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The Bronze Age cultural landscape of Wādī al-Zahaimi

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Summary

On the north bank of Wādī al-Zahaimi, east of the town of Liwa¹ in northern Oman, a remarkably well-preserved Bronze Age cultural landscape was discovered and documented in January 2018 by the Wadi al-Jizzi Archaeological Project. It includes first, a well-preserved Umm an-Nar settlement with two circular tombs, a possible watchtower, and imported pottery from the Indus and Dilmun; second, a large transitional cemetery, with about 170 tombs dating to the late Umm an-Nar and early Wadi Suq periods, which has striking parallels with the famous linear alignments from ‘Asimah; and third, a small Wadi Suq settlement with stone-built houses. In this paper, we present this well-preserved Bronze Age cultural landscape and its relevance to our understanding of the late third and early second millennia BC in south-eastern Arabia.

Keywords: Umm an-Nar, Wadi Suq, domestic architecture, funerary traditions, prehistoric pottery

Introduction

In this paper we present new data on remains from the Umm an-Nar and Wadi Suq periods that were documented along the north bank of Wādī al-Zahaimi. Wādī al-Zahaimi is located in the north of Oman, in the hinterlands of the town of Liwa². In this remote part of the Bāṭinah, a remarkably well-preserved cultural landscape of the Bronze Age was encountered, and we will present a summary of the sites and their associated structures here.

These data were obtained in the course of the January 2018 season of the Wadi al-Jizzi Archaeological Project. This is a systematic and multi-period survey of an area of about 1800 km² in the hinterlands of modern Ṣuḥar. Over the past five seasons we have focused on the documentation of two wadi corridors connecting the coast to the mountains: Wādī Sūq/Wādī al-Jīzī, on the one hand, and Wādī Fizḥ/Wādī al-Zahaimi, on the other. The archaeological remains of these two corridors differs markedly: whereas historic sites predominate along the Wādī Sūq/Wādī al-Jīzī corridor, there is a rich and well-preserved prehistoric landscape along Wādī Fizḥ/Wādī al-Zahaimi, and we have reported on some of these data previously (Düring & Olijdam 2015; Düring, Olijdam & Botan 2017; Düring & Botan 2018).

The area along the north bank of Wādī al-Zahaimi that is discussed in this contribution is located between

the village of Fizḥ to the east, and the hamlet of Qaṭṭārīyah, located to the west at the foot of the al-Ḥajar mountains, and is about 4.5 km in length. At its centre is a flat alluvial terrain fed by various minor wadi systems, which is probably the main reason this landscape was selected for occupation in the past. Within this part of Wādī al-Zahaimi we have encountered a series of sites (Fig. 1) dating to the Umm an-Nar period; the transition between the Umm an-Nar and the Wadi Suq; the Wadi Suq Period; the Iron Age, including the cemetery at site 50/51 (Düring, Olijdam & Botan 2017); and the Islamic period (middle to late Islamic). In this study the focus is on the Bronze Age remains; evidence from the later periods will be addressed in future publications.

The Umm an-Nar settlement

A substantial Umm an-Nar settlement was found at a site that we labelled WAJAP-S73. It is located in a depression due north of Wādī al-Zahaimi that has good agricultural soils and captures moisture from the surrounding hills. In the Islamic period a *qanāt*-type *falaj* was built to irrigate this depression with water captured from Wādī al-Zahaimi upstream, and it is unclear whether the area could have been farmed in the Umm an-Nar period and if so, how it might have been irrigated.

Site 73 includes various components. Towards Wādī al-Zahaimi there are two substantial slag concentrations

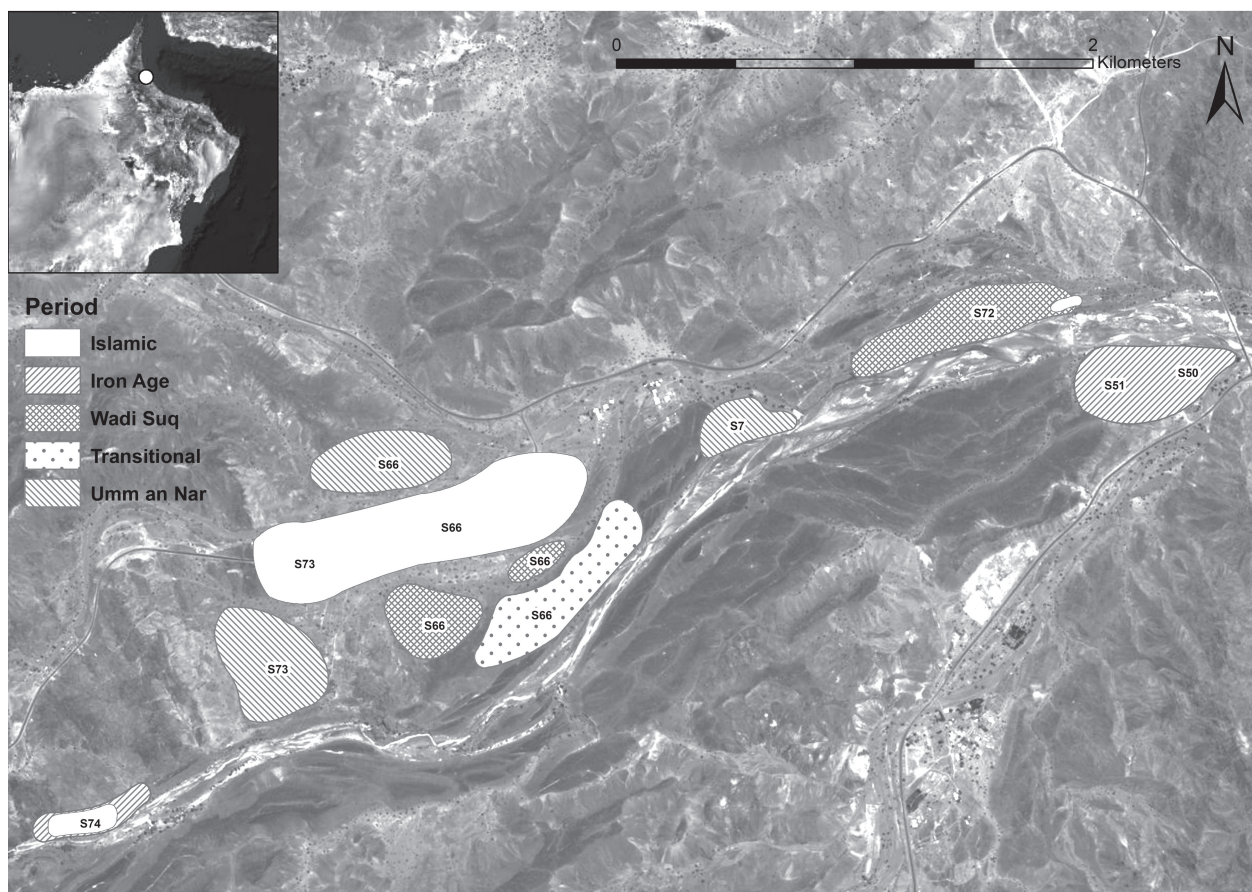


FIGURE 1. A map showing the distribution of archaeological sites in Wādī al-Zahaimi as documented during the WAJAP 2018 season.

that are most likely dated to the Bronze Age (Umm an-Nar or Wadi Suq periods). This interpretation is based on circumstantial evidence, consisting of the complete absence of associated Iron Age or Islamic pottery, and the morphology of the slag, which differs from the typical bowl slags that can be dated to the late antique and Islamic periods (Weisgerber 1987). The slag at Site 73 did not contain any charcoal and therefore cannot be dated with ^{14}C . The site also has two small tombs, a possible watchtower, an Umm an-Nar settlement, and a smaller Wadi Suq settlement (Fig. 2).

The Umm an-Nar settlement has a core area in which buildings are clustered relatively close to one another, but there are also numerous buildings that are spread out across a larger area (Fig. 3). Some of these are in secluded locations and might not have been visible from

the central area of the settlement. The buildings are not arranged in any clear orientation and do not have a specific alignment — there are no streets or courtyards around which buildings are placed. Most buildings are located on sloping terrain, with their entrances seemingly on the lower side of the building, although there are also some buildings in flat areas. No standard orientation of buildings can be determined, instead the orientations generally appear to be determined by the terrain of the settlement.

In total about thirty buildings were documented that can be dated to the Umm an-Nar period. Their walls are double faced, about 0.7 to 1 m wide, with two flat wall faces, often consisting of slabs placed upright with uneven and narrow top surfaces, and a rubble and gravel core. This type of wall construction and the lack of substantial

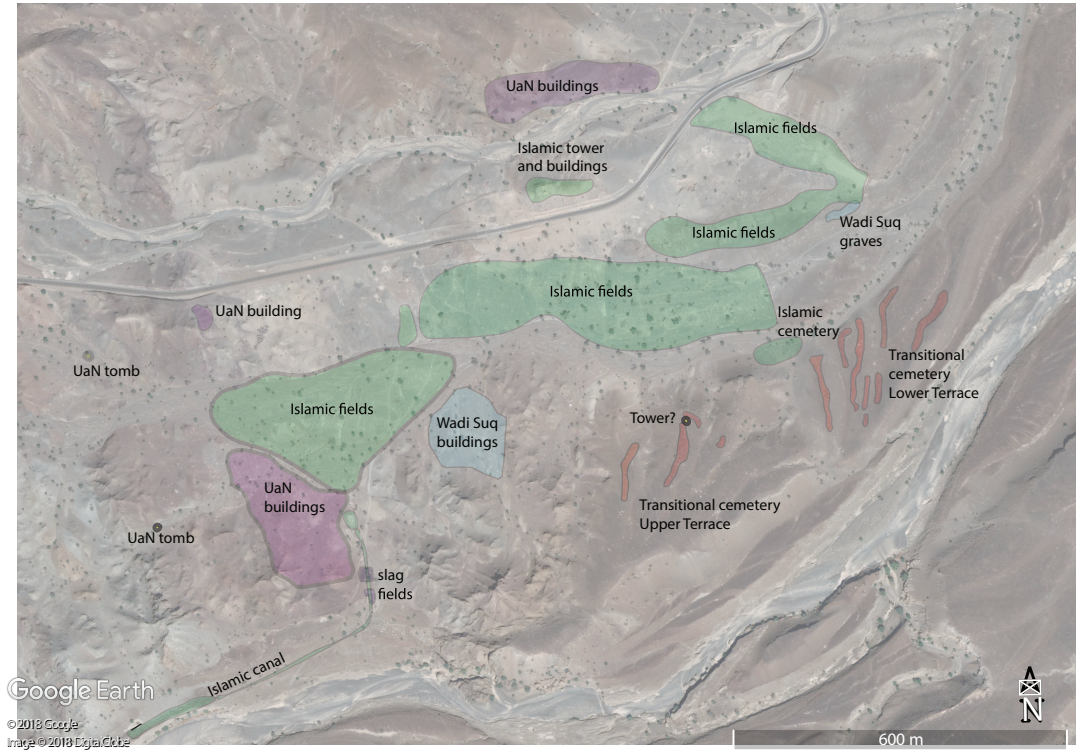


FIGURE 2. A map showing the various components of Sites 66 and 73 in Wādī al-Zahaimi (B. Düring).

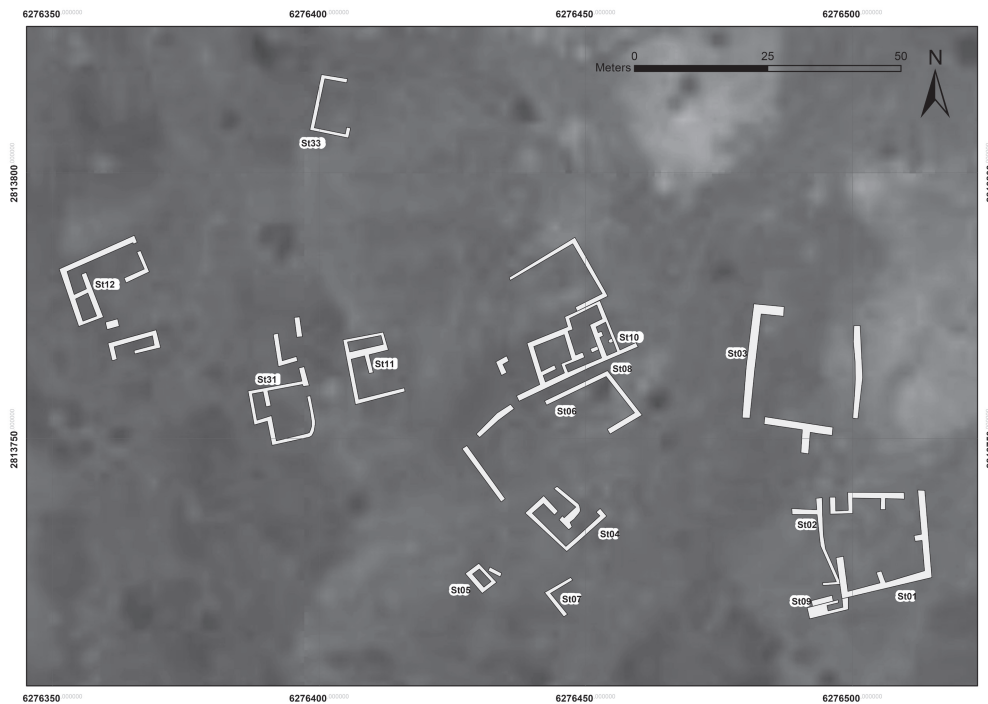


FIGURE 3. The central area of the Umm an-Nar settlement at WAJAP-S73 (J. Aal).



FIGURE 4. *Umm an-Nar tomb S73_St60 (photograph B. Düring).*

amounts of stones in their immediate surroundings indicate that these walls were not originally much higher than what is visible today. It is possible that these walls had a superstructure of loam, or that brushwood was stacked on top to raise their height, but no evidence survives to support these suggestions.

The buildings at Site 73 vary considerably in size, from c.30 to c.400 m². The large dimensions of many of these structures are remarkable. The buildings take on several forms. First, there is a good number of more or less square buildings, c.20 x 20 m. In some cases the large courtyard structures seem to lack a wall on one side and appear as large U-shaped structures. Given the considerable size of these structures and the apparent lack of division walls it is unlikely that these structures were roofed. Instead it seems more plausible that they served as courtyard structures. Similar large square courtyard structures have been documented at our WAJAP-S63, a smaller Umm an-Nar settlement located some 9 km downstream, and just to the east of Fizh (Düring & Botan 2018), and possibly at al-^cAyn (Blin 2007; 2012), although the dating of the latter site is not entirely clear. Some of these large courtyard structures have one or more small rooms attached to one of their sides, c.2.5 m wide, which could have been roofed with palm trunks or in other ways, for example with *barasti*-type structures (buildings made of woven palm frond). These spaces could have been used as living spaces,

storage rooms, workshops, or some combination of these. Here it should be noted that very little slag was found in association with these courtyard structures, and this contrasts with the structures at nearby Dahwa, where there is clear evidence of metallurgical activities inside the buildings (Kh. Douglas, personal communication). It is therefore perhaps more plausible to associate these courtyard structures with pastoralists and with a seasonal use of the site, something that has also been suggested for other Umm an-Nar settlement sites, such as al-Zibā (Blin 2007; al-Tikriti 2012: 90; Schmidt 2018; Düring & Botan 2018).

Apart from these large courtyard structures, there are also some smaller buildings with one or two rooms, resembling more closely what we might expect a house to look like. However, the surface finds do not help us to distinguish differences between these 'domestic' buildings and other structures.

As at Dahwa, there are Umm an-Nar tombs associated with the settlement area. To the west in the immediate vicinity of the settlement, we have identified two relatively small round tombs, both with diameters of c.5 m. No so-called 'sugar lumps' or dressed stones were found in association with these tombs. Their walls stood only about 0.4 m above the surface with few stones in the surrounding area, making it likely that these were mainly subterranean tombs. No internal partition walls could be discerned on the surface, but the shape of these

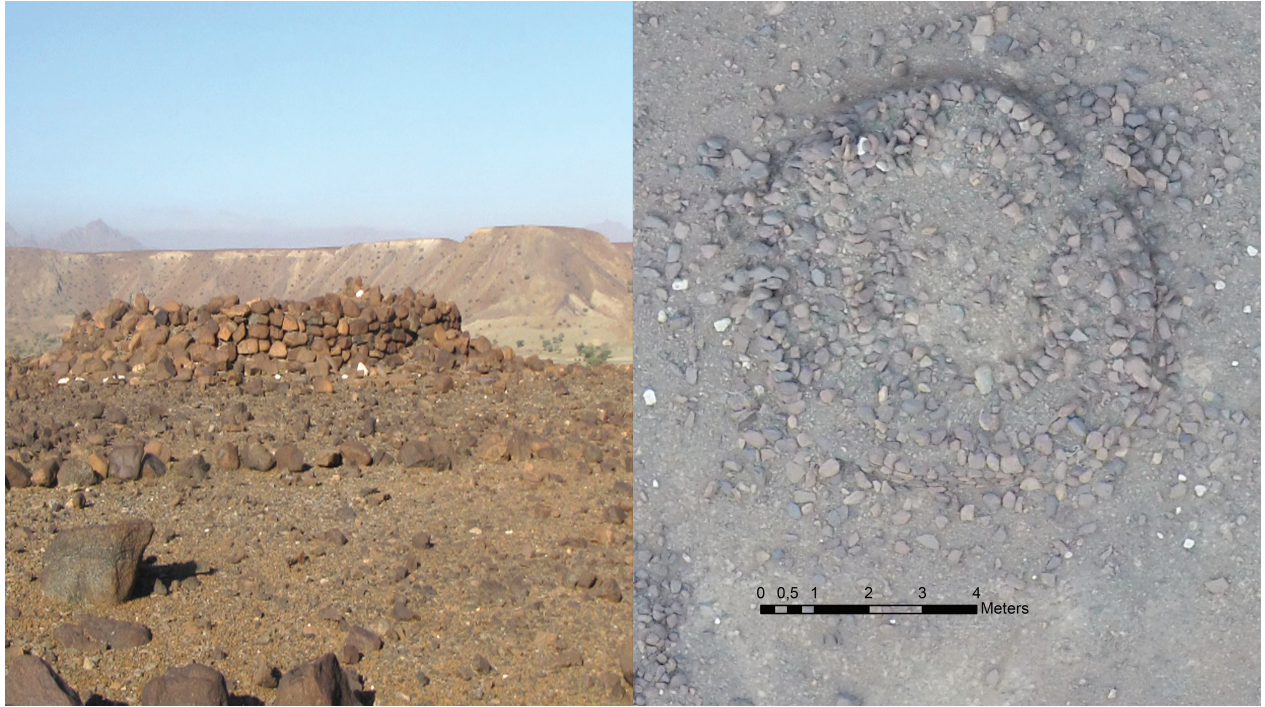


FIGURE 5. Tomb S66_St184 viewed from the side and from above (B. Düring).

structures, the large size of the stones used, and their location clearly suggest that they are tombs.¹

On a spur directly adjacent to and overlooking the settlement, we documented a monumental round structure with a diameter of 7 m (S66_St184) and with an inner round chamber measuring c.3 m across. It was c.0.8 m high and had a layer of flat slabs on its surface (Fig. 5). In some respects, this structure resembles the Umm an-Nar watchtower from Wādī Ḥilo (Kutterer 2013: 126–134), but given its close proximity and alignment with other tombs on the upper terrace of the transitional cemetery that is discussed below, and the presence of a round chamber in the centre of our structure, we think it is more plausibly a significant and large tomb.

Over 300 sherds were collected at Site 73, many large and well preserved (Fig. 6). The Umm an-Nar assemblage is defined by large domestic jars made of Sandy Red Ware (de Vreeze 2016: 66). The few rims that were recovered

display similarities with jars reported from Hīlī, al-Zībā, and Bāt, such as St02_L01_C02 (Méry 2000: fig. 91.3). Several fragments of the Sandy Red Ware with ridged appliqué decoration were also collected. At Hīlī 8 ridged appliqué decorations only appear in phases IIC2 and IID which date to c.2500–2300 BC (Cleuziou 1989: 76). A total of sixty-two pieces of Umm an-Nar Fine Ware were collected from this settlement, mostly body sherds. This type of ceramics, which has sometimes been designated as ‘funerary ware’, appears to have been widely used in domestic contexts as it occurs across various structures. Likewise, Umm an-Nar Fine Ware was found at the nearby Umm an-Nar settlement WAJAP-S63 mentioned above (Düring & Botan 2018).

In addition, twenty-four fragments of Indus Black Slipped jars were collected from several buildings within the Umm an-Nar settlement. There are only three different rims, such as St08_L13_C01 (Fig. 6), and it is possible that the Indus sherds derive from a few vessels only. However, the sherds were widely spread across the settlement rather than clustered, which suggests that this ware was quite common at site 73.

¹ The structures are too large to be interpreted as wells, which could be an alternative interpretation.

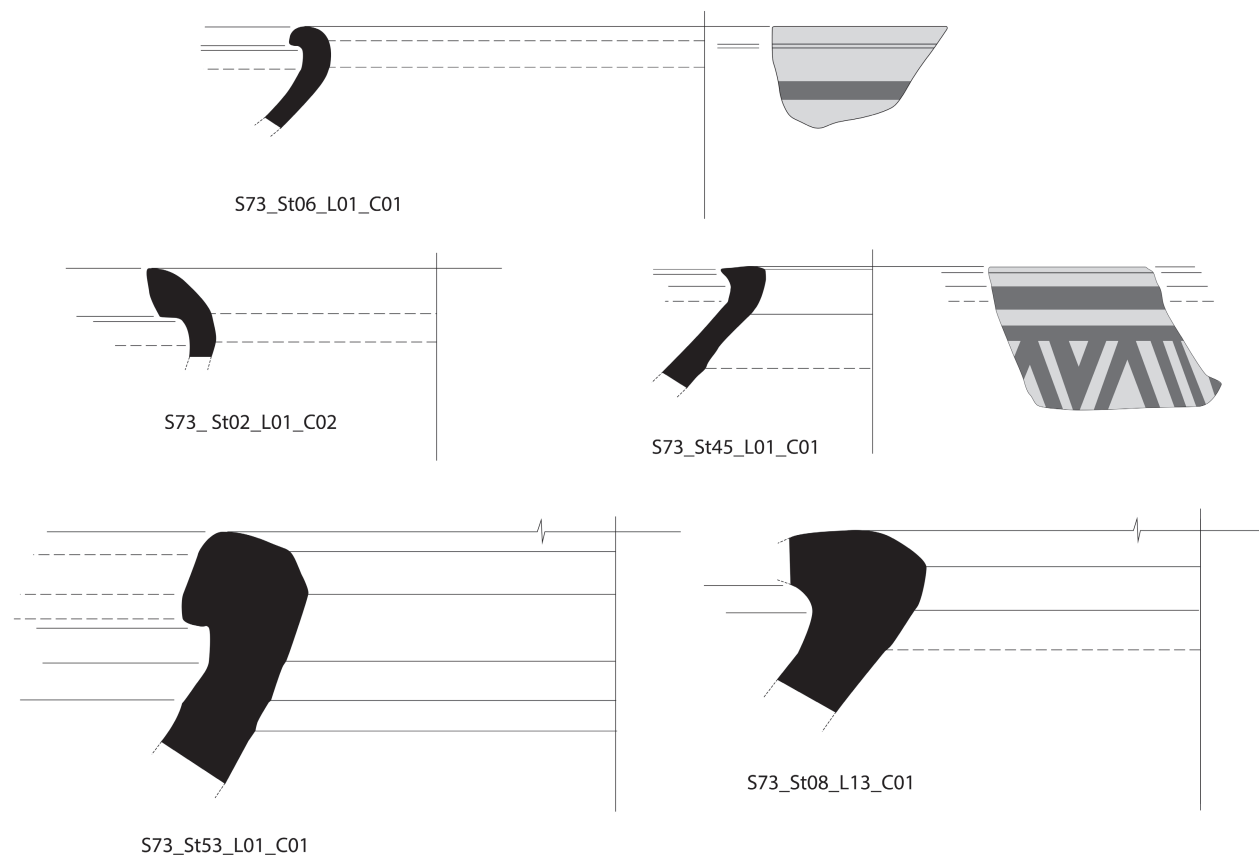


FIGURE 6. Diagnostic Umm an-Nar and Indus ceramics from the settlement at WAJAP-S73 (J. Porck).

The transitional Umm an-Nar–Wadi Suq cemetery

Immediately adjacent to the Umm-an Nar settlement lies a large cemetery that we have dated to the transition between the late Umm an-Nar and early Wadi Suq periods (WAJAP-S66). This dating is based on two considerations: first, the pottery found in association with these tombs; and second, the architectural parallels of the tombs with the cemetery at ‘Asimah (Vogt 1994). The transitional cemetery consists of about 170 tombs arranged in linear alignments along a roughly north-south axis, which are distributed over a lower and an upper terrace situated along Wādī al-Zahaimi.²

On the ground these tombs take on the form of low

platforms, with walls raised about 40 cm above the surface (Fig. 7). The platform has walls on either side, which are made of wadi cobbles and are about 0.6 m wide, with a loose packing of soil and gravel in the centre. The tombs take on two forms. They occur as rectangles, which can measure up to 12 m long and c.2.5 m wide, or as round platforms with a diameter between 3 and 5 m. In some cases the two types are combined and bonded.

From above, these tombs appear as linear arrangements of rectangular and circular tombs, which are highly reminiscent of the ‘Asimah tombs (Fig. 8). ‘Asimah has been presented as an exceptional cemetery (Cleuziou & Tosi 2007: 274–275). Although additional alignments have been suggested at Wādī ‘Ashwānī, Qidfa’, and Kalbā’ (Vogt 1994: 134–135), they have been dismissed by colleagues (Christian Velde and Carl Philips, personal communications). The cemetery in Wādī al-Zahaimi is more than a 100 km from ‘Asimah as the crow

² In some areas of the cemetery, oval terraced tombs dating to the mid-first millennium AD have been built on top of these Bronze Age tombs.



FIGURE 7. A typical rectangular grave of the transitional cemetery at WAJAP-S66 (photograph B. Düring).

flies, and is much larger and much better preserved than ʿAsimah when it was excavated by Burkhard Vogt.

Relatively few finds were found at the transitional cemetery of Site 66. Miscellaneous finds consist of a mere two fragments of small, undecorated soft-stone vessels (one base and one body sherd) and a shell bead. This uncharacteristic dearth of materials, combined with the undisturbed appearance of the tombs, strongly suggests that this cemetery has not been looted and is in near pristine condition. The pottery found in association with the graves consists predominantly of domestic rather than funerary fabrics. Remarkably they are commonly found on one side of the tomb, in the east central area. This distribution pattern of domestic pottery has, as far as we know, not been observed elsewhere. We tentatively link this pottery with post-funerary activities performed next to the grave.

Several Umm an-Nar fragments were recovered from the cemetery. Most third-millennium sherds were extremely fragmented and the collection yielded no clear diagnostic fragments. No Umm an-Nar Fine Ware was recovered from the cemetery. Interestingly,

we did record one piece of Slag Tempered Ware, a type of domestic pottery identified for the first time at the nearby Umm an-Nar settlement at WAJAP-S63 (Düring & Botan 2018).

The Wadi Suq period is much better attested in the cemetery. It must be stated, however, that the amount of painted pottery is very limited, in stark contrast to assemblages from other Wadi Suq cemeteries in our study area, again supporting the impression of only limited disturbance of this cemetery (Fig. 9). The vast majority of fragments consist of beakers/cups and spouted jars. This predominance of beakers and spouted jars has been attested at other Wadi Suq burial sites such as Shimāl and Qarn al-Ḥarf (Velde 2003; de Vreeze 2016; Méry 2000: figs 166.4 and 167). The Wadi Suq period has been described as a period in which decorative motifs on ceramics became more naturalistic and more elaborate (de Vreeze 2016: 69). There is one body sherd that fits this description. The fragment, which consists of a sandy, pinkish fabric with no visible inclusions, bears a plant-like motif painted in maroon on a cream-coloured slip.



FIGURE 8. A composite of aerial photographs of some graves in the transitional cemetery at WAJAP-S66 showing rectangular and circular tombs (photographs S. Weijgertse).

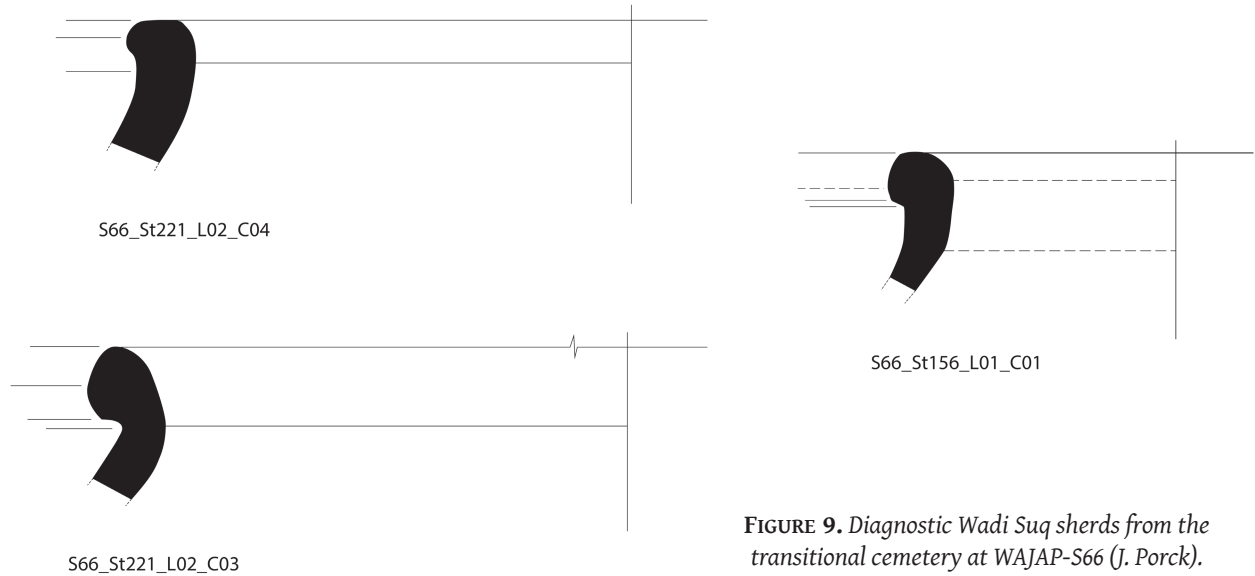


FIGURE 9. Diagnostic Wadi Suq sherds from the transitional cemetery at WAJAP-S66 (J. Porck).

If we compare the transition cemetery of WAJAP-S66 with ʿAsimah, alignment A, we note two similarities. First, there are similar alignments of rectangular and circular tombs, with a tomb architecture and dimensions that are interchangeable. Second, at both sites there is also a clear marking of orientations, which in ʿAsimah takes the form of the use of white stone on one side of the alignment and in Site 66, in the presence of pottery to one side of the tombs.

The finds from alignment A at ʿAsimah — a particularly significant amount of metal artefacts, including weapons — and the apparent singularization of an important individual, have led to the interpretation that this might be evidence of a local chief of some sort (Cleuziou & Tosi 2007: 274–275). The finds from ʿAsimah suggest a date at the transition between the Umm an-Nar and Wadi Suq periods (Vogt 1994: 130), and we think our — admittedly scant assemblages — also fit into that time period.

The Wadi Suq period in Wādī al-Zahaimi

Apart from the transitional cemetery, there are a number of typical Wadi Suq-type tombs in Wādī al-Zahaimi. At Site 72, located about 1.5 km to the west of Site 66, we discovered a series of circular tombs that had invariably been looted. They could still be identified as Wadi Suq graves due to the presence of Wadi Suq sherds and by the

stone oval alignments with a central cist that are more typical of the Wadi Suq period in our region. These are located in the lower part of Site 66 in Wādī al-Zahaimi, and we have found hundreds of these graves in various cemeteries in the eponymous Wādī Sūq (Frifelt 1975; Düring & Olijdam 2015); scores of additional ones have been excavated in rescue excavations for the industrial area east of the Şuḥar port, which remain unpublished. The diversity of Wadi Suq grave types in the Şuḥar hinterland calls for excavations which could establish whether they can be explained in chronological terms or in other ways.

Remarkably, however, there is also good evidence of a Wadi Suq settlement at Site 73 (Fig. 10). Known settlements of the Wadi Suq period are very few — they include Ra’s al-Jinz 1, and the tell sites of Hīlī, Kalbāʿ, Tell Abraq, and possibly Nawd Zubā (Carter 1997; Cleuziou & Tosi 2007; Magee 2014: 182) — and there is limited data on these settlements because of a lack of excavations and/or publications. In our 2014 season we found a settlement, WAJAP-S2, that we provisionally dated to the Wadi Suq period (Düring & Olijdam 2015; Düring & Botan 2018), despite only having found a few sherds that support this date.

By contrast, the Wadi Suq hamlet at Site 73, provides a relatively strong dataset. We have found clear building remains, which are distinct in location, construction, size, and shape from the nearby Umm an-Nar

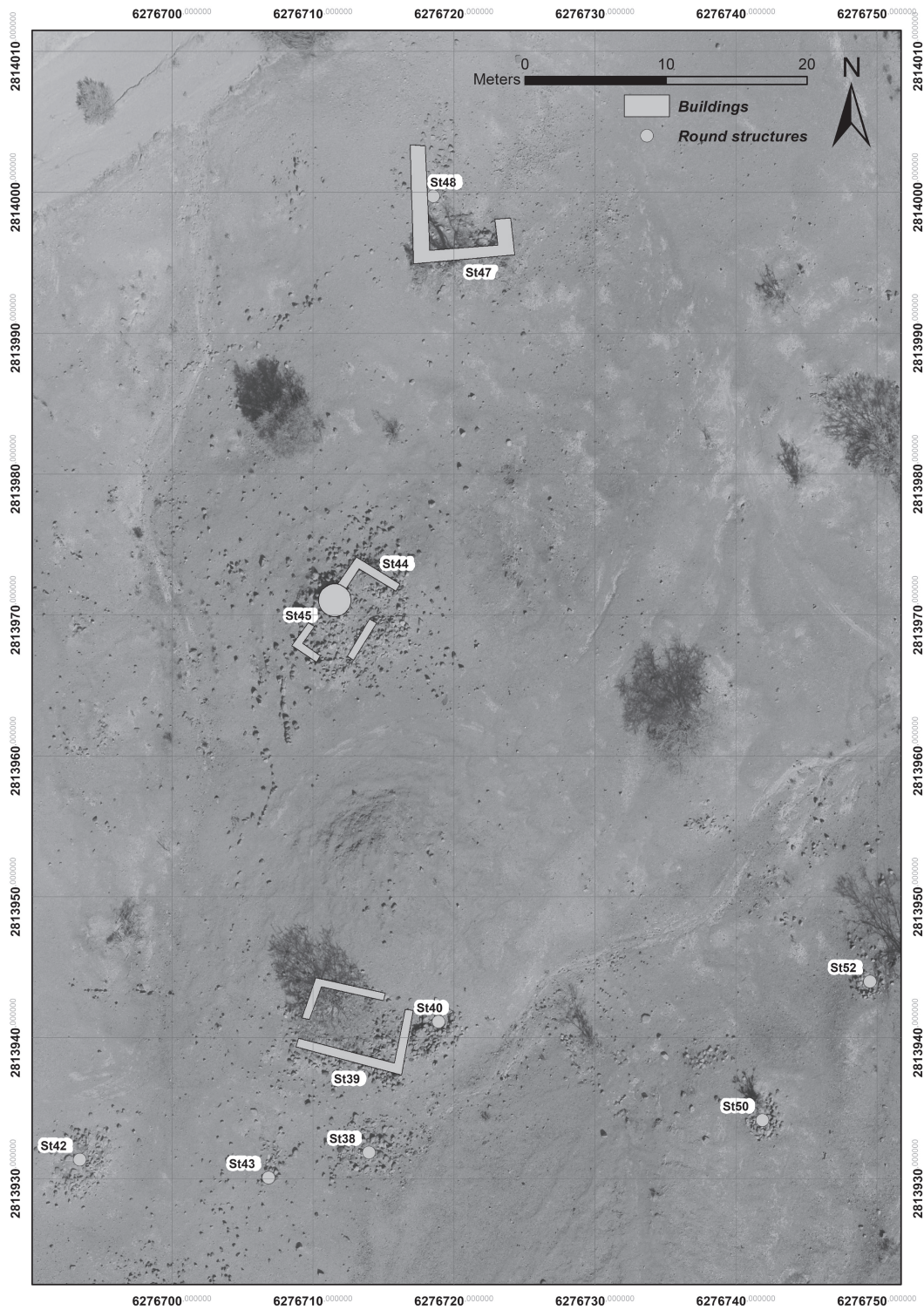


FIGURE 10. The central area of the Wadi Suq hamlet at WJAP-S73. Additional buildings are found dispersed within the landscape (J. Aal).

structures, and are associated with a significant amount of diagnostic Wadi Suq pottery.

The buildings are structures with one or two rooms, measuring between 7 and 4.5 m long and 5.5 and 2.5 m wide (see Monchablon et al. 2003 for very similar-sized structures of the Wadi Suq period at Ra's al-Jinz 1). The walls are only about 40 cm wide and built with much smaller stones than the nearby, but spatially distinct, Umm an-Nar structures. No clear features were visible in any of these buildings, but they were surrounded by a considerable number of large hearth features, and there were large amounts of *Terebralia* shells present, suggesting that these might have been consumed in the settlement.

A considerable amount of Wadi Suq pottery was found at Site 73, including some remarkable domestic types, such as St53_L01_C01 (Fig. 6). The Wadi Suq ceramics primarily consist of medium-sized jars and large storage vessels. This is in contrast with the Wadi Suq ceramics from the adjacent transitional cemetery at Site 66, where the majority of ceramics consist of beakers/cups and spouted jars.³

Almost all of the recovered sherds display a dark red-/maroon-coloured slip on the exterior and interior. The medium-sized jars are often painted, in contrast to the larger storage vessels which are usually plain. The Wadi Suq ceramics from Site 73 show parallels with several other contemporary sites. Fragment St45_L01_C01 (Fig. 6) displays close parallels with Hīlī 8 period III ceramics, while fragment St06_L01_C01 closely resembles Wadi Suq domestic vessels recovered at Nawd Zubā (Kennet & Velde 1995: 93–94; Méry 2000: 250).

Somewhat surprisingly given the location and the size of the settlements, WAJAP-S73 appears to have been linked to networks that also maintained international contacts with the northern part of the Persian Gulf, as is attested by a sherd from Dilmun (Fig. 11). The red-coloured fabric with many lime and shell inclusions is characteristic of the Barbar ceramic tradition. The sherd comes from Structure 39, which is part of the Wadi Suq settlement. The Ridged Ware fragment, St_39_L02_C06,



FIGURE 11. A Barbar sherd from Dilmun found in a Wadi Suq context at WAJAP-S73.

is well attested in early second-millennium contexts in the eastern part of the Emirates (e.g. Grave et al. 1996). The thickness of the body fragment indicates it is from a medium-sized storage jar. This chance discovery confirms there was a continuation of contacts with Dilmun after the demise of the Umm an-Nar period.

Summary and conclusion

To summarize, we found a remarkably well-preserved Bronze Age cultural landscape in Wādī al-Zahaimi that includes significant remains from the Umm an-Nar period (c.2600–2000 BC), the transition between the Umm an-Nar and the Wadi Suq periods (c.2100–1900 BC), and the Wadi Suq period (c.2000–1600 BC). First, we documented a well-preserved Umm an-Nar settlement, with two associated slag concentrations and two Umm an-Nar tombs, and Umm an-Nar ceramic assemblages that clearly demonstrate that this remotely located settlement was part of long-distance exchange networks and relatively affluent. Second, we have documented a remarkable large transitional Umm an-Nar–Wadi Suq cemetery, that mirrors the well-known site of ‘Asimah,

³ The different ceramic assemblages found at the Umm an-Nar and Wadi Suq cemeteries and subsequent settlements has been discussed in several articles by various authors in the past decades (e.g. de Vreeze 2016; Schmidt & Döpfer 2016). It is interesting to note that in our study region this dichotomy seems only applicable for the later period.

but which is much larger and in an excellent state of preservation, and is currently the only preserved cemetery of its kind. Third, there is good evidence of the subsequent Wadi Suq period, which includes both tombs and a well-dated and clearly defined settlement, with some evidence of being connected to long-distance exchange networks. Taken together, the Wādī al-Zahaimi Bronze Age landscape is therefore highly significant for the prehistory of south-eastern Arabia. We intend to conduct additional research on this well-preserved and important Bronze Age cultural landscape in Wādī al-Zahaimi in the coming years, and to contribute to the protection of this crucial cultural heritage.

Acknowledgements

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