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## Archaeological Survey at Ibra in the Sharqiyah, Sultanate of Oman

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### Introduction

As part of the German-Omani cooperation project “Transformation processes of oasis settlement in Oman” (1) archaeological work was carried out at the Wadi Bani Awf and the al-Hamra area between 1999 and 2001 (Häser 2000, 2003). In 2002 the second stage started with an archaeological survey at the coastal site of Tiwi (Schreiber & Häser 2004). In the 2003 campaigns (2) we crossed the eastern Hajar mountains and moved the base of our operations to Ibra in the interior (Fig. 1). The chosen transect led from the small village of Mibam in Wadi Tiwi across the plateau of S/vir and its famous tower tombs to Ibra. As this is a distance of more than 75 km as the crow flies, and archaeological research was done already in parts of this area (Yule & Weisgerber 1998), we selected just three spots: the small mountain oasis of Maqta, a group of tombs near Jaylah, and the Iron Age hill-fort at Is/.mayyah (3), while the main work was concentrated on Ibra itself.

### Survey at Ibra

Ibra is after Sur the second largest town of this region and is the largest inland oasis of Oman’s eastern province Sharqiyah (4). Because of its geographical location (Bonnenfant & Le Cour Grandmaison 1977: 91) Ibra should have always played a key role, as it links the northern mountains, including the nearby prehistoric mining sites of al-Batin and of al-NIba and the coast, to the southern interior region and the Wahi/-ba Sands. So considering its geographical position and also oral tradition (Bonnenfant & Le Cour Grandmaison 1977: 91), we assumed that Ibra had a long history of settlement and we expected to find archaeological remains from all periods.

While the wider surroundings of Ibra have been the object of archaeological research several times over the last 30 years (5), the oasis of Ibra itself has been, probably because of its size, always excluded from this research. Apart from socio-ethnological examinations in the mid

1970's (Le Cour Grandmaison 1977), a record of the preserved archaeological sites and monuments was long overdue.

To get a first impression of the extent and the topography of the oasis we studied satellite images of the Ibra area (fig. 2). The area of Ibra is cut by three major wadis: Wadi Ibra, Wadi Nam and Wadi Gharbi. Today the largest settlements surrounding the oasis are al-Ahmadi and al-Thabti to the north and al-Matarid. to the south. The core of the oasis is formed by Alayat Ibra, inhabited by the al-Maskari tribe and Sufalat Ibra, which is again divided into several smaller quarters like al-Qanatir or al-Manzafa, which are inhabited by the tribe of the al-Hirt. A neutral zone separated the settlement areas of the formerly hostile tribes, about hundred meters wide, which divides the oasis.

### The Bronze Age

We decided to start our investigations in this neutral zone in a hilly area, overlooked by an Islamic watchtower (I0003) and bordered by Wadi Ibra to the east. Soon it became clear, that this decision was a good one. Here we discovered the remains of what once must have been a large circular Umm an-Nar building (I0004) (fig. 3). Unfortunately, the north-western part of this circular structure was heavily disturbed by recent building activities, so that its exact dimensions are not clear. Besides Umm an-Nar potsherds, the whole area was covered with Early Iron Age as well as Islamic pottery, a clear indication, that this site was re-used during these periods. Some visible wall remains seem to be connected to the large structure, but they may also belong to a later period.

Located on a hill some 200 m to the north-east are the remains of at least two large round structures, which were, according to their shape and the scattered pottery (fig. 4/1-4), Umm an-Nar tombs (I0007.1 and I0007.2). Later tombs, also located in this area were partially built of stones from this Umm an-Nar tombs, so it is probable that their original number was much higher.

The south eastern-most hills enclose a small valley, where an area of 50 x 50 m had been bulldozed for no obvious reason (I0005). At the edges of this area the surface material was piled up in 1 m high heaps, from which we collected fragments of Wadi Suq (5) funerary pottery (fig. 4/5-8). Among these was a black painted spout (fig. 4/5), a type very common during this period. Numerous parallels can be cited from several cemeteries as well as from two settlements (7). Some meters to the north-west, near an Islamic cemetery, is a small area located, which had not yet been bulldozed. Here, some circular or slightly oval underground graves were visible on the surface (fig. 5). Taking into account the pottery (fig. 4/9-10) and

the shape of the remaining graves, this was a Wadi Suq cemetery (I0006), which was unfortunately nearly completely destroyed.

On the north-east side of the hills, located directly at the edge of Wadi Ibra a small smelting site was found (I0008), but it cannot be dated because apart from slag and hammer stones there are no other finds. But what we can say is, that this small area formed the centre of the oasis from the middle of the third to the middle of the first millennium BC. So there was a continuous occupation for at least 2000 years and the site was re-occupied in the later Islamic periods.

### The Iron Age

The main Early Iron Age occupation was located at two different sites. One settlement (I0002) was established in the area of the former Umm an-Nar settlement mentioned above. Obviously connected to this settlement was a cemetery (I0007) of about 50 small circular or oblong structures on the hills situated to the north. Early Iron Age pottery was found on these dilapidated tombs as well as on the surface there (fig. 6/15-17). In any case, it is obvious that the stones of the earlier Umm an-Nar tombs were re-used for these later structures.

A second Early Iron Age settlement (I0039) was founded several kilometres to the south-west on a flat hillock, which is now located in an extended Islamic cemetery (I0038), still in use today. No Islamic graves were built on this hill until now and so traces of house foundations are visible on the surface. Even if these remains are hardly noticeable, the scatter of Early Iron Age settlement pottery makes the occupation of the site obvious (fig. 6/11-14).

At the foot of the hill and slightly apart from the Islamic graves, the remains of some early Iron Age tombs were found. These tombs were in a very bad condition. Probably the Iron Age cemetery (I0040) had been larger in ancient times and the tombs disappeared during the later use of that area as an Islamic burial ground.

In the following Samad- or Late Iron Age period this site was abandoned and the settlement shifted to a high hill on the western side of Wadi Gharbi just above the old quarter of al-Qanatir at Sufalat Ibra. The urban planners of the project had already discovered the settlement, which we labelled I0052, in 2002, when they mapped the architectural remains of al-Qanatir.

To get a better overview of the extent and the topography of the settlement, air photographs were made with a helium-filled balloon. The settlement (fig. 7) stretches along a small ridge for about 60 or 70 metres to the north of a watchtower (I0053), which was built from stones of

this settlement. It consists of about twenty stone houses partly built on artificial terraces. In some cases the walls stand still up to a height of 0.8 m. A 0.7 – 1.0 m wide wall incorporating the foundations of at least two collapsed towers, protected the whole area. Scattered all over the settlement site were the scanty remains of a few circular structures, which we identified as tombs. According to the pottery and the bronze arrowheads (fig. 8), the tombs were of Early Iron Age date and showed, that the Early Iron Age cemetery, which runs along the flanks of the hills on the south-eastern side of Wadi Gharbi, originally ended at this settlement site. Later the tombs were dismantled and the stones used to build houses and walls of the settlement.

Before we started collecting the surface pottery, the settlement was divided in four areas according to its natural topography. This was, as it turned out later, useless, as the surface material was very homogeneous and the pottery repertoire is typical of a Samad-period or Late Iron Age settlement (fig. 9). Because the site was covered with an enormous amount of potsherds, we decided to concentrate on just very specific and / or new types. Despite this, we still collected more than 350 potsherds from these four areas, as well as from the slopes.

The most outstanding piece is a nearly complete preserved bottle with an incised mark on its shoulder (fig. 9/8 and fig. 10/1), which was partly buried under a collapsed wall. Marks on Late Iron Age jars in Southeast-Arabia (fig. 10), of which at least some can be identified as letters of South-Arabian script (Müller 1981), are known mainly from funerary contexts, such as from tombs in the cemeteries of Samad al-S/va/-n (fig. 10/2-13), as well as from tombs at Khad/.ra/->/ Bani/- Daffa/->/ (fig. 10/14), al-Batin (fig. 10/15) and Rustaq (fig. 10/16) (Yule 2001). But such incisions have also been found in the hill-fort of Maysar 34 (fig. 10/17-18) (Weisgerber 1982), in the settlements of Khor Rori (fig. 10/22) in Dhofar (Yule & Kervran 1993) and at Mleiha (fig. 10/19-21) (Mouton 1992) in the Emirates. These marks are a continuation of older ones, which were relatively common in Early Iron Age Rumeilah (Benoist 1999: fig. 108), and were also found at Qarn Bint Saud (Cleuziou 1977: 42, fig. 10/6,13,20; Stevens 1994: 247, fig. 17/77-84; al-Tikriti 1998: fig. 2/b-d and photos 2, 4, 6-9, 11), Muweilah (Magee 1999: 44, fig. 3; Müller 1999) and Raqi 2 (unpublished). The oldest known example was excavated at Tell Abraq in a late second millennium BC context (Potts 1991: 58, fig. 69/1).

In contrast to the large amount of pottery found scattered on the surface, small finds were scarce. Just a few shells, a soft-stone rim-sherd and a single terracotta figurine (fig. 9/15) were found.

### The Islamic periods

With the beginning of the Islamic Age, the settlement area shifted again. Now the settlement (I0046) was built on a low elevation above Wadi Gharbi, where some traces of rectangular foundations are still visible. Connected to this settlement was a cemetery (I0047) at the southern and eastern edge of the area as well as a mosque (I0044) at the eastern slope of the elevation. This mosque with some red painted decorations at its inner walls had been restored some time ago. A second mosque (I0056), with two qiblatain (one in the direction of Mecca, the second in the direction of Jerusalem) is located a little bit wadi downwards and may also have been related to this settlement.

Sometime during the later Islamic period this settlement was also abandoned and according to the pottery, the occupation shifted once again, now to the areas of the oasis where the modern inhabitants have lived in the recent past and some still live today.

During the survey in the palm gardens and the old towns in the oasis of Alayat Ibra and Sufalat Ibra, it turned out that this area was very disturbed by continuous use. The custom of lowering the ground for the palm gardens has destroyed the old ground surface in vast areas of the oasis. Some small hills can be identified as remains of mud brick houses, which were scattered between the fields. Late Islamic pottery dates these remains, while a few Late Iron Age potsherds prove activities in the central part of the oasis at least during this period.

Survey in the modern built-up areas east of the main oasis along the Bidbid – Sur road showed that the hills there were used for burials. On top of the higher hills Hafit-tombs were erected, while the lower ones are occupied by Early Iron Age tombs. However, these tombs are now completely destroyed. No other sites were recognized in this area, and this means, that this areas was not used for habitation until modern times.

### The area of al-Thabti

After this, the survey was continued along the mountains on the eastern side of Wadi Ibra starting at the junction of Wadi Nam with Wadi Ibra where the hills were crowned by Hafit tombs, which mark the passage into the mountains. Further north, in the area of al- Thabti several groups of different types of tombs were discovered. These tombs extend along the eastern terrace of the Wadi Ibra between the mountains and the wadi itself for at least 10 kilometres. We followed Wadi Ibra upwards for about 4 kilometres and then had to stop for lack of time. All in all, more than 250 tombs were registered.

By far the most common type is a tomb with an outer double ring-wall and one, but often also two or more, irregular shaped chamber inside the walls. Such tombs are situated on the tops of hills or on the ridges. Since stone robbing has heavily disturbed all of them, their original structure is hardly recognizable, but it is possible that these tombs were originally Hafit tombs. In later times they were rebuilt, and, according to the finds (fig. 11/1-5), which include iron arrowheads, spindle-whirls and a bronze bangle, this must have happened in the course of the Iron Age period.

A second type of tomb is similar to a tomb, which was excavated under the direction of B. de Cardi in 1976 at T/.a/-wi/- Silaim, some 25 kilometres south-east of Ibra (de Cardi et al. 1977: 19 – 21) This type consists of two or three concentric ring-walls and in many cases a plinth in front of the outer face of the tomb. The diameter of these tombs varies between 6 and 11 m and some of them are still preserved up to a height of more than 2 meters (fig. 12). The chamber is about 1 to 2 m in diameter. In contrast to the aforementioned tombs, they sit at the foot of the hills or directly in the plain. Only a few Umm an-Nar potsherds and some beads were found inside these tombs. At the moment, especially without excavation it is difficult to say if the finds of the Umm an-Nar period belong to the original grave inventory or if they are to be associated with later intrusive burials. The same doubts were already expressed by B. de Cardi and B. Doe, who were not sure, whether the finds of the Umm an-Nar period in the excavated cairn 1 at T/.a/-wi/- Silaim belonged to the original grave inventory or to a later burial (de Cardi et al. 1977: 21). In the second case, the tomb would be older than the Umm an-Nar finds.

A third type of tomb is built like the second one but has a larger chamber with one or more internal dividing walls (for example I0112-4). In this respect they are very similar to Umm an-Nar tombs. Very often they were originally covered with irregularly shaped white limestone rocks resembling the Umm an-Nar “sugar lumps”. This limestone was quarried from an “Oman exotic” located in a nearby valley. Even if the limestone used for the tombs at Ibra was not worked, it had a similar effect. It catches the attention through the sharp contrast with the black coloured surrounding landscape and the dark brown stones used for the ring-walls of the tombs. Most examples of this type of tomb were built in the plain, but some were placed in a more prominent position on top of low hillocks. Only a few finds were discovered. Some sherds of Umm an-Nar pottery, a fragment of a soft-stone vessel with dotted double

circles (fig. 11/6), a handful of beads, a fragment of a flint scraper (fig. 11/7), as well as frequently flint flakes were found on these tombs.

In some cases also Iron Age finds occur, a clear indication, that these tombs were re-used during this period, too. The question that arises is, are these tombs of a local or regional type or do they represent a chronological development, an intermediate form linking the earlier Hafit and the later “classical” Umm an-Nar tombs? But these questions can only be answered through large-scale excavations.

### The Late Stone Age

However, not only tombs were found at this area. Remains of walls built of relatively large boulders were recognized on three small hills close to different groups of tombs. In some cases rectangular and oval structures of double walls were visible. One house or room (I0267) was measuring 2.5 x 2.2 m (fig. 13). A large double-faced wall, stretching to the north-east for ten metres is connected to this structure. At site I0272 the structures are a little bit smaller and at site I0310, round structures were built with boulders in front of large rocks. The walls are merely more than one to three layers high preserved and all in all the remains of these sites are very scanty.

Not a single potsherd was found there, but some flint tools and flakes, a pierced shell-fragment as well as a worked, but weathered piece of bone were recovered (fig. 14).

At the moment it is difficult to date the structures, because the lithic material needs a more detailed examination (8). The material seems to belong to a different assemblage to that found on Omani coastal sites and at least the trihedral point (fig. 14/1) suggests a date of c. 5500 / 4500 BC. (Charpentier 2004).

### Conclusion

During the course of the survey in the oasis of Ibra more than 480 archaeological sites or monuments from all periods were registered. By means of these sites it was possible to understand the settlement shift in this area (fig. 15). The oldest settlement activities were found near al- Thabti, an area that was used already some 7000 years ago. During the Umm an-Nar period at the latest, the settlement shifted to the western edge of Wadi Ibra, near to the present-day core of the main oasis. This area formed the centre of settlement for 2000 years until the Early Iron Age. During this period a second settlement emerged some kilometres to the south-west (9), which was then abandoned and with the beginning of the Late Iron Age a new settlement was build up on the mountains above Wadi Gharbi. With the coming of Islam,

the settlement shifted again, back to the plain at the edge of Wadi Gharbi. This site was deserted sometime in Late Islamic times and during this period the whole oasis became occupied. Finally, in our days more and more people leave their traditional quarters to settle in new areas, for example along the new main road from Bidbid to Sur.

So the positions of the settlement areas shifted in the course of time, but they were always situated close to the wadis. The reasons for these shifts are not clear but water may have had a strong impact on the location of settlements and with it on their shifts too. In all cases the settlements were small. An extension of the settlements as well as the oasis was only possible by the intensification of the falaj system, which enabled a larger area to be farmed. This happened in a larger scale not before the rule of the Yaaruba dynasty in the 17th century AD (Korn 2002: 5).

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## Notes

1 Partners of this project are the Oriental Institute of the University in Tübingen, the Institute of Urban Planning of the University in Stuttgart, the Institute of Crop Sciences of the University in Kassel, the Orient-Department of the German Institute of Archaeology in Berlin, together with the Department of Archaeology of the Sultan Qaboos University in Muscat.

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2 The survey was carried out by Dr. Jutta Häser and the present author from January 29<sup>th</sup> to February 19<sup>th</sup> and from October 9<sup>th</sup> to November 12<sup>th</sup> 2003.

3 The results of this mountain transect will be published elsewhere (Siebert et. al. in press).

4 According to the 1993 census, Sur is inhabited by c. 54.000 people, followed by Ibra with c. 20.000 people (Ministry of National Economy (ed.), n. d.).

5 “Surrounding” means a radius of about 50 kilometres around Ibra. For the sites discovered or excavated cf. Hastings et. al. 1975: 12; Meadow et. al. 1976: 114, 116 – 117; de Cardi et al. 1976: 154 – 155; de Cardi 1977: 65; Doe 1977: 47 – 51; de Cardi et al. 1982; Yule & Weisgerber 1996, 141 – 142.

6 As it was proposed in a recently published article by C. Velde (2003), the term Wadi Suq is used here for the first half of the second millennium BC (2000 – 1600 BC) in contrast to the following Late Bronze Age (1600 – 1250 BC).

7 Spouted vessels with black painted decoration on the upper half of the body were found at Shimal tomb Sh 1 (Donaldson 1984: 287, fig. 7/54, 288, fig. 8, 289, fig. 9 and 290, fig. 10/64,65), tomb Sh 6 (de Cardi 1988: 63, fig. 8, 9 and 65, fig. 10), tomb Sh 99 (Velde 2003: 103, fig. 2/12), tomb Sh 102 (Vogt & Kästner 1987: fig. 13/10), tomb Sh 103 (Vogt & Velde 1987: fig. 24/3-7) and tomb Sh 404 (Velde 2003: 103, fig. 2/11), at the cemetery in Wadi Suq from the surface (Frifelt 1975: 409, fig. 20a) and from grave 1121 (Frifelt 1975: 409, fig. 20b and 410, fig. 21a) and also from the cemetery S21 in Samad. These are the graves 22 (Yule 2001: tab. 267/5), 68 (Yule 2001: tab. 323/1), 84 (Yule 2001: tab. 341/2), 111 (Yule 2001: tab. 369/1) and 120 (Yule 2001: tab 378/4).

A few examples were also found at the settlements of Shimal (Velde 2003: 105, fig. 3/3,4) and Hili 8, phase III (Cleuziou 1979: 64 – 65, fig. 35/1-3; Cleuziou 1981: 281, fig. 3).

8 The lithic material from al-T/-habiti/- is currently under study by V. Charpentier.

9 The Early Iron Age settlement I0039 is located near a falaj, which is still in use today. The question, whether this falaj was already built during the Iron Age cannot be answered