

PROGRAM

Thursday 21 May: State of the art, terminology and methods

- 08:30-09:00 Coffee & Registration
- 09:00-09:30 Jennifer Swerida & Mathilde Jean
Welcome & Introduction to the Workshop
- 09:30-10:30 Sophie Méry - *Keynote Lecture*
A state of the art: pottery studies from the Neolithic to the end of the Bronze Age in the Oman Peninsula
- 10:30-11:00 Coffee Break
- 11:00-11:30 Stephanie Döpfer
Umm an-Nar and Wadi Suq Pottery traditions from north-central Oman
- 11:30-12:00 Samiya Al Shaqsi
Bronze Age Pottery in Oman: Reconstructing Production Systems and Craft Organization
- 12:00-12:30 Maria Paola Pellegrino
Reassessing the Late Bronze Age in the Northern UAE (ca. 1600–1300/1200 BCE): Ceramic Traditions and Regional Dynamics
- 12:30-13:30 Lunch Break
- 13:30-14:00 Akshyeta Suryanarayan
Crafting cuisine: Ceramics and culinary technologies in ancient southeastern Arabia
- 14:00-14:30 Eli Dollarhide
Communicating with pots: technological styles of Umm an-Nar ceramics
- 14:30-15:00 Akinori Uesugi, Takehiro Miki, Dennys Frenéz
Technical and Stylistic Traditions of Post-Urban Indus Pottery: Evidence from Eastern Arabia
- 15:00-15:30 Coffee break
- 15:30-17:00 Open Discussion
- 17:00-19:00 Workshop reception

Friday 22 May: Aligning Datasets

- 09:00-09:30 Coffee & Welcome
- 09:30-10:00 Michel de Vreeze
The Island at the Centre of the World? Umm an-Nar Island's multicultural nature viewed through the ceramic record
- 10:00-10:30 Nour Al Marzooqi, Daniel Eddisford, Michel de Vreeze, Colleen Morgan, Peter Sheehan
Rethinking Umm an-Nar Pottery Production in the Al Ain Region
- 10:30-11:00 Khalid Douglas, Nasser Al Jahwari, Sophie Méry, Mohamed Hesein
Umm an-Nar Domestic Pottery and Regional Variation Across the Hajar Mountains: A Case Study from Al-Ghoryeen and Dahwa Settlements
- 11:00-11:30 Coffee Break
- 11:30-12:00 Michele Degli Esposti
Early Bronze Age Pottery from Salut-ST1: A Single-Period Assemblage in the Bisya-Salut Oasis?
- 12:00-12:30 Michel de Vreeze, Dennis Brakemans, Bleda Düring
Ceramics at the Crossroads? Reassessing Umm an-Nar and Early Wadi Suq Assemblages from Burj Huraiz in the Sohar Hinterlands
- 12:30-13:30 Lunch break
- 13:30-15:30 **Practical workshop**
Please bring some materials (pottery, data, thin sections) for discussion
- 15:30-16:00 Coffee break
- 16:00-17:00 **General Discussion**
- 17:00-17:30 **Closing Remarks & Next Steps**
- 18:00-20:00 Participant Dinner

ABSTRACTS

A state of the art: pottery studies from the Neolithic to the end of the Bronze Age in the Oman Peninsula

Sophie Méry¹

This presentation will be a state of the art, a synthesis of ceramic studies in the Oman peninsula from the Neolithic (mid-6th millennium) to the end of the Bronze Age (around 1600 BC).

Over the past thirty years, archaeometric (determining the composition of clay and temper) and technological (revealing all or part of the production sequence) analyses have been added to typochronological analyses. However, archaeometric and technological studies remain to be developed. Questions of chronology, periodization, and cultural transmission will be addressed. During the Neolithic period, all pottery originated in southern Mesopotamia. The diffusion of the pots was limited to the coast of the Arabian Gulf, but decorated plaster vessels exist on the islands off Abu Dhabi, a phenomenon also known in the Levant. The Early Bronze Age (Umm an-Nar period), in the 3rd millennium BC, saw the emergence of local ceramics, but potters from the Indus and Makran regions also settled in the Oman peninsula. Moreover, the importation of pottery was important. The end of the 3rd millennium BC corresponds to a decline in local pottery techniques. Other local ceramics, which appeared at the beginning of the 2nd millennium BC, have no connection in terms of form, decoration, or technology with the pottery of the Umm an-Nar period; however, some of the pottery highlights a transition between the two periods, also corroborated by stoneware. The distribution of Wadi Suq pottery appears to have been limited to the northwest of the Oman peninsula. The question of the transition between the Bronze and Iron Ages remains much debated, with the question of the existence of Iron Age 1 being at the center of the investigations, as well as the chronological gap between Oman and the United Arab Emirates.

Umm an-Nar and Wadi Suq Pottery traditions from north-central Oman

Stephanie Döpfer²

This paper examines the pottery traditions of Early and Middle Bronze Age sites in north-central Oman, focusing on Bat, Al-Zebah, Tawi Said, as well as several sites in the Wilayat al-Mudhaybi region, including Al-Khashbah, Mukhtru, Al-Qabrayn, and Al-Musalla. Drawing on recent excavations and survey collections, the study compares pottery recovered from tombs, tower structures, rectilinear architecture and other, more ephemeral sites. The aim is to evaluate how variations in the production and use of pottery reflect regional, functional and chronological

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differences during the Umm an-Nar and Wadi Suq periods of the third and second millennia BCE. Particular attention is given to the interplay between vessel form, decorative practices, ware categories and archaeological context. Where available, radiocarbon dates are used to refine the chronological framework and clarify temporal relationships between different pottery traditions. By placing these assemblages in dialogue with one another, the study highlights the importance of interregional and inter-contextual comparison in achieving a comprehensive understanding of pottery production, consumption and exchange. Ultimately, the study aims to contribute to a more cohesive, comparative understanding of ceramic production, use, distribution and diachronic development across the Oman Peninsula.

Bronze Age Pottery in Oman: Reconstructing Production Systems and Craft Organization

Samiya Sulaiyam Al Shaqsi³

Bronze Age pottery in Oman constitutes one of the most informative categories of archaeological evidence for reconstructing the technological traditions, economic organization, and social structures of ancient communities. Within the cultural framework commonly associated with Magan pottery production reflects not only daily domestic activities but also broader systems of craft specialization and resource management. This study approaches Bronze Age pottery beyond traditional typological and chronological classifications by focusing on a comprehensive reconstruction of the pottery production system. The research examines raw material procurement, clay recipes and temper selection, paste preparation techniques, vessel-forming methods such as coiling and hand-shaping, surface treatment practices, and firing conditions in order to identify technological traditions and levels of craft specialization. Special attention is given to the identification of local production through technological markers such as fabric composition, firing variability, manufacturing defects, and wasters, which may indicate the existence of pottery workshops even in the absence of preserved kilns. Furthermore, the study investigates pottery as an indicator of economic organization by analyzing functional variability between cooking vessels, storage jars, transport containers, and serving wares, as well as differences in vessel quality that may reflect social differentiation. Spatial analysis of pottery distribution within archaeological contexts is employed to identify activity areas and potential production zones, allowing the reconstruction of workshop organization and patterns of consumption. Comparative technological analysis is also used to distinguish local pottery traditions from imported or externally influenced wares, thereby contributing to the understanding of interregional exchange networks linking southeastern Arabia with neighboring cultural spheres such as Mesopotamia and Dilmun. In addition, the research explores the concept of technological style as a reflection of cultural identity and learned craft traditions, aiming to identify recurring manufacturing signatures that may correspond to individual potters or workshop groups. By integrating technological analysis,

³ Oman Ministry of Heritage and Tourism

functional interpretation, and spatial distribution, this approach seeks to reconstruct the full organization of pottery production and circulation during the Bronze Age. Such a perspective allows pottery to be understood not merely as a chronological marker, but as a dynamic indicator of technological knowledge, social organization, craft specialization, and cultural interaction in Bronze Age Oman.

Reassessing the Late Bronze Age in the Northern UAE (ca. 1600-1300/1200 BCE): Ceramic Traditions and Regional Dynamics

Maria Paola Pellegrino⁴

The Late Bronze Age (ca. 1600–1300/1200 BCE) remains one of the least explored phases of UAE protohistory. Long interpreted as a cultural hiatus, possibly reflecting increased mobility and limited archaeological visibility, it is now increasingly recognized as a distinct and transformative period within Southeast Arabia. This paper reassesses the Late Bronze Age in the northern UAE through a study of ceramic assemblages from the unpublished site of Masafi-5 (ca. 1400–1200 BCE), analyzed alongside material from Shimal SX, Tell Abraq, Kalba 4, selected funerary contexts in the Fujairah region, and comparative evidence from Husn Salut in Oman. The research combines typo-chronological classification, macroscopic fabric analysis, technological examination, and petrographic investigation. This integrated approach identifies coherent ceramic traditions and production systems within the northern UAE and clarifies patterns of circulation and regional interaction. The evidence refutes earlier interpretations of decline, instead revealing adaptive settlement strategies and a sustained yet gradually transforming ceramic production integrated within regional exchange networks. The Late Bronze Age therefore emerges as a pivotal phase marked by internal transformation and structured connectivity within Southeast Arabia during the second millennium BCE.

Crafting cuisine: Ceramics and culinary technologies in ancient southeastern Arabia

Akshyeta Suryanarayan⁵

Pottery is a transformative technology: it reshapes the affordances of its contents, facilitates the storage and transport of goods, and materialises culinary knowledge (Miller 1987; Pollock 2023). Its invention and spread altered diets, economies, and social practices across much of the world (Rice 1999; Craig 2021). Yet its adoption was neither inevitable nor uniform, and the social, economic, and ecological factors that drove or constrained its uptake remain insufficiently understood. Moreover, although craft production and consumption practices are deeply interrelated, they are often treated as separate spheres of enquiry (Stahl 2014), obscuring how technologies such as pottery actively structured everyday food practices. In southeastern Arabia, pottery was not routinely used until the early-mid third millennium BCE, suggesting that ceramic

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technology initially played a limited role in food and resource management (Méry 2000). This raises important questions: what needs did pottery address in this region? How did its adoption 'fit' with existing culinary practices and subsistence strategies? And what can ceramic use reveal about broader transformations during the Umm an-Nar period? This talk explores these questions through previously published lipid residue analysis of pottery from inland Umm an-Nar period settlements (Suryanarayan et al. 2025), alongside new preliminary results from Umm an-Nar Island. By reconstructing vessel use at the molecular scale, the talk will explore the relationship between ceramic use, resource management, and exchange networks in Early Bronze Age southeastern Arabia, offering new perspectives on how and why pottery became embedded within local culinary and technological systems.

References:

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- Suryanarayan et al. (2025) 'Identifying pastoral and plant products in local and imported pottery in Early Bronze Age southeastern Arabia', *PLoS One* 20(6): e0324661. <https://doi.org/10.1371/journal.pone.0324661>

Communicating with pots: technological styles of Umm an-Nar ceramics

Eli Dollarhide⁶

The beginning of the Umm an-Nar period marked the start of the Oman Peninsula's first large-scale ceramic industry. These initial pots, bowls, and jars were produced with remarkable technological know-how: the peninsula's first potters levigated clays, utilized slow-turning wheels, and built kilns that reached over 1000 degrees Celsius. A wealth of literature has examined how the resulting fine, high-fired, black-painted wares exhibit influences from the neighboring Iranian plateau, the Indus Valley, and Mesopotamia. In this paper, I propose an alternative perspective to finding meaning in local Umm an-Nar pottery by looking inwards. In a society with no writing system, I explore how the Early Bronze Age ceramics of the Oman Peninsula can be understood as

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their own form of communication and ‘information technology,’ drawing from the theoretical work of Cathy Costin. I present my petrographic analysis of Umm an-Nar sherds from the UNESCO World Heritage Site of Bat and several of its environs: Khutm, Rakhat al-Madrh, Dariz, and, further to the south ‘Amlah, to establish an Umm an-Nar technological style that exhibits local variation even within the small Bat region. I position the technological choices and techniques evinced in the thin-sections as semantics. In tracking the movement of ceramics across the Bat region, different communication networks appear. Broadening the scope of this perspective to include other Umm an-Nar sites within Hajar mountains and beyond reveals an Early Bronze Age peninsula rich in interconnection and communication through ceramic media.

Technical and Stylistic Traditions of Post-Urban Indus Pottery: Evidence from Eastern Arabia

Akinori Uesugi⁷, Takehiro Miki⁸, Dennys Frenéz⁹

This presentation proposes a diagnostic framework for the identification of Post-Urban (Late Harappan) Indus pottery traditions in Eastern Arabia, addressing a long-standing need for clearer technological and stylistic criteria applicable to early second-millennium BCE assemblages from the Gulf and the Oman Peninsula. Following the decline of the Urban Indus system after c. 1900 BCE, exchange across the Arabian Sea did not abruptly collapse but was instead reorganised, with ceramic materials constituting the most visible archaeological indicators of these reconfigured connections. After outlining the main technical and stylistic features of Post-Urban ceramic traditions in the Greater Indus Valley, i.e. the Cemetery H tradition of the Punjab, the Jhukar tradition of the Lower Indus, and the Sorath Harappan tradition of Gujarat, the presentation will focus on Indus-related pottery from second-millennium BCE contexts in Oman and Bahrain, which is closely associated with the ceramic style in Gujarat. While a few archaeologists have discussed the presence of ceramic vessels related to Post-Urban Indus productions in Eastern Arabia, no synthetic approach has been made to provide a clear definition of this ceramic style in the region. A multi-faceted approach to defining this ceramic style in the region, focusing on clay sources and preparation, modelling techniques, and stylistic elements, will therefore be presented. By synthesising stylistic, technological, and decorative criteria, this presentation provides practical reference parameters for archaeologists working in Eastern Arabia, enabling more secure identification of Post-Urban (Late Harappan) Indus pottery traditions, and contributing to a more refined understanding of craft practices, mobility, and exchange networks across the Indus-Arabian interface in the early second millennium BCE.

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The Island at the Centre of the World? Umm an-Nar Island's multicultural nature viewed through the ceramic record

Michel de Vreeze¹⁰

The ceramics from Umm an-Nar Island give a particularly informative view of the multiple cultural backgrounds of people meeting on the Island. With renewed excavations initiated by the DCT (2020-2023), a rich record of material culture is associated with highly detailed archaeological phasing of the occupation ranging from ca. 2800-2100 cal BC. The ceramic record reflects both local Umm an-Nar traditions and contact around the Gulf, particularly but not exclusively with Mesopotamia. Insightful are the clear links to coastal traditions that connect Umm an-Nar with Eastern Arabia and Bahrain, not archaeologically visible away from the coast during the earlier stages of the Umm an-Nar period, suggesting a strong and continuous coastal culture with links to northern communities. These ceramic traditions herald the influence sphere of Dilmun a few centuries later. The well-contextualised and dated ceramic record from Umm an-Nar Island allows us to look at the background of the inhabitants and their unique multicultural connections and revisit assumptions on the nature of interregional exchange in the Gulf.

Rethinking Umm an-Nar Pottery Production in the Al Ain Region

Nour Al Marzooqi¹¹, Daniel Eddisford¹², Michel de Vreeze¹³, Colleen Morgan¹⁴, Peter Sheehan¹⁵

This paper presents preliminary results from ongoing research on Umm an-Nar (Early Bronze Age) pottery production in the Al Ain region, drawing on assemblages from Hili Archaeological Park and ongoing excavations of a new discovered Umm an-Nar tomb on the edge of the Mu'tariḍ Oasis, c.10km to the SE of Hili. At Hili, domestic assemblages associated with ephemeral fire pits, post holes, and a mudbrick structure are located in close proximity to the only currently known Umm an-Nar pottery kiln. However, the identification of a growing number of Umm an-Nar sites in the Al Ain region invites a reassessment of the assumption of centralised ceramic production focused on the Hili settlement. By comparing ceramic forms, fabrics, and surface treatments from domestic and funerary contexts, this study explores the possibility of multiple production loci, including household-level manufacture or small-scale workshops operating alongside specialised kiln production. The paper outlines a methodological framework combining typological analysis with emerging compositional data, including planned pXRF analyses, to investigate technological choices, clay sourcing, and production variability. By situating pottery production within both settlement and funerary landscapes, this research contributes to broader discussions on regional chronologies, craft organisation, and social practice in Bronze Age southeast Arabia.

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Umm an-Nar Domestic Pottery and Regional Variation Across the Hajar Mountains: A Case Study from Al-Ghoryeen and Dahwa Settlements

Khaled Douglas¹⁶, Nasser Al Jahwari¹⁷, Sophie Méry¹⁸, Mohamed Hesein¹⁹

The Umm an-Nar culture (c. 7600–2000 BCE) represents a key phase in the Bronze Age of southeastern Arabia, characterized by widespread settlement and tombs with distinctive material culture. Domestic pottery forms an essential component of daily life and provides valuable insight into production practices and regional traditions. Despite its importance, comparative studies of domestic ceramics across the Hajar Mountain range remain limited. The presentation examines domestic pottery assemblages from Al-Ghoryeen, on the southern side of the Al Hajar Mountain, and Dahwa 7, on the east side the Al Hajar Mountain, in order to assess similarities and differences in ceramic traditions. Umm an-Nar pottery assemblages from both settlements were retrieved from well stratified context and dated by C14. The study is based on typological analyses of vessel forms, fabrics, and surface treatments. The results reveal both shared characteristics and localized variations in pottery production. While certain forms and types suggest common cultural practices, differences in fabric composition and imported pottery types and percentages point to locally adapted traditions and trade system. These patterns indicate that the Hajar Mountains did not constitute a complete barrier to cultural interaction but rather shaped regional expressions of domestic pottery. This study contributes to a better understanding of Umm an-Nar domestic life and highlights the role of geography in structuring material culture in Bronze Age southeastern Arabia.

Early Bronze Age Pottery from Salut-ST1: A Single-Period Assemblage in the Bisya-Salut Oasis?

Michele Degli-Esposti²⁰

Extensive excavations at the “tower” site of Salut-ST1, located in the ancient oasis of Bisya and Salut (Sultanate of Oman), have revealed a deeply eroded stratigraphic sequence. Despite this surface erosion, the site preserves significant “sealed archives” within its negative features. Notably, the large ditch surrounding the central stone monument contains colluvial deposits intercalated with anthropogenic layers, indicating phases of repeated activity within the partially backfilled structure. Radiocarbon analysis dates this stratigraphic sequence to c. 2450–2200 cal BC. The associated ceramic assemblage appears largely homogeneous, characterised by a limited repertoire of shapes that align with the Middle Umm an-Nar period, as recently redefined by Swerida et al. (2021). This contribution presents the pottery from two primary sequences surveyed within the main ditch, along with a description of the proposed fabric typology. Within the context of the Bisya and Salut area, where two other “tower” sites are known at a close distance from ST1,

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these data can serve as a comparison for those assemblages, contributing to the aim of refining the chronological distribution of these monuments and investigating their potential coexistence or succession. Besides, Salut-ST1 will hopefully be situated within the broader context of the Wadi Bahla basin, integrating ongoing fieldwork to reconstruct regional settlement patterns across the Early Bronze Age landscape.

Ceramics at the Crossroads? Reassessing Umm an-Nar and Early Wadi Suq Assemblages from Burj Huraiz in the Sohar Hinterlands

Michel de Vreeze²¹, Dennis Brakemans²², Bleda Doring²³

The site of Burj Huraiz is a rural settlement located in the Sohar hinterlands. Positioned in the northern Batinah, it finds itself at the crossroads of northern and southern cultural traditions in the Bronze Age, connecting the coast and the hinterlands, and straddles the Umm an-Nar – Wadi Suq transition. As a rural site on the border of various ceramic traditions, it gives important insights about changes over time and connection to other regions, with evidence of ‘regional’ versus imported ceramics. This paper will briefly present the general nature of the ceramic assemblages and then shift to the compositional data we obtained from these assemblages through petrography and pXRF analysis. This integrated approach aims to assess the nature and origin of the various ceramic assemblages at the site and their change over time.

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