

## **SOFTSTONE IN ARABIA & IRAN**

A specialist workshop organised by  
The British Museum & the Society for Arabian Studies

Wednesday 21st July 2004

Venue: Department of the Ancient Near East, The British Museum

The purpose of this specialist workshop is to discuss evidence for the production, circulation, function and, where appropriate, iconography on carved softstone in Arabia and Iran from the Bronze Age through to more recent times. The organisers are particularly concerned to hear speakers consider one or more of the following topics: the relationship of the material to adapting technologies, intended function, original visual appearance, and their relationship to objects of similar function made of other materials. Key questions include: what objects are made of softstone at any one period? How frequent are they? Why was softstone preferred as a material at some periods and for certain functions? What functions did the objects have? Does the use of this material have implications for the relative importance of other crafts? What evidence is there for the places of primary production of softstone objects as opposed to their secondary reworking?

The number of places is strictly limited and we regret that booking is now closed. However, the programme, abstracts and speakers' details are given below, and we expect to publish the proceedings in the Society for Arabian Studies Monograph Series.

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## PROGRAMME

- 09.00 *Assemble Great Court*
- 09.25 *Introductory remarks* (St J. SIMPSON)
- 09.30 Hélène DAVID (CNRS): Softstone imports in Syria
- 10.00 Sylvia WINKELMANN (Universität Halle-Wittenberg): The iconography of the intercultural style
- 10.30 Lubov' KIRCHO & Vladimir A. ZAVYALOV (Institute for the History of Material Culture, St Petersburg): Middle Bronze Age softstone from Altyn-depe in south-west Central Asia
- 11.00 *Discussion*
- 11.15 *Break*
- 11.30 Carl S. PHILLIPS (CNRS, UMR 7041): Softstone vessels from south-east Arabia: production, typology, distribution and imitation
- 12.00 Christian VELDE (Museum of Ras al-Khaimah): Softstone in Shimal / Ras al-Khaimah: workshops and stylistic development during the Wadi Suq Period
- 12.30 Peter MAGEE (University of Bryn Mawr): The production of Omani steatite in the Iron Age
- 13.00 *Discussion*
- 13.30 *Lunch*
- 14.30 W.D. GLANZMAN (University of Calgary): The Softstone Cooking Bowl of the 1<sup>st</sup> Millennium BC in South-west Arabia: Archaeological Views and Cultural Dynamics
- 15.00 Shelagh WEIR (SOAS, Anthropology Department Research Associate): Contemporary stone work in the Yemeni highlands
- 15.30 Sarah JENNINGS (English Heritage): Siraf, Iran: a local softstone industry and imported softstone
- 16.00 St John SIMPSON (The British Museum): Changing patterns of manufacture and circulation from Kush to Merv during the Sasanian and Islamic periods
- 16.30 *Discussion*
- 17.00 *Closing remarks* (Carl S. PHILLIPS)

## SPEAKERS

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## ABSTRACTS

### SOFTSTONE IMPORTS IN SYRIA

Hélène DAVID

Iranian softstone vessels imported to the Syrian territory have so far only been known from Mari on the middle-Euphrates. A dozen unpublished vessels, either bought by the Aleppo museum in the 1940s or excavated more recently at Tell Brak, may shed new light on the geography of softstone vessels during the Bronze Age, as they not only extend the northerly limit of their known distribution but are also different to the highly decorated examples previously known from Mari and might therefore indicate a different process of acquisition.

### THE ICONOGRAPHY OF THE INTERCULTURAL STYLE

Sylvia WINKELMANN

The motifs of the intercultural style are part of a fixed canon of motifs characterising the early art from the 5<sup>th</sup>-3<sup>rd</sup> millennia BC in Mesopotamia, Iran and Bactria. In Bactria and Iran this canon continues into the 2<sup>nd</sup> millennium BC. Some of the motifs go back until the neolithic times, single motifs continue to be depicted as *überzeitliche Bildmotive* (Moortgat) until the end of Near Eastern art. The way to depict these motifs in intercultural style follows the following characteristic principles:

- the using of ligatures to express an actual or previous event to create composite beings connecting animals and man
- the using of substitutes to depict the mythological and real appearance of an acting figure
- the using of the principle *pars pro toto* which finds its special expression in the intercultural style in two ways: a) in the reduction of a composition originally containing man and animals into the acting animals only, and b) in creating a repetitive pattern using only one picture element of a greater composition.

For stylistic reasons, through the way individual and composite motifs are expressed as well as from the thematic circles depicted, the greatest congruence exists between the intercultural style, the Proto-Elamite and Mesopotamian art in the period from Late Uruk/Jemdet Nasr to Early Dynastic II, indicating that this was the main period of its use. The intercultural style includes three main thematic circles:

- Depictions of a cultic scene connected with sexual intercourse and the sacrifice of a man as well as the adoration of a bull and a goddess
- Depictions of mythological events and the myth connected with this ritual which contain the fight between eagle, leopard or man with serpents, as well as the visit of a goddess by a man who obtains a vessel or plant from her

- The various appearances of a goddess in anthropomorphic, zoomorphic and inanimate form which is connected with mythological ideas.

The mythological background of the art depicted on these stone vessels goes back to the spiritual world of the neolithic and chalcolithic agricultural communities and reflects a matriarchal world view.

## **MIDDLE BRONZE AGE SOFTSTONE FROM ALTYN-DEPE IN SOUTH-WEST CENTRAL ASIA**

Lubov' KIRCHO & Vladimir A. ZAVYALOV

### ***Introduction***

This paper is based on two previous articles published in Russian by L. Kircho with the late G.M. Kovnurko. These include mineralogical descriptions of typologically and functionally diverse stone artifacts mainly found in burials excavated at the site of Altyn-depe. Roentgenometric analyses were conducted by V.B. Trofimov (Chair of Crystallography of the Geological Faculty, Sankt-Petersburg State University). This is one of the largest and most extensively and intensively studied Chalcolithic and Bronze Age sites in Central Asia. It is situated in southern Turkmenistan, 5-6 km. east of the first line of the piedmont elevations of the Kopet Dagh in the ancient valley of the Pra-Tedzhen. The stone artifact assemblage numbers several hundred objects dating from the late 4<sup>th</sup>-early 2<sup>nd</sup> millennia BC. These were macroscopically divided into groups, and a selection were sectioned for microscopic and x-ray phase analysis.

### ***The range of stone artefacts***

The following materials were identified as:

- Dense light pink or yellowish calcite-alabaster was used for small toiletry containers, including conical, biconical, flared, and double-bowl shapes (types 1-3, 5-6b), lamps, beads, spindle-whorls and anthropomorphic figures. Rounded pebbles suggested on-site working.
- Gypsum was used for 12 small single or double toiletry containers with biconical, rounded or open-mouthed profiles, and occasionally ridged exterior walls (types 4, 6a-b, 7-8). These totalled almost half of those toiletry vessels found in the burials.
- Yellow and brown flint with reddish and violet veining, which was used for making points.
- A hard marbly limestone used for lamps and vessels believed to be turned on a lathe.
- An unidentified reddish stone used for lamps.

## ***Beads***

These were made of the following materials:

- Banded agate. Three groups were distinguished on the basis of colour, namely colourless with pale-blue or greyish veins, red and white, and yellowish with brown or dark brown veins. Agate occurs in this region of Central Asia among the basalts either in the Badghyz-Kushka region in southern Turkmenistan or near Bolshoy Balkan in the west, with agate outcrops at Gerkhez 13 km. north-west of Oglandy in north-west Turkmenistan, or occurring within local conglomerates in the form of greyish-lilac, pale yellow or pinkish-lilac pebbles and small boulders ranging from 2-25 cm. across.
- Plain cornelian. These were homogeneous in colour.
- Several cornelian beads which had been etched with white designs (burial 03-409, no. 1).
- Lapis lazuli. These included a trapezoidal bead from an early Namazga IV burial 818, and a squared cylinder with gold caps from Namazga V burial 60 (both of which were identified as imports); the source of the raw material is presumed to be Badakhshan.
- Turquoise (a convex bicone disc = Beck A.1.e according to Beck's typology; also from burial 60); the closest source of turquoise appears to be the Tus region of north-east Iran.
- Rock-crystal.
- Unidentified white stone.

Finally evidence was also found for beads made from two distinct artificial high-temperature compositions. The first of these consisted of:

- thin-walled cylindrical beads (measuring 2.5 mm. in diameter and 6 mm. in length), a single convex biconical octagonal bead, and a square stamp-seal believed to be a Harappan import. They were opaque and shiny white (but possibly weathered) in appearance; although their surfaces were easily scratched it was difficult to crush them. They were carved from soft talc and then deliberately hardened through firing at a high temperature in order to create an altered faience-like composition of two-thirds enstatite (magnesium silicate), 10-15% quartz and a small amount of cristobalite. The temperature at which enstatite crystallises is above 1200 C. This technology resembles that known from ancient India and Iran.
- The second high-temperature composition was used for making a variety of small objects. These consisted of opaque yellowish-green spherical beads 5-6 mm. across; flat rectangular beads with denticulated edges which resemble examples excavated at Togolok-21 in Margiana, Tepe Hissar IIIB-C and Shahdad cemetery A; oblate beads, as in the Gonur-depe North cemetery, a stylised anthropomorphic figurine; and a cruciform compartmented stamp-seal. These had an artificial composition of 40% quartz & 60% cristobalite with a grain-size of under 0.2 mm. which were fused at the temperature of over 1400 C (Mohs 7). They are suggested to have been made initially from an easily worked porous siliceous rock such as diatomite or trepel which must have been fired at temperatures of over 1400 C in order to re-crystallise the

silica. This process is recorded here for the first time and the process of firing these materials must have been rather complex.

### *Steatite*

Finally, a number of items were carved from steatite, the principal subject under discussion here. Greenish-black steatite or “soapstone” was used for a variety of types and sizes of object found in both settlement and burial contexts. The surface of some of these vessels (such as vessel 4 from room 371 in excavation area 9) and a lidded lamp (from burial 626-627) contained irregular reddish-brownish specks of iron impurity. The objects included lamps, a so-called “lamp-cup”, small biconical toiletry containers (type 6b), stamp-seals, beads, and a so-called “staff” measuring 1.20 m. in length (burial 362). In addition, excavations in the temple at Altyn-depe produced a long pestle-like object, plus a “column” and a “weight” similar to those excavated at Tepe Hissar and which were made of calcite-alabaster, but in the case of the Altyn-depe finds all were made of steatite.

The earliest beads and an anthropomorphic figurine carved from this material were found in a burial chamber (room 1) in level 6. The remainder of the steatite items, including cylindrical beads (resembling examples found at Mehrgarh and later Harappan sites), a seal (burial 413), and other figurines (burials 634-638) made from a white heated form of steatite, were from level 5 and later, including Namazga V burials in levels 2, 1 and O. This suggests a date no earlier than the final Early Bronze Age for the use of steatite at Altyn-depe.

Dark grey and reddish steatite was also used during the late 3<sup>rd</sup>-2<sup>nd</sup> millennia BC in Margiana, where it features at Gonur-depe, Togolok-21, and Togolok-24. The origin of this has not been identified, but in addition to the known sources in Iran, it has been suggested that it may occur in the Kopet Dag and Paropamisus mountains. At Gonur-depe it was reported to be the most commonly used (imported) stone, followed by banded calcite-alabaster vessels (tall footed bowls, bowls, square-bodied vials and a trough-spouted vessel), limestone and sandstone grinding equipment, and semi-precious stone beads. The range of steatite objects at sites in Margiana included small open and kidney-shaped bowls with incised hatched triangles and other simple geometric incised decoration on the exterior or along the top of the rim; square-bodied vials, including blanks and sometimes with incised decoration on the shoulder; a decorated mace-head; amulets and stamp-seals (including an unfinished example from Togolok-24); and biconical beads or spindle-whorls with dotted circle decoration.

## **SOFTSTONE VESSELS FROM SOUTH-EAST ARABIA: PRODUCTION, TYPOLOGY, DISTRIBUTION AND IMITATION**

Carl S. PHILLIPS

The paper is intended to summarise four inter-related themes regarding the manufacture of softstone vessels in south-east Arabia over a period of approximately 2000 years from the mid-3<sup>rd</sup> to the mid-1<sup>st</sup> millennium BC. Tentative evidence for the initial inspiration of the softstone industry will be presented, followed by a review of what direct evidence there is for the manufacture of stone vessels in the UAE/Oman. This will be followed by a consideration of the typology and dating of softstone vessels which will be viewed alongside evidence for the distribution of vessels beyond their place of manufacture. It will also be considered to what extent the softstone industry influenced, or was influenced by, other manufacturing industries. It is hoped that this overview will enable discussion of the role of softstone vessels in the Bronze Age and Iron Age societies of south-east Asia.

## **SOFTSTONE IN SHIMAL / RAS AL-KHAIMAH: WORKSHOPS AND STYLISTIC DEVELOPMENT DURING THE WADI SUQ PERIOD**

Christian VELDE

The tombs of the Wadi Suq period (2000-1600 BC) in Shimal/Ras al-Khaimah have yielded a large collection of softstone vessels and lids, which make it possible to address the questions of workshops and development in this period. The variety of patterns, vessels and stone materials, which are not paralleled in any other period, and their irregular distribution was an important help in understanding the softstone production. Each material displayed a quite strict range of pattern and shapes which allow us to identify different workshops with their own traditions. Beyond those workshops there were stylistic changes in the patterns, which can best be explained with a development of the softstone production ranging from the Late Umm an-Nar Period towards the Late Bronze Age.

## **THE PRODUCTION OF OMANI STEATITE IN THE IRON AGE**

Peter MAGEE

The production of softstone vessels is now recognized as a major component of material culture in the south-east Arabian Iron Age. In this paper we will provide evidence for the production of this material based on recent ICP-MS analysis; examine the export of this material to other areas of the ancient Near East; and present some new evidence from the Iron Age II site of Muweilah that provides a cautionary note on the relationship between decorative style and chronology.



**THE SOFTSTONE COOKING BOWL OF THE 1<sup>st</sup> MILLENNIUM BC IN  
SOUTH-WEST ARABIA:  
ARCHAEOLOGICAL VIEWS AND CULTURAL DYNAMICS**

W.D. GLANZMAN

Various types of softstone artefact categories occur in the archaeological contexts of ancient south-west Arabia during the transition to and throughout the historic periods of the 1<sup>st</sup> millennium BC. These categories include several types of vessels and a variety of implements of uncertain function. One of the most commonly encountered categories is the Cooking Bowl. Its appearance in this region follows the use of various metamorphic (schist) rocks as tempering agents in ceramic Cooking Bowls. This paper explores how Softstone Cooking Bowls evolve technologically and functionally over time, coinciding with developments in other forms of material culture.

**CONTEMPORARY STONE WORK IN THE YEMEN HIGHLANDS**

Shelagh WEIR

This paper discusses the contemporary industry in carved stone (*naht*) in Ghaylan on the heights of Jabal Razih in north-west Yemen. This paper describes, and shows slides of, the tools, the products and the craftsmen at work. It also describes how the products are used and marketed, and discusses why they are able to compete with utensils of mass manufacture.

**SIRAF, IRAN:  
A LOCAL SOFTSTONE INDUSTRY AND IMPORTED SOFTSTONE**

Sarah JENNINGS

Three types of soft stone were in use at Siraf from the 8<sup>th</sup>-11<sup>th</sup> centuries – a type of gypsum, grey soap stone or steatite, and talc stone. The most common of these was a milky white stone called, variously, alabaster, anhydrite or gypsum. Artefacts of this soft stone were made on the site using techniques usually associated with lathe turning wood. These mostly comprised small bowls, dishes, or containers with lids, and a small proportion were decorated. Evidence for manufacturing techniques comes from working waste. Grey soapstone vessels were imported in some quantities for a variety of functions. The largest vessels were plain bucket-shaped cooking pots, frequently with horizontal flanges. The smaller vessels were more elaborate, both in shape and decorated. So-called incense burners with a circular bowl, four legs projecting below the base, and large horizontal handles were common. Decoration on soapstone was mostly incised, ring-and-dot motifs arranged in groups or parts of compass drawn circles. Vessels with carved decoration were less common. Talc stone

items were rare and likely to be luxury goods. They were always well-made and polished and could be regarded as special items.

## **CHANGING PATTERNS OF MANUFACTURE AND CIRCULATION FROM KUSH TO MERV IN THE SASANIAN AND ISLAMIC PERIODS**

St John SIMPSON

Excavations by Dr D. Kennet at the site of Kush in Ras al-Khaimah have produced the first archaeological evidence for the circulation of softstone in this region during the 5<sup>th</sup>-7<sup>th</sup> centuries. The uses were as small objects and small carefully finished bowls turned on a lathe. The latter belong to the tail-end of an industry previously attested at ed-Dur and Mleha, and confirm its continuity, later than previously suspected. Softstone objects have also been reported from Partho-Sasanian contexts at Tepe Yahya in south-east Iran, but as these have not been published in detail it is unclear whether they represent Arabian imports or possibly evidence for a south-east Iranian softstone industry. By contrast, judging by the excavations of three areas at Merv, there is no evidence for the manufacture (or at least circulation) of softstone from the third major Sasanian source-area of the Mashhad/Tus region, nor have softstone objects been recognised from Sasanian contexts in Mesopotamia or other parts of Iran. The implications are that the industry at this period was highly localised and directly descended from an earlier local Arabian tradition.

The situation changes soon after the Islamic Conquest. At Kush, softstone was now predominantly used for making large hole-mouth cooking-pots with horizontal exterior ledge-handles. These were carved by hand, often were heavily blackened through repeated use, and were regularly repaired with copper wire or metal rivets. They closely resemble examples found at other Gulf sites, including Bahrain and Siraf. Variations on this form were also made in north-east Iran at this period, and they regularly recur in Early Islamic and Seljuk contexts at Merv as well as other sites in Central Asia. The widespread popularity of softstone for making cooking-pots, and which continues up to the present day in north-east Iran, is a phenomenon which is described by some Early Islamic food-writers, who also explain the apparent absence of lids in the archaeological record. It is concluded here that this new fashion for softstone cooking wares was introduced by Arabs as part of the Conquest, and possibly even triggered the development of a new form of cooking-pot in ceramic “brittle-ware” in Northern Syria.