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**IRON AGE STONE VESSELS FROM THE OMAN PENINSULA.  
A PRELIMINARY NOTE.**

Pierre LOMBARD

First discovered in 1964 at Dibba, in the United Arab Emirates (BIBBY 1965 : 353, 354), the Omani Iron Age period was forsaken for years and often eclipsed by the important archaeological results yielded by earlier periods. (1) But if forsaken, it was not entirely forgotten. In 1968, the first sondage carried out in the Al Ain oasis by Karen FRIFELT and her team revealed a settlement site at Rumeilah, in which archaeological material had clear associations with the few finds collected at Dibba (FRIFELT 1968 : 171). Traces of this already famous « Dibba culture » were even recovered from one of the Hafit cairns which was subsequently re-used (BIBBY 1970 : 315, 316 ; FRIFELT 1970 : 377).

Since this pioneering period, our knowledge of these First Millennium BC cultures has been extended appreciably. New sites were surveyed in 1976 at Shimal and Ghalilah, in the vicinity of Ras-Al-Khaimah (DE CARDI 1976). In the Al Ain oasis a French survey in 1977 revealed about twelve Iron Age settlements in the Hili-Qattarah area (CLEUZIOU *et al.* 1977 : 10, 11 and Fig.4), and since the beginning of 1981, the Rumeilah settlement, threatened by increasing urbanization, is being extensively excavated by the French Archaeological Mission in Abu Dhabi (cf. *infra*).

Last but not least, two important necropoles have yielded particularly rich material : Qarn Bint Sa'ud, to the north of Hili, and Al Qusais, near Dubaï (cf. *infra*). One can complete this review by indicating sites discovered by the Harvard Archaeological Survey in Oman (HUMPHRIES 1974 :52), and the interesting fortress of Lizq, presented by G.WEISGERBER (1981) at the present meeting.

But it would be long and tedious to sketch a whole picture of the Oman Peninsula in the first half of the First Millennium BC. The purpose of this paper is rather to consider this Iron Age period in concrete terms through one of its products: *carved stone vessels*. Obviously this choice is not fortuitous. Stone vessels are present throughout these cultures. They are found either in settlement sites or in graveyards. Their shapes, their decoration and probably their material, too, differ from the well-known productions of previous periods. In fact, these items represent one of the most original features of the Omani Iron Age.

\* \*  
\*

## THE SITES

As an illustration of this production, we have chosen specimens from three main sites of the period, already mentioned : Qarn Bint Sa'ud, Al Qusais and Rumeilah. (2)

The *Qarn Bint Sa'ud* necropolis, located in 1970 by the Danish Expedition, is situated about 15 km north of Hili (FRIFELT 1970 : 378). The site appears as a rocky outcrop, 800m long. Its greatest width is about 200m and it stands 60m above the surrounding sand dunes. From 1972 to 1975, 18 graves were excavated, some by the Danish Expedition and some by a staff of the Department of Antiquities, Al Aïn, led by Walid YASIN. These excavations revealed that the occupation range of the necropolis was quite wide, and in the light of recent works, Qarn Bint Sa'ud appears today as a regional key site where the main phases of the Omani prehistory coexist:

1) The Hafit phase (late IVth-early IIIrd mill. BC), represented here by its distinctive cairns, all located at the foot of the mount ;

2) The period of the IIIrd mill. BC settled culture of the Omani foothills, represented by circular and compartmentalized graves, close to the Hili ones ;

3) The so-called Wadi Suq period, now well illustrated in Oman in the early IIrd mill. BC as CLEUZIOU (1979) demonstrates in a recent study ; the bronze material from a rectangular grave seems to be linked with this phase ;

4) Lastly, the Iron Age period, which is in fact represented there only by reoccupation or extension of earlier graves, in spite of what had been previously believed (LOMBARD 1979 : 28).

The *Al Qusais* necropolis, situated 13 km NE of Dubaï was accidentally discovered and excavated in 1974 by an Iraqi team and more recently (1980-81) by a local one (SALMAN 1974 : o-p; *Al-Athar* 1975 : 52-57; TAHA 1981). The site has yielded about thirty undamaged graves and the burial material is one of the richest collected from this period : pottery, bronze weapons, stone vessels, etc... (TAHA 1981 ; LOMBARD 1981).

The last site, *Rumeilah*, was apparently the most extensive Iron Age settlement of the Al Aïn oasis, but a large part of it was destroyed last year by bulldozers. Before this unfortunate destruction, this low tell was almost 800m long and 150m wide. In January 1981, the French Archaeological Mission in Abu Dhabi stepped in to protect and excavate the site. Several large mudbrick houses have already been discovered and two different occupation levels in the First Millennium BC have been identified, each characterized by a distinctive architecture and artefacts. This important discovery helps to fill the gap between the Iron Age and the Hellenistic period (BOUCHARLAT and LOMBARD to be published).

## TYOLOGY

We realize the limits of this preliminary study. Until the last few years, Iron Age stone material from the Oman area has been scarcely published. Furthermore, items are now

displayed or stocked in various museums (Al Aïn, Dubaï) ,and the relevant documentation is similarly scattered.

As we were unable to work on an exhaustive corpus, and as excavations in progress reveal new specimens every year, one must not consider this « typology » as definitive. However, these carved stone vessels can be classified morphologically into four main representative groups:

1) *Flat based cups,with in most cases a horizontal spout.* Their height ranges from 4 to 7 cm, and the diameter from 7 to 15cm. (FIG. 3 :1-4).

2) *Larger bowls ,with splayed sides and a flat base.* The rim is generally cut horizontally. Sometimes, it is thickened and displays incised patterns. The height ranges from 4 to 8 cm and the diameter from 10 to 18 cm. (FIG. 3 :5-7).

3) The third group is the most distinctive of the period. *Vessels are strongly carinated, with convergent sides and a convex base.* Several variants can be distinguished by their cross-sections : conical, "beehive-shaped", etc... (FIG. 3 :8-12). One specimen, from Al Qusais, is divided into three compartments.

4) The last type is also rather unusual. It appears as a *barrel-shaped suspension vessel,with four vertically pierced lugs.* The dimensions can be rather large, from 20 to 25cm high. (FIG. 5 :21-22; 4 : 13). Curiously, this type is not found at Qarn Bint Sa'ud (at least among the Danish material) but is well represented on other sites, notably at Ghalilah, and Al Qusais, where a nice specimen had been found (SALMAN 1974 : Pl. 15 (arabic par); *Al-Athar* 1975 : Pl. 11).

We must add to these main categories some other shapes, represented here and there by a single specimen (FIG. 4 :14 ,15) and numerous lids (FIG. 4 : 16-20), which in some cases greatly outnumbered the collected vases, suggesting an earlier looting of the corresponding vessels. (3)

## DECORATION

Almost all of the vessels examined present a geometrical incised decoration, probably hand-made with a spike. Except for some specimens, treatment is often coarse. Furthermore it is surprising to notice how such poor workmanship in decoration is often coupled with finely executed shapes.

Incised patterns are usually superficial and, due to the stone wear, less apparent. Illustrated vessels show some of the most distinctive patterns : herring-bones, arches, triangular compositions, and saw-tooth incisions. We have to emphasize this last pattern which seems to be a rather good stylistic and chronological indicator of the period, at least with respect to stone vessels. (4)

## TECHNOLOGY

One of the most interesting problems posed by this production is that of the stone employed for this purpose. The terminology used by archaeologists has often been contradicted by geological reality.

In archaeological publications, soft stone objects are often referred to as « *steatite* », as opposed to stronger materials like diorite, for example. But a wholesale use of this term made it unreliable : nowadays the term « *steatite* » is applied to a whole range of minerals of various aspects, textures, colours and hardness. Geologically speaking however, steatite has a very precise definition, being essentially constituted of magnesium silicate. Light in colour, it reveals, when touched, a smoothness from which is derived its usual appellation, « soapstone ».

In his study devoted to the Yahya stone vessels, KOHL (1974), following the report of X-ray diffraction analysis, has proposed the term « chlorite » which indicates not a precise mineral but rather a group of metamorphic and complex silicates, characterized by a green colour and a crystalline appearance. In fact, many archaeologists have now agreed upon this term « *chlorite* », the meaning of which is certainly wider. However, it still does not coincide with all the archaeological evidence. KOHL himself admits that 15% of his comparative samples from various Near-Eastern sites were not proved to be chlorite... (1975 : 30).

Iron Age stone vessels found in the Oman Peninsula have never been submitted to any petrographical analysis except for a sample from Rumeilah, precisely proved to be true steatite. Of course, one must beware of any generalization founded on a single rudimentary analysis (5). However, this preliminary indication suggests that the term « *chlorite* » is no more suitable than the previous one and, on the other hand, strengthens the hypothesis that the Iron Age items differ slightly from those of the IIIrd millennium BC. In addition to their dark colour and the dense structure of their stone, Bronze Age specimens found at Hili and Umm-An-Nar, for instance are above all different in *shape*.

We are convinced that the strongly carinated shapes noted in the First Millennium BC at Qarn Bint Sa'ud and elsewhere are explained by a stylistical evolution as well by *the use of another material*, probably softer and more fragile, which dictates the shape of the product. We find it significant that these carinated shapes, quite unusual in the IIIrd millennium BC, appear extensively as from the Wadi Suq period (CLEUZIOU 1979 : fig. 10:3) and, indeed, linked with the use of the same light grey stone discovered at First Millennium BC sites.

Another significant case is that represented by a similar industry still existing today in Mashâd, the pilgrim's city of eastern Iran, where the local use of a soft whitish stone has produced almost similar shapes (WOLFF 1966 : Fig.202). In this connection, KOHL (1975) has suggested already that carving techniques noticed at Mashad seemed to be rather similar to the protohistorical ones. Such an hypothesis appears unsafe for the Iron Age period, especially regarding the use of a similar lathe, hand-operated with a bow (WOLFF 1966 : Fig.205-207; KOHL 1975 : Fig.6). As a fact we did not find such tooling marks on the Omani vessels and we are inclined to share WEISGERBER's opinion (1981) that there is no real evidence for the use of a lathe for carving vessels before the Hellenistic period.

If a slight doubt remains about its precise definition, the source of the stone carved by Iron Age craftsmen is more evident. Chlorite, steatite and derivatives abound in the Oman Peninsula. These ultrabasic rocks represent the main geological formation of the Hajjar Mountains, the *Ophiolites*, locally called by geologists "*The Semail igneous*" (LEES 1928 : 601-604). (Cf. Fig.2)

These rocks have produced a typical landscape of jagged peaks in the area. After PILGRIM (1908), who first identified this formation at the beginning of this century in the Wadi Semail near Sib, the Oman Ophiolites were more recently studied (ALLEMANN and PETERS 1972 ; WILSON 1973), notably by GLENNIE (*et al.* 1973) who demonstrated that the main strata of chlorite and steatite were generally situated in the lower part of the massif and more particularly on its western side, therefore not far from our archaeological sites in the foothills.

Carved stone vessels are not new to archaeologists working in the Arabian Peninsula. Our specimens from U.A.E sites appear to be a link in a long regional tradition. In his study devoted to the stone material from the Riyadh Museum, ZARINS (1978 :67) reported the earliest evidences to be those from Janūb Al Matabattihat, a neolithic site in the southwestern Rub-Al-Khali, and those from Al- Khubar, a late Obeid site of Eastern Arabia. We have already mentioned the carved stone vessels at Bronze Age sites as Failaka, Tarūt and in the Oman area. On the other hand, they are found on later preislamic cities (Najrān) or Early Islamic ones (Al-Fau, Saudi Arabia or Murwab, Qatar) (6).

However, this distinctive Iron Age industry poses some questions, which still remain unanswered.

First, the chronological problem. Even though recent discoveries have contributed to an improved understanding of the material culture, they do not allow at present a precise dating. Nevertheless, first comparative studies based mainly on pottery and bronze material (HUMPHRIES 1974 ; LOMBARD 1979) have suggested a reasonable date about 750-650 BC.

On the other hand, what can be said about the social function of these vessels ? We know from excavations of various settlements that they are not only funeral goods. Their abundance alone suggests a rather functional use as opposed to the IIIrd Millenium BC items (LAMBERG-KARLOVSKY 1970 : 66). New excavations in progress on the Rumeilah settlement are likely to shed new light on this topic.

A last problem is that of the diffusion of these Omani products. In Bahrain Island (where rough material is non-existent), similar shaped and decorated objects have been found in the so-called Assyrian graves of the Al-Hajjar necropolis (RICE 1972) as well as in some unpublished graves accidentally discovered during the construction of Isa Town.

We have in the future to explain these foreign evidences and possibly to clarify the nature of these contacts.

## NOTES

(1) *The terminology « Iron Age » is used with reference to the Iranian chronology, particularly Iron Age III which had clear associations with the Omani evidence. In this study « Iron Age » is not applied to the Late First Millennium BC, still considered as « Hellenistic period », in default of a better term.*

(2) *I wish to thank here Dr. Karen FRIFELT who has kindly allowed me to study the stone material from Qarn Bint Sa'ud, and Dr. Munir TAHA for discussing the Al-Qusais excavation and material.*

(3) *I am indebted to Miss Beatrice DE CARDI to have drawn my attention to this interesting detail.*

(4) *As a fact, saw-tooth incisions appear to be a very common pattern on later pottery found at hellenistic sites such as Thaj or Ed-Dour.*

(5) *Polarizing microscope analysis, by courtesy of Dr. S .FUDRAL, Université de Savoie (Chambéry).*

(6) *Personal communication of C. HARDY-GUILBERT, French Archaeological Mission in Qatar.*

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## LIST OF FIGURES

**FIGURE 1** : Iron Age sites in the Oman peninsula.

**FIGURE 2** : Main geological features (after Wilkinson, 1977, *Water and Tribal Settlement in South-East Arabia*, Clarendon Press, Oxford).

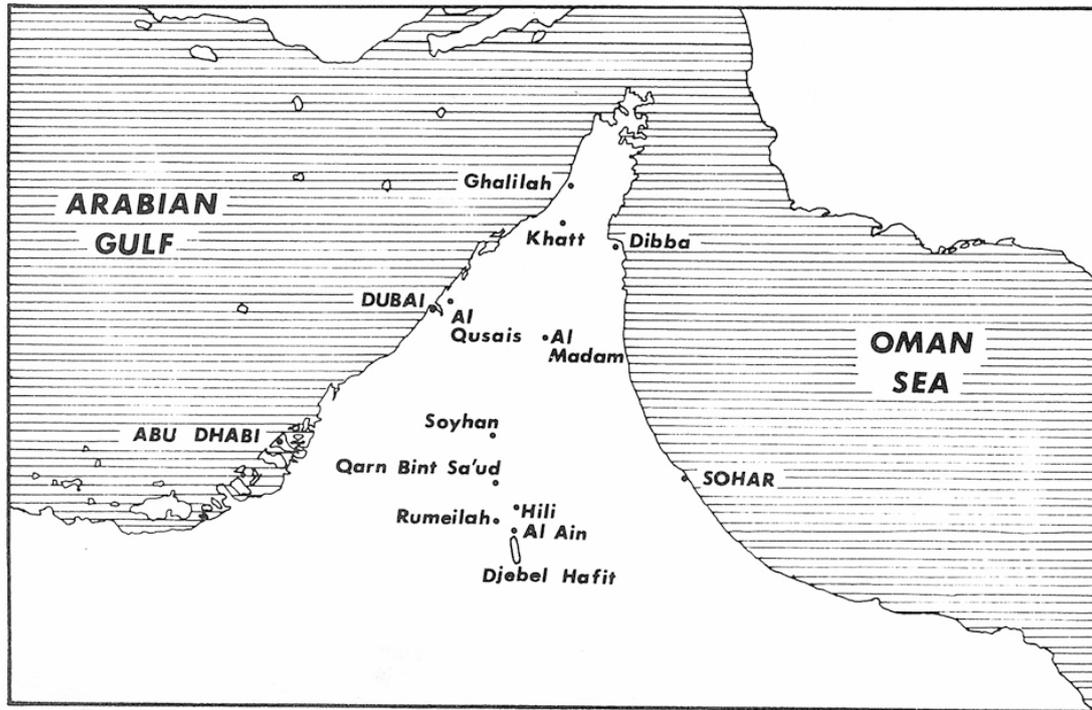
**FIGURE 3** Stone vessels. N°s 1, 2, 10 : Al-Qusais ; 3 to 9, 11, 12 : Qarn Bint Sa'ud

**FIGURE 4** Stone vessels and lids. N° 13 : Rumeilah ; 14 to 18, 20 : Qarn Bint Sa'ud ; 19 : Al-Qusais.

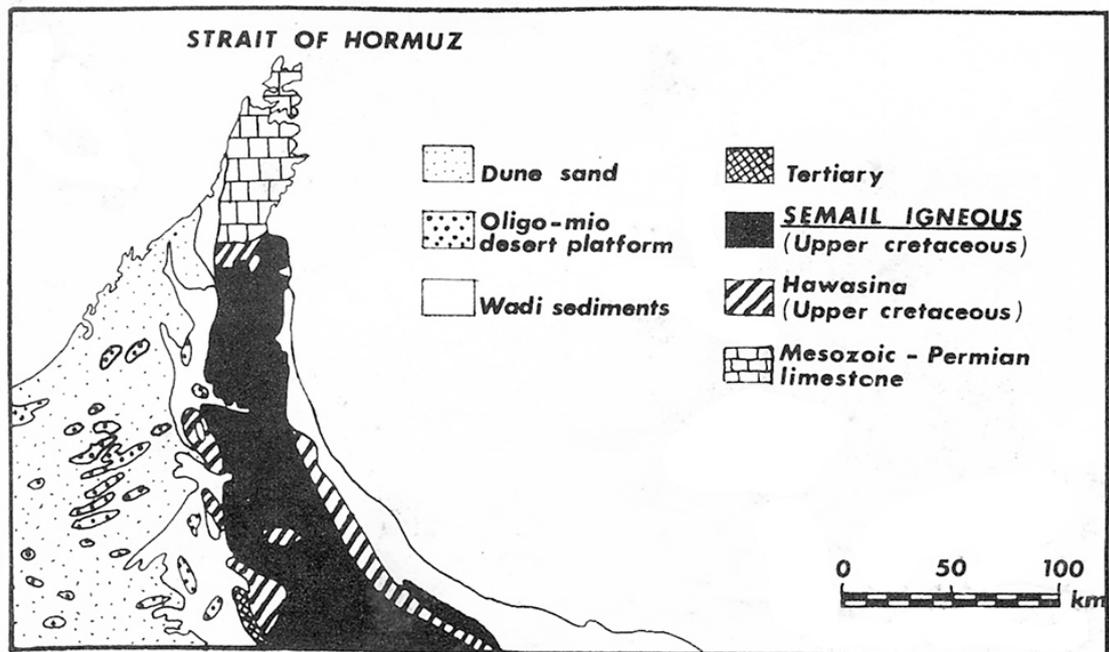
**FIGURE 5** Stone vessels. N° 21 : Rumeilah ; 22 : Al-Qusais

**FIGURE 6** Qarn Bint Sa'ud.

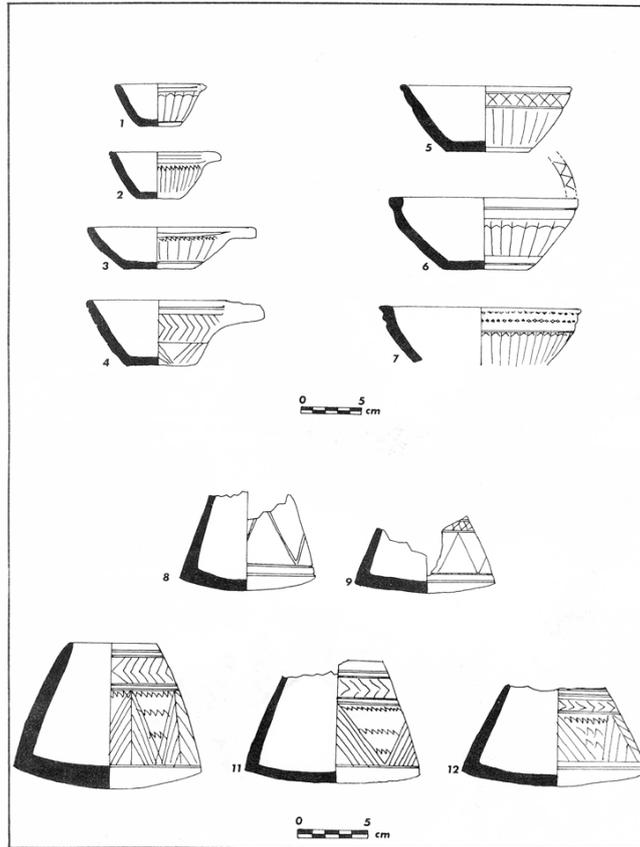
**FIGURES**



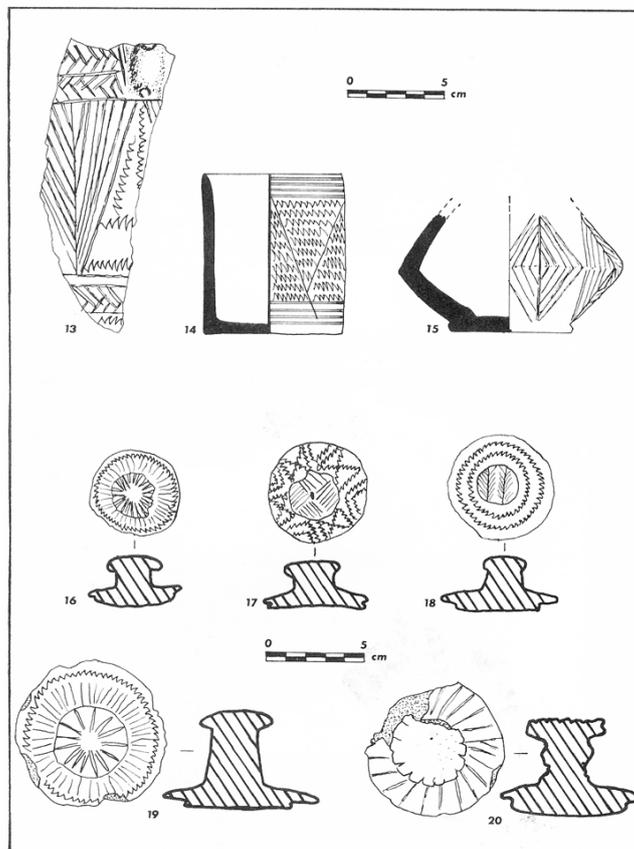
**Figure 1**



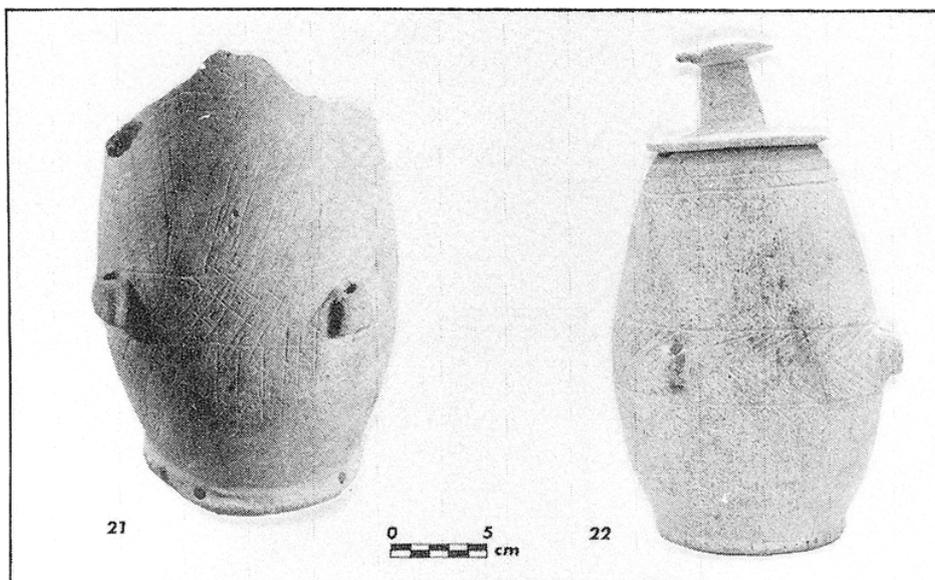
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**



**Figure 6**