

Archaeological results of the 1999 and 2000 survey campaigns in Wādī Banī ‘Awf and the al-Hamrā region (Central Oman)

Jutta Häser

Introduction

During three campaigns in 1999 and 2000 an interdisciplinary team of scientists conducted a survey in an area, which includes the Wādī Banī ‘Awf with some smaller tributary wadis as well as the surroundings of al-Hamrā (Fig. 1).

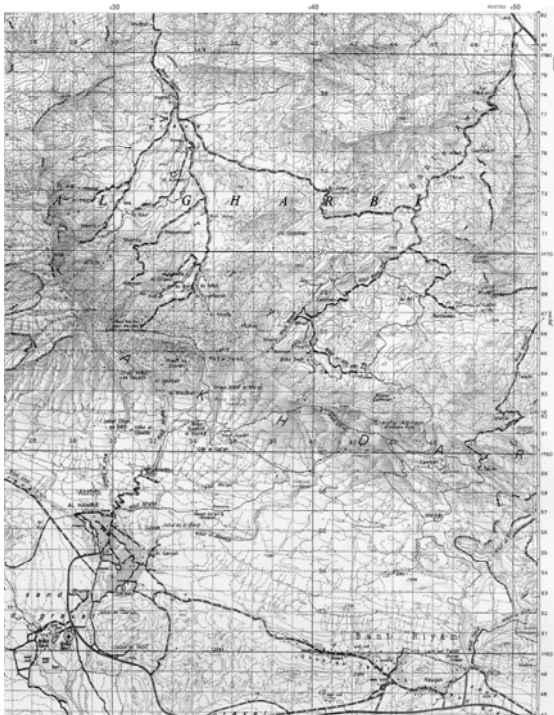


Fig. 1. Study area along Wādī Banī ‘Awf and the al-Hamra-region. (Part of topographical map Rustaq 1:100,000 NF 40-3D Ministry of Defence of the Sultanate of Oman by Hunting Surveys Limited 1984 reduced to scale 1:200,000).

A preliminary report on the participants and aims of the interdisciplinary project 'Transformation processes in Oasis settlements in the Sultanate of Oman' as well as the first archaeological results were presented on the 30th Seminar for Arabian Studies and published afterwards (Häser 2000: 115-118).

The data collection is completed now and the detailed classification of the material is in progress. In this article the main results of the archaeological surveys in regard to the occupational development of the areas under study will be summarised.

Wādī Banī ‘Awf

The earliest remains in the Wādī Banī ‘Awf are Hafit type tombs (Fig. 2). They are situated at the entrance of the wadi and can be

found in small groups all along the slopes of the wadi.



Fig. 2. Hafit type tomb in Wādī Banī ‘Awf.

About sixty tombs of this period have been discovered. No finds were made in or around these tombs. Interestingly enough Hafit type tombs do not occur in the Balad Seet area, which is the most intensively used area in the later periods.

The dressing of stones on one of the tombs in a cemetery at the junction to al-Biḡr resembles slightly that of Umm an-Nar tombs. However, this tomb is very deteriorated and only excavations can determine, if we are really dealing with a tomb of this type. No other remains of the Umm an-Nar period were observed in the Wādī Banī ‘Awf.

The next period, that is represented in the Wādī Banī ‘Awf is the Wadi

Suq period. We have found underground tombs, which are covered with large slabs (Fig. 3).



Fig. 3. Subterranean tomb with large roof slabs near the village of Zammah in Wādī Banī ‘Awf..

Otherwise, no finds of any kind were found in the cemetery. Therefore, the dating of the tombs is only based on the grave type. However, it cannot be completely excluded, that these graves belong to the Samad period. In this case, as well, only future excavations will allow us to decide the date with certainty.

No settlements of Bronze Age date were discovered. It is possible that they have been eroded away, yet the lack of remains does not prove their non-existence. On the other hand, known settlements of the third millennium B.C. are clearly located

in other topographical and geomorphological environments. Therefore, it is not surprising that there are no settlement remains. However, the presence of tombs shows that this area was known. Presumably, it was used for grazing livestock during the third millennium B.C. and also in the early second millennium B.C.

One of the most interesting discoveries was that of an Iron Age II site at Balad Seet. At the foot of the east side of an outcrop almost in the centre of the valley, which is covered by a modern settlement, about 650 sherds of Iron Age II date were found (Fig. 4).



Fig. 4 Balad Seet, view from east. The arrow marks the rubbish dump, where the pottery of different periods was found.

This area is still used as a rubbish dump. Due to the find context as well as the pottery assemblage, it is

most probable that we are dealing with the rubbish dump of an Iron Age settlement, which was also situated on top of the outcrop like the still inhabited village. No architectural evidence from this period remains, due to the almost continuous settlement occupation at this site.

Some pottery sherds of the early Iron Age were also found in an Islamic cemetery west of the terrace fields (Fig. 5) as well as on old, already deteriorated terrace fields. In the case of the cemetery area it is possible, that this place was settled in the Iron Age period. The Islamic graves are clearly built in some old house structures. However, in my opinion it is more reasonable that the visible house walls belong to an early Islamic occupation (see below). Therefore, it is assumed that the scatter of Iron Age sherds in this cemetery area as well as on the terrace fields could be explained by the distribution of ancient manure which was hauled from refuse heaps and middens located in the village.

Here pottery fragments would have become mixed with the refuse and consequently when manure was dumped on the fields it left a sparse residue of artefacts. This was recognised on fields – though of early Islamic date – during the Wādī Banī ‘Awr hinterland survey (Wilkinson 75: 162).

No graves of early Iron Age date were found in the surroundings of the oasis of Balad Seet. However, two small Iron Age cemeteries were discovered north of Balad Seet near the village of Zammah and at the junction of the wadi route to the village of al-‘Ayr. The graves are extremely damaged and only some pottery sherds give a hint as to their date to the early Iron Age. In addition, some single tombs or in one case a small group of three graves may probably be dated to the same period view of their shape. Whether these tombs were the burial places of the deceased of the settlement at Balad Seet is

questionable when considering the distance of about 15 km to the oasis.

We realised at a glance at the distribution map of the early Iron Age sites that Balad Seet is the first early Iron Age settlement discovered on the northern side of the al-‘Ajar mountains. With this result we could fill a gap of investigation on the Oman Peninsula.

The Iron Age settlers have chosen the area of Balad Seet deliberately. It is the most suitable place for living in the Wādī Banī ‘Awr, since on the one hand spring water comes from five large sources and can be directed to the fields by open channels. On the other hand one can find arable land in this area. Therefore, this oasis was occupied continuously during the last 3000 years.

The continuation of habitation is also proven by some late Iron Age sherds from the same site. This is the only site in the Wādī Banī ‘Awr, where remains of the Samad period were observed, unless we are dealing with Samad graves at Zammah as mentioned above.

Sherds of early Islamic date were found again on the slope of the settlement of Balad Seet. However, more sherds were discovered in an Islamic cemetery east of the terrace fields. The Islamic tombs were clearly built inside some dilapidated houses. It is possible, that originally an early Islamic settlement was located at this place.

This is the only site in the Wādī Banī ‘Awf, where remains of the early Islamic period have been recognised. For the middle Islamic period we could observe a slight increase in settlement activities. The sherds, which were used for identifying sites of this period, are imported, late underglaze sgraffiato wares, which can be dated to the eleventh and/or twelfth century. Pottery sherds of this type were found again on the slope of the Balad Seet hill, but also at the oasis of Hāḥ and at some small sites at the junction of the Wādī Banī ‘Awf and the road to the village of al-Biḥr. Interestingly a road connects these sites with the oasis of Ha/-t/., and in turn a path

leads from this settlement to Balad Seet and across the mountains to al-Hamrā.

For the late Islamic period we can recognise a dramatic change in settlement activities along the Wādī Banī ‘Awf. In many places terrace fields were constructed and long irrigation channels were built to supply the fields and the settlements with water. It must have been a great expenditure of work. Presumably, the agricultural and occupational development of the area was supported by the Yaḥḥaribah dynasty similar to the al-Hamrā region (see below). During this period the oases of Faraḥah, al-Wāsiḥ, ḥikha and Zammah, which exist still today, were built. Two more areas were settled during the late Islamic period, which are abandoned now. These are the sites at the junctions to the village al-Biḥr, on the one hand, and to the village of al-ḥAyr (Fig. 6), on the other. As we have seen above, these regions were already used as burial areas during the early Iron Age and as habitation sites during

the middle Islamic period. One can observe demolished terrace fields in the surroundings. Moreover, an aged resident of the nearby village told our team, that the oasis at the junction to al-Ḥayr was called Marqamt and that it was destroyed by a great flood. However, it was not possible to get any information about the date of this event. Therefore, it is most probable, that these regions were not suitable for agriculture because the fields were endangered by occasional wadi floods.

The villages in the oases are very small and the plans of the houses are very simple. Only the village at Balad Seet is larger and its layout is more compact. In many cases towers or small fortresses are built close to the settlements. In the oasis of Faraḥ we have an even more remarkable situation. This settlement lies strategically well chosen at the narrowest point of the wadi entrance and is fortified with a wall. The gate to the settlement is built with dressed stones and mortar, observed nowhere else in the architecture of the wadi.

The typical pottery assemblage of the late Islamic period consists of glazed wares, called Bahla wares. Careful examination of the pottery wares showed, that these Bahla wares are very similar in paste and glaze. The dating of the pottery is still under discussion because a detailed study is still lacking. Whitcomb (1975: 131) suggested a date during the seventeenth (or eighteenth) century for the beginning of the production of glazed pottery at Bahla in a preliminary study of the Islamic periods.

The oases of Faraḥ, al-Wāsiḥ, Ḥikha and Zammah, Balad Seet and Hāḥ are still inhabited as mentioned above. However, the villages of Faraḥ, Ḥikha, Zammah and Hāḥ have moved from the slopes to the fringes of the wadi. This shift of habitation areas was already observed by Mershen (2001: 159 footnote 1) during the survey in Wādī Banī Ḥarūs, the neighbouring wadi of Wādī Banī ‘Awf. She explained

this fact by the advent of motorised transport.

To sum up the result of the survey in the Wādī Banī ‘Awf: For the early third millennium B.C. the presence of people is proved by Hafit type tombs all along the Wādī Banī ‘Awf except the oasis of Balad Seet. Wadi Suq subterranean tombs show that people used that region also in the early second millennium B.C. However, only one site close to the village Zammah represents this period. No settlements could be discerned for both of these periods. Presumably the people utilized that area for grazing livestock.

The earliest settlement can be dated by a pottery assemblage to the Iron Age II period. People chose the most suitable area that is Balad Seet, for establishing their settlement. Most probably they lived from farming based on an irrigation system. Balad Seet remained the most important settlement in the Wādī Banī ‘Awf. New small oasis settlements were established during the middle Islamic period at Ha/-t/. and two

others sites in the Wādī Banī ‘Awf. A dramatic development of settlement building can be observed in the late Islamic period. Almost all oasis settlements of this period still exist.

Al-Hamrā region

When looking at the al-Hamrā region, the situation is similar in some respects, yet slightly different in others.

Varying kinds of tombs were discovered in that area (Fig. 7). Since the shape of the tombs cannot be determined definitely and no finds were associated with them, it is impossible to date these tombs with certainty. However, some of them are presumably Hafit type tombs and can be dated to the early third millennium B.C.

One of these prehistoric tombs, which stood in a row of three connected graves, contained sherds of a typical beaker of the Wadi Suq period. Presumably, this beaker belongs to a secondary burial of the second millennium B.C. No other

remains of this period were discovered in the al-Hamrā region.

Distinctly different kinds of tombs can be dated to the early Iron Age period on the basis of pottery finds. They are situated in small groups of ten to twenty on the hills in the surroundings of al-Hamrā. Due to their extremely poor state of preservation, it is almost impossible to reconstruct their original appearance.

As in Balad Seet, the earliest settlement remains can be dated to the Iron Age II period. One such site is situated on a hill close to Dāt □ayl. It consists of a large enclosure wall of a double row of stones (Fig. 8) and about six large houses (Fig. 9). The lower layers of the house remains are built of large stones. The upper parts of the walls were built with small, very loosely piled stones that are not connected with the lower part of the wall. It appears that the original walls were delapidated and that the lower, remaining parts were re-used in later times. The younger walls do not look

very substantial and it seems that they were not used as houses but for defense for a short time. This would comply with the pottery assemblage at this site. Some Iron Age II period sherds and very few, very late Islamic sherds were found, not enough to represent a substantial village occupation.

The second early Iron Age settlement is located near the village of Bilād Sayt south of al-Hamrā. It was discovered by the German Archaeological Mission during a visit of that region in 1997 (Schreiber 1998: 90). In this case no enclosure wall protected the village. The houses are small and built on the slopes of a hill (Fig. 10). Some of the walls are still 1.2 m high and are constructed with large stones. There are no signs of a re-use in later times. The scattered pottery of the middle Islamic period can be probably assigned to a demolished building on the other side of the hill. Here only middle Islamic sherds were found, and it can be assumed

that the house was built during that period.

Most interestingly, these two Iron Age II sites are located very close to subterranean aflāj. These irrigation channels cannot be dated by finds discovered in their surroundings however it is probable that the choice of the settlement location was influenced by its potential for constructing an irrigation system. Whether the water supply system was originally an underground falaj cannot be determined. The question of the introduction of subterranean aflāj on the Oman Peninsula is still under discussion. However, the locations of the Iron Age II settlements at al-Hamrā are examples that underline the theory that the expansion of settlements during this period was made possible by the introduction of this new irrigation technology.

As opposed to Balad Seet, the occupation of the settlement sites was not continued in al-Hamrā. However, some pottery sherds close to a wall, one cairn tomb and some

subterranean tombs point to occupation of this area during the late Iron Age period. Presumably, we are dealing with Samad underground tombs. However, only excavations can prove this assumption.

Solely single sherds were found that can be definitely classified as early Islamic wares. They are green-blue glazed imports. Due to the fact that we are not familiar with local wares of early and middle Islamic times, the imported pottery is the only possibility to recognise an occupation of the region during these periods. For the middle Islamic period there are various sites with underglaze sgraffiato wares of the eleventh and twelfth century. One site is situated near the early Iron Age settlement at Bilad Sayt. Here foundations of a house were found, which belong probably to this period. Another site is located on the slopes of the hill which is crowned by the so-called tower *ḥiḥn ḥāwr*, already mentioned by B. de Cardi

and her colleagues (de Cardi *et al.* 1976: 143–144, 161–163). On the east and north side remains of terraces and foundations of houses were discovered. It is difficult to determine without excavations if they should be assigned to the middle or to the late Islamic period, because most of the scattered pottery sherds are clearly of late Islamic date. There are more sites with underglaze sgraffiato wares, however, no building remains were found at these places.

In view of the quantity of sites with this kind of imports, we can say, that an increase of settlement activities during the middle Islamic period can be recorded.

Pottery types of the following four hundred years are still almost unknown, and imported pottery of this period was not found. Hence, it is very difficult to determine, whether or not there was an occupation in the al-Hamrā region.

However, the breakthrough of settlement and especially agricultural activities emerged with the

construction of an underground falaj that led from Wādī Ghūl to a new town at al-Hamrā. Palm groves stretch south of the falaj, whereas the mud brick town is situated north of it on the hilly flanks of the al-Hajar mountains. The oldest settlement comprises about 200 houses and an estimated population of c. 2000 persons (Oasis Settlement in Oman 2000: 71). These construction activities were organized under the Yaa/-ribah dynasty during the mid seventeenth century. Since this time al-Hamrā represents the center of the Abrīyīn tribe.

The earlier settlement at the $\square i \square n$ $\square \bar{a} w r$ was still in use and late Islamic pottery could be found also at other places in that region. On the hills along the southern flanks of the al-Hamrā oasis as well as on the hills which delimit the area between Jabal al-Qal \square a and al-Hamrā with several smaller villages, towers were built to protect the cultivation area and the settlements against enemies from the open land to the south.

At all late Islamic sites so-called Bahla glazed wares are most frequent. The pottery sherds of the various sites are very similar in their composition, and it can be assumed that they were actually produced in workshops in the large pottery center at Bahla, about 20 km south of al-Hamrā. The glazed as well as the unglazed wares are very similar to the material found in the Wādī Banī ‘Awf. Therefore, the same source of pottery vessels for both settlement areas is probable. This result shows what is still true today, namely, the mountain range of the al-Hajar is not a barrier between both regions under study. It can be cautiously assumed that the first settlement in Wādī Banī ‘Awf at Balad Seet was built by settlers from the al-Hamrā region, who were looking for new cultivatable land. Balad Seet with its favorable water and topographical conditions was the most interesting place for them. This could perhaps explain the absence of tombs from the same period in the surroundings of Balad Seet.

Summing up the results of the survey in the al-Hamrā region, we can state that the use of the area starts at least in the early third millennium, as evidenced by Hafit type tombs. No signs of the Umm an-Nar period could be recognised and the following Wadi Suq period is only attested by a single secondary burial. The settlement occupation in that region begins in the Iron Age II period with two small sites of different plan. They are situated close to aflāj, which are used today. However, the correlation between the emergence of these settlements and the introduction of the falaj systems can only be explored by excavations. Different types of tombs from the same period were discovered. Yet, it is hard to discern which of these tombs belong to the former settlers of the Iron Age villages. The late Iron Age period is perhaps represented by some subterranean tombs. However, the assignation of the pottery sherds on the surface to this cemetery is not

proved. The remains of the early Islamic period are also extremely scarce. Underglaze sgraffiato pottery sherds of the eleventh and twelfth century at several sites point to a slight increase in settlement activity. A substantial change came with the construction of a large underground falaj and the establishment of a larger town at al-Hamrā, which has provided the area with the economic basis for a center of the Abri/-yi/-n tribe until today.

Conclusions

The investigation of the origin and development of oasis settlements in Wādī Banī ‘Awf and the al-Hamrā region shows that the use of both areas started in the early third millennium B.C. However, the rise of settlements appeared as late as in the early first millennium B.C. and decreases during the first millennium B.C. again. A slight expansion is cognizable during the eleventh and twelfth century. The expansion over the whole Wādī Banī ‘Awf and the intensive use of arable land in the al-

Hamrā region first commenced in the late Islamic period, presumably in the mid seventeenth century. The phases of expansion are due to the introduction and development of falaj irrigation systems.

Differences are discernible in the shifting of sites. The oasis Balad Seet was continuously inhabited since its establishment, although probably with various intensity. In contrast, the Iron Age sites at al-Hamrā were abandoned and later settlements were built at different locations. This is due to the different topographical and geomorphological situation of both areas which restrict expansion in the Wādī Banī ‘Awf.

The similar oasis development in both areas as well as the similarities of the pottery assemblages from the Iron Age until modern times show that the inhabitants maintained intensive contacts. Therefore, the al-Hajar mountains should not be regarded as a cultural barrier.

(1) The transliteration of place names in the investigation area

follows the topographical map Rustāq 1:100,000 NF 40-3D Ministry of Defense of the Sultanate of Oman by Hunting Surveys Limited 1984. The only exception is Balad Seet in Wādī Banī ‘Awf written Bilād Sayt in the map.

Bibliography

de Cardi, B./ Collier, St./ Doe, D. B. 1976. *Excavations and Survey in Oman 1974–1975*. The Journal of Oman Studies 2, 101–187. Sultanate of Oman.

Häser, J. 2000. *Formation and transformation processes of oasis settlements in the Sultanate of Oman: preliminary report on a new field project*. Proceedings of the Seminar for Arabian Studies 30: 115-118.

Mershen, B. 2001. *Observations on the archaeology and ethnohistory of rural estates of the 17th through early 20th centuries in Oman*. Proceedings of the Seminar for Arabian Studies 31: 145-160.

Oasis Settlement in Oman - Pilot Study 1999-2000 2000 (unpublished report Städtebau-Institut. Stuttgart University).

Schreiber, J. *Die Siedlungsarchitektur auf der Halbinsel Oman vom 3. bis zur Mitte des 1. Jahrtausends v. Chr.* Altertumskunde des Vorderen Orients 9. Münster: Ugarit Verlag.

Whitcomb, D.S. 1975. *The Archaeology of Oman: a preliminary discussion of the Islamic periods*. The Journal of Oman Studies 1: 123-157.

Wilkinson, T.J. 1975. *Sohar Ancient Fields Project*. The Journal of Oman Studies 1: 159-166.

Dr. Jutta Häser

Deutsches Archäologisches Institut
Orient-Abteilung

Podbielskiallee 69-71

D-14195 Berlin

Germany