

"Transformation processes in oasis settlements in Oman" 2005 archaeological survey at the oasis of Nizwā: a preliminary report

JÜRGEN SCHREIBER

Summary

In the context of the German-Omani co-operation project "Transformation processes in Oasis settlements in Oman" the last phase of archaeological investigations started in the spring of 2005. After Izkī and the Jebel al-Aḥḍar in 2004, field work concentrated on Nizwā, which always played an important part in the country's history as a political and religious centre. Today, Nizwā oasis has a north-south extension of nearly 20 km and is with its 60,000 inhabitants one of the largest inland oases of central Oman. As the process of urbanisation is in fast progress at Nizwā, large areas are already covered by modern building activities and many archaeological sites have been destroyed. Despite this situation it was possible to record nearly 300 find-spots from the late 4th/early 3rd millennium BC to the Late Islamic period. These sites, with a major emphasis in the Early Iron Age and the Middle Islamic period, allow us to sketch the development of settlement activities within this oasis. The preliminary results are presented in this paper.

Keywords: Hafit, Umm an-Nar, Early Iron Age, Late Iron Age, Islamic periods

Introduction

In 1998/1999 the project "Transformation processes in oasis settlements in Oman" was started, an interdisciplinary co-operation project between the Sultan Qaboos University at Muscat and several German Institutions.¹

In a first phase of the project from 1999–2001 archaeological survey was conducted at Wādī Banī ʿAwf and al-Ḥamrāʿ (Häser 2000; 2003), followed in 2002/2003 by a second phase with surveys in Ṭīwī and Wādī Ṭīwī (Korn *et al.* 2004; Schreiber & Häser 2004), part of the eastern Ḥajar-mountains (Siebert *et al.* 2005) and Ibrāʿ (Schreiber 2005).

In December 2003 this project was extended again for another two years by generous financial grants from the German Research Foundation and the German Archaeological Institute. Archaeological research in this third phase concentrated on fieldwork in Izkī and the Jabal al-Aḥḍar in 2004 (Schreiber 2004) and concluded with a survey at Nizwā (Fig. 1) in 2004/2005.² With this survey, field-work of the project was finished and the final publication is now in preparation.

The topography of Nizwā

The oasis of Nizwā is located at the southern foot of the Jabal al-Aḥḍar massif, some 140 km south-west of Muscat or 30 km west of Izkī. Today, around 60,000 inhabitants live in this oasis (Ministry of National Economy [n.d.]), which stretches from Farq in the south to Wādī Samiṭ in the north for nearly 20 km along Wādī al-Abyaḍ and Wādī Kalbūh, reaching a maximum east-west extension of around 3 km in some places. This makes Nizwā one of the largest oasis centres of inner Oman.

The oasis is surrounded by ophiolite mountains to the west and by the foothills of the Jabal al-Aḥḍar to the east. A passage to the north-west along the Wādī al-Abyaḍ leads in the direction of Tanūf and Bahlāʿ. The southern access to the oasis is at Farq, where the southern plains meet the mountains.

The core of the oasis is formed by the main residential areas of Sufālat Nizwā and ʿAlāyat Nizwā, also known as Samad al-Kindi, and several other minor settlements such as Soʿāl, Hay al-ʿAīn or al-Maddah, to name just a few. The souk and the famous fort are located in Sufālat Nizwā, which is separated by Wādī al-Abyaḍ from ʿAlāyat Nizwā (Costa 1983: 253).

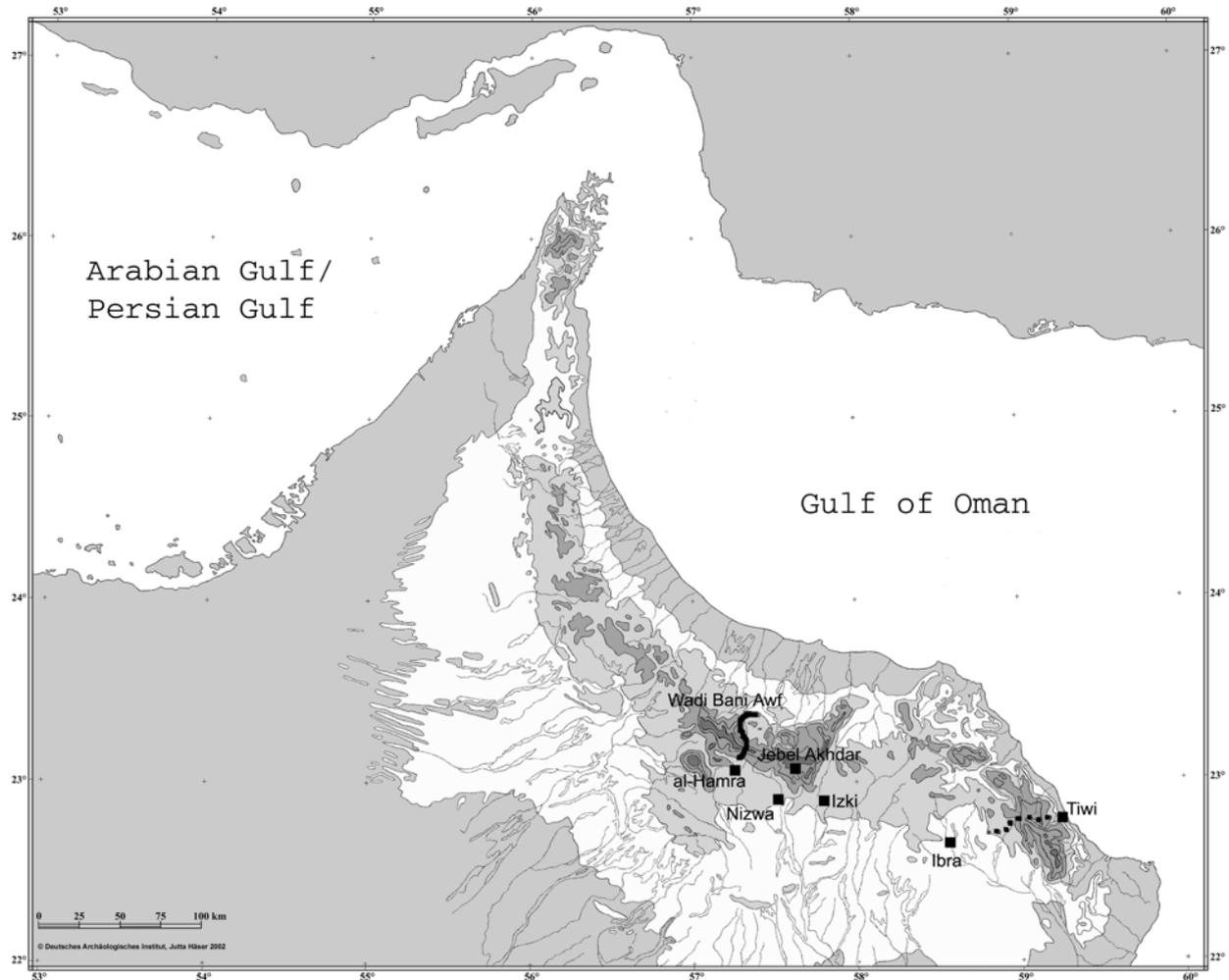


FIGURE 1. Map of South-eastern Arabia with areas of research 1999–2005.

Research history

According to historical sources Nizwā, like Izkī, is said to be one of the oldest towns in Oman (Wilkinson 1977: 130). Nizwā was the capital under the Julandā dynasty in the sixth and seventh centuries AD, when Islam was introduced to Oman. After this time Nizwā played a significant part in the country's political and religious history, both as the capital and as the seat of the Imam.

Despite its importance, hardly any archaeological work has been done at Nizwā and the same is true for most of the other large oases of inner Oman, which have not yet been the subject of systematic research.

Beatrice de Cardi and Brian Doe recorded two pre-historic sites in the mid-1970s (Doe 1976: 159–160; 1983: 67). These are the circular structures of the third

millennium BC located at Farq, a small village on the southern outskirts of the Nizwā oasis. A third structure at Farq was reported by Jocelyn and Geoffrey Orchard in the 1990s (Orchard 2000: 225 n. 2; Orchard & Stanger 1999: 91 n. 2).

In 1985 a rich collection of metal artefacts was delivered to the Department of Antiquities in Muscat. Subsequent investigations showed that these objects had come from a tomb located at the Jabal al-Hawrah, east of Nizwā centre. This so-called "warrior-tomb" has been dated by al-Shanfari and Weisgerber (1989) to the transition from the Late Bronze Age to the Early Iron Age.

Most of Nizwā's important mosques were recorded and recently published by Paolo Costa (2001). Moawiyah Ibrahim (2001) concentrated his work on Nizwā's main cemetery, where he recorded tombstone inscrip-



FIGURE 2. *Remains of the circular third millennium BC structure 1 at Farq.*

tions, while architectural studies of the central quarter of Hārat al-ʿAqr in Sufālat Nizwā were recently conducted by Soumyen Bandyopadhyay (2005).

The survey

As the process of urbanization is in fast progress at Nizwā, large areas are already covered by modern buildings and thus had to be excluded from our survey, which was, therefore, concentrated on the edges of the oasis as well as in the undisturbed areas inside the palm gardens of the oasis itself. The southernmost point of the area of research was on the outskirts of Farq, while Wādī Samiṭ was the northernmost point of the investigation: a total of 289 find-spots were recorded.

The Hafit period (3000 – 2500 BC)

As in other oases, *c.* fifty to sixty Hafit/Beehive tombs indicate a late fourth- and early third-millennium BC presence in the oasis. A small group of these tombs is located on the eastern hills between Farq and Nizwā centre, while the majority are clustered in a large valley,

which forms the boundary of the oasis to the north-east. Unfortunately it was not possible to locate a settlement site of this period.

The Umm an-Nar period (2500 – 2000 BC)

Monuments of the second half of the third millennium BC are located at Farq and have been known, as mentioned before, since the mid-1970s. These are the remains of circular structures. Structure 1 is still preserved to a height of 2 m with a diameter of 20 m (Fig. 2). The second one is a small "tell" with a diameter of 28 m, which is encircled by a wall consisting of large unworked stones. The core of this structure still stands about 7 m above ground level (Doe 1976: 159–160; 1983: 67). In the surrounding area the remains of several walls, which seem to be connected to this structure, are visible on the ground. Unfortunately, the construction of modern houses in this area has destroyed most of these archaeological remains. In addition a third structure, a flat circular platform with a diameter of 20 m, is located several hundred metres to the north-west.

Further remains of the late third millennium BC



FIGURE 3. *The fortified outcrop N120.*

were found in the north of the oasis. They are located in the aforementioned valley, which forms the boundary of the oasis to the north-east. The southern part of this extended valley has been almost entirely bulldozed in order to use this area for agriculture. Numerous fields were laid out there for cultivation, but most of these have already been abandoned. The bulldozing of this area has probably destroyed most of the archaeological remains. Close to a small Islamic cemetery (N108), which had not been bulldozed for religious reasons, we found some foundations and a very disturbed Umm an-Nar-tomb (N109) with a diameter of 8 m.

North of this field area several structures or plans consisting of foundations were visible partially buried in the ground, and it is possible that later sedimentation may have taken place in this area.

Scattered over this plain are several rocky outcrops where the remains of walls, as well as Umm an-Nar pottery intermingled with a few Early Iron Age and Islamic sherds, were found. A closer examination showed that some of these rocks were used as campsites, while

at others more elaborate structures suggest a use as settlement and/or fortification. Some of the lower outcrops were fortified with large unworked stones, incorporating the natural rock into the structure. The most impressive of these is a *c.* 20 m-high rocky peak (N120), which is almost completely fortified by rectangular stones (Fig. 3). A massive wall more than 4 m high fortifies its western slope and parts of its eastern flank are fortified in the same way.

Further west, near Wādī Samiṭ and close to the Nizwā–Bahlāc road we recorded another small Umm an-Nar fortification (N188). Again it consisted of large unworked stones, forming a circular structure with a diameter of 13 m, and incorporating a small natural outcrop. A line of about twenty tombs was recorded in the plain, south of this fortification. All of them are very disturbed and only flat heaps of pebbles with a diameter of between 5 and 8 m have survived.

Even if most archaeological remains are destroyed or covered by sediments, we can conclude that in the third millennium BC probably the whole valley was

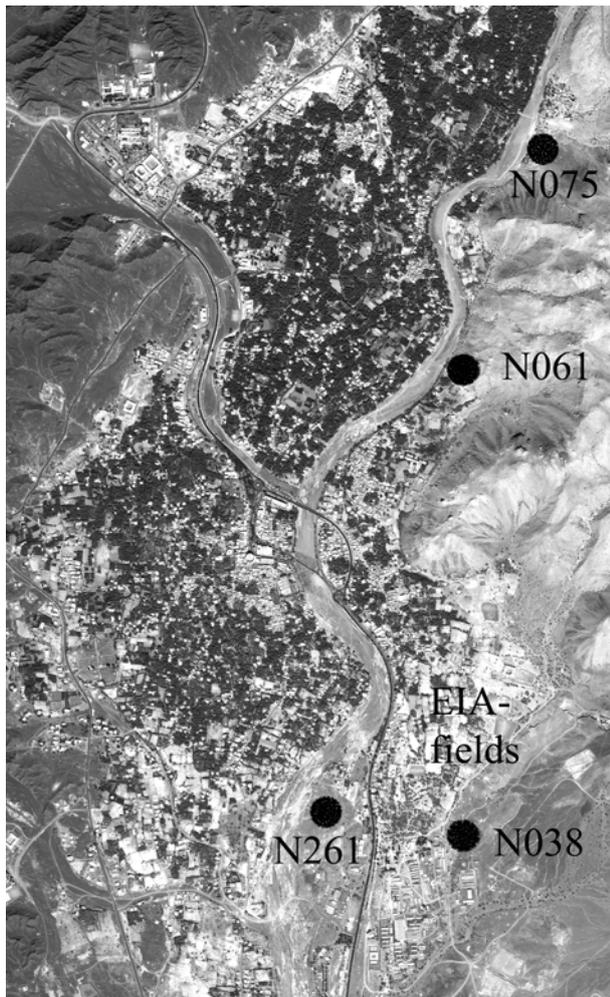


FIGURE 4. Satellite image of the Nizwā oasis with Early Iron Age settlement areas.

used as a settlement area.

As in many other oases the following Wadi Suq period (2000 – 1600 BC) appears to be missing. We discovered a small area with several badly preserved underground graves south of the third-millennium BC settlement area, but no sherds or small finds were found to suggest a date for these graves. But at least the famous so-called Nizwā "warrior-tomb" with its assemblage of weapons and other small finds, which was examined in 1985, proves that there were burials in the oasis at the end of this period, or rather during the transition from Late Bronze Age (1600 – 1300/1250 BC) to Early Iron Age (al-Shanfari & Weisgerber 1989).

The Early Iron Age (1300 – 300 BC)

In the Early Iron Age settlement activity increased considerably, especially at the eastern side of Wādī Kalbūh. This area stretches for some kilometres from the mountains bordering the oasis to the east, to the edge of Wādī Kalbūh to the west, and today the modern Nizwā main road cuts through it. The eastern part of the area is formed by a large valley situated east of the main road between Farq and Soʿāl. Today, most of the valley is not accessible because of military facilities, but north of the military area and south of the contemporary settlement of Soʿāl lies a vast area of deserted fields, which stretches into the modern village (Fig. 4). These fields are covered with a dense scatter of potsherds: most of them date to the Middle Islamic period (among them imported sgraffiato and celadon sherds etc.), but intermingled with them are numerous Early Iron Age sherds. Located between these fields are some low mounds, most of them with Islamic graves on top. These mounds consist of soil excavated from the fields in order to reach the water-table, but a closer examination showed that they are also covered with Early Iron Age sherds. Additionally, foundations are visible on the surface of most of the mounds: these are probably the remains of Iron Age houses or farmsteads. So the whole extended area was already exploited in the Early Iron Age with single houses and farmsteads between the fields, and larger settlement units located to the east near the mountains (N012) and to the west on the edge of Wādī Kalbūh (N261). Both sites consist of a chain of low hills, which are covered with a dense scatter of Early Iron Age pottery. At the south-western edge of the larger site, N261, we found the remains of a few almost completely destroyed structures, which might have been Early Iron Age tombs.

Several hundred metres up the wadi, north of Soʿāl, lies another small valley. Located in this valley are the remains of a few mud-brick buildings, deserted fields, and Islamic graves, surrounding a small mosque (N063) with a beautiful decorated mihrab, known as mosque al-Šarja (cf. Costa 2001: 69–72).³ Additionally, three funerary mosques are distributed over the extended Islamic cemetery. As suggested by the surface pottery and the preserved wall foundations, the graves as well as the mosques were erected on another Early Iron Age settlement. A limestone hill locally known as Jabal al-Hawrah protrudes into the valley. Built on its flat plateau is a hill fort (N061) (Fig. 4), consisting of a massive, 200 m-long semicircular rampart with several collapsed towers, enclosing a small area above the wadi (Fig. 5). Inside the enclosure lie the ruins of several



FIGURE 5. Aerial view of the hill-fort N061 (photo W. Schäper/A. Bürkert).

buildings including a cistern. According to the pottery this site was probably built during the Early Iron Age and later reused during the Middle Islamic period (al-Shanfari & Weisgerber 1989: 17). The remains of another rampart can be found below the hill fort, enclosing the eastern part of the valley, where the Early Iron Age settlement was probably located.

Another Early Iron Age settlement area (N075) is located several hundred metres further up the wadi on a flat terrace near the small village of Sībā^c (Fig. 4). Today this area is also used as a cemetery, but between the Islamic graves some foundations are still visible and the surface is densely scattered with Iron Age pottery.

While it is possible to prove that there was a substantial settlement at Nizwā during the Early Iron Age, the question of whether the increase in settlement activity during this period was connected to the introduction of the *falaj* system at Nizwā has still to be answered (Boucharlat 2003: 168).

Another problem is that of Early Iron Age burials. Except for a few structures at settlement site N261, which may be the remains of tombs, no other tombs of this period were found. Even the practice of reusing Hafit-period tombs for Iron Age burials, which was very common in Izkī, Ibrā³, and at other sites, could not be attested in Nizwā. Along the foot of the mountains east

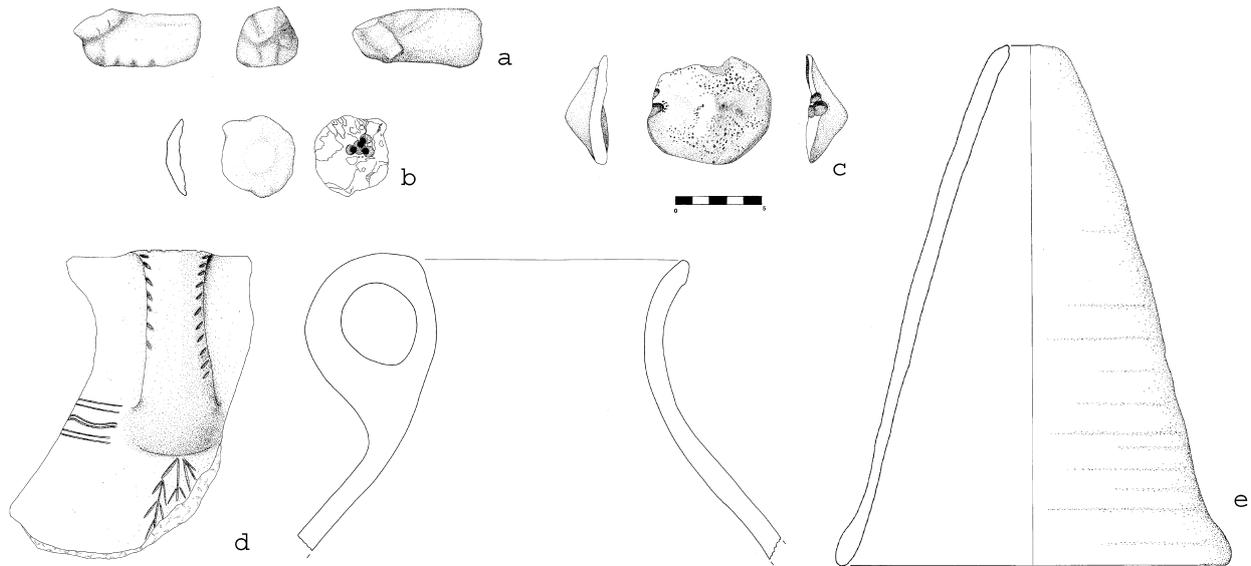


FIGURE 6. Finds from the survey: a – fragment of a terracotta figurine (DA 19745) from N061; b, c – ‘shell-button’ (DA 19712) from N059 and N076 (DA 19720); d – fragment of a decorated pitcher from a tomb at site N261 (DA 19693:1588); e – clay-pipe/nozzle (?) from the Middle Islamic potter’s workshop N030 (DA 19639:1910).

of Wādī Kalbūh and north of So‘āl we found several areas, which were deeply cut by erosion channels containing a few modern Islamic graves. Visible in the sections cut by these channels are several layers of stones as well as human bones. Some of these bones were also exposed on the surface by rain and erosion. This suggests that the Early Iron Age tombs may have been located in those areas that are today covered by several layers of silt and gravel.

Except for a huge amount of potsherds, other small finds were scarce at the Early Iron Age settlement sites. The most interesting finds were a fragment of a clay animal figurine (DA 19745) (Fig. 6a) from the Nizwa hill fort (N061), and two so-called "shell-buttons" or "belt-buckles" from two of the settlement sites.⁴ The first example (DA 19712) from site N059 (Fig. 6b) is a convex piece of weathered shell with an approximate diameter of 4.5–5.0 cm and four drill-holes on the reverse. The second example (DA 19720) was found at site N076 (Fig. 6c). It is also convex, but with an average diameter of 7.0 cm which is larger than the first example. The preserved edges of the shell are clearly smoothed with three drill-holes on one side. Both examples are undecorated. A handful of similar pieces are known from south-east Arabia. More elaborate shell-buttons, with a central perforation and decorated with double and/or single dot-in-circle motifs were found at tomb SH 102 at Shimal (Vogt & Kästner 1987: fig.

18/3-4), Dibba (Frifelt 1971: 365, fig. 11A), Sharm (Barker & Hartnell 2000: 205, fig. 3), and tomb 4 at Bithnah (Corboud *et al.* 1996: 161, pl. 27/1). Unpublished examples from the long-burial of al-Qusais are on display in Dubai Museum (Barker & Hartnell 2000: 205). Outside south-east Arabia such buttons were found at Nimrud (Mallowan 1966: 125, fig. 66) in an eighth-century BC context, which therefore provides an Early Iron Age date for this kind of artefact, while the inventory of Tomb SH 102 suggests instead an earlier, Late Bronze Age date (Vogt & Kästner 1987: 32). The undecorated shell-buttons from Nizwā are best paralleled with examples from a reburial in Cairn 20 at Jabal Hafit (Frifelt 1971: 364, fig. 9E) and from a tomb at Qarn Bint Sa‘ud (Frifelt 1971: 365, fig. 11C), tomb Fashgha 1 in the Wadi al-Qawr (Phillips 1987: fig. 39, upper part) and tomb 4 at Bithnah (Corboud *et al.* 1996: 161, figs 4–5).

The Late Iron Age (300 BC – 630/1000AD)

Before we turn to this period, a short comment should be made here on terminology as there seems to be some confusion over what is meant by ‘Late Iron Age’. In Central Oman this expression is used synonymously, but in a more neutral way, with the term "Samad period", and refers to all cultures or assemblages of the period roughly corresponding with the Late pre-Islamic,



FIGURE 7. *Remains of the old Friday-mosque at Samad al-Kindi.*

Sasanian and part of the Early Islamic periods of the United Arab Emirates (Yule 1999: 143, fig. 25). However, unlike the Emirates, it does not include Iron III (600 – 300 BC).

Compared to the Early Iron Age, remains of the following Late Iron Age or Samad period are scarce. On the western side of Wādī Kalbūh a handful of Late Iron Age sherds was collected in an Islamic cemetery, but no structures or tombs seem to be connected to this period.

At the north-western edge of the Early Iron Age site N261 we recorded several structures, which were obviously graves. After heavy rainfalls in February 2005, the wadi cut through two of these structures. Among the pottery collected were sherds of decorated pitchers, of a type that is commonly found in Samad-period graves (Fig. 6d).

More interesting is the site of the ruined Friday mosque of Samad al-Kindi (Costa 2001: 49). This mosque was originally built between the fields and the palm gardens and is today almost completely overgrown (Fig. 7), making access to the site relatively difficult. Almost nothing of this building is preserved, apart from the *qibla* wall and the remains of a few pillars. As far as it is possible to ascertain without excavating, the founda-

tions of this mosque were built on a low mound. On the mound's eroded western side, in the section below the foundations of the mosque, we found numerous sherds. According to the pottery the mosque was built on the remains of what once must have been a Late Iron Age structure.

The Islamic periods (630 – 1750 AD and later)

The Islamic periods, with the exception of the Early Islamic period, are well attested, and therefore just a few examples of sites will be presented here.

Among the most interesting of the numerous Islamic cemeteries is Nizwā's main cemetery N245 (cemetery of Imams, see Ibrahim 2001). Behind the main mosque of this cemetery we found a low rocky outcrop where a small, square, single-room building was erected — probably the remains of a mosque or a praying area (N247). The walls of this building were built in alternating rows of reddish-black ophiolite and white magnesite stones giving the building a colourful appearance (Fig. 8).



FIGURE 8. *View of the mosque/praying area N247.*

At So‘āl we found the remains of a Middle Islamic potter's workshop (N030). Located between the modern houses, the surface of a low mound was covered with thousands of potsherds, many of them over-fired, burned, melted or distorted, as well as many fragments of clay pipes (Fig. 6e), which may have been used as nozzles for pottery kilns. It is interesting to note that we also found fragments of these nozzles in many Islamic cemeteries.

The most interesting finds of the Islamic periods are fragments of three glazed figurines (Fig. 9) — two horsemen and a horse — which were found at three different cemeteries at Nizwā. Another horseman fragment

was found at the Jabal al-Aḥḍar in an enclosed prayer place near the deserted settlement of Wādī Banī Ḥabīb. Exact parallels to our figurines were found during restoration in the debris of the mosque at Bahlāḥ fort. These small horse and camel figurines are now stored in the Department of Antiquities in Muscat.⁵ The deposition of these figurines in cemeteries, prayer areas, or mosques suggests a use as votive offerings and sheds light on popular religious practices. As the glaze of these figurines is identical to the glaze of the vessels of the so-called "Bahla-ware", it is proposed that they were locally made in the Late Islamic period or even more recently.

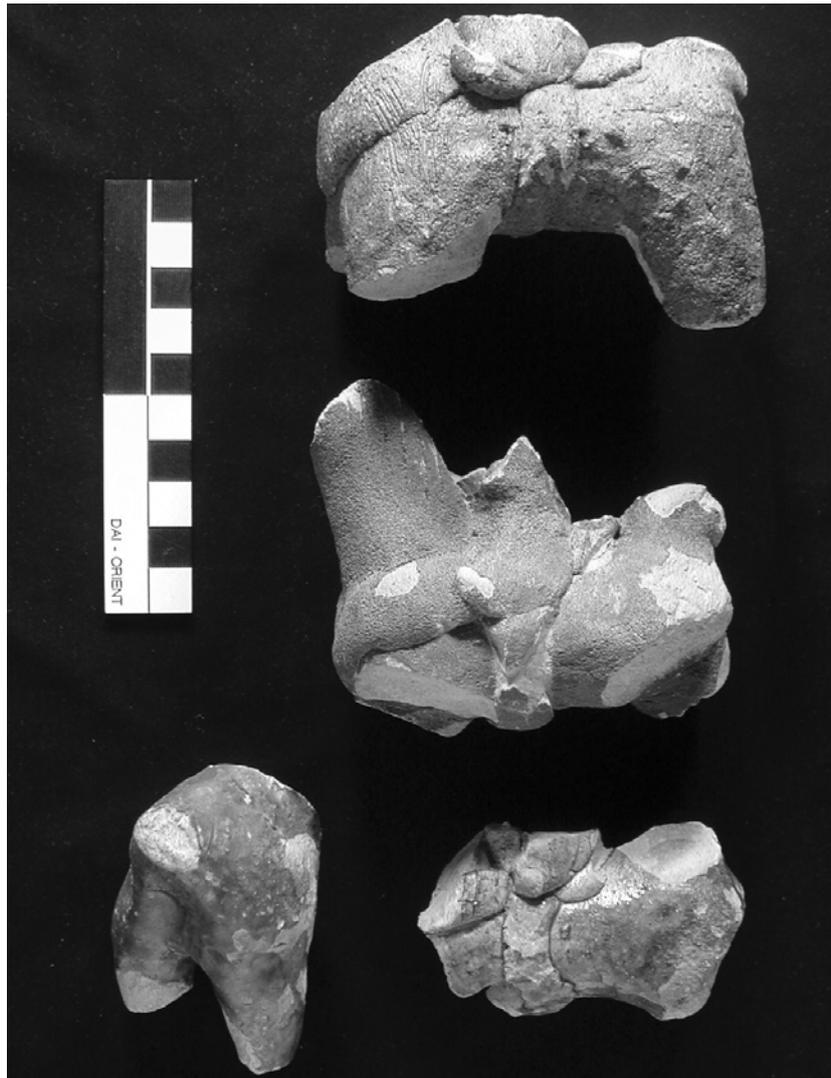


FIGURE 9. *Fragments of glazed figurines from Nizwā and the Jebel al-Aḥḍar: horseman from N265 (DA 19734) on top, horseman from N011 (DA 19705) in the middle, horse from N272 (DA 19741), bottom left and horseman from JA069 (DA 19759), bottom right.*

Conclusion

In conclusion, the development of Nizwā oasis can roughly be sketched as follows:

No settlement of the late fourth and early third millennium BC was discovered, but Hafit tombs testify to the presence of people in the oasis during this period. The first settlements were attested in the second half of the third millennium BC, located to the south and north of the oasis, but no remains of this period were found in the area of the central oasis itself. The strategic location

and also the fortified character of most of the preserved monuments suggest that at least some of the third-millennium BC structures were built to control access at both ends of the oasis. After a decline in the Wadi Suq period, they were maintained for the same purpose during the Early Iron Age, but the main settlement of this period shifted to the eastern terrace of Wādī Kalbūh, where several settlements were distributed over a row of valleys along the foothills of the Hajar mountains. As most of these sites were used as cemeteries in Islamic times, they are still preserved, and compared to the ear-

lier periods, attest to an enormous growth in population. This growth in population may be due to the extension of arable land and the introduction of a *falaj* system. An extended area of deserted Iron Age fields was discovered near Soʿāl, but no *falaj* could be found there.⁶ With the beginning of the Late Iron Age settlement activity declined for unknown reasons, but even if remains of the Late Iron Age are scarce, we have the first indication of settlement shifting into the central oasis at this time. In the Early Islamic period oasis settlement at Nizwā seems also to have been at a low level, but at least by the beginning of the Middle Islamic period most of the oasis was used for agriculture and settlement.

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cially of the hill fort N061. I am also very grateful to my wife, Nikola Schreiber, who executed all the final drawings for publication of the Nizwā material.

Notes

- ¹ The German partners of this project are the Oriental Institute at the University of Tübingen, the Institute of Urban Planning at the University of Stuttgart, the Institute of Crop Sciences at the University of Kassel, and the Oriental Department at the German Institute of Archaeology in Berlin. The German Research Foundation, the Sultan Qaboos University, and the German Archaeological Institute generously financed this project.
- ² Fieldwork at Nizwā was conducted under the direction of the present author from 17th to 30th October 2004, from 22nd to 10th March 2005, and a few days in October of the same year.
- ³ In his gazetteer, Doe mentions an old mosque in al-Jinah (site 26), but he is probably referring to this mosque (1976: 160).
- ⁴ The "shell-buttons" were found near a mosque (N059), built on an Early Iron Age settlement area, and in an Islamic cemetery (N076), which also rests on a settlement area (N075) of the same period.
- ⁵ These two figurines were shown to the present author by Dr. Birgit Mershen at the Department of Antiquities on 26th November 2005.
- ⁶ Boucharlat (2003: 168) cites a corrected C¹⁴ date of the early first millennium BC for a *falaj* system at Nizwā, but unfortunately does not give the location of this *falaj*.

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Author's address

Jürgen Schreiber, Deutsches Archäologisches Institut, Orient-Abteilung, Berlin, Germany.
e-mail juergenschreiber@mnet-online.de