### DAY 1 AUDITORIUM

### Tracing Ancient Pathways: A Landscape Archaeological Survey of Settlements and Routes in Coastal Omani Sharqiyah

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Keywords: Neolithic, Early Bronze Age, landscape archaeology, survey, settlement

**Abstract:** This paper presents the result of a preliminary study aimed at evaluating the archaeological potential of the Sur area, in the coastal Omani Sharqiyah. A survey was carried out along the coastal strip between Sur and Ras Al Jinz to investigate the absence of settlements between the Neolithic and the Bronze Age in the area.

This survey also aimed at identifying potential pathways, posited based on the relationship between watercourses, funerary areas and (hypothesized) settlements. To achieve these objectives, we combined a series of landscape archaeology methods, such as least-cost path and the analysis of site distribution in a GIS environment, integrating previous research data.

The main result of such preliminary study is the identification of territorial relationships between the mouth of the wadis on the coast and a series of settlements potentially dating back to the 4th millennium BCE, marked by pluricellular stone structures, which probably presented a superstructure made of short-lasting materials. In addition, more recent structures were identified further inland following the wadis and the hypothesized paths.

The valuable data provided by the survey and pilot study allow designing more refined landscape analyses for future research in the region.

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## The Omani-Italian Archaeological Expedition at Al Tikha: Preliminary Report of the 2023-2024 Archaeological Campaigns

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- Khaled Douglas (Sultan Qaboos University)
- Nasser Al-Jahwari (Sultan Qaboos University)

- Mohammed Hussein (Sultan Qaboos University)

Keywords: Archaeological Excavation, South Al Batinah, Oman, Umm an Nar, Early Bronze Age

Abstract: First identified and surveyed by the Rustaq-Batinah Archeological Survey between 2013-2018, the site of Al Tikha is located 42km south-west of the coastline, among the eastern slope of the Al-Hajar Mountains, on the interfluve between the Wadi Sahtan and the Wadi al-Ghashab north of the modern city of Rustaq, in the Batinah region. The archaeological investigation conducted so far revealed a large settlement, dating back to the Umm an Nar period and with a later reoccupation during the Iron Age, representing the first settlement of the Early Bronze Age excavated in the South Al Batinah. This paper reports on the second and third seasons of the Omani-Italian Archaeological Expedition at Al Tikha, a joint project born in 2022 between the Department of Archeology at the Sultan Qaboos University and the University of Pisa, under the supervision of the Omani Ministry of Heritage and Tourism.

### A unique Early Bronze Age Building from Al-Ghoryeen, Oman

- Khaled Douglas, Sultan Qaboos University
- Nasser Al-Jahwari, Sultan Qaboos University
- Mohamed Hesein, Sultan Qaboos University

Keywords: Al-Ghoryeen, Late Hafit, Umm an-Nar, Settlement, Public

**Abstract:** Al-Ghoryeen is a very important Early Bronze Age site located on the western side of Al-Hajer Mountain, ca. 95 km southwest of Muscat in Wilayet Al-Mudhayb in Oman. The fourth season of excavations at the site, which took place in December 2023, led to the exposure of the very important building, S3. Most of the architectural phases of the building were uncovered. The earliest phase shows a unique large rectangular building with an outer oval enclosure stone wall. The size and plan of the building presumably indicative of a public function. The different architectural phases are dated by C14. They provide evidence of a late phase of Hafit period and early Umm an-Nar occupation. All phases of the building will be presented and discussed in the presentation.

# Mutaredh Community Mall – more insights into the development of the hydraulic, agricultural and funerary landscapes of al-'Ayn (UAE).

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- Mohammed Khalifa (DCT Abu Dhabi)
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**Keywords**: al-'Ayn – oasis landscape— archaeological monitoring - Iron Age agriculture - Umm an-Nar tombs

**Abstract:** Excavations for a major construction project along the western edge of Mutaredh Oasis have produced important new evidence for the hydraulic, agricultural and funerary landscapes of al-'Ayn.

The palimpsest presented by the site includes at least one monumental Umm an-Nar tomb, located nearly 10km from the nearest previously known examples at Hīlī. This Bronze Age funerary landscape is overlain by an extensive and complex Iron Age field system, with a network of channels feeding coherent arrangements of tree pits providing further evidence for the scale and extent of Iron Age agriculture. Deep sections provided by excavation for underground car parks have shown the relationship between the natural geomorphology of the site and ancient hydraulic systems including water harvesting.

The Iron Age landscape here is preserved beneath deep sand deposits which are in turn overlain by Late Islamic features including an earthen wall probably marking the original western extent of the oasis, a defensive tower and a well-preserved mosque.

The preservation and presentation of these key elements in situ within the plot provides a significant opportunity for public engagement with ongoing archaeological investigations into the development of the oasis landscape of al-'Ayn.

## Specialisation in tuna fishing in the Early Bronze Age. The case of the village of Ra's al-Hadd 6 (Sultanate of Oman).

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**Keywords**: Early Bronze Age, pelagic fishing, zooarchaeology, Great Transformation, social collaboration

Abstract: The Hafit settlement at Ra's al-Hadd 6 (HD-6), dated to the first half of the third millennium BC, is located in the eastern most area of the ash-Sharqiyyah region of the Sultanate of Oman where a complex of architectural units made of mudbrick and stone were uncovered during several excavation campaigns. A large fish assemblage (45,000 bones) provides a set of information on the exploitation of the coastal area for which little is known compared to the Neolithic period. These bones offer valuable insights regarding the onset of pelagic fishing and the recognition of sea control by the inhabitants of HD-6. Throughout the period of occupation, there was a noticeable rise in pelagic fish presence, with an increase of the weight of the tuna (Thunnus spp.). These data suggested an improvement in techniques, with the introduction of metal hooks, the possible use of small boats and, above all, an intensification of the fishing activities that we proposed to interpret has an increase of collaborative activities. The study of fish remains could emphasise the already demonstrated social changes in the Bronze Age Hafit society, so called "Great Transformation". For these communities, social cohesion seems to be essential and the fishing of schools of tuna could also require collective actions for the capture and process.

### Hili 14 and is role within Iron Age society

Ali Abdu Rahman Al Meqbali (DCT, Abu Dhabi / University of Durham)

- Daniel Eddisford (DCT, Abu Dhabi / University of Durham)
- Sam Botan (University of Leiden)
- Michel de Vreeze University of Durham)
- Dominic Tomasi
- Abdullah Al Yammahi (DCT, Abu Dhabi)
- Abdullah Khalfan Al Kaabi (DCT, Abu Dhabi)
- Dia Al Tawalbeh (DCT, Abu Dhabi).

Keywords: Hili 14, Iron Age, archaeology, Landscape, Development

Abstract: The Department of Culture and Tourism Abu Dhabi has undertaken five seasons of archaeological excavation and survey at the fortified Iron Age site of Hili 14, located within the Hili Archaeological Park in Al Ain. This work has confirmed the presence of an exceptionally well-preserved Iron Age landscape dating to the Iron Age II Period (1000-800 BCE). In addition to the fortified compound of Hili 14 and a monumental building within its walls, a range of other structures have been excavated in the immediate surrounding area in association with the fortified compound. These include a possible ritual building, but also several pottery kilns, areas of possible craft activity and irrigation systems associated with agriculture. Radiocarbon dates now inform us about the quick rise of Hili 14 and its relatively short period of use. These findings now allow for a timely discussion on the role of Hili 14 and its place within the Iron Age social landscape. The paper will conclude by comparing Hili 14 with Iron Age settlements in the region and discuss Iron Age society through the lens of Hili 14's results.

### Tell Abraq After the Bronze Age: Results from the 2023 Field Season.

Michele Degli Esposti et al.

Abstract: Tell Abraq, shared between the emirates of Sharjah and Umm al-Quwain, is one of the most well-known Bronze Age sites in Southeast Arabia. Renewed excavations begun in 2019 by the Italian Archaeological Mission in Umm al-Quwain, in collaboration with the Tourism and Archaeology Department Umm al-Quwain, have transformed our understanding of Tell Abraq after the Bronze Age. There seems to have been an occupational contraction in the Iron Age II (c. 1100-600 BC), perhaps not insignificantly coinciding with the foundation of a new settlement at nearby Muweilah. The site was reoccupied in the final Iron Age III (c. 600-300 BC) or early Late Pre-Islamic period (PIR.A c. 300-150 BC) and continued until the PIR.C period (c. AD 0-150) when, however, a shrine was erected and evidence for domestic buildings is currently absent. The remarkable finds assemblage includes human statues with parallels to those found at Palmyra and Hatra, an Aramaic inscription with possible Palmyran palaeographic influence, and a coin hoard including local issues and gold imitations of Tiberius aurei. The site developed into a burial ground during the PIR.D period (c. AD 150-300) or slightly later, with shaft burials characterised by a lower side chamber which anticipated Islamic practices, part of a wider early Sasanian-period funerary landscape that possibly includes Agab Island. This paper will summarise the previously littleknown post-Bronze Age occupation of Tell Abraq and highlight the significant new discoveries of the Partho-Sasanian period.

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M. Degli Esposti, F. Borgi, M.P. Pellegrino, C. Abric, F. Barchiesi, R. Houssein Kannouma

Another side to the story. Preliminary results from the renewed excavations on the eastern side of Tell Abraq (Umm Al-Quwain). Advances in UAE Archaeology: Proceedings of Abu Dhabi's Archaeology Conference 2022: 183-207. Abu Dhabi/Oxford: Zayed National Museum – Department of Culture and Tourism/Archaeopress

### Exploring the funerary archaeology of Halban, Batinah South Governorate, Sultanate of Oman

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**Keywords**: Funerary practices, Tomb architecture, Inter-regional trade, Early Bronze Age, Sultanate of Oman

Abstract: The site of Halban, located 35 km to the west of Muscat, was first mentioned in Paul Yule and Gerd Weisgerber's 1998 detailed report on monumental tombs across southern Arabia (Yule and Weisgerber 1998, Williams 2023). The site consists of 33 monumental and well preserved, stone-built funerary structures located on an elevated calcareous terrace emerging at the intersection between the Al-Batinah coastal plain and the Al-Hajar Al-Gharbi mountains. The terrace overlooks the delta formed by two seasonal water courses also hosting a falaj sustaining the oasis and village of Halban.

Most tombs can be attributed to the third millennium BCE and present an impressive diameter, considerable preserved height, and a certain degree of variability in construction techniques and external polishing. The present project aims to locate these monuments in the long-term structural development of tomb design during the Bronze Age of Oman, as well as to better understand population structure and demography of the groups that built and used them. This paper presents the results of the 2023 and 2024 excavations at the site, which hint at a complex palimpsest of continuity and reuse (Döpper 2023) in a key location connecting inland oases with coastal communities and long-distance trade.

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### The first excavation season to Shokur (Dhank, Oman): a multi-period fortified settlement between desert and mountain

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**Keywords**: Fortified settlement; South-east Arabia; Iron Age; Wadi Suq; multi-period occupation

Abstract: The talk presents the results of the first exploration season at Shokur (Dhank), on the western flanks of the Jebel Al Abyad. Shokur is a multiphase fortified settlement originally dated back to the Bronze Age. The mound covers an area of more than one hectare, and it consists of three terraced areas characterized by a massive external fortification wall dated to the Early Iron Age and some internal terracing walls. The data obtained from the extensive archaeological excavation has revealed the imposing fortification wall built in two different phases, which we can date to the Iron Age II, as well as the internal rooms consisting of stone walls and intended for production and storage activities. The internal retaining walls delimit terraces composed of mudbrick floors, including the highest, which seems to belong to the original Bronze Age tower. In fact, the material culture has allowed to identify very clearly the most recent phase of occupation of the Iron Age II, characterized by the typical incised storage jars, fragments with the plastic representation of the snake, spouted vessels and carinated bowls, as well as the recovery of numerous painted fragments of the Wadi Suq phase and some sporadic Umm an-Nar sherds.

### A new programme of field research at Shimal, Ras al-Khaimah (UAE): Exploring human adaptations across the second millennium BCE

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- Caitlin D'Gluyas, UNE, Australia
- Amanda Dusting, University of Sydney, Australia
- Guy Hazell, ArcSurv, Australia

Keywords: Bronze Age, Iron Age, Climate, Environment, Mobility

Abstract: Our research aims to contribute to a better understanding of cultural change in the Oman Peninsula during the 2nd millennium BCE, a period of dramatic social collapse and transformation that is a focus of current archaeological debate (e.g. Döpper 2021; Kennet in press). Our major focus is the site of Shimal and its wider landscape, one of the few areas of SE Arabia for which continuous human presence can be documented across this period. In Nov-Dec 2023, we commenced an interdisciplinary programme of field and laboratory work at the site. We excavated two trenches, recovering well stratified midden deposits of the Iron I period (c. 1250-1000 BCE) and Late Bronze Age (c. 1600-1250 BCE), and identifying a large wall that bordered this part of the site during the LBA. Excavation and flotation produced substantial collections of archaeological materials (pottery, animal bone, shell, charcoal, etc.) from stratigraphically wellcontrolled contexts. Preliminary geoarchaeological coring demonstrated the presence of ancient coastal deposits c. 1.5 km from the main settlement (the modern coastline is c. 4.4 km distant), while paired shell and charcoal samples were collected for absolute dating and studies of past environmental change, and plant samples for Sr-isotope analysis were collected from across northern Ras al-Khaimah with the aim of exploring ancient human and animal mobility. This paper reports on the results of the field season and on the progress of ongoing scientific analyses.

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#### Settlement change and continuity through the Islamic period in the Khaybar Oasis

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**Keywords**: Khaybar – 6<sup>th</sup>/7<sup>th</sup> century occupation – ceramics – settlement patterns – continuity

**Abstract:** Recent archaeological survey and targeted soundings by a CNRS-Afalula-RCU project in Khaybar, in northwestern Arabia, have produced new insights into the settlement and material culture profile of this important Hijazi oasis in Islamic periods. First radiocarbon results indicate that a series of small settlements along part of the basalt escarpment edge of the Harrat al-Natah overlooking the Wadi al-Suwayr were occupied from the sixth to mid seventh centuries CE. Possessing an arguably defensive aspect, these may provide a correlate to some of the

"fortresses" of Khaybar mentioned in historical accounts of the Battle of Khaybar of 7 AH / 628 CE. From the later eighth century a new settlement organisation – and the presence of new imported ceramics – stands out in the archaeological record in Khaybar, including the installation of a new central partly walled foundation at Kharāyib al-Sihlah, enclosing what currently appear to be primarily the remains of monumental buildings. The main congregational mosque in the oasis core was also rebuilt at this time, and would continue to be reconstructed and used through to the modern period. Occupation from Middle Islamic period can be detected in the major sites in Khaybar, and a vigorous new expansion in settlement occurs from the nineteenth century.

### Uthman bin Affan mosque in Jeddah

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Keywords: Jeddah, Hejaz, Islamic Archaeology, mosque, architecture

Abstract: As part of the ongoing historical research and urban development activity in the historic al-Balad district of Jeddah, Jeddah Historic District (JHD), under the Saudi Ministry of Culture (MoC) commissioned our team to our team to conduct archaeological investigations at a number of sites within the city. Among others, we were tasked with the excavation of Uthman bin Affan mosque, the oldest continuously used religious structure in the centre of al-Balad. Until now it has never been a subject of archaeological examination. Several construction phases were distinguished. Currently, the chronology of the building stretches from modern times until at least the 10th century CE, however, the earliest foundation level of the mosque was not reached yet. Our research revealed several significant changes in the mosque architecture and layout. In this presentation archaeological works conducted during several campaigns in 2020-2024 will be outlined and some preliminary conclusions will be presented.

# Piecing together the evidence: Architecture, inscriptions and sherds from an early Islamic funerary context in Qurḥ/al-Mabiyat

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Keywords: Qurh / al-Mabiyat, Early Islamic period, Funerary Archaeology

**Abstract:** Recent archaeological fieldwork in the Early Islamic city of Qurḥ/al-Mabiyat identified an extended cemetery area located north of the city wall. The area is characterized by supposed simple inhumation graves, apparently delimitated by rows of pebbles, while remains of stone

walls, brick fragments, and pieces of white plaster indicate the presence of substantial and representative funerary architecture extra muros. Excavations by the German Archaeological Institute funded by the Royal Commission for AlUla in 2022 and 2023 uncovered two adjoining architectural units, each confined by enclosure walls and plastered floors surrounding an embedded central structure. The remains show high efforts and elaboration by facings and superstructures. As the buildings have been looted, investigations concentrated on architecture, associated religious Kufic inscriptions, pottery (9<sup>th</sup> – 11<sup>th</sup> century CE), and the contextual embedding within the cemetery as part of the town and built environment. These new findings enable to develop new perspectives regarding Early Islamic burial practices in northwest Hejaz and the wider region. The limited number of built monuments at Qurḥ compared to the large number of inhumation graves, indicates that a rather small group of people may have been privileged in death and therefore, suggest significant social distinctions within the early Islamic society of the city.

### Mining Site Project: Excavations in al-Ma'malah and al-'Abla', southwest Saudi Arabia

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Keywords: Saudi Arabia, southwest Arabia, mining, settlements, Abbasid

Abstract: The Saudi Heritage Commission's mining site project aims to (1) register all the ancient mining sites in Saudi Arabia, (2) shed light on their roles in history, (3) understand the urban planning of ancient mining settlements, (4) collect information on mining methods and tools, (5) rehabilitate the sites to introduce old civilizations, and (6) invest in old mining sites. The first stage of the project started in southwest Saudi Arabia, and two mining sites, al-Ma'malah (al-Bāhah Province) and al-'Ablā' ('Asīr Province), were selected for excavation. The excavations at both sites yielded many archaeological features related to mining activities dating back to the Abbasid period. Architectural remains include walls of trimmed granite, bricks, buttresses to protect walls from falling, and floors with partial traces of plastering. Some buildings contain warehouses, tannūr ovens, basins, and places to store tools. In the center of the al-'Ablā' site, a mosque measuring 28.86 m by 22.30 m was discovered. Excavated objects from both sites comprise fragments of various glazed and unglazed pottery, glassware, stoneware (steatite lamps, cooking pots, etc., some with carved decorations), metalware, stone tools (querns, pestles of various shapes, etc.), and metal tools. Some of these tools were obviously used in mining work.

### New discoveries from the pilgrim way-station at al-Aqiq, Taif Governorate, Makkah Province, Saudi Arabia

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Keywords: Darb Zubayda, pilgrimage, al-Aqiq, Abbasid settlement, water management

**Abstract:** The pilgrim route between Kufa and Mecca (the Darb Zubayda) flourished during the Abbasid period. Way-stations were constructed during this period to safeguard the route and

provide facilities for passing pilgrims. While the existence of these way-stations is well known (al-Dayel & al-Helwa 1978; al-Rashid 1980; O'Kane 2014), details relating to their chronology, the nature of their occupation, and the relationship between these sites and their surrounding environments, are poorly understood. This paper presents initial results from fieldwork carried out at the al-Aqiq waystation, Taif Governorate, Makkah Province, in November 2023. At al-Aqiq, a methodology including excavation, pedestrian survey, drone photography, and the production of photogrammetric reconstructions, offers a more complex understanding of the way-station. Investigations of hydraulic infrastructure — reservoirs and a dam — within and adjacent to the nearby wadi, suggest a sophisticated system of water management associated with supplying pilgrims and the local community. Newly recorded Islamic inscriptions, meanwhile, provide clues to the identities of the people living at and visiting the site, while finds from the settlement, including imported ceramics and soft-stone vessels, indicate a thriving economy with transregional reach. This paper synthesises these new discoveries to construct a nuanced picture of a key location along the Darb Zubayda.

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An Architectural, Documentary, and Archaeological Study of Models of Ottoman Citadels on Alțariq Al-Sulțāni, between Al-Madinah and Mecca

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Keywords: Al-Şafrā', Al ṭarīq Al Sulṭānī, ḥamrā, Badr, Bi'r 'Abbās, Al-judīdah

Abstract: Al-Ṭarīq Al-Sulṭānī, which connects Al-Madīnah with Mecca, holds significant historical importance in Islamic history. This paper aims to shed light on this road, define it, identify its points and stations, and explore its historical significance. The Ottomans took great care of it as part of their interest in the Two Holy Mosques, strengthening and fortifying it. The paper also aims to study the citadel models built along the road, the reasons for their construction, and their importance. Additionally, it seeks to analyze the architectural styles and elements of the road, comparing them with other examples of Ottoman citadels along various pilgrimage routes in Al-Ḥijāz. This paper holds great importance as it presents a new documentary publication for the first time, featuring four Ottoman citadels on the Sūlṭānī Road. The study adopts a comparative, analytical, and inductive approach, relying on essential documents concerning the castles, their locations, completion dates, and architectural styles.

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A newly identified Late Antique settlement in the al-'Ulā oasis. New insights on the occupation, material culture, agricultural practices and religion of Late Antique northwest Arabia.

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**Keywords**: northwest Arabia; Late Antiquity; archaeology; archaeobotany; archaeozoology.

Abstract: Although it is documented by later sources and a growing – though still limited – number of inscriptions, the Late Antique period remains a virtually blank page in the archaeological record of northwest Arabia. In this context, the discovery by the Dadan Archaeological Project (CNRS/RCU/AFALULA) of a Late Antique settlement 1 km south of ancient Dadan, in the al-'Ulā valley, represents an essential addition to the knowledge of this period. This settlement was identified in 2019 and investigated during three excavation seasons (2021-2023), exposing a massive building used from the 4<sup>th</sup> to the 6<sup>th</sup> century AD and probably belonging to a ruling elite. The interdisciplinary study of this site (combining archaeology, ceramology, study of macrolithic artefacts, archaeobotany, archaeozoology and geo-archaeology) offers new insights into the material culture, agricultural practices, diet and even religious identity of its inhabitants. Last but not least, the excavations have provided important clues suggesting that this settlement took over an earlier site, perhaps connected with the Minaean colony at Dadan.

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### Excavations at the center of the early Islamic monastery of al-Qusur: results of the 2019, 2022 and 2023 campaigns

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**Keywords**: monastery, cell, early Islamic, Church of the East, Kuwait

**Abstract:** The first step of the program of the French-Kuwaiti Archaeological Mission in Failaka (MAFKF) at al-Qusur was achieved in 2018. The excavation to the north and west of the monumental church led to the discovery of a food processing building, a refectory and what is probably a monk's cell, suggesting that al-Qusur was indeed a monastery, at least in its central part. The study of pottery, glass, coins and stucco revealed that the main occupation of the site took place from the middle of the 7th c. and until the 9th c. A new program began in 2019 intending to better understand the foundation of the monastery and its abandonment, to work on the daily life of the monks and to understand the organization of the monastery. The excavation continued north and west to the church and new soundings were carried out to the south. The campaigns 2019, 2022 and 2023 revealed new monastic buildings surrounding the church. Some of them are related to the foundation of the monastery and may have housed the first monks.

### Continued Work at a Nestorian Monastery and Sasanian-Period Settlement on Sīnīya Island, Umm al-Quwain

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**Keywords**: Late Antiquity; Gulf monasticism; settlement archaeology; funerary archaeology.

Abstract: This paper will present a summary of the ceramics from the 2023 field season and preliminary report on the 2024 excavations at the Late Antique to early Islamic monastery and settlement on Sīnīya Island, undertaken by the Tourism and Archaeology Department Umm al-Quwain together with its local and international partners. The ceramics from the northern sector of the settlement are late Sasanian, i.e., 5<sup>th</sup> to 6<sup>th</sup> centuries CE, making Sīnīya the only excavated Sasanian-period settlement in Eastern Arabia. Ongoing excavations in the southern sector have since revealed the nucleus of the settlement, which may push back the onset of occupation still earlier, raising the prospect that Sīnīya replaced ed-Dur as the focus of settlement in the lagoon of Umm al-Quwain in the 4<sup>th</sup> or 5<sup>th</sup> century CE. We will further present the Bayesian analysis of a radiocarbon sequence from the floors of the church, the samples for which were processed by Beta Analytic with generous funding from the Zayed National Museum, so as to contribute to debate around the chronology of East Arabian monasticism. A team of forensic archaeologists are now excavating a mass grave found near the church, possible victims of the Justinianic plague that reoccurred roughly every 15-20 years from ca. 540 to 750 CE, which would make this the only known plague pit excavated in the Sasanian Empire. The preliminary results of isotope, pathogen, and aDNA analysis will be discussed alongside the historical sources as part of an integrated methodological approach.

## Syriac Sources for the History and Civilization of the Arabs and Arabia, 3<sup>rd</sup> – 13<sup>th</sup> century CE (SSHCAA)

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**Keywords**: Syriac – Sources- Islam- Arabs – Arabia

**Abstract:** The Syriac literature represents a vital source for understanding the history of Arabia and Arabs since the 3rd century CE in which Syriac sources recorded valuable details about Arab and Arabia during the pre-Islamic period such as their ethnic origins, religious life, and Christian minorities in Arabia. In the context of Islam, Syriac authors offer valuable accounts about the rise of Islam, the geography of Arabia, the Prophet Muḥammad, the Caliphs, conquests, and conquered populations under the Caliphate.

However, the scarcity of scholarly translations into Arabic has created a pressing need for sufficient scholarly materials. As a result, King Abdulaziz Foundation for Research and Archive (ad-Darah) has launched an ambitious project, the SSHCAA. This project aims to provide Arabic-Speaking researchers works of high standards that consists of collecting the sources of Syriac literature, followed by the extraction of relevant texts, creating a digital database that includes original Syriac texts alongside their Arabic and modern European translations (priority in English) in addition to an introduction and comprehensive commentary on each source. The current paper sheds light on the main concept and processing stages of this project prior to the present stage in which significant results has been concluded.

### DAY 1 SALLE DEMARGNE

### Urban generative processes and morphology of Early to Middle Islamic settlements in Eastern Arabia

Agnieszka Lic, Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences

Keywords: urbanisation, generative processes, Eastern Arabia, Jumeirah, al-Qusur

Abstract: Urbanism in Eastern Arabia in the Early Islamic and Middle Islamic periods has been a subject of limited scholarly attention. Despite a few exceptions in addressing the problem theoretically (Petersen 2009) and new advances in our understanding the size, level of complexity, and importance of particular settlements (Insoll et al. 2016, Tawalbeh 2023), there is virtually no discussion that would aim at creating a coherent picture of the development of towns in this region and period. In this paper, current archaeological theories tackling the problem of urbanism (Smith 2023) will be applied in order to evaluate particular sites in eastern Arabia (such as al-Qusur, Jumeirah, al-Ain/Buraimi, Bilad al-Qadim). The goal is to trace urban archaeological attributes of these settlements, irrespective of whether they could be "classified" as towns or not, in order to direct attention to some functional aspects of these sites. For example, the consideration of al-Qusur as a probable pilgrimage destination (Bonnéric 2023) could be analysed in terms of of urban generative processes related to the flow of pilgrims at this Christian site. The function of Jumeirah's building JM5 (the so-called caravanserai) raises, in turn, questions about the role of this settlement in relation to the hinterland.

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#### Connected units in the Old Town of AlUla and their social significance

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- Aljohara Almodarra (Archaïos)
- Marek Z. Barański (Archaïos / Academy of Fine Arts in Gdańsk)

**Keywords**: AlUla, Islamic city, social groupings, connected units, oral history

**Abstract**: Various studies on traditional Islamic cities have underlined a direct relationship between urban structure and social groupings. This complex relationship is based on a strong sense of place; homes, neighborhoods and communities are interconnected on many levels. Furthermore, it is proved to be typical for adjacent clusters of buildings to be inhabited by direct

or extended family members. However, attempts to reconstruct this distinctive socio-spatial pattern pose a significant challenge in the case of abandoned settlements, even if they were deserted only a few decades ago. The MuDUD Project' research on the Old Town of AlUla in Saudi Arabia serves as an example of a non-invasive and successful method for investigating the impact of social dynamics on architectural space. The described matter is examined in depth through building archaeological research on groups of neighboring residential units - physically connected through various architectural means - as well as targeted interviews with former inhabitants of the town. Consequently, this paper presents the process of creation and transformation of building blocks and sheds new light on the history of the town as well the urban dynamics through time, with particular emphasis on the last two centuries.

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#### The onomasticon of the inscriptions from Himā

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Keywords: Ancient South Arabian; Thamudic; epigraphy; proper names; Ḥimā

Abstract: This paper will provide a comprehensive overview of the onomasticon of the inscriptions from Ḥimā, with a particular focus on those carved in Thamudic Himaitic script. So far, the onomastic data have mainly been exploited to draw inferences regarding the spoken language(s) of their authors or for information about their religious cosmology (Robin & Gorea 2016). In his introduction to his 2022 book on the rock carvings of the ʿĀn Jamal spur, Christian Robin also dealt briefly with the theophoric names. He noticed that there were many similarities between the Ancient South Arabian and the Himaitic Thamudic graffiti. Most of the theonyms refer to well-known north-Arabian (al-Lāh/al-Lāt, al-ʿUzza, Manāt, Kahl) or pan-Semitic deities (Īl, ʿAthtar and Shams) while, on the other hand, the Sabaean deities (Almaqah, Taʾlab) are surprisingly absent. Based on this evidence, Robin argued that the people who carved the graffiti belonged to the same population and worshipped the same deities, regardless the type of script they used.

However, preliminary research conducted on the data of this ever-expanding corpus (surpassing by now the 20.000 texts) collected and digitized by the French-Saudi mission has revealed a much more complex configuration, not only with respect to the theophoric names but also to other

types of names, such as those having mimation or the one-word names. Most notably, it appears that the distribution of these features correlates with the sub-scripts of the Himaitic alphabet. Such script variation also correlates with distinct formulaic expressions and linguistic traits. The onomastic data seem therefore to converge towards the idea that the area of Ḥimā was inhabited in the antiquity by diverse populations employing more than one linguistic variety, and who perhaps settled in the region during different historical periods.

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### Studying Minaean society through a digital prosopography approach

Irene Rossi – CNR, Institute of Heritage Science (Milan, Italy)

Keywords: Epigraphy, Ancient South Arabian, Minaeans, prosopography, Linked Open Data

Abstract: Ancient South Arabian people took great care in the identification of persons in the inscriptions they left, making prosopographical studies possible – albeit challenging. This paper discusses the ongoing efforts towards building a prosopographic repertoire of the Minaean people, through the support of a digital tool designed on purpose. The tool allows for the reuse of textual data of the inscriptions recorded in the DASI archive [http://dasi.cnr.it/], as well as for integration of data from other sources. It helps identify people and disambiguate namesakes, provide descriptions, delineate relationships, map family and clan networks, and present this information as Linked Open Data. By blending the advantages of a traditional prosopographic repertoire with the adaptability of digital support, it offers enhanced flexibility in data management. In the presentation of the first results of the Minaean prosopography case-study, special attention is paid to the possibility to relate individuals and clans across the Minaean communities in southern Arabia and beyond, in order to gain a better understanding of their social organisation in a diachronic and diatopic perspective.

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### The 'confession' inscriptions of ancient South Arabia: a diachronic study

Dr Justine Potts, St. John's College, University of Oxford

**Keywords**: Ancient South Arabia; epigraphy; confession; religion; legal texts.

**Abstract**: Since the very beginning of South Arabian studies, epigraphic texts variously called 'confession', 'expiatory', or 'propitiatory' inscriptions have attracted much attention. Scholars have addressed the problems of their categorisation, of the ritual action behind them, of their vocabulary and of their local, sanctuary-specific differences. No study hitherto, however, has analysed the corpus in diachronic perspective. This paper proposes an overview of how the practice of writing up 'confessions' changed over time in ancient South Arabia, and will attempt to relate diachronic trends to wider structural circumstances. This exercise, in turn, will raise the question of whether the changes which are identified reflect shifts in ritual or, rather, in epigraphic rhetoric. This paper will also bring into discussion the confession inscriptions from Roman Asia Minor, which, since Alexander Sima's article of 1999, have not been considered in parallel with the South Arabian inscriptions. Since then, many new inscriptions - from both locations – have been discovered. It is now high time to reconsider the ancient South Arabian confession inscriptions in comparative perspective, with particular attention to how they changed over time. This will help address the unresolved question of whether a ritual of confession spread across ancient South Arabia.

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### Organic residue analysis of Ubaid vessels in the eastern Gulf: preliminary results from Akab and Umm al-Quwain 2

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Keywords: SE Arabia, Neolithic, Ubaid, ceramics, lipid residues, vessel use

Abstract: The earliest known pottery vessels in SE Arabia are Ubaid vessels from Mesopotamia, dating from the late sixth to the mid-fifth millennium BC. While Ubaid pottery is mostly found along the central Gulf, it is also documented at coastal sites in the eastern Gulf, possibly exchanged directly or down-the-line. At this time, aceramic Arabian populations were engaging in hunting, gathering, fishing and herding, and navigating around the Gulf coast, exchanging products such as softstone, obsidian, haematite and livestock such as ovicaprids. It is possible that Ubaid pottery and/or products within vessels carried connotations of prestige in Arabian communities and were used in specific contexts to display wealth and/or status while serving food; perhaps redistributed in acts of ceremonial gift-giving or exchange at communal or feasting events. This paper will present the first results of organic residue analysis of a small sample of Ubaid vessels from two coastal sites in south-east Arabia, Akab and Umm al-Quwain 2, to discuss the contents of Ubaid pottery and raise questions about the presence of imported products transported in Ubaid vessels.

# Early Bronze Age Agriculture in the Hajjar Foothills: Insights from Bisya Population Oral Health (3000-2500 B.C.E., Oman)

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**Keywords**: Southeast Arabia; Bioanthropology; Dental disease; Diet; Collective tomb

**Abstract:** In the southeastern Arabian Peninsula, the beginning of oasis agriculture is presumed to have occurred around 3000 BC, but its rise is not attested until ca. 2500 BC by bioarchaeological

(botanical and anthropological remains) or geochemical (isotopic) data. The first half of the 3rd millennium was thus a pivotal period, probably characterized by a diversification of livelihoods from nomadic pastoralism inland to coastal resource exploitation on the coast. While the pace of adoption of an agricultural lifestyle is still poorly defined, its impact on the economy and diet shows great regional variation (foothills, valleys, coastal areas). In this paper, we present the analysis of several oral parameters (wear, calculus, caries, alveolar resorption, abscesses, antemortem losses, linear enamel hypoplasia) carried out on a population from the Hajar foothills in Bisya (Sultanate of Oman). The studied corpus comes from a monumental collective tomb (Tomb 4169). Its architectural features and the artifacts associated with the deceased suggest that it was used between 3000 and 2500 BC, a transitional phase for which there is very little data available. Our results allow us to assess the contribution of agriculture to the diet, and shed new light on dietary habits and health status of individuals during this still poorly documented period. These data are put into perspective and compared with published data from other geographic areas, revealing the diversity of subsistence strategies in Early Bronze Age Arabia.

# The role of animals in the afterlife. The case of the human/animal primary depositions of corridor-shaped tomb LCG-2 at Dibbā al-Bayah (Musandam – Sultanate of Oman)

Elena Maini & Francesco Genchi, Sapienza – University of Rome – Italy

**Keywords**: Human/Animal depositions; Oman; collective graves; Iron Age; animal sacrifices

Abstract: This communication presents the multi-level analysis of funerary rituals involving animals in Dibbā al-Bayah burial complex, made possible by the extraordinary amount of spatial and diachronic information collected during the excavation. The site is located on the east coast of the Musandam Peninsula, at the border between Oman and the UAE. The Large Collective Grave 2 features a long rectangular chamber, approximately 24 meters long and 4 meters wide, built during Iron Age II (1100-600 BC) and extensively used until the Pre-Islamic Recent period (250 BC-400 AD). At the base of the rectangular chamber, along the mobility corridor located in the middle, 31 primary depositions were discovered often accompanied by articulated paraphernalia composed of valuable tools and artefacts. At least 15 of these depositions show the close relationship between humans and animals, underlined by all the ritual aspects. This study considers the choices in terms of carcass treatments, the considerations regarding the deceased sex and age at death, and those of the accompanying animals, that were almost exclusively goats. The careful deposition of these domestic species in anatomical connection near the human bodies suggests a symbolic connection with this common animal, chosen as companions for the otherworldly world.

### "Eating Flesh is unprovoked murder". Long-term faunal consumption in al-Bad' Oasis, Saudi Arabia.

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Keywords: archaeozoology, mammals, fishes, seashells, al-Bad oasis

**Abstract:** Located near the Gulf of Aqaba in the Madyan Peninsula, the al-Bad' oasis comprises eight archaeological sites dating from the Neolithic to the early Islamic era, which were the subject of excavated surveys between 2017 and 2022 by a Saudi-French team (CNRS-Heritage Commission). Among the many artefacts found, almost 10,000 faunal remains, including mammals, fish and seashells, have been identified. The archaeozoological study of these different assemblages will enable us to follow the evolution of meat consumption over time. This examination will highlight both the persistence and the notable variations in dietary/culinary practices within the oasis from around 7000 BC to the 9th century CE. Finally, these results will be compared with those obtained from other major urban centres in north-western Arabia.

### How to supply a large urban population in the desert during Antiquity? Archaeobotanical multiproxy analyses on the caravan city of Thāj

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Keywords: Archaeobotany, eastern Arabia, Antiquity, plant resources, aridity

**Abstract:** The archaeological site of Thāj (Eastern Province of Saudi Arabia) is usually considered as the earliest city in eastern Arabia, settled from the late Iron Age to the Early Islamic period, with a peak in the 'Hellenistic' period (4th to 2nd c. BC). Yet in Antiquity, northeast Arabia was characterized by arid climatic conditions quite like those of today, with a very limited vegetation cover. This raises numerous questions regarding the acquisition strategies of plant resources (food, fodder, fuel...) that made possible to support the growth of an urban population over the long term. The archaeological excavations conducted at Thāj by a Saudi French project from 2016 to 2022 therefore provide a unique opportunity to document these strategies through multiple archaeobotanical investigations (seeds/fruits, wood charcoal, phytoliths). The first results allow us to identify agrarian productions such as cereals (barley, wheats), pulses (grasspea), and fruit trees (date palm, grapevine), which suggest the existence of vertically organized date palm gardens near the site, fed by ground water tables. Other crops may have been imported, showing the integration of the city in long-distance trade networks. High concentrations of some wild plants associated with dung highlight the intensive exploitation of such plant formations, suggesting that over-grazing practices might be responsible for environmental degradation at a regional scale.

#### **Date presses of Al Zubarah**

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**Keywords**: Al Zubarah, Date press, Suq, Islamic Archaeology, Qatar

Abstract: Located NW coast of Qatar, Al Zubarah is the largest archaeological site in the country. The fortified settlement houses mosques, palaces, courtyard houses, streets, cemeteries, a canal, and a marketplace (suq). The latter was subject to excavations first time during the 1980s by a Qatari mission led by Al Khulaifi which was only partly published. The area contained beside storage rooms from the later occupation of the town also over 30 date presses (sing. madbasa, pl. madabis) directly under the storage rooms dating to the mid-18th century, the main occupation of Al Zubarah. Later excavations by the Qatar Islamic Archaeology and Heritage (QIAH) Project found a further 20 date presses south of the Al Khulafi excavations, increasing the total to over 50. While Al Khulaifi excavations were never restudied and never fully understood, QIAH Project excavations presented a well-organized commercial area with date presses built mirrored along a main street.

Recent small-scale excavations in the area excavated by Al Khulaifi yield enlightening information about the organization and design of the date presses and the suq. This paper will present the results of these excavations and compare different reconstructions of Al Zubarah Suq with the current archaeological data.

# Beyond the Oasis and Within the Community: can community-based participatory research enhance our understanding of Arabian Archaeology?

- Dr. Selin Nugent (Oxford Brookes University)
- Dr. Jennifer Swerida (Universiteit Leiden)
- Nora Al-Aati (University of Pennsylvania)
- Reilly Jensen (Utah Department of Cultural and Community Engagement)

**Keywords**: community research, participatory methods, archaeological research design, outreach, Oman

**Abstract:** We examine the scholarly and local implications of integrating traditional fieldwork with participatory approaches in Arabian archaeology through a case study of community outreach and interview research by the Bat Archaeological Project.

Bat is of regional importance as a UNESCO World Heritage Site with decades of archaeological research by foreign missions. The community holds the social memory of all archaeological work at Bat, both their discoveries and modes of practice. Our research builds on wider discourse in community archaeology and indigenous critiques with the aim to nurture collaborations with the Bat community and design research methodologies around local preferences. We have found that there is great interest and pride in the research that has taken place, but a feeling of disconnection from the findings. They are also keen to share proximal knowledge of preservation and outreach needs. We synthesise our findings to discuss models for local engagement and how they can be integrated into research. As foreign scholars, we are in a privileged position to support local learning and opportunities. We argue that formally integrating these approaches in archaeological research in Arabia is timely and presents opportunities to both enhance research rigour and build sustainable community relationships within the region.

**Activating Heritage Sites through Embodied Intangible Heritage and Community Engagement** 

Astrid Kensinger, Shaima Sherif.

Keywords: Nomadic movements / Exhibition / Heritage preservation / Nomadic Cultural heritage

**Abstract:** This talk will introduce the "Mapping Migration Memories" project in Doha, Qatar. It will explore the relationship between Heritage Spaces, Intangible Cultural Heritage (ICH) research and community engagement through art and design.

Mapping Migration Memories results from a multi-year research project developed by (IN)>Tangible Lab, under the Institute for Creative Research at VCUarts Qatar. Gathering and using existing archived and recorded memories, photos, films and oral histories, the exhibition captures the historical biannual nomadic movements between the desert and the sea in Qatar. Embarking on two expeditions to the desert in 2022, the installation offers audiences the opportunity to reenact the expeditions and migrations in the North and South through an evocative landscape within the Company House that fuses memory with real soundscapes and a call for heritage preservation through embodiment. "Mapping Migration Memories" emphasises the importance of intangible practices and oral traditions so often lost in rapidly developing societies, and serves as a call to capture generational and local ecological knowledge.

### Recovery & Conservation in (Post)Conflict San'ā': challenges & learnings

- Trevor Marchand, SOAS, Emeritus Professor Social Anthropology (RCIM\* Scientific Director)
- Abdulhakim al-Sayaghi, Social Fund for Development (Yemen), Senior Consultant of Cultural Heritage Unit (RCIM Project Manager)
- Sabina Antonini de Maigret, Director of Italian Archaeological Mission in Yemen (RCIM Archaeological Consultant)
- Cristina Muradore, Istituto Veneto per i Beni Culturali (RCIM Cultural Advisor)
- Ester Lopardo, Chief Executive Monumenta Orientalia (RCIM Administrative Director)
- \* Recovery & Conservation of Islamic Monuments in the Old City of Şan'ā' (2024–2026)

RCIM partners: Monumenta Orientalia (Rome) and Social Fund for Development (Yemen); RCIM funder: Aliph Foundation (Geneva)

**Keywords**: Yemen, (post)conflict, architectural heritage, Islamic monuments, conservation

**Abstract:** The landmark truce in April 2022 between warring parties in Yemen lapsed six months later, but 'truce-like conditions' nevertheless continued and international support for negotiations toward peace grew during 2023. This inspired hope for Yemen's people and economy, and for salvaging the country's incomparable cultural heritage.

With a large grant from Aliph Foundation, Monumenta Orientalia in partnership with the Social Fund for Development (Yemen) launched a new venture at the start of 2024 for the Recovery and Conservation of Islamic Monuments (RCIM) in the Old City of Ṣanʿāʾ. The two-year project aims to recover seven key historic structures distributed across five city quarters. In revitalising traditional building crafts and local conservation practices, RCIM is creating hundreds of employment and skills-training opportunities, returning mosques and public meeting places to their religious and social functions, and regenerating a 'sense of place' among Ṣanʿāʾ residents.

However, given the unfolding events in the Red Sea and heightened political tensions in the broader region, security in Yemen is once again at risk and RCIM therefore operates and

strategizes within a VUCA (volatile, uncertain, complex, ambiguous) environment. Our presentation will deliberate upon RCIM's experiences during its first six months of operation and ask how its learnings might beneficially inform the planning and expectations for concurrent and future conservation projects in (post)conflict Yemen.

### **DAY 2 AUDITORIUM**

### The youngest Paleolithic at Jebel Faya and the Arabian Standstill hypothesis

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**Keywords:** Faya Palaeolandscape, settlement continuity, human dispersal, lithic artifacts, chronometric dating

**Abstract:** Geneticists revealed an extended period of genetic adaptation in Arabia between about 82-55 ka. They named this the Arabian Standstill period (ASP) and argued that linked to prolonged small population sizes, a number of adaptive signatures developed. One major implication of the ASP hypothesis is settlement continuity from late MIS 5 (c. 85-70 ka) to early MIS 3 (c. 60-50 ka). Testing whether Arabia could have indeed been home to human populations exposed to the identified prolonged phase of adaptation, is challenging, given the scarcity of dated sites from this time frame. To contribute to this topic, we present here fresh chronological, archaeological, and sedimentological data from AH II, the youngest Paleolithic layer of the Faya Shelter sequence in the Emirate of Sharjah, UAE. Results from OSL dating reveal that AH II was deposited about 80 ka ago, which would represent the early ASP. To test for archaeological evidence in support of the ASP hypothesis, we will compare lithic technological signatures of AH II with contemporaneous Arabian assemblages and with Arabian assemblages dating to the end of the ASP. Based on these comparisons, we will draw conclusions about the potential of an Arabian localization of a human population linked to the ASP hypothesis.

# Investigating the Neolithic of South-Central Oman between Duqm and Nafun (South-Central Oman)

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Keywords: Neolithic, Megalithic grave, Bifacial production, Oman, Duqm

**Abstract:** Over the last decade, extensive surveys and excavations have been conducted in the broader vicinity surrounding Duqm city, stretching up to the village of Nafūn in Al-Wusṭā (southcentral Oman). Ongoing fieldwork since 2022 has focused on a collective megalithic grave in Nafūn and an encampment in the Duqm Wādī Ṣayy area. Various locations surrounding the wadi systems have revealed evidence of Neolithic occupation, including the already-known Duqm coast, while Nafūn so far lacks proper evidence of settlements or lithic workshops. Isotopic analysis of the burial community in Nafūn suggests that the grave served as a burial site for a diverse community from settlements in different locations, spanning several dozens of kilometres away.

The proximity to high-quality chert outcrops and elevated fluvial terrace systems overlooking the wadi floodplains likely played a crucial role in attracting human habitation during that period. The simultaneous excavation of both sites aimed to achieve multiple objectives: validating the Neolithic occupation chronology, expanding our understanding of its spatial extent and occupational sequence, defining the cultural framework of these human communities, and addressing gaps in our knowledge about Neolithic societies and their subsistence in south-central Oman.

This recent research highlights the presence of Neolithic settlements inland, complementing the conventional assumption of the prevailing dependence of Neolithic communities on marine resources. The ultimate goal of our research is to offer new perspectives for studying the Early and Middle Holocene in Al-Wusṭā.

### The multicultural nature of Umm an-Nar society, and what happened to it?

Michel de Vreeze; Honorary Research Fellow Durham University

**Keywords**: Umm an-Nar; Wadi Suq, Migrant studies, Material Culture; Multicultural society.

Abstract: This paper wants to critically review the current state of evidence surrounding migrants in the Umm an-Nar period (2800-2000BC). It is a highly relevant question for understanding the period, and for the study of past migrant communities in general. The presence of migrants from for instance the Indus Valley has been recognized in the archeological record. And similarly, other communities from abroad might have migrated to Southeast Arabia to form local ties. The paper wants to gather the material cultural evidence provided by the archaeological record for non-local people in the Umm an-Nar period. It questions the reasons for these migrant communities, and how they were integrated into local culture, by using various social theories on migrant communities and how social cohesion might have been regulated in the past. The presence of non-local people, possibly in large numbers, and their integration into Umm an-Nar society raises more questions. If we can recognize migrants in the Umm an-Nar period, but not as clearly in the following millennium, what happened to these communities in the following Wadi Suq period? Were they fully integrated by then, and if so, what does this say about the nature of Bronze Age society in the region.

#### Dental Health in the Umm an-Nar and Wadi Suq

- Jaime Ullinger, Quinnipiac University

- Lesley A. Gregoricka, University of South Alabama

**Keywords:** bioarchaeology, dental anthropology, diet, Bronze Age

**Abstract:** As part of a larger study examining human adaptation to climate change at the end of the Early Bronze Age in southeastern Arabia, we examined dental health among Umm an-Nar (2700-2000 BCE) and Wadi Suq (2000-1600 BCE) communities from Ras al-Khaimah, UAE. While the Umm an-Nar period witnessed widespread sedentism, date palm agriculture, and extensive trading systems, the transition to the Wadi Suq left abandoned settlements, a shift in mortuary practices, and a decline in interregional exchange systems while it became warmer and drier. Skeletons from Shimal, representing over 800 individuals from two Umm an-Nar tombs, and over 60 from four Wadi Suq tombs, were examined for antemortem tooth loss (AMTL), which occurs in highest frequencies among agricultural communities that consume soft, sticky foods. While we hypothesized that the Umm an-Nar communities would have more AMTL, Wadi Suq peoples had relatively-similar to slightly-higher rates of tooth loss (~15% for most tombs), with one tomb (Shimal 602) having evidence of over 40% of all teeth lost before death. Indeed, molar loss was significantly greater in the Wadi Suq (over 50%, compared to 23% in the Umm an-Nar), suggesting they may have been consuming even more dates and/or other soft foods than their predecessors.

### Biogeochemical evidence for site use and continuity among Umm an-Nar and Wadi Suq communities at Shimal

- Lesley A. Gregoricka, University of South Alabama
- Jaime M. Ullinger, Quinnipiac University

Keywords: bioarchaeology, Umm an-Nar, Wadi Suq, Bronze Age, mobility

**Abstract:** While secondary mortuary practices and taphonomic processes affecting human bone interred within Umm an-Nar (2700-2000 BCE) and Wadi Suq (2000-1600 BCE) communal tombs make biogeochemical analyses challenging, teeth hold considerable potential in evaluating human movement among past groups. Here, radiogenic strontium isotope ratios from human dental enamel were assessed to investigate shifting forms of social organization among Umm an-Nar and Wadi Suq communities at the site of Shimal in the Emirate of Ras al-Khaimah, UAE. Shimal is uniquely suited to such a study due to the size of its necropolis and because it was continuously occupied throughout the third and second millennia, evidenced by a dense collection of tombs indicative of a once-substantial population. This investigation expands on prior isotopic work (tombs Unar 1, SH 95, and SH 103) at the site – including a second Umm an-Nar tomb (Unar 2) and two additional Wadi Suq tombs (SH 99, SH 602) – and reveals similarities suggestive of continuity despite transformative environmental and cultural changes that occurred throughout southeastern Arabia beginning around 2200-2000 BCE. These results have important implications for understanding the ways in which smaller-scale and less urbanized societies may have more successfully adapted to external change.

Regional differences or duality: Reconsideration of the mortuary customs during the Wadi Suq period through geospatial analyses.

Taichi Kuronuma (Research Institute of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies).

**Keywords:** Wadi Suq period, collective and individual burials, mortuary customs, subsistence strategy, topography

Abstract: The Wadi Suq period in Southeast Arabia (ca. 2000–1600 BCE) is characterised by regional differences in mortuary customs with variegated tomb types. Bordered by the Wadi Jizzi basin, collective burials are often confirmed in the West, while individual burials are dominant in the East. However, recent discoveries of collective tombs in the East questioned this view of regional differences. Given the relationships with the local environment and subsistence strategies, this paper re-examines Wadi Suq mortuary customs's regional diversity and selectivity. The spatial distribution of the 413 collective and individual burials was analysed based on the updated typology and the eight topographical categories. The association with other nonmortuary sites was also explored. The result indicates that unlike in the West, the collective tombs in the East were not necessarily restricted to where the sedentary-oriented lifestyle was capable. They were also built in the topography, where a mobile lifestyle was suitable. Contrarily, individual tombs were erected in any topographical categories. It is considered that the local environment and subsistence strategies affected the selectivity of the style of mortuary practice in each burial. Thus, the apparent regional differences of Wadi Suq mortuary customs reflect the duality emanating from natural and cultural factors.

### Iron Age Snake Figurines in south-eastern Arabia: A Critical Reassessment.

Tracey Cian, PhD Candidate in Classical and Near Eastern Archaeology, Bryn Mawr College (Bryn Mawr, Pennsylvania, USA). <a href="mailto:tcian@brynmawr.edu">tcian@brynmawr.edu</a>

Keywords: Snake figurines, Iron Age, Oman, United Arab Emirates, "Snake Cults"

**Abstract:** Thousands of snake artefacts have been discovered in south-eastern Arabia in recent years. Dating to the Iron Age (c. 1000–800 BC) and appearing in different forms, from metal figurines to appliqués on ceramic vessels, these snakes appear to be connected to special sites, located on the major transit zones in the region, and share a number of significant commonalities. Scholarship has commonly attributed a religious connotation to these objects and sites, associating them with "Snake Cults".

Based on research carried out in 2023/2024, the proposed paper will critically examine the use of these objects and further consider their importance for communities living in the area. It will showcase the different methodologies used by this research, and present results from ongoing typological and contextual analysis. In particular, the paper will question the purpose of these artefacts, seeking to better understand their connection to different sites across the region, and exploring whether the artefacts themselves assumed different meanings according to the sites and contexts in which they were placed. Moreover, tentative connections to the wider region of the Near East will be proposed by considering iconographically similar objects from the Levant and a unique tradition from Bahrain.

Pottery making in the first oases: comparison between Bat and Bisya domestic and funerary assemblages

Jennifer Swerida (Leiden University), Mathilde Jean (British Museum)

Keywords: Oman, pottery, Umm an-Nar, typochronology, petrographic analyses

**Abstract:** The earliest known pottery production in Oman appears in the first oases of the Hajar mountains southern foothills during the Umm an-Nar period of the 3<sup>rd</sup> millennium BCE. Despite a long history of ceramic research in southeast Arabia (see Blackman et al. 1989; Cleuziou 1989; Méry 2000), the modalities of the establishment and organization of this craft are little known because of limited excavations, stratigraphy, and dating. Bat and Bisya are known to be among the largest and earliest oasis sites in this region. Taking advantage of recent excavations by the Bat Archaeological Project and the French Archaeological Mission in Central Oman, this paper provides the first extensive comparison of pottery assemblages from domestic, monumental, and funerary contexts from these sites. Securely dated pottery is examined through typological classification, contextual situation, and technological and petrographic analysis to determine the degree of standardization and centralization of the crafts. Results of this study will provide novel insights on Umm an-Nar period pottery use patterns and related social-economic interaction networks in the Hajar mountains.

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# Elemental Composition and Ancient Technique of Dilmun Burial Jars from Bahrain Using pXRF and Petrographic Analyses

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**Keywords:** Bahrain, pXRF, Dilmun, Qala'at, Arabian Gulf, pottery

Abstract: The "Special hand-made" pottery assemblage, also known as the Dilmun burial jars, is classified as a special and rare Barbar-period pottery type (2030 -1950 BC.) from Bahrain burial mounds. It is made from unique shape and morphology, special color and quality, and function and context. The burial jars assemblage was defined as Dilmun Barbar-period type due to the ware type's fabric as well-fired, fine-grained clay matrix and some white particles "halos". A total of 90 ceramic sherds from Qala'at and the Royal Mounds of A'ali in Bahrain, as well as reference groups, are subject to non-destructive portable X-ray fluorescence (pXRF) spectrometry. Preliminarily petrographic thin-section analysis is also applied to five samples to reconstruct possible clay paste recipes and identify raw materials. Its first kind of this study, the results indicate that geochemical analyses can successfully distinguish subgroups within a typological category of ceramic assemblages non-destructively. The results also identified the elemental and mineralogical composition which can provide more insight into the similarities and differences among Dilmun Barbar-period pottery types. This study is encouraged to explore other aspects of craft specialisation, such as ceramic technological choices and the influence of sociopolitical units in the Bronze Age of the Arabian Gulf.

### The production of Bahlā Ware in the context of Late Islamic Oman

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**Keywords:** Oman, ceramic analysis, ceramic production, lead-barium glaze.

**Abstract:** This paper presents the new scientific data concerning the production of Bahlā Ware retrieved from four Late Islamic settlements in central Oman. These are both surface finds and those from archaeological excavations carried out between 2020 and 2022. Radiocarbon dating from the excavated contexts places them between the 15th and 20th centuries CE, with the majority of dates between the 17th and 20th centuries.

This scientific study combines methods of ceramic petrography, wavelength dispersive X-ray fluorescence (WD-XRF) analysis and scanning electron microscopy with energy dispersive spectrometry (SEM-EDS) analysis, for the reconstruction of ceramic production technology and provenance. The integrated results of petrographic and chemical analyses of ceramic bodies show that all samples can be grouped into a single fabric. Furthermore, the comparison between fabrics from Oman and al-Ain¹ indicates the common origin of these two ceramic groups. This reinforces the hypothesis about the Omani provenance of Bahlā Ware and gives insight into a regional production centre of this important pottery. The SEM-EDS analysis focuses on the in-depth compositional study of unique lead-barium glaze as well as application and firing methods.

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# **Coastal Crossroads: Rethinking Nomadism versus Sedentism Dynamics in Oman Early Bronze Age Communities**

Valentina M. Azzarà<sup>1,2,3</sup>, Alexandre P. De Rorre<sup>3</sup>

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**Keywords**: Early Bronze Age, sedentism/nomadism, coastal communities, resource exploitation

**Abstract:** The Early Bronze Age in South-Eastern Arabia is traditionally marked as a period of significant development, which some have associated with the rise of sedentary communities in the interior regions, particularly in the second half of the 3rd millennium. The situation along the coast presents a contrasting narrative. Here, environmental conditions did not favour the development of agriculture, leading to theories about the emergence of semi-nomadic groups that migrated between different ecological niches.

Yet, a comprehensive analysis of evidence found at major coastal settlement sites such as Ras Al Had HD-6, Ras Al Jinz RJ-2, and RJ-3, compel a re-evaluation of these views. This paper will review the evidence gathered from these sites, focusing on aspects such as stratigraphy, micro-phasing, settlement patterns, architectural maintenance over time, and the utilization of both aquatic and terrestrial resources, which collectively point towards sustained and permanent occupations.

By critically analysing these settlements within the broader context of EBA communities, this study proposes a different perspective. It argues for the existence of permanently settled groups in coastal Sharqiyah, whose sedentarisation was facilitated by the efficient exploitation of the rich and diverse resources available year-round, and questions the traditional model of semi-nomadic communities oscillating between the coats and the inland.

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### A Rural Perspective on the Umm an-Nar and the Wadi Suq Periods from Burj Huraiz (northern Oman)

Bleda Düring (Leiden University); Michel de Vreeze (presenter, Durham University); Eric Olijdam (Leiden University).

**Keywords:** Umm an-Nar; Wadi Sug; Domestic Buildings; Agriculture; Economy.

Abstract: Despite substantial research on the Umm an-Nar and Wadi Suq periods in southeastern Arabia, we know surprisingly little about rural settlements and their economies between ca. 2700 and 1600 BCE. Umm an-Nar research has centred mainly on sites with monumental structures, which often have relatively few domestic buildings, at least as excavated. For the Wadi Suq period, only a few settlements have been found across southeastern Arabia, but these yield relatively little insight into domestic life and remain partially published. Therefore, the discovery of a series of rural settlements dating to the Bronze Age in the northern Batinah, is very significant. To better understand the nature of such rural settlements and their (agricultural and craft) economies excavations were initiated at the site of Burj Huraiz, in the Liwa hinterlands, where well preserved domestic buildings of the Umm an-Nar and Wadi Suq periods were discovered in previous work in

2018. In this paper the results from the 2023-2024 excavations at Burj Huraiz will be contextualized within the broader discussion on the transition of the Umm an-Nar to Wadi Suq period, and the nature of settlements, social organisation, and economies between 2700-1600 BCE in southeastern Arabia.

### A long-term history of oasian landscapes in Southeast Arabia – assessment from the oases of Ras al Khaimah, Masafi and Rustag

**Authors:** Louise Purdue<sup>1</sup>, Sophie Costa<sup>1</sup>, Hatem Djerbi<sup>2</sup>, Gourguen Davtian<sup>1</sup>, Julien Charbonnier<sup>3</sup>, Alain Carré<sup>1</sup>, Linda Herveux<sup>4</sup>, Aline Garnier<sup>5</sup>, Derek Kennet<sup>6</sup>, A. Benoist<sup>4</sup> and Claude Rouvier<sup>7</sup>

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**Keywords:** oasis, landscape, paleo-environment, United Arab Emirates

**Abstract:** Agricultural societies in arid environments have relied on the development and management of oases for millennia. Due to the harsh environment in which they have developed, it is hard to believe in their stable trajectory through time. Their holistic study, in order to decipher the social and/or environmental driving factors behind their emergence and evolution, remains under-explored.

The ANR OASIWAT project (Dir. L. Purdue, 2016-2020) focussed on the long-term reconstruction of oasian landscapes and hydro-agrosystems in multiple oases in Southeastern Arabia (Dhayah, Shimal-Jiri and Khatt in Ras al Khaimah, Masafi in Fujairah, Rustaq in Oman). The systemic, multiscalar and diachronic approach adopted combined field and laboratory geoarchaeology, geomorphology, chronology, geophysics, geomatics, paleoecology and agronomy. Applied to the study of nearly 70 sequences, we were able to trace the series of anthropic and/or natural events that led to their long-term spatial and temporal dynamics.

We aim to present here a synthesis of our results focusing on: 1- environmental and hydroclimatic conditions in the Hajar mountains from the end of the Pleistocene-early Holocene up until today and its impact of resource availability, 2- cycles of development-decline of agriculture and their spatial synchronicity, 3- identification and evolution of agrarian and hydraulic practices through time.

# DAY 2 SALLE DEMARGNE — SPECIAL SESSION – LATE ANTIQUE ARABIA: A CHANGING LANDSCAPE

### The Higazi Paleo-Arabic Inscriptions and the Context of the Quran

Al-Jallad, Ahmad

Abstract: The past several years have witnessed a dramatic increase in the number of documented Paleo-Arabic inscriptions from the Ḥigāz, ranging from the region of Tabūk to Ṭā'if. Many of these text contain substantial content that shed light on the religious background of their authors. The aim of this talk is to bring this material in conversation with the Quran and early literary sources to bring us towards a reconstruction of the religious landscape of the Ḥigāz on the eve of Islam.

### Northwest Arabia during Late Antiquity: crisis or transformation? A reassessment of the archaeological evidence (4<sup>th</sup>-8<sup>th</sup> century AD)

Chung To, Guillaume; Guillaume Charloux; Jérôme Rohmer

**Abstract:** In the oases of northwest Arabia, Late Antiquity is usually considered as a period of decline between two settlement peaks – the Nabataean/Roman period and the Early Islamic 'revival'. Until recently, the 5<sup>th</sup> and 6<sup>th</sup> centuries indeed appeared as a gap in the archaeological record (e.g. at al-Bad', Madā'in Şāliḥ, Qurayya, 'Aynūna, and to a lesser extent Taymā') and inscriptions are scarce, suggesting a massive decrease of sedentary settlement in the region, an abandonment of oasis agro-systems and the presence of mobile populations. However, this picture does not sit well with Islamic sources, which mention several active settlements in the region at the time of the Prophet – especially Khaybar and Taymā'. In view of these contradictory clues, the recent identification of Late Antique settlements in the oases of Dādān (al-'Ulā), Dūmat al-Jandal and Khaybar provides critical new evidence that lead to adumbrate a more nuanced picture of human occupation in Late Antique northwest Arabia. Based on most recent discoveries and on a reassessment of the available archaeological evidence, the present lecture aims to better characterize the changes in the settlement patterns of Late Antique northwest Arabia, to shed new light on the transition toward the Early Islamic settlement boom, and to question the causes for major socio-political changes during this major transitional period.

### Hydroclimate during the emergence of Islam in late Antique Arabia

Fleitmann Dominik & alii [John Haldon, Raymond S. Bradley, Stephen J. Burns, Hai Cheng, R. Lawrence Edwards, Christoph C. Raible, Matthew Jacobson, Albert Matter]

**Abstract:** In Arabia the 6<sup>th</sup> and 7<sup>th</sup> centuries C.E. are marked by profound societal changes which promoted the disintegration of the major Arabian polities. Yemen has a long and diverse agricultural tradition that developed over several millennia to cope with the harsh and marginal environmental conditions. Present-day rainfall ranges from 150 to 450 mm yr<sup>-1</sup> in most parts of Yemen but can reach up to ~1000 mm yr<sup>-1</sup> in the highlands. Rainfall typically lasts from January to May (termed *seif*) and July to September (termed *kharif*), where the summer rainfall period is more intense. Himyar utilized ingenious water management strategies to maximize agricultural

yields despite low mean annual rainfall. In the highlands, large-scale terraced fields, dams and soil retention walls prevailed, whereas spate irrigation was used along the Ramlat as-Sab'atayn desert margin. Overall, Himyar's agriculture was primarily rainfed, the use of wells and cisterns was only marginal and mainly for household consumption. Since agriculture was a primary aspect of the local and regional economies, low agricultural yields during dry years would have affected the stability of these economies and undermined the political influence of Himyar's rulers. The amount of labor is one key factor in agricultural productivity, in particular the maintenance of hydraulic infrastructures, in both the highlands and desert margins, required substantial resources and planning which only a well-organized and stable society could provide. The structural integrity of terraced fields depends on the maintenance of the whole system of hillside terraces. Furthermore, the intensive terrace and irrigation systems of Himyar were clearly a source of great pride for the inhabitants and political leaders as evidenced by abundant inscriptions. Our climate reconstructions reveal a simultaneous significant reduction in spring and summer rainfall at the beginning of the sixth century C.E. This change would have had a profound impact on socioeconomic conditions and all aspects of economic life in Himyar. The combination of drought, neglect of irrigation systems and terraced fields can thereby exacerbate socio-economic problems. Thus, severe droughts contributed to the demise of Himyar, the dominant power in Arabia until 525 C.E., led to general socio-economic and political decline, strengthened tribal communities across Arabia and raised the influence of pilgrimage centers such as Mecca.

### Religions of Ancient South Arabia from polytheism to monotheism (4th - 6th century CE)

Gajda, Iwona

Abstract: Religions of Ancient South Arabia from polytheism to monotheism (4th - 6th century CE)

The religions of southern Arabia underwent major changes between the 4th and early 7th centuries CE. At the beginning of the 4th century CE, all the territories of ancient South Arabia were unified: the Himyarite kings succeeded in unifying three ancient kingdoms, Himyar, Saba and Hadramawt. A common language and a common era were adopted. As far as religion was concerned, the situation was more complicated. The kingdom of Saba had an ancient religious tradition, with its own pantheon and main god, Almaqah. The Hadramite kingdom also had a traditional religion, with the main god, Siyān. The Himyarite kingdom, however, did not have a strong centralised cult, the main gods of the Ḥimyarites were only rarely mentioned and their various tribes, who had previously belonged to other kingdoms, worshipped a variety of gods. This is probably why the Himyarites did not try to impose their own religion on the annexed territories. Rather, they preferred to preserve the worship of the main Sabaean god, Almaqah, in Marib. Later, as religious developments progressed in South Arabia, Jewish and Christian communities settled there and some inhabitants converted to Judaism. In the second half of the fourth century CE, the Himyarite kings converted to Judaism. The majority of the population followed. The ancestral polytheistic cults were abandoned.

Christianity and the expansion of East Syrian monasticism in East Arabia (6-8th cc. CE)

Hoyland, Robert

**Abstract:** This paper will examine the historical context for the expansion of East Syrian ('Nestorian') Christianity and monasticism in late antique East Arabia. Four monasteries have now been excavated in this region and a number of other Christian buildings and artefacts have been uncovered. In particular, excavation has now begun at the site of Darin on Tarut Island, which would appear to have served as the most important episcopal seat along this coast. In the light of this new evidence, it is worth returning to the question of what drove this expansion and in what way it is connected with the rise of the Sasanian dynasty in Iran in the 3<sup>rd</sup> century CE. We will also pay some attention to the status of East Syrian Christianity in East Arabia during what has recently been called Islamic Late Antiquity, namely the formative period of the Islamic Empire (*ca* 630-750).

# Legitimacy and authority in late pre-Islamic and early Islamic South Arabia: the case of the Yu'firids and the Manāḫids

Koutchoukali, Imar

**Abstract:** The period between 500 and 850 CE saw unprecedented social and political change in South Arabia. In the second half of the 6th century AD, the Sabaean political tradition that had existed for over a millennium disappeared, seemingly overnight. Over the next two centuries, South Arabia came to be integrated into the Islamic polity, being ruled by the Umayyads and the Abbasids until the latter's disintegration during the second half of the ninth century.

With the collapse of central political authority, rule over southwest Arabia was divided between several semi-independent dynasties. Of these, the Yuʿfirid and Manāḫid dynasties asserted their rule by claiming descent from the Himyarite kings who had ruled the region centuries earlier. At the same time, they had come to operate within new political framework of Islam, which had its own impact on how these dynasties sought to legitimize their way

The ascent of the Yuʻfirids and Manāḫids co-occurs with the appearance of a renewed scholarly interest in South Arabia's pre-Islamic history. Scholars like Webb ((Webb 2016, 2021) have discussed the role of Yemen in debates in Abbasid Iraq, but comparatively less attention has been paid to how early Islamic Yemenis saw their own history, particularly in a political context (Robin and Schiettecatte 2013). During this period, a distinct exegetical tradition arose that came to see pre-Islamic South Arabia as a center of pre-Islamic monotheist piety, further solidifying the notion of Yemeni exceptionalism (Koutchoukali 2023).

This paper will investigate how the political traditions of pre-Islamic South Arabia interacted with early Islamic attitudes to legitimacy and authority. It does so by studying the early Islamic material, such as genealogies, *qubūriyyāt*-literature and messianic prophetic traditions.

#### Pre-Islamic Arabic Christian poets and the religious landscape of Western Arabia

Lindstedt, Ilkka

**Abstract:** Louis Cheikho (1859–1927) famously labelled many pre-Islamic Arabic poets "Christian." This rather sweeping categorization has come under quite a bit of criticism, most recently by Nora Schmid and Peter Webb. In my talk, I will discuss the thorny question of the identification of parts of Arabic poetical corpus as Christian, as well as the authenticity of the poetry ascribed to figures such as 'Adī ibn Zayd, commonly known as Christian. I will analyze the contents of some (possibly)

Christian poets and their import for reconstructing the religious landscape of Western Arabia. In light of recent epigraphic finds of sixth-century CE Arabic inscriptions, all of which are monotheist and some clearly Christian, it makes sense that there were also Arabic-speaking Christian poets.

Finally, I will present the interesting case of Abū Qays Şirma ibn abī Anas, a not very well known Christian poet from Medina and contemporary to the Prophet Muhammad. Though Şirma's poetry only survives as quotations in later Arabic narrative sources, I argue that it cannot be merely discarded, and certain features in his verses bolster their authenticity.

### Religious continuity and variability in Northwest Arabia, 200-600 CE

Nehmé, Laila

**Abstract**: The demise of the Nabataean Kingdom in 106 CE was followed, in Northwest Arabia, by a Roman religious imprint which was neither significant nor long-lasting for the Roman military presence in Hegra ended at the end of the third century CE. Following this Roman parenthesis, the religious landscape of the region started to diversify, with the appearance of deities, epithets and formulas not attested before in the epigraphic landscape. The divine names were mentioned either *per se* or were used as the divine element in theophoric names. This presentation will try to present the broad lines of the changes which occurred during the period under consideration, using mainly but not only the Nabataean Aramaic and Developing Arabic epigraphic material.

### The "Entry" of Iyad into Tanukh. Invasion, Migration, and Integration in Late Antique North-Eastern Arabia

Pierre, Simon

**Abstract:** In his genealogical work, Ibn al-Kalbī notes various sub-groups of the Nizārī atypical tribe of Iyād as having "entered into (dakhala fī)" the Yamanī conglomerate of Tanūkh. This fusion process, thus opposed to the classical fission model of the nasab, is not confined to these groups, but they are its most prominently represented in Medieval sources. Iyād and Tanūkh would have migrated together from the same Arabian region and maintained a close though distinct presence in Iraq and then Northern Mesopotamia and Syria during early Islam, both associated with Arab Christianity.

By prioritizing dated testimonies, particularly epigraphy, over Abbasid textual reconstructions, an alternative scenario emerges. Initially, "Tanūkh" represented the northernmost trans-Arabian kingdom from the 3rd-5th centuries, somehow synonymous with "Iraq". Simultaneously, "Iyādh" was a 'ashīra' within the central Ma'add territory. Similar to Germanic groups of the same period, they began attacking and migrating into sedentary territories. After many convolutions only discernible from traces of lost imperial reports, they became the predominant "Ma'addī" population over "Tanūkh," whose original significance vanished. Finally, during the 6th-7th centuries, new introgressive groups began to exert influence in the "camp (Ḥīra)" of the region of 'Aqūlā (Kūfa), diminishing the importance of "Iyād" as an elite designation.

### The phylarchs and the sponsorship of the church

Wood, Philip

**Abstract:** The phylarchs and the sponsorship of the church. Both the Jafnid and Nasrid phylarchs ruled over Christian populations. But secondary literature, following propagandistic primary sources, has tended to play up the Jafnids' commitment and underplay that of the Nasrids. This paper offers a re-reading of the hagiographic sources relating to Jacob Baradeus and to the conversion of Nu'man III to understand them in their immediate settings and recognise later pressures to re-write these narratives in response to changing events.

# **DAY 3 AUDITORIUM**

### Out of Africa and into Oman: Palaeolithic Survey

- Matthew Meredith-Williams, La Trobe University
- Roman Garba, Czech Academy of Sciences
- Yamandu Hilbert, University of Tübingen
- Lee Arnold, Adelaide University
- Ash Parton, Oxford Brookes University
- Mathieu Duval, Centro Nacional de Investigación sobre la Evolución Humana (CENIEH)
- Dominik Chlachula, Czech Academy of Science
- David Alsop, La Trobe University
- Nick Sutton, La Trobe University

Keywords: Palaeolithic; lithic artefacts; Oman; Out of Africa

**Abstract:** This talk introduces our project and presents an overview of the findings from our 2023 field season in Oman. The peopling of Arabia during the Palaeolithic is dominated by the of Out of Africa narrative and refugia debate; this project seeks to contribute to these using a multidisciplinary approach to target specific landforms for investigation, with the aim of locating stratified and datable sites through survey and excavation. In 2023 we covered over 11,000km, visiting over 80 locations; of these 5 yielded results presented here, which will be further investigated next season.

### Results from this season include:

- The first identification of Middle Palaeolithic (Nubian/Levallois) in central Oman, to southwest of Duqm, in the southern Huqf
- Excavation of a site dated to MIS-3 on the Tiwi coast
- Identification of an extensive wadi palaeo-terrace system in Wadi Ghadun
- Test pit of karst feature sediments in Dhofar highlands with stratified archaeology
- Test pitting of Lower Palaeolithic site near Ibri

These results have the potential to contribute new knowledge for peopling of Oman and more broadly the timing and nature of Out of Africa dispersal events.

# Exploitation and use of marine invertebrates at the Neolithic site of Sur-Masirah 10 (Sultanate of Oman)

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Keywords: Shellfish, Crab, Neolithic, Oman, Environment

**Abstract:** In Arabia, during the Middle Holocene, groups of fisher-hunter-gatherers settled along coasts and islands to gain access to a wide range of complementary resources. Exploitation of marine and coastal environments played a major role in the socio-economic systems of these populations and influenced their diet and technological culture.

This presentation focuses on marine malacological material from the Neolithic site of Sur-Masirah 10 (SM-10), dated to the 5th millennium BC, which has been excavated and studied in a multidisciplinary way as part of the ANR Neoarabia project. The site is located on the western coast of Masirah Island in the Arabian Sea, located to the south of a vast protected bay, fed by a few wadis that favored the development of mangrove ecosystems during the humid Arabian period. These elements made the site extremely attractive to Neolithic communities. While many fish were exploited among the various habits accessible near the site (parrotfishs, sardines...), shellfish emerged as one of the most important resources.

The results of the malacological study are based on more than 10,000 remains and 6,700 individuals. They show that the inhabitants had access to a variety of nearby environments (lagoon and mangrove, intertidal muddy sand zone and rocky environment) for their food and the supply of raw materials. The marine molluscs discovered were mainly culinary waste and at least fifteen of the 115 species identified were consumed, showing that Neolithic communities had a very good knowledge of their environment and used a variety of resources. Marine shells were also used as raw materials for making. At least twelve species, which appear to be different from those collected for food purposes, have been used to make decorative items such as beads. Some shellfish were also used as tools or objects.

The different uses of marine invertebrates in food, tools and craft activities highlight the importance of these marine animals in many areas of life in the coastal communities of the Arab Neolithic.

# The potential of snails as climate and environmental archives in dryland environments: new perspectives from Oman

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**Keywords**: Climate reconstruction; stable isotopes; sclerochronology; terrestrial and aquatic snails, Sultanate of Oman

**Abstract:** Aquatic and terrestrial snails are underestimated as climate and environmental archives, despite often being the only recorders available in arid areas. The UmWeltWandel project has analyzed 180 snails from different eras (Neolithic to present) and locations in central Oman over the past three years to assess the potential of this archive to reconstruct ancient climate and environmental conditions.

Stable oxygen ( $\delta^{18}O$ ) and carbon ( $\delta^{13}C$ ) isotope values were derived from high-resolution sampling (micromilling) of radiocarbon dated shells and analysis via GC-IRMS. The  $\delta^{18}O$  and  $\delta^{13}C$  isotope values of the snails were then used in combination to reconstruct local paleoclimate and environmental conditions.

Aquatic snails (*Melanoides tuberculata*) can be used to estimate the temperature of the surrounding water during life of the animals and identify the type of water inputs to which the snails were exposed (*e.g.*, groundwater vs surficial water). Terrestrial gastropods (*Zootecus insularis*), in turn, can be used to approximate local vegetation types (C3/C4 ratio) and determine the origin of palaeo-precipitation regimes as well as interpret precipitation and evaporation patterns.

Our results enable us to disentangle different environmental conditions: influence on wetlands by groundwater inputs or rainfall, mixed C3/C4 vegetation cover vs C4-dominated vegetation cover as well as evaporation patterns.

# Between heavy rain events, groundwater recharge and water supply: a first geo-hydrological assessment of the Saq district of the AlUla oasis

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Keywords: Al-Ula, Oasis, Hydrology, Geology, Saq district

**Abstract:** Since 2023, interdisciplinary research has been carried out as part of a DAI-RCU project at the site of Tell Saq and the neighbouring Wadi Saq in the AlUla oasis, northwest Arabia. Bronze and Iron Age pottery and large quantities of ground stone tools indicate a domestic sphere, accompanied by evidence of crop cultivation in the middle of the 3<sup>rd</sup> millennium BCE. Dated primary contexts yet need to be identified among the massive, steeply sloping deposits on which architectural remains are covered by secondary deposits from the First World War period.

The mound lies at the confluence of the Wadi Saq and the main AlUla valley, opposite the Wadi Megder/Talat al-Hammad, a position apparently characterized by advantages and risks at the same time. Preliminary hydrological investigations in the Wadi Saq and an assessment of results of core drillings in the vicinity of the site provide first information on the groundwater supply of the Wadi Saq and the geological situation, suggesting that the area was highly suitable for settlement and agriculture. Water supply of the Wadi Saq was in fact fed by the Harrat al-Uwayridh in quantities allowing for a stable groundwater recharge. At the same time hydrological modelling suggests that the degree of infiltration in the upper part of the Wadi Saq minimized the risk of the effects of heavy rain events. Thus, it appears that the location of the mound was carefully chosen.

# Environmental dynamics in northwestern Arabia during the Holocene: fluvial, wetland and dune archives in the AlUla oasis

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- 6. Independant researcher

Keywords: oasis, alluvial sediments, dunes, climate oscillations, history of human occupation

Abstract: The oasis of AlUla (NW Saudi Arabia) provides a unique research background for paleoenvironmental studies. Located at the foot of the Harrat al-Uwayrid formation which separates the sandy deserts of northern Arabia (Hamra Desert) from the Red Sea, AlUla is characterized by the development of emblematic archaeological sites such as the Iron Age site of Dadan, the Nabataean site of Hegra, or the Islamic city of AlUla. To better understand the environmental, hydrological and climatic background in which the oasis developed, alluvial and eolian sedimentary archives were studied in the oasis and its surroundings. Geophysical investigations and stratigraphic description of exposed sedimentary archives, test pits and core drillings were conducted in the field and samples collected for sedimentological, geochemical and chronological analyses (OSL and 14C). Based on 130 radiocarbon and OSL dates, our results provide the opportunity to propose a first chronostratigraphic overview of Late Quaternary deposition in the AlUla, with 11 distinct sedimentary phases. They highlight a long-term tendency towards aridification since the second part of the Holocene, as well as short-term climatic oscillations. This allows us to draw first hypotheses on the impact of hydroclimatic dynamics on ancient societies for the last 10 millennia.

### The Neolithic and Chalcolithic occupation of Khaybar, Saudi Arabia

Rémy Crassard<sup>1</sup>, Diaa Albukaal<sup>1</sup>, Kathleen Dupinay<sup>2</sup>, Marylise Marmara<sup>1</sup>, Benjamin Mutin<sup>3</sup>, Jacques Élie Brochier<sup>4</sup>, Sylvain Colin<sup>5</sup>, Bruno Depreux<sup>1</sup>, Hervé Monchot<sup>6</sup>, Victoria Reina<sup>1</sup>, Séverine Sanz-Laliberté<sup>1</sup>, Guillaume Charloux<sup>6</sup>, Munirah AlMushawh<sup>7</sup>

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Keywords: Neolithic, Chalcolithic, lithics, dwelling structures, hearths.

Abstract: Over eight field seasons, the Khaybar Longue Durée Archaeological Project has conducted surveys and excavations at numerous late prehistorical campsites dating back to the Neolithic and Chalcolithic periods (between 7200 and 4000 cal. BCE). Given the scarcity of prior archaeological exploration in the region, the outcomes of these surveys and excavations are particularly significant for enhancing our understanding of the spatial organization, architecture, and associated artifacts of these sites. The findings from the campsite excavations indicate various habitation-related activities, including heating and cooking, lithic industry, food processing, and hunting. Of particular note is the Al-Matahna site (KH05187), which has provided one of the oldest evidences of human occupation from the Early Neolithic period in Arabia. This site stands out for its remarkable density of archaeological material. The extensive surface survey yielded a substantial amount of lithic material, numbering in the tens of thousands. Furthermore, over 190 macrolithic objects, such as grindstones (both static and mobile), grinders, hammerstones, and polishers of different types and sizes, were identified and geolocated across an area of approximately 600 sq. m. The excavation efforts involved four sondages at distinct locations within the site. One of these, conducted within a circular structure, yielded a wealth of materials, including lithics, worked marine shells, bone tools, unusual stone tools, and faunal remains. The other three sondages revealed a stratigraphy ranging from 20 to 80 cm in depth, suggesting the presence of potentially well-preserved living surfaces. Additionally, the study aims to explore the potential connection between these campsites and nearby mega-traps (desert kites), investigating whether they were utilized by the same human groups.

# New Insight into the Neolithic Mustatil Tradition: First Evidence from the Harrat Khaybar, Saudi Arabia

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Keywords: Mustatil, Neolithic, Cult, Pastoralism, Saudi Arabia.

Abstract: In late 2023 the University of Sydney, along with the Heritage Commission, began work at a large mustatil site to the southeast of Al-Thamad on the Harrat Khaybar, Saudi Arabia. This site is marked by a large concentration of mustatils (28), as well as a series of monumental features dating from the Neolithic onwards. These are the first mustatils to be investigated on the Harrat Khaybar, where more than 400 have been identified. Over the course of this work, all mustatils were examined, with test excavations conducted in three. Dateable surface material was also obtained from several other mustatils at the site. The results of these test excavations and surface sampling shed new and important light on the mustatil tradition. This paper will outline the key findings of this work, in light of important contextual information from the mustatils of AlUla. As well as the wider ritual and pastoral framework of the tradition, and its place in the Arabian Neolithic. Based on the AlUla and Khaybar datasets, the mustatil tradition appears to have been a cohesive ritual concept that extended across a large part of Saudi Arabia, making it one of the earliest, widespread ritual traditions known to date.

# Contextualising the Bronze Age Funerary Landscapes of AlUla and Khaybar

Hugh Thomas (The University of Sydney), Daniel Franklin (The University of Western Australia), Lauren Swift (The University of Western Australia), Fahad Bagdadi (Independent Scholar), Jane McMahon (The University of Sydney), Melissa Kennedy (The University of Sydney)

Keywords: Saudi Arabia; Bronze Age; Burials; Arabian Peninsula; burial traditions

**Abstract:** In the late 4<sup>th</sup> and early 3<sup>rd</sup> millennia BCE, monumental tombs begin to be constructed across the Arabian Peninsula in areas such as Oman, Yemen, and the UAE. In comparison to these regions, the Bronze Age tombs of Saudi Arabia have not garnered as much academic attention. However, the counties of AlUla and Khaybar, Saudi Arabia, contain two of the densest Bronze Age funerary landscapes in the Arabian Peninsula. Both regions are characterised by tens of thousands of funerary structures, ranging from cairns and tower tombs to monumental 'pendant' burials. As part of the Prehistoric AlUla and Khaybar Excavation Project, ongoing analysis and excavation of these structures has been undertaken to determine the chrono-typological development of these features. Evidence suggests that large-scale tomb building started in the 3<sup>rd</sup> Millennium BCE, continuing for approximately 1200 years. This horizon of monumental tomb construction finds good parallels not just across the Arabian Peninsula, but Western Asia.

Saudi Arabia appears to have been far more interconnected with the Arabian Peninsula, and beyond, than previously supposed. This paper will not only address the recent discoveries in AlUla and Khaybar, but seeks to contextualise these findings within the broader 3<sup>rd</sup>-2<sup>nd</sup> millennia BCE cultural horizon, exploring the socio-cultural stimuli that accompanied this episode of monumental tomb building across Western Asia.

#### Funerary Rituals on Qurayyah's Painted Pottery?

Marta Luciani

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**Keywords:** Funerary Archaeology; final Late Bronze and Initial Iron Age; Qurayyah Painted Ware; Iconography

**Abstract**: The paper aims at reviewing the iconography attested on painted vessels found by the Saudi-Austrian Joint Archaeological Project in Area R in Qurayyah (Luciani 2023).

Area R is a final Late Bronze/initial Iron Age, over 400sq-meter large architectural complex composed of several burial chambers and a two-room sanctuary (Luciani 2021). Although the excavation is ongoing and the context not yet fully investigated, the iconographic repertoire painted on vessels is so rich and varied as to allow us to explore the question: can we recognize funerary rituals in the figurative images painted on the vessels found in the burial chambers of Qurayyah's Area R complex?

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# The sedentarization process in North-west Arabia during the Bronze Age: new evidence at Khaybar and other regional oases

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Keywords: Sedentarisation, North Arabia, Bronze Age, funerary avenues, walled oasis

Abstract: The transition from a mobile to a sedentary way of life is a process that is particularly difficult to assess in archaeology. Recent explorations at Khaybar, in the Saudi Hijaz, have provided several pieces of evidence of a regional sedentarisation process during the early Bronze Age. In this well-known historical oasis, funerary avenues, a town and monumental walls have recently been uncovered, whose construction and use seem to overlap during the second half of the 3rd millennium BC. We hypothesise that at this time, social tension for food and water access could have required group gathering in an ecological niche/refuge and collective adaptation. Funerary avenues were the first stage in this transformation from a nomadic to a more sedentary way of life, which was followed by sedentary evidence: town and ramparts. Although archaeological information is still lacking for the other regional oases, several clues that we will present during this conference seem to lead to similar conclusions.

### The field of possibilities: First crops in north-western Arabia

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Keywords: Northern Arabia, Bronze Age, crops, date palm, water management

**Abstract:** During the Bronze Age (3<sup>rd</sup>-2<sup>nd</sup> millennium BCE), massive architecture emerged in Northern Arabia, sometimes associated with irrigation structures, metallurgical and pottery production, or domestic remains. This phenomenon is thought to reflect a widespread sedentarization process in interconnected sites, recently labelled as "urban" or "walled oases". However, the associated subsistence economies are currently poorly understood. In an arid paleoclimatic context, compensated by underground and surface water resources, the first cultivated plants - cereals, figs, olives, and grapes - appeared, suggesting various scenarios. Among them, the use of imported plants coming from elsewhere or the local existence of palm-free oases with limited or absent irrigation structures must be considered. The date palm only becomes visible in the mid/late 2<sup>nd</sup> millennium, by contrast with Eastern Arabia where early agrarian forms integrated the date palm in the 3<sup>rd</sup> millennium, supporting the hypothesis of a diffusion of date palm from east to west. Our presentation, which results from the collaboration between several on-going archaeological projects currently working in the al-'Ulā region and Khaybar (CNRS/AFALULA/RCU), aims to document evidence of the first crops in Northern Arabia based on the archaeobotanical records. Furthermore, it explores the societal, environmental, and technical implications of these early agricultural developments, raising under-explored hypotheses on water management, such as water harvesting techniques.

# 3000 years of settlement in one of the main ancient north-Arabian oases: Dadan, from the Bronze Age to the Early Islamic Period.

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Keywords: Northwest Arabia; Bronze Age; Iron Age; Late Pre-Islamic period; Early Islamic period

Abstract: Dadan, one of the main ancient oasis settlements in northwest Arabia, is mostly known for its alleged heyday in the first millennium BCE, when it became the capital of two successive North-Arabian kingdoms (Dadan and Liḥyān) and a major trade station on the 'Incense Road'. However, new field research carried out since 2020 by the *Dadan Archaeological Project* (CNRS/RCU/AFALULA) is currently revealing a much longer settlement history, running virtually uninterrupted from the Early/Middle Bronze Age to the Early Islamic period. Not only does Dadan fit in with recent research developments, which have recognized the early development of northwest Arabian oasis settlements, but it offers an unparalleled chronological sequence showing no major occupational gap for at least 3000 years – including during periods that are generally poorly documented in the regional archaeological record, such as Late Antiquity. Based on the results of four excavation and survey seasons and a wide array of specialized studies, this paper will present the first overview of the sequence of Dadan and put it into perspective within the history of the al-'Ulā oasis and that of northwest Arabia as a whole.

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# The emerging of South Arabian urban societies at the dawn of the Iron Age: the material culture from abroad

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Keywords: Southern Arabia, Bronze age, Iron Age, urban societies, material culture

**Abstract:** The emerging of South Arabian societies at the dawn of the Iron Age (caravan kingdoms) is a phenomenon that goes hand in hand with the emerge of confederate tribal entities, cities, and circulation of material culture, shaped around the XII-VIII cent. BCE. However, the formative process of South Arabian societies and cities, as well as agricultural centers and towns, begins as early as during the Bronze Age (III-II millennium BCE), between the regions of the Khawlan highland and the pre-desert foothills, where hydraulic technologies were developed. This indispensable factor will, at the dawn of the 1<sup>st</sup> millennium BCE, be joined by the market for aromatics. The available data, looking at the turn of the 1<sup>st</sup> millennium BCE as well as at the Bronze Age, make it possible to better define the formative process of southern Arabia cities and society. A topic, this one, debated mainly with regard to the factors that determined it. de Maigret (1996), Nebes (2001), Sass (2007), Sedov (2005), Schiettecatte and Mouton (2014: 171), Magee (2014), Avanzini (2016) will be quoted to make a state of the art; furthermore this paper intents to display those elements of material culture that shed light on at what extent foreign matters, i.e. from Levantine and/or Mesopotamian contexts, may have contributed to give form to southern Arabia urban societies.

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# The Art of Qaryat al-Faw: A Reassessment and Contextual Analysis

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Keywords: Qaryat al-Faw, Arabian art, temple, sculpture, pottery

Abstract: Year after year, excavators working at Qaryat al-Faw unearthed a diverse array of treasures, ranging from intricately decorated stone buildings to finely cast bronze statues. While some of these artefacts remained unpublished, discussions on the available material recognised characteristics that pointed at certain times towards influence from South Arabian art, while others highlighted the clear imprints of Hellenism and Romanism. Despite these occasional observations, no review has yet fully contextualised the development of these styles in Qaryat al-Faw. In this lecture, I aim to delve into the architecture and material culture from the two distinctive construction phases of the city (Phase I: c. 400-100 BCE; Phase II: c. 100 BCE – 300 CE). This will be done by providing a new categorisation system, whilst employing a comparative approach that contrasts the existing data against material from Egypt, the Mediterranean, Mesopotamia, South Arabia, and the Iranian Plateau. The result will be an enhanced understanding and a new catalogue of the material culture of al-Faw, with a newly proposed cultural landscape that fostered the movement of artisans, artists, and craftspeople across these different regions. To facilitate a better comprehension of the discussed materials, the presentation will feature new 3D reconstructions of temples and tombs, complemented by fresh artifact displays and on-site photography.

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# Beyond Sumhuram: Defining the South Arabian Influence over Khor Rori (Dhofar, Sultanate of Oman)

Silvia Lischi, Faculty of Asian and Middle Eastern Studies, University of Oxford

Keywords: Late Iron Age, Ancient South Arabians, Khor Rori, Sumhuram, Inqitat

Abstract: This presentation discusses the results of recent archaeological surveys and excavation activities in the Khor Rori area, which shed light on the intricate dynamics of land use by the Ancient South Arabians during the Late Iron Age (300 BCE - 300 CE). This research was made possible by an extensive mapping programme undertaken by the DHOMIAP project over the past five years to identify South Arabian structures outside the city walls of Sumhuram. Considered in the light of the presence of the indigenous Dhofar Coastal Culture settlement (HAS1) just 2km southeast of Sumhuram, the explored South Arabian structures led to a paradigm shift in the historical narrative of the area. In fact, their chronological and functional interpretation allows for a more refined analysis of the territorial occupation in the area and the evolutionary relationships between the two culturally distinct centres. The preliminary data indicate more complex land-use patterns than previously thought, allowing the definition of distinct phases of the South Arabian penetration into Dhofar. Ultimately, this presentation will provide a holistic view of the evolving cross-cultural interactions that occurred in Khor Rori during the Late Iron Age, contributing to a deeper understanding of the South Arabian influence in the region.

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### The Yemeni Mummies: Investigative Report

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- Mohammed A. Atbuosh, Independent researcher, <u>m@atbuosh.com</u>

Keywords: Yemen; Mummies; Mummification; Graves robbery; Rock-cut tombs

**Abstract:** Yemen developed a technique for preserving and mummifying deceased bodies through the use of aromatic plant materials and resins found in the local environment. However, these mummies are currently in poor condition, with many of them on the verge of disappearing. Regrettably, the ongoing illegal excavation and continuous destruction of burial sites, especially the rock tombs containing several mummies, pose a significant threat to this unique scientific treasure. The preservation of the mummies has not been scientifically sound in some aspects. They have fallen into a precarious state due to the lack of ideal environmental conditions,

appropriate treatment, and inadequate care. This report aims to provide a comprehensive overview of the published literature on Yemeni mummies and their current conditions, an updated catalog, followed by a complete bibliography of the literature, which is mostly in Arabic and has thus escaped the attention of the international academic community.

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# DAY 3 SALLE DEMARGNE

# Where east meets west: The historical relevance of the springs on the Abu-Jir lineament, the Arabian Desert in Iraq

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Keywords: Bedouins, fortress, Oases, tribes, ancient roads

Abstract: More than 200 springs span more than 500 km, forming a slightly arced line between the floodplain of Mesopotamia and the Arabian Desert in Iraq. This desert has been the realm of nomadic people for millennia, where permanent settlement is inevitable. The springs probably sustained palaeolithic humans and have been a focus for human settlement ever since. At least a linear series of fortresses are associated with the springs, dating back to the Sasanian period and reoccupied afterwards until the Ottoman period. They have been used variously as fortresses, habitation, and worship. The springs also sustained agriculture through networks of canals and were mapped and described by Alois Musil, who travelled through the area in 1912. Recently, the springs have been imperilled by groundwater extraction for industrial agriculture. The springs of Abu-Jir may be the longest chain of springs in the world and mark a boundary of immense cultural significance. In this paper, we outline a proposal for research to understand the springs further in the context of their essential location and imminent decline.

# Sailing with the rhythm of the winds: A rhythmanalytical approach to comprehend sailing strategies of the pre-modern Red Sea sailors.

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**Keywords:** Red Sea, sailing, sailors, navigation, rhythm analysis

**Abstract:** This paper analyses a variety of sailing strategies adopted by local navigators that challenge existing assumptions around sailing the Red Sea in the pre-modern period. Historic misunderstandings of the implications of the Red Sea environment for navigation have given rise to a series of myths about the Red Sea space: that it was dangerous to sail (Zazzaro, 2013: 1); that it was navigated only during daytime (Seland 2020: 101-102); and that prevailing northerlies in its northern sector presented a major impediment to sailors (Sidebotham 2011: 181).

Spatiotemporal analysis of data gleaned from 18th & 19th century CE travelogues, considered alongside modern wind data and seen through a rhythmanalytical perspective, demonstrates that many of these assumptions are false: pre-modern Red Sea sailors sailed at night, and they sailed north using north-westerly winds to their advantage alongside diurnal winds. Adopting a rhythmanalytical approach — a heuristic concept that helps to understand periodic temporalities of natural rhythms (for instance, everyday occurrences of diurnal winds) and its impact on human activities (in this case sailing) within space - provides an alternative perspective to understand that sailors sailed with the rhythm of the winds and, in turn, that their sailing strategies and everyday life were shaped by the natural cycles of those winds.

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Metallurgical Synergy: Copper trade, unveiling technological exchange in Southeastern Arabia (4<sup>th</sup>-3<sup>rd</sup> millennium BC)

Sara Quaggio (University of Pisa)

**Keywords:** Copper Trade, Technological Exchange, Southeastern Arabia, Socioeconomic Complexity, Typological-Statistical Approach.

**Abstract:** During the transition from the 4th to the 3rd millennium BC, societies in southeastern Arabia not only reflected but also played a pivotal role in propelling distinct technologies within neighboring communities, contributing significantly to the early development of socioeconomic complexity in the Gulf. This synergistic exchange of shared objects, supported by textual evidence, suggests a transfer of ideas and technologies between these regions, portraying them as integral components of an active and thriving socio-economic configuration, particularly from the third millennium BC onward.

Using an innovative typological-statistical approach on 247 collected objects, this study employs network analysis together with the Mann-Whitney test, the Univariate and Probability plots for comparing the relevant chemical components within the collected object types. This methodology aims to systematize a diverse range of regional evidence into a coherent "big picture" while concurrently providing a more complex understanding of the intricate interconnections between Magan and southern Mesopotamia.

# Evidence for the commercial connections between the Red Sea, Arabia, and the later Roman province of Third Palestine

Walter D. Ward (Professor, University of Alabama at Birmingham)

**Keywords:** Commerce, Red Sea, Arabia, Aila, later Roman Empire, economy

**Abstract:** I am proposing a synthetic presentation which examines the evidence for commercial connections between the Red Sea, the Arabian Peninsula, and the later Roman province of Third Palestine. This paper is based on the data collected for my latest book project on the subject, which examines literary sources, papyri from Nessana and Petra, and archaeological sources.

My paper will especially concentrate on analyzing the evidence of commercial contacts. For example, I will discuss the archaeological evidence from the port of Aila (modern Aqaba, Jordan) which shows evidence of economic exchange with Arabia (steatite vessels) and the Red Sea (sherds from Axum). I will also discuss the finds of Aila amphorae (storage containers) at sites in Arabia and throughout the Red Sea.

Another major topic will be the impact of nomadic groups and Arabs, often called Saracens in the primary sources, on the economy of Third Palestine. For example, the Nessana papyri provides an account of a sixth century merchant caravan led by an Arab named Zunayn. Furthermore, I will discuss the early Islamic sources which discuss caravan traffic from Arabia to the later Roman empire.

Sailing to and from Khor Rori. The pottery assemblage from Khor Rori (Oman) as testing ground for models of the western Indian Ocean trading routes between the 5th c. BCE and the 5th c. CE

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Keywords: Khor Rori, Oman, Indian Ocean, Trade, Pottery, Sea Routes

**Abstract:** From the second half of the 1<sup>st</sup> millennium BCE, the Indian Ocean became the stage forthe development of a series of international trading connections. A fundamental node of sucha complex network was the site of Khor Rori[1] in the Dhofar region of the Sultanate of Oman. Known as *Moscha Limen* to the unknown author of the *Periplus Maris Erythraei* [2], the site of Khor Rori was commercially active and well connected with the entire western Indian Ocean, as highlighted by the finds that the archaeologists have retrieved with Mediterranean, Persian Gulf, Red Sea, and Indian origins. The image that we have, at the moment, of the complexity of the trading system is still far from being satisfactory. However, considering the geographical dimensions of the topic, the author proposes to limit the focus of the presentation to the connections directly involving the site of Khor Rori. In this presentation, some of the most known theories regarding the trade routes are tested against the collection of all published data regarding the pottery artefacts from Khor Rori. In particular, the attention is mainly centered on identifying the most probable directions and routes followed by traders starting or ending their journey in Khor Rori.

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# Made elsewhere: what do imports reveal about the evolution of cultural practices in Al-Ula (Hejaz) during the Islamic period?

- Maria Paola Pellegrino, Archaïos
- Francelin Tourtet, Archaïos and Freie Universität Berlin
- Cassandra Furstos, Archaïos
- Nolwenn Guedeau, UMR 7298 LA3M and Islamic Archaeology Unit, BIGS-OAS, Bonn University
- Anne Leschallier de Lisle, Archaïos
- Yasmin Kanhoush, Archaïos and UMR 5133 Archéorient
- Julien Charbonnier, Archaïos

**Keywords:** Al-Ula, oasis, Islamic archaeology, material culture, trade network

Abstract: As evidenced by the survey conducted in the framework of the Al-Ula Cultural Oasis Project (led by Archaïos, funded and steered by the French Agency for AlUla Development on behalf of the Royal Commission for AlUla), the Al-Ula region (Hejaz, Kingdom of Saudi Arabia), has been continuously settled for at least 3,000 years. Material remains (pottery, glass artifacts, tobacco pipes, stone vessels, coins etc.) of non-local origin collected during the UCOP survey and dated from the Early Islamic to the Late Ottoman period (7th - 20th centuries CE) provide evidence of contacts with neighboring regions (e.g. Egypt, the Levant, and Mesopotamia) as well as more distant ones (e.g., Eastern Asia, Europe). Quantifying the imported objects and tracing their provenance along with possible maritime and overland routes to Al-Ula contributes to investigating the relations between this oasis and the "outer world" in a diachronic perspective. Through the analysis of imported artifacts, this article will also shed light on related cultural practices in local Arabian societies, such as tobacco, coffee, and tea consumption.

# Abraha's Cathedral in Ṣancāa and the Great Mosque: Material and Spiritual Continuity

Dr. Werner Daum, professor (retired), Università di Pavia

**Keywords:** Abraha's cathedral: its "cupola" discovered. It still exists.

Abstract: The Great Mosque is the successor of Abraha's cathedral, which in turn had been the heir of a pagan sanctuary. The latter's main cultic elements (a building and two poles) had been incorporated into the church and, from there, made their way into the mosque. In the mid-8th c. AD, the church was demolished; its columns and most of its coffered ceilings were re-employed in the mosque. Against the background of the 2000-year history of this magnificent building, a recent discovery by the Italian restoration project (2005-2015) further adds to our understanding of the cathedral and the mosque: The domes beside the miḥrāb contained beautifully carved alabaster reliefs that had been invisible due to 1500 years of soot and pollution.

I think these plaques are the ones that, according to al-Azraq $\bar{i}$ , originally formed the "qubba" of the cathedral, guiding the sun's blending light into its holy eastern section, the direction of the congregation's gaze. Their installation in the mosque (direction of Mecca) reflects a similar spiritual idea. The miḥrāb (mid-8th c.), substituting the originally central position of the domes, provides a dating ante quem for the alabasters. The quality of the reliefs points to a workshop in Constantinople. The artist might have been one of the masters,  $\bar{s}unn\bar{a}^c$ , sent by Justinian to  $\bar{s}anc\bar{a}^c$ .

### From the Oath Under the Tree to the Hijra: Evolving Narratives of the Umma's foundation

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**Keywords:** Umma, al-Ḥudaybiya, Hijra, Medina, Mecca.

**Abstract:** The concept of *umma* is rooted in the Quran, but the moment of its foundation has been subject to reinterpretation by early Muslim scholars. By employing a new hadith datation method based on a relational database programmed in SQL, I argue that during the 1st/7th century, the Hijra journey from Mecca to Yatrib/Medina is minimized in early accounts. Instead, the allegiance oath under the tree during the expedition of al-Ḥudaybiya (6/628) takes precedence as the defining moment of the community's establishment (This idea was firstly articulated in Tillier & Vanthieghem 2019: 167. See also the account of al-Ḥudaybiya presented by the Medinese traditionist 'Urwa b. al-Zubayr (m. 93/712-3) in Schoeler & Görke 2008). While various other events, such as the change in qibla or the conquest of Mecca are also proposed as foundational moments (Crone 1994), a pivotal shift occurred in the years 100-20/720-40. During this time, some descendants of Meccan Companions (saḥāba) who migrated to Medina insisted on redefining the foundation around the moment of migration. This new narrative of the First Muhāģirūn (almuhāģirūn al-awwalūn) served to support their claims to numerous privileges based on the principle of sābiqa. As this definition gained prominence in the first half of the 2<sup>nd</sup>/8<sup>th</sup> century, the migration to Medina narrative was progressively enriched with anecdotes supported by the Medinese traditionists al-Zuhrī (m. 124/741-2) and his disciple Ibn Isḥāq (m. 150/767), transforming it into a comprehensive founding narrative of the *umma*.

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Taqī al-Dīn al-Fāsī and the emirate of Mecca: toward the sharifisation of the sharifate (7<sup>th</sup>-9<sup>th</sup>/13<sup>th</sup>-15<sup>th</sup> centuries)?

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Keywords: Hijâz, Mecca, Arabic historiography, medieval history, social history

Abstract: The Emirate of Mecca is often referred to in academic literature as the "Sharifate of Mecca", a name that echoes the status of its leaders, the Ḥasanid sharifs who ruled the Holy City, hailing from the Banū Qatāda lineage since the 7<sup>th</sup>/13<sup>th</sup> century onward. This name also underlines the influence of the Prophet's descendants, the *ashrāf*, in Mecca and the Ḥijāz, well beyond that of the ruling family. This paper investigates the process through which the influence of the *ashrāf* spread during the late medieval period, and participated in shaping Mecca as a city whose social and political landscape was in part defined by the socio-genealogical status of its distinctive ruling elites. Through a detailed analysis of 9<sup>th</sup>/15<sup>th</sup> century historiographical narratives of the Ḥijāzī corpus, especially the 'Iqd al-thāmin composed by the Meccan scholar Taqī al-Dīn al-Fāsī (775-832/1373-1429), I will illustrate that the Meccan *ashrāf* became increasingly prominent from the end of the 7<sup>th</sup>/13<sup>th</sup> century onward. Progressively integrated in a process of institutionalization of the political and scholarly a'yān of the Holy City, that reshaped the social landscape of Meccan elites, their growing strength led, by the end of the 8<sup>th</sup>/14<sup>th</sup> century, to a reconfiguration of the Meccan power structures.

### Iron Age Metal Hoard discovered at Saruq Al Hadid-53 Archaeological Site, Dubai-UAE

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Keywords: Metal hoard, Saruq Al Hadid, Artifacts, Iron Age, Copper alloy

Abstract: This paper aims to discuss the discovery of a metal hoard at Saruq al-Hadid-53 archaeological site in Dubai (UAE). This large metal hoard was found during excavation works conducted in 2019. It was found buried in a circular pit 40 centimeters deep below the surface. The hoard dates to Iron Age II (between 900 and 700 BC). This collection of undisturbed metal artifacts contains 123 objects consisting mainly of copper alloy vessels, tools, and other special items such as mirrors, axe heads and ladles. Other artifacts were made of soft stone and bone. Burn marks on the objects suggest that they were used many times before their deposition in the pit. This paper will also discuss site characterization, the hoard description, dating, its importance, discovered Artifacts, and the decorations on the discovered artifacts in this hoard. The paper will shed light on the main discoveries at Saruq-53 and its connection with the other areas at Saruq al-Hadid site.

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### Al-Shu'aybah Hoard Coins: A Comprehensive Study from Salvage to Cataloguing.

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Keywords: Cultural Heritage, Submerged, Shu'aybah, Jeddah, Ayyubid, Mamluk

Abstract: The study of al-Shu'aybah hoard coins holds significant importance, standing as a major Islamic treasure recovered from the depths of the Red Sea near the port of Shu'aybah in the Makkah al-Mukarramah region in 1994. This hoard, comprising an extensive collection of approximately five thousand coins, represents a valuable historical record. The collection includes loose oxidized coins, three clumps of coins, and two albums containing partially treated coins, totalling 804 coins, among which 30 date back to the Rasulid dynasty in Yemen (1253 to 1350 AD). Al-Shu'aybah hoard becomes a rich tapestry for studying the history of coins during the Mamluk era in Egypt and the Levant, as well as the period of the Rasulid dynasty in Yemen. It serves as a crucial source for delving into the medieval history of states, exploring names, nicknames, and their evolution in Islamic history in Egypt and Yemen. In addition, the study sheds light on the meticulous process of salvaging the hoard from the sea depths, showcasing the Kingdom of Saudi Arabia's commitment, represented by the Heritage Commission, to preserving submerged cultural heritage.

The study encompasses all stages of preserving al-Shu'aybah hoard, documenting its historical, cultural, and archaeological significance. This study presents a compelling example of submerged cultural heritage, addressing key issues such as the calibre and weight of the hoard coins. These aspects are pivotal in understanding the coins' role as economic tools, serving as true indicators of economic strength. The study reveals that countries with robust and stable economic systems mint high-quality coins with consistent weights, facilitating substantial commercial circulation in monetary and commercial markets.

The significance of this study lies in its thorough examination of al-Shu'aybah hoard coins from the Ayyubid and Mamluk eras, as well as the Rasulid dynasty in Yemen. The study classifies coin types, interprets inscriptions, and analyses their political, economic, and social implications. Furthermore, it aims to compile a comprehensive catalogue, providing a valuable resource for researchers and scholars in dating undated coins from this crucial period in Islamic history.

#### "Midianite" Pottery from Timna and Qurayyah: A Novel Assessment

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Keywords: QPW, Timna, Qurayyah, Final LBA, Pottery Exchange Networks

**Abstract:** The "Midianite" pottery – now known as Qurayyah Painted Ware (QPW) – discovered in the copper production site of Timna, Israel has been the centre of an ongoing archaeological discourse for over 50 years, involving questions over its provenance and dating. Until a few years ago, the only possible comparison of this material retrieved from Qurayyah had been collected from its surface.

Since the start of the Joint Saudi Arabian-Austrian Archaeological Project in Qurayyah in 2015 (Heritage Commission and University of Vienna), an in-depth study of the Late Bronze Age pottery production and use has been initiated, allowing its distinction in different assemblages in the initial LBA and final LBA. The latest research on the material originating from the secured and radiocarbon dated archaeological context of Area R allowed us to draw a direct link between ARPW (Area R Painted Ware) 3 and 2 and the QPW excavated in Timna Site 200, supporting its previously proposed dating in the 13<sup>th</sup> to mid-12<sup>th</sup> cent. BCE. This paper will show how the two discussed assemblages morphologically and stylistically correspond to each other, confirming their overlapping dating, and therefore distinguishing them from other partially different repertoires from the Southern Arabah, belonging to separate chronological horizons.

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# Rock art and funerary monuments in Jabal al Qahar – Al Reeth (Saudi Arabia):

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Keywords: Al Reeth, Jabal al Qahar, survey, rock art, funerary monuments

**Abstract:** In this communication we present the preliminary results of an archaeological mission in the Al Reeth Mountains (the southwestern region of Saudi Arabia). This mission was carried out as part of the archaeological inventory project of the al Reeth province which is part of the region of Jazan.

Systematic surveys allowed the inventory of several painted and engraved shelters as well as necropolises which show burials of a varied typology. These remains, of diverse chronology, are witnesses to a long human occupation of this high-altitude sector and to a long-term anthropization of the mountain.

We therefore examine here two aspects of interaction between men and the rocky substrate: shelters, cavities, slabs, and rocks which served as elements or places of simple and collective burial and as supports for the different painted and engraved artistic manifestations, which suggest aspects of daily life and symbolic thought of the human groups who frequented this mountainous area.

### Epigraphic Survey in Yanbu', Saudi Arabia: First Season (2023)

- Risa Tokunaga, Heritage Commission, Saudi Arabia (speaker)
- Ajab Alotibi, Heritage Commission, Saudi Arabia
- Majed Dahash, Heritage Commission, Saudi Arabia
- Muzhira Alqahtani, Heritage Commission, Saudi Arabia

Keywords: Saudi Arabia, Yanbu', early Islamic inscriptions, Thamudic inscriptions, rock art

**Abstract:** This paper overviews the result of the first season of the Saudi Heritage Commission's epigraphic survey in Yanbu 'Governorate in al-Madinah Province. As previous surveys have proven, the area, through which many routes to al-Madinah have passed, is a treasury of early Islamic graffiti. Our comprehensive survey aims to systematically record a vast number of inscriptions and petroglyphs in the area that remain unrecorded. The first season, conducted in November 2023, covered 128 sites in 16 areas surrounding Jabal Radwā, including most parts of Wādī 'Ar'ar, the largest graffiti concentration in the region, Wādī 'Abāthir, and Wādī Buwāṭ. We documented a total of 991 Islamic and 151 Thamudic inscriptions, in addition to 1367 petroglyphs, including prehistoric rock art, *wasms*, and other signs. Most of the early Islamic inscriptions are supplications to Allah and the declaration of faith, which date back to the seventh and eighth centuries judging from the script style and some accompanying dates. Thamudic inscriptions, usually found adjacent to them, are written vertically, many showing the characteristics of Thamudic D with the formula 'n + PN ("I am so-and-so") and some with Thamudic C formula wdd + f + PN, the meaning of which is still under discussion.

# DAY 3 SALLE GRODECKI — FOCUS SESSION "ZAYDI GOVERNANCE IN YEMEN BETWEEN LEGAL THEORY AND POLITICAL PRACTICE"

### Legitimating the rule: The examination of an imam

#### Johann Heiss

Abstract: The establishment of a form of centralized rule even of only of local significance necessitates many legitimatory procedures. In the case of the biographies of the Zaydi imams, their legitimations are carefully described and usually exhaustively presented. Practically every author of an imams biography dwells on miracles (āyāt, karāmāt, muʻjizāt) showing that the imam is worthy (muḥaqqiq) of his position, and on dreams (al-manāmāt al-ṣādiqa) pointing out the imam and predicting his imamate.

This paper will focus on one of the legitimating procedures, the examination of the imam (imtihan, ihtibar), is where the imam is asked numerous questions intended to show his excellent education, good memory, and sound mind. Some of the scholars who have formulated questions may later become important officials and politicians at the imam's court. The examination of the imam thus has a double function: on the one side it is one of the legitimating tools for the imam's position, on the other side it serves as an opportunity for the imam to select officials serving in his government. The text serving mainly as a source for the lecture is 'Alī b. Nashwān al-Ḥimyarī's sīra of imām al-Manṣūr 'Abdallāh b. Ḥamza (d. 617/1217).

#### Shifts in the Zaydi theory of appointing the imam (ca. 1400-1500 CE)

#### Eirik Hovden

**Abstract:** The Zaydi theory of the imamate states that the method ( $tar\bar{i}q$ ) is da'wa, that is, the qualified man should claim the imamate. This shifts the focus from those selecting and appointing, to the person making the claim. If he is qualified according to the criteria, and if he is the best candidate, his imamate becomes binding on all Muslims. But who should evaluate his claim and validate it? This point is less clear, perhaps because Zaydi imams for a long time operated with a small number of followers already backing the imam before the da'wa, making alliances with local tribes, and in any case operating as a minority, albeit with its own realm, the *hijra*.

# Dhimma Governance and the Zaydi Madhhab Spectrum: The forced conversion of Jewish orphans, its Islamic-legal background, and political relevance for Qāsimī and Mutawakkilī Yemen

#### Kerstin Hünefeld

**Abstract:** Twentieth century Jewish-Yemeni sources refer to the practice of forced conversion of Jewish minor orphans to Islam and their removal (*naz'*) from their remaining family environment. Though the practice is reported to have taken place within the realm of Imam Yaḥyā Ḥamīd al-Dīn (r. 1904-1948), however, the latter is not mentioned as a driving force, but seems to rather have been challenged by it by not clearly identified actors from within the Zaydi spectrum.

This talk seeks to identify the Zaydī subgroup supporting this practice and its political positioning within the Qāsimī and Mutawakkilī political context. The major work of Zaydī jurisprudence, the *Sharḥ al-Azhār* that – including all text layers – developed from 15<sup>th</sup> to mid 18<sup>th</sup> century, does not include a clear ruling regarding that practice. Zaydi Islamic-legal sources (fatwas) from 17<sup>th</sup>/18<sup>th</sup> century Yemen, however, point to the practice of Imam Sharaf al-Din Yaḥyā (d. 965/1558) as precedent. Following the question of what it means, in political terms, to revive a practice attributed to Imam Sharaf al-Din within the imamate of Yaḥyā Ḥamīḍ alDīn, this talk aims to give insights into and provoke further discussion on the formation of a Qāsimī "middle course" and those forces excluded from it.

## Restricting Judicial Discretion in Medieval Zaydism (1348-1558)

#### Ebrahim Mohammed Abdulwahid Mansoor

Abstract: Among the literature produced in the Zaydi territory between 1348-1558 CE was a set of *fiqh* texts that worked to some extent as the law of the community. Some of these texts were written by Zaydi imams and belonged to different genres of legal writing. An example is the texts of the imams: Yaḥyā b. Ḥamza (d. 749/1348), Aḥmad b. Yaḥyā al-Murtaḍā (d. 840/14367) and 'Izz al-Dīn b. al-Ḥasan (d. 900/1494). In most cases, the imams point out legal disagreements in their texts, identifying the opinion that is described as (*al-mukhtār/alaqwā/al-aṣaḥḥ* etc.), i.e., the correct opinion from their point of view. One feature of the correct opinions chosen by the imams is that they do not restrict the judge's discretion, meaning that a judge may or may not use them as a basis for his judgments. In other cases, however, the imam indicates certain areas of disagreement where judges are obliged to follow his opinion.

This paper presents the *fiqh* texts attributed to the imams who governed/or sought to govern the Zaydi territory between 1348-1558 CE, focusing on areas of obligation and how they worked as an instrument to consolidate the Zaydi power.

### Transfer of power in the Sharaf al-Dīn imamate (912-980/1506-1573): theory and practice

#### Ekaterina Pukhovaia

**Abstract:** The tension between the meritocratic principle underlying Zaydi political theory that prevented the formation of dynasties and the practical need to stabilize the transfer of power between rulers was constant throughout the pre-modern history of the Zaydi imamate. The demand for a stabilized transfer of power became particularly strong when the imamate expanded

its territory and developed a broader support base. This article provides a functional analysis of the development of dynasticism as a practice in Zaydi Yemen by focusing on a unique document from the period of rule of imam al-Mutawakkil Yaḥyā Sharaf al-Dīn (d. 965/1557), the first Zaydi imam to rule over both Upper and Lower Yemen. The document, a will (waṣīya), composed during the plague of 933/1527, demonstrates how the Zaydi political elite developed a new language to ensure hereditary transfer of power. The paper contextualizes this unique document preserved in a single manuscript of a biography (sīra) of imam Yaḥyā Sharaf al-Dīn in the broader context of sixteenth-century political transformation in Yemen and places it within a longue durée history of Zaydi political thought and practice.

# Power, Lineage, and Submission in the 13th Century: Sources and Historiography of the Relationship between the Emir of Mecca and the Zaydi Imam of Yemen

Clarck Junior Membourou Moimecheme, University of Strasbourg

Abstract: In a seminal article published in 1987 in the scholarly journal International Journal of Middle East Studies, Richard T. Mortel demonstrated that the Sharifian families, which had gained control of Mecca since the 10th century, had early embraced Shiism. Despite the scarcity of sources from that period, they reveal the close ties between the Ismaili power of the Fatimid caliphate and the new emirs of Mecca (Ja'farids). However, it appears that the situation evolved during the reigns of the Ayyubid and Rassoulid sultans when accounts of the adoption of Zaydi Shiism by the Sharifs and Hasanid emirs of Mecca became increasingly prominent among historians, geographers, and travelers. In this article, Richard T. Mortel further explores the history of Meccan Zaydism and its connections with Zaydi imamate in Yemen through the lens of Sunni historiography. This historiography comprises chronicles, travel accounts, and Meccan or non-Meccan biographical dictionaries, excluding Zaydi historiographical production, which, to date, has only been explored by a collective of Jordanian scholars in a publication dedicated to the biography of Emir Qatāda b. Idrīs (d. 1221), founder of the Banū Qatāda dynasty. The descendants of this dynasty continued to hold power in the holy city until 1925. Building upon existing studies on the subject, this presentation aims to deepen the discussion on the interdependent relations between the Emir of Mecca and the Zaydi Imam of Yemen, examining the contributions of both Sunni and Zaydi historiography.