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New light on the late Wadi Suq period from the Ṣuhār hinterlands

Michel de Vreeze, Bleda Düring & Eric Olijdam

Summary
The late Wadi Suq has been an elusive phase in the archaeology of the Oman peninsula. It is mostly documented in the settlements of Kalbāʾ and Tell Abraq, both located in the United Arab Emirates. The tell deposits with late Wadi Suq levels at these sites remain poorly understood, and the same applies to the limited evidence from funerary sites. In the Ṣuhār hinterlands we have previously found what appears to be late Wadi Suq materials in cemeteries, but these surface finds consist of a few sherds and soft-stone fragments that can be interpreted in various ways. In the 2018 season, however, an unequivocal Wadi Suq non-funerary site was found on a steep outcrop in Wādī Fizḥ, at Site 84. In this contribution we present Site 84, its characteristics and location, the structures that are visible, and the artefact assemblages collected from its surface.

Keywords: late Wadi Suq, ceramics, soft-stone vessels, visibility, landscape archaeology

Introduction

In this paper we present new data on remains from the late Wadi Suq to the early Late Bronze Age (*c*.1700–1600 BC) period from Site 84 which was documented along Wādī Fizḥ in 2018 by the Wadi al-Jizzi Archaeological Project (WAJAP). Wādī Fizḥ is located in the north of Oman, in the hinterlands of the town of Liwaʾ. The remarkably well-preserved cultural landscape of the Bronze Age in this remote part of the Bāṭinah has previously been reported (Düring & Botan 2018; Düring et al. 2019), including well-documented early Wadi Suq remains. In this paper we will focus on the mid-second millennium BC.

The late Wadi Suq and Late Bronze Age in south-east Arabia

The period from the end of the Wadi Suq and the start of the Late Bronze Age remains one of the more elusive in the archaeology of south-east Arabia, and in particular for Oman. In the Ṣuhār region, good evidence has been found for Wadi Suq presence in cemeteries and settlements which, based on associated ceramics, might generally be considered rather early in the Wadi Suq period, straddling the transition from the late Umm an-Nar period to the Wadi Suq period (*c*.2000 BC) (Düring et al. 2019). Early Wadi Suq evidence from Oman is particularly strong in the Al-Akhḍar region, with the cemeteries of Samad al-Shāʾn and Al-Akhḍar/Khuḍra (Yule 2001; Yule & Weisgerber 2015a). Similar evidence has recently been found in the al-Rustāq area, again suggesting strong continuities from the Umm an-Nar to the Wadi Suq period (Kennet, Deadman & Al-Jahwari 2016: 160–161). Wadi Suq settlements are generally scant in Oman, with the exceptions of Raʾs al-Jinz 1 (Monchablon et al. 2003; see Righetti 2015 for a recent overview), and Maysar, which might have a Wadi Suq horizon based on available radiocarbon dates but which left little in terms of distinct material culture (Weisgerber 1981: table 2),[1] and the ephemeral Wadi Suq reuse of towers at Bāt (Frifelt 1985: 104; Williams & Gregoricka 2016) and some possible house structures at the same site (Kerr 2016).[2]

Even more elusive is the Late Bronze Age (*c*.1600–1250 BC) in Oman. However, two important tomb assemblages have been dated to this period, from al-Wāsiṭ and Nizwā (Velde 2003: table 1; Yule & Weisgerber 2015b). According to Yule and Weisgerber's map (2015b: fig. 1) there is also

[1] One radiocarbon date (charcoal), although with a wide margin of error, dates at least some of the activity at Maysar to the Wadi Suq: HD 5737–5294: 3460 ± 50 BP: 1965–1878 cal BC (1 sigma); 1901–1643 cal BC (2 sigma). All dates in this paper are calibrated using OxCal v. 4.3.2 using the IntCal13 calibration curve (Bronk Ramsey 2009).

[2] Charcoal from two fireplaces outside the tower date to the Wadi Suq period (Frifelt 1985: 104, appendix), the second fireplace *w* (1145.CM: 3260 ± 50 BP) yielding a calibrated date of 1661–1427 (2 sigma), thus dating within the Late Bronze Age. However, no associated material was found.

a contemporaneous settlement at Al-Wāsiṭ, but evidence to support this has so far not been presented.

In the Ṣuhār hinterlands there is a relatively rich record of Bronze and Iron Age cemeteries and settlements. Along both the Wādī Suq/Wādī al-Jīzi corridor on the one hand, and the Wādī Fizḥ/Wādī al-Zahaimi on the other, we have documented a fair amount of Wadi Suq sites, mostly in the form of cemeteries. Along the Wādī Suq corridor there is a series of cemeteries of the Wadi Suq period, including the cemetery site where Frifelt first excavated in the 1970s — and which became the name for the Middle Bronze Age of south-eastern Arabia — at Site 12 (Frifelt 1975; Cleuziou 1981), and further cemeteries at Sites 53, 22, and 3, and a small settlement at Site 2. Along Wādī Fizḥ are a robbed-out Wadi Suq cemetery at Site 72, a small Wadi Suq cemetery at Site 66, as well as a large Umm an-Nar–Wadi Suq transitional cemetery and a small Wadi Suq settlement at Site 73 (Düring et al. 2019). Finally, the Sohar Heritage Project excavated a further, unpublished, Wadi Suq cemetery somewhere in the Ṣuhār industrial area. Thus, we have in our research area a substantial number of Wadi Suq cemeteries —including a variety of grave types — as well as two small settlements of the Wadi Suq period. The precise chronology of these sites remains difficult to establish and will require further research. In this paper, however, we want to present yet another type of Wadi Suq site, that of Site 84. We date this site to the late Wadi Suq and possibly into the (poorly understood) transition to the Late Bronze Age.

In his seminal article on the Wadi Suq and Late Bronze Age, Velde gave a clear summary of the archaeological data, and argued for a strong distinction between the Wadi Suq and Late Bronze Age: 'It has become clear that we are dealing with two completely different material cultures in the 2nd millennium B.C., without a transitional phase between them' (2003: 104). This conclusion was based predominantly on the perceived absence of such a transitional phase at Tell Abraq, and the perceived distinction in the two cultural assemblages in the tombs at Shimāl. Although his observations on the general division of material cultural assemblages is very useful, there are indications against an overly rigorous distinction between the Wadi Suq and the Late Bronze Age. For instance, the attribution of copper-alloy arrowheads solely to the Late Bronze Age (2003: 112) can now be refuted based on evidence from the Qarn al-Ḥarf tombs, where they seem to be associated with at least some Wadi Suq burials (Weeks, forthcoming). As we will discuss below, the same can be argued for the ceramic evidence, particularly based on the continued excavations at Tell Abraq (Magee et al. 2015; 2017).

A general problem which has confounded proper evaluation of the transition from the Wadi Suq to the Late Bronze Age has been the absence of radiocarbon dates from well-stratified sites, and the dominance of tomb assemblages without associated absolute dates, together with the problem of repeated reuse of such communal tombs. The lack of radiocarbon dates is particularly challenging for Oman. Ongoing excavations at Tell Abraq have started to remedy this situation, providing well-dated deposits associated particularly with this mid-second-millennium BC period (Magee et al. 2015; 2017). Furthermore, the evidence from Sarūq al-Ḥadīd obtained with a thorough radiocarbon programme (Weeks et al. 2017; 2019), also allows a reassessment of this chronological transition. Weeks and colleagues have shown that the transitions between periods as they have been traditionally defined can be problematic. Breaks at Sarūq al-Ḥadīd do not adhere to our chronological periodizations but transcend them. Thus, Horizon V at this site incorporates the start of the Wadi Suq period, and Horizon IV includes both the Wadi Suq and the Late Bronze Age (Weeks et al. 2019: 20–21).[3] A similar picture can be derived from Tell Abraq, where the best *terminus ante quem* for the end of the Wadi Suq is provided by the short-lived ^{14}C (date stone) sample Beta-430299 (3280 ± 30), 1610–1519 (1 sigma)/1630–1497 (2 sigma) cal BC,[4] similarly suggesting that the transition from the Wadi Suq to the Late Bronze Age might lie as early as 1650–1500 BC, but awaits further dating evidence (Magee et al. 2017: table 1). In addition, ceramic studies now suggest a gradual development from the Wadi Suq to the Late Bronze and Iron Age I (Karacic et al. 2018: 24–25).

Site 84

This brings us to Site 84 in the Ṣuhār hinterland survey (Fig. 1). It is located at the confluence of Wādī al-Zahaimi

[3] According to the modelled ^{14}C dates the Horizon V–IV transition is dated to 1854–1715 cal BC (2 sigma) (Weeks et al. 2019: 21).
[4] Calibrated using Oxcal V4.3.2 (Bronk Ramsey 2009).

Figure 1. *A map showing the location of Site 84 in the Ṣuhār hinterlands and selected contemporaneous sites in the Oman peninsula (created in QGIS with Google Maps background).*

and Wādī Fizḥ, part of a wadi corridor in which we found a considerable number of sites, including cairn fields overlooking the wadi and coast, Umm an-Nar settlement sites, a series of Iron Age settlements with associated field systems and a cemetery, as well as some Wadi Suq-period cemeteries and a small settlement. Moreover, in the Iron Age cemetery of Site 50/51, located at the other side of the confluence, we found a residual Wadi Suq presence in the grave assemblages (Düring, Olijdam & Botan 2017; Düring et al. 2019).

The site contains many poorly built terrace walls on the slopes, most of which have collapsed. These narrow terraces were about 1–1.5 m wide and skirted the slope of the hill (Fig. 2). Given the limited width of these terraces it is not clear what purpose they served. We did not encounter any structures that resembled possible buildings. We did find, however, several semi-circular stone alignments set on the edge of the terraces, which could have served some form of storage function.

As we are dealing with survey material, care must be taken not to over-interpret the assemblage. With the absence of absolute dates from stratified deposits, the possibility of multi-period activity versus a single-period site must be considered. However, we suggest that the assemblage mainly represents a short sequence of the final centuries at the end of the Wadi Suq into the start of the Late Bronze Age. This date is primarily based on the absence of earlier Wadi Suq ceramics, known from elsewhere in the survey, and of the classical Late Bronze ceramic types, such as footed goblets (Velde 2003: 105).

Figure 2. *An overview of site 84.* **Top:** *the location of the settlement (in orange) at the back of the hill in a side wadi;* **bottom:** *the recognizable features (in yellow) observed in the survey.*

The pottery from Site 84

In total, 165 sherds were collected from the site, of which the majority (112; 67.9%) consist of body sherds (Fig. 3). Twenty-three rims and twenty-six bases are the most useful for typological purposes, together with a single handle, two spouts, and a possible lid.

Body part	Rim	Base	Handle	Spout	Lid?	Body	Total
Number	23	26	1	2	1	112	165
Percentage	13.9	15.8	0.6	1.2	0.6	67.9	100

Figure 3. *Sherds by diagnostic type.*

Wares

Seven distinct ware groups were noted, based on the coarseness of the fabric, the general inclusions present, the surface treatment, and firing (WS.7, WS.8, WS.9, WS:10, WS:11, WS.12, and WS.13) (Fig. 4). The large majority of the pottery belongs to wares 7 and 8, both soft, medium-fine fabrics used for large storage vessels (Fig. 5). Future petrographic and XRF analyses will provide a more detailed insight into the different wares and how they relate to other wares within the WAJAP survey area and beyond.

Ware	Number of sherds	Description	Remarks
WS.7	68	When oxidized fires to an orange colour. When reduced to a pink (light yellow) colour. Marked by being semi-fine and softer fired than the earlier WS fabrics. The ware typically contains limestone, iron oxide pebbles and vegetal temper. Decoration: occasional slip, 10R 4/4, weak red Sometimes contains painting in black.	Associated with storage jars, beakers, bowls, and spouted jars (shoulder spout)
WS.8	52	Orange to pink in colour. Compared to WS.7 it is coarser, containing larger fragment (up to 2–5 mm) of mainly limestone and iron oxide (larger pebbles). These are sub-angular to rounded. The fabric is relatively soft. It can feature a weak red slip. Associated with coil-built, handmade, or slow-wheel formed vessels, mostly storage jars.	Mostly storage jars; occasional beaker and spouted jar.
WS.9	9	Porous coarse ware. Reddish brown in colour. Fired neutrally. Quite porous, with voids due to vegetal temper. Dominant are limestone, iron oxide, and vegetal temper — quite badly sorted. Comparable in clay and temper to WS.8 but coarser in nature. Predominantly handmade; slow-turned and slow-wheel finished.	Storage jars; possible lid.
WS.10	8	This ware is similar to WS.9 but slightly overfired, resulting in a lighter surface. Often associated with a weak red slip. Iron oxide is dominant and slightly lighter in colour (likely due to firing conditions). Handmade, slow-turned, and slow-wheel finished. Decoration: incised lines.	Mostly storage jars; rare bowl.
WS.11	8	Part of the Middle Bronze Coarse Wares, it is typically richer in vegetal temper, visible as elongated and pocket pores. Of a reddish hue and a bit harder fired than the other coarse wares, often showing a markedly reduced core (sandwich pattern) and better control of the kiln.	Mostly jars; rare bowl.
WS.12	6	This is the coarsest variant. Characterized by badly sorted limestone, iron oxide, and chert grit/sand. The clay is badly mixed and often shows stress cracks. Associated with coil-built jars. No decoration is associated with this ware.	Exclusively storage jars
WS.13	4	A ware used for medium to thin vessels, with badly sorted abundantly present limestone, iron oxide, and grey sand-sized sub-angular particles. Gritty to the touch.	Jars and possible beaker

Figure 4. *A summary of the wares found at S84.*

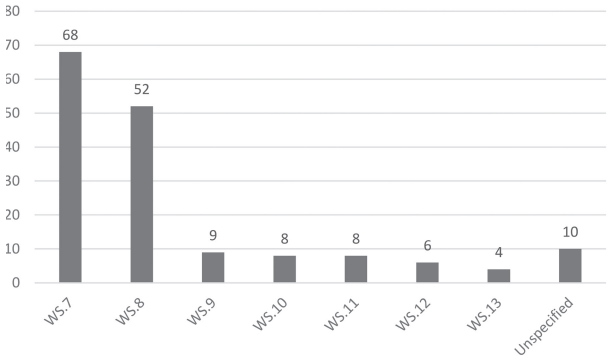

Figure 5. *A breakdown of the wares at S84 (total 165).*

General techniques

Most vessels fall in the category of large jars which were slab- or coil-built. A particularly interesting detail is the presence of string-impressed sherds relating to large slab- or coil-built thick-walled jars, which were probably in need of string support when being built up and drying in intermittent stages (see Fig. 8/2). This technique is also attested at Tell Abraq in the Wadi Suq levels, where Potts (1991: 42) attributed the use of string support to Harappan inspiration. However, there seems no need to relate this practice to certain cultural groups. Instead it represents a craft technique used during this period to support larger vessels while drying. For smaller vessels, the use of the wheel to finish coil-built vessels is attested, particularly for open vessels such as bowls and beakers. Most evident is the presence of beakers with string-cut bases, which have long been attested as a quintessential technical feature of Wadi Suq ceramics (Potts 1990; Velde 2003). Thirty-six percent of the sherds featured a slip, most often weak red (10R 5/4), reddish brown (2.5YR 5/4) and, more rarely, red (10R 5/6) or light grey (2.5Y 7/1) in colour.

Typology

In terms of typological parallels, particularly good examples come from Kalbāʾ, which is the nearest Wadi-Suq to Late Bronze Age site, *c.*55 km north of Site 84. Similar assemblages can be found at the settlement sites of Shimāl (Velde 1990) and Tell Abraq (Potts 1990; 1991; Magee et al. 2017). Notably, the ceramics from previous excavations such as Kalbāʾ and Tell Abraq show no clear distinction between late Wadi Suq and early Late Bronze Age contexts, which is perhaps partly due to excavation methods and the ephemeral nature of occupation on settlement slopes. However, recent excavations at Tell Abraq, supported by a wide range of ^{14}C dates, show the same picture of continuity for this late Wadi Suq to early Late Bronze Age phase around 1700–1600 BC (Magee et al. 2017: 225–228). Wadi Suq tomb assemblages from Shimāl (Velde, in preparation) and Qarn al-Ḥarf (de Vreeze, forthcoming) provide particularly good parallels for the beakers, as well as funerary sites with late Wadi Suq assemblages on the east coast of the Emirates such as Bidiyyah (al-Tikriti 1989) and Dibbā (Pellegrino et al. 2019).

Large 'storage' jars (Figs 6–8)

The bulk of our assemblage consists of rather coarsely made coil-built storage jars with thick walls (73% of diagnostic sherds; 87% of rim sherds). A variety of rim shapes occur (Fig. 6/1–11). Simple everted rims with slight internal indentions (Fig. 6/1–4) have particularly good parallels in the Wadi Suq assemblages of Kalbāʾ and Late Bronze Age deposits from Tell Abraq (Carter 1997: fig. 22.2, jar 2; Potts 1991: fig. 80.5; Magee et al. 2017: fig. 27/i–j). Almost 49% of these jars bear slipped or partially slipped surfaces (47/120 sherds), a feature that is remarked to be exceedingly rare for Late Bronze Age vessels (Velde 2003: 105, mentioning that most vessels are 'unpainted'). Jars bearing incised lines on the neck are rarer (Fig. 8/1) but have good parallels at Wadi Suq levels at Kalbāʾ and mid-second-millennium Tell Abraq (Carter 1997: fig. 22.1: jar 1; Potts 1990: figs 80.4 & 81.1). An interesting detail is the above-mentioned presence of string-impressed body sherds which find good parallels at Tell Abraq in the Wadi Suq levels (Potts 1991: fig. 39.11, TA 2084).

Parallels with Kalbāʾ in particular, along with Tell Abraq and Shimāl, indicate a late Wadi Suq or early Late Bronze Age date for the variety of rims from Site 84. Bases belonging to these jars are generally flat and separately made as a plaque on which further coils were added (Fig. 7). It is sometimes hard to distinguish between a fragmented base or a possible lid, as is known from Wadi Suq and Late Bronze Age contexts at Kalbāʾ (Carter 1997: fig. 23.1). Smaller jars, such as Figure 6/6, have good parallels at Shimāl dating to the (late) Wadi Suq/Late Bronze Age (Velde 1990: fig. 7.5).

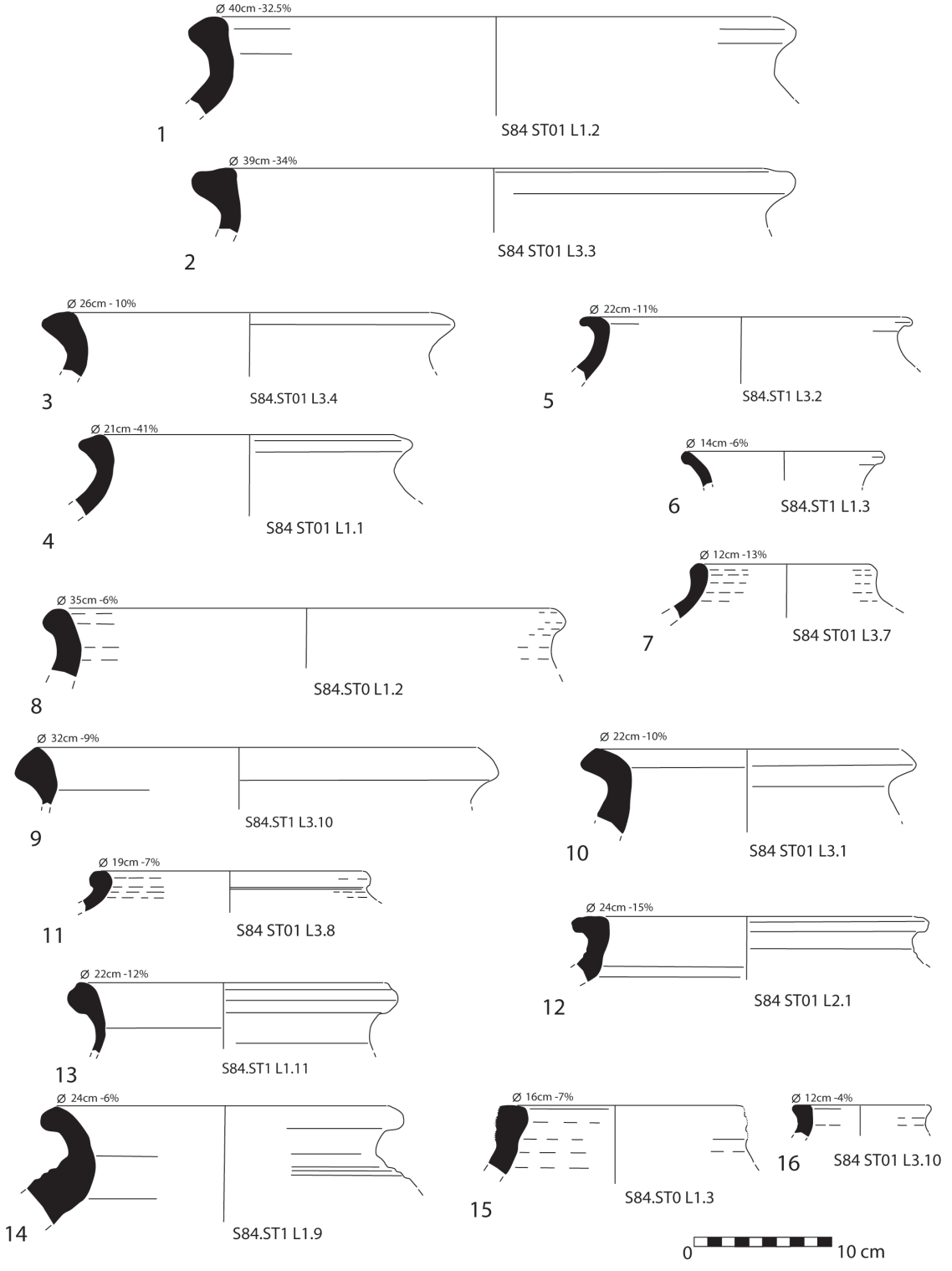

Figure 6. *Rim jars belonging to storage jars and smaller jars found at Site 84.*

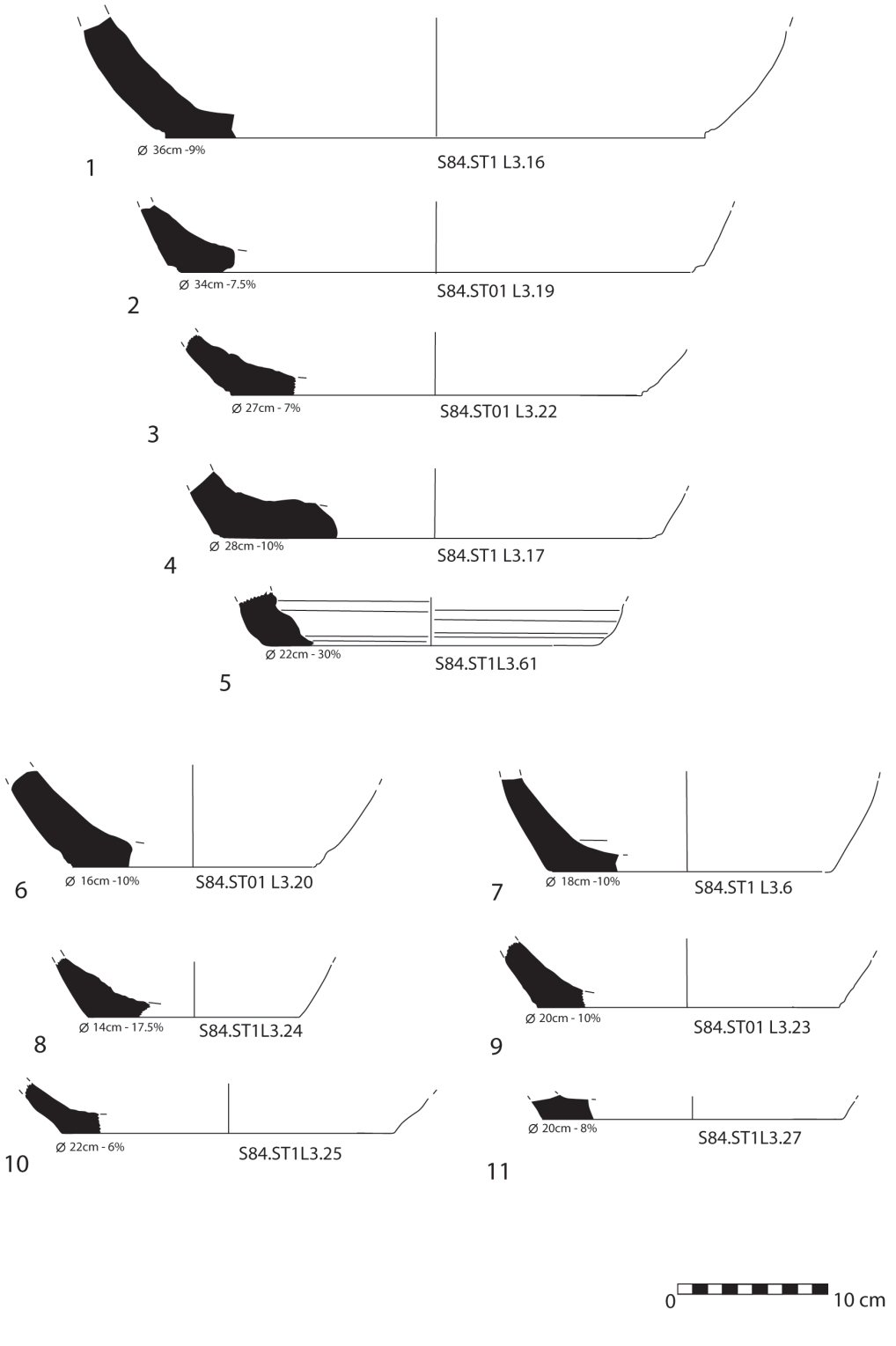

Figure 7. *Base types found at Site 84.*

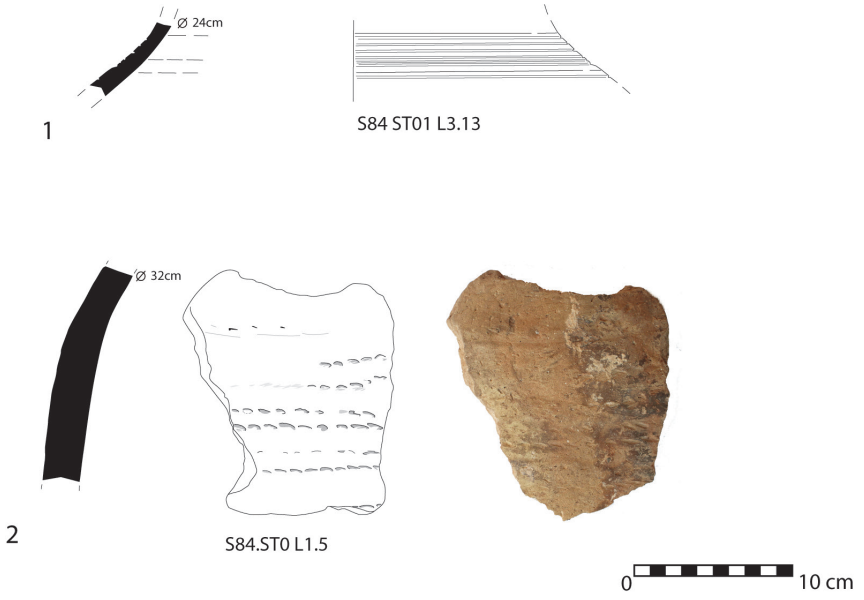

Figure 8. *Production techniques visible on storage jars from Site 84.*

Jars and spouted jars (Fig. 9/11–12)

Two spout fragments were found. One of these (Fig. 9/12) is a shoulder spout and has good parallels in late Wadi Suq assemblages, particularly in the northern Emirates (e.g. Shimāl: Velde 2003: fig. 2.12; Qarn al-Ḥarf: de Vreeze, forthcoming). In settlement context, Kalbāʾ shows a good parallel (Carter 1997: fig. 23.2), as well as examples from Khawr Fakkān (Jasim 2000: fig. 35.1–2). The other fragment (not illustrated) might have been attached to either the rim or the shoulder. These spouts place at least part of the assemblage squarely in the late Wadi Suq period and ties it strongly to ceramic practices in the north. Such shoulder spouts are very rare in Oman, discounting a single cylindrical shoulder spout on a (probably) unique vessel from Qorin es-Saḥḥaimah (Yule & Weisgerber 1996: Abb.7.7).

Bowls (Fig. 9/1–3)

Bowls are rather rare. At Site 84 these are attested in rim types, bases, and decorated body sherds. A deep bowl (Fig. 9/3) has good parallels at Kalbāʾ in the late Wadi Suq and (early) Late Bronze phase (Carter 1997: fig. 26.1, bowl 12). The same (probably) late Wadi Suq date can be given based on parallels with Tell Abraq (Potts 1991: fig. 40.6).

The bowl in Figure 9/2 has a distinctly squared rim. It is wheel-made with a markedly flattened rim and slip on both sides (10R 5/4 weak red). The ware (WS.10) is often a bit overfired with a weak red slip. Perhaps the closest match comes from Kalbāʾ (Carter 1997: fig. 21.10, type 10), where it is dated to the Wadi Suq period (Carter's 'classic Wadi Suq').

Beakers (Fig. 9/4–10)

Beakers are represented by a few rim-sherds, bases (including string-cut bases) (Fig. 9/4–6), and body sherds. The beaker/bowl in Figure 9/1 has no exact parallels as far as we know, but the way the rim is flattened and the slight carination in the wall (due to coiling) is reminiscent of similar techniques used to finish beakers and bowls at Kalbāʾ (Carter 1997: fig. 21.5,10). Body sherds of typical beakers with painted wavy lines (Fig. 9/7–10) are a well-attested type in late Wadi Suq assemblages, particularly from tombs such as Bidiyyah (al-Tikriti 1989: pl. 63.1,3), Dibbā 76/1 (Pellegrino et al. 2019: fig. 5.1), Qarn al-Ḥarf (de Vreeze, forthcoming), and Shimāl (Velde, in preparation). They are also known from settlement contexts, such as Kalbāʾ (Carter 1997: figs 20.2,3 & 29) and Tell Abraq (Potts 1990: fig. 81.1,4; 1991: figs 4, 6, 9 & 13; Magee et al. 2017: fig.

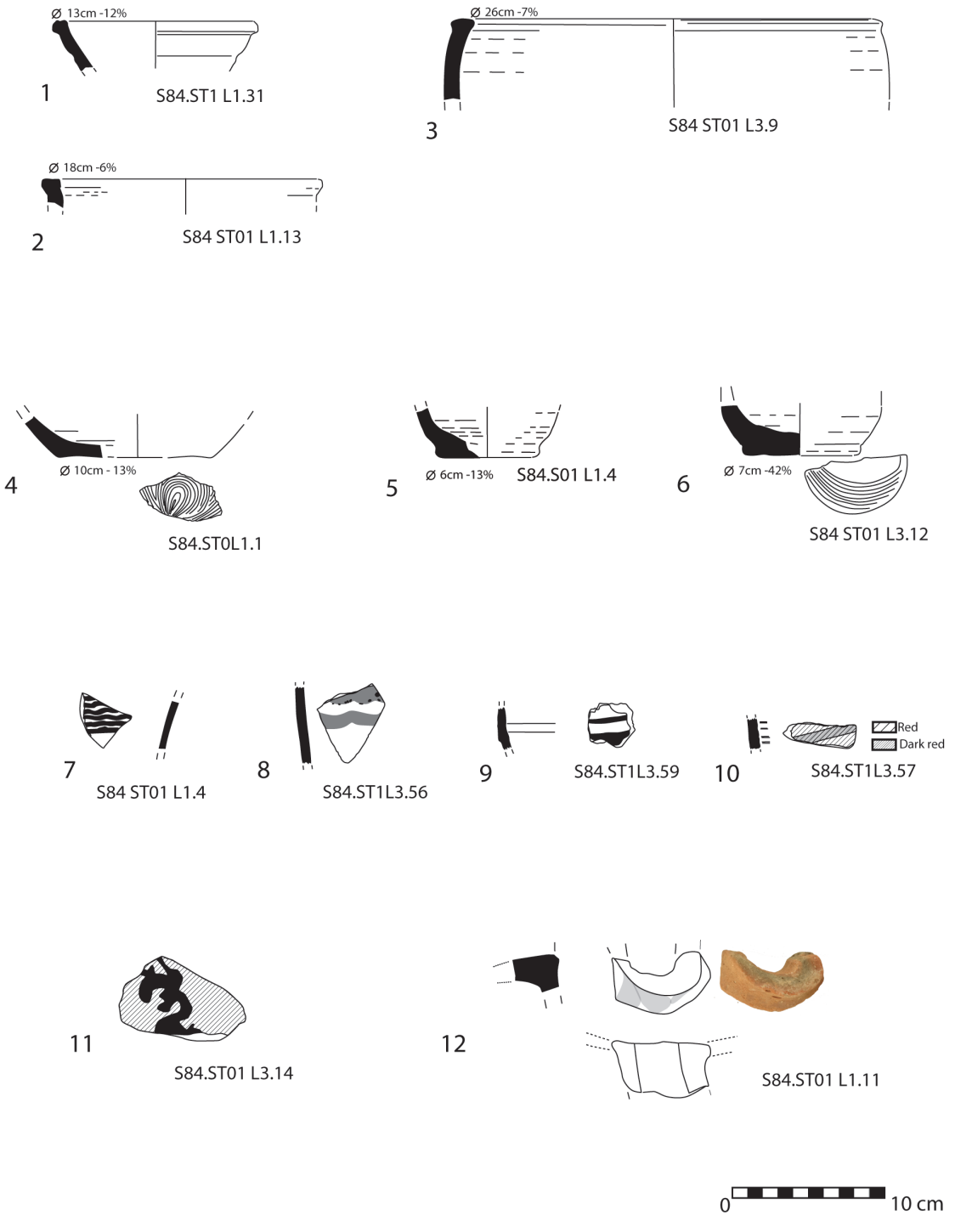

Figure 9. *Beakers, bowls, decorated sherds, and a spouted jar fragment t from Site 84.*

23b). Tell-tale signs of Wadi Suq presence are string-cut bases of beakers, considered almost synonymous with the Wadi Suq, but mostly (though not exclusively) related to a late stage where the vessel was cut off the wheel without further scraping or smoothing of the base. Such string-cut beakers are well attested at Kalbāʾ and Tell Abraq (Carter 1997; Potts 1990: fig. 85; 1991: figs 46.16 & 87), and from the tombs at Shimāl, Qarn al-Ḥarf, Bidiyyah, and Dibbā. Significantly, recent excavations by Magee et al. (2017: fig. 32) show this string-cut base in a similar coarse fabric to have continued well into the Late Bronze Age.

Miscellaneous (lids?)

Lids/dishes (S84_St1_L1_C16) are a Wadi Suq to Late Bronze Age phenomenon at Kalbāʾ (Carter 1997: 171).

A string-cut footed beaker from S50 (Fig. 10)

When discussing the late Wadi Suq to early Late Bronze Age evidence in our region, a beaker/goblet from a disturbed tomb at nearby Site 50 cannot go undiscussed. It is coil-built and wheel-finished with a slightly pedestalled string-cut base and a painted decoration of a single wavy line on a red slip (Fig. 10). These features show the transition of late Wadi Suq string-cut bases to fully pedestalled goblets which become the hallmark of the Late Bronze Age (Velde 2003: 105). This beaker was made in a rather fine ware, and the best parallels might come from Shimāl tomb 1 (de Cardi 1988: fig. 6.43; Velde 2003: fig. 4.2). Similar slightly pedestalled string-cut bases are well attested at Kalbāʾ from Wadi Suq and Late Bronze Age phases (Carter 1997: fig. 34, K4.467, K4.201) and Tell Abraq (Potts 1990: figs 91.15, 95.8; 1991: fig. 39.10,12), and from previously mentioned, newly excavated Late Bronze Age contexts at Tell Abraq (Magee et al. 2017: fig. 27). This unique vessel is important in illustrating the presence of the mid-second-millennium transition in the Ṣuhār region in the burial record, beyond the slightly enigmatic site of Site 84.

Soft-stone vessels

Among the wealth of ceramic materials from Site 84 we found fragments of two different soft-stone vessels. No other miscellaneous items were found, except a small quantity of copper slag fragments.

Figure 10. *A string-cut slightly footed beaker from Site 50 incorporating features of the Wadi Suq–Late Bronze Age transition in this type of vessel.*

The first is the rim fragment of a large vessel with a straight profile. Dating this vessel relies primarily on the decoration, which is very faint and worn/weathered and obscured by the irregular surface (due to the coarseness of the stone) and the 'micaceous' inclusions. The top panel consists of three rows of large dotted circles separated by thinly carved horizontal lines. According to the new chronology developed for Wadi Suq vessels (Velde 2018), this type of decoration (pattern A2) most plausibly dates to the early Wadi Suq and was part of a vase (shape A). We might be dealing with an heirloom, possibly retrieved from one of the Wadi Suq sites in the vicinity, such as settlement Site 73, or cemeteries Site 50/51 and Site 72 (Düring, Olijdam & Botan 2017; Düring et al. 2019).

The second soft-stone vessel is an unfinished item. The vessel-to-be is only roughly shaped and displays evidence of deep gauging. It was discarded because part

of the wall of the lower section was punctured from the inside. This type of mishap should be attributed to the coarseness and poor quality of the stone, which characterizes a large portion of the soft-stone vessels from our research area. The vessel's top section appears to have been removed, making it impossible to determine the original height and shape of the vessel-to-be.

Late Wadi Suq soft-stone vessels are represented at Shimāl Phase 3 (Velde 2018). These vessels are extremely rare in Oman. A transitional or early Late Bronze Age soft-stone assemblage is not yet properly identified. The large soft-stone collection from Tomb 1 at Wāsiṭ has been presented as being early Late Bronze (Yule & Weisgerber 2015b), as most soft-stone vessels could not be clearly determined vis-à-vis the assemblages presented in Velde's initial study (2003). Their interpretation can now be revised, however, in light of a new study on the development of Wadi Suq soft-stone vessels from the Shimāl tombs (Velde 2018). Re-examination based on photographs kindly provided by Paul Yule, suggests that nearly all vases and bowls from Wāsiṭ date to Phases 2 and 3 of the Wadi Suq period; only a small group belongs to Phase 1, while two are Late Bronze. These findings are supported in other artefact groups from Wāsiṭ such as, for instance, beakers and spouted jars (Yule & Weisgerber 2015b: pl. 39.1,3,19), and in the tomb architecture. Tomb 1 is of the Ghalilah type, known as a Wadi Suq-type tomb predominantly in the northern Emirates (Velde, in preparation). This indicates that the tomb was in use for the entire Wadi Suq period and into the Late Bronze Age. The Wāsiṭ tomb assemblage is thus partly contemporaneous with our Site 84, and its location on the main trajectory from the al-Buraymī/al-ʿAyn oasis to the Bāṭinah coast, *c.*40 km from Site 84, is relatively nearby.[5] This tomb becomes even more significant when we analyse the role Site 84 might have played in the landscape.

Discussion: Site 84 in its regional context

Based on parallels with other sites, specifically Kalbāʾ and Tell Abraq (including recent excavations), Site 84 most likely dates to the late Wadi Suq period bordering on the early Late Bronze Age, straddling the century between 1700 and 1600 BC. It is possible that the present paucity of sites for this period derives from the inconspicuous nature of their location: these sites were meant to be hard to find.

The discovery of Site 84 suggests to us that more similar hard-to-detect sites of the second millennium BC await discovery in Oman. Notwithstanding this hypothesis, increasing survey data in Oman would suggest that the second millennium BC is an emptier landscape in terms of settlement evidence, certainly when compared with the preceding Umm an-Nar period. Evidence from al-Rustāq (Kennet, Deadman & Al-Jahwari 2016) and the Ṣuhār hinterlands might suggest that this is particularly true for the later Wadi Suq period and Late Bronze Age, whereas the start of the Wadi Suq is still quite well represented as a continuation of the Umm an-Nar period. The contrast between Oman and the northern Emirates, the latter showing a rather strong continuity in the late Wadi Suq and Late Bronze Age both in tombs and settlements, thus still holds true. Ideas for a stronger focus on more 'pastoral' ways of life in the second millennium, already expressed by Cleuziou (1981: 292; see also Magee 2014: 188, 196; Righetti 2015: 254), might partially hold true and suggest that large parts of Oman might have been rather sparsely settled, perhaps increasingly supporting more non-sedentary ways of life.

Site 84 represents a new type of site in the Omani archaeological record, with terraces on a steep slope, and minimal visibility in the landscape. It does not appear to constitute a settlement. The predominance of large jars, most probably relating to storage, but also vessels of consumption such as bowls, beakers, and spouted jars, might suggest these slopes were used primarily to store agricultural goods crucial to the subsistence of local communities, in a secluded yet accessible location, for use by a community that was absent during large parts of the year. This also fits with the model of 'multi-sited' communities suggested by Weeks and colleagues (2018: 16), which represent a larger variety of practices of mobility and sedentism with groups living in more spatially dispersed units within the region for parts of the year.

When considering the evidence from the wider region, the construction of such settlements on hill slopes is not uncommon in the northern Emirates, and Site 84 might represent the southernmost extension of

[5] The three soft-stone vessels from the tomb at Nizwā (al-Shanfari & Weisgerber 1989: fig. 4.1–3) are all Late Bronze Age, as is the weapons inventory.

this phenomenon recognized so far. Similar settlements on hill slopes, although often more substantial and including building structures, are known from Khawr Fakkān, dating to the (late) Wadi Suq period (Jasim 2000), and Masāfī-5, of which the ceramics date to the Late Bronze Age (Degli Esposti & Benoist 2015; Charbonnier et al. 2018). Another similar site is the Shimāl settlement, with structures and terrace-walling up the lower slopes of the al-Ḥajar mountains constructed in a similar fashion (Vogt & Franke-Vogt 1987). One could thus argue that all these terraced sites on steep slopes are part of the same trend during the later Wadi Suq and Late Bronze Age. These existed alongside long-inhabited tell sites, such as Tell Abraq and Kalbāʾ. Kalbāʾ seems to have been walled and featured a large mud-brick platform in the Wadi Suq with Late Bronze Age deposits being more enigmatic and devoid of architectural remains (Carter 1997: 134–136). The same applies to Tell Abraq, with a walled Wadi Suq settlement and extensive late Wadi Suq to Late Bronze Age occupation built on the partly terraced slopes (Magee et al. 2017). Possibly these also functioned in relation to non-sedentary mobile communities practising mixed subsistence strategies.

The importance of Site 84 is thus twofold: it suggests that late Wadi Suq/early Late Bronze (*c.*1700–1600 BC) settlements can indeed be found in Oman, but in less visible locations. More importantly, Site 84 shows a break with the settlement pattern of the Umm an-Nar and early Wadi Suq period. If anything, the perceived change between settlement patterns, material culture, and social changes often associated with the start of the Wadi Suq might instead find its strongest expression here, at the end of the Wadi Suq period.

If we can think of the mid-second millennium in the Oman peninsula as a less substantially settled landscape, with groups partly using more mobile lifeways, would it perhaps also have been a more dangerous landscape? We suggest that the key to understanding the nature of Site 84 and other similar sites is the very fact that it is so inconspicuous. Yet when standing on top of the site one can monitor large tracts of the surrounding landscape. Does this location relate to matters of security? Can we relate this site location to the preponderance of weapons in contemporaneous tombs such as al-Wāsiṭ, Nizwā, and Qaṭṭārah usually associated with the onset of the Late Bronze Age (al-Shanfari & Weisgerber 1989; Yule & Weisgerber 2015b; also Velde 2003: table 4)?

Magee (2014: 183) warns against the assumption of a more 'warlike' society in this period, since many of these weapons were buried. Likewise, Potts (1998) suggests that such weapon deposits in tombs might rather reflect a time of peace, which fits well with the fact that little trauma has been found on skeletons of this period (Blau 1999).

Nonetheless, we cannot exclude the possibility that raiding might have been important in the later second millennium BC. The ideology of raiding is well documented for later Arabian history, during which it served as a socially accepted form of redistribution (Mackintosh-Smith 2019: xxi). Of course, historically documented raiding relied heavily on fast transport animals, such as horses and camels, for which there is no evidence in the second millennium BC (Magee 2015). However, the threat of raids and the need to protect agricultural supplies in a period in which non-sedentary communities practised mixed subsistence strategies might well explain the type of Site 84 specifically and the evidence for the late Wadi Suq/Late Bronze Age in the north of Oman and the Emirates more broadly.

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Author's addresses

Michel de Vreeze, C/Santa Maria 26,1, 17820 Banyoles, Spain.
e-mail micheldevreeze@gmail.com

Bleda S. Düring, Faculty of Archaeology, Leiden University, PO Box 9514, 2300 RA Leiden, Netherlands.
e-mail b.s.during@arch.leidenuniv.nl

Eric Olijdam, Faculty of Archaeology, Leiden University, Adriaan Butijnweg 1, 4411 BT Rilland, Netherlands.
e-mail olijdam@zeelandnet.nl