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The ʿIbrī/Selme Hoard from al-Ẓāhirah Province – 30 Years After

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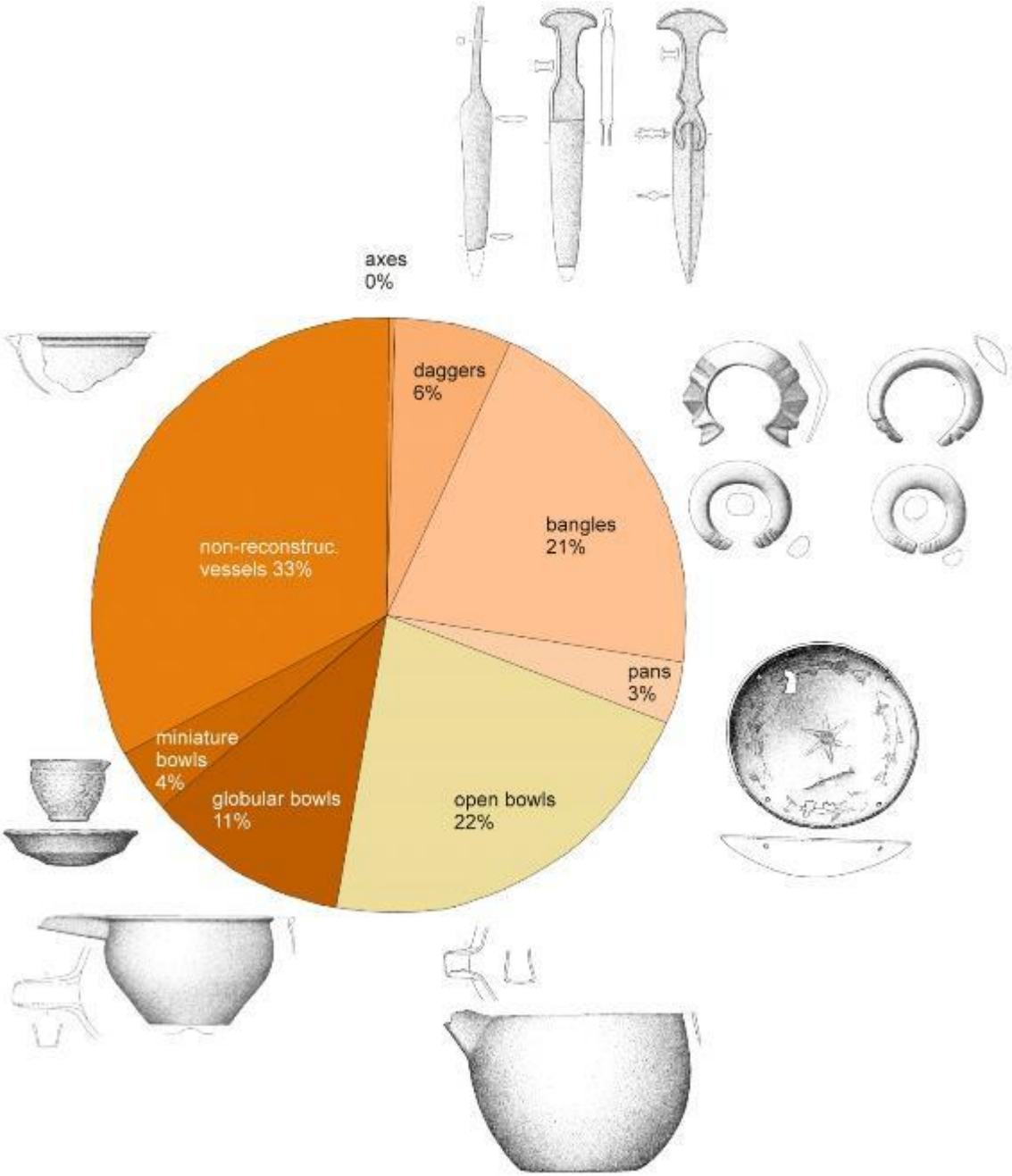
One of Oman's most important Early Iron Age (EIA = Lizq-Rumailah period) discoveries derived August 1979 from two ancient "towers" on the Dar al-Salām Farm just 1800 m north-east of the ʿIbrī pass at a plain known as Selme/Silme[1], on the farm of Shaikh ʿAbdāllah b. Sālim b. Rashid al-Zaidī, once deputy minister for Islamic Affairs. As the largest ancient metal hoard to derive from the ancient Near East (Yule and Weisgerber 2001: 1), that from Selme is important for the prehistory and heritage of Oman and most of South-eastern Arabia since it shows a large variety finds attributable to the EIA. Metal vessels account for nearly ¾ of the hoard artefacts [Graph 1]. The catalogue finished, it is clear to our and future generations exactly which artefacts occurred and their appearance. There is no need to reinvestigate the hoard looking for potentially interesting uncatalogued pieces, which archaeologists love to do. Nowhere else in the region is the spectrum of EIA metal finds as plentiful as in this hoard. In keeping with the high standards of the successful series *Prähistorische Bronzefunde*, metal-related aspects, such as typology, use-wear and the significance of differences in the metal oxidation required close attention. The present essay strives to succinctly summarises the find circumstances, restoration, and cognate research. Disappointingly for our EIA in South-eastern Arabia, there we still have to get along only with copper alloy since paradoxically little evidence for iron working in this period has yet come to light (Magee 1998). The reader should not despair because the EIA pottery has close contemporary parallels with neighbouring iron-using Iran.

Germana and Paolo Costa as well as later ʿAlī Aḥmed Bakhīt al-Shanfāri sent Selme artefacts in lots to the German Mining Museum in Bochum for study and restoration. These then were returned reciprocally to the Department of Antiquities in al-Khuwair. On arrival the next lot was sent until a total of 508 metallic objects was catalogued. In addition, 25 stone and 57 pottery shards also were catalogued for the publication which belonged ot the context, but not to the hoard itself. 146 alone of these Selme metallic artefacts were restored mostly by J. Kunkel in the Mining Museum laboratory. From 1980 to c. 2000, aside from the Selme hoard, the Mining Museum and the author had other copper, iron and a few glass finds restored mostly excavated from Samad al-Shān, al-Moyassar (Yule 2001a) and al-Fuwaidah (Yule 2001b). The vast majority of all restored artefacts in the Department and now in the National Museum derive from our activities [Fig. 1].

FIND CIRCUMSTANCES

In January 1980 a group from the Ministry of National Heritage and Culture including Nicholas P. Stanley Price visited the find-spot first hand. During landscaping activities on the farm the bulldozer tor into the contexts. After Shaikh ʿAbdāllah's original delivery of four cartons of finds, in this first visit 22 more were presented – all in copper alloy.

[1] The GPS coordinates of the find-spot are 451000E, 2572150N. These contradict more recent ones from Google Earth: 23°15'32.12"N; 56°31'11.85"E, 374 m altitude=UTM 40Q 450898E; 2572254N, which are not as exactly geo-referenced. Tension at close range between different maps as well as with GPS measurements (aside from that caused by ‚selective availability') is common; different variables are involved. Research and cataloguing of this find took place between 1982 and 1990; first from 1987 to 1990 it was financed by the DFG (grant WE 776/4-1) and the Fritz Thyssen Foundation (1986). With the help of the sketches and other data which Weisgerber provided, Yule drew, catalogued and published the finds.



GRAPH 1. Proportion of the different kinds of metallic artefacts in the Selme hoard, 508 pieces.

Stanley Price summarized the find situation: "[After landscaping] a small remnant (18 m north/south by 5 m east/west) was left standing with two recent concrete block structures upon it, the depth of the deposit which has been removed was c. 1.2 –1.5 m towards the north, decreasing southwards to c. 1 m or less. In this remnant there could be seen a number of limestone blocks, several of them superimposed though dislodged." (Yule and Weisgerber 2001: 9). Such whitish 'sugar-lump stones' usually are nicely worked on five sides and the sixth is unworked (Yule and Weisgerber 2001: 10–12 Figs. 3–6). The two "round towers" in which the hoard was immured are identifiable in an aerial photo made in 1978.

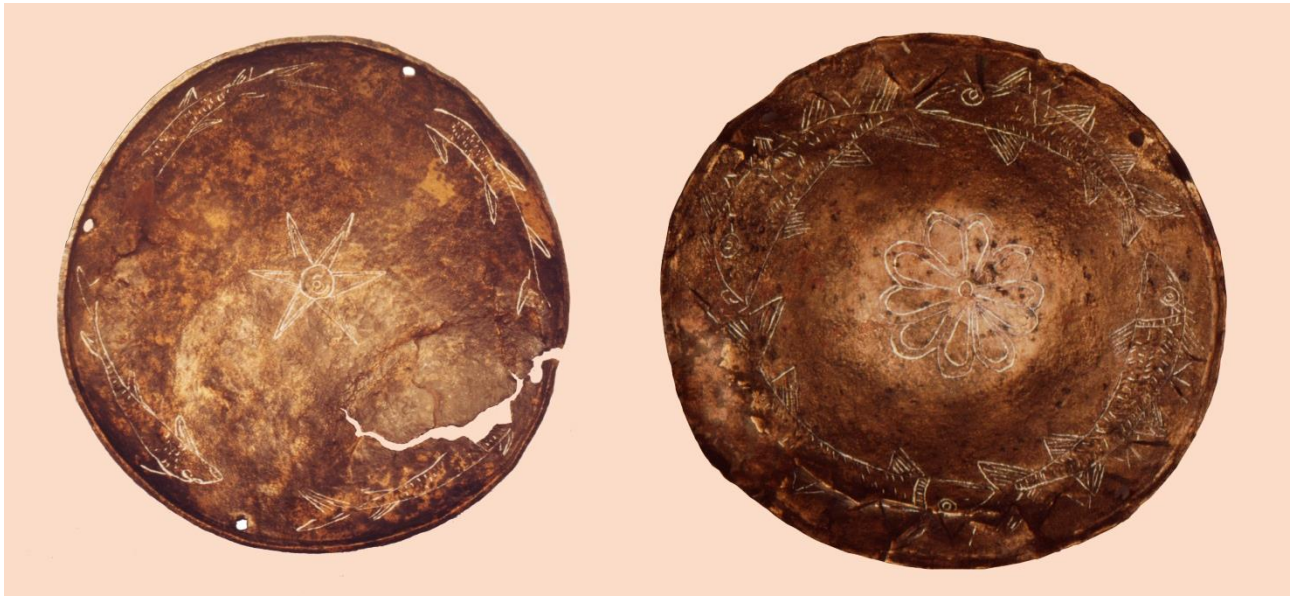


FIGURE 1. Restored plates from the Selme hoard: (DA 5656) is one of the few pictorial images from EIA Oman; (DA 3785) shows four fish swimming counter clockwise. Such vessels are rare early examples of pictorial subjects.

In it visible at the find-spot are two circles 50 m apart from each other away from the *falaj* which are Umm an-Nar period tholos tombs made of the sugar lump stones (Yule and Weisgerber 2001: 13 Fig. 7. Each measured at least 5 m in diameter (Yule and Weisgerber 2001: 12).

Despite the bulldozing, the stones of one of the tombs (Yule and Weisgerber 2001: 10 Fig. 4), formed the basis for the concrete block generator hut. After the workers found new artefacts and stuck them between the blocks, the watchman collected them. Subsequent visits yielded further artefacts which we submitted to the Department. Gerd Weisgerber was clever and persevered to glean as many artefacts as possible. For example, he promised the watchman on the farm to bring him a new bangle in return for an old one. Gerd then got the artefact restored (Yule and Weisgerber 2001: no. 37), had an excellent copy made in plastic from it, and with aplomb gave the restored original to the Department and the shiny new copy to the watchman, who was quite pleased. After this, he provided us several further metal finds. We also delivered to the Ministry one of the many sugar lump stones from the site to preserve it as evidence of the find circumstances.

The recovery of the Selme hoard was not a controlled excavation, but rather the observation of the destruction which took place during the gardening from 1980 to about 1986, at the later date when the author conducted his first visit. The entire Selme assemblage derive from different periods: Umm an-Nar, Wadi Suq and EIA (Yule and Weisgerber 2001: 17, 28–29). But few of the metallic artefacts predate the EIA (Yule and Weisgerber 2001: cat. nos. 6–11 (daggers), no. 268 (vessel). Post-EIA finds are not identifiable. Thus the deposition occurred some time after 300 BCE. My best guess is in the medieval period when copper production again revived in Oman.

What is the value of this hoard? Even if the Selme hoard does not qualify as a primary context, the large numbers of finds provide excellent evidence for the definition of the EIA inventory. Since some resemble coeval pottery shapes or each other, there is ample indication of relative contemporaneity of many hoard pieces. Several find classes occur without known predecessors. Since stone bowls and pottery had no value to the foragers they are taken to belong to the original tomb finds. Selme lies 40 km away from the nearest copper production centre [Fig. 2]. At this time parts of central Oman nearer the centres were perhaps far richer than Selme in terms of metalwork – but only the Selme hoard survived by a quirk of fate. No other site in Arabia has presented us with such detail of the EIA metal industry.

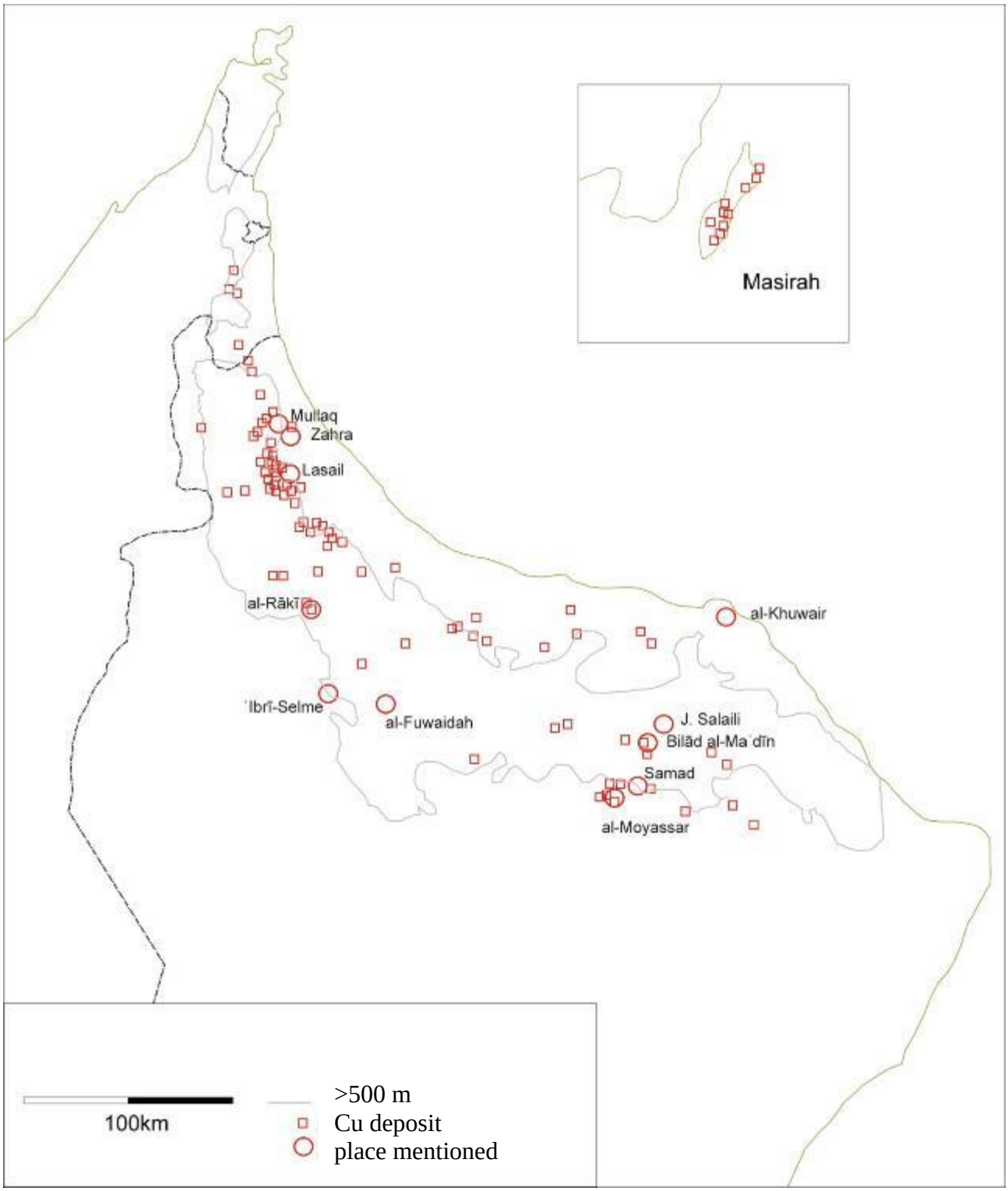


FIGURE 2. Map shows the archaeological sites and metallic ore deposits (Hauptmann 1985; Shanfari 1987).

THE FINDS, RESTORATION AND COGNATE RESEARCH

It is neither possible nor desired here to recount all of the EIA research for South-eastern Arabia. Our scope is far more limited: First, a few words regarding the restoration seem appropriate, since this aspect has been little discussed. The latter aimed to remove the oxidation nearly, but not quite down to the non-oxidized level of the metal. In a few cases corrosion products had complete replaced the metal of raised bowls which made them quite fragile. The thinner ones were less resistant to the oxidizing effects of the saline soil and the mechanical damage caused by the bulldozer.

The fragile restored finds suffered were unduly stressed by being sent to and from numerous exhibitions as well as a lack of adequate storage facilities at home. This is not the fault of the members of the Department, who simply followed orders. The artefacts were the victim of their success and attractiveness. Many again are in need of restoration. But I observed no copper sickness among them. My DA (Department of Antiquities) database with over 8000 files is still the main inventory for these and other finds dealt with by our mission in Oman (available in *Academia.edu*). With regard to the restoration in general of archaeological small finds for our region, very little literature has been written.

That for the archaeometallurgy of Oman's EIA is equally limited: The vast majority of the literature deals with the long-distance trade of the Bronze Age Umm an-Nar period (e.g. Weisgerber et al. 1981). Even special studies leave aside the elusive EIA period in favour of that of the land Magan-Makkan and the much later early medieval period (e.g. Hauptmann 1985). At some EIA sites the mines, tombs of the miners, and slag exist, but as at al-Rākī the stratigraphy is scrappy and complicated. Still lacking is a petro-chemical definition of the composition of EIA slag. Seen more positively, some 20 mining sites contain EIA pottery and show that at this time the primary sulphidic copper ores in Oman were exploited for the first time (Weisgerber *et al.* 2007: 292). The smelted crude metal then would have to be roasted to drive out the residual sulphur which makes it brittle and unsuitable for smithing. Major EIA metal production sites include Bilād al-Ma'dīn (Weisgerber *et al.* 1981: 189–190 Abb. 12–13), Lasail (al-Asail), Mullaq, Musfa=J. Salailī (Weisgerber 1980: 102 Abb. 72), Semdeh, al-Rākī 2 (Weisgerber *et al.* 1981: 232; his excavation daybook of 1996-7), Zahra 2. EIA tap-slag cakes are irregular in form and weigh up to 10 kg – far larger than Bronze Age ones (Weisgerber 1987: 156–157 fig. 76.1). By no stretch of the imagination, perhaps such resulting ingots also were larger. Probably the medieval metallurgists recycled much of the EIA slag in order to extract the last metal and there is much to do at slag-rich EIA sites such as al-Rākī. Gerd Weisgerber pointed out that all medieval mining sites are built on top of EIA ones (2007: 303). The latter tend to be closer to the ore source, but never as close as in medieval times.

During the Old Babylonian period, to judge from cuneiform texts and archaeological remains, copper exports from Oman declined drastically. But the number of copper artefacts on Late Dilmun period Baḥrain at this time indicates a brisk trade with an origin probably in Oman – beside Iran, the main copper source (examples: Lombard and Kervran 1989: 70–78).

Few cuneiform texts illuminate Oman's EIA copper industry only indirectly (AHW III: 1495–1496; Röllig 1983: 345; Reiter 1997, but this second source deals down only to the Old Babylonian period). Copper or bronze are written in Sumerian URUDU and in Akkadian *(w)erûm*. Strangely, no plano-convex, perhaps better put, 'disc' ingots (Akkadian: *kakkarum* / *kakkartum*) survive from Oman's EIA period – all date earlier [Fig. 3]. Nor have early medieval ones survived. But recently at Fujairah/Masafi Anne Benoist (CNRS) reported EIA ingots in her excavation (personal communication).

M. Prange and A. Hauptmann sampled eighty-six of the 508 EIA metallic artefacts from Selme to determine their chemical composition and studied one piece metallographically (2001: 76–77). The alloy does not change as a function of the required purpose of the artefact (e.g. tools as opposed to jewellery). The most obvious observation is that the main additive, tin, ranges between 7.27 wt % and 12.33 wt %. This is higher than for the preceding period (Prange 2001: 65 Abb. 71). For the succeeding period eight copper alloy artefacts from Samā'il grave inventory Bar1 (non-Samad Late Iron Age=LIA) are all that we have (Hauptmann and Prange 2001b: 489), and give only a first impression.

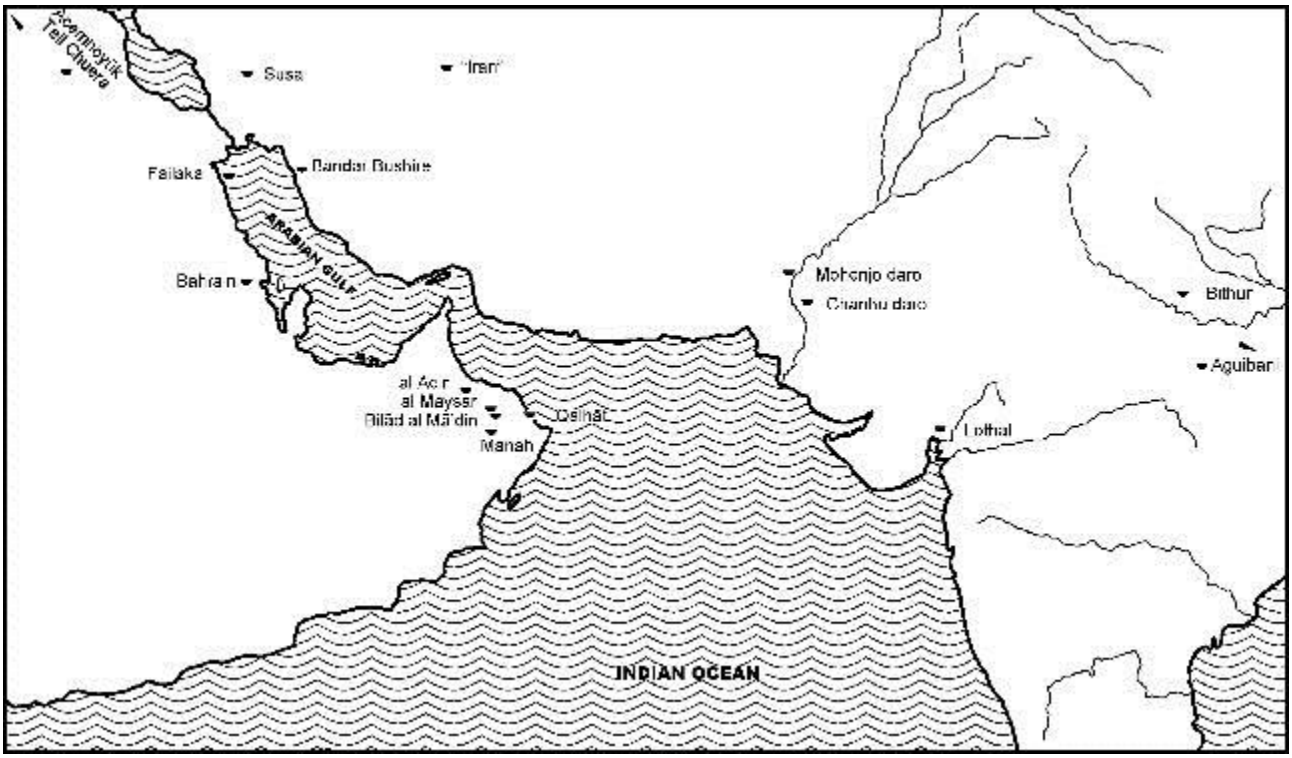


FIGURE 3. Copper ingots known in the Near East date generally from the 3rd millennium BCE

They contain less tin (4.5 –7%) than those from EIA Selme. The metallurgy of the EIA is superior to that before and after from this part of the ancient world because EIA metallurgists could control the amount of tin in the alloy more consistently.

THE INTERPRETATION OF THE SELME HOARD

In order to understand the origin of this hoard, first we must separate it from the finds which one would expect especially in the Umm an-Nar period tombs in which it occurred, especially pottery and stone bowls. In their form the metal vessels resemble Iranian pottery from this same time, and thus can be roughly dated. Evidence for the origin of the hoard comes in the form of the folding of many metal vessels in order to facilitate their transportation and kiln recycling [Fig. 4]. The mere fact that hundreds of metallic vessels are hoarded in the two Umm an-Nar (2500–1900 BCE) tombs built centuries years earlier than the beginning of the EIA supports this view. We never had any alternatives for the interpretation. The advantages of tomb robbing over primary copper production are obvious: No mining, smelting, roasting are involved. There is no need to gather valuable fuel. The EIA subterranean and hut tombs provided a ready source of recyclable metal for metal foragers (Yule 2001a: Taf. 479). Extensive grave/tomb attrition both in ancient and modern times is most notably in archaeological sites at Samad and al-Moyassar (Yule 2001a). First of all, precious metal is missing in nearly all graves. Today's successors to the ancient foragers find the tombs a boon to building. Evidence for this is ubiquitous. The forager need not even bend down to pick up the building material.

If the metallic artefacts derive from EIA tombs, why are none of the latter locally visible today? There are neither EIA nor LIA tombs anywhere in the immediate area, not to mention the otherwise sparse subsequent building. A *falaj* traverses Selme from the south-west to the north-east. Possibly stones from graves served as a building material here to clad its interior or were transported during a later period further away. Although it seems appealing to think that this happened at the end of the EIA at the hand of LIA immigrants, as mentioned above, the early medieval population competes is a more viable explanation.

FIGURE 4. Vessels such as this one (DA 3825.23) were folded to facilitate their transportation to the cache and recycling.

Did archaeologists simply miss such EIA subterranean graves during surveys? Most EIA subterranean graves are hardly distinguishable from those of the preceding Wadi Suq period (Yule 2001a I: 35: 76 examples), although the most characteristic EIA grave/tomb type is the 'hut tomb' (definition and dating: Yule 2001a I: 39–40). If we were to find only a single example of this grave/tomb type in Central Oman in the immediate neighbourhood of Selme, this would be of minor help to the insatiable archaeologist since most are thoroughly rifled. However, where such hut tombs have survived, as in the Jebel Salaili 19 km north-east of Samad, one observes that only a small break in the roof sufficed large enough to allow a child. Once inside the tomb, the child could hand the metalwork out to the awaiting forager. For whatever reason, the salvagers never returned to the cache in Selme to pick up the fruit of their toil. There are several types of hoards, but this temporary storage cache fits best the evidence.

To date, in South-eastern Arabia no traces of LIA metal production have been identified despite determined survey from several experts. Thus, it seems senseless to consider the re-introduction of Parthian mining into Oman, as some do. But by the Sasanian period, this again becomes an option, even if it is still archaeologically invisible. Except for pottery, given the elusiveness of a Samad LIA style, the integrity of its artefactual assemblage can easily questioned. Even after considerable time, effort and publication, this assemblage is still little-known. Thus after the end of the EIA, at this stage of research, such implements in copper alloy are best dealt with as imports, most likely from neighbouring copper-rich Iran.

Like few others the Selme hoard adds substance to the skeleton of pre-Arabic history in Oman and shows the wealth and intelligence of the EIA population.

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