

## **Bronze Age Arabia - 70 years on...**

### **What we have learned, and what we still don't know?**

This year's IASA Seminar for Arabian Studies (56<sup>th</sup>) is hosted by Moesgaard Museum and Aarhus University, Denmark and celebrates the 70<sup>th</sup> jubilee of our Arabian Gulf expeditions (est. 1953).

To mark this important anniversary and the legacy of P.V. Glob and T.G. Bibby we are planning a special session focused on the archaeology of Bronze Age Arabia, Saturday Aug. 5<sup>th</sup>.

### **Special Session positioning statement**

This special session will set out to address the major open questions, qualify the limits of our understanding, and suggest directions for new and more targeted research to fill these gaps. A total of 11 papers are presented by distinguished experts. Geographically, the session aims to cover all of Arabia with a thematically broad focus on the Bronze Age. Each presenter has been charged with a specific area or topic and some predefined questions. The aim of the contribution is to raise debate that propel our understating of Bronze Age Arabia forward.

The special session papers are planned for peer reviewed publication in a publication separate from the Proceedings to the Seminar for Arabian Studies.

## **Abstracts**

### **The walled 'urban' oases "Culture" in Northwest Arabia: 4th to 2nd millennium BCE.**

Marta Luciani, University of Vienna

Current field research in Arabia has revolutionized past paradigms.

The last couple of years are proving that very large oasis settlements formed in the NW deserts of the Arabian Peninsula, which are very extended in size (several hundred hectares), feature monumental architecture (foremost in the form of ceremonial plateaus and encircling walls) and evidence a functionally complex organization of settlement that includes large agricultural areas watered through sophisticated, large-size irrigation systems.

Within their enclosures they create a "bounded landscape" with a settlement model structurally and intentionally different from contemporary Mesopotamian, Egyptian and even Southern Levantine urbanism.

The exact chronological and cultural setting of this phenomenon and its importance for re-writing the history of the southern edges of the Ancient Near East will be highlighted in this lecture.

### **The Bronze Age in Northwest Arabia - A view from Tayma**

Arnulf Hausleiter, DAI Orient Abteilung, Berlin

While the understanding of the history of the Tayma oasis was long dominated by Assyrian-Babylonian and biblical textual sources as well as by the ten-year stay of King Nabonidus in the Hijaz, multidisciplinary research in the last 20 years has revealed an unprecedented settlement history that began as early as 7000 years ago with the introduction of oasis cultivation. With the establishment of a permanent settlement, the groundwater-fed oasis already reached an extent of about 9 km<sup>2</sup> at the transition from the 4th to the 3rd millennium BC. The contribution contextualises the significance of this evidence with the latest research in the region and beyond.

### **Bronze Age Societies of Yemen and Dhofar**

Michael Harrower, Johns Hopkins University

Our understanding of Bronze Age societies of Yemen and Dhofar remains somewhat limited in comparison with the Gulf region and far better-known South Arabian Iron Age kingdoms of later periods. Over the past 15 years ongoing archaeological field projects in Dhofar have yielded many important new discoveries, but violent conflict in Yemen has inhibited fieldwork and has damaged and destroyed deeply important sites and museums. What are the most important issues for heritage management and most pressing questions for future research? What current and prospective insights do these regions hold for broader Arabian, Near Eastern, and global archaeology?

### **The pan-Arabian c. 3000 BC monumental funerary complex**

Olivia Munoz, UMR 8215 "Trajectoires" Centre de Recherches, Paris

The tower tombs of the Oman peninsula (Emirates and Oman) were originally seen as an isolated "Hafit" cultural manifestation but now seem to form the eastern distribution of a much wider monumental funerary complex that materialized across Jordan, Sinai, Saudi Arabia, Yemen, and Kuwait. 1) What is known about the "Stone to Bronze Age" transition? 2) How does Eastern Arabia's first monumental tombs relate to the similar monumental tombs across Arabia? 3) What were the lifestyles of the tomb builders? 4) How was the Oman peninsula culturally and physically connected to Yemen, Saudi and Jordan in the "Hafit" period? 5) What are the major unknowns in our understanding of the earliest Bronze Age? and 6) How can we better address them in future research?

### **Early Bronze of SE Arabia - origins and evolutions focused on the Hafit to Umm an-Nar transition**

Nasser Al-Jahwari, Sultan Qaboos University

Nasser Al-Jahwari, Khaled Douglas & Mohamad Hesein

The Early Bronze of SE Arabia has for long looked at the Hafit and Umm an-Nar periods as to isolated cultural expressions. This paper explores the origins and evolutions of the SE Arabian Bronze Age cultures with a focus on the Hafit to Umm an-Nar transition. This important juncture is readdressed based on new data from the site of Ghoryeen in Oman which allow new insights into the cultural and societal developments of both the pre Hafit phase and the Hafit to Umm an-Nar transition.

## **The Umm an-Nar to Wadi Suq Transition, as seen Oman**

Stephanie Döpfer, Julius-Maximilians-Universität Würzburg

The transition from the Umm an-Nar to the Wadi Suq period in Oman is still poorly understood. Many of the fundamental questions (what happened, when did it happen, why did it happen) still await answers. By presenting our current state of knowledge in these debates, will focus in particular on the question of which push and pull factors (climate deterioration, economic and social changes in neighbouring regions) may have played a role in the changes during this transition and what are the major unknowns in our understanding of this transition. It will also discuss what are the effects of these changes to the broader region, e.g., on trade or settlement patterns.

## **What is this thing called 'Wadi Suq'. A view from the Northern Emirates**

Michel de Vreeze, Durham University

It is becoming increasingly clear that the Umm an-Nar (2800-2000BC) to Wadi Suq (2000-1600BC) transition around the end of the 3rd millennium was gradual in many ways. Nevertheless, the transition falls around a time of some important regional developments in terms of political configurations across the region (Mesopotamia, Indus Valley, Bahrain). The aridification (4.2Ka) effect has often been considered to play a role in these developments across the region. Likewise, the end of the Umm an-Nar period in the relatively arid zone of the Oman Peninsula is likely tied to these events. Besides immediate climatic effects (aridification) on local communities, it is interesting to discuss the possible indirect effects that might have played out around the late 3rd millennium, to do with the shifting dominance of Dilmun in the exchange network, and the waning of Mesopotamian and Indus related influence around the time. Besides the need for more absolute dates for the Bronze Age in SE Arabia, the possible influence of climatic events on changing exchange relations between Wadi Suq communities and new regional powers and political configurations, such as Dilmun will be discussed.

## **Bronze Age Metal Exchange in the Greater Persian Gulf region**

Lloyd Weeks, University of New England

This paper reviews Bronze Age metal extraction in southeastern Arabia and the wider exchange of metals within the greater Persian Gulf region during the 3rd and 2nd millennia BCE, considering archaeological, archaeometric and documentary evidence. The specific focus is the production and trade of copper, tin, and silver, including consideration of their sources and the routes and mechanisms through which they reached Arabia. Together, these metals illustrate the significance of eastern Arabian metal production and trade for understanding wider regional developments, while highlighting the necessity of a supra-regional scale of analysis – for which we can co-opt Possehl's concept of the Middle Asian Interaction Sphere – in order to better understand 'local' Arabian expressions of economic and technological change. The presentation will consider remaining uncertainties in our understanding of Arabian Bronze Age metal production and exchange, and identify avenues for future research to address these lacunae.

## **Beyond Trade: The Intricacies of Indus Civilization Interplay with Dilmun during the Bronze Age**

Dennys Frenez, University of Bologna

Akinori Uesugi, Tsurumi University

The Indus Civilization (c. 2600-1900 BCE, present-day Pakistan and north-western India) is renowned for its advanced civil engineering and urban planning, skilled craftsmanship, and extensive long-distance trade networks spanning Western and Central Asia. In this scenario, the interrelationships between the Indus Civilization (known as Meluhha in the Sumero-Akkadian texts) and Dilmun carry profound historical and archaeological significance considering Bahrain's pivotal location on the maritime routes linking the Greater Indus Valley with the Oman Peninsula and southern Mesopotamia. This presentation, therefore, endeavours to deconstruct the intricate dynamics of this interplay, shedding light on the multifaceted aspects that influenced not only the exchange of commodities but also the reciprocal transmission of significant social-economic concepts. Adopting a comprehensive multidisciplinary approach, this study explores the cultural, economic, and political dimensions of the Indus-Dilmun nexus, investigating the nature and evolution of the trade routes, the range of commodities exchanged, and the underlying economic mechanisms that facilitated and sustained this interaction. Particular attention is directed towards identifying cultural exchanges and diffusion of ideologies, concepts, and technological innovations between these regions during the late third and early second millennium BCE. Finally, an effort is made to interpret this phenomenon and its evolution in the light of major socio-political events and climatic changes that occurred locally in the wider region, attempting to identify individual cause-and-effect relationships or a more general domino effect.

## **The economic evolution of the Kingdom of Dilmun as proxy for Macro level changes in Middle Asia**

Steffen T. Laursen, Moesgaard Museum & Aarhus University

The evolution of the Kingdom of Dilmun can now be traced in relative high detail in the archaeological record. While the overall introduction, culmination, and decline evidently occurred between c. 2300 and 1600 BC, several stages of expansion can also be identified within Dilmun's general economic boom. This contribution will characterize the most distinct stages of economic expansion and attempt to date each stage through C14 based Bayesian models. The successive steps of growth which lead to the culmination of Dilmun as an emporium of sea trade are of particular importance because the underlying causes for the shifts in trade must echo changing conditions far beyond the island of Bahrain. A better understanding of Dilmun's economic boom is accordingly of significance to the wider debates on Bronze Age Middle Asia and beyond. Specific questions that will be addressed in this line of inquiry are 1) what happened, 2) When did it happen, and 3) outline the problems of making causal links to changes in Babylonia, Iran, Oman and the Indus World?

**Discussion Panel**

Prof. Robert Carter, Qatar Museums Authority

Prof. Derek Kennet, Durham University

Prof. Peter Magee, Zayed National Museum, Abu Dhabi.

Prof. Adrian G. Parker, Oxford Brookes University