

# The softstone vessels assemblage from the Long Collective Grave 1 (LCG-1) at Dibbā al-Bayah (Sultanate of Oman): A preliminary assessment

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#### Abstract

The present contribution aims to provide an overview of the large collection of soft stone vessels and lids coming from the collective tomb Long Collective Grave 1 in the Dibbā al-Bayah funerary complex, along with a brief description and evaluation of the tomb itself. The corpus of material here discussed has been recovered during the 2012 season, and it mainly encompasses the chronological span between the second and first millennium BC. The findings are classified and organised in tables according to their chronological phase, and successively on the basis of their morphology and decorative patterns to which a major focus is addressed. Given the outstanding manufacturing of the materials, the finely incised and even plastic decorations, and their state of preservation, an assessment of such remarkable corpus, although partial, contributes significantly to the study of the diffusion and production of stone vessels in South-East Arabia.

#### **KEYWORDS**

collective grave, Dibbā, Iron Age, Late Bronze Age, soft-stone vessels

## 1 | INTRODUCTION

A total of 241 soft stone vessels and 73 lids were recovered from the excavation focused on the Long Collective Grave 1 (LCG-1) at Dibbā al-Bayah (Dībbā) in the Sultanate of Oman. The tomb yielded 132 vases and 50 lids, whilst the remaining ones were recovered from five pits discovered around the grave. The material comprises vessels and lids of varying sizes, the majority of which are made of a small variety of soft stone types, which—in the absence of petrographic analysis—will generally be referred to as 'soft stone', a term encompassing stones characterised by a Mohs Hardness of 3 or softer (Phillips & Simpson, 2018, p. 2). Indeed, although chlorite is usually stated to be the most used material, H. David pointed out that in south-eastern Arabia there are at least six different kinds of minerals derived from the same altered ophiolitic rock (David, 1991, pp. 175–178, 2001, p. 328), whose petrographic complexity can only be observed through a microscope (see also: Yule, 2016, p. 32).

Despite the exact provenance of the vessels being unknown, they did serve as burial goods in the collective tomb. The findings that are analysed here were first sorted based on their chronological attribution, which was deduced from their morphological and decorative features, and then organised in tables according to shape, decorative pattern, and provenance (tomb LCG-1 or pits).

Most of the vessels are related to the early stages of the Iron Age, although some specimens can be associated with the end of the Wadi Suq period and the Late Bronze Age, and there are very few examples of the Umm an-Nar period, which can be considered as heirlooms.

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This collection, which possibly counts the highest number of vases among the tombs published so far, is similar to many other assemblages from an early funeral and domestic contexts of the region. The purpose of this paper is to illustrate the specimens and compare them with the soft stone vessels from other sites so that possible distribution patterns might be traced. This present contribution also provides an introduction to the discovery of the site and the state of research, as well as a brief assessment of the tomb.

## 2 | THE DIBBĀ AL-BAYAH BURIAL COMPLEX AND TOMB LCG-1

Dibbā is located on the eastern coast of the Musandam peninsula, directly overlooking the Gulf of Oman (Figure 1). This enclave is politically divided into three zones: one belonging to the Sultanate of Oman (Dibba-Oman, usually transliterated as Dibbā, also known as Dibbā al-Bayah), one to the Emirate of Sharjah (Dibbā al-Hisn), and another to the Emirate of Fujairah (Dibbā al-Fujairah).

Collective tomb LCG-1 was accidentally discovered at the beginning of 2012 during infrastructural works

carried out within the propriety of the Sporting Club at Dibbā al-Bayah (25°36'38.78"N, 56°15'28.57"E), in the Musandam Peninsula part of the Sultanate of Oman. The Ministry of Heritage and Tourism of the Sultanate of Oman (MHT) started a project of rescue excavation later in the years, under the supervision of Sultan Al-Bakri, then Director of the Department for Excavations and Archaeological Studies, and presently Director General for Archaeology. Several additional seasons were later conducted by the MHT with Francesco Genchi as field director and under the scientific supervision of the late Maurizio Tosi, then an archaeological advisor for the MHT (Genchi, 2013, 2014).

The Dibbā burial complex—represented by two 'Long Collective Graves' (LCG-1 and LCG-2), a later PIR (Pré-Islamique Récente, 250 BC–AD 400) grave, and several pits with ritual offerings—seems to have been continuously occupied from the Late Bronze Age (1600–1350 BC) until the Iron Age II/III period (*c*. 600 BC) (Figure 2).

LCG-1 presents a rectangular shape and is a longchambered subterranean grave lined with limestone blocks (Figure 3). The remains of hundreds of individuals of different sex and age in secondary deposition filled the long chamber along with almost 4000 valuable objects, including soft stone and pottery containers,



FIGURE 1 A satellite image of south-eastern Arabia showing the location of Dibbā al-Bayah and main sites of the region. [Color figure can be viewed at wileyonlinelibrary.com]

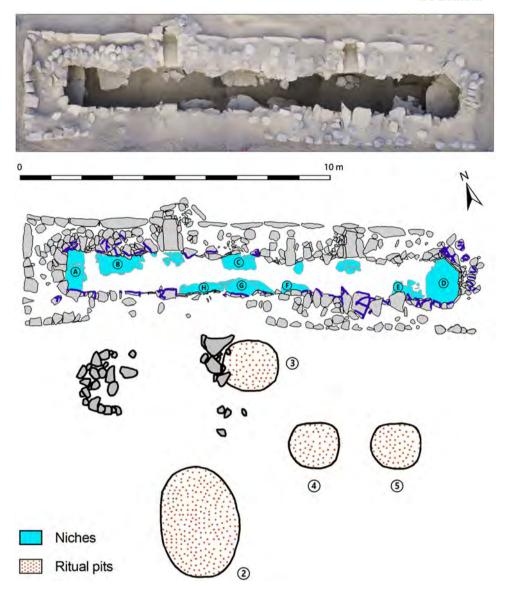


FIGURE 2 Tomb LCG-1: Final plan of the main funerary structure and related ritual pits. LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]

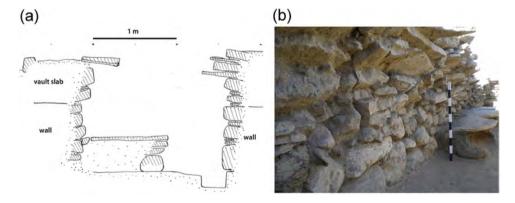


FIGURE 3 (a) East/West profile of the tomb on the southern side (drawing by M. Cattani) and (b) Particular foundations and internal walls (western side). [Color figure can be viewed at wileyonlinelibrary.com]

bronze tools and weapons, and ornaments in semiprecious stones, silver and gold (Genchi, 2013).

The aim of this article is to present the soft stone vessel assemblage collected inside the Dibba LCG-1 grave, which was completely excavated during the rescue excavation carried out by the Department of Archaeology within the Ministry of Heritage and Culture. The excavation lasted for 2 months during which the chamber of the grave was emptied down to its floor, which was reached at a depth of 120 cm. Material and human remains were collected and kept in the storage of the Ministry at Muscat. Unfortunately, no radiocarbon dates are available for LCG-1. However, the analysis of both the structural stratigraphy and the material culture indicates that LCG-1 underwent several use phases starting from the end of the Wadi Sug or the beginning of the Late Bronze Age (ca. 1500 BC), throughout the Iron Age I/II, up to 600 BC. Several episodes of relocation and rearrangement of skeletal remains and grave goods have been identified inside the main chamber, as well as the reburial of earlier remains in external funerary pits. In addition, eight benches sealed with large slabs were identified at the bottom of the burial chamber, almost all of which were filled with human remains from secondary burials and were later explored.

A first assessment of the human bones retrieved during the first excavation season was carried out by Dr. Antonio Todero,<sup>1</sup> while the bones found in the benches were excavated and studied by Luciano Fattore.<sup>2</sup> According to a preliminary evaluation of the minimum number of individuals, LCG-1 contained at least 188 individuals, including 153 adults and 35 subadults, both male and female (Fattore et al., 2015, p. 1 and note 6). They were accompanied by 9666 items, with an additional 1730 artefacts deposited in five external funerary pits (Genchi, 2013: fig. 47). The spatial distribution of the objects was not recorded during excavation, and stratigraphic data are also lacking. The human remains were collected, but their association with grave goods was recorded unsystematically and cannot be considered for further studies of the assemblage.

This type of long-chamber tomb, either semisubterranean or above ground, and comparable ritual practices are noted in other largely contemporaneous funerary sites in the region (summary and updates in Genchi et al., 2018; Pellegrino et al., 2019).

Several tombs with a remarkably similar structure have been excavated mainly in the UAE during the past decades, although a number of them had been erected completely above ground. However, several underground or partially underground graves that show a good similarity with Dibbā LCG-1 have been investigated. A similar underground chamber is found in a recently published grave that was excavated at Dibbā Fujairah (Pellegrino et al., 2019) and another one at Qarn al-Harf, in the Emirate of Ras al Khaimah (Kennet et al., 2013). Nevertheless, the closest resemblance is with the long tombs at Sharm, Bidya 1 and Dhayah 2 (Riley & Petrie, 1999, p. 183, Figure 4; Al-Tikriti, 1989a, p. 106 and Pls. 61–62; Kästner, 1991, p. 238, Figure 5).

## 3 | SOFT STONE VESSEL ASSEMBLAGE

Of the 241 total soft stone vessels, 132 come from the long collective tomb, among which 36 from Pit 1, 58 from Pit 2, 12 from Pit 3, and 3 from Pit 4. There are 73 soft stone lids, of which 50 are from LCG-1, 6 from Pit 1, 12 from Pit 2, 2 from Pit 3, and 3 from Pit 4 (Table 1). The assemblage comprises almost completely intact soft stone vessels and lids. As mentioned above, the raw materials that were used the most are chlorite and steatite, which are naturally found in the al-Hajar Mountains of both UAE and Oman (see Harrower et al., 2016), with hues ranging from light blueish-grey to dark green. At a naked eye examination, it is possible to detect the use of other lighter whitish-beige stonespossibly calcite, limestones or even mudstone-like for DA 29109 (Figure 6.12), 29266 (Figure 7.7), 51297 (Figure 8.7), 29046 (Figure 9.9) and 29561 (Figure 6.7) whose colour tend towards beige, or like DA 29529 (Figure 6.1), 29040 (Figure 9.7), 29541 (Figure 10) and lids DA 29108 (Figure 11.4) and 29481 (Figure 7.8) tending towards white. Likewise, the dark brown colour of DA 29044 (Figure 9.13), 29047 (Figure 12.5), 29101-(Figure 6.15) and of the lids DA 29113 (Figure 4.13), 29104 (Figure 7.3), 29107 (Figure 7.9), as well as the lighter reddish-brown colour of the conical DA 28962 (Figure 9.11), all possibly manufactured from sandstone, are also noticeable.

Based on syntactic schemes and motive combinations, a couple of vessels indicate heirloom specimens referable to the Umm an-Nar production. It is however evident that the persistence of these objects among the grave goods is not related to the use of the tomb in the third millennium.

The earliest group of soft stone vessels that can be used to assess the chronology of the grave is to be dated to the Wadi Suq period (2000–1600 BC). These vessels are few, and mainly comprise vases with globular or conical bodies, large open vessels and spouted bowls.

LCG-1 also produced some examples of what could be considered 'classical' Late Bronze Age soft stone vessels, as described by C. Velde in 2003.

The preliminary analysis strongly suggests that most of the vessels belong to the Iron Age tradition. The most common vessels to be represented in this assemblage are

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**FIGURE 4** Examples of softstone vessels from LCG-1 referable to Umm an-Nar tradition (DA 51302; DA 29551) and Wadi Suq (DA 29220; DA 28936; DA 29542; DA 51283; DA 51306; DA 29194; DA 29218; DA 28914; DA 29920; DA 29098; DA 29113) (photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]



**FIGURE 5** Oval vase with four knobs and rounded base referable to Wadi Suq tradition (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

shallow spouted bowls, simple bowls with a slightly convex base, open or beaker-like vessels and several conical vessels. Their decorations vary, but they are all characterised by the occurrence of certain motifs: small and finely executed 'zig-zag' lines in combination with dot-in-circles, often bordered by a series of horizontal lines. Moreover, the exterior surface is often decorated by superimposed horizontal bands filled mainly by rows of dot-in-circles, triangular compositions, saw-teeth linear motifs or saw-teeth segments composing zig-zag lines.

On closer inspection, and in light of ongoing research by some colleagues (Düring et al., 2017), some specimens could be considered as belonging to the Iron Age I phase (1300/ 1250–1000 BC), although this interpretation is limited by the fact that no tomb that can be exclusively attributed to this period has yet been discovered. Funerary contexts where Iron Age I soft stone vessels have been recovered are tomb 100 at Asimah (Vogt, 1994) and tomb 102 at Shimal (Vogt & Kästner, 1987), in addition to some specimens coming from the collective graves at Wadi Fizh (Düring et al., 2017), Sharm (Ziolkowsky, 2001), Bithnah (Corboud et al., 1996), Dadna (Benoist & Ali Hassan, 2010), Naslah (Phillips, 1997) and the Tell Abraq settlement (Potts, 1991). They are thin-walled vases that include bowls and spouted bowls with a slightly convex base, as well as beakers with a flat base. The frequency of these specimens in LCG-1 is rather high compared to the other multiperiod tombs, almost predominant.

However, there is no shortage of vessels belonging to the Iron Age II phase (1100–600 BC), which is the most widespread in the region. Vessels from this period include large conical vessels—whose decorative motif consists of a frieze of triangles filled with oblique and parallel lines or with a series of radiating triangles (Figure 9.1–2, 6–7) —two spouted bowls bearing the typical gadroon decoration (Figure 13), two barrel-shaped vases equipped with pierced lugs (Figure 14) and some circular lids with biconical handles and radial decoration (Figure 7.9, 16, 3–4).

In this contribution, 169 soft stone vessels and 24 stone lids will be described and classified. These were selected according to their state of preservation, having chosen to display the better-preserved specimens and exclude the ones presenting similar decorative motifs or that were too fragmented. Moreover, fragments that were too small and undecorated were also excluded since a chronological and typological subdivision was not possible for them. Unfortunately, the absence of stratigraphic data does not allow a selection based on the specific context of origin, nor an association between grave goods and burials. On the other hand, there seems to be a certain typological distinction based on the shapes and decorative motifs between the objects found in the collective tomb and those laid in the surrounding pits. In fact, almost all of the vases of the Umm an-Nar, Wadi Suq and Late Bronze Age traditions come from the pits.

Due to a large number of specimens in this collection, we opted for a classification in tables that includes the chronological and provenance subdivision of the vases, as well as their morphology and decorative motifs, to facilitate the reading and definition of the types.

## 4 | MORPHOLOGY

Although the assemblage also features vessels that are morphologically ascribed to the Umm an-Nar, Wadi Suq and Late Bronze Age phases, most of the forms relate to the Iron Age, reflecting the main period of use of the tomb. In fact, on a morphological basis, it is possible to distinguish 30 types from the Iron Age phase, 4 types from the Late Bronze Age, 9 types from the Wadi Sug and only one type that refers to the Umm an-Nar period (Table 2). The criteria followed for the assignment of the shapes are essentially based on the characteristic profile of the vessel (conical, rectangular, globular). The distinction between bowls and open vessels was based on the progression of the walls, vases are usually straight, with a diameter of over 12 cm at the mouth, bowls are deeper and usually more than 10 cm high with either characteristic hyperbolic profile or outward-curving walls.

The most recurrent shapes reflect the typical morphological characteristics of the identified phases, except for a few rare specimens. For example, the only TABLE 1 Periodisation and context of the provenance of the specimens.

	Provenance				
Period	LCG-1	Pit 1	Pit 2	Pit 3	Pit 4
Umm an-Nar		51302	29551		
Wadi Suq	28936	29220	51306		
	29218	29542	28914	29098	
	29920		51283	28929	
			29194		
			29113		
Late Bronze Age	28934	28903	51301		
	28930	29193			
Iron Age	29096, 51292, 51293, 51288, 28904, 29043, 29182, 29280, 29285, 29292, 28907, 29040	29103	29046	29997	29553
	29100, 29173, 29208, 29267, 29501, 29545, 29503, 29547, 51298, 29520, 29544, 29525	29592	51287		39529
	29302, 29270, 29176, 28962, 29044, 29599,	29300	29045		
	29510, 28913, 29190, 29204, 29038, 51294, 29187, 28912, 29531, 29186, 29527, 29529,	29106	32794		
	29587, 28935, 29303, 29561, 28932, 29554, 29095, 29097, 29275, 29281, 29277, 39280,	29533	29530		
	29295, 29221, 29189, 29296, 29299, 29174,		29104		
	29039, 28897, 29041, 29110, 29188, 29511, 51295, 51297, 29526, 29505, 29512, 51282,		29500		
	28917, 29209, 29204, 29543, 29523, 29995, 28916, 29541, 29550, 29271, 28931, 29108,		29211		
	29273, 29099, 29999, 29048, 28908, 51305,		32837		
	29102, 29274, 29109, 29278, 29276, 29210, 29172, 29026, 28905, 29297, 28911, 29042, 29269, 29179, 29047, 29998, 51290, 29050, 29101, 29111, 29212, 29087, 29560, 39210, 33430, 33411, 33432, 33417, 29268, 33409, 20107, 23422, 23426, 23410, 23418, 20204		29481		
	29107, 33423, 33426, 33410, 33418, 29304 33431, 33425, 29509, 33408, 39108, 29266				

Abbreviation: LCG-1, Long Collective Grave 1.

specimens attributable to the Umm an-Nar phase are the typical double-compartmented, rectangular vessels [Umm an-Nar (hereafter UN) Type 1, Figure 4.1], whereas for the Wadi Suq phase there are oval, conical, globular and some open shapes with straight outward sloping walls. Morphologically, the most common Wadi Suq vessels from LCG-1 fall within the classification recently developed by Cristian Velde (Velde, 2018) for the period.

The earliest specimen from this collection (Wadi Suq (WS) Type 1, Figure 4.3) corresponds to a Type A conical vessel, according to C. Velde's shape classification. It is a conical vase with slightly incurving sides that reaches its maximum width near the base and has four little protruding knobs. Another original oval vessel (WS Type 8, Figure 5) also seems to belong to Type A, despite some distinctive characteristics. It has nearly straight walls, with its maximum width in the lower part, as well as four cubic knobs. The bottom is flat and the base is rounded.

A pair of conical vessels, with a point of a maximum expansion near the base and without any knobs (WS Type 2, Figure 4.4) correspond to Type C of Velde's classification, whereas a globular vessel that reaches its maximum width at the centre of the vessel and that is equipped with four vertical pierced lugs (WS Type 6, Figure 4.12) corresponds to Type D. The shape of type D has been recognised since as early as the Late Umm an-Nar period (David, 1996). This suspension vessel is, above all, recurrent in the early contexts, and it recurs frequently at the Samad al Shan cemetery (Yule, 2001: Pl. 269/1; 279/1; 299/1; 340/5; 362/5), at Al-Wasit (Yule & Weisgerber, 2015b: Pl. 19/93; 23/104, 106; 27/118), at Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 18/6, 7, 8) and at Shimal, SH99 and SH103 (Vogt & Franke-Vogt, 1987: figs. 33/4; 25/5, 6).

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**FIGURE 6** Some specimens of beakers with a hyperbolic profile or outward-curving walls (drawings C. Rielli, photographs P. Koch, G. Tursi). [Color figure can be viewed at wileyonlinelibrary.com]

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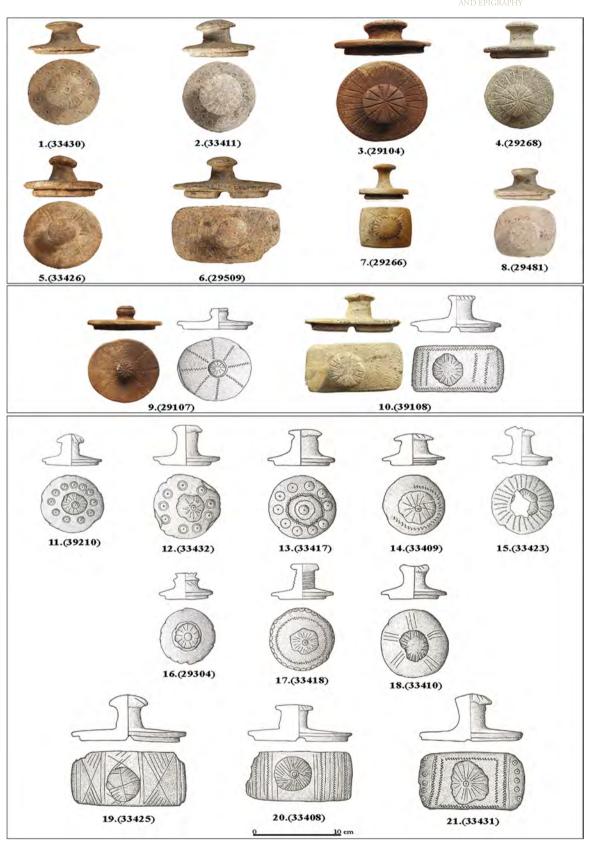


FIGURE 7 Some examples of circular, rectangular and square lids recovered from LCG-1 (photograph P. Koch). [Color figure can be viewed at wileyonlinelibrary.com]

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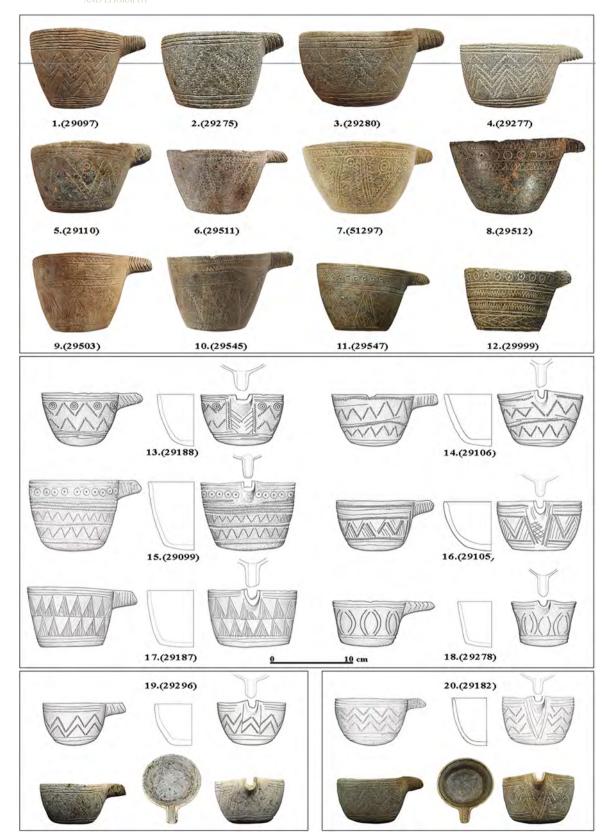


FIGURE 8 Spouted bowls from LCG-1 referable to Early Iron Age tradition (drawings C. Rielli, photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]

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FIGURE 9 Conical vessels from LCG-1 referable to the Iron Age tradition (photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]



**FIGURE 10** The only globular vessel referable to Early Iron Age tradition (photograph G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]

Two large open vessels characterised by straight outward sloping walls and round everted rims (WS Type 3, Figure 4.6), a similar though smaller vessel (WS Type 4, Figure 4.8), and two shallow bowls with U-shaped spouts (WS Type 5, Figure 4.9) are not included into Velde's classification. They could be considered as local variants that were widespread in the final phases of the Wadi Suq period, as demonstrated by their presence at some sites in the northern region, such as the settlement of Shimal for the open vessels, and tomb 2 at Dhayah (Häser, 1991: fig. 3/a, b), tomb 1 at Bidya (Al-Tikriti, 1989a: Pls. 66/A; 67/A, B) and tomb 99 at Shimal (Häser, 1991: fig. 3/c) for the spouted bowls.

In addition, a peculiar and unique specimen is a compartmented box consisting of two beehive-shaped vases (WS Type 7, Figure 4.10), equipped with two distinct rims on the top of each vase to emphasise the division between the two compartments. This finds a precise parallel in the funerary context of the 2nd millennium BC of Al-Wāsit, tomb W1 (Yule, 2015: Pl. 26/115).

To conclude the morphological analysis of the material of this period, a round vessel lid with a rounded base and a slightly knob-shaped handle should be included in this description (WS Type 9, Figure 4.13). Its typical shape, with a downward sloping surface, counts it among the most common specimens of the Wadi Suq tradition and finds precise parallels in tomb 6 at Shimal (De Cardi, 1988: fig. 12/13), site 2 at Ghalilah (Donaldson, 1984: figs. 25/16, 17, 21) and in Dhayah 1 (Häser, 1988: Pl. 11/409), just to mention a few examples.

Regarding the Late Bronze Age, the identified vessel shapes also reflect the morphological innovations of the period (Velde, 2003). This is particularly true for the double compartmented rectangular boxes [Late Bronze Age (LBA) Type 1, Figure 15.1], which were reintroduced since they had previously been present during the Umm an-Nar period, and were widespread in the

funerary contexts of this phase, as demonstrated by tomb N1985 at Nizwa (Al-Shanfari & Weisgerber, 1989: fig. 4/3, 4). Further examples of typical morphological features are the shallow conical vessels with rounded bases (LBA Type 2, Figure 15.2), which are comparable to the specimens from Qusais (Häser, 1988: Pl. 8/8) and Nizwa (Al-Shanfari & Weisgerber, 1989: fig. 4/1), the oval vase with a slightly rounded base and an inward tapering body (LBA Type 3, Figure 15.5), which is similar to those from tomb 3 at Kalba (Phillips, 2013: fig. 14/2) and Mukhailif (Yule, 2015: fig. 48/16), and lastly the globular shaped vessel with a rounded rim (LBA Type 4, Figure 15.4).

From a morphological point of view, the assemblage dateable to the Iron Age is the most abundant, as already mentioned since there are about 134 almost intact specimens, which include both vases and lids. Morphology-wise, almost all the most common shapes for this period have been identified. In addition, one or more types were identified for each shape.

Considering the open forms, spouted bowls are the most numerous and are divided into five types. The first three types share a common U-shaped spout and a slightly rounded base. They are differentiated by their curving sides [Iron Age (IA) Type 1, Figure 8.3], straight outward sloping sides (IA Type 2, Figure 8.1), and hyperbolic profile (IA, Type 3, Figure 8.18). The fourth type is essentially distinguished only by its right-angled beak (IA, Type 4, Figure 8.13), whereas the fifth shows an uncommon quadrangular shape and a right-angled beak (IA Type 5, Figure 16.1).

Bowls are also divided into five types, two of which are very rare in assemblages of this period. The first two types have very similar dimensions and a slightly round or flat base. They are differentiated by sides that are either slightly rounded (IA Type 6, Figure 17.3) or flaring (IA Type 7, Figure 17.13). Another type is shallow and has a hyperbolic profile (IA Type 8, Figure 17.15). Two specimens are characterised by an original shape and peculiar manufacture. The first one is a footed bowl with straight walls and a rounded angle carination at the junction with the foot; the foot presents a short and straight neck (IA Type 9, Figure 18). The most original specimen among the bowls is exhibited in the National Museum of Oman in Muscat, and it consists of a unique container with the shape of a bird or another winged animal (IA Type 10, Figure 19). The most characteristic shape among the beakers is their hyperbolic profile and a slightly rounded base, which can be considered a distinctive trait of this product given the high number of specimens (IA Type 11, Figure 6.1). This type is followed by two other types, one with straight outward sloping walls (Iron Age, Type 12, Figure 6.3) and the other with sides that are even more curved (IA Type 13, Figure 6.13).

Wide conical vessels are the most common shape in the assemblage. There are more than 30 intact examples, and they are divided into two types based on the wall

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**FIGURE 11** Compartmented boxes from LCG-1 referable to the Iron Age tradition (drawings C. Rielli, photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]



FIGURE 12 Some specimens of rectangular boxes with inward-curving and inward-straight walls (photographs P. Koch, G. Tursi). [Color figure can be viewed at wileyonlinelibrary.com]



**FIGURE 13** Spouted bowl with gadroons decoration referable to Iron Age II phase (photograph G. Tursi). [Color figure can be viewed at wileyonlinelibrary.com]

profile. Usually, those with inward curving walls have a rounded base and are slightly carinated (IA Type 14, Figure 9.1), whereas those with straight inward sloping walls have a flat or slightly rounded base (IA Type 15, Figure 9.3).

Of the ten compartmented boxes, most correspond to the classic double compartmented rectangular box with a slightly rounded base and an inward tapering body (IA Type 16, Figure 11.1), but two types are truly original in the context of south-eastern Arabia. The first is a triple compartmented box that has one cylindrical and two quadrangular vases, with a rounded base and sloping sides (IA Type 17, Figure 11.6), which has only one comparison coming from the grave goods of tomb 4 at Wa'ab (Wadi al-Qawr) (Huckle, 2003: fig. 1). The second is a quadruple compartmented square box with a flat base (IA Type 18, Figure 20.2) that has comparisons outside of the Arabian Peninsula, namely in Iran and Afghanistan (Phillips & Simpson, 2018: figs. 19, 47).



**FIGURE 14** The typical Iron Age barrel-shaped suspension vessel with vertically pierced lugs (photograph G. Vianini). [Color figure can be viewed at wileyonlinelibrary.com]

Rectangular vessels with slightly rounded bases are also common and are subdivided into two types on the basis of their curving (IA Type 19, Figure 12.1) or straight inward-sloping walls (IA Type 20, Figure 12.2), whereas barrel-shaped vessels with four pierced lugs (IA Type 21, Figure 14) and globular-shaped vessels (IA Type 22, Figure 10) are rare.

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TABLE 2 Morphological classification and parallels (reference to inventory number, figure number and progressive object number).

Туре	Quantity	Morphological description	Comparanda
Umm an-Nar Type l	2 51302 (4.1) 29551 (4.2)	Double compartmented rectangular box with a flat base and slightly carinated walls	Ajman (Al-Tikriti, 1989b: Pl. 45/I, J: Pl. 55/B) Ibri-Selme (Yule, 2001: Pl. 45/509) Hili North Tomb A (David, 1996: fig. 5/7) Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 15/1) Rumeilah (Boucharlat & Lombard, 1985: Pl. 60/3)
Wadi Suq Type 1	1 29220 (4.3)	Conical vessel with four symmetrical knobs and rounded base	Shimal SH-103 (Velde, 2003: fig. 5/3) Dadna (Benoist & Ali Hassan, 2010: fig. 7/11) Mereshid (Benoist, 2002: fig. 35/3)
Wadi Suq Type 2	2 29542 (4.4) 28936 (4.5)	Conical vessel with slightly rounded base (without knobs)	<ul> <li>Shimal SH-95 (Velde, 2003: fig. 5/7)</li> <li>Al-Akhdar (Yule &amp; Weisgerber, 2015a: Pl. 19/8)</li> <li>Al-Wāsiţ (Yule &amp; Weisgerber, 2015b: Pl. 20/ 96; 22/102)</li> </ul>
Wadi Suq Type 3	2 51283 (4.6) 51306 (4.7)	Open vessel with rounded base, outward sloping walls and everted rim	Shimal settlement (Häser, 1991: fig. 1/d) Husn Salut (Tagliamonte, 2018: Pl. 78/21)
Wadi Suq Type 4	1 29194 (4.8)	Open vessel with straight outward sloping walls, rounded rim and base	No exact parallels
Wadi Suq Type 5	2 29218 (4.9) 29098 (4.11)	Open bowl with curving sides, rounded base and rim. U-shaped spout	Bidya 1 (Al-Tikriti, 1989a: Pl. 66/A; Pl. 67/A, B) Dhayah Tomb 2 (Häser, 1991: fig. 3/a, b) Shimal SH-99 (Häser, 1991: fig. 3/c)
Wadi Suq Type 6	1 29920 (4.3)	Globular vessel with four pierced lugs	<ul> <li>Shimal SH-99 (Vogt &amp; Franke-Vogt, 1987: fig. 33/4)</li> <li>Shimal SH-103 (Vogt &amp; Franke-Vogt, 1987: fig. 25/5, 6)</li> <li>Al-Akhdar (Yule &amp; Weisgerber, 2015a: Pl. 18/ 6, 7, 8)</li> </ul>
Wadi Suq Type 7	1 28914 (4.10)	Double circular compartmented box with four knobs	Al-Wāsiț (Yule & Weisgerber, 2015b: Pl. 25/115) Husn Salūt (Tagliamonte, 2018: Pl. 79/34)
Wadi Suq Type 8	1 28929 (5)	Oval-shaped vessel with four knobs and rounded base/disc	Bidya 1 (Al-Tikriti, 1989a: Pl. 68/A)
Wadi Suq Type 9	1 29113 (4.13)	Round vessel lid with a rounded base and slightly knob-shaped handle	Shimal Tomb 6 (De Cardi, 1988: fig. 12/13) Dhayah 1 (Häser, 1988: Pl. 11/409) Shimal SH-103 (Häser, 1988: Pl. 19/514) Ghalilah Site 2 (Donaldson, 1984: fig. 25/16, 17, 21)
Late Bronze Age Type 1	2 29193 (15.1) 28903 (15.3)	Double compartmented rectangular box with a flat base and inward sloping sides	Nizwa (Al-Shanfari & Weisgerber, 1989: fig. 4/3, 4) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 20/2) Samad al Shān S2135B (Yule, 2001: Pl. 264/7)
Late Bronze Age Type 2	1 51301 (15.2)	Shallow conical vessel with rounded base	Al-Qusais (Häser, 1988: Pl. 8/8) Nizwa (Al-Shanfari & Weisgerber, 1989: fig. 4/1)
Late Bronze Age Type 3	1 28930 (15.5)	Closed vessel with a slightly rounded base and inward tapering body	Mukhailif (Yule, 2015: Pl. 48/16) Kalba Tomb 3 (Phillips, 2013: fig. 14/2)
Late Bronze Age Type 4	1 28934 (15.4)	Globular vessel with rounded rim	No exact parallels
Iron Age Type 1	9 29280 (23.9) 29277 (8.4) 29275 (8.2) 29547 (8.11) 29106 (8.14)	Open bowl with curving sides and slightly rounded base. U-shaped spout	Husn-Salut (Tagliamonte, 2018: Pl. 78/19) Sharm (Ziolkowsky, 2001: figs. 28, 49) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 14/2) Al-Buhais, BHS 28 (Jasim, 2012: fig. 121/5) Qarn Bint Sa'ud (Zutterman, 2004: fig. 5/3)

Туре	Quantity	Morphological description	Comparanda
	29105 (8.16) 29296 (8.19) 32794 (16.3) 29050 (13)		
Iron Age 7 Type 2	8 29097 (8.1) 29110 (8.5) 29511 (8.6) 51297 (8.7) 29512 (8.8) 29053 29545 (8.10) 29187 (8.17)	Open bowl with straight outward sloping sides and slightly rounded base. U-shaped spout	<ul> <li>Fashgha 1 (Phillips, 1987: fig. 23/3; 25/9, 10)</li> <li>Dadna (Benoist &amp; Ali Hassan, 2010: fig. 8/3)</li> <li>Bithnah Tomb 4 (Corboud et al., 1996: Pl. 14/3)</li> <li>Al-Buhais, BHS 78 (Jasim, 2012: fig. 265/1, 3)</li> <li>Asimah As 100 (Vogt,1994: fig. 42/16)</li> <li>Ibri-Selme (Yule, 2001: Pl. 47/525)</li> </ul>
Iron Age Type 3	2 29278 (8.18) 29276 (16.2)	Open bowl with hyperbolic profile and slightly rounded base. U-shaped spout	No exact parallels
Iron Age Type 4	5 29188 (8.13) 29099 (8.15) 29182 (8.20) 29277 (8.4) 29999 (8.15)	Open bowl with curving sides and slightly rounded base, spout with angled sides	Husn-Salut (Tagliamonte, 2018: Pl. 78/17) Qarn Bint Sa'ud (Zutterman, 2004: fig. 5/1, 2, 5) Sharm (Ziolkowsky, 2001: fig. 28) Fashgha 1 (Phillips, 1987: fig. 30/25) Ibri-Selme (Yule, 2001: Pl. 45/516)
Iron Age Type 5	1 29221 (16.1)	Quadrangular open bowl with slightly rounded base, spout with angled sides	No exact parallels
Iron Age Type 6	9 51285 (17.1) 29520 (17.2) 51287 (17.3) 29048 (17.4) 51288 (17.5) 28908 (17.6) 51305 29525 (17.11) 29299 (17.12)	Open bowl with sloping walls and slightly rounded or flat base	<ul> <li>Sharm (Ziolkowsky, 2001: fig. 50)</li> <li>Wadi Fizh S51 (Düring et al., 2017: St50, L19, M2, St50, L8, M2)</li> <li>Shimal SH102 (Vogt &amp; Franke-Vogt, 1987: fig. 14/5-7)</li> <li>Shimal SH99 (Vogt &amp; Franke-Vogt, 1987: fig. 33/2)</li> <li>Al-Buhais BHS84 (Jasim, 2012: fig. 294/5, 8)</li> <li>Rumeilah (Boucharlat &amp; Lombard, 1985: Pl. 60/4)</li> </ul>
Iron Age Type 7	4 29186 (17.13) 29302 (17.14) 29111 (17.16) 29297 (17.10)	Open bowl with straight outward sloping walls and slightly rounded or flat base	Asimah As 100 (Vogt, 1994: fig. 42/9) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 14/ 6, 7; 15/2) Dibba 76/1 (Pellegrino et al., 2019: fig. 16/3, 6, 8) Al-Buhais BHS85 (Jasim, 2012: fig. 306/7, 11, 12) Ghalīlah Site 2 (Donaldson, 1984: fig. 23/3)
Iron Age Type 8	3 29270 (17.15) 51292 (17.7) 29544 (17.8)	Shallow open bowl with hyperbolic profile and slightly rounded or flat base	Dadna (Benoist & Ali Hassan, 2010: fig. 8/ 1, 2) Sharm (Ziolkowsky, 2001: fig. 26)
Iron Age Type 9	1 29102 (18)	Footed bowl with neck and circular base, straight walls	No exact parallel
Iron Age Type 10	1 29560 (19)	Bowl shaped like a winged animal with a rounded rim and two handles	No exact parallel
Iron Age Type 11	13 29529 (6.1) 29527 (6.2) 51282 (6.4) 29587 (6.8) 28935 (6.9)	Open beaker with hyperbolic profile and rounded or flat base	Asimah As 100 (Vogt, 1994: fig. 43/4, 5, 7) Qarn Bint Sa'ud (Zutterman, 2004: fig. 8) Ibri-Selme (Yule, 2001: Pl. 47/528) Dibba 76/1 (Pellegrino et al., 2019: fig. 23/1, 2) Al-Buhais BHS 27 (Jasim, 2012: fig. 115/3) Bawshar (Yule, 1999: fig. 17/87)

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TABLE 2 (Continued)

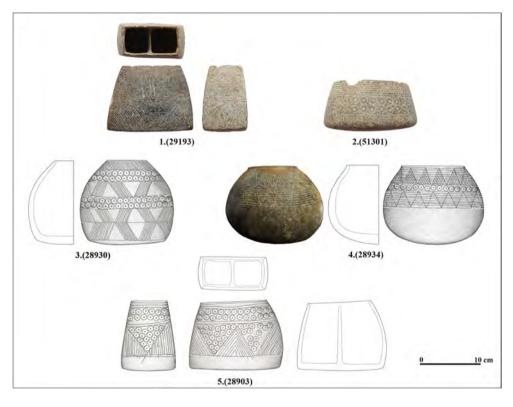
Туре	Quantity	Morphological description	Comparanda
	29303 (6.10) 29274 (6.11) 29109 (6.12) 29101 (6.15) 29172 (6.16) 28917 (22.1) 29045 (22.2) 29209 (22.3)		Shimal SH 102 (Vogt & Franke-Vogt, 1987: fig. 14/3)
Iron Age Type 12	4 29526 (6.3) 51294 (6.5) 29042 (6.6) 29269 (6.17)	Open beaker with straight outward sloping walls and rounded or flat base	Sharm (Ziolkowsky, 2001: figs. 44, 75) Asimah As 100 (Vogt, 1994: fig. 43/10) Shimal SH 102 (Vogt & Franke-Vogt, 1987: fig. 14/4) Naslah 1 (Phillips, 1987: fig. 7)
Iron Age Type 13	3 28911 (6.13) 29210 (6.14) 29561 (6.7)	Open beaker with curving walls and rounded or flat base	Al-Buhais BHS 85 (Jasim, 2012: fig. 306/8, 12, 13) Fashgha 1 (Phillips, 1987: fig. 24/4) Qarn Bint Sa'ud (Zutterman, 2004: fig. 7/1, 2) Hili 8 (Cleuziou, 1989: Pl. 35A)
Iron Age Type 14	20 28904 (9.1) 29189 29292 (9.5) 29208 (9.8) 29510 (9.15) 28262 29176 (9.10) 29553 (9.12) 29599 (9.14) 29044 (9.13) 28931 (9.18) 29523 (9.19) 29103 (23.1) 29173 (23.2) 29174 (23.3) 29271 (23.4) 29190 (23.6) 28932 (23.8) 39280 (23.9) 29179 (23.12)	Conical vessel with a rounded or flat base and inward curving walls	Husn Salut (Tagliamonte, 2018: Pl. 79/26, 27) Qarn Bint Sa'ud (Zutterman, 2004: fig. 9/1, 2) Sharm (Ziolkowsky, 2001: fig. 31) Asimah As 100 (Vogt, 1994: fig. 42/2) Fashgha 1 (Phillips, 1987: fig. 24/7) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 18/ 2, 3; 19/1) Ibri-Selme (Yule, 2001: Pl. 46/523) Dibba 76/1 (Pellegrino et al., 2019: fig. 20/1)
Iron Age Type 15	12 29043 (9.3) 29285 (9.4) 29040 (9.7) 29046 (9.9) 28907 (9.6) 29543 (9.16) 29550 (9.20) 29998 (9.17) 29204 (23.7) 29100 (23.11) 29267 (23.10) 28913 (23.5)	Conical vessel with a slightly rounded or flat base and straight inward sloping walls	<ul> <li>Qarn Bint Sa'ud (Zutterman, 2004: fig. 9/3)</li> <li>Fashgha 1 (Phillips, 1987: fig. 24/8; 26/14)</li> <li>Bithnah Tomb 4 (Corboud et al., 1996: Pl. 17/3; 19/3)</li> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 20/2, 4)</li> <li>Bawshar (Yule, 1999: fig. 19/105, 106)</li> <li>Asimah As 100 (Vogt, 1994: fig. 42/7)</li> <li>Al-Buhais BHS 32 (Jasim, 2012: fig. 134/12)</li> </ul>
Iron Age Type 16	7 29995 (11.1) 29996 (11.2) 39529 (11.3) 29108 (11.4) 29997 (11.5)	Double compartmented rectangular box with a slightly rounded base and inward tapering body	Tell Abraq TA21 (Potts, 1990: fig. 143) Asimah As 100 (Vogt, 1994: fig. 43/1, 2) Husn Salut (Tagliamonte, 2018: Pl. 79/33) Daba LCG-2 (Genchi et al., 2018: fig. 6/c, e) Sharm (Ziolkowsky, 2001: figs. 47, 53)

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Туре	Quantity	Morphological description	Comparanda
	29273 (11.7) 28905 (20.1)		Samad al Shān S101130 (Yule, 2001: Pl. 215/2)
Iron Age Type 17	2 29554 (11.6) 29095 (21)	Triple compartmented box, two quadrangular and one cylindrical, rounded base and sloping sides	Wa'ab Tomb 4 (Huckle, 2003: fig. 1) Husn Salut (Tagliamonte, 2018: Pl. 79/34)
Iron Age Type 18	1 29026 (20.2)	Quadruple compartmented square box with a flat base	<ul> <li>Shahdad (Phillips &amp; Simpson, 2018: fig. 19/1, 2, 7, 8)</li> <li>Northern Afghanistan (Phillips &amp; Simpson, 2018: fig. 47/6)</li> </ul>
Iron Age Type 19	4 29039 (12.1) 28916 (12.6) 29038 (12.7) 29087 (24)	Rectangular vessel with a rounded base and curving sides	<ul> <li>Ibri-Selme (Yule, 2001: Pl. 46/517)</li> <li>Bithnah Tomb 4 (Corboud et al., 1996: Pl. 20/2)</li> <li>Al-Buhais BHS 85 (Jasim, 2012: fig. 303/5)</li> </ul>
Iron Age Type 20	5 28897 (12.2) 29041 (12.3) 29266 (7.7) 29047 (12.5) 29212 (12.8)	Rectangular vessel with a slightly rounded base and straight inward sloping sides	Fashgha 1 (Phillips, 1987: fig. 27/15) Dibba 76/1 (Pellegrino et al., 2019: fig. 23/3) Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 19/1) Al-Buhais BHS 10 (Jasim, 2012: fig. 65/4)
Iron Age Type 21	1 51303 (14) 51304	Barrel-shaped vessel with four pierced lugs and rounded rim	Rumeilah (Boucharlat & Lombard, 1985: Pl. 61/10) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 20/1) Al-Buhais BHS 31 (Jasim, 2012: fig. 130/2) Daba LCG-2 (Genchi et al., 2018: fig. 6/d)
Iron Age Type 22	1 29541 (10)	Globular vessel with a rounded base	Naslah Tomb 4 (Tagliamonte, personal communication (fig. 7.78/10)
Iron Age Type 23	10 29100 (23.11) 29268 (7.4) 33423 (7.15) 33409 (7.14) 33426 (7.5) 33430 (7.1) 33411 (7.2) 39210 (7.11) 33432 (7.12) 33417 (7.13)	Round vessel lid with a flat base and small knob- shaped handle with a rounded top	<ul> <li>Fashgha 1 (Phillips, 1987: figs. 33/34, 34/38)</li> <li>Sharm (Ziolkowsky, 2001: figs. 46, 62)</li> <li>Rumeilah (Boucharlat &amp; Lombard, 1985: Pl. 61/11)</li> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 23/4, 5; 24/4)</li> <li>Dadna (Benoist &amp; Ali Hassan, 2010: fig. 8/6–8)</li> <li>Bithnah Tomb 4 (Corboud et al., 1996: Pl. 22/ 5-7; 23/1)</li> </ul>
Iron Age Type 24	1 33418 (7.17)	Round vessel lid with a flat base and small knob- shaped handle with a flat top	Al-Buhais BHS 85, 77 (Jasim, 2012: figs. 307/ 4, 5; 261/3) Bawshar (Yule, 1999: fig. 22/125) Fashgha 1 (Phillips, 1987: fig. 32/33) Husn Salut (Tagliamonte, 2018: Pl. 80/40) Dibba 76/1 (Pellegrino et al., 2019: fig. 24/3, 5)
Iron Age Type 25	2 29101 (6.15) 29304 (7.16)	Round vessel lid with a flat base and biconical handle with a flat top and deep incisions	Dibba 76/1 (Pellegrino et al., 2019: fig. 24/6) Sharm 1 (Ziolkowsky, 2001: figs. 81, 94) Al-Buhais BHS 32, 30, 27 (Jasim, 2012: fig. 135/7; 126) Samad al Shān S3004 (Yule, 2001: Pl. 426/5)
Iron Age Type 26	1 33410 (7.5)	Round vessel lid with a flat base and small knob- shaped handle with a concave top	Al-Wasit Tomb W1 (Yule & Weisgerber, 2015b: Pl. 36/148)
Iron Age Type 27	3 29509 (7.6)	Rectangular vessel lid with division and a knob-shaped handle with a rounded top	Tell Abraq TA 22 (Potts, 1990: fig. 140) Sharm (Ziolkowsky, 2001: figs. 89, 91)

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Туре	Quantity	Morphological description	Comparanda
	33425 (7.19) 33431 (7.21)		Dadna (Benoist & Ali Hassan, 2010: fig. 8/11) Bithnah Tomb 4 (Corboud et al., 1996: Pl. 23/5)
Iron Age Type 28	2 39108 (7.10) 33408 (7.20)	Rectangular vessel lid with division and a knob-shaped handle with a flat top	Daba LCG-2 (Genchi et al., 2018: fig. 6/f) Wa'ab Tomb 4 (Tagliamonte, personal communication) (fig. 5.23/5)
Iron Age Type 29	1 29266 (7.7)	Square vessel lid with a flat base and small knob- shaped handle with a rounded top	No exact parallel
Iron Age Type 30	1 2948 (7.8)	Quadrangle vessel lid with blunt angles and slightly rounded base, flattened knob-shaped handle	Rumeilah (Boucharlat & Lombard, 1985: Pl. 61/5) Ibri-Selme (Yule, 2001: Pl. 46/522) Dadna (Benoist & Ali Hassan, 2010: fig. 8/10)



**FIGURE 15** Examples of softstone vessels from LCG-1 referable to the Late Bronze Age (DA 29193; DA 51301; DA 28930; DA 28934; DA 28903) (drawings C. Rielli, photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]

Numerous circular, rectangular and square lids were unearthed in the grave and in the adjacent pits. The circular ones are more abundant, and they can be divided into four subgroups based on the shape of the knob/handle. Most are round vessel lids with flat bases and small knob-shaped handles with a rounded top (IA Type 23, Figure 7.1), others have a flat (IA Type 24, Figure 7.17) or a concave top (IA Type 26, Figure 7.18). Some circular specimens have a biconical handle with a flat top and deep incisions (IA Type 25, Figure 7.16). Among the other lids, there are: some rectangular specimens that can be associated with compartmented boxes and therefore have the classic internal division and a knob-shaped handle with either a rounded (IA Type 27, Figure 7.19) or a flat top (IA Type 28, Figure 7.20); one square lid (IA Type 29, Figure 7.7) and the lid of an original quadrangle vessel that has blunt angles and a slightly rounded base, as well as a squat knob-shaped handle (IA Type 30, Figure 7.8).



**FIGURE 16** Three examples of spouted bowls are displayed in the showcases of the National Museum of Oman (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

## **5** | **DECORATIVE PATTERNS**

The vessel assemblage from LCG-1 is relatively uniform in terms of decorative patterns, constituted by a basic set of recurring geometric themes, particularly: zig-zag lines, saw-teeth motifs, triangular fields, dot-in-circles and, to a lesser extent, herringbone patterns. Moreover, a smaller number of vessels display figurative motifs, both phytomorphic and zoomorphic. The analysis of the vessels consisted of the classification of recurring patterns, which were differentiated on the basis of the combination of motifs. Such decorative patterns are in fact present on most of the vessels, from the spouted specimens to the compartmented ones. When a decorative pattern presented slight differences in the combination of motifs, variants were assigned within the classification. All the decorative patterns were classified in a schematic table, grouped by cultural phase, and assigned a progressive number, followed then by a description and by the main parallels with specimens from south-eastern Arabian sites (Table 3).

The Umm an-Nar samples are limited to two compartmented boxes that bear the same typical basic pattern of the period, which consists of a regularly placed double dot-in-circles motif, enriched by an incised line along their edge (UN Pattern 1, Figure 4.1). These vessels easily find parallels with other rectangular and compartmented boxes found in the main funeral sites of the period, such as Hili North Tomb A (Cleuziou & Vogt, 1983: Pl. 10/1; Cleuziou & Méry, 2011: David, 1996: fig. 5/7), Hili Garden Tomb N (David, 2002: fig. 15/4-5), Jabal al-Buhais BHS89 (Jasim, 2012: fig. 329/9), Al Akhdar (Yule & Weisgerber, 2015a: Pl 15/1), Ibri-Selme (Yule, 2001: Pl. 45/ 509), Rumeilah (Boucharlat & Lombard, 1985: Pl. 60/3), Tell Abraq (Potts, 2008: figs. 21-25), and Tarut (Zarins, 1978: Pl. 70/551), as well as in the Royal Necropolis of the late III millennium at Gonur North in Turkmenistan (Sarianidi, 2006: fig. 103).

The ten Wadi Suq vessels can be grouped into two decorative patterns that largely reflect the classification recently developed by C. Velde, characterised by the strict division into two panels, each with its own set of patterns.<sup>3</sup> The first pattern of this period includes six vessels that have one of the panels decorated with dot-incircles, while the other bears chevrons or sets of lines (WS Pattern 1, Figure 4: DA 28914). This is the most recurring Wadi Sug pattern, having close parallels with a number of sites, especially Tomb W1 at Al Wasit (Yule & Weisgerber, 2015b: Pl. 21/99, Pl. 22/101, Pl. 23/105, Pl. 25/112, Pl. 27/118; Pl. 29/123), as well as Al Akhdar (Yule & Weisgerber, 2015a: Pl. 18/4, 8), Dadna (Benoist & Ali Hassan, 2010: fig. 7/11), Shimal tomb B (De Cardi, B & Potts, 1988: fig. 12/7), and Shimal SH 101 (Vogt & Franke-Vogt, 1987: figs. 5/3, 15/4, 25/6), Kalba (Phillips, 2013: fig. 13/7) and Jebal al-Buhais (Jasim, 2012: figs. 12/2, 157/1, 215/7, 229/1). More peculiar variations of this pattern include the presence of deeply carved grooves-such as in the case of a single suspension vessel (Variant 1.b, Figure 5)—or the absence of dot-in-circles (Variant 1.c, Figure 4.4). The second pattern includes two spouted bowls, one bowl and one conical vessel that are characterised by rows of dot-and-circles with no separating lines (WS Pattern 2, Figure 4.9).

A break from this tradition is found in the Late Bronze Age decorative patterns, where the division into two panels is abandoned in favour of a decoration that covers the whole body of the vessels (Velde, 2003, p. 109). All the five examples of this period share the same combination of horizontal and oblique lines, dot-incircles, filled triangles and net patterns, which conform to the decorative schemes codified by Velde (2003, p. 110). Despite the presence of the same motifs, their arrangement is still so peculiar that each vase has its own decorative pattern. The first decorative scheme is carved on a globular vessel, it is composed of superimposed horizontal bands alternated with double rows of dot-incircles, followed by a set of oblique lines and a net pattern (LBA Pattern 1, Figure 15.3). This combination is the one with more parallels, like the biconical vessel from Rumeilha (Boucharlat & Lombard, 1985: Pl. 60/6) and other shapes from tomb SH 102 at Shimal (Vogt &

<sup>&</sup>lt;sup>3</sup>The Wadi Suq decorative schemes from LCG-1 fit into groups A, A3, B, C and D in Velde's classification (Velde, 2018, p. 116, tab. 1).

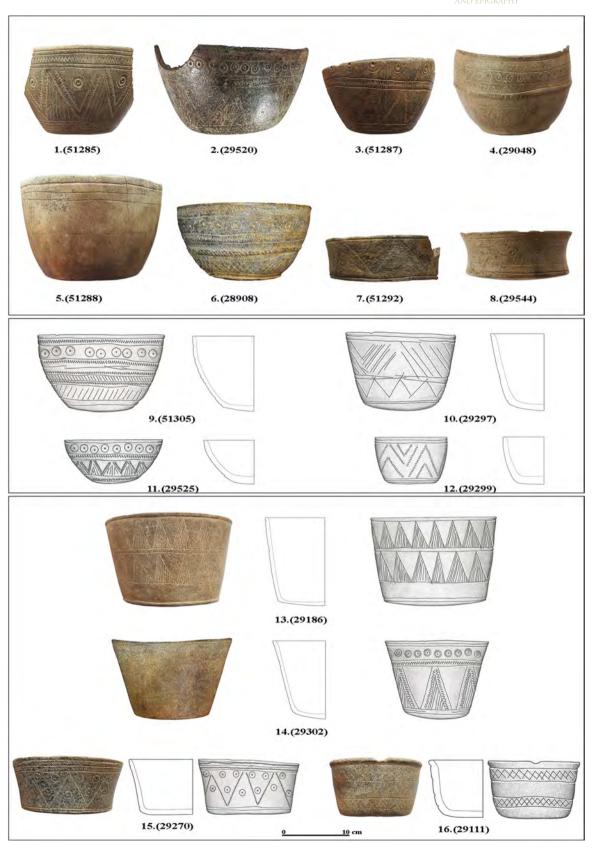


FIGURE 17 Some examples of bowls and open vessels from LCG-1 (drawings C. Rielli, photographs P. Koch, G. Tursi). LCG-1, Long Collective Grave 1. [Color figure can be viewed at wileyonlinelibrary.com]



**FIGURE 18** Footed bowls with short and straight neck and circular base (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

Franke-Vogt, 1987: fig. 15/8) Bidya (Al-Tikriti, 1989a: Pl. 69), Al-Wasit (Yule & Weisgerber, 2015b: Pl. 29/124) as well as two fragments of a tapering jar with a very similar decorative scheme, that probably came from Ur and are currently at the British Museum (Reade & Searight, 2001: fig. 11). The second pattern, visible on another globular vase, despite falling among the motifs of the period, is restricted to the upper portion of the vessel. Similar to the previous pattern, a single row of dot-in-circles divides two bands of horizontal lines. A frieze of triangles is added to both the upper and lower bands (LBA Pattern 2, Figure 15.4). A quite different disposition decorates the surface of a conical vessel, which has a central double-row of dot-in-circles framed by a dense net pattern and oblique lines (LBA Pattern 3, Figure 15.2). The last examples pertaining to this cultural phase are two compartmented boxes: one is characterised by a frieze of radiating triangles and several rows of dot-incircles filling the space between them (LBA Pattern 4, Figure 15.5); the other has two rows of larger dot-in-



**FIGURE 19** A unique bowl shaped like a bird displayed in the showcases of the National Museum of Oman (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]



**FIGURE 20** Two examples of compartmented boxes and related lids are displayed in the showcases of the National Museum of Oman (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

circles, followed by a dense set of oblique lines (LBA Pattern 5, Figure 15.1).

The vessel assemblage ascribable to the Iron Age is by far the largest and, accordingly, the number of decorative schemes of the period increases and shows more innovations, with 12 patterns and 11 potential variants. The decorative repertoire can be largely restricted to five main patterns, which cover a larger number of vessels. These consist of a limited number of main motifs that are combined to create relatively articulated variants and are consistently found on different shapes.

Patterns 1 and 2 are the most recurrent across the assemblage, including 58 and 43 vessels, respectively.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>These decorative patterns are largely attested in funerary contexts and – to a lesser degree – in the settlements of the main sites of the area, such as Asimah As 100 (Vogt, 1994; figs. 42/7, 42/13 43/4-7), Shimal SH-102 (Vogt & Franke-Vogt, 1987; fig. 14/5-3) Al-Akhdar (Yule & Weisgerber, 2015a; Pl. 21/11), Bithnah tomb 4 (Corboud et al., 1996; Pl. 15/2), Sharm (Ziolkowsky, 2001; figs. 26, 28), Dibbā 76/1 (Pellegrino et al., 2019; figs. 20/2, 23/1, 16/3). For a more comprehensive list of parallels, cfr. Table 3: Pattern 1; 2.

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TABLE 3 Decorative pattern classification and parallels (reference to inventory number, figure number and progressive object number).

Pattern	Quantity	Decorative description	Comparanda
Umm an-Nar Pattern 1	2 51302 (4.1) 29551 (4.2)	3–5 rows of double dot-in-circles. They can be framed by a simple line	<ul> <li>Hili North Tomb A (Cleuziou &amp; Vogt, 1983: Pl. 10/1; David, 1996: fig. 5/7)</li> <li>Hili Garden Tomb N (David, 2002; fig. 15/4-5)</li> <li>Jabal al-Buhais BHS89 (Jasim, 2012: fig. 329/9)</li> <li>Al Akhdar (Yule &amp; Weisgerber, 2015a: Pl. 15/1)</li> <li>Ibri-Selme (Yule, 2001: Pl. 45/509)</li> <li>Rumeilah (Boucharlat &amp; Lombard, 1985: Pl. 60/3)</li> <li>Ajman (Al-Tikriti, 1989b: Pl. 45/h, i, j, 1)</li> <li>Tell Abraq (Potts, 2008: fig. 21–25)</li> <li>Tarut (Zarins, 1978: Pl. 70/551)</li> <li>Saar (Lombard, 1999; 66: fig. 42)</li> <li>Susa (Miroschedji, 1973: figs. 8/7-10, 9/2-3)</li> <li>Gonur North (Sarianidi, 2006: fig. 103)</li> </ul>
Wadi Suq Pattern 1	2 29220 (4.3) 28914 (4.10)	2 rows of double dot- in-circles, horizontal lines, chevrons in the lower panel	Al Wasit tomb W1 (Yule, 2015: Pl. 21/99, Pl. 22/101, Pl. 23/105, Pl. 25/112, Pl. 27/118, Pl. 29/123) Al Akhdar (Yule & Weisgerber, 2015a: Pl. 18/4, 8) Dadna (Benoist & Ali Hassan, 2010: fig. 7/11) Shimal tomb B (De Cardi, 1988: fig. 12/7) Shimal SH 101 (Vogt & Franke-Vogt, 1987: figs. 5/3, 15/4, 25/6) Kalba (Phillips, 2013: fig. 13/7) Jabal al-Buhais (Jasim, 2012: figs. 12/2, 157/1, 215/7, 229/1)
Wadi Suq Variant 1.a	2 51283 (4.6) 51306 (4.7)	Horizontal lines, 2 rows of dot-in- circles. Triangles filled in with horizontal lines/ sets of oblique lines in the lower panel	Kalba, tomb K3 (Phillips, 2013: fig. 13/4)
Wadi Suq Variant 1.b	1 28929 (5)	Horizontal lines interspersed with 2 rows of dot-in- circles, 3 deep horizontal grooves.	Sharm (Ziolkowsky, 2001: fig. 24) Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 18/1, 4, 8)

(Continues)

Quantity	Decorative description	Comparanda
	Diagonal lines and a panel of horizontal lines	Al-Wasit (Yule & Weisgerber, 2015b: Pl. 20/97; 22/101; 28/120) Shimal, Tomb 103 (Vogt & Franke-Vogt, 1987: fig. 25/6)
1 29542 (4.4)	2 separated bands of 12 horizontal grooves. The upper one is intersected by sets of oblique lines. The lower one has chevrons below it	<ul> <li>Al-Wasit (Yule &amp; Weisgerber, 2015b: Pl. 17/87, 88; Pl. 18/89, 90, 91)</li> <li>Shimal (Vogt &amp; Franke- Vogt, 1987: fig. 5/2)</li> <li>Dadna (Benoist &amp; Ali Hassan, 2010: fig. 7/8)</li> <li>Kalba, tomb K3 (Phillips, 2013: fig. 13/3)</li> </ul>
4 29218 (4.9) 29098 (4.11) 29194 (4.8) 28936 (4.5)	2 rows of dot-in-circles framed by 2-4 lines, or by bands filled with oblique lines.	Tarut (Zarins, 1978: Pl. 63/75b) Kalba (Phillips, 2013: fig. 14/2) Shimal SH 99 (Vogt & Franke-Vogt, 1987: fig. 33/7)
1 29113 (4.13)	Dot-in-circles, strokes along the edge and lines around the base of the handle	<ul> <li>Shimal, tomb SH 99- SH 103 (Vogt &amp; Franke- Vogt, 1987: figs. 34/1, 2; 26/5, 7)</li> <li>Ghalīlah (Donaldson, 1984: fig. 25/19).</li> <li>Buhais cemetery, tomb BHS 8- BHS tomb 89 (Jasim, 2012: figs. 57/7; 329/2, 5)</li> <li>Al-Wasīt (Yule &amp; Weisgerber, 2015b: Pl. 33/136; 34/139, 142).</li> <li>Dadna (Benoist &amp; Ali Hassan, 2010: fig. 7/7).</li> <li>Husn Salūt (Tagliamonte, 2018: Pl. 78/8).</li> <li>Ras al-Khaimah (Donaldson, 1984: fig. 25/19)</li> </ul>
1 28930 (15.3)	Superimposed bands alternating 2 rows of dot-in-circles and a zig-zag motif. Herringbone pattern in the lower bands	Rumeilah (Boucharlat & Lombard, 1985: Pl. 60/6) Shimal, SH 102 (Vogt & Franke- Vogt, 1987: fig. 15/8) Bidya, Tomb 1 (Al- Tikriti, 1989a: Pl. 69) Al-Wāsit, Tomb W1 (Yule, 2015: Pl. 29/124) Ur (Reade &
	1 29542 (4.4) 4 29218 (4.9) 29098 (4.11) 29194 (4.8) 28936 (4.5) 1 29113 (4.13)	1       Diagonal lines and a panel of horizontal lines         1       2 separated bands of 12 horizontal grooves. The upper one is intersected by sets of oblique lines. The lower one has chevrons below it         4       2 rows of dot-in-circles framed by 2-4 lines, or by bands filled with oblique lines.         2913 (4.13)       Dot-in-circles, strokes along the edge and lines around the base of the handle         1       Dot-in-circles, strokes along the edge and lines around the base of the handle         28930 (15.3)       Superimposed bands alternating 2 rows of dot-in-circles made a zig-zag motif. Herringbone pattern in the lower

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TABLE 3   (Continued)			
Pattern	Quantity	Decorative description	Comparanda
Late Bronze Age Pattern 2	1 28934 (15.4)	2 bands of horizontal lines are separated by a row of dot-in- circles. The upper set of lines is intersected by a frieze of triangles filled in by oblique lines, the lower set is intersected by a zig-zag line	Mukhailif (Yule, 2001: fig. 5/19.10) Bithnah, Tomb 4 (Corboud et al., 1996: Pl. 15)
Late Bronze Age Pattern 3	1 51301 (15.2)	Net pattern in the upper panel, 2 rows of dot-in-circles, set of oblique lines below	<ul> <li>Nizwa, N1985 tomb (Al-Shanfari &amp; Weisgerber, 1989: fig. 4/1)</li> <li>Al-Wāsit (Yule &amp; Weisgerber, 2015b: Pl. 30/127; Pl. 31/128)</li> <li>Qattarah (Velde, 2003: fig. 6/4, 11).</li> <li>Al-Qusais (Häser, 1988: Pl. 8/3)</li> </ul>
Late Bronze Age Pattern 4	1 28903 (15.5)	2 rows of dot-in-circles framed by 3 incised lines, a frieze of radiating triangular compositions filled in by lines, and dot- in-circles in between	Nizwa, tomb N1985 (Al- Shanfari & Weisgerber, 1989: fig. 4/4) Samad Ash-Shan, tomb S2135B (Yule, 2001: Pl. 264/7)
Late Bronze Age Pattern 5	1 29193 (15.1)	2 rows of dot-in- circles, band of 6 horizontal lines, 2 sets of oblique lines	(Velde, 2003: fig. 6/1, 4. 6. 9–11) Al-Qusais (Vogt, 1985: Pl. 119/7)
Iron Age Pattern 1	18 29096 51292 (17.7) 51293 51288 (17.5) 28904 (9.1) 29043 (9.3) 29189 39280 (23.9) 29285 (9.4) 29292 (9.5) 28907 (9.6) 29040 (9.7) 29100 (23.11) 29173 (23.2) 29208 (9.8) 29267 (23.10) 29046 (9.9) 29103 (23.1)	Triangular fields, can be framed by saw- teeth motifs filled in by oblique lines, parallel lines, parallel saw-teeth motifs or left empty. The panel is enclosed by horizontal lines	Asimah As 100 (Vogt, 1994: fig. 42/7, 43/4) Dibba 76/1 (Pellegrino et al., 2019: figs. 20/2, 23/1) Sharm (Ziolkowsky, 2001: figs. 26, 38) Asimah As 100 (Vogt, 1994: fig. 42/2) Bithnah tomb 4 (Corboud et al., 1996: Pl. 19/1) Mukhalif (Yule, 2015: fig. 48/16) Ibri-Selme (Yule & Weisgerber, 2001: Pl. 47/527)
Iron Age Variant 1.a	24 29501	Triangular fields created by saw-	Asimah As 100 (Vogt, 1994: figs. 42/13, 43/7, 9)

(Continues)



Pattern	Quantity	Decorative description	Comparanda
	29545 (8.10) 29503 (8.9) 29547 (8.11) 51298 29105 (8.16) 51285 (17.1) 29520 (17.2) 51287 (17.3) 29544 (17.8) 29525 (17.11) 29302 (17.14) 29270 (17.15) 29045 (22.2) 29176 (9.10) 28962 (9.11) 29553 (9.12) 29044 (9.13) 29599 (9.14) 29510 (9.15) 28913 (23.5) 29190 (23.6) 29204 (23.7) 29038 (12.7)	teeth motifs filled with oblique lines, horizontal lines or left empty. The upper thinner band can contain a row of double dot-in- circles or saw-teeth lines. Double dot- in-circles can be placed between the triangular fields. The pattern is framed by saw- teeth motifs	<ul> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 16/3)</li> <li>Shimal Sh-102 (Vogt &amp; Franke-Vogt, 1987: fig. 14/5, 3)</li> <li>Al-Akhdar (Yule &amp; Weisgerber, 2015a: Pl. 21/11)</li> <li>Bithnah tomb 4 (Corboud et al., 1996: Pl. 15/2)</li> <li>Husn Salut (Tagliamonte, 2018: Pl. 79/25)</li> <li>Rumeilah (Boucharlat &amp; Lombard, 1985: Pl. 60/ 4) Sharm (Ziolkowsky, 2001: figs. 26, 31)</li> </ul>
Iron Age Variant 1.a.1	1 32794 (16.3)	2 saw-teeth bands, radiating triangular composition composed of saw- teeth motifs alternated by double dot-in- circles, net motif below	Asimah As 100 (Vogt, 1994: figs. 42/13, 43/9) Dibba 76/1 (Pellegrino et al., 2019: fig. 16/3) Shimal Sh-102 (Vogt & Franke-Vogt, 1987: fig. 14/3) Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 21/11) Bithnah tomb 4 (Corboud et al., 1996: Pl. 15/2) Husn Salut (Tagliamonte, 2018: Pl. 79/25) Rumeilah (Boucharlat & Lombard, 1985: Pl. 60/4)
Iron Age Variant 1.a.2	1 29996 (11.2)	Saw-teeth, triangles intersected by horizontal lines, a frieze of triangles filled with oblique lines alternated by dot-in-circles	Rumeilah (Boucharlat & Lombard, 1985: Pl. 60/5) Sharm (Ziolkowsky, 2001: fig. 47)
Iron Age Variant 1.a.3	1 51294 (6.5)	Horizontal saw-teeth, net motif, triangles filled in by oblique lines, saw-teeth	Bawshar cemetery (Yule, 1999: fig. 19/ 100, 106) Qarn Bint Sa'ud (Zutterman, 2004: fig. 9/1)
Iron Age Variant 1.b	12 29187 (8.17) 28912 29531 29186 (17.13)	2 panels bearing a frieze of triangular fields filled with parallel oblique lines. Dot-in-circles	Dibba 76/1 (Pellegrino et al., 2019: fig. 23/2) Bawshar cemetery (Yule, 1999: fig. 17/87)

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TABLE 3 (Continued)     Pattern	Quantity	Decorative description	Comparanda
	29527 (6.2) 29587 (6.8) 28935 (6.9) 29303 (6.10) 29561 (6.7) 28932 (23.8) 29554 (11.6) 29095 (21)	between the triangles in the upper/lower band, or in the thin band below	Jabal al-Buhais BHS 27 (Jasim, 2012: fig. 115/3) Asimah As 100 (Vogt, 1994: figs. 43/4, 42/2) Qarn Bint Sa'ud (Zutterman, 2004: fig. 8)
Iron Age Variant 1.b.1	1 51303 (14)	2 panels, triangular fields filled in and composed of saw- teeth motifs. 4 zig- zag lines composed of saw-teeth motifs below	Jabal al-Buhais BHS 27 (Jasim, 2012: fig. 130/2) Dibba 76/1 (Pellegrino et al., 2019: fig. 23/2) Asimah As 100 (Vogt, 1994: fig. 43/4)
Iron Age Pattern 2	13 29097 (8.1) 29275 (8.2) 29280 (8.3) 29277 (8.4) 29295 29221 (16.1) 29182 (8.20) 29296 (8.19) 29299 (17.12) 29174 (23.3) 29039 (12.1) 28897 (12.2) 29041 (12.3)	2 or more parallel zig- zag lines composed of saw-teeth motifs and framed by horizontal grooves	Ibri-Selme (Yule & Weisgerber, 2001: Pl. 45/516) Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 19/2)
Iron Age Variant 2.a	7 29110 (8.5) 29188 (8.13) 29533 29511 (8.6) 51295 51297 (8.7) 29526 (6.3)	Double dot-in-circles, zig-zag lines composed of saw- teeth motifs. The horizontal parallel lines that frame the pattern can contain saw-teeth segments	Husn Salut (Tagliamonte, 2018: Pl. 78/19) Sharm (Ziolkowsky, 2001: figs. 26, 31) Shimal SH-102 (Vogt & Franke-Vogt, 1987: fig. 14/4, 7) Asimah As 100 (Vogt, 1994: fig. 43/10)
Iron Age Variant 2.b	1 29106 (8.14)	Zig-zag lines composed of saw- teeth motifs divided into two panels, both panels are preceded by saw-teeth motifs	Qarn Bint Sa'ud (Zutterman, 2004: fig. 8) Jabal al-Buhais BHS 27 (Jasim, 2012: fig. 115/ 3, 4)
Iron Age Variant 2.c	16 29505 29512 (8.8) 29530 29592 29300	Saw-teeth motif, a row of double dot-in- circles, zig-zag lines composed of saw- teeth motifs, these can also be	Asimah As 100 (Vogt, 1994: figs. 42/13, 43/9) Dibba76/1 (Pellegrino et al., 2019: fig. 16/3)

(Continues)



Pattern	Quantity	Decorative description	Comparanda
	51282 (6.4) 29529 (6.1) 28917 (22.1) 29209 (22.3) 29204 (23.7) 29543 (9.16) 29523 (9.19) 29995 (11.1) 39529 (11.3) 29997 (11.5) 28916 (12.6) 29541 (10)	enclosed by simple lines	<ul> <li>Shimal SH-102 (Vogt &amp; Franke-Vogt, 1987: fig. 14/3)</li> <li>Al-Akhdar (Yule &amp; Weisgerber, 2015a: Pl. 21/11)</li> <li>Bithnah tomb 4 (Corboud et al., 1996: Pl. 15/2)</li> <li>Husn Salut (Tagliamonte, 2018: Pl. 79/25)</li> <li>Rumeilah (Boucharlat &amp; Lombard, 1985: Pl. 60/4)</li> </ul>
Iron Age Variant 2.c.1	4 29550 (9.20) 29271 (23.4) 28931 (9.18) 29108 (11.4)	Saw-teeth motif, a row of dot-in-circles, zig-zag lines of saw-teeth motifs, herringbone pattern on the base or below the rim. The herringbones can also be composed of saw- teeth segments	Qarn Bint Sa'ud (Zutterman, 2004: fig. 9/3,4) Bithnah tomb 4 (Corboud et al., 1996: Pl. 19/1) Mukhalif (Yule, 2015: Pl. 48/16)
Iron Age Variant 2.d	1 29273 (11.7)	Frieze of radiating triangles composed of saw-teeth motifs	Samad al Shan tomb S101130 (Yule, 2001: Pl. 215/2)
Iron Age Pattern 3	7 29099 (8.15) 29999 (8.12) 29500 29048 (17.4) 28908 (17.6) 29102 (18) 29274 (6.11)	Superimposed bands containing dot-in- circles, saw-teeth motifs, zig-zag lines or herringbone motifs	Bithnah tomb 4 (Corboud et al., 1996: Pl. 15/2) Shimal SH -102 (Vogt & Franke-Vogt, 1987: fig. 14/5) Jabal al-Buhais BHS 85 (Jasim, 2012: figs. 305/3; 306/3, 5)
Iron Age Variant 3.a	1 29109 (6.12)	6 superimposed bands containing saw- teeth motifs	Rumeilah: (Boucharlat & Lombard, 1985: Pl. 60/2) Bawshar cemetery (Yule, 1999: fig. 18/96)
Iron Age Pattern 4	6 29278 (8.18) 29276 (16.2) 29210 (6.14) 29172 (6.16) 28905 (20.1) 29026 (20.2)	Phytomorphic design created by saw- teeth or herringbone motifs, enclosed by horizontal lines	<ul> <li>Wa'ab 4 (Tagliamonte, personal communication)</li> <li>Fashgha (Phillips, 1987: fig. 27)</li> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 20/4)</li> <li>Jabal al-Buhais BH6 42 (Jasim, 2012: fig. 162/11)</li> </ul>

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Pattern	Quantity	Decorative description	Comparanda
			Husn Salut (Tagliamonte, 2018: Pl. 79/31) Rumeilah (Boucharlat & Lombard, 1985: Pl. 61/10)
Iron Age Pattern 5	4 29297 (17.10) 28911 (6.13) 29042 (6.6) 29269 (6.17)	Chevrons composed of radiating saw-teeth motifs or simple lines. The pattern can be divided into 2 panels	Jabal al-Buhais BHS 84 (Jasim, 2012: fig. 292/ 5, 6) Al-Wāsit, tomb W1 (Yule, 2015: Pl. 31/130) Qarn Bint Sa'ud (Zutterman, 2004: fig. 7/ 1, 2) Bawshar cemetery (Yule, 1999: fig. 17/ 87, 89) Jabal al-Buhais, BHS 85 (Jasim, 2012: fig. 306/12) Dibba 76/1 (Pellegrino et al., 2019: fig. 16/7) Hill 8 (Cleuziou, 1989: Pl. 35/A)
Iron Age Pattern 6	2 29179 (23.12) 29047 (12.5)	Horizonal lines, saw- teeth motif, lozenges created by saw-teeth motifs.	Jabal al-Buhais, BHS 85 (Jasim, 2012: fig. 305/4)
Iron Age Variant 6.a	1 29998 (9.17)	Horizontal saw-teeth motif, double dot- in-circles, triangles made of saw-teeth motifs and filled in by oblique lines, lozenges composed of saw-teeth motifs	Jabal al-Buhais, BHS 85 (Jasim, 2012: fig. 305/4)
Iron Age Pattern 7	3 51290 29211 29050 (13)	Horizontal lines, vertical parallel lines that create gadroons	Bithnah tomb 4 (Corboud et al., 1996: Pl. 14/1) Dibba 76/1 (Pellegrino et al., 2019: fig. 18) Fashgha (Phillips, 1987: fig. 23/3) Sharm (Ziolkowsky, 2001: fig. 61)
Iron Age Pattern 8	1 29101 (6.15)	Vertical saw-teeth motifs framed by 3 horizontal lines	No exact parallel

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#### TABLE 3 (Continued)

Pattern	Quantity	Decorative description	Comparanda
Iron Age Pattern 9	1 29111 (17.16)	2 horizontal bands containing a net pattern motif	Dadna (Benoist & Ali Hassan, 2010: fig. 8/3, 5) Wadi Fizh (Düring et al., 2017: fig. 7/ S51_St50_L21_M53) Jebel Buhais BHS 77 (Jasim, 2012: figs. 260/6, 268/3) Fashgha 1 (Phillips, 1987: fig. 29/22) Bithnah tomb 4 (Corboud et al., 1996: Pls.17/2, 18/1)
Iron Age Pattern 10	1 29212 (12.8)	Frame of saw-teeth motifs containing 4 oblique saw-teeth segments	No exact parallel
Iron Age Pattern 11	1 29087 (24)	Low relief depicting a canid and a goat, saw-teeth motifs, phytomorphic design composed of saw-teeth motifs	Jabal al-Buhais, BHS 31 (Jasim, 2012: fig. 130/1) Rumeilah (Boucharlat & Lombard, 1985: Pl. 61/10) Dibbā, LCG-2 (Genchi, 2015: fig. 83)
Iron Age Pattern 12	1 29560 (19)	Parallel zig-zag lines create the neck and the wings of a bird	No exact parallel
Iron Age Pattern 13	4 33430 (7.1) 33411 (7.2) 39210 (7.11) 33432 (7.12)	Double dot-in-circles on the surface, radiating lines on the knob, double dot-in-circle in the centre	<ul> <li>Sharm (Ziolkowsky, 2001: fig. 98)</li> <li>Bawshar, 'honeycomb cemetery' (Yule, 1999: fig. 19/101).</li> <li>Shimal, tombs SH 102, SH 103 (Vogt &amp; Franke- Vogt, 1987: fig. 14/12; 26/3). Husn Salut (Tagliamonte, 2018: Pl. 79/37).</li> <li>Ras al-Khaimah (Donaldson, 1984: fig. 12/10)</li> </ul>
Iron Age Variant 13.a	1 33417 (7.13)	Dot-in-circles on the surface, band of saw-teeth motifs along the base of the knob, dot-in- circle at the centre encircled by saw- teeth motifs	Al-Akhdar (Yule & Weisgerber, 2015a: Pl. 20/5). Samad al Shan, tomb S2122 (Yule, 2001: Pl. 267/6)

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TABLE 3   (Continued)			
Pattern	Quantity	Decorative description	Comparanda
Iron Age Pattern 14	2 29104 (7.3) 29268 (7.4)	Radiating lines on the surface, line of saw- teeth along the edge, lines radiating from the centre of the knob	<ul> <li>Dadna (Benoist &amp; Ali Hassan, 2010: fig. 8/9). Sharm (Ziolkowsky, 2001: fig. 74).</li> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 23/4, 8).</li> <li>Fashgha 1 (Phillips, 1987: figs. 31/28; 32/31; 33/ 34, 36).</li> <li>Bithnah (Corboud et al., 1996: Pls. 22/7; 23/ 1). Bawshar (Yule, 1999: fig. 22/126).</li> <li>Jabal al-Buhais cemetery, tombs BHS 15, BHS 30, BHS 40, BHS 83, BHS 85 (Jasim, 2012: figs. 80/ 1, 5; 125/4; 157/3; 283/3; 307/2, 3)</li> </ul>
Iron Age Variant 14.a	1 33409 (7.14)	Ring of saw-teeth. The top of the knob has lines radiating from a central dot-in- circle	Sharm (Ziolkowsky, 2001: figs. 34, 46, 67, 68). Bithnah (Corboud et al., 1996: Pl. 22/3). Jabal al-Buhais cemetery, BHS 77 (Jasim, 2012: fig. 261/3)
Iron Age Pattern 15	1 29107 (7.9)	Saw-teeth motifs arranged in radiating lines. The knob has lines radiating from its centre	Sharm (Ziolkowsky, 2001: fig. 100) Bithnah (Corboud et al., 1996: Pl. 22/2) Dibba 76/1 (Pellegrino et al., 2019: fig. 24/4)
Iron Age Variant 15.a	1 33423 (7.15)	Dense saw-teeth radiating segments. Short lines on the knob	<ul> <li>Sharm (Ziolkowsky, 2001: fig. 100).</li> <li>Bithnah (Corboud et al., 1996: Pl. 22/2).</li> <li>Dibba 76/1 (Pellegrino et al., 2019: fig. 24/4)</li> </ul>
Iron Age Pattern 16	1 33426 (7.5)	Sets of 2 parallel lines radiating from the base of the handle, 2 intersecting lines on the knob	Sharm (Ziolkowsky, 2001: fig. 72)

(Continues)

Pattern	Quantity	Decorative description	Comparanda
Iron Age Variant 16.a	1 33410 (7.18)	5 sets of 3 radiating lines on the surface, lines radiating from the centre of the knob	Sharm (Ziolkowsky, 2001: fig. 72)
Iron Age Pattern 17	1 33418 (7.17)	Saw-teeth motif is combined with a series of crescent- shaped features along the edge of the surface. Dot-in- circle surrounded by radiating lines on the knob	No exact parallel
Iron Age Pattern 18	1 29304 (7.16)	Simple circle surrounded by radiating lines on the knob	No exact parallel
Iron Age Pattern 19	1 33431 (7.21)	Saw-teeth linear motifs around the base of the handle. On both sides, a saw- teeth vertical segment followed by a line and a row of dot-in-circles. On the knob, a central dot-in-circle surrounded by radiating lines	Bithnah (Corboud et al., 1996: Pl. 23/5). Sharm (Ziolkowsky, 2001: figs. 89, 91)
Iron Age Pattern 20	1 33425 (7.19)	2 rectangular areas delimited by 2 pairs of parallel lines. At their centre 4 triangular fields, 2 of them filled by oblique lines. On the knob, a cross scheme composed of 2 lines	Dibba 76/1 (Pellegrino et al., 2019: fig. 24/8)
Iron Age Pattern 21	1 29509 (7.6)	4 double dot-in-circles in the corners of the surface, fine marks of short (2-4 cm) strokes long. Dot-in-circle on the knob	Sharm (Ziolkowsky, 2001: fig. 82)

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Pattern	Quantity	Decorative description	Comparanda
Iron Age Pattern 22	1 33408 (7.20)	Vertical bands composed of saw- teeth linear motifs between 2 lines alternated with plain bands. On the knob, double dot- in-circle surrounded by radiating lines	Husn Salut (Tagliamonte, 2018: Pl. 80/43). Sharm (Ziolkowsky, 2001: fig. 91)
Iron Age Variant 22.a	1 39108 (7.10)	Vertical and horizontal saw-teeth motifs on the surface, radiating lines on the knob	Rumeilah (Boucharlat & Lombard, 1985: Pl. 61/5). Bawshar 'honey- comb cemetery' (Yule, 1999: Pl. 21/121)
Iron Age Variant 22.b	1 29266 (7.7)	4 lines radiate from the base of the handle to the corners of the design, framed by saw-teeth motifs along the edges. Radiating lines on the knob	Bawshar 'honeycomb cemetery' (Yule, 1999: Pl. 21/121) Rumeilha (Boucharlat & Lombard, 1985: Pl. 61/5)
Iron Age Pattern 23	1 32837 (20.2)	4 triangular fields. 2 opposing fields have 4 leaf-shaped figures composed of saw-teeth motifs and filled in with curved lines. The 2 other opposing fields bear 4 triangles filled in with horizontal lines. A cross and shortcuts are present along the edge of the knob	Shahdad cemetery (Phillips & Simpson, 2018: fig. 16/1)

The presence of triangular fields covering almost the whole surface of the vessels characterises Pattern 1 (Figure 9.3–4), which is definitely the most frequent and decorates especially conical vessels (24 samples), although it is also found on spouted vessels and bowls (11 samples each). The triangular field features can appear framed by saw-teeth motifs and are usually filled with oblique lines, although they can also contain parallel lines, saw-teeth motifs or be empty.

Pattern 1 has six variants, which are characterised mainly by the addition of dot-in-circles and the division of the decoration into two panels. The same principles can be observed for Pattern 2, which is characterised by similar compositions. The addition of dot-in-circles placed between triangular fields, along with the addition of a saw-teeth line or a row of dot-in-circles, characterises the first variant of Pattern 1, which can be found as a decoration on twenty-four vessels, especially conical vessels and bowls (IA Variant 1.a, Figure 17.1). Another combination concerns the organisation of the frieze of triangular fields into 2 superimposed panels (IA Variant 1.b, Figures 6.1 and 21), attested on 12 specimens, especially on beakers (6 specimens); the same combination can also display a set of oblique sawteeth lines in the lower panel, as the case of a fragmented barrel-shaped suspension vessel (Variant 1.b.1, Figure 14). Three further variations within Variant 1.a, which can be seen on a spouted vessel, a compartmented box and a beaker, feature slight differences such as a radiating triangular composition alternated by double dot-in-circles (IA Variant 1.a.1, Figure 16.3), and the addition of a band containing a frieze of triangles and a net motif either over the base or below the rim (Variant 1.a.2, Figure 11.2; Variant 1.a.3, Figure 6.5).

Pattern 2 is the second most recurrent, virtually attested on all the forms with five variants. It can mainly be found on spouted bowls (21 samples), followed by conical vessels (7 samples) and compartmented boxes (5 samples). The basic decoration originates from parallel zig-zag lines (from 2 to 5) composed of saw-teeth motifs, framed by horizontal lines that usually cover the whole surface of the vessels (IA Pattern 2, Figure 8.1-4). As previously stated, the different combinations follow the same artistic convention as Pattern 1. Accordingly, a first variant-displayed on six spouted vases and on a large beaker-involves the addition of dot-in-circles between the zig-zag lines and, occasionally, the presence of a sawteeth segment along the rim and along the base (Variant 2.a, Figures 6.3 and 8.5). These basic motifs appear also arranged in two overlapping panels (Iron Age, Variant 2.b, Figure 8.14), or with the addition of an upper band



**FIGURE 21** A specimen of triple compartmented vessel displayed in the showcases of National Museum of Oman (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

containing either a saw-teeth motif and a row of dot-incircles (Iron Age, Variant 2.c, Figures 6.4 and 22.3). The latter combination is actually the most frequent within the pattern-it being attested on twenty vessels, including six different shapes-and it can also involve the addition of a herringbone pattern placed either on the base or below the rim (IA Variant 2.c.1, Figures 9.20 and 23.4). The innovative last decoration, with saw-teeth lines being used to create a single large frieze of radiating triangles, is reproduced on a single compartmented box (IA Variant 2.d, Figure 11.7). A completely different arrangement of the same motifs is displayed on eight finely decorated specimens (two bowls, three spouted vessels and three beakers), and it consists of superimposed lines and thin bands (up to six) alternated by thick grooves (IA Pattern 3, Figure 8.12; Variant 3.a, Figure 6.12). Pattern 4 was assigned to six outstanding vessels (two spouted vessels, two beakers, two compartmented boxes) with a single large panel decorated with phytomorphic designs, which are created by either sawteeth lines or herringbone motifs. On both spouted vessels, a similar design comprising a frieze of convex segments portrays something reminiscent of a series of petals or leaves (Figures 8.18 and 16.2), which reminds of the decoration carved on a beaker from Wa'ab 4 (E. Tagliamonte, personal communication November 2021). Other leaves, carved by a series of saw-teeth motifs, decorate the two beakers. To be noted is how, on DA 29172 (Figure 6.16), the arrangement of a series of these leaves takes on the appearance of an anthropomorphic figure with raised hands. The depiction of the vegetal elements is even more articulated on the compartmented boxes, where the decorative pattern seems to represent a leaved stem surrounded by flowers and arrow-shaped petals (IA Pattern 4, Figure 20.1–2). Close comparisons based on these designs are not present among contemporary sites in the region, although many specimens containing phytomorphic features were found in other tombs, such as Fashgha (Phillips, 1987: fig. 27), Dibbā 76/1 (Pellegrino et al., 2019: fig. 20/4), Jabal al- Buhais (Jasim, 2012: fig. 162/11) and settlements, such as Husn Salut (Tagliamonte, 2018: Pl. 79/31) and Rumeilah



**FIGURE 22** Three examples of beakers are displayed in the showcases of the National Museum of Oman (courtesy of National Museum of Oman, photograph Saleh Al-Ruzeiqi). [Color figure can be viewed at wileyonlinelibrary.com]

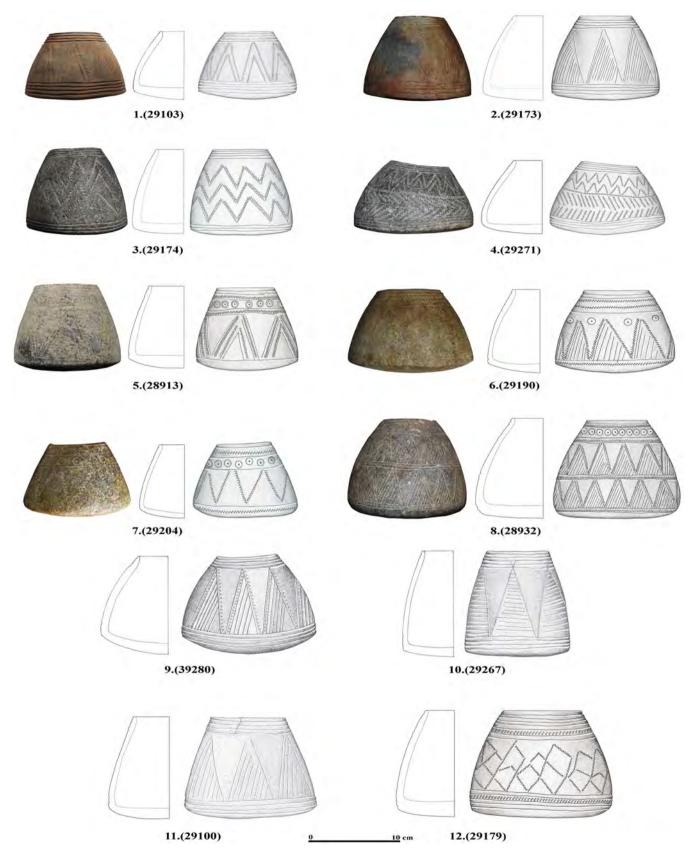


FIGURE 23 Conical vessels referable to the Iron Age tradition (drawings C. Rielli, photographs P. Koch, G. Tursi). [Color figure can be viewed at wileyonlinelibrary.com]

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(Boucharlat & Lombard, 1985: Pl. 61/10).<sup>5</sup> The remaining decorative patterns are present on an increasingly limited number of specimens, and some of them are found on single unique vessels. Amongst these, the most frequent among the open shapes is a chevron pattern composed of radiating lines-that can also be organised in two superimposed panels-which was found carved on three beakers and one bowl (IA Pattern 5, Figure 6.6-17). A rarer decoration is found on the main panel of one conical and one rectangular box, and it displays a sequence of lozenges formed by a saw-teeth motif (IA Pattern 6, Figure 23.12). This decorative scheme can also include the addition of an upper band containing a frieze of triangles that are filled alternatively by oblique lines and dot-in-circles, as testified by one conical vessel (IA Variant 6.a, Figure 9.17). The decorative pattern that consists of a single large panel and includes a series of parallel and vertical gadroons framed by thin incised lines corresponds to Pattern 7, and it was found on just three spouted vessels (Figure 13). A large panel with sparse vertical saw-teeth linear motifs framed by horizontal lines characterises the body of another beaker whose decoration is unique, considering that there are no exact parallels in literature (IA Pattern 8, Figure 6.15). Equally unique is a basic decoration consisting of two horizontal bands containing net pattern motifs that are present on the body of a bowl (IA Pattern 9, Figure 17.16). Precise comparisons are not attested for such decorative patterns, though usually, bands of net designs are common in combination with gadroons, such as on some bowls from Dadna (Benoist & Ali Hassan, 2010: fig. 8/3, 5), Wadi Fizh (Düring et al., 2017: fig. 7/S51\_St50\_L21\_M53), Jebel Buhais BHS 77 (Jasim, 2012: figs. 260/6, 268/3), Fashgha 1 (Phillips, 1987: fig. 29/22) and Bithnah tomb 4 (Corboud et al., 1996: Pls.17/2, 18/1). A frame made with a sawteeth motif, containing four parallel oblique saw-teeth segments is found on the sides of a small rectangular box, and finds no parallel in literature (IA Pattern 10, Figure 12.8). Regardless of the noticeable number of different patterns and variants, and the exquisite rendering of many of them, the most original decorative patterns of the assemblage of LCG-1 are to be found in the depiction of zoomorphic subjects, represented on a beautiful rectangular box and a bowl, both exposed at the National Museum at Muscat. The first sample (IA Pattern 11, Figure 21) consists of a low relief motif portraying a canid and a goat on the opposite long sides, and phitomorphic designs on the short sides. The latter

are composed of saw-teeth motifs depicting a stem with three leaves bearing a central vein and framed by horizontal lines. The horror vacui of the artist for the residual space seems to have been expressed by the use of several saw-teeth segments all around the two animals. Zoomorphic features are rare and are often associated with phytomorphic designs. A decoration depicting a fish and a bird is found on a beaker from BHS 31of the Jabal al-Buhais cemetery (Jasim, 2012: fig. 130/1), whereas another probably zoomorphic element is attested on a suspension vessel from Rumeilah settlement (Boucharlat & Lombard, 1985: Pl. 61/10). A close comparison can be made with a cylindrical beaker with the depiction of a complete quadruped figure standing next to a tree that was found at the second collective grave at Dibbā (LCG-2), (Genchi, 2015: fig. 83).

Finally, the representation of zoomorphic motifs finds its major expression, in the body of a unique ornitomorphic bowl (IA Pattern 12, Figure 19). This vessel has a handle decorated with parallel zig-zag lines forming the neck of the animal, at the end of which the elongated head of the animal can easily be recognised. On the opposite side, there is set a knob representing the tail. The body of the vessel is divided into two panels: the top one, with incised wings on it, is decorated with a dense series of parallel oblique lines; whereas the bottom one displays the typical zig-zag band enclosing a saw-teeth linear motif between two lines. The top panel was made in relief to accentuate the wings of the animal. Moreover, a large and deep groove runs below the rounded rim. The execution of the drawing of the bird adapts to the shape of the bowl, and the most prominent features are limited to the head, neck and tail, which are only slightly outlined. Unfortunately, these elements are not sufficient to determine what type of bird is depicted. Nevertheless, by tracking the archaeological attestations on bird-motifs on stone vessels, a speculative hypothesis may be advanced. A special class of carved vessels, which are characterised by a distinctive low-relief decoration on the entire surface, are generally referred to as 'Intercultural Style' vessels (Kohl, 1975, p. 1) and have been interpreted as artefacts conveying a particular ritual significance due to the imagery they bear (Lamberg-Karlovsky, 1988, p. 53). Among the several zoomorphic elements that belong to the iconography of such a group, one of the most attested is the bird of prey, which is usually interpreted as an eagle, even though it would most likely be a vulture (Gypaetus barbatus) (see Winkelmann, 2018, p. 90). Although not in a plastic manner, bird designs are attested on vessels and are present across the ancient Near East as early as the 4th millennium BC, being later associated-during the 2nd millennium-to the Akkadian 'Etana myth'. According to this myth, king Etana helped save an eagle from starvation, who then took him up into the sky to find the plant of birth, which allowed him to have a son (Winkelmann, 2018). Returning to our bowl, slight resemblances in the use of the incisions and in the anatomic simplification of the bird can be observed with the depiction of an eagle carved on a

<sup>&</sup>lt;sup>5</sup>Based on the recent revision of stone vessels by E. Olijdam, the two specimens with phytomorphic motifs from Fashgha 1 and Rumeilah are ascribed to the Iron Age I assemblage (Düring et al., 2017: fig. 9). However, it should be emphasised that in the first case the vessel belongs to an assemblage that also includes typical materials from Iron Age II (Phillips, 1987: figs. 24/5, 28/18, 33/35, 35/39, 40), whereas in the second case the authors include the vessel among the materials of Rumeilah II phase (600-300 BC) (Boucharlat & Lombard, 1985, p. 60). Furthermore, the specimen from Dibbā 76/1 was retrieved from a multiperiod tomb (Pellegrino et al., 2019).

squared lid from Tepe Yahya, which is stated to be characteristic of the 'Intercultural Style' (Kohl, 2001, p. 218: fig. 13.7). In absence of other parallels, the possibility that this ornitomorphic vessel was inspired by the symbolic and long-lasting eagle/vulture motif, that circulated in the Iranian and Mesopotamian area on stone vessels and lids, should therefore not be ruled out.

### 5.1 | Lids

The decorative schemes carved on the surfaces of the lids are composed of the same ubiquitous motifs that have already been largely described for the stone vessels. In particular, dot-in-circles, saw-teeth segments and simple lines are equally attested on circular, squared and rectangular lids. In the latter, the larger surface allows more complex combinations, which however still follow the same principles of symmetry and alternation of motifs as the other lids. With only one exception, all the lids recovered from LCG-1 fall within the Iron Age period, and—as for the coeval vessels-their different combinations allow the identification of twelve decorative patterns and six variants, even though often represented by a single example. The earliest lid can be quite safely assigned to the Wadi Sug period, is characterised by a decoration composed of a ring of dotin-circles, complemented by some parallel and oblique strokes along the edge (WS Pattern 3, Figure 4.13). The pattern falls within the classification developed by Velde (Velde, 2018) and finds several parallels in funerary contexts, such as tombs SH 99 and SH 103 at Shimal (Vogt & Franke- Vogt, 1987: figs. 34/1, 2; 26/5, 7), Ghalilah (Donaldson, 1984: fig. 25/19), tombs BHS 8 and BH6 89 at Buhais (Donaldson, 1984: fig. 25/19), Al-Wasit (Yule & Weisgerber, 2015b: Pl. 33/136; 34/139, 142), Dadna (Benoist & Ali Hassan, 2010: fig. 7/7) and Husn Salut (Tagliamonte, 2018: Pl. 78/8). All the other twenty-two stone lids, as mentioned, are ascribable to the Iron Age, and among them, the most common motif is found on five circular lids. Pattern 13, pertaining to this phase, displays a ring of dot-in-circles that can be combined with incised lines along the edge. The knob is decorated with a dot-incircle feature at its centre, from which radiating lines or grooves are set out (IA Pattern 13, Figure 7.1–2). This basic combination also presents a variation, consisting of the addition of a band of saw-teeth motifs arranged along the base of the knob and associated with the dot-in-circles (IA Variant 13.a, Figure 7.13). The knob and the surface of two circular lids are decorated with roughly incised radiating lines and a saw-teeth line all along the edge (IA Pattern 14, Figure 7.3–4). A single circular lid displays the same pattern, though the radiating lines are missing (IA Variant 14.a, Figure 7:14). The decoration with radiating lines finds its best example in Pattern 15, where the lines are finely rendered through the use of several saw-teeth lines (Figure 7:9). The radiating lines departing from the base of the handle can also be seen grouped in sets of 37

two or three lines, as is the case of two circular lids that differ mainly for the decoration of the handle (IA Pattern 16, Figure 7.5; Variant 16.a, Figure 7.18). Pattern 17, which was found on only one specimen, is instead characterised by a ring of saw-teeth motifs combined with a series of crescent-shaped features arranged along the edge of the surface. Moreover, a central dot-in-circle, surrounded by another radiating line pattern, is placed on the knob (Figure 7.17). The last circular lid has its decoration limited to the knob, and it consists of a central simple circle surrounded by radiating lines (IA Pattern 18, Figure 7.16). The remaining patterns are incised on rectangular lids and a square one. Among these, the most basic decoration consists of four dot-in-circles arranged in the corner of the smoothed surface (IA Pattern 21, Figure 7.6). A series of saw-teeth motifs, which can also be enclosed by vertical bands, characterises Pattern 22, which is found incised on the body of two rectangular lids (Figure 7.20. Variant 22.a, Figure 7:10). A square lid presents the same pattern, although the saw-teeth motifs run around the edge as a sort of frame (IA Variant 22.b, Figure 7.7). A wellpreserved lid, which was part of a compartmented box, displays a decorated surface consisting of a rectangular area marked by saw-teeth motifs around the base of the handle. On both sides of the lid's surface, a sawteeth vertical segment, followed by a simple cut and a row of dot-in-circles, completes the decoration (IA Pattern 19, Figure 7.21). Whereas a cross scheme composed of two lines that form four fields characterise Pattern 20 (Figure 7.19). This is a rather original pattern, that finds a similar parallel on a fragmentary lid found in Dibbā 76/1 (Pellegrino et al., 2019: fig. 24/8). To conclude this overview of the decorative patterns, we can finally mention a unique square lid associated with a four-compartmented box (DA 29026) divided into four fields, which are characterised by leaf-shaped figures and triangles filled by horizontal lines (IA Pattern 23, Figure 20.2).

## 6 | DISCUSSION

The morphological and decorative analyses clearly show that the majority of the soft stone vessels and lids recovered from both the grave and the pits of LCG-1 date to the Iron Age (approximately 80% of the whole assemblage).

Material from earlier phases is however present, although to a much lesser extent, reflecting a tradition that characterises the collective tombs of the region, which are therefore often referred to as multiperiod tombs. The presence of Wadi Suq or even Umm-an-Nar material in tombs with mainly Iron Age artefacts is usually considered intrusive, and these objects are interpreted as heirlooms. In fact, the question remains -WILEY-ARCHAEOLOGY

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whether a certain class of artefacts continues to be produced in the phases following its main appearance, whether its persistence is justified by later burials, or whether it is just an heirloom that the group preserved over time.

In the case of LCG-1 and the pits identified outside of it, a significant detail may shed light on this matter: almost all of the Umm-an-Nar, Wadi Sug and Late Bronze Age vessels come from the pits next to the tomb, in particular from the wider and deeper pit 1 and from pit 2, possibly testifying to the maintenance of the tomb that involved removing the objects that had originally been deposited and placing them outside to make room for the more recent depositions and their grave goods. This could be a clue in favour of a rather archaic first use of the tomb, probably during the final phases of the Wadi Sug, as well as evidence of a widespread custom of prolonged use of collective tombs, as demonstrated in other funerary contexts (Dhayah tomb 3: Kästner, 1989; Dank: K. Williams, personal communication October 2021), although similar pits are quite rare, possibly due to the incomplete exploration of the surrounding areas. In support of this likely interpretation, we have radiocarbon dates for pits 3 and 4, which date the displacement of the oldest objects to an early period of the Iron Age  $(2867 \pm 40 \text{ BP}, 1200-910 \text{ cal BC} \text{ at } 95.4\%)$  and to a possibly more mature one  $(2777 \pm 40 \text{ BP}, 1020-820 \text{ cal})$ BC at 95.4%,<sup>6</sup> respectively, which is rather consistent with the main and final use of the funerary structure. It is therefore possible to suggest the occurrence of maintenance actions in the funerary space, and a setting aside of the originally deposited objects, in favour of the more recent Iron Age depositions.

Excluding the two specimens from the Umm-an-Nar phase, that is, the typical compartmented rectangular boxes, that can certainly be interpreted as heirlooms, almost all the specimens attributable to the Wadi Sug phase fall within the recent classification elaborated by Christian Velde (Velde, 2018), both from a morphological and a decorative point of view. Morphologically, the innovations consist of two large open vessels (WS Type 3), two spouted bowls (WS Type 5) and a small straightwalled vessel (WS Type 4), though classic vessel types A, C and D of Velde's classification are also present. Definitely worth mentioning is the compartmented box composed of two beehive-shaped vessels with knobs (WS Type 7), and the distinctive oval vessel with four knobs and a rounded base/disc (WS Type 8). In addition, the typical round vessel lid with a rounded base and a slightly knob-shaped handle (WS Type 9) completes the assemblage of this phase.

The classification developed by Velde in 2018, which identifies different *Types* based on vessel shapes and

decorative *Patterns*, has allowed us to outline the developmental phases of the Wadi Suq period by combining these data (Velde, 2018, p. 121, tab. 7 and 8).

As far as the decorative models are concerned, the ones codified by Velde are all present in the assemblage: from the basic model-consisting of a combination of horizontal lines, dot-and-circles and oblique lines-to the model with increased parallel incised lines, which are sometimes without dot-and-circles. The motifs that appear in particular on open vessels are more original and are associated with Pattern C, which presents variations like dense horizontal incised lines under the rim and the introduction of new elements in the lower panel, like triangles filled with horizontal lines. Other specimens show a substantial variation from the conventional model by abandoning the two-panel division and preferring dot-and-circle bands with no division lines (Pattern D). Therefore, Types D and A, in combination with Patterns A and B, refer to Phases 1 and 2; whereas Type C, in combination with Pattern B and—especially -Pattern C, represents the beginning of Phase 3. The two open vessels could refer to this later phase, representing a variant. Finally, Pattern D represents the last stage and could already be close to the Late Bronze Age tradition.

The small group of Late Bronze Age vessels features two compartmented boxes (LBA Type 1) that represent a reintroduction in this period, having been absent during the earlier Wadi Suq phase. The typical low conical vessel (LBA Type 2) and two globular vessels (LBA Types 3 and 4) complete the shapes. The decorative motifs that characterise the period, as defined by Velde (Velde, 2003), include the net motif, the triangle filled with lines, numerous rows of dot-and-circles without divisions, and oblique lines or bundles of horizontal lines combined with oblique lines. The Late Bronze Age contexts in the region are too few, and especially not period-exclusive often being multiperiod tombs, except for those at Nizwa and Al-Wasit. Therefore, to classify the specimens from LCG-1, we should rely on the parallels from the above-mentioned tombs, with those of Al-Qusais and Qattarah and with the settlements of Tell Abraq, Kalba and Shimal.

The Iron Age assemblage is, as mentioned above, by far the predominant one, with practically the whole range of the most recurrent and characteristic forms of the period. Within this collection, spouted bowls (IA Types 1–5), beakers (IA Types 11–13) and conical vases (IA Types 14–15)—are dominant, whereas the typical biconical vases are absent. A more in-depth morphological analysis highlights the presence of typical forms of the mature phase of the Iron Age—such as the conical vase with a convex base (IA Type 14), the spouted bowl, the rectangular vase (IA Types 19–20), the compartmented box (IA Types 16–18), the barrel-shaped vase with pierced lugs (IA Type 21) and the lid with a biconical handle and deep incisions on the top (IA Type 25)—but

<sup>&</sup>lt;sup>6</sup>The datings were performed by Prof. L. Calcagnile at the CEDAD, *Center for Dating and Diagnostics* of the University of Salento.

it also reveals a certain frequency of a corpus of forms like the beaker with hyperbolic profile (IA Type 11) or with outward sloping walls and a flat base (IA Type 12), as well as the bowl with a slightly convex base (IA Types 6–7), which are all characterised by thin walls. The main comparison for this latter group of vessels is with the assemblage from the tombs of Asimah 100 and Shimal 102, as well as-to a lesser extent-with other contexts, such as the tombs of Dadna, al-Akhdar and Sharm. Some authors have recently advocated for the attribution of this corpus of vessels to the Iron Age I phase, based on a series of finds from funerary and settlement contexts in the northern region of Batinah (Düring et al., 2017). This is an ongoing study based on the review of a series of collections by Christian Velde and Eric Olijdham, attempting to define a typological development of soft stone vessels for the Iron Age I phase.<sup>7</sup> The study involves the tombs of Asimah 100 and Shimal 102, where this type of vessel was found in association with Iron Age I ceramics. However, it has also been found in Iron Age II contexts, where Iron Age I ceramics are absent.

The analysis indicates that the traditional shapes commonly attested in the early 1st millennium BC contexts are well represented among the grave goods in tomb LCG-1. Above all, the conical vessels are numerous and represent a typical expression of the period, being widely attested in funerary contexts, such as tomb 1 at Fashgha (Phillips, 1987: figs. 24/7, 8; 26/14), tomb 4 at Bithnah (Corboud et al., 1996: figs. 17/3, 18/2, 19/1, 3), and the tombs at Bawshar (Yule, 1999: fig. 19/105, 106) and Al-Buhais (Jasim, 2012: figs. 134/12; 268/1-3, 5-6; 305/1-6). The same for the spouted bowls, which are present in the above-mentioned contexts as well as in the tomb at Dadna (Benoist & Ali Hassan, 2010: fig. 8/3), the tomb at Sharm (Ziolkowsky, 2001: figs. 28, 49) and in the collection from Qarn Bint Sa'ud (Zutterman, 2004: fig. 5/3), just to mention a few examples. Moreover, beakers with an original hyperbolic profile or with straight outward-sloping walls are also very common and are closely comparable to the Iron Age assemblages of tomb 100 in Asimah (Vogt, 1994: fig. 43/4, 5, 7, 10), tomb 102 in Shimal (Vogt & Franke-Vogt, 1987: fig. 14/3, 4), tomb 1 in Dibbā 76 (Pellegrino et al., 2019: fig. 23: 1, 2) and among the assemblages from Sharm (Ziolkowsky, 2001: figs. 44,

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75), Qarn Bint Sa'ud (Zutterman, 2004: fig. 8) and Ibri-Selme (Yule, 2001: Pl. 47/528).

Also, a relatively high number of compartmented boxes can be attributed to the Iron Age production. Among these, those with a rectangular shape and sloping walls especially stand out and find parallels in numerous contemporary contexts such as Sharm (Ziolkowsky, 2001: figs. 47, 53), Asimah (Vogt, 1994: fig. 43/1, 2) or Samad al-Shān (Yule, 2001: Pl. 215/2), as well as with two very rare specimens found in southeastern Arabian contexts: the first is a triple compartmented box composed of one cylindrical and two quadrangular compartments, which finds a precise comparison with an intact specimen exhibited at the Ras al-Khaimah Museum (Huckle, 2003: fig. 1), whereas the second is a quadruple compartmented square box that finds specific comparisons in the northern regions such as Iran and Afghanistan (Phillips & Simpson, 2018: figs. 19/1, 2, 7, 8 and 47/6). Rectangular profile vases, barrel-shaped vases and a single globular profile vase complete the collection of forms that are present, which, although numerically not very frequent in contemporary contexts, are present among the characteristic productions of the Iron Age.

The lids also reflect typical Iron Age shapes, especially the circular ones with a small knob-shaped handle, a flat base and different morphologies of the top, which are very common for example in tomb 1 at Fashgha (Phillips, 1987: figs. 33/34, 34/38), at Dadna (Benoist & Ali Hassan, 2010: fig. 8/6-8) and in the tombs of Al-Buhais (Jasim, 2012: figs. 307/4, 5; 261/3). Additionally, those with a biconical handle with a flat top and deep incisions are also very common, particularly in the classical Iron Age phase, as in tomb 1 at Dibbā 76 (Pellegrino et al., 2019: fig. 24/6), tomb 1 at Sharm (Ziolkowsky, 2001: figs. 81, 94) and the tombs of Samad al-Shan (Yule, 2001: Pl. 426/5) and Al-Buhais (Jasim, 2012: figs. 135/7, 126). Some specimens that are rectangular and have an internal division can be associated with compartmented boxes, whereas others, with a quadrangular shape and a flat base, with rectangular vessels. The latter are quite rare, while rectangular lids with internal divisions are very common in this period, as proved by their diffusion in sites such as Tell Abrag (Potts, 1990: fig. 140) and the tombs of Bithnah (Corboud et al., 1996: fig. 23/5) and Wa'ab 4 (E. Tagliamonte, personal communication, November 2021), just to name a few examples. In general, during the Iron Age, there is an increase in the number of lids compared to earlier periods, probably due to better manufacturing and greater strength of the specimens.

Among the decidedly original forms that do not find specific comparisons in the coeval contexts of the southeastern Arabian Peninsula, there is the footed bowl with a neck and circular base (Figure 18, DA 29012), which, like some other ceramic vessels, seems to have been inspired by the metal goblet vessels that were widespread during the 2nd and 1st millennium (also at LCG-1 two

<sup>&</sup>lt;sup>7</sup>On the chronology of the Iron Age some clarification and updates are necessary. The subdivision in three phases (Iron Age I, 1300/1100-1000 BC; Iron Age II, 1000–600 BC; Iron Age III, 600–300 BC) is based on research conducted at several sites in the North of the Oman Peninsula, mainly Tell Abraq, Rumeilah, Shimal and Kalba (Magee & Carter, 1999; Magee, 1996). Based on the geographical location of Daba and the material culture, this study follows this chronological division. Investigations carried out in several residential and funerary contexts in central Oman, including Salut, have led to a reconsideration of this chronological division due to the identification of a phase, identified as Iron Age II, set as early as 1300 BC. This was based on the material culture and corroborated by the absence of material from the Iron Age I phase (Avanzini & Phillips, 2010; Degli Esposti et al., 2018).Therefore, the division in Early Iron Age, EIA (1300-600 BC; i.e., Iron Age II) and Late Iron Age, LIA (600–300 BC, i.e., Iron Age III) is usually used for sites in Central Oman. Originally, this sublivision was introduced by Weisgerber in the early 1980s to distinguish between the phases of the Lizq settlement (EIA) and those of the Samad al-Shān necropolis (LIA), the equivalent to the Late Pre-Islamic period in the Emirates (Magee et al., 2017; Phillips, 2010; Schreiber, 2010).



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metal specimens were found and are now on display at the National Museum of Oman). Some fragments of limestone goblet vessels are present in the collections of the British Museum and come from the necropolis of Timna (Phillips & Simpson, 2018: figs. 17, 18), though they differ from the specimens from Daba. Among the bowls, the most original specimen is the alreadymentioned bird-shaped container (Figure 19). It, too, does not find precise parallels in the region, and to find something similar one must look into the Anatolian contexts, where an unfinished raptor-headed cup was found in Kültepe (Özguç 1986: pls 133.2,4, 136.2).

Moreover, the analysis of the decorative patterns provides us with some essential information on the frequency of the motifs and their distribution. The frequency of decorative patterns is very uniform in the LCG-1 assemblage, as they are composed of a few recurring motifs, which are variously organised and are present on almost all shapes. They consist mainly of continuous lines of saw-teeth and dot-and-circle motifs, delimited by incised horizontal lines and organised in overlapping bands. Bands containing filled-in triangles are also common, while those with herringbone motifs and net patterns are rare. Bowls with gadroon motifs are very rare.

While the patterns on some conical vessels—such as the filled-in triangles placed on a large central paneland on a few spouted bowls-such as the gadroons-as well as on lids-such as the radial motif-are unequivocally characteristic of the mature phase of Iron Age II, this cannot be said for most of the patterns on the remaining vessels. In fact, patterns consisting of overlapping bands of saw-teeth motifs combined with bands of dot-and-circles, or panels containing parallel zig-zag lines interspersed with dot-and-circles, are generally considered to belong to the transitional period of the Late Bronze-Iron Age. It is no coincidence that they are found on the vessels from the tombs of Asimah 100 and Shimal 102. A precise attribution of these decorative patterns obviously still needs to be demonstrated and, in the absence of stratigraphically excavated and dated contexts, it remains a complex task. However, it should be noted that in contrast to other contexts, where only a few are found, beakers and thin-walled bowls decorated with the above-mentioned motifs are very numerous in LCG-1, as can be inferred from the specific summary tables. Certainly, the figurative motifs are among the most original decorative ones. These mainly consist of phytomorphic patterns and are mostly found on the surfaces of the compartmented boxes.

Undoubtedly, the most original decorative pattern of the entire assemblage is represented by the rectangular box depicting the low-relief of a canid and a goat (Figure 24). What is certainly striking about this specimen is the technique used to create the outline of the animals (carved in low relief), which is not found on any other vase in the collection. This technique probably comes from the Mesopotamian area, where it is attested since the 4th millennium BC. (Phillips & Simpson, 2018, p. 6), as it attested in south-eastern Arabia since the 3rd millennium, as shown by the relief of tomb 1059 at Hili (Frifelt, 1975).

When attempting to define the phases of the introduction of certain shapes and decorations, it should be borne in mind that a part of the materials found in the tomb leads us to envisage its use starting from the second half of the second millennium: that is, the objects imported from the neighbouring regions, like the cylindrical faience seal, the circular gold pendant and the eye-stone with a cuneiform inscription, that reflect the Elamite and Kassite cultural components and can probably be dated to the second half of the second millennium (Frenez et al., 2020). In addition to these highly valuable objects, the presence of some spouts with tubular beaks should not be overlooked. These can be ascribed to assemblages that are considered related to the Iron Age I and that find comparisons with the material discovered-for example-in the settlements of Masafi 5 (Degli Esposti & Benoist, 2015: fig. 9/8) and Kalba (Carter, 1997: fig. 30/4), as well as in the tomb at Dadna (Benoist & Ali Hassan, 2010: fig. 3/2).

## 7 | CONCLUSIONS

The detailed examination of the shapes and decorations of the soft stone vessels from the LCG-1 grave at Dibbā revealed an assemblage consistent with its multiple periods of use, though with a clear prevalence of Iron Age vessels. Within this phase, there appears to be a predominance of more archaic features, compared to the contexts from the north of the peninsula-such as Asimah and Shimal-and other less numerous features that are ascribable to more mature phases of the Iron Age. Whether a real Iron Age I phase can be distinguished in South-eastern Arabia, the debate is still open (Degli Esposti et al., 2018; Magee et al., 2017) and, at the moment, it seems to be confined to the northern region, even though the ongoing attempt to revise the contexts of central Oman and coastal Batinah may open new scenarios. In fact, by tracing the diffusion trajectories of the decorative patterns in particular, it emerges that most of the comparisons come from the funerary contexts adjacent to the area of Dibba and thus from the northern region of the Oman peninsula, although a discrete amount also seems to come from the contexts of the coastal Batinah region (Düring et al., 2017) and other isolated examples from contexts of central Oman. It should be noted that there is insufficient understanding

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of the chronology and material culture for the phases that go from the Wadi Suq to the Iron Age I (Magee et al., 2017), and even the existence of this latter phase is now rejected for Central Oman, where the features of the classic phase of the Iron Age emerge prematurely (Phillips, 2010). This situation may lead us to reflect on the possible regional development of archaic and differentiated characters in the early stages of the Iron Age, based on the rather uniform data from the northern region of the Oman Peninsula. A picture that seems to be uniform during the central phases of the Iron Age, based on cultural influences, which according to chronological and material culture data, seem to have originated from the regions of central Oman.

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#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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#### REFERENCES

- Al-Shanfari, A., & Weisgerber, G. (1989). A late bronze age warrior burial from Nizwa (Oman). In P. Costa & M. Tosi (Eds.), *Oman Studies. Papers on the archaeology and history of Oman* (pp. 17–30). Istituto Italiano per il Medio ed Estremo Oriente. Serie Orientale Roma 63.
- Al-Tikriti, W. Y. (1989a). The excavations at Bidya, Fujairah. The 3rd and 2nd millennia BC culture. In Archaeology of the United Arab Emirates (Vol. 5, pp. 101–114). Department of Antiquities and Tourism.
- Al-Tikriti, W. Y. (1989b). Umm An-Nar Culture in the Northern Emirates: third millennium BC tombs at Ajman. In Archaeology of the United Arab Emirates (Vol. 5, pp. 89–100) Department of Antiquities and Tourism.
- Avanzini, A., & Phillips, C. (2010). An outline of recent discoveries at Salut in the Sultanate of Oman. In A. Avanzini (Ed.), *Eastern Arabia in the first millennium BC, Proceedings of the International Conference held in Pisa 12-13 May 2008* (Arabia Antica, 6) (pp. 93–108). "L'Erma" di Bretschneider.
- Benoist, A. (2002). Archaeological investigations in Fujairah 2000: A preliminary report. French Archaeological Mission in the U.A.E. CNRS Lyone and Nanterre, January 2002.

## WILEY-ARCHAEOLOGY

- Benoist, A., & Ali Hassan, S. (2010). An inventory of the objects in a collective burial at Dadna (Emirate of Fujairah). In L. Weeks (Ed.), *Death and burial in Arabia and beyond Multidisciplinary perspectives* (pp. 85–99). BAR International Series, 2107. Archaeopress.
- Boucharlat, R., & Lombard, P. (1985). The oasis of al Aïn in the Iron Age. Excavations at Rumeilah 1981–1983. Survey at Hili-14. In Archaeology in the United Arab Emirates (Vol. 4, pp. 44–73).
- Carter, R. (1997). Defining the Late Bronze Age in South-East Arabia. Ceramic evolution and settlement during the second Millennium BC [Unpublished doctoral dissertation]. Institute of Archaeology, University College.
- Cleuziou, S. (1989). Excavations at Hili 8: A preliminary report on the 4<sup>th</sup> to 7<sup>th</sup> campaigns. In *Archaeology in the United Emirates* (Vol. 5, pp. 61–85).
- Cleuziou, S., Méry, S., & Vogt, B. (Eds.). (2011). Protohistoire de l'oasis d'Al-Aïn, Travaux de la Mission archéologique française à Abou Dhabi (Émirats Arabes Unis). Les sépultures de l'âge du Bronze. Maison de l'archèologie René Ginouvès-Nanterre, Abou Dhabi Authority for Culture and Heritage (BAR Int. Ser. 2227, Oxford).
- Cleuziou, S., & Vogt, B. (1983). Umm An Nar Burial customs new evidence from Tomb A at Hili North. *Proceedings of the Seminar* for Arabian Studies, 13, 37–52.
- Corboud, P., Castella, A. C., Hapka, R., & Im Obersteg, P., (1996). Les tombes protohistoriques de Bithnah: Fujairah, Emirats Arabes Unis (Terra Archaeologica vol. 1). Monographies de la Fondation Suisse-Liechtenstein pour les recherches archéologiques â l'étranger (FSLA). Publikationen der Schweizerisch-Liechtensteinischen Stiftung für archäologische Forschungen im Ausland (SLSA).
- David, H. (1991). A first petrographic description of the soft stone vessels from Shimal. In C. Dobiat & K. Leidorf (Eds.), Golf-Archäologie—Mesopotamia, Iran, Kuwait, Bahrain, Vereinigte Arabische Emirate und Oman (pp. 175–178). Internationale Archäologie 6, Universität Gottingen, Bundesrepublik Deutschland & Maison de l' Orient Méditerranéen.
- David, H. (1996). Style and evolution: Soft stone vessels during the Bronze Age in the Oman. Proceedings of the Seminar for Arabian Studies, 26, 31–46.
- David, H. (2001). Soft stone mining evidence in the Oman Peninsula and its relation to Mesopotamia. In S. Cleuziou, M. Tosi, & J. Zarins (Eds.), *Essays on the late prehistory of the Arabian Peninsula* (pp. 317–335). Serie Orientale. Roma XCIII.
- David, H. (2002). Soft-stone vessels from Umm an-Nar tombs at Hili (UAE): A comparison. *Proceedings of the Seminar for Arabian Studies*, 32, 175–185.
- De Cardi, B. (1988). The grave-goods from Shimal Tomb B in Ras al-Khaimah, U.A.E. In D. Potts (Ed.), Araby de Blest. Studies in Arabian archaeology (pp. 45–71). Carsten Niebuhr Institute Publications, 7. University of Copenhagen/Museum Tusculanum Press.
- Degli Esposti, M., & Benoist, A. (2015). More on Masafi ancestors: The Late Bronze Age site of Masafi-5. Proceedings of the Seminar for Arabian Studies, 45, 57–73.
- Degli Esposti, M., Condoluci, C., Phillips, C., Tagliamonte, E., & Sasso, M. (2018). The Early Iron Age chronology of South East Arabia: A reassessment on the basis of Husn Salut excavations. In A. Avanzini & M. DegliEsposti (Eds.), *HusnSalut and the Iron Age of south east Arabia. Excavations of the Italian Missionto Oman 2004–2014* (pp. 279–300) (Arabia Antica, 15). "L'Erma" di Bretschneider.
- Donaldson, P. (1984). Prehistoric tombs of Ras Al-Khaimah. Oriens Antiquus Roma, 23, 191–312.
- Düring, S. E., Olijdam, E., & Botan, S. A. (2017). New Iron Age data from collective graves in Wādi Fizh, northern Oman. *Proceedings* of the Seminar for Arabian Studies, 47, 75–92.

- Fattore, L., Nava, A., Genchi, F., Mancinelli, D., & Maini, E. (2015). L'area sacra di Daba (Musandam, Oman, II-I millennio a.C.). I morti oltre la morte. L'analisi tafonomica e l'interpretazione dei processi culturali e naturali sulle ossa di LCG-2 [Conference presentation] Archeologia e Antropologia della Morte: Costruzione e Decostruzione del Sociale, Rome, 20–22 May 2015.
- Frenez, D., Genchi, F., David, H., & Al-Bakri, S. (2020). The Early Iron Age collective tomb LCG-1 at Dibbā al-Bayah, Oman: Longdistance exchange and cross-cultural interaction. *Antiquity*, 95(379), 1–21. https://doi.org/10.15184/aqy.2020.224
- Frifelt, K. (1975). On prehistoric settlement and chronology of the Oman Peninsula. In *East and West* (Vol. 25, pp. 359–424). Istituto Italiano per il Medio ed Estremo Oriente.
- Genchi, F. (2013). Explorations at Daba, Sultanate of Oman: Preliminary Report (April 2013). Report prepared for the Ministry of Heritage and Culture, Sultanate of Oman.
- Genchi, F. (2014). Explorations at Daba, Sultanate of Oman: Preliminary Report (October to December 2013). Report prepared for the Ministry of Heritage and Culture, Sultanate of Oman.
- Genchi, F. (2015). Explorations at Daba, Sultanate of Oman: Preliminary Report (October 2014 to February 2015). Report prepared for the Ministry of Heritage and Culture, Sultanate of Oman.
- Genchi, F., Fattore, L., Nava, A., & Maini, E. (2018). The LCG2 complex at Dibbā (Musandam, Oman, II-I millennium BC): Structural, material, and osteological elements. *Proceedings of the Seminar for Arabian Studies*, 48, 99–117.
- Harrower, M. J., David, H., Nathan, S., Dumitru, I., & Al-Jabri, S. (2016). First discovery of ancient soft-stone (chlorite) vessel production in Arabia: Aquir al-Shamoos (Oman). Arabian Archaeology and Epigraphy, 27(2), 197–207. https://doi.org/10. 1111/aae.12076
- Häser, J. (1988). Steingefäße des 2. vorchristlichen Jahrtausends im Gebiet des Arabisch/Persischen Golfes, Typologie der Gefäße und Deckel aus Serpentinit, Chlorit, Steatit und verwandten Steinarten. [Unpublished master's thesis].
- Häser, J. (1991). Soft-StoneVessels from Shimal and Dhayah/Ras Al-Khaimah, U.A.E. In K. Schippmann, A. Herling & J.-F. Salles (Eds.), Golf-Archäologie. Mesopotamien, Iran, Kuweit, Bahrain, VereinigteArabische Emirate und Oman (pp. 221–232). Internationale Archäologie, 6. Marie Leidor.
- Huckle, M. (2003). A unique soft-stone tri-compartmentalised vessel (probably from Wa'ab 4, in the Wadi al-Qawr, Ras al-Khaimah, U.A.E.). Arabian Archaeology and Epigraphy, 14(1), 58–62. https://doi.org/10.1034/j.1600-0471.2003.140105.x
- Jasim, S. A. (2012). The necropolis of Jebel al-Buhais. Prehistoric discoveries in the Emirate of Sharjah. Department of Culture and Information.
- Kästner, J. M. (1991). Some preliminary remarks concerning two recently excavated tombs in Dhayah/Ras al-Khaimah. In K. Schippmann, A. Herling, & J.-F. Salles (Eds.), Golf-Archäologie. Mesopotamien, Iran, Kuweit, Bahrain, Vereinigte Arabische Emirate und Oman (pp. 301–314). Internationale Archäologie, 6. Marie Leidorf.
- Kennet, D., Velde, C., Ahmed, H., Cain, A., Goodburn-Brown, D., Hilton, A., & Weeks, L. (2013). *Qarn al-Harf. Rescue excavations* at a new Wadi Suq cemetery in Ras al-Khaimah. Paper presented at the 47th Seminar for Arabian Studies, London.
- Kohl, P. L. (1975). Seeds of Upheaval. The production of Chlorite at Tepe Yahya and an analysis of commodity production and trade in Southwest Asia in the Mid-Third Millennium [Doctoral dissertation, Harvard University].
- Kohl, P. L. (2001). Reflections on the Production of Chlorite at Tepe Yahya: 25 Years Later. In C.C. Lamberg-Karlovsky (Ed.), Excavations at Tepe Yahya, Iran 1967–1975. The Third Millenium (pp. 209–230). American School of Prehistoric Research. Bulletin 45. Peabody Museum of Archaeology and Ethnology, Harvard University.

- Lombard, P. (1985). L'Arabie orientale à l'Age du fer [Unpublished doctoral dissertation]. Panthéon, Sorbonne.
- Lombard, P. (Ed.). (1999). Bahrain, the civilisation of the two seas: From Dilmun to Tylos. Exhibition presented at the Institut du Monde Arabe from 18 May to 29 August 1999. Camille Cabana.
- Magee, P. (1996). The chronology of the Southeast Arabian Iron Age. Arabian Archaeology and Epigraphy, 7(2), 240–252. https://doi. org/10.1111/j.1600-0471.1996.tb00103.x
- Magee, P., & Carter, R. (1999). Agglomeration and regionalism: Southeastern Arabia between 1400 and 1100 BC. Arabian Archaeology and Epigraphy, 10, 161–179. https://doi.org/10.1111/ j.1600-0471.1999.tb00136.x
- Magee, P., Händel, M., Karacic, S., Uerpmann, M., & Uerpmann, H.-P. (2017). Tell Abraq during the second and first millennia BC: Site layout, spatial organisation, and economy. *Arabian Archaeology and Epigraphy*, 28, 209–237. https://doi.org/10.1111/aae.12103
- Miroschedji, P. de. (1973). Vases et objets en stéatite susiens du Musée du Louvre. In *Cahiers de la Délégation Archéologique Française en Iran* (Vol. 3, pp. 9–79). P. Geuthner, 1971–1987.

Özgüç, T. (1986). Kültepe-Kaniş II. Türk Tarıh Kurumu Basimevi.

- Pellegrino, M. P., Esposti, M. D., Buta, M., Tagliamonte, E., & Hassan, S. A. (2019). Grave-goods from the long chamber tomb "Dibba 76/1" (Fujairah, UAE): A first inventory. *Arabian Archaeology and Epigraphy*, 30(1), 1–43. https://doi.org/10.1111/aae. 12120
- Phillips, C. (1987). Wadi al Qawr. Fashgha 1. The excavation of a prehistoric burial structure in Ras al Khaimah, U.A.E (Project Paper, 7). Department of Archaeology, University of Edinburgh.
- Phillips, C. (1997). The pattern settlement in Wadi al-Qawr. Proceedings of the Seminar for Arabian Studies, 27, 205–218.
- Phillips, C. (2010). Iron Age Chronology in South East Arabia and new data from Salut, Sultanate of Oman. In A. Avanzini (Ed.), *Eastern* Arabia in the first millennium BC, Proceedings of the International Conference held in Pisa 12-13 May 2008 (Arabia Antica, 6) (pp. 71–80). "L'Erma" di Bretschneider.
- Phillips, C. (2013). Excavations at Kalba 1993–1995. Sharjah Antiquities, 13, 10–27.
- Phillips, C. S., & Simpson, J. (2018). Introduction. In C. S. Phillips & J. Simpson (Eds.), Approaches to the study of chlorite and calcite vessels in the Middle East and Central Asia from prehistory to the present (pp. 2–54). British Foundation for the Study of Arabia Monographs No. 20. Archaeopress.
- Potts, D. T. (1990). A prehistoric mound in the Emirate of Umm al-Qaiwain, U.A.E.: Excavations at Tell Abraq in 1989. Munksgaard.
- Potts, D. T. (1991). Further excavations at Tell Abraq. The 1990 season. Munksgaard.
- Potts, D. T. (2008). An Umm an-Nar-type compartmented soft-stone vessel from Gonur Depe, Turkmenistan. Arabian Archaeology and Epigraphy, 19(2), 168–181. https://doi.org/10.1111/j.1600-0471.2008. 00296.x
- Reade, J., & Searight, A. (2001). Arabian softstone vessels from Iraq in the British Museum. Arabian Archaeology and Epigraphy, 12, 156–172. https://doi.org/10.1034/j.1600-0471.2001. d01-3.x.
- Riley, M., & Petrie, C. A. (1999). An analysis of the architecture of the tomb at Sharm, Fujairah, U.A.E. Arabian Archaeology and Epigraphy, 10(2), 180–189. https://doi.org/10.1111/j.1600-0471. 1999.tb00137.x

Sarianidi, V. I. (2006). Goňurdepe. City of Kings and Gods. Miras.

Schreiber, J. (2010). The Iron I-period in South-Eastern Arabia. A view from Central Oman. In A. Avanzini (Ed.), Eastern Arabia in the first millennium BC, Proceedings of the International Conference held in Pisa 12-13 May 2008 (Arabia Antica, 6) (pp. 81–92). "L'Erma" di Bretschneider.

Arabian archaeology **-WILEY** 

- Tagliamonte, E. (2018). Stone vessels. In A. Avanzini & M. Degli Esposti (Eds.), Husn Salut and the Iron Age of south east Arabia. Excavations of the Italian Mission to Oman 2004– 2014 (pp. 279–300). (Arabia Antica, 15). "L'Erma" di Bretschneider.
- Velde, C. (2003). Wadi Suq and Late Bronze Age in the Oman peninsula. In D.T. Potts, H. Al-Naboodah & P. Hellyer (Eds.), Archaeology of the United Arab Emirates. Proceedings of the First International Conference on the Archaeology of the U.A.E. (pp. 102–113). Trident Press.
- Velde, C. (2018). The question of workshop and chronology in the Wadi Suq period. In C. S. Phillips & St. John Simpson (Eds.), Softstone. Approaches to the study of chlorite and calcite vessels in the Middle East to Central Asia from prehistory to the present (pp. 112–123). British Foundation for the Study of Arabia Monographs, 20. Archaeopress.
- Vogt, B. (1985). Zur Chronologie und Entwicklung der Gr\u00e4ber des sp\u00e4ten 4.-2. Jtsd. v. Chr. auf der Halbinsel Oman: Zusammenfassung, Analyse und W\u00fcrdigung publizierter wie auch unver\u00f6fentl. Grabungsergebnisse [Doctoral dissertation, University of G\u00f6ttingen].
- Vogt, B. (1994). Asimah: An account of a two months rescue excavation in the mountains of Ras al- Khaimah, United Arab Emirates. Department of Antiquities and Museums, Shell Markets Middle East.
- Vogt, B., & Franke-Vogt, U. (1987). Shimal 1985/1986. Excavations of the German Archaeological Mission in Ras Al-Khaimah, U.A.E. A Preliminary Report Berlin. Berliner Beiträge zum Vorderen Orient. Berlin: Dietrich Reimer.
- Vogt, B., & Kästner, J.-M. (1987). The finds and dating of SH 102. In B. Vogt & U. Franke-Vogt (Eds.), Shimal 1985/1986. Excavations of the German Archaeological Mission in Ras Al-Khaimah, UAE. A preliminary report Berlin (pp. 26-36). Dietrich Reimer.
- Winkelmann, S. (2018). Remarks on the iconography of the "Intercultural Style". In C.S. Phillips & St. John Simpson (Eds.), Softstone. Approaches to the study of chlorite and calcite vessels in the Middle East to Central Asia from prehistory to the present (pp. 90–111). British Foundation for the Study of Arabia Monographs, 20. Archaeopress.
- Yule, P. (1999). Chronology. In P. Yule (Ed.), Studies in the archaeology of the Sultanate of Oman (pp. 44–71). Orient Archäologie, 2. Marie Leidorf.
- Yule, P. (2001). Die Gr\u00e4berfelder in Samad al Shan (Sultanate Oman). Materialien zu einer Kulturgeschichte (Orient Arch\u00e4ologie, 4). Marie Leidorf.
- Yule, P. (Ed.). (2015). Archaeological research in the Sultanate of Oman: Bronze and Iron Age Graveyards. The Expedition of the Deutsches Bergbau-Museum Bochum in Oman 1 (2015). Der Anschnitt Zeitschrift für Kunst und Kultur im Bergbau, Beiheft, 28. Marie Leidorf.
- Yule, P. (2016). Valorising the Samad Late Iron Age. Arabian Archaeology and Epigraphy, 27(1), 31–71. https://doi.org/10. 1111/aae.12060.
- Yule, P., & Weisgerber, G. (2001). The metal hoard from 'Ibril/Selme, Sultanate of Oman (Prähistorische Bronzefunde, 20/7). Franz Steiner Verlag.
- Yule, P., & Weisgerber, G. (2015a). The cemetery at al-Akhdar near Samad al-Shān in the Sharqīya (Oman). In P. Yule (Ed.), Archaeological research in the Sultanate of Oman: Bronze and Iron Age Graveyards. The expedition of the Deutsches Bergbau-Museum Bochum in Oman 1 (2015) (pp. 111–172). Der Anschnitt Zeitschrift für Kunst und Kultur im Bergbau, Beiheft, 28. Marie Leidorf.

#### 44 WILEY ARCHAEOLOGY AND EPIGRAPH

- Yule, P., & Weisgerber, G. (2015b). Al-Wāsiţ Tomb W1 and other Sites: Redefining the Second Millennium BCE Chronology in South-Eastern Arabia. In P. Yule (Ed.), Archaeological research in the Sultanate of Oman: Bronze and Iron Age Graveyards. The expedition of the Deutsches Bergbau-Museum Bochum in Oman 1 (2015) (pp. 111–172). Der Anschnitt Zeitschrift für Kunst und Kultur im Bergbau, Beiheft, 28. Marie Leidorf.
- Zarins, J. (1978). Typological studies in Saudi Arabian archaeology: Steatite vessels in the Riyadh Museum. In A. H. Masry (Ed.), Atlāl, Vol. 2: The Journal of Saudi Arabian Archaeology (pp. 65–95). Idārat al-Āthār wa-al-Matāḥif bi-Wizārat al-Maʿārif al-Saʿūdīyah.
- Ziolkowsky, M. C. (2001). The soft stone vessels from Sharm, Fujairah, United Arab Emirates. Arabian Archaeology and Epigraphy, 12(1), 10–86. https://doi.org/10.1111/j.1600-0471.2001.aae120102.x

Zutterman, C. (2004). The softstone vessels from Qarn Bint Sa'ud, Abu Dhabi (U.A.E.). Arabian Archaeology and Epigraphy, 15(1), 105–114. https://doi.org/10.1111/j.1600-0471.2004.00030.x.

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