## Chapter 3:

# The Early Bronze Age Settlements of the Sohar Hinterlands: Scratching the Surface

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### 3.1 Introduction

This paper presents the Early Bronze Age settlement data from the Sohar hinterlands. This part of Oman attracted the attention of the earliest generation of archaeologists working in Oman, who recognised the archaeological potential of the region, which included: first, the major historic trading city of Sohar, which seem to have become an important settlement from at least the Sasanian period onwards;<sup>1</sup> second, the substantial coastal water aquifers at the Sohar coast, which are fed by the large water catchment of the Wadi al-Jizzi, and facilitate a relatively dense occupation throughout the millennia; third, the presence of one of the few natural passages through the Omani mountain range, which has been of major importance for travel an trade throughout the millennia; and, finally, the Sohar hinterlands have rich copper deposits, which have been exploited in the Early Bronze Age, the Iron Age, the Sasanian period, the Middle Islamic period, and over the last 50 years. Therefore, it is certainly not coincidental that both the "Harvard Archaeological Survey" (in 1973) and Karen Frifelt (in 1972–1973) investigated this region in what are in effect the first serious archaeological explorations of the Sultanate of Oman.<sup>2</sup>

Given the properties of the Sohar hinterlands, there is every reason to assume, that the Sohar region would have been an attractive landscape for people in the Early Bronze Age.<sup>3</sup> In combination with the relatively early archaeological investigation, one might expect the region to feature prominently in discussions of the Early Bronze Age in Eastern Arabia. However, this is clearly not the case.<sup>4</sup> No doubt, this situation is partially a result of an apparent lack of a particular type of monumental structure, which consists of the so-called 'Umm an-Nar towers'.<sup>5</sup> Likewise, the Sohar region is lacking cemeteries with well-built 'sugar lump' tombs of the Umm an-Nar period.

For better or worse, the archaeology of Early Bronze Age Eastern Arabia is currently heavily biased towards monumental sites, and in particular towards sites with multiple tower structures accompanied by a cemetery of 'sugar lump' tombs. Research has therefore been centred on spectacular sites such as Hili, Bat, Bisyah, and Al-Khashbah.<sup>6</sup> This type of sites are not present in the Sohar region - or for that matter most of the Batinah – and for that reason it is commonly disregarded in studies of Early Bronze Age Eastern Arabia. What is even more remarkable, however, is that studies dealing with Early Bronze Age domestic buildings and settlements have also ignored the Sohar region.<sup>7</sup> This is the case despite the fact that good Early Bronze Age settlement evidence for the site of Zahra has been published by Costa and Wilkinson<sup>8</sup>. Therefore, this omission is difficult to understand. In fact, in terms of Early Bronze Age settlement evidence, the Sohar region is relatively rich in data. In this paper we would like to do two things: first, to present settlement data from both the earlier survey of Costa and Wilkinson and that of the "Wadi al-Jizzi Archaeological Project", in order to discuss the characteristics of these settlements and the buildings; second, to consider how these settlements are situated in the broader cultural landscape, and how the organisation of the landscape compares to other parts of Eastern Arabia.

<sup>1</sup> Williamson 1973; Kevran 2004.

<sup>2</sup> Humphries 1974; Frifelt 1975.

<sup>3</sup> Uerpmann – Uerpmann 2012: 83.

<sup>4</sup> Cleuziou – Tosi 2007: 107; Magee 2014: 99.

<sup>5</sup> Cable – Thornton 2012: 391.

<sup>6</sup> Cable – Thornton 2012: 391.

<sup>7</sup> E.g. Al-Jahwari 2008; Azzarà 2015: 181–205; Kerr 2016: 28, 120.

<sup>8</sup> Costa - Wilkinson: 1987: 97-99.

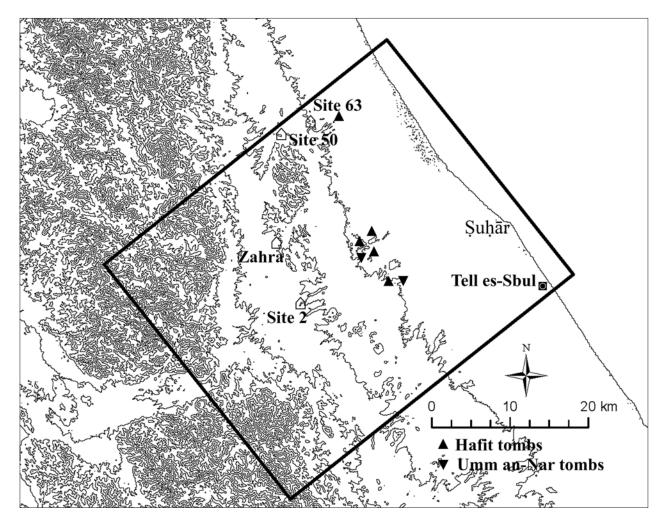


Fig. 1: Map of the Wadi al-Jizzi Archaeological Project research region showing the Umm an-Nar settlements, the main locations of Hafit and Umm an-Nar tombs, and the location of Tell al-Sbul.

# 3.2 Early Bronze Age settlements in the Sohar region

All the Early Bronze Age settlement evidence data we have in the Sohar hinterlands dates to the Umm an-Nar period. Although we have a substantial presence of Hafit tombs on the spurs adjacent to the major natural route along the Wadi Suq/Wadi al-Jizzi leading into and across the Hajar al-Gharbi, as well as smaller amounts of Hafit tombs along the Wadi Fizh, no evidence has so far been retrieved for settlements dating to the Hafit period. This is perhaps not so surprising, given that Hafit settlements have been elusive across Eastern Arabia, and only a few have been found so far, at Hili 8, Ras al-Hadd HD6, Wadi Shab GAS-1, and at Al-Khashbah.<sup>9</sup> Most of these Hafit settlement sites were found in the course of excavations initially targeting later periods, and the only area where Hafit settlements were found through survey appears to be the Ja'alan (by the French-Italian team directed by Cleuziou and Tosi).

By contrast, for the Umm an-Nar period we have a number of settlement sites in the Sohar region, and it could even be argued that this settlement evidence, in terms of density of remains and quality of Umm an-Nar settlement data, is fairly unique in Eastern Arabia. If we define this category of sites as relatively small hamlets or villages comprising of a group of buildings but lacking a tower structure or associated tombs, relatively few sites are known across Eastern Arabia. Settlement sites include Al-Ayn, Khor Bani Bu Ali-SWY-3, Ras Al-Jinz 2, and Al-Zebah.<sup>10</sup> Larger and more complex settlements, with towers or associated tombs are known from the eponymous site of

Cleuziou –Tosi 2007: 84–97; Magee 2014: 94–98; Azzarà 2015: 110–180; Schmidt – Döpper 2017.

Méry – Marquis 1998; Méry – Marquis 1999; Blin 2007; Blin 2012; Azzarà 2015; Kerr 2016: 119–171; Döpper – Schmidt in press.

Umm an-Nar Island, Al-Ghoryeen, Maysar, Hili 8, and Dahwa.<sup>11</sup> Thus for the entirety of Eastern Arabia, we have a total of only four small settlement sites, as well as five 'complex' villages for which we have good evidence.<sup>12</sup> Seen in this light, the two definite Umm an-Nar settlements, and a possible third and fourth one, which will be presented here, are a significant addition to the known corpus of sites.

### 3.2.1 Zahra 1

The site of Zahra 1 was first identified and documented by Costa and Wilkinson.<sup>13</sup> At the locality of Zahra they also documented a substantial settlement dating to the Iron Age (labelled Zahra 2) as well as the remains of a field and irrigation system dating to the Islamic period. The Umm an-Nar component of the sites consists of two small hamlets located at the northern edge of the locality, on opposite sides of a deeply incised wadi.

The pottery found by Costa and Wilkinson<sup>14</sup> and pieces collected by us subsequently, suggest a date for this settlement in the later Umm an-Nar period. The fragments belong to the Sandy Ware/Sandy Domestic Ware which has been found at sites such as Bat, Hili 8 (phase IIc2), and Kalba.<sup>15</sup> Intriguingly, Costa and Wilkinson<sup>16</sup> also found a sherd (G) that appears to belong to Black-on-Red funerary pottery. This is puzzling since there are no known tombs located at Zahra 1. However, this situation is mirrored at Site 63, to be discussed below. The suspension vessel found at Zahra 1 has parallels in the late 3rd millennium, mostly from tombs.<sup>17</sup> Sherd O is part of a bowl. The best parallel can be found at the Umm an-Nar settlement of Al-Zebah.<sup>18</sup> What is intriguing is the fact that four of the rim-types found by Costa and Wilkinson<sup>19</sup> do not have any parallels within the published literature, but do occur at WAJAP Site 63. There is a possibility that these rim-types are part of a local tradition. The alternative it that these rim-types actually occur more broadly, as several Umm an-Nar settlements await final publication.

The masonry at Zahra 1, Site 'U', consists of larger stones placed with flat sides facing outwards along the two wall faces, and has a packing of gravel and

- 13 Costa Wilkinson 1987: 97–99.
- 14 Costa Wilkinson 1987: 173–175.
- 15 Cleuziou 1989: 74–75; Eddisford Phillips 2009: 104.
- 16 Costa Wilkinson 1987: 174.
- 17 Méry 1997: 176.
- 18 Schmidt Döpper 2016: fig. 7e.
- 19 Costa Wilkinson 1987: fig. 86k, l, m, and p.

soil in the centre. These walls typically did not have a flat top surface. Walls vary between 100 and 70 cm in width. Their construction method and the lack of substantial stones in the surroundings make it clear that these were not buildings with substantial stone walls. Instead they constitute the wall footing, which might have carried superstructures made of organic materials.

East of the wadi was a hamlet identified as 'R', and to the west was another small settlement labelled 'U'. Directly adjacent to the 'U' locality a small dam feature (Dam 3 on Fig. 2) was found that probably retained water for the growing of crops on a relatively small area of fields. Behind settlement 'R' there was a similar dam feature, which however, like the one associated with settlement 'U', could not be securely dated to the Early Bronze Age.

Since the late 1970s, when Costa and Wilkinson documented this site, a large part of the Zahra 1 and 2 sites has been destroyed by the development of a modern farm, which has included indiscriminate bulldozing of prehistoric buildings, and a large part of the site has unfortunately been lost, and this includes the larger cluster of Early Bronze Age buildings at 'R'.

Settlement 'R' seems to have comprised of about seven buildings, mostly with about two rooms, and varying considerably in size, from about 50 to c. 200 m<sup>2</sup>. All of these buildings are of considerable size, and many of them have room spans exceeding five metres. This has considerable implication for how we can reconstruct and interpret these buildings, and this is a point we will return to below.

Settlement 'U', located across the wadi, had about six buildings, again mostly consisting of two rooms. Apart from a small structure, measuring  $18 \text{ m}^2$ , buildings are again quite large, ranging between about 80 and 170 m<sup>2</sup> (Fig. 2). Like in hamlet 'R', there does not appear to be an orientation of buildings along a street or open spaces, although both settlements have a linear orientation along the wadi edge.

Interestingly, both settlements had furnace fragments associated with them, clustered on the southern side of the hamlets, suggesting that a modest amount of copper production took place there. We would not necessarily agree with the idea that this was a mining settlement, as suggested by Costa and Wilkinson, however. The amounts of furnace fragments at the still extant hamlet 'U' are small, and could have easily derived from one or two demolished smelting furnaces. Of course, the surface assemblages might have been depleted by repeated visits of archaeologists, so we will return to this issue with the better preserved dataset of Site 63, which will be discussed below.

<sup>11</sup> Weisgerber 1983; Cleuziou 1989; Frifelt 1995; Al-Jahwari – Kennet 2010; Al-Tikriti 2012; Kerr 2016: 119–171; Al-Jahwari this volume.

<sup>12</sup> Of course many more Umm an-Nar towers are known (Cable – Thornton 2012), and we assume that most of these would have been surrounded by a settlement.



Fig. 2: Aerial photo of settlement 'U', Zahra Site 1, with plan of Costa and Wilkinson superimposed.

#### 3.2.2 WAJAP Site 63

Site 63 located in the Wadi Fizh, like the Zahra site, was first identified by Costa and Wilkinson, who noted "highly weathered collapsed buildings" and "occasional walls are visible", and they also noted the presence of furnace fragments and small amount of fragmented pottery.<sup>20</sup>

In the 2017 season we mapped this site in some detail. Although many buildings were indeed difficult to work out, the combination of using high resolution aerial imagery and careful scrutiny has resulted in a fairly clear plan of this Early Bronze Age settlement site (Fig. 3). The Umm an-Nar settlement has about 17 buildings. They can be distinguished readily from the adjacent Late Islamic village because the masonry, state of preservation, and proportions of buildings from both periods is distinct. One issue that complicated matters in some places, however, was that the Umm an-Nar period buildings had been reused to keep livestock (personal communication of residents of the adjacent village), and some walls had been build up/added in the Late Islamic period. Again, the masonry was quite distinct, enabling us to plan the Umm an-Nar buildings with some confidence. The Early Bronze Age walls consist of double faced walls, with large stones placed with flat faces outwards on both sides and have a rubble and gravel core. They are between about 70 and 100 cm wide. By contrast, the Islamic period walls are built with smaller stones in a terrace construction, thus tapering inwards as they rise.

Like at the Zahra settlements 'U' and 'R', no clear organisation of buildings around streets or courts can be discerned at Site 63. Instead buildings are loosely dispersed along the ridge of the hill on which they are situated. This is perhaps not very surprising given the small size of the settlement we are dealing with. At the same time some clusters of about three buildings do occur at Site 63, and the same might also be the case for the less well understood settlements 'R' and 'U' at Zahra 1. These building clusters might tell us something about the social fabric of the community, but it also makes it difficult in some cases to distinguish between one building and the next.

The buildings at Site 63 vary considerably in size, from about 30 m<sup>2</sup> to over 300 m<sup>2</sup>. What is remarkable is the enormous size of many of these structures. The buildings take on two main forms. First, there are buildings consisting of one or two rooms, such as for example buildings 42, 44, and 48. Second, there are a number of large rectangular walled spaces that have interior proportions of up to  $10 \times 12$  m, such as buildings 35, 46, and 70. Clearly, these spaces are too large to have been roofed, unless there were extra walls sub-



Fig. 3: Plan of the Umm an-Nar settlement at WA-JAP-S63 (Site 63), located in the Wadi Fizh, near the village of Falaj.

dividing these spaces, like they have been found at 'the Warehouse' at Umm an-Nar Island,<sup>21</sup> which is moreover similar in size, or the various buildings at Ras al-Jinz 2.<sup>22</sup> However, such division walls were not noted in the survey, and they do not seem to be the most likely explanation for these structures. Instead of interpreting these structures as (very) large buildings, we think it makes more sense to interpret them as large courts, similar to the excavated structure at Al-Ayn<sup>23</sup> in which for example livestock might have been kept or tents might have been pitched. In most of these large courtyard structures there are rooms of about 2.5 m wide (which could have been roofed), along the sides, which might have been used as living spaces, storage rooms, workshops, or some combination of the these functions. Interestingly, higher

<sup>20</sup> Costa - Wilkinson 1987: 105.

<sup>21</sup> Frifelt 1995; Al-Tikriti 2012.

<sup>22</sup> Azzarà 2015.

<sup>23</sup> Blin 2007; Blin 2012.

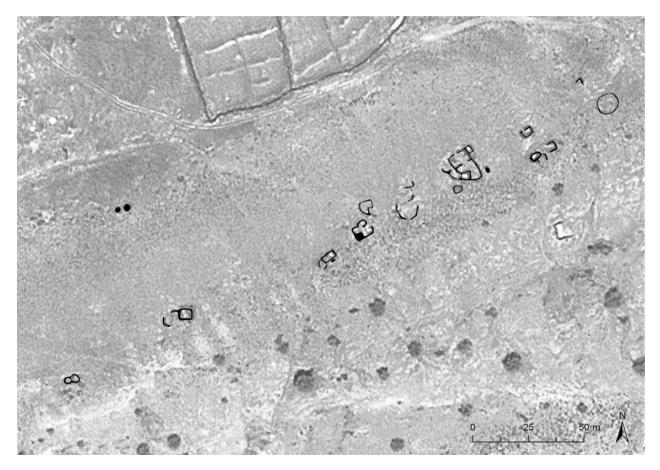


Fig. 4: Plan of WAJAP Site 2.

densities of Umm an-Nar pottery were found in the rooms than in the courts. Such an arrangement of the larger courtyard structures could suggest a seasonal use of the site, something which has been suggested also for other Umm an-Nar settlement sites.<sup>24</sup>

One of the large buildings at Site 63, namely 55, is different from the other structures, in that it has a number of partition walls that demarcate a number of rooms, in what looks like a tripartite arrangement of the building. Thus, from the surface, this appears to be the only 'complex' building in the settlement. In its north-west corner there is a small platform or room (locus 6) that was littered with large amounts of furnace fragments. These are also found in considerable quantities on the slope of the hill to the north of the building, as well as in small quantities throughout the settlement. Some 850 furnace fragments were counted at the site, as well as about 80 slag pieces. This suggests that some copper production took place at the site. This production might have been quite limited in scale, however, given that the deconstruction of a single smelting oven could have resulted in substantial amounts of furnace fragments, and it is postulated

here that the fragments of Site 63 probably derived from no more than a handful of furnaces.

The pottery found at Site 63 can be defined over a number of fabrics. Most are in a sandy fabric, of which there is a variety with few inclusions, and another one with some mineral temper. This pottery corresponds to the Sandy Domestic Ware that has been found at sites such as Hili 8 (mainly in phase IIc2) and Kalba.<sup>25</sup> The mineral tempered sandy fabric corresponds with the Ridged Ware described at Kalba by Eddisford and Phillips<sup>26</sup>, which again appears to date to Hili 8 phase IIc2. One of the most reoccurring shapes is a globular pot with a simple everted rim, which finds parallels with the domestic wares from phases IId and IIe at Hili 8.27 Large jars and deep bowls with an everted rim and a flattened lip, which start occurring at Hili in phases IIe and IIf, are also present at Site 63.28 These rim-types also occur at various other Umm an-Nar sites, such as Bat<sup>29</sup> and Al-Zebah.<sup>30</sup> The parallels at other sites suggest a date for

<sup>24</sup> Blin 2007; Al-Tikitri 2012: 90; Döpper – Schmidt in press; Schmidt this volume.

<sup>25</sup> Cleuziou 1989: 76; Eddisford - Phillips 2009: 107.

<sup>26</sup> Eddisford – Phillips 2009: 104.

<sup>27</sup> Cleuziou 1989: pl. 26.

<sup>28</sup> Cleuziou 1989: 76-77.

<sup>29</sup> Méry 2000: fig. 91.

<sup>30</sup> Schmidt - Döpper 2016: fig. 7e.

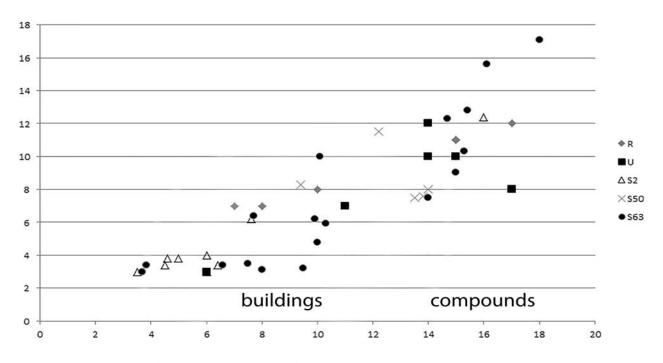


Fig. 5: Scatter diagram of the width and length of domestic buildings possibly dating to the Umm an-Nar period in the WAJAP survey region.

Site 63 between *c*. 2500 and 2300 BC. An exceptional type of pottery found at Site 63 is a very coarse ware with slag temper, which is so far unique in the Umm an-Nar period and most likely represents a local fabric. Further, small quantities of Umm an-Nar Black-on-Red funerary pottery (which is puzzling as it does not normally occur on settlements) and Indus pottery were found. The latter is a mica rich fabric of which Indus Black Slipped Jars were made.<sup>31</sup> In comparison to Dahwa<sup>32</sup>, however, the quantities of Indus pottery are very small, and these differences can probably be taken as a proxy for a limited involvement of the settlements in broader exchange networks.

#### 3.2.3 WAJAP Sites 2 and 50

Two other site investigated in the Wadi al-Jizzi Archaeological Project that we briefly want to mention are sites 2 and 50, both of which could date (in part) to the Umm an-Nar period.

Site 2 is located along the Wadi al-Jizzi at the interface of the mountains and the plain. We have suggested that this is a settlement dating to the Wadi Suq period,<sup>33</sup> on account of the pottery we found with it. However, we also found one Indus black slipped sherd at this place, which means that it could also date (in part) to the very end of the Umm an-Nar period. Like the Zahra hamlets 'U' and 'R', we are dealing with a small number of buildings, nine in this case, arranged in a linear pattern along a wadi bank, and again without an orientation to a street or court. However, there are also some differences with the Zahra 1 settlements, as most buildings are single roomed and smaller than those of Zahra (Fig. 4). One building of the settlement is clearly bigger, and has up to seven spaces. Most importantly, no Umm an-Nar pottery was collected at this site.

At WAJAP Site 50, located in the upper Wadi Fizh, the structures and assemblages documented date mainly to the Late Islamic period (a cemetery) and Iron Age (buildings and a cemetery),<sup>34</sup> but there are also a few structures that could potentially date to the Umm an-Nar period, although we lack good dating evidence. In particular, we found a number of large stone compound structures – with widths of about 8 m, thus too wide to roof. In these buildings we found only a few Iron Age sherds. There also a few body sherds that could be Early Bronze Age. So the inclusion of these buildings here is highly tentative.

# 3.3 Characterising Umm an-Nar settlements in the Sohar region

When we plot the dimensions of the sites discussed so far on a scatter diagram we can discern various anomalies (Fig. 5). First, the dimensions of the buildings of

<sup>31</sup> Méry - Blackman 2004: 227.

<sup>32</sup> Al-Jahwari et al. this volume.

<sup>33</sup> Düring - Olijdam 2015.

<sup>34</sup> See Düring - Olijdam - Botan 2017.

Site 2, apart from the one large multi-roomed structure, are clearly amongst the smallest in the size distribution range. This suggest that this settlement is different from the other Umm an-Nar settlements in the region, and reinforces the idea that we might be dealing with a chronological difference, and that our earlier assessment that it fits better in the subsequent Wadi Suq period might hold. Another conclusion that can be drawn from the scatter diagram is that the Umm an-Nar buildings occur in two size clusters: smaller buildings ranging between about 5x3m to c.  $12 \times 8 \text{ m}$ , and the larger compound structures that over a 100 m<sup>2</sup> in size. How can we interpret this distribution? Clearly the smaller buildings could easily have been used as domestic structures or workshops. The larger, compound structures, as has already been argued might have consisted of walled courts in which animals might have been kept or temporary barasti type structures or tents might have been placed.<sup>35</sup> However, given the existence of rooms situated on the sides of these courts, the livestock idea is most convincing at present.

If we focus on the settlements where the evidence is most convincing, that is Zahra 1 and Site 63, we can conclude that settlements consist of a fairly small size hamlets, of between 5 to 17 buildings. Given the repeated occurrence of this type of grouping, it can be suggested that such a unit constituted a social residential (neighbourhood) unit in Umm an-Nar settlements, and that the settlement at Zahra 1 would have consisted of two such units. These neighbourhoods might have been used by groups that can be estimated between 25 and 170 people in size, but below 100 seems more likely. Thus we are dealing with a number of fairly small size communities, probably spread rather thinly across the landscape. The existence of large walled compounds in these small settlements might have been linked to the importance of livestock.

The three settlements concerned were so small that they did not need formal public spaces in the form of streets, courts, or towers. Instead they are arranged as roughly linear arrangements of building along a wadi edge or on the crest of a low hill. This means that no single building stood out in terms of location in these settlements, and neither do we see clear evidence for buildings that are clearly larger. However, as discussed, building 55 at Site 63 might have been the only large building with a series of rooms and is associated with copper production evidence. This could suggest that some form of differentiation between buildings did exist.

In two settlements (Zahra 1 and Site 63), substantial amounts of 'furnace fragments' were found, and Costa and Wilkinson suggested for this reason that Zahra 1 was a mining settlement. Here we would like to note some problems with this interpretation. As we have discussed, the extant evidence suggests that copper production was a relatively minor economic activity, and these settlements are we think better understood as small farming villages, perhaps used seasonally, by farmers who had livestock and grew crops in the surroundings, and that these villagers also undertook copper production as an extra activity. At Zahra, two dams/small field systems possibly dating to the Umm an-Nar period were found. No similar features were found at Site 63, possibly due to later activities in the same landscape, but given the water is relatively abundant in the nearby Wadi Fizh, it is likely that agriculture was practiced there as well.

# 3.4 Early Bronze Age landscapes in the Sohar region

In a recent study Al-Jahwari and Kennet<sup>36</sup> have postulated a hierarchy of Umm an-Nar settlements with: first, large multi-tower sites at the top, second, settlements with a single tower and Umm an-Nar tombs, and third, small village without towers or tombs. Clearly, in this typology the Wadi al-Jizzi sites fall in the last category, as the settlements discussed here have neither a tower nor associated tombs. However, upon reflection, the situation seems more complicated. In the entire Batinah region of Oman towers are conspicuous for their almost complete absence.<sup>37</sup> While Rustaq is now an exception to this pattern, as multiple towers were found there in close proximity to each other,<sup>38</sup> the rest of the Batinah still lacks evidence for any towers. This absence of evidence could of course be explained in various ways. One idea could be that insufficient research has been done in the Sohar region and that towers might have been robbed or are difficult to identify. This argument can of course not be disproven, but we do not think it is plausible that we have missed these structures.

Another, and in my mind more likely option, is that the arrangement of sites in the Sohar region is more similar to what we know from Emirates than it is to the inland and mountain sites of central Oman. In the northern part of the Oman Peninsula we have only a few known towers, occurring as single towers, at sites such as Tell Abraq and Kalba 4, and these are mud-brick structures which were located at the base of tell sites under habitation layers dating to the 2<sup>nd</sup> millennium BC (Wadi Suq, Late Bronze Age) and Iron Age. They date to the later Umm an-Nar peri-

<sup>35</sup> See Costa 1985: pl. 4 for an example what this might have looked like.

<sup>36</sup> Al-Jahwari – Kennet 2010.

<sup>37</sup> Cable – Thornton 2012.

<sup>38</sup> Kennet – Deadman – Al-Jahwari 2016.

od.<sup>39</sup> In the Sohar region we have only one site that could potentially be similar: Tell al-Sbul, also known as Site SH11 from the Harvard Survey.<sup>40</sup> However, none of the 814 sherds or 24 soft stone vessel fragments we collected at this site could be securely dated to the Umm an-Nar period, so if there is any Early Bronze Age occupation at the site it is securely sealed by later occupation layers. The site of Dahwa<sup>41</sup> in the Saham region could possibly fit the middle tier in the settlement classification of Al-Jahwari and Kennet. It is certainly much larger than any of the sites in the Sohar region, and is thus probably similar in size to type site of Al-Ghoryeen, with its 50 buildings.<sup>42</sup> Moreover, Dahwa has associated tombs. However, it lacks a tower.

In the Sohar region, the situation is different (Fig. 1). We have, as discussed, a number of small Umm an-Nar settlements in the hinterlands, close to the mountains where water is relatively abundant. It is likely that further settlements existed along the Sohar coast, where there is much ground water, although we lack any evidence for this so far. Umm an-Nar tombs have been documented in three locations in the Wadi al-Jizzi region. First, Frifelt excavated an Umm an-Nar tomb approximately where the district of Falaj al-Qaba'il is located today. Two to three partially preserved tombs (incomplete due to stone robbing) were found in this location, one of which was excavated by Frifelt<sup>43</sup>. The tombs were built of undressed boulders and cobbles. The excavated tomb had at least six rooms, four of which were preserved. It contained assorted bones and skulls, as well as two small jars, one of which can be dated to the early Umm an-Nar, although Méry<sup>44</sup> dates it to the Hafit period. So far, we have not been able to relocate these graves, if they still exist, or find additional examples in the vicinity of Falaj al-Qaba'il. A strange location where we found five Umm an-Nar tombs measuring about 7–8 m across is next to a small hill in the Wadi al-Jizzi gravel floodplain. Parts of the outer arcs are still visible, but overall preservation appears to be poor. No pottery was observed. There is a possibility that these graves are mostly subterranean, which would explain the paucity of finds, and the limited preservation of positive structural remains.

Very similar tombs were found at the third location where we found Umm an-Nar tombs, at the site of Wili. Here we documented a total of 213 preserved tombs, and it is clear that bulldozing activities and erosion by the wadi have erased at least a third of the cemetery. The graves can be differentiated into various types. First, there are a number of very large cir-

cular structures, some measuring up to 12 m in diameter. In a few cases these had section of the outer walls or inner dividing walls still preserved. These very large structures are undoubtedly Umm an-Nar period tombs. The tombs are relatively low in elevation and very few artefacts were found in association with these graves. Most tombs at Wili were much smaller, however. These include circular and oval structures, the smallest of which are only 4 m in diameter. Some of these structures were well built, but others were constructed haphazardly. Further some of the tombs had an inner oval cist, which is not typical for the Umm an-Nar period, but suggest we are dealing with a continuation of the cemetery into the Wadi Sug period. Indeed a few of these cists have been exposed in river sections, and clearly show subterranean oval burial chambers. These graves have very good parallels at the Wadi Suq cemetery (our Site 12) where Frifelt excavated. If we plot the distribution of the Umm an-Nar settlement and cemetery site in the Sohar region, a remarkable, but puzzling pattern becomes apparent (Fig. 1). First, on the coast we so far lack any clear evidence for Umm an-Nar occupation, apart from a hypothetical occupation at Tell al-Sbul. Second, along the Wadi al-Jizzi gravel fan and the Wadi Suq we have Umm an-Nar period tombs. Remarkably, the Wadi al-Jizzi graves are far removed from any agriculturally productive landscape in prehistory. The graves at Wili and Falaj al-Qaba'il are located close to landscapes which were cultivated with falaj systems only from the Late Islamic period onwards, and the graves of Wadi al-Jizzi are in the middle of a vast wasteland. Our research has so far failed to document any evidence for Umm an-Nar period towers or settlements in vicinity to these tombs. Especially for Wili, with its substantial number of graves, we were expecting non-funerary assemblages and structures, but nothing has surfaced.

Why are the known Umm an-Nar tombs located in these landscapes, far from the settlements and agricultural areas? It is conceivable that cemeteries such as that at Wili and in the Wadi al-Jizzi flood plain were deliberately located in barren (dry) territories that were not claimed by any group as a pasturage for their livestock, and served as communal burial groups for a number of various social groups, perhaps even with each tomb serving a particular hamlet community. Ultimately, this is a rather speculative attempt to make sense of what is so far a very incomplete dataset. Nonetheless, the difference with the situation of Umm an-Nar cemeteries elsewhere is striking and calls for an explanation.

<sup>39</sup> Azzarà 2015: 196.

<sup>40</sup> Humphries 1974.

<sup>41</sup> Al-Jahwari et al. this volume.

<sup>42</sup> Al-Jahwari – Kennet 2010: 167.

<sup>43</sup> Frifelt 1975.

<sup>44</sup> Méry 2000: 175, no 6; also Potts 2012: 373.

#### 3.5 Conclusion

The Umm an-Nar settlements in the Sohar region have not received much attention in studies of domestic architecture in recent scholarship, despite the fact that some relevant evidence has been available since the late 1980s. In this brief paper we have augmented the existing dataset of Zahra 1 with the recently surveyed Site WAJAP-63, located in the Wadi Fizh. We have demonstrated that both at Zahra 1 and WAJAP-63 we are dealing with relatively small settlements of between 5 and 17 buildings. These small settlements comprise both residential structures and larger compound structures. The latter might have been used to keep livestock in, but this is a hypothesis only. The Umm an-Nar settlements in the Sohar region have evidence for a moderate amount of copper production, but they would appear to be mainly agricultural settlements, engaged in farming and animal husbandry, possibly on a seasonal basis. This idea is corroborated by the scarcity of imported ceramics at

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Prospection et fouilles au pied du Djebel Salim Khamis (Ja'alan, Sultanat d'Oman): Occupations et habitats du IIIe millénaire av. J. C., in: J. Giraud – G. Gernez (éd.), *Aux marges de l'archéologie. Hommage à Serge Cleuziou, Travaux de la Maison René-Ginouvès*, Paris: 483–490. these sites, especially when compared to the situation at Dahwa, where imported Indus ceramics is much more common. Finally, we have discussed the arrangement of Umm an-Nar sites in the Sohar region, which lacks evidence for Umm an-Nar towers, and shows a spatial disassociation of cemeteries and settlements that is quite remarkable. Clearly we are only at the beginning of understanding the diversity of Umm an-Nar cultural landscapes, and how domestic sites fit into them.

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