



<https://publications.dainst.org>

iDAI.publications

DIGITALE PUBLIKATIONEN DES  
DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS

Das ist eine digitale Ausgabe von / This is a digital edition of

Buquet, Cécile

## The Burial Practices at Shahi-Tump (Balochistan, Pakistan): First Anthropological Analyses.

in: Franke-Vogt, Ute – Weisshaar, H.-J (Hrsg.), South Asian archaeology 2003: proceedings of the Seventeenth International Conference of the European Association of South Asian Archaeologists, 7–11 July 2003, Bonn 57–62.

DOI: <https://doi.org/10.34780/mvc3-3u6b>

**Herausgebende Institution / Publisher:**  
Deutsches Archäologisches Institut

**Copyright (Digital Edition) © 2022 Deutsches Archäologisches Institut**  
Deutsches Archäologisches Institut, Zentrale, Podbielskiallee 69–71, 14195 Berlin, Tel: +49 30 187711-0  
Email: [info@dainst.de](mailto:info@dainst.de) | Web: <https://www.dainst.org>

**Nutzungsbedingungen:** Mit dem Herunterladen erkennen Sie die Nutzungsbedingungen (<https://publications.dainst.org/terms-of-use>) von iDAI.publications an. Sofern in dem Dokument nichts anderes ausdrücklich vermerkt ist, gelten folgende Nutzungsbedingungen: Die Nutzung der Inhalte ist ausschließlich privaten Nutzerinnen / Nutzern für den eigenen wissenschaftlichen und sonstigen privaten Gebrauch gestattet. Sämtliche Texte, Bilder und sonstige Inhalte in diesem Dokument unterliegen dem Schutz des Urheberrechts gemäß dem Urheberrechtsgesetz der Bundesrepublik Deutschland. Die Inhalte können von Ihnen nur dann genutzt und vervielfältigt werden, wenn Ihnen dies im Einzelfall durch den Rechteinhaber oder die Schrankenregelungen des Urheberrechts gestattet ist. Jede Art der Nutzung zu gewerblichen Zwecken ist untersagt. Zu den Möglichkeiten einer Lizenzierung von Nutzungsrechten wenden Sie sich bitte direkt an die verantwortlichen Herausgeberinnen/Herausgeber der entsprechenden Publikationsorgane oder an die Online-Redaktion des Deutschen Archäologischen Instituts ([info@dainst.de](mailto:info@dainst.de)). Etwaige davon abweichende Lizenzbedingungen sind im Abbildungsnachweis vermerkt.

**Terms of use:** By downloading you accept the terms of use (<https://publications.dainst.org/terms-of-use>) of iDAI.publications. Unless otherwise stated in the document, the following terms of use are applicable: All materials including texts, articles, images and other content contained in this document are subject to the German copyright. The contents are for personal use only and may only be reproduced or made accessible to third parties if you have gained permission from the copyright owner. Any form of commercial use is expressly prohibited. When seeking the granting of licenses of use or permission to reproduce any kind of material please contact the responsible editors of the publications or contact the Deutsches Archäologisches Institut ([info@dainst.de](mailto:info@dainst.de)). Any deviating terms of use are indicated in the credits.

C. Buquet

## The Burial Practices at Shahi-Tump (Balochistan, Pakistan): First Anthropological Analyses

The site of Shahi-Tump is located in the south of Balochistan in Pakistan, quite near the coastal area, in Makran. The Kech River passes nearby. Excavations at Shahi-Tump play a fundamental role in the comprehension of the Chalcolithic chronology of this geographical area (Besenval, in press a).

During the different periods of occupation we have recognized graveyards as well as houses: the settlement was periodically abandoned and used as a cemetery. Then, the different parts of the graveyards were abandoned and new walls were erected on top of existing graves. The settlements and the graveyards are superimposed above each other. This means a lot of destruction and perturbation inside the graves, associated with a poor conservation of the bones. They are smashed and very fragile. We tried to treat the bones with a paraloid solution, in order to increase their resistance. Therefore, we are not able to remove them in good condition. This disintegration of the bones is mostly due to the high content of salt inside the soil. Pelvic bones and skulls are always altered.

The 2002 field season was dedicated to the study of the skeletons. It allowed us to have a global view of the population, and also to adapt the objectives and studies to the particularities and constraints of this collection.

The excavation at Shahi-Tump, carried out during seven seasons from 1997 to 2003, allowed us to work with more than 180 individuals. A first overall look at the funeral practices observed in Shahi-Tump is presented here. They include mainly two different kinds of burial patterns. We recognise, on one hand, the primary burial type, and, on the other, the secondary burial type. The difference between them is not only cultural, but also practical. The primary type defines a unique ceremony in the way the dead body is managed. With the secondary burial type, the funerary practice involves at least two different procedures with some intervention and manipulation of the corpse at different stages of decomposition. In that case, the funerary ritual entails at least two different ceremo-

nies, both of them related to the management of the remains. It refers a levy of the totality or just parts of the body to be laid down somewhere else. Naturally, the place of decomposition differs from the final place of deposit.

A primary burial site can be composed of individuals, multiples (several individuals deposited at the same time), or can be collective (several individuals buried, but not at the same time, but successively).

Most of the 181 burials are single primary ones (almost 71%). The archaeological evidence shows complex treatments and different customs involving the deposition of the body and the presence (or not) of ornaments or other grave goods. Some ochre was observed above the bones, below the skeleton, or in both places. Sometimes, the ochre deposit is inside a shell. The practices are variable, but we can find some ochre inside most graves. The tomb architecture is not always accessible. Sometimes, the sediment does not allow us to see the pits or any special arrangement of the hole in itself. But, we have found stone or mud-brick structures.

We have recognised two principal phases of burials, which are chronologically subsequent and cover the Chalcolithic period. The typology is still in progress, but the main difference seems to be the handling of grave goods. In the first phase, dated to period II, we do not find many ceramics or ornaments. The second phase, the more recent one, is dated to period IIIa, or the Shahi-Tump cemetery culture phase. It shows the deposition of typical ceramics (Besenval 2000, in press b), beads ornaments, copper objects and faunal remains (fig. 1).

In spite of the differences between the phases that testify to the existence of a certain kind of code observance related to the social structure, the investigation also revealed many similarities within the funerary practices involved in burying the dead. We need to analyse each clue, about the body treatment, the deposition inside the grave, the kind of goods associated, and where they were placed. We are looking for all taphonomical processes that distinguish the remains prior to the moment of the



Fig. 1. Ceramics and faunal remains of a period IIIa burial.

burial. Trying to understand the funeral rituals involves the comprehension of the way death is perceived.

#### INITIAL GRAVE TYPOLOGY

##### *Individual Primary Burial Type*

We have observed 128 individual primary burials (71% of the population). The orientation of the graves is mostly west-to-east, with the skull lying in the west. This type represents 76% of the skeletons, only 3% are oriented east-to-west, while 11% and 7% are respectively orientated north-to-south and south-to-north.

We have noticed that the skeletons are mostly laid on their side. Among the 104 skeletons for which the position was observable, 86 were on their lateral decubitus (i. e. almost 83%). We observed no significant preference between left and right (respectively 45% and 38%). 11 were in a dorsal (10,6%), only two in a ventral (2%) position.

Legs are always bent and so are frequently the arms. The position is commonly foetal-like. Sometimes, the limbs are forcibly bent. We have often observed the non-natural position of the heel touching the pelvis. It is a sign of an external compression. When this position is not caused by a narrow pit, we have to imagine that the limbs were tightly wrapped by some binding (fig. 2).

In many cases, the bone position indicates that the whole body or parts of it were wrapped during the deposition. We have also found some imprints or fragments of elements that have now vanished

(fig. 3). In one case, a few red-and-black remains of a mat associated with asphalt were excavated in 2001 inside a child burial.

##### *The Cremation Burial Type*

During the 2000 field season, a different kind of primary sepulchre was found: cremation. The bones were burnt *in situ*, as we can see from the surrounding burnt sediment. This unique sample of cremation is also the stratigraphically lowest primary burial found at Shahi-Tump (fig. 4).

This adult skeleton lay on its back, oriented east-to-west. Its gender is unknown. The grave may have been disturbed in antiquity. One particularity of the layers around this burial is the complete absence of ceramic. Therefore, the dating of this cluster is still difficult and the radiocarbon analyses will be fundamental. Investigations of the bones and the taphonomic processes are still in progress.

##### *The Multiple Burial Type*

With 26 samples, multiple burials represent 17% of the primary burials and almost 15% of the total. Most of the time, juxtaposition includes only two individuals, with sometimes an original intermingling of the skeletons. Figure 5 shows a grave composed of a male adult, lying on his back, orientated west-to-east, with the head set at the west side (fig. 5). At his feet, a child was discovered. Its dental age is between 2½ and 3 years. This child is lying on its left side and also oriented west-to-east.

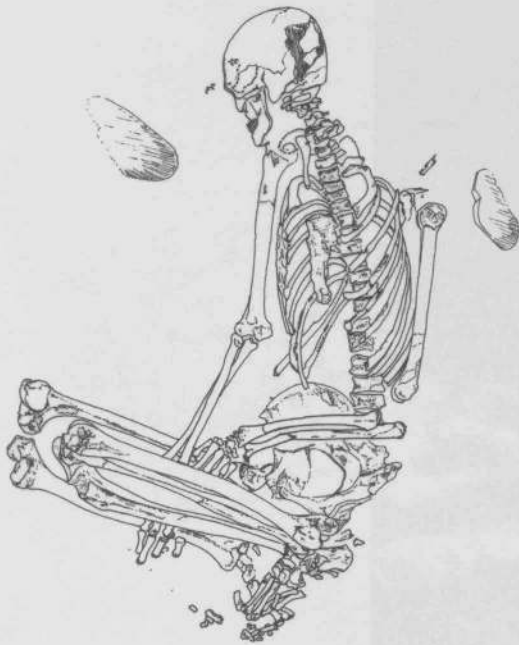


Fig. 2. Wrapped lower limbs.



Fig. 3. Remains of a mat recovered in a burial.

Fig. 4. View of the lowest primary burial (cremation) found in Shahi-Tump.



The orientation and position of the bodies follow the same pattern as in the individual graves, with a preference to a position on the lateral side, oriented west-to-east. One of the burials, excavated during the 2000 field season, contained 11 skeletons, adults and children together (fig. 6). The complexity of the bone positions indicates different degrees of care in the way the bodies were deposited.

Unfortunately, the cluster has been disturbed by the subsequent construction of new walls for the settlement. We call this kind of burial a “disaster grave”, indicating that the population had to manage a lot of deceased people in a short time. No trauma traces appear on the bones and we have no clue about any fighting that may have killed these 11 people, but something caused their death at about the same time, possibly an epidemic not



Fig. 5. Male adult and child double grave.

visible in the bones. This event causes an accident inside the mortality curve.

#### *Secondary Burial Type*

Secondary burials are hardly detectable, as the position of the body may have been disturbed by many varieties of events (erosion, collapsing of the grave, foraging animals), and not only by human intervention. To find evidence for the fact that the decomposition place and the final deposit place are not identical, one has only few arguments: no joining articulation of the bones, and few or no small bones. Secondary burials refer to an intentional, pre-defined action, which is an integrated part of the funeral process.

We have recognised 10 secondary graves. Some concern one, others several individuals. The whole sample represents 5,5% of the total.

These different kinds of voluntary interventions and manipulations define some clusters. The groups seem to regard death not in a unique way, but from culturally and practically distinct perspectives. Our first interest is to understand the funeral code of these societies that defined the different ritual oper-

ations carried out before, during, and after the deposition of the dead. Therefore, we have prepared an initial mortality analysis of the collection, in order to outline some prospective mortality anomalies.

#### MORTALITY ANALYSIS

As the grave typo-chronology is still in progress, period II and IIIa burials will be mixed to approach a first representation of Chalcolithic mortality patterns in general.

#### *Age Estimation*

For the immature population, estimating an age is possible most of the time. Because of the continuous growth process, we have different types of evidence at hand: tooth evolution, statures, and maturation. For adults, it is more complicated. Bones are always smashed and particularly the skulls have in most cases lost their inner shape. This means that the suture closure can be rated only for a minority of the collection. Rib sternal points and most pubic symphises are not always assessable.

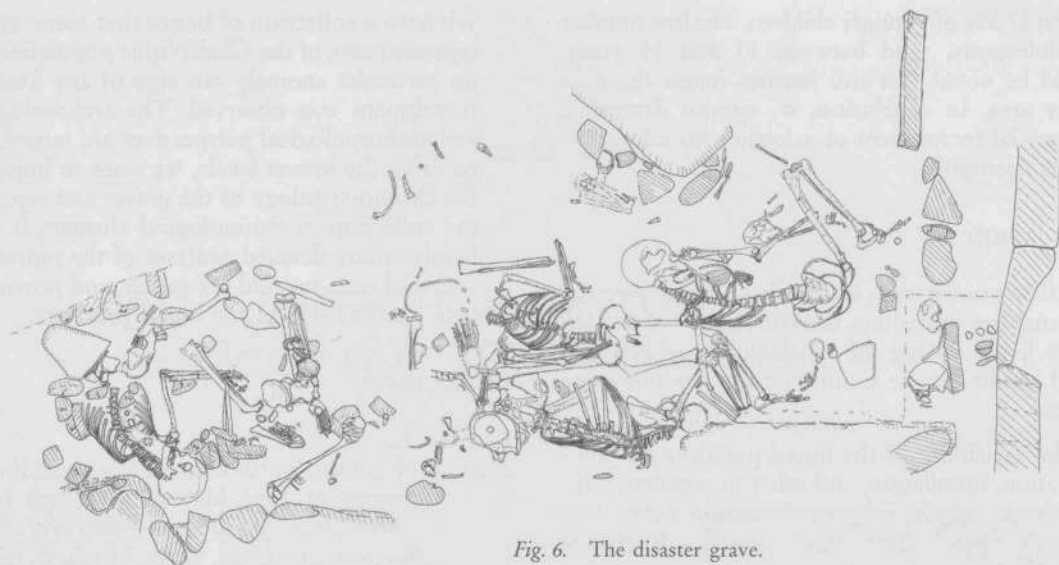
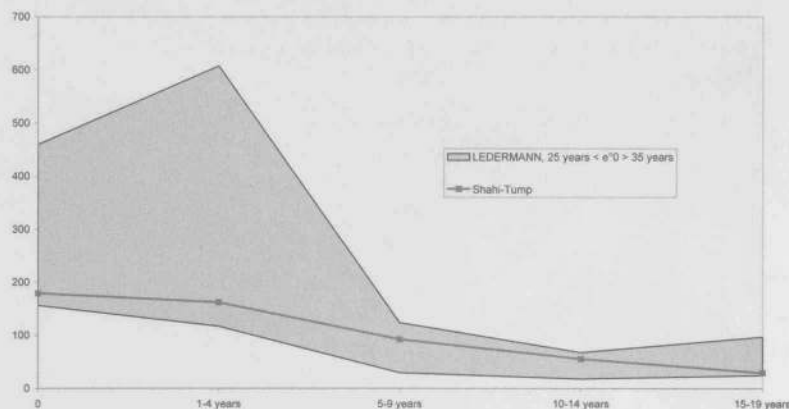


Fig. 6. The disaster grave.

Fig. 7. Shahi-Tump: mortality distribution for immatures.



In 2002, when we made a new anthropological study of all the skeletons, we decided to observe the dental wear, the bones and skulls, and tried to classify adults into three groups: "young", "between two ages", and "old". Dental wear is variable from one population to another, but we have adapted the scales for Shahi-Tump. The age distribution of adults shows a quite equal proportion between the different classes, 23% are indeterminate.

#### Gender Discrimination

Pelvic bone conservation is one of the poorest of the skeleton, because the remains were often flattened. As the sexual dimorphism of the rest of the bones is not well enhanced, gender ratio is prob-

lematic to carry out. The high proportion of indeterminate saps the significance of our results. We have noted 41 females and 18 males (respectively 43% and 19%), but the 37 indeterminate cannot easily be put aside.

#### Demographic Distribution

The first remarks we can make concern the good representation of sub-adults classes (fig. 7). The dark colour shows the normal distribution curve for an ancient population (Ledermann 1969), the white line shows the Shahi-Tump demographic distribution by age groups. Usually, we notice a deficit of children under 5 years, but this problem does not occur in our sample with a proportion of

around 17.5% of younger children. The low number of adolescents, aged between 15 and 19 years, should be noted, but still remains inside the normality area. In conclusion, we cannot determine any special recruitment or selection for admission to this necropolis.

#### CONCLUSION

This first presentation of the Shahi-Tump population analyses underlines the complexity of the societies living during the Chalcolithic period. The initial results can be summarized in the following points:

- The variability of the burial practices, of preparation, installation, and other manipulation involved in the burial procedures, like ochre, faunal or ceramic deposits, the presence or absence of goods inside the grave, a reopening of the grave, and any forms of manipulations it involves, the transportation of the remains, or any other combination.
- The choice of one or several funeral ceremonies. It reveals that the people had variegated visions of death, and that the choice of the particular kind of funerary practice was guided by personal choices and beliefs that were linked to a social code.

- We have a collection of bones that seems to be representative of the Chalcolithic population, as no particular anomaly nor sign of any kind of recruitment was observed. The archaeological and anthropological perspectives are mixed. By reaching the lowest levels, we want to improve the chrono-typology of the graves and separate the collection in chronological clusters. It will involve more detailed analyses of the representation of each age and sex group, and provide a better knowledge of the burial practices.

#### BIBLIOGRAPHY

- Besenal, R.  
2000 New Data for the Chronology of the Protohistory of Kech-Makran (Pakistan) from Miri-Qalat 1996 and Shahi-Tump 1997 Field-Seasons. In: Taddei, M./de Marco, G. (eds.), *South Asian Archaeology 1997*. Rome, 161-187.
- in press a Excavation of the Shahi-Tump Burials (Makran/Pakistan). A short presentation of the results. In: Raven, E. (ed.), *South Asian Archaeology 1999*. Leiden.
- in press b Chronology of Protohistoric Kech-Makran. In: Jarrige, C. (ed.), *South Asian Archaeology 2001*. Paris.
- Ledermann, S.  
1969 *Nouvelles Table-Types de Mortalité*. I.N.E.D., Travaux et Documents No. 53. Paris.