious iconoclastic Muslim visitors who understood the towers to be religious monuments from the "time of darkness". It is difficult to date their activity, since the local population seems to be ignorant of it. But a wild guess in the past century rests on the amount of silt deposited in and around the tombs and the patina of the stones still in situ and those which have fallen.

Conclusions

A distinction between Hafit and Umm an-Nar tomb architecture has eluded archaeologists
Fig. 32. Archaeological sites near Isma'iyah, al Shāriq and Maqta'ah.
in individual cases until now. Two main types of tombs are the well-known: Hafit Beehives and Umm an-Nar tombs. In the discussion of the towers at Shir, the degree of elaborateness and the manner of dressing the stone serve as guides to the chronology. The shape of the stones of Umm an-Nar tombs ranges from dressed blocks ("sugar lumps") to slabs with bevelled edges. All tombs with dressed stones can be attributed to this period. Others with unworked edges or sides may belong to this period if the courses are carefully laid. Only a few of the towers at Shir combine characteristics of the Hafit and the Umm an-Nar. The examples discussed here show that the material basis available is lacunose and that every larger new complex is likely to change the picture of these standing tombs. It also shows that architectural typologising without a firm chronology is destined to fail. Only further excavations of Chalcolithic and Bronze Age tombs can lead to the desired clarity.

Expressions such as "pill-boxes", "turrets", "beehives" and "hut tombs" first arose as simple descriptive appellatives. But it is desirable to use them now more discriminantly if they are to serve as chronologically diagnostic tomb forms. Moreover, it is clear that these respective names describe groups of tombs which in certain cases turn out to be morphologically heterogeneous. It is desirable to redefine them. Perhaps the most diffuse of all are "pill-boxes" which can have any shape whatever. In the post-war world a more suitable alternative may be "cairn", simply a heap of stones. Tombs such as those at Zukait and the Wadi al-#in can be described aptly as tower tombs, bringing them in line with those at Shir.

Catalogue

Structures along the track from Shir to al-Shāriq

The elevated plateau of Shir appears on a map (scale 1:100,000); the position of the road was determined by means of a GPS. The same holds for the position of the tombs and forts near Maqta'ah and al-Shāriq (Fig. 32). The Hafit tombs along the track into the mountains show that these ways are far older than one might think at first glance. Even prior to the time of the tower tombs it existed. They seem to reflect old donkey trails which as early as the third millennium BC were well-travelled. Otherwise it would not have made sense to build tombs there. Thus the catalogue begins with selected tombs from al-Shāriq. Without the help of datable small finds, the suggested sequence Hafit, and Umm an-Nar tombs is hypothetical.

Fort Ism1, "Qarn Suwaich"
Position: 692822; 2534733

On the elevated corner between the road from 'Irā and the Wadi Kabbah lies a fort of Iron Age date. The bank of the wadi is steep and inaccessible. Walls seal all of the crevices in the rocks. The slope to the road is barricaded by a large wall. Housing took place on artificial terraces thus forming additional hindrances to potential invaders. Walls of buildings were constructed of rocky stones and still stand sometimes to more than 0.60 m height. On the surface large quantities of Early Iron Age pottery (Lizq/Rumaylah) are visible.

Tomb Ism1
Position: 693077; 2534912
On the mountain crest ending at the edge of the fort Ism1 some Hafit tombs are visible.

Tomb Maqt1
Position: 703710; 2526600, altitude: c. 980 m

Located above the black wadi terrace at 980 m height, this Hafit cairn is built from round stones with an inner and outer wall. The outer one measures 0.80 m in its thickness at the base, and is preserved to a height of 0.55 m. The northern side is 0.55 m high. Also here the outer facing is recognisable. The west side stands 0.80 m high in several courses. Here a double wall construction is readily recognisable. Rubble is fallen into the centre of the tomb.