Tomb 1 at RJ-1 was excavated during three seasons by the Joint Hadd Project, between 2002 and 2004. Only the underground part of the monument remained, built in a round excavation, 30 to 40 cm deep, cut down to the bedrock through the sediment of the early 3rd millennium settlement. It was 8 metres in diameter and divided into two sectors by a partition wall running more or less east-west across the diameter. Each part was then divided into four chambers by three walls, making eight compartments in all. Over this preserved part, one can imagine a pavement of large flat slabs, of which only one remained. The elevation of the upper part is unknown, but one may hypothesize that it consisted of only four chambers, as part of the dividing walls were only meant to support the pavement slabs. According to the material found, the use of the tomb may have lasted two to three centuries, around 2550-2350 BC. There is evidence that the tomb was then dismantled, levelled to the ground. The stones of the upper part and the large slabs covering the lower part were recovered, probably to build another tomb nearby, and the lower part was filled with clean yellow clay from the plain, that had to be transported half a kilometer to the top of the mesa where RJ-1 is located (Figure 17.1).
Some two meters south of the monument, directly below the surface, were discovered three elongated parallel pits full of dislocated human bones and dug through the previous sediment to the bedrock. It is unclear whether they were dug simultaneously or at different times, although the latter seems likely (Figure 17.2). More than 22,000 bone fragments were collected between the tomb (ca. 2500) and the pits, allowing a partial understanding of the buried population and the funerary practices. With a few exceptions, the bones found inside the tomb were not connected with one another. This can probably be explained by the fact that no complete bodies were deposited in the subterranean part of the grave, and that the bones and bone fragments found there fell from the upper part at the time the monument was destroyed.

Inside the pits, the bones were always separated from the inner surface of the excavations by a black sediment rich in organic components, suggesting that they were deposited in a container, perhaps made of wooden planks, that had since long disappeared. At first sight, the bones found in bone pit 1 appeared dislocated and disorganised, until a group of 28 skulls was uncovered when excavating the southern part. To the north, many long bones of lower and upper limbs, well preserved, were arranged as a polygon around a possible hearth. A grouping of long bones was also detected in pit 2. On various occasions, some bones were still anatomically connected, mainly fragments of hands, feet and rachis. In two cases foetal bones were discovered together. It is impossible to tell if these were still grouped together when the bones were moved from the grave to the pit or if the stillborn babies were directly deposited in the pit.

Half of the bones found in pit 1 were burnt. These were mainly located in the upper part of the filling while deeper only some areas appear to have been in contact with combustion heat. It ranges from traces of rapid stoking (40%) to long burning at high temperature (60%).
Almost all were burnt when the flesh was gone, with a few exceptions, as for instance four vertebrae which were still connected and appear to have been burnt fresh. North of the pit, a hearth was probably set in the upper part of the filling and all the bones were deeply burnt. A few burnt bones here were also found in pits 2 and 3, usually burnt at low temperature, and almost none in the tomb itself (Figure 17.3).

This leads us to conclude that the corpses were first deposited in the upper part of the tomb. When the flesh was gone the bones were removed and deposited in pits. One may imagine that the pits were dug on the occasion of such activities, which occurred at least twice during the use of the grave until it was eventually emptied and destroyed. On this occasion, the operators did not hesitate to remove some corpses that were not completely fleshless, probably the last ones deposited in the tomb, as demonstrated by the persistence of some anatomical connections in the pit. The bones were not simply thrown into the pits but often reorganized according to categories, a practice common in all collective burials across the world.

FIGURE 17.3. Anamorphic representation of the bones found in Grave 1 and the three pits. The size of each one is determined by its frequency in the tomb or the pit. (Olivia Munoz. using software Poser 3.0™).
The bones found in such burials are also an important source of information about the population of that time. Despite the high fragmentation of the bones and the fact that they were mixed, it was established that at least 74 individuals were buried in tomb 1 and the pits, although the figure could be much higher, up to over 100 (Figure 17.4). Tomb 1 contained the remains of at least 20 women, 16 men, and 15 children below 15 years of age, whose sex could not be determined. A comparison of the number of young children with the average rate of death in an archaic population indicates that children below 5 were much fewer than expected, thus indicating that at least some of them were buried elsewhere, as indicated by the discovery of five tombs of babies or young children in buildings I and II at RJ-2 that are contemporaneous with the grave. The average size of adult individuals was around 1.6 m, men being taller than women. The pathologies that could be observed on the bones may partly be due to occasional food stress, and repetitive physical activity or working accidents, but do not attest to systematic violence.

These excavations clearly demonstrate the complexity of funerary rituals and practices in Umm an-Nar burials. They complement the observations already made at Al-Sufouh, Hili North A, Hili N or Al-Abraq. The dead bodies went through complicated processes that ended with mixing all of them in the community of ancestors. On the other hand, it also confirms that the monuments in which such process partly took place were dismantled after two or three centuries of use, when new ones, usually larger, were built, confirming the importance of these funerary rituals in social and kinship politics.
Serge Cleuziou & Maurizio Tosi

IN THE SHADOW OF THE ANCESTORS

THE PREHISTORIC FOUNDATIONS OF THE EARLY ARABIAN CIVILIZATION IN OMAN

second expanded edition

Edited by
Dennys Frenez & Roman Garba
Note: The maps in this book are historical and cannot be modified as they are specifically drawn for that period only and they do not reflect political, geographical and administrative boundaries. The Geographical Place Names (GPN) in these maps are not written by the Arabic Standardized Romanization System applied in the National Survey Authority of Oman (NSA).
# Table of Contents

**Foreword**
*Cornerstones of Archaeological Research in Oman*, by H.H. Haitham bin Tariq Al-Said ix

**Editorial Note**
*A Posthumous Expanded Edition*, by D. Frenez & R. Garba xi

**Acknowledgements** xv

**In Memoriam of Serge Cleuziou, 1945-2009**
*An Arabian Explorer in a Cartesian Mind*, by M. Tosi xix

**In Memoriam of Maurizio Tosi, 1944-2017**
*A Scientist of Curiosity*, by D. Frenez xxv

Chapter 1 • A Land of Many Landscapes for Greater Opportunities 1

Chapter 2 • The Search for the Earliest Humans in Oman 17

  *Window 1*
  *On the Trail of the First Humans in Oman*, by J. Rose 32

Chapter 3 • From Early Hunters to the Last Foragers 37

  *Window 2*
  *Early Herders at A-Buhais 18*, by M. Uerpmann & H.-P. Uerpmann 64

  *Window 3*
  *Earliest Cultures along the Coastlands of Oman*, by V. Charpentier 66

  *Window 4*
  *Sea Mammals and Humans in the Oman Peninsula*, by V. Charpentier & S. Méry 69

Chapter 4 • The Great Transformation 71

  *Window 5*
  *The Middle Holocene Fishermen Settlement of KHB-1*, by F. Cavulli & S. Scaruffi 109

  *Window 6*
  *The Prehistoric Graveyard at Ras Al-Hamra RH-5*, by S. Salvatori 117

  *Window 7*

  *Window 8*
  *Shell-Midden Economy in the Fourth millennium BC*, by M. Uerpmann & H.-P. Uerpmann 126

  *Window 9*
  *Marine Turtles from Ras Al-Hamra RH-5*, by M. Delfino & J. Frazier 128

  *Window 10*
  *Neolithic and Early Bronze Age Occupations at HD-5*, by F. Borgi & E. Maini 130
Window 11  
Bead Production in the Late Neolithic Communities of Coastal Oman, by M. Buta, D. Frenez, E. Bortolini, V. Charpentier & J.M. Kenoyer  

Window 12  
Jabal Al-Aluya. An Inland Neolithic Settlement, by M. Lemée & G. Gernez  

Window 13  
The Hafit Settlement HD-6 at Ras Al-Hadd, by V.M. Azzarà & M. Cattani  

Window 14  
The Early Metallurgy of the Oman Peninsula, by C. Giardino  

Window 15  
Analysis of Stone and Metal Artifacts from HD-6, HD-10 and HD-1, by R.W. Law  

Window 16  
The Earliest Camel Remains of Oman from Ras Al-Hadd HD-6, by A. Curci & M. Carletti  

Chapter 5 • A Great Society Emerges under the Eyes of the Ancestors  

Window 17  
Tomb 1 at Ras Al-Jinz RJ-1 and Associated Bone Pits, by H. Guy & O. Munoz  

Window 18  
Zukayt and the Burial Fields of Wadi Halfayin, by E. Bortolini  

Chapter 6 • Taming the Desert with Oases and Herds  

Window 19  
Animal Economy in an Early Oasis Settlement, by M. Uerpmann & H.-P. Uerpmann  

Window 20  
Earliest Potteries in the Oman Peninsula, by S. Méry  

Window 21  
An Early Third Millennium BC Madbassa?, by S. Cleuziou †  

Window 22  
The Early Oasis Settlements of the Hajar Region, by J. Orchard & J. Orchard †  

Chapter 7 • Trade and the Beginnings of Seafaring in the Indian Ocean  

Window 23  
Copper from Magan for the Mesopotamian Cities, by G. Weisgerber †  

Window 24  
From Green to Red. Smelting Red Copper from the Green Ore, by G. Weisgerber †  

Window 25  
Indus Pottery in the Oman Peninsula, by S. Méry  

Window 26  
Reconstructing an Early Bronze Age Boat, by T. Vosmer  

Window 27  
Early Bronze Age Navigation and Trade Routes, by T. Vosmer  

Window 28  
Bitumen from Ras Al-Jinz RJ-2, by E. Badel  

Window 29  
The Manufacture of Conus sp. Shell Rings at the Site of HD-60, by L.G. Marcucci  

Chapter 8 • The Early Arabian Civilization at its Zenith