Centro Interdipartimentale di Servizi di Archeologia



Direttore

Andrea D'Andrea

Rivista on-line ISSN 2036-6353

2021 volume 12



The site of Zafār/al-Balīd (Sultanate of Oman) Archaeological investigations between past and present

Proceedings of the round table held at Naples, Università L'Orientale, on June 18th 2021

Edited by A. D'Andrea, R. Giunta, A. Pavan, R. Valentini





Pubblicazione elettronica del

Centro Interdipartimentale di Servizi di Archeologia (CISA)

Vicoletto 1° S. M. Agnone, 8 - 80139 Napoli tel./fax +39 081440594 • • e-mail cisa@unior.it

Newsletter Archeologia CISA. Ricerche e Studi

Direttore Andrea D'Andrea

© 2022 CISA e Autori individuali

Pagine 178 + covers; Dimensioni 21 × 29,7 cm

ISSN: 2036-6353

COMITATO SCIENTIFICO
Barbara Barich
Irene Bragantini
Teresa E. Cinquantaquattro
Bruno Genito
Guido Vannini

COMITATO EDITORIALE
Matteo D'Acunto
Anna Maria D'Onofrio
Roberta Giunta
Andrea Manzo
Fabrizio Pesando
Rosanna Pirelli
Chiara Visconti

REDAZIONE Rosario Valentini Angela Bosco Dora D'Auria Eleonora Minucci

SUMMARY

Foreword by Alessandro Garbellini	V
Introduction	1
Andrea D'Andrea, The urban space between reports and excavations	3
$\textit{Roberta Giunta}, \textit{Z} \textit{Afār/al-Balīd: Dating issues and main evidence between the 11^{th}-14^{th} centuries}$	15
Alexia Pavan, A Sentinel on the Indian Ocean: The citadel of al-Balīd (excavations 2016-2020)	23
Rosario Valentini, Photogrammetric and topographic investigations at al-Balīd	47
Carlotta Passaro, Atlas of the walls: First results from the study of the citadel	53
Alessandro Ghidoni, Ship timber recycling in al-Balīd	67
Agnese Fusaro, The history as told by the pottery: an insight into the last occupation phase of the citadel of al-Bal $\bar{\text{D}}$	81
Chiara Visconti, Chinese-style ceramic unearthed at Ḥafār/al-Balīd: A general overview of the corpus and a focus on the latest period	101
Arturo Annucci, The Coinage of Zafār/al-Balīd in the monetary context of Dhofar	117
Alexia Pavan, Ali Al Kathiri, The objects from al-Balīd at the Museum of the Frankincense land, Ṣalālah, Sultanate of Oman	127
Amanda Antonelli, Dhofar cemetery areas: The state of research and New Investigation tasks	137
Annex Visits, archaeological surveys and excavations in Zafār/al-Balīd (1834-2019)	149
References	153
GENERAL INDEX	165

FOREWORD

I welcome with great pleasure this volume on the Italian researches over al-Balīd site published by the University of Naples "L'Orientale". This is a further sign of how actual, dynamic and tangible is the collaboration between Italy and Oman in the archaeological field. Since the 1970s, the contribution of the Italian archaeological missions to the development of the relationship between the two countries has been essential. Thanks to the enthusiasm of the Omani authorities in promoting studies and research on the history of the Sultanate, Italian universities have always found responsive and supporting stakeholders, willing to facilitate excavations, analysis and in-depth activities by the archaeologists. Italian universities have always shared and agreed the goals and the features of their research with the Omani authorities, thus helping build a solid relationship of collaboration and trust, which has turned into a constant dialogue, joint activities and publications. These collaborations have also paved the way to a cooperation in the cultural and restoration sectors which allowed to share Italian conservation techniques with the Sultanate.

As part of the Vision 2040, the economic diversification strategy, the Omani authorities are focusing on the development of the tourism sector thanks to the appeal of the great historical heritage of Oman. The collaboration with Italy also supported the inclusion of several Omani sites studies by Italian scholars in the UNESCO World Heritage List. This is a great recognition of Italy and its scholars.

In this framework, the activity of "L'Orientale" in Dhofar is extremely important. This part of Oman is a key area for studies on the development of coastal civilizations in Southern Arabia. The research allows us to understand the relations that the Dhofar had with the rest of the region, from the African coasts the shores of Asia. This highlights the roots of the openness of the Sultanate to the world, which still today makes the maritime dimension a pillar of Oman's development. The interest of the Omani Authorities for Dhofar – the birthplace of late Sultan Qaboos bin Said – and its potential for cultural tourism thanks to the presence of important UNESCO sites, makes the continuation of the studies on al-Balīd as promising as ever.

Since 2021, the Mission led by Prof. Roberta Giunta has received funds from the Ministry of Foreign Affairs and International Cooperation of Italy. Italy has been supporting the work of Italian archaeologists in the Sultanate for over 40 years, thus gaining the appreciation of the Omani authorities at the highest level. Whilst recalling with great pleasure my participation to the roundtable of June 2021, I wish the mission full success in its research, which will be able to clarify still unknown aspects of the long history of Omani civilization.

A special thanks goes to the Ministry of Heritage and Tourism of the Sultanate of Oman, a strong partner of Italy and which has been supporting this new project. With the same spirit, I would like to express my gratitude to Professor Roberta Giunta and the co-director Dr. Andrea D'Andrea, as well as their working group, and Dr. Alexia Pavan in particular, for their dedication and constant collaboration with the Embassy of Italy in Muscat.

Alessandro Garbellini Deputy Head of Mission Embassy of Italy in Muscat

Introduction

This volume collects the contributions presented at the remote round table "The site of Zafār/al-Balīd (Sultanate of Oman). Archaeological investigations between past and present", held at the University of Naples L'Orientale on 18th June 2021. The choice to organise a workshop and not a traditional conference arose from the need to create an opportunity for exchange and comparison among the scholars and experts who have worked in different fields at al-Balīd during recent years. This opportunity for discussion was also necessary given the peculiar historical moment: in 2020 the Office of the Adviser to His Majesty the Sultan for Cultural Affairs, under whose aegis the work of J. Zarins and L.S. Newton (2015-2012) and subsequently of A. Pavan (2016-2020) had been carried out, was closed and the activities passed under the Ministry of Heritage and Tourism of the Sultanate of Oman. Moreover, the pandemic crisis of 2020 had caused a forced and prolonged interruption of fieldwork, requiring a change in the strategy of the archaeological activities conducted since 2021 by the mission of the University of Naples "L'Orientale", co-directed by Roberta Giunta and Andrea D'Andrea.

It was therefore a priority to organise a meeting from which, on the one hand, the state of the art about the current knowledge of the site could emerge and, on the other hand, new research trajectories could be outlined. The last few years of work at al-Balīd have been characterised by a multidisciplinary approach, which, alongside the more traditional methods of archaeological investigation, first and foremost the stratigraphic excavation, has included the collaboration of experts from various sectors, from geo-archaeological investigations aimed at the reconstruction of the palaeo-environment, to the study of ceramics from both the Islamic Lands and East Asia, numismatics and wooden elements reused in architecture and, finally, the 3D survey of the citadel.

Despite the work that has been carried out, there is still much to be understood about the foundation of the city, its urban layout with its transformations, its relationship with the surrounding area and the ethnic components that are presumed to have inhabited it.

Only a holistic and interdisciplinary approach will allow us to try to understand many of the still unclear issues of the settlement's development and therefore archaeological field research must necessarily be accompanied by a recovery and a re-reading of the available written tradition that may record different sources, Chinese, Arabic and also European.

The geographic location of the site represents a privileged perspective to outline a model of an Islamic city in southern Arabia at least for the middle and late Islamic period. In fact, al-Balīd is the only medieval city along the Indian Ocean coast where excavations can be carried out, given the political instability in Yemen and the lack of evidence along the eastern part of the coast, with the exception of Qalhāt, which was however abandoned in the 16th century.

The proceedings of this conference represent a starting point for a new season of investigations in al-Balīd including the contribution that scholars from different research perspectives can make to the understanding of life of this important crossroad in the East-West trade routes. The main purpose was to produce a "handbook" that could be used by those working on-field, also to guide necessary subsequent studies on the ancient landscape and on the materials. However, we are committed to continuing our investigations through activities aimed at understanding the urban development of the site, but also delineating the cultural and natural environment in which the site was able to develop and prosper for many centuries.

Our heartfelt thanks go to the authors who contributed with their articles and research to this volume. The resumption of investigations in al-Balīd can only be achieved by bringing together a young and old group of scholars who are experts in different fields and moved by a spirit of interdisciplinary collaboration.

Works at al-Balīd have been possible thanks to the cooperation with the Ministry of Heritage and Tourism and we would like to thank the Minister, HE Salim bin Mohammed Al Mahrouqi, Dr Sultan Al Bakri, Director General for Archaeology and Dr Ali Al Mahrouqi, Director of Surveys and Archaeological

Excavations in Muscat for their support to the resumption of activities at the site.

In Ṣalālah Mr Khaled Abdullah Al Abri, Director General of Heritage and Tourism in the Governorate of Dhofar, Mr Ali Al Kathiri, Director of the Land of Frankincense Sites Department, and Mr Said al Amri, Supervisor of the site of al-Balīd, are heartfelt thanked for the strict and fruitful collaboration on the field, in the logistic and for their continuous support.

Warda Al Shahri, Salem Ghassani and Salem Tabook did a great job in the organization of the store and the conservation of the findings.

Warm and due thanks must also be directed to HE Abdulaziz bin Mohammed Al Rowas, former Adviser to the former HM the Sultan for Cultural Affairs who first believed in the potential of the site and initiated the development of the works at al-Balīd.

The efforts of surveyors, restorers, technicians and geologists have to be mentioned as well, in particular we are grateful to M. Cremaschi, S. Laurenza, A. Massa, A. Tilia, A. Zerboni for their contribution to the round table.

Finally, we really would address a heartfelt thanks to the Italian Embassy in Muscat in the person of HE Federica Favi, Italian Ambassador in the Sultanate and Dr Alessandro Garbellini, Deputy Head of Mission, whose constant support has been essential for an easier resumption of the activities at the site and the Italian Ministry of Foreign Affairs and International Cooperation for the economic and political support provided to the mission.

The editors

THE HISTORY AS TOLD BY THE POTTERY: AN INSIGHT INTO THE LAST OCCUPATION PHASE OF THE CITADEL OF AL-BALĪD

Agnese Fusaro, ERAAUB Team, Department of History and Archaeology, University of Barcelona

This paper presents some of the most interesting results of the research work conducted between 2016 and 2018 on the ceramic findings of the Islamic period collected at the citadel of al-Balīd during the most recent excavations (Pavan *et alii* 2020, 173-174). Studies on the pottery from the site were carried out before 2016 by other scholars within the framework of previous archaeological missions (Fusaro 2019, 130-131); they have been essential for this new research project, which is meant to be in continuity with the past efforts, although with necessary revisions. A multidisciplinary approach has been chosen as the methodological base for the study: the archaeological work, comprising stratigraphic and quantitative analysis of the assemblages and stylistic-morphological-technological examination of the pottery, is supported by ethnoarchaeological research on modern Dhofari pottery tradition carried out in 2017-2018 and archaeometric analyses, that are currently ongoing (Fusaro 2019, 131-132).

A number of published manuscripts have been already dedicated to the presentation of the whole pottery *corpus* of the Middle and Late Islamic period from the citadel and the first results of this research work (Fusaro, 2018, 2019, 2020a, 2020b). For this reason, only a brief overview of the main wares circulating at al-Balīd is provided. Most of this paper will be devoted to the last occupation phase of the citadel. This is a largely unknown and often neglected period of al-Balīd, as it has been usually defined as a phase of decline of the city, also according to the available historical sources and the architectural remains. Nonetheless, the ceramic evidence depicts a different and quite unexpected scenario, suggesting that al-Balīd was a still lively site, largely involved in manufacturing and trading activities (see also Visconti in this volume).

THE CORPUS

The ceramic *corpus* from the citadel of al-Balīd so far analysed totals 12973 items, dated between the 14th and the 18th century. It is characterised by the abundance and the remarkable variety of the wares, with a wide range of types, styles, quality, and provenance.

A geographical approach has been used to distinguish the wares composing the *corpus*, with three main groups: local wares, regional wares, imports from farther regions.

Local unglazed hand-made productions are the most abundant. With the label "local", we suggest a possible manufacturing area in the Ṣalālah plain. Four main groups have been identified, according to the fabrics and the functions of the vessels. The grit temper ware mainly comprises kitchenware, both for cooking and preparing foods, and storage vessels. It has two sub-groups: the coarser variant 1 mainly comprises basins and bowls; the finest variant 2, with better finished and more decorated items, was probably used for preparing and serving foods. The shell temper ware is almost exclusively associated with cooking pots and jars; however, the sub-group 2, which comprises the finest and most decorated vessels, especially pots, jars and jugs, can be considered the proper tableware. The same function is also related to the red ware. Its fabric has similar features to the grit temper ware, but it is much finer and more compact. The associated vessels, fine bowls, pots, jars and jugs, always show well-finished surfaces with rich and varied decoration. The dot-and-circle ware is the most peculiar ware of the local manufacture. Bowls, pots and jars are characterised by a well-recognisable dot-in-circle motif impressed or rouletted over the surface, also combined with other decorative patterns.

Along with the abundant local pottery, at least two unglazed hand-made regional productions have been identified. The clear difference between the fabrics of these wares and the ceramic bodies of the local ware point to clay procurement areas other than the Ṣalālah plain. Nonetheless, the morphological and stylistic similarities recognised suggest common traditions, thus indicating that these wares come from manufacturing centres within Dhofar or neighbouring lands. Two wares have been identified so far, the regional grit temper ware and the flakes temper/steatite ware, with a possible third one circulating during the last occupation phase of the site.

The imports collected at the citadel constitute a very important collection within the pottery *corpus*, with their striking quantity and their absolutely remarkable variety and richness.

¹ The Project has been funded by the Italian Mission to Oman, University of Pisa, for the 2016 campaign and by the Max van Berchem Foundation (Geneva) for the years 2017-2018.

The examination of styles and fabrics of these ceramic items, together with a comparative analysis with other coeval corpora, allows recognising different lands of origin: northern Oman, Yemen, the Gulf area, Iranian/Iraqi regions, Egypt and/or Syria, Eastern Africa, the Indian subcontinent, and East Asia.

THE CHRONOLOGY OF THE CITADEL

The pottery analysis conducted so far greatly contributed to better defining and proposing reliable chronological attributions for the constructional and occupation phases of the citadel during the Middle and Late Islamic periods. Thanks to the most recent archaeological works, six main phases of the building have been outlined (Pavan et alii 2020, 175-180), thus revising the periodisation used by Zarins for the whole site (Newton, Zarins 2017, 67-69). The study of the archaeological materials, especially ceramics, recovered in the campaigns since 2016 allows dating the last three of them, namely phases IV (end of the 13th-15th century), V (16th century), and VI (17th-18th century). In Fig. 1² are shown the rooms and areas of the citadel selected for the pottery study, as they are considered the most reliable and untouched archaeological contexts of the building; they have been divided according to the chronological attribution suggested by each ceramic assemblage and the related occupation phase (Tab. 1).

The contexts considered are: rooms A31/A33 in the north-western corner; a trench close to room A47, in the western part; rooms A2 and A5, in the southern side; a large central-eastern area associated with the SUs 83 and 100; rooms (A52-A57) interpreted as horses' stables, leaning just against the eastern curtain wall; and the area where an early eastern entrance of the palace has been identified.

THE LAST OCCUPATION PHASE OF THE CITADEL

Besides suggesting reliable chronological attributions for the levels of the citadel, the more recent pottery study also throws light on some socio-economic aspects of the last occupation phase (VI) of the building and, more in general, of the site. This phase was defined by Zarins as a period of decay and collapse, with the growth of smaller communities, mainly dedicated to agriculture, at the expense of the formal town which shrank in size (Newton, Zarins 2017, 67, 115). A situation confirmed by the scanty architectural remains unearthed at the citadel just below the surface layers. They comprise rather poor structures, some made of fired brick walls, with an orientation different from the earlier ones. To the same period belongs a tank built in the South-western corner of the citadel, that stands on a plaster floor badly preserved. The latter was used as the foundation for a number of plastered basins (Pavan et alii 2018, 214).

Conversely, ceramics recovered in the layers related to phase VI tell another story, depicting al-Balīd as a still lively site, intensely producing higher quality and refined ceramic artefacts and actively involved in short- and long-distance trade, until its final collapse after the 18th century.³

To give a comprehensive framework of this period, the ceramic assemblages from different layers of the citadel have been considered. SUs 83 and 100, in the central-eastern area, are the layers where the most abundant ceramic findings were collected, totalling 2300. SU101 was excavated in the western part of the citadel; 113 sherds have been recovered there (Tab. 2). The materials found in the wall collapses in room A2 and rooms A31/A33, SUs 17 and 48 – with 103 and 111 sherds respectively – also prove to be very useful (Tab. 3). Even if it is less reliable, SU1 is also considered, as it is very rich in pottery, with an amount of 588 selected pieces; it extended over the southern area of the citadel (Tab. 4).

Local wares

Local wares represent the great majority of the assemblages dating to the 17th-18th century, totalling about 75-86% in each context. The stratigraphic analysis of the ceramic findings has given very useful information to better understand the changes that these productions underwent throughout the timespan considered (Fusaro 2019, 136). Focusing exclusively on the last occupation period, during the 17th-18th century, grit temper ware slightly decreases compared to the previous phases, not surpassing 50% of the whole assemblage. 4 Meanwhile shell temper ware increases, sometimes reaching the 20% ca. of the total amount; this is especially true for its finest variant 2, representing between 1 and 6% of the whole assemblage, while it never surpasses the 2% in the previous phases. The red ware shows a general increase as well. Dot-and-circle

² Unless otherwise specified, the figures, photographs, and drawings have been made by the author.

³ See also Visconti in this volume.

⁴ The only exceptions are represented by SUs 17 and 48; indeed, being them wall collapses, their assemblages can be mixed and altered.

ware completely disappears. Meanwhile, a new ware appears, the grit-angular ware, labelled after its temper characterised by elongated angular brown/grey inclusions in a red matrix. Surface treatments and forms of the grit-angular ware are similar to those of the coeval Grit 2 and the red wares. This ware is particularly wellrepresented in SUs 83, 100, and 101.

In general, the overall quality of the local ware improves. Concerning the grit temper ware, changes occur both in the ceramic body and the morphology. The fabric is frequently more compact and the variety of sub-fabrics is greater, the variants rich in vegetal temper or with abundant red or white inclusions being common; we cannot exclude that this evidence, along with the appearance of the grit-angular ware, could testify a higher number of different local workshops active at that time. The surfaces of the vessels are often better finished, smoothing and burnishing are more frequently used. As far as the morphology is concerned, there is an increase in large bowls, some hemispherical with the inturned upper portion and others with conical profile, frequently with a triangular-section rim projecting inward. A higher amount of large pots and medium jars also circulate (Fig. 2a-c, e).

Conversely, sub-group 1 of the shell temper ware changes little, large cooking pots always prevailing, even if a slight increase in medium and small jars with a short neck has been noted in the latest stage (Fig. 2d, f). There are also some open forms, such as bowls and large bowls, that were almost absent in the earlier stages of this production.

The most interesting changes occurring in the last occupation phase of al-Balīd concern the red ware and the finest variant 2 of shell temper ware. Indeed, their quality greatly improves and their manufacture becomes more refined, showing a wider morphological and stylistic variety. The high quality of the surface finishing and the thinness of the body walls are especially noteworthy. Polishing and red slip, also used in association, are widespread. Surfaces are richly decorated with more complex and refined patterns: incisions, impressions, also made with a comb, and red painting are used separately or together. The most common forms are deep bowls with globular body, small pots, jars with high cone-truncated neck, some with handles, and spouted jugs (Fig. 3).

Finally, it is worth mentioning a small group of nine high-necked jars and bowls, belonging to the local grit temper ware 2 and red ware, that bear a peculiar red painted cross-motif with dotted edges. They were found in SUs 1,83=100, 101,22=18=19 (only the latter belong to an earlier phase). This motif seems to be a simplified version of a trefoiled or trilobed cross; preliminary research so far has revealed interesting similarities with cross symbols used by different Christian communities (Fusaro 2020a, 88), thus suggesting the possibility that a group of Christian people lived at al-Balīd at least in the 17th-18th century, demanding vessels with this specific decoration to local potters.

Regional wares

The two regional wares identified within the *corpus* are absent in the majority of the assemblages considered, except for only two fragments in SUs 48 and 101. In parallel, an unglazed ware of probable Dhofari/regional provenance is much better represented in this latest period than in the previous ones. This ware shows some parallels with the productions of the Late Islamic period in the Hadramawt region (Whitcomb 1988, 194-198; see also Rougeulle 2015, 157-159, 434). The ware comprises hand-made vessels made of a coarse fabric, whose colour ranges from red to reddish-brown/reddish yellow and very pale brown; in some cases, the core or the inner surface of the paste has a grey colour. The fabric features are the following: low compactness and high porosity, probably also due to the presence of vegetal temper; abundant white and grey mineral temper, including a few burnt-out white inclusions, and sparse red inclusions. The ware has been labelled WSLIP, after its frequent association with a white or white-cream coating.⁷ There is also a unique sherd from SU83 with a red slip. Both coatings are to be found on Hadrami specimens. A very few items also bear a red painted decoration over the white-cream slip, a common feature in the pottery from Hadramawt.⁸

The morphological repertoire is limited to only three forms recognised: a hole-mouth pot with thickened rim and hemispherical shoulder (inv. no. SU61,55; Cf. Whitcomb 1988, figs. 15-r, 16-j; Rougeulle 2015, fig. 278.6); a shallow conical bowl with thickened rim (inv. no. SU100,20); a large jar with thickened well-rounded

⁵ Two residual small fragments have been found respectively in SUs 83 and 48.

⁶ This could recall the peculiar black core and the abundant chaff temper so characteristics of the Hadrami ceramics (Whitcomb 1988, 196; Rougeulle 2015, 157).

⁷ In some cases, the presence of coating is doubtful, being most probably an effect of the firing process.

⁸ In an earlier item belonging to the necked jar from SU61,54, a horizontal row of red dots has been recognised. For comparisons with Hadrami items, see Whitcomb 1988, 198, figs. 13-18, especially fig. 15-f; Rougeulle 2015, fig. 160.11.

rim projecting outwards (inv. no. SU100,13; Cf. Ciuk, Keall 1996, pl. 95/27-b, large vat whose presumed functions are water storage and dyeing) (Fig. 4).

If the similarities between the WSLIP ware and the Hadrami productions are not so stringent, at the same time some macroscopic resemblances have been detected with fabrics and forms of the grit temper ware locally produced at al-Balīd. This evidence could possibly suggest that the manufacturing area of the WSLIP ware coincides with the Hadramawt region or with an area between that and the Salālah plain. Further confirmation of this hypothesis could come from the large jar inv. no. SU100,13, with an almost completely grey body and cream-white surface, characterised by a dark blue content, possibly indigo (Fig. 4c). It is known that the cultivation of indigo-producing plants has a long tradition in Northern Oman and Yemen, including Hadramawt (Balfour-Paul 2004, 62-65), and also Dhofar (Newton, Zarins 2017, 100-101).

Imported items

A wealth of imported vessels can be still found in the last occupation phase of the citadel, with a notable variety both concerning quality and provenance, even if the proportions among the wares change in comparison with the previous phases. Their presence in each assemblage ranges from 12 to 22% ca. The best-represented items among the imports belong to the so-called Bahla/Khunj ware, totalling about 1/3 of the whole imports. East Asian specimens follow, with an average of 2,4% within the assemblages. Ceramic artefacts originating from the Indian subcontinent, Iranian/Iraqi lands and Yemeni regions are more or less equally represented, with an average of less than 2% within the assemblages. There are also fewer items whose provenance is less certain, some of them could have originated from Egypt and the Gulf regions.

a) Bahla ware

The Bahla/Khuni ware has been named after the sites proposed as manufacturing centres in Northern Oman and Southern Iran, respectively. Many studies testify its wide circulation during the Late Islamic period until the 20th century in the Gulf and the northern regions of the Arabian Peninsula (Power 2015, 28). Nonetheless, abundant items have been also unearthed at numerous sites along the southern Arabian coast, 9 including al-Balīd. Despite being a common finding in many sites, this glazed ware has been long disregarded. Only in recent times, some scholars have concentrated on it, investigating some open issues, in particular its provenance. An origin in the area of Bahla or at least in Northern Oman seems now proven at least for some items (Živković et alii 2019; Carvajal et alii 2019, 63); the ongoing archaeometric analysis on the specimens from al-Balīd could further clarify the question. Three fabrics are associated with this production recovered at the citadel: Bahla 1, Bahla 2, Bahla 3; two more variants, much less represented, are also identified (Coarse red and Fine red). Their colour ranges from light red, red, to grey; sometimes they are visible within the same body, thus indicating an uneven firing. All pastes are very compact and hard, with sparse mineral temper, comprising fine opaque white inclusions. The only exceptions are Bahla 2 and Coarse red, which are less compact and richer in white temper. Bahla 1 is characterised by a sandy texture. The monochrome glazed wheelthrown items of the Bahla ware have no slip. The glaze is usually speckled and low quality. The glaze colours range from mustard, green, olive green, to russet and brown, with a vast variety of shades. It frequently appears matt and altered, only a few items show a glossy glaze. In some cases, the glaze is completely covered with a greyish or whitish alteration layer that prevents identifying its original colour. The glaze usually covers both surfaces almost completely. Specimens have plain surfaces free of decoration, except for a few large bowls and jars showing carved segments or mouldings. The latter feature, along with glaze colours and some forms, points to a possible origin of the Bahla ware as an imitation of the so-called Martaban products, especially for the jars, and other East Asian stoneware vessels, especially for the large bowls. Almost the whole amount of specimens belonging to the Bahla ware have been found in the layers of phase VI, arriving to represent up to 10% ca. of the assemblages considered. Nonetheless, seven sherds have been also recovered in levels of the earlier phases IV and V. Two specimens have been found in SU56, one belonging to an olive green glazed bowl and one belonging to a necked medium jar with two light horizontal mouldings on the exterior under a russet glaze; three more fragments come from SU61 just below: one thick wall whose inner surface is ribbed (possibly belonging to a large conical bowl with a flange) and one wall fragment, both characterised

⁹ In the last occupation phases of Sharma dated to the 18th-19th century, in the areas of Hadramawt-Mahra and Tihama, in particular al-Mukha (Rougeulle 2015, 435), at the site of Kawd am-Saïla (Hardy-Guilbert, Rougeulle 1995, 33), and in the Wādī Hadramawt region (Whitcomb 1988, 200).

by a speckled light green glaze, and one belonging to a monochrome dark brown glazed jar (inv. no. SU61,45). Another jar is from SU22. A bowl fragment with a speckled olive-green/brownish glaze was unearthed in SU73L. Therefore, it is possible to suggest that Bahla ware started circulating at the site of al-Balīd already in the 15th-16th century. This evidence definitely confirms the hypothesis of a beginning of the manufacture of Bahla ware in a period earlier than the chronology proposed for the majority of the ceramic *corpora*; ¹⁰ at the same time, the pottery analysis also confirms that its presence becomes significant in the 17th-18th century (Power 2015, 20). Moreover, thanks to the data at our disposal it is possible to propose a preliminary chrono-typology for the Bahla ware, with two main stages (Fig. 5). During the earliest phase of circulation, in the 15th-16th century, the fabric variant Bahla 1 largely dominates, with only one specimen made of a coarser and less compact fabric (Bahla 2). The variety of glaze colours is already wide as well as its quality. As far as the morphology is concerned, half of the items are conical bowls, two with flange and one whose rim shows a deep groove; both types will be found also in the later stage of the production (see inv. nos. SU1,668 and SU1,238, Fig. 5). Three specimens belong to necked medium jars. Therefore, it is possible to state that open and closed forms are equally represented in this first stage. 11 The proportion changes completely during the later stage of the production (17th-18th century), ranging from 1:10, 1:20, and 1:30 ca. between closed and open forms; in three assemblages (SUs 17, 48, 101) closed forms are not represented at all. 2 Closed vessels exclusively consist of medium jars with a short rounded neck, in continuity with the shoulder, and thickened rounded rim projecting outwards; no complete jars have been recovered; however, an ovoid shape of the body, sometimes provided with handles, can be inferred (see inv. nos. SU61,45, 22, 442 and 83, 20, Fig. 5). Within the open forms, small bowls are the least represented, with only two specimens, with a unique type of hemispherical bowl with everted rim (see inv. no. SU17,8, Fig. 5). Small dishes follow with a total of 14 items recovered; they are characterized by a tapered rim, shallow conical well, and ring base; the outer profile of the body is rounded and it could have a lower carination (see inv. nos. 83-100, 19 and 1-576, Fig. 5) Deep bowls are quite well represented, with a total of 26 items. The morphology is quite limited: the body is conical or slightly hemispherical, the rim is simple or tapered, the better-preserved items show a ring base; many have ribbed surfaces (see inv. nos. SU1,219, 1, 166 and 12, 16, Fig. 5). Large conical bowls and large shallow conical bowls are equally well represented, with 34 and 30 specimens respectively. The former type is characterized by a flange or, less frequently, by a simple rim with an inner groove. Many items show ribbed surfaces. No complete items have been unearthed, but it is possible to suggest that this type also has a ring base (see inv. nos. SU1,220, 1,238, 1,668, 1,321 and 83-100, 17, Fig. 5). The large shallow bowls are characterized by a simple rim, sometimes slightly inturned, conical body profile, sometimes with a low carination, and very shallow ring base; some vessels bear horizontal carvings on the inner surface or parallel carved segments on the outer surface (see inv. nos. SU83-100,18 and SU1,712, Fig. 5).

b) Wares from East Asia and the Indian subcontinent

Items from East Asia and the Indian subcontinent are still well represented among the imports of the last occupation phase of the citadel (phase VI), even if in less quantity than in the previous phases IV and V (Fusaro 2019, fig. 9). The most remarkable drop can be traced for the Indian vessels. They represent an overall average of 1.4%, ranging between 1 and 2.75% ca. in the single assemblages, while in the previous phases these wares are among the best-represented imports within the corpus (Fusaro 2020a, 86-88). Almost the whole amount of Indian items found at the citadel are coarse utilitarian wares, including cooking pots, with no especial aesthetic value; for this reason, they have been interpreted as evidence of the presence of an Indian community/communities living at al-Bālid. A preliminary analysis of the fabrics and the forms attested in the assemblages from the latest layers of the citadel seems to suggest that in this period most of the vessels come from north-western regions of the Indian subcontinent, rather than the southernmost ones (Fusaro 2020a, 87).

¹⁰ The hypothesis has been already stated by Kennet 2004, 43 and Rougeulle et alii 2014, 306-307, 311; Rougeulle 2015, 435 according to the data emerged from the corpora of Julfar al-Mataf and Qalhat.

¹¹ It is evident that such a small quantity of items could not be considered totally reliable or representative for the typology of the period; nonetheless, this is a preliminary evaluation that could be useful for the future analysis of the Bahla ware in its earliest stage.

¹² The scanty presence of jars within the Bahla ware has been also detected elsewhere for the period from the 18th century onwards (see, for example, Bystron 2020, 47, fig. 8.b).

Regarding the East Asian imports, a thorough report of the wares and their related percentages is presented by Chiara Visconti in this volume (see also Pavan, Visconti 2020).

c) Wares from Iranian and Iraqi regions

Some imported items have been recognised as products from the Iranian/Iraqi regions. Stonepaste vessels are the most remarkable findings among them, both because they are the better-represented wares within this group and they are the highest-quality artefacts of the whole imported category, after the East Asian vessels. Moreover, these items prove to be useful chronological markers.

All the forty stonepaste vessels belong to the Safavid Blue-and-White wares and can be dated to the 17th century-early 18th century. The preliminary comparative analysis points to Kirmān as the probable production centre for most of the sherds collected in the uppermost layers of the citadel. ¹³ Indeed, this city played a key role in the manufacture of stonepaste items during this period.

The majority of the stonepaste vessels are small bowls or cups, there is only one bowl with everted rim and four large dishes/shallow bowls. The small bowls or cups have simple underglaze painted blue, sometimes in two shades, or blue and black decorations. The forms recognised are related to a type with a hemispherical profile, deep well, simple or slightly tapered rim, and high ring base with straight feet. Bowls/cups can be better compared with Iranian items dated to the second half of the 17th-early 18th century, ¹⁴ with a few exceptions among those with blue and black decoration. ¹⁵ Two of the blue-painted small bowls, recovered from SU1, show a lobed rim (Fig. 6a): one with a more complex floral pattern in two blues (Cf. Crowe 2002, cat. no. 210; Golombek et alii 2013, figs. 2.38A-2.39A); one with a simple indented band painted in blue outside the rim (inv. no. SU1,633; Cf. Crowe cat. nos. 212, 293). The bowl with flared profile and everted rim (inv. no. SU1,506; Fig. 6h) has a much coarser stonepaste body than the other items and is characterised by a simple floral decoration in black and blue, with spiral elements on the exterior. 16

Of the dishes recovered, two ring bases with straight feet are the better-preserved specimens and are characterised by an underglaze blue paint: inv. no. SU48,10, with a peculiar dragon on a vegetal and floral scrolls background (Fig. 6j), ¹⁷ and inv. no. SU100,11a, with the recognisable depiction of an insect in Chinese style (Fig. 6k). ¹⁸ A third fragment of a large dish/shallow bowl with flange shows an underglaze blue painted decoration combined with a moulded fluting in the well (inv. no. SU100, 8; Fig. 6i). Such kind of production is dated around the mid-17th century (Crowe 2002, 24; Watson 2004, 456, Cat. U.8; Golombek et alii 2013, 100).

Two items, one from SU83 and inv. no. SU100,11b, can be easily distinguished because of the peculiar dense red paint used (Fig. 6c-d); they can be safely attributed to the Kirmān Polychrome ware of the second half of the 17th century (Watson 2004: 472, Cat. U.26; Golombek et alii 2013, 105, fig. 2.77B). Within the stonepaste group, there is also a ring base of coarse buff stonepaste (inv. no. SU101,1; Fig. 61) completely different from the other items. The carved fluting on the outer surface and the sea-green glaze covering it clearly testify its attribution to the "pseudo-celadons" group produced in Iran during the 17th century (Watson 2004, 465, cat. no. U.17; Golombek *et alii* 2013, 103, fig. 2.75).

A very small group of underglaze painted earthenware originating from Iranian or Iraqi manufacturing centres have been ascribed to the "Manganese painted ware". Two of the four items recovered at the citadel come from the late SU83 (Fusaro 2020a, fig. 16). They are made of fine buff bodies and belong to large shallow bowls with flange, covered with white slip and a black or black and turquoise painted decoration under a transparent colourless glaze. The stratigraphic data from the citadel suggests

¹³ Those of the blue and black type, the cups with very simple blue decoration, and the type with red painting (Golombek 2003, 256, 262-263; Golombek et alii 2013, 105).

¹⁴ Crowe 2002, 140, cat. nos. 481-482; Golombek 2003, 262-263. A strict resemblance is visible between inv. no. SU83,17 (Fig. 6g) and Crowe 2002, cat. no. 468.

¹⁵ See, in particular, inv. no. SU1,534 (Fig. 6f; Fusaro 2020a, n. 18) and a bowl from SU83 (Fig. 6e; cf. Crowe 2002, cat. no. 87) that can be attributed to the first half or mid-17th century.

¹⁶ Cf. Crowe 2002, cat. nos. 76-77, p. 84, and the "Foliage and Flowers" group for the pattern (first half of the 17th century). Nonetheless, due to its much cruder body and painting style, this item is more probable a later product (cf. Crowe 2002, cat. nos. 465 and 468, end of the 17th-early 18th century).

¹⁷ Cf. Crowe 2002, form 139, p. 105, form 148, pp. 106; cat. nos. 149 and 155, dated to the mid-17th century.

¹⁸ Cf. Crowe 2002, cat. nos. 122, 132, 139, 143, 148 for form and drawing style and decoration (mid-17th century), cat. nos. 288, 290, 295, 296, for the general style (second half of the 17th century); Golombek et alii 2013, fig. 2.59 (mid-17th century).

circulation of this ware at least from the 14th-15th century¹⁹ until the 17th-18th century.²⁰ These vessels share interesting similarities, both for morphology and decoration, with the underglaze painted items attributed to Yemeni manufacturing centres.

Two small fragments have been ascribed to the so-called Red-Yellow ware (Fig. 7). They have been recovered exclusively in the uppermost layers, i.e. SUs 1 and 101. They are conical bowls, with a simple rounded rim, made of a fine buff clay body; its well-recognisable and peculiar feature consists of a russet slip which is incised to create a geometric dotted pattern, covered with a transparent mustard-yellow glaze. Identical items were found at Ra's al-Khayma and al-'Ayn (Kennet 2004, 56; Power 2015, 12, fig. 7). According to the texture and the colour of its fabric, this ware could possibly originate from Iranian or Iraqi regions. It circulated in the Arabian Peninsula and the Gulf area during the 18th century, along with the Manganese painted ware, until the early 19th century.

d) Wares from Yemen

An important group of glazed vessels has been identified with productions attributed to the Yemeni regions, especially the westernmost ones. Among them, there is the so-called Haysi ware, labelled after the associated manufacturing centre (Keall 1983, 383, fig. 4/14; 1991, 83-84, figs. 10-11; 1992, 30-32); it is one of the most important chronological markers for the last occupation phase VI of the citadel. Indeed, specimens related to this production have been found exclusively in the uppermost layers, therefore confirming their circulation since the 17th century.²¹ The associated fabrics are two: the most common (13 sherds) is a fine sandy pale yellow/whitish body, with no temper visible to the naked eye; only two sherds are made of a fine red fabric. This evidence seems to suggest that most of the items reaching al-Balīd were produced in the Hays manufacturing centre, where kaolin-rich clay is available, but some items were also imported from other Yemeni centres, including 'Aden (Mason et alii 1989, 547; Keall 1991, 82-83; 1992, 29).

These items are covered with a white slip and a green and/or mustard yellow glaze; the glaze always appears glossy. Sparse decoration can be used, such as carved segments or impressed dots or notches. The morphological repertoire is limited to small cups with an almost cylindrical body and a low carination, standing on a ring base, which sometimes is very thick; in some cases, a thin horizontal groove marks the junction between the bottom and the wall on the interior (Fig. 8b-c). There are also a conical bowl (Fig. 8a) and an element identified as a smokers' pipe.

Along with the Haysi ware, the underglaze painted ware is the best represented among the productions originating in the Western Yemeni regions, with an amount between 0.5 and 2% ca. within the assemblages considered. The vessels show a remarkable variety of red fabrics, from fine and medium to coarser variants; there is also a unique hemispherical bowl from SU83 with a peculiar coarse whitish fabric. The morphological typology includes quite thick bowls with hemispherical profile, flange, and ring base, conical bowls with flange (only one with simple rim), or deep hemispherical bowls (Fig. 9a-d). Other features of the ware are white slip, transparent colourless glaze, underglaze painted black, black and turquoise, blue and turquoise, or even only turquoise decoration, with very simple geometric or stylised vegetal/floral patterns. Interesting parallels have been traced with underglaze painted bowls from the Zabīd area (Ciuk, Keall 1996, pls. 95/45-48); more in general they can be ascribed to the underglaze painted wares commonly spread in western and south-western Yemen (Mason, Keall 1988, 454, fig. 4; Hardy-Guilbert, Rougeulle 1995, 37-38). The stratigraphic analysis suggests that these wares circulated at al-Balīd mainly in the 17th-18th century, with an initial spread in the 14th-15th century.²²

From the same region also comes only one fragment of the so-called Blue Tihama ware unearthed in SU1.²³ It belongs to a conical bowl with thickened rounded rim characterised by a white slip-painted decoration, mainly consisting of dots and horizontal bands, applied directly over the body under a transparent turquoise glaze (Fig. 9e). Parallels have been detected with items from the Zabīd area (Keall 1983, fig. 4.8; 1991, fig. 9). Due to the scanty number of items found at the citadel, we cannot

¹⁹ Two sherds come from SUs 43 and 56, related to phases IV and V respectively.

²⁰ For similar chronology, see Kennet 2004, 51-52; Carter, Naranjo-Santana 2011, 47, 54; Power 2015, 12, 20.

²¹ They are represented in all the assemblages considered, except that from SU101.

²² Four fragments have been recovered in SUs 43 and 61, phase IV. It has been suggested that the underglaze painted wares replaced the Yemeni Yellow ware (Whitcomb 1988, 190).

²³ The ware is very scanty in the whole *corpus* of the citadel, with only two other specimens found in layer 22, related to phase IV.

propose any precise chronology for the ware. It has been dated to the 15th-16th century (Keall 1991, 82);²⁴ therefore, we cannot exclude that this piece could be residual. Almost surely residual are also three fragments belonging to the Yemeni Yellow ware, also known as Mustard ware.²⁵

Monochrome turquoise vessels are also present in some of the layers considered, i.e. SUs 83=100, 48, and 1, even if in a very small quantity (less than 1% in each assemblage mentioned). The forms recognised recall a unique type of conical bowl with a flange and thick ring base. There are also two wall fragments, possibly belonging to jars. They are characterised by a transparent turquoise or greenturquoise glaze applied over the body, without any slip, that covers almost exclusively the inner surface, leaving the outer one unglazed (Fig. 9f-g). These vessels can be ascribed to the so-called Blue Speckled Ware (Hansman 1985, 52, figs. 12.a, d, f, g, h; Kennet 2004, 53-54). Even if it is usually attributed to Iranian/Iraqi regions, it is also possible that some of the items have a South Arabian origin (Horton 1996, 293, fig. 216-o); a more precise production area in Western Yemen has been proposed especially for items with red fabric (Hardy-Guilbert, Rougeulle 1995, 37). Indeed, except for only one item made of a fine buff ceramic body (inv. no. SU100,2), that can be attributed to Iranian/Iraqi manufacturing centres, the monochrome turquoise vessels found in the assemblages of Phase VI are characterized by fine fabrics with sparse mineral temper, usually including sand and micaceous inclusions, ²⁶ that can be considered proper of the ceramic manufacture of western Yemeni regions (Mason, Keall 1988, 452-456). The presence of only one item with buff fabric seems to suggest that monochrome turquoise vessels from Iranian regions circulated at al-Balīd mainly until the 16th century; indeed, these items are much better represented in phases IV and V (Fusaro 2020a, 77). Whereas monochrome items probably coming from western Yemeni centres reached al-Balīd until the 18th century, along with other products from the same region.

e) Wares from Egypt (?)

A very few items found in SUs 83, 100, 17, and 1 have been identified as imports from Egypt.²⁷ These are fragments of unglazed very fine and thin grey jugs bearing incised and comb incised geometric decoration, one specimen shows an epigraphic band in Arabic. Due to the thinness of the sherds, only very small fragments are preserved. Nonetheless, it is possible to infer that these jugs are characterised by a high cylindrical neck, sometimes the shoulder is carinated, the associated ring base has a triangular-section outer profile (Fig. 10). The stratigraphic analysis shows that these vessels have been found exclusively in the uppermost layers of the citadel, suggesting a circulation at the site only in the 17th-18th century.

Wares from the Gulf area and other imports

A very small amount of unglazed imported items has been associated with the Gulf area. They are characterized by a coarse dark red fabric, with large and medium red-brown angular and fine whitish and whitish burnt-out inclusions, or by a much more compact and hard fabric, with a dark red colour and sandy texture, with sparse vegetal and mineral temper, comprising fine white inclusions. In some cases, the wall surfaces are ribbed or covered by a dark red or black coating. Most of the vessels found are wheel-thrown. The peculiar body of these vessels, as well as their surface treatments, possibly suggests a provenance from the Gulf area (Kennet 2004, 58; Rougeulle 2015, 163-165); nonetheless, we cannot exclude that they may have also come from southern Iranian regions, as this type of jars is common at Sīrāf and the author personally classified and analysed vessels with similar fabric features collected in Fars. Among them, the most interesting item is a flat base of a wheel-thrown jar with red residue on the surfaces (Fig. 11a), which can be interpreted as a container for transporting dyestuff or other valuable content.

Within the group of the Gulf productions found in the latest layers at the citadel, i.e. SUs 83 and 100, there are also two hand-made jars with dark red-brown painted decoration, that probably come from Julfār (Fig. 11b).²⁸

²⁴ This dating better fits the other two findings from SU22, phase IV.

²⁵ Two fragments come from SU100 and one item of more uncertain attribution is from SU48.

²⁶ They are labelled sandy pale-yellow fabric and medium red fabric.

²⁷ According to a preliminary comparative analysis they can be possibly defined *qulal*; for similar items, see Raban 1971, 151-154; Smith et alii 2012, 180-181; Zazzaro et alii 2017, 259-260.

²⁸ Cf. Hansman 1985, 60-64, figs. 14, 17; Kennet 2004, 70-71; Mitsuishi, Kennet 2013, 3, fig. 4 style 5; Saunders 2013, 300, "Julf4".

Two small groups of unglazed jugs and jars are also present in the layers of the last occupation phase of the citadel. The first comprises wheel-thrown jugs made of a fine white-cream or buff body, with incised and comb incised decoration. This group could be tentatively recognised as the so-called Incised White ware attributed to Iranian or Iraqi regions (Kennet 2004, 77), even if multiple production centres have been also proposed (Power 2015, 6). These vessels still circulated during the Late Islamic Period until the 19th-20th century (Power 2015, 7).²⁹ At the citadel this kind of jugs has been unearthed throughout the stratigraphy considered, thus suggesting a long period of circulation since at least the 14th century, even if in the later periods the artefacts are less in quantity and seem less refined.

The other category is much more problematic as far as its attribution is concerned. It comprises wheelthrown jugs and jars, some with ring bases and globular or sub-globular body; many have incised or comb incised decoration. All the items share two main features that make the ware easily recognisable: a quite fine, compact, and hard pinkish-red fabric, with moderate presence of mineral fine and medium white, red, and grey inclusions; surfaces show a well-distinctive creamy-white colour, that in the majority of the cases seems to be obtained during the firing process. This peculiar chromatic combination of body and surfaces recalls the description of the Pink & White ware found at Rā's al-Khayma, but this identification is not conclusive; no hypothesis has been advanced for its provenance (Kennet 2004, 81). Some parallels can be also traced with Western Yemeni productions (Rougeulle 2015, figs. 166/14-18, 167).³⁰

SOCIO-ECONOMIC ASPECTS OF THE LAST OCCUPATION PHASE

The analysis of the ceramic wares found in the layers related to the last occupation of the citadel proves that, after the crisis of the 16th century (Fusaro 2020a, 79), al-Balīd enjoyed an economic recovery during the 17th-18th century: besides being a still very active manufacturing centre, the site still played an important role in the trading network of the Indian Ocean world. This is testified by two main aspects. The overall improvement and the greater variety of the local ceramic productions demonstrate that local potters reached quite high technological skills, especially in manufacturing fine tableware; moreover, it seems that ceramic production was more diversified and associated with a larger number of workshops. We cannot exclude that some changes in forms and styles of the local wares could be also the reflection of a change in the habits of the al-Balīd population. In parallel, the pottery study shows the arrival and/or transit at the site of numerous ceramic goods of different quality from farther regions, such as Egypt, Yemen, Northern Oman, Gulf lands, Iran and/or Iraq, and East Asia.

Both the revival of the Dhofari pottery tradition and the remarkable variety of the imports during this phase could be explained with the rise of the Ya'rubid (1624-1749) and the Āl Bū Sa'īd (1749-) dynasties, under which there was an intensification of cultural unity in the Western Indian Ocean, and a substantial trade expansion, especially from the 17th century onward. Both dynasties are responsible for the creation of the modern nation of Oman (Nicolini 2017, 141, 143, 155), the Āl Bū Sa'īd included Dhofar in this nation (Peterson 2004, 257; Nicolini 2017, 147). The latter could also explain the abundance of the Bahla ware, circulating at al-Balīd in a period when new, stronger relations started between Northern and Southern Oman.

The large amount of Iranian stonepaste vessels of the 17th-early 18th century seems a reflection of the favourable moment experienced by the Safavid potters, who expanded the export of their blue and white products imitating coeval Chinese porcelains both to Europe and South Asia, at a time when porcelain production for export decreased during the passage between the Ming and the Qing dynasties (Crowe 2002, 21-23; Golombek 2003, 254, 268; Golombek et alii 2013, 109). Evidently, al-Balīd was an important trading post and outlet involved in the routes network used for the trade of these Iranian products.

Much cheaper and low-quality products also reached and passed through the site. Among them, there are several underglaze painted earthenwares, both from Iranian/Iraqi regions and Yemeni centres, that probably imitated the more expensive and higher-quality contemporary Iranian stonepaste items, as suggested by their form and colour combinations of glaze and paint.

²⁹ Alternatively, we cannot exclude that the vessels found at the citadel could be attributed to the so-called 'Ali ware, that has been suggested to have been produced in Bahrain during the 18th-20th centuries (Carter, Naranjo-Santana 2011, 47-48).

³⁰ Jugs and jars with almost identical forms, red body and white-cream surfaces, and incised decoration are better represented in earlier levels of the citadel dated to phase IV (SUs 61, 74, 73L, 105=108, with a total of 14 sherds). The only difference detected is the moderate to abundant presence of micaceous inclusions in the body, a feature that proves their provenance from Western Yemeni regions (Rougeulle 2015, 160).

The large quantity of Yemeni ceramic imports at al-Balīd even in the latest occupation layers clearly suggests that the city maintained strong, durable relations with the neighbouring country throughout the Islamic period, in the form of ruling dynasties of Yemeni origin, moving communities, cultural affinity, involvement in the same trade routes, export of specific goods (Fusaro 2020a, 84-85; Newton, Zarins 2017, 95-107, 109). These relations extended from eastern lands, such as the Hadramawt or areas closer to the Şalālah plain, to the westernmost regions. In the former case, the WSLIP ware could eventually point to the presence of Hadramis at al-Balīd, possibly connected with emigration of people from Hadramawt in the late Islamic period, especially from the 17th century (Whitcomb 1988, 194-195). In parallel, westernmost Yemeni centres, such as Ḥays and those in the Zabīd area and 'Aden littoral, provided a good number of varied ceramic vessels to the citizens of al-Balīd.

The presence of Haysi cups and the predominance of cups among the Iranian stonepaste items suggest that during the 17th-18th century the consumption of coffee but also tea was a very popular habit throughout Europe and Asia (Crowe 2002, 22-23), also including al-Balīd, along with smoking.

Finally, the pottery analysis also suggests that in the 17th-18th century al-Balīd was a multicultural/multireligious centre: Muslim Dhofari people coexisted with communities from other lands and of other religious faiths. Indeed, the pottery evidence seems to point to the presence of an Indian community and a group of Christian people, whose origin is still to be traced. People from the Indian subcontinent lived at the site at least since the 14th century; however, the strong drop in Indian wares within the assemblages considered demonstrates that their number, as well as trade with the Indian subcontinent, strongly decreased in the 17th-18th century. Hypothetically, both aspects could probably be related to the fact that from the 16th century onward the Indian subcontinent and the trade of its items were widely dominated by European powers, thus contributing to a decrease in direct free relations of Indian merchants and communities with the Arabian Peninsula.

CONCLUSIONS

The methodology established, the classification carried out, and the results achieved during the 2016-2018 project are the fundamental premises for continuing the study of the ceramic material within the framework of the new Italian archaeological mission at al-Balīd of the Università di Napoli L'Orientale.

The future research work will be carried out not only on the ceramic findings of the citadel but on the whole ceramic material from the site, recovered in old and new surveys and excavations. It aims at filling the gaps left by previous works on the pottery from al-Balīd and solving still open issues of the more recent study, also thanks to the valuable support of the ethnoarchaeological work and the archaeometric analysis, both to be resumed within the new project. Among the main objectives, there are: conducting an in-depth analysis of local, regional and imported items, with a precise technological and stylistic characterisation; proposing comprehensive typology for each ware; delineating a chronological sequence of the productions circulating at the site in different phases of the Islamic period; defining the provenance of regional and imported artefacts; examining more in-depth the role of other Dhofari and regional communities and its relationship with the site of al-Balīd by means of the comparative analysis between local and regional wares; clarifying the chronology of the less known occupation phases of the site, especially the earliest ones; and finally publishing a thorough volume on the whole pottery corpus from al-Balīd.

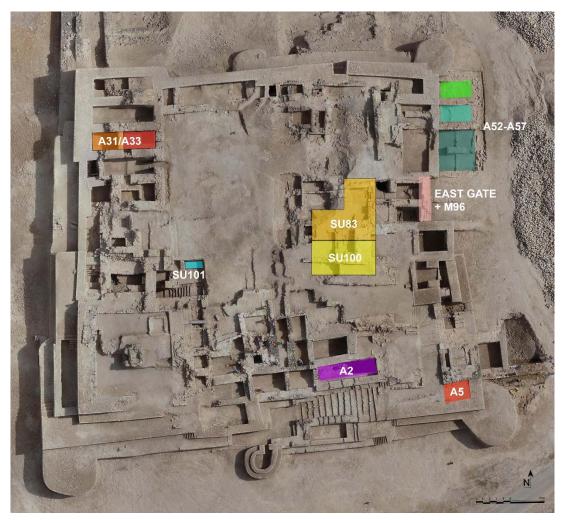
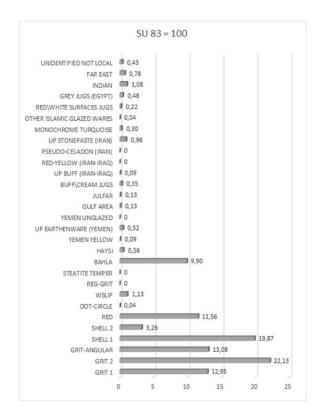


Fig. 1 - Orthophotograph of the citadel, with indication of the archaeological contexts selected for the pottery study (Plan by A. Massa).

PHASES	SUGGESTED CHRONOLOGY	ROOMS A31/A33	ROOM A2	ROOOM A5	S-C AREA	C-E AREA	ROOM A52	ROOM A57	EAST GATE
END	Post-18th century	COLLAPSE	COLLAPSE						
VI	17th-18th century	SU 48	SU 17=3		SU 101	SU 83 = 100			
V	16th century	SU 56							
IV	IV 14th-15th century SU 43=61		SU 22=18=19 SI	SU 10			SU 73	SU 73	SU 125
10	14th-15th century	14th-15th century 50 45-61 SO	30 22-18-19	30 10			SU 112	SU 105-106	30 123

Table 1 - Table showing the stratigraphic units excavated at the citadel with the associated archaeological phases and the related chronological attribution proposed.



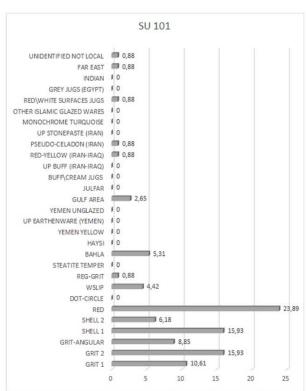
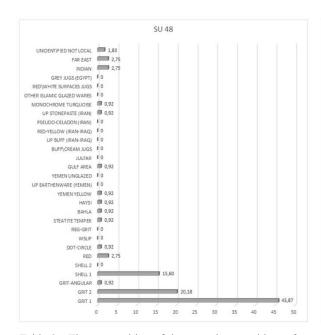


Table 2 - The composition of the ceramic assemblages from SUs 83=100 and 101, with the percentages of each ware or group of wares found.



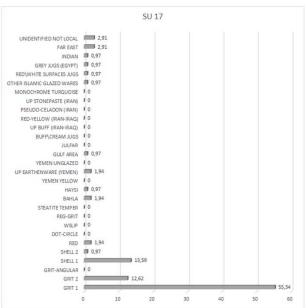


Table 3 - The composition of the ceramic assemblages from SUs 48 and 17, with the percentages of each ware or group of wares found.

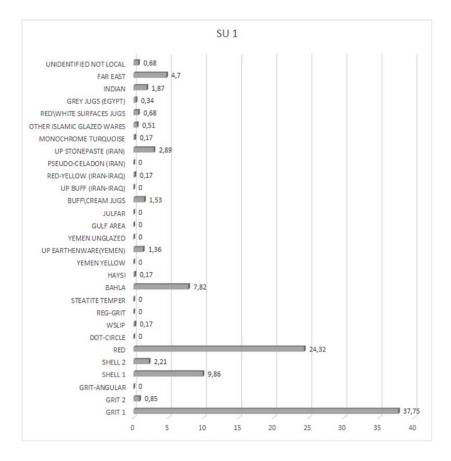


Table 4 - The composition of the ceramic assemblage from SU1, with the percentages of each ware or group of wares found.

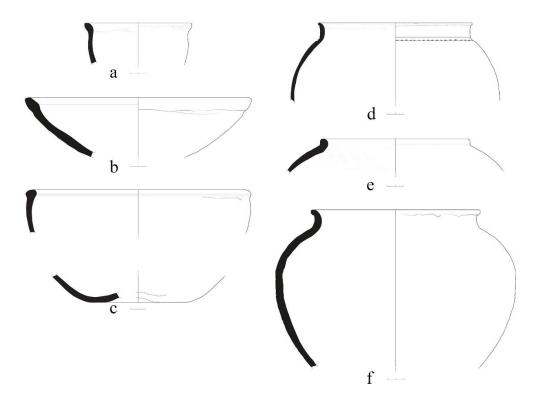
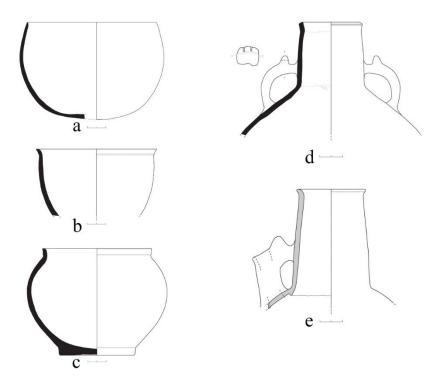


Fig. 2 - Specimens of grit temper ware (b, e), grit-angular ware (a, c) and shell temper ware (d, f) found at the citadel. a) inv. no. SU83,2; b) SU1,362; c) SU100,27; d) SU100,24; e) SU100,28; f) SU1,266.



 $Fig. \ 3 - Specimens \ of \ red \ ware \ (a-c) \ and \ shell \ temper \ ware \ 2 \ (d-e) \ found \ at \ the \ citadel. \ a) \ inv. \ no. \ SU83,6; \ b) \ SU1,563; \ c) \ SU1,554; \ d) \ SU83=100,26; \ e) \ SU1,241-244.$



Fig. 4 - Specimens of the WSLIP ware found at the citadel. Inv. nos. a) SU100,20; b) SU61,55; c) SU100,13.

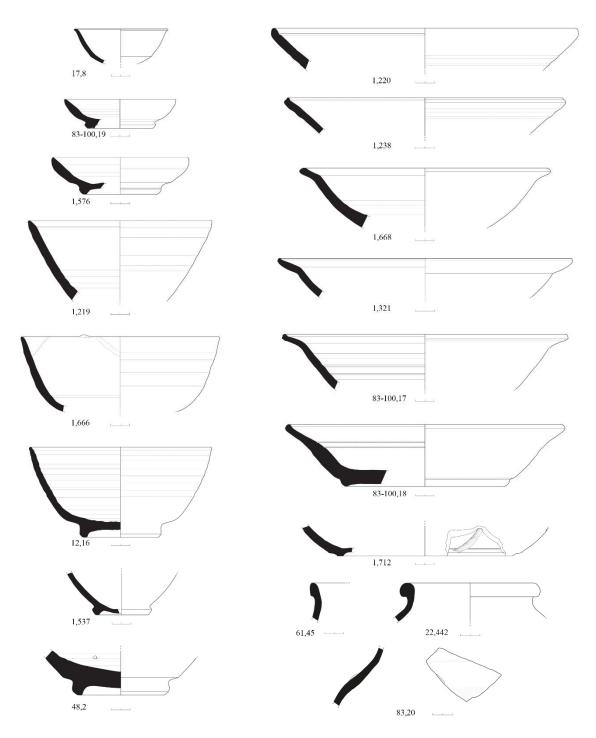


Fig. 5 - Specimens of the Bahla ware found at the citadel.



Fig. 6 - Specimens of Iranian stonepaste wares found at the citadel. a) bowls from SU1, in the centre inv. no. US1,633; b) bowl from SU83; c) inv. no. SU100,11b; d) sherd from SU83; e) bowl from SU83; f) inv. no. SU1,534; g) inv. no. SU83,17; h) inv. no. SU1,506; i) inv. no. SU100,8; j) inv. no. SU48,10; k) inv. no. SU100,11a; l) inv. no. SU101,1.



Fig. 7 - Specimens of the Red-Yellow ware found at the citadel. Top: inv. no. SU1,377; bottom: sherd from SU101.

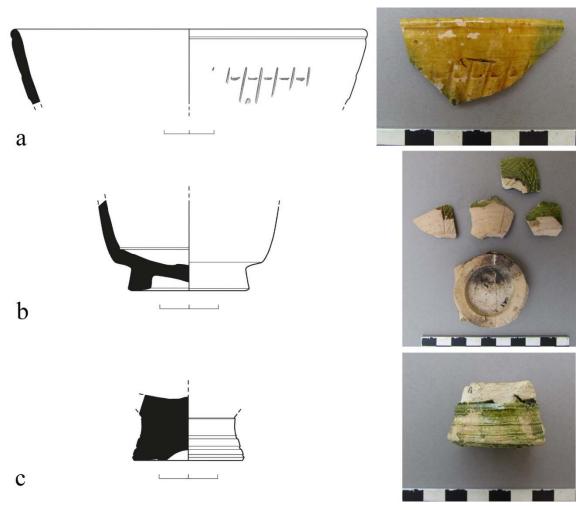


Fig. 8 - Specimens of the Haysi ware found at the citadel. Inv. nos. a) SU83,18; b) SU83=100,3; c) SU83,19.

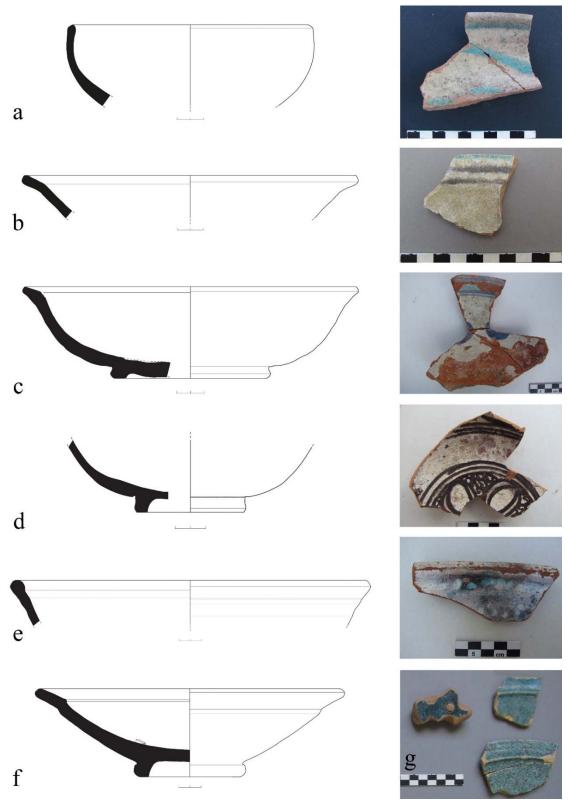


Fig. 9 - Specimens of the underglaze painted ware (a-d), the Blue Tihama ware (e), and the monochrome turquoise ware (f-g), probably coming from Yemen, found at the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,536; d) SU1,263; e) SU1,346; f) SU18,22 g) sherds are the citadel. Inv. nos. a) SU17,9; b) SU100,4; c) SU1,263; e) SU1,from SU83.



Fig. 10 - Specimens of underglaze fine grey jugs, probably coming from Egypt, found at the citadel. a) sherds from SU83; b) sherds from SU100; c) sherds from SU1; d) inv. no. SU100,5.

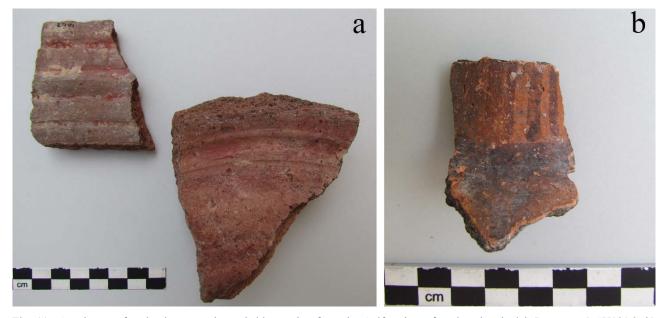


Fig. 11 - Specimens of underglaze vessels, probably coming from the Gulf regions, found at the citadel. Inv. nos. a) SU101,3; b) SU100,1.

ANNEX

Visits, archaeological surveys and excavations in Zafār/al-Balīd (1834-2019)

Andrea D'Andrea, Roberta Giunta, Alexia Pavan

Years	Activities	References
1834-36	First visit by Stafford Bettesworth Haines to 'Awqad (lit. Audád), Salalah (lit. Ṣallálah), Ḥāfa (lit. Haffer) and the "extensive ruins located two miles and a half E.N.E. of Haffer, near a fresh-water lake".	Haines 1845, 118
1836	Charles John Cruttenden visits Salalah (lit. Solahlah), Dahrīz (lit. Dyreez), Ḥāfa (lit. El Hafah), and the remains of an old town called El Bellut (i.e. al-Balīd) located between Ḥāfa and Dahrīz.	Cruttenden 1836, 187
1839	Henry John Carter draws the first schematic plan and provides a detailed description of the site, which was located between the towns of Salalah (lit. Silalah) and Ḥāfa (lit. El Hafa) on the west, and that of Dahrīz (lit. Dareez) on the east. He visits the citadel ruins (pp. 229-30) and the ruins of the great mosque (lit. Temple or Mosque), which originally contained one hundred and eighty-three pillars (p. 230). He points out that the site was divided into two parts, of which only the eastern one was fortified (p. 225).	Carter 1844-46 (The same information can be found in Carter 1846)
1883 and 1884	Samuel Barrett Miles draws a historical picture of the region (pp. 498-514), and gives a description of the site, which he locates between Hāfa (lit. Al-Hafa) and Dahrīz (lit. Dareez). He clearly identifies the city walls, the towers, the ditch, the citadel, the great mosque and the custom house (p. 544). He also provides information on the burial grounds at al-Ribāt (lit. Robat; p. 547).	Miles 1919; Marshall 1989, 74
1894	The Bents (James Theodore and his wife, Mabel) visit al-Balīd (lit. Al Balad) and al-Ribāt (lit. Robat), which were the ancient capital of Dhofar (p. 115). Based on Sprenger's work (1864), Bent points out that the ancient name of al-Balīd was Zafār (lit. Zafar), which was destroyed in 618/1221-22, when al-Manṣūra (lit. Mansura) was built, "under which name the capital was known in early Mohammedan times" (p. 116).	Bent 1895
1895	The Bents visit Dhofar region for the second time. With regard to al-Balīd and al-Ribāt, they provide very similar information to that of the 1894 publication.	Bent Th. and M. 1900
1918	Charles Craufurd visits al-Balīd (lit. Al Bilad), which is in a state of complete ruin, and the graveyard located in the western area. He also takes the first photographs of the Great Mosque.	Craufurd 1919

Years	Activities	References
1930	Visit to the ruined city of al-Balīd (lit. Balid) by Bertram Thomas (p. 38), "the most extensive ruins of the Dhofar (lit. Dhufar) plain" (p. 8). He takes some photos on the site (see also Peyton 1983, p. 75).	Thomas 1932
1930 ca.	Sultan Said bin Taimur carries out some excavation works along the east end of the south side of the citadel.	(Quoted in Albright 1982, p. 59)
1945	Wilfred Thesiger arrives for the first time in Ṣalālah, "the capital of Dhaufar", and visits the site and the numerous ruins scattered around the city and the plain (pp. 43-44).	Thesiger 1959 (ed. 2008)
1952-1960	First archaeological excavations (started in spring 1952) under the auspices of the American Foundation for the Study of Man (AFSM). Wendell Phillips was the sponsor of the expedition; Frank P. Albright the main archaeologist and responsible of the whole work. The AFSM works involved the city wall, the towers, the two city gates, the citadel ("Area A"), the great mosque, the western bridge, four habitations in the western side of the walled city ("Area H"), and a number of buildings and mosques scattered around the site which are shown on a map drawn by Phillips (fig. 21; see also Zarins 2007, fig. 2). However, a full account of the excavation work and a complete list of the finds are lacking. Albright (p. 106) provides only a list of 90 artefacts, summarily described and without graphic or photographic documentation. Unpublished materials are held by the AFSM in various locales in Virginia.	Phillips 1971; 1972; Albright 1955; 1982
1977-1981	Paolo Costa leads three seasons of work (started in spring 1978, following a first survey in winter 1977) on behalf of the Omani Ministry of National Heritage and Culture and in cooperation of the local authorities. Costa employs a large team of experts, analyses the site for the first time with a scientific approach, and provides a detailed site plan with a 50 m interval grid system. The main excavation activities concerned the great mosque, the western bridge and city gates (called "Area A"), and an area located in the centre of the walled city (called "Area B"). However, once again, a final analysis of the materials and a study of the ceramic fragments are lacking.	Costa 1979
1980	Giovanni Oman, upon invitation of Costa, carries out a preliminary study of the epigraphic material from the western cemetery of the site (1983), as well as from Ṣalālah and Mirbāṭ (1982).	Oman 1982; 1983; 1989
1994	At UNESCO's request, Michael Jansen draws up an executive project for the development of cultural tourism in the Governatorate of Dhofar.	Jansen 2015, p. VII
1995-2003	The German archaeological mission from Aachen University, directed by M. Jansen, in cooperation with the National Committee for the supervision of Archaeological Survey in the Sultanate, carries out numerous campaigns. The main activities carried out by the mission were: the first topographic surveying of the site (1995-1996; Jansen 2015, p. 31); the application of digital prospection and three-dimensional documentation in conservation of architectural remains (1997-2000; <i>Id.</i> , pp. 32-37); the documentation methodology for the archaeological activities (2001; <i>Id.</i> , pp. 37-40). The excavation activities involved the Great Mosque (Sept. 1995; Sept. 1996; March 1997; AugNov. 1997; <i>Id.</i> , pp. 49-92); the citadel (March 1997; Aug. 1998; March 1998; FebrApril 1999; OctDec. 1999; spring 2000; NovDec. 2000; March-April 2001; <i>Id.</i> , pp. 161-208); the northern and western city wall (Sept. 1996; Sept. 1997; March-April 1998; OctDec. 1999; March	Powell, al-Salmi 1997; 1998; Jamme 1998; Koschick 1998; Powell 1998a; 1998b; Yule 1998b; 1999a; 1999b; Hermann 1999; Jansen 1999; Al Shamsi 1999, White 1999; 2000a; 2000b; White, Unterlechner 1999; 2000; Peshkov 2001; Peshkov, Voyakin 2001;

Years	Activities	References
	2000; NovDec. 2000; March-April 2001; <i>Id.</i> , pp. 93-160); the small mosques 655 and 940 (spring 2000; <i>Id.</i> , pp. 219-226); the House 803 (May-June 2000; <i>Id.</i> , pp. 231-232, 258-263); the courtyard 720 (May-June 2000; <i>Id.</i> , pp. 228-231, 237-257); the residential area south of the citadel (March 2000; <i>Id.</i> , pp. 232-233, 235-236). Seven soundings (1998; <i>Id.</i> , pp. 270-284) were moreover carried out with the aim of finding pre-Islamic evidences which, however, did not emerge. A number of conservation actions, such as the restoration of a number of columns, were performed as well.	Stevens 2001; Urban 2001; Franke-Vogt et alii 2003; Jansen 2001; 2002; 2003; 2015
1996-1997	Two excavation campaigns lead by an archaeological team of the Sultan Qaboos University focused on the so-called "funerary mosque" with its facilities and burial area.	Ibrahim, Al Tigani 1997; see also Jansen 2015, pp. 209-217.
1996-1998	Mauro Cremaschi conducted a number of geomorphological surveys within the works carried out by the Italian Mission to Oman (IMTO) in the coastal area of Dhofar and in the interior of the region. In 1997 a palynological study was carried out as well with the samples processed by the University of Amsterdam (Carina Hoorn). At al-Balīd tests were conducted on three different spots in order to collect palynological samples. The results confirm the idea of Costa that the settlement was a kind of virtual island and that the lagoon was connected to the sea until recent time.	Hoorn, Cremaschi 2004
1997-2004	First studies on ceramic material with proposals for typologies	Yule 1998a; Franke Vogt 2002; Yule et alii 2005; Yule, Muhammed 2006
1998	Within the frame of the Oman Maritime Heritage Project, Jana Owen made a short reconnaissance campaign in the lagoon of al-Balīd. https://museum.wa.gov.au/maritime-archaeology-db/maritime-reports/oman-maritime-heritage-project	Owen 1998
2000	A first sedimentological study is conducted by the Canadian Edward Reinhardt who prepared a PhD thesis discussing the development of the site from a palinoligical, sedimentalogical and micropalaeontological perspective.	Reinhardt 2000
2005-2012	Archaeological works are carried out by Juris Zarins and Lynne Newton under the auspices of the Office of the Adviser to H.M. the Sultan for Cultural Affairs, directed by Abdul Aziz bin Mohammed Al Rowas. Their work focused on the citadel, the western and southeastern areas of the walled city, jetties, breakwaters, southern towers and gates, "Custom House", a small mosque located to the east of the citadel and the building complex in the southwestern corner, outside the city wall. Most of the excavated material were cleaned, classified and placed in boxes.	Zarins 2007; Belfioretti, Vosmer 2010; Newton, Zarins 2010; 2014; 2017; Zarins, al- Jahfali 2012; Zarins, Newton 2006; 2012
2012-2018	Krista Lewis of the University of Arkansas at Little Rock directs new excavation works that lead to the discovery of a large multi-storey building, located in the south-western part of the site.	Lewis 2012; 2013 <i>a</i> ; 2013 <i>b</i> ; 2013 <i>c</i> ; 2014; 2015

Years	Activities	References
2015-2016	Excavation campaign by the Italian Mission to Oman (IMTO), University of Pisa, headed by A. Avanzini and directed by A. Pavan (October-December) and S. Lischi (February-March 2016). Works were carried out exclusively on the citadel following the request of HE Abdul Aziz bin Mohammed Al Rowas.	Pavan 2015; Lischi 2016; Pavan, Lischi 2016
2016-2019	The most recent archaeological work carried out at the site focused on the citadel and was conducted by Alexia Pavan under the auspices of the Office of the Adviser to H.M. the Sultan for Cultural Affairs, directed by Abdul Aziz bin Mohammed Al Rowas. New and important results have also been achieved through the study of ceramic and porcelain material, as well as ship timbers and coins.	Pavan 2017-18; 2019; 2021; Fusaro 2018; Pavan et alii 2018; 2020; Fusaro 2019; Pavan et alii 2019; Annucci 2020; Fusaro 2020a; 2020b; Ghidoni 2020; Pavan, Visconti 2020

References

- Agius, D.A. (2013) Ships that Sailed the Red Sea in Medieval and Early Modern Islam Perception and Reception, in V. Porter, L. Saif (eds), *The Hajj: Collected Essays*, pp. 84-95, London.
- Agius *et alii* (2016) D.A. Agius, J.P. Cooper, L. Semaan, C. Zazzaro, R. Carter, Remembering the Sea: Personal and Communal Recollections of Maritime Life in Jizan and the Farasan Islands, Saudi Arabia, *Journal of Maritime Archaeology* 11 (2), pp. 127-177.
- al-Akwa', I. (1980) al-Madāris al-islāmiyya fi'l-Yaman, San'a.
- Al-Baleed Archaeological Park (2015) = Al-Baleed Archaeological Park Salalah. [Office of the Adviser to His Majesty the Sultan for Cultural Affairs Sultanate of Oman], Muscat—Salalah.
- Album, S. (2011) Checklist of Islamic Coins, Santa Rosa.
- Albright, F.P. (1955) Explorations in Dhofar, Oman, Antiquity 113, pp. 37-39.
- Albright, F.P. (1982) *The American Archaeological Expedition in Dhofar, Oman, 1952-1953* (The American Foundation for the Study of Man 6), Washington.
- Amaldi, D. (1996) Il Dhofar nella letteratura araba classica, Egitto e Vicino Oriente 19, pp. 239-241.
- Anastasio *et alii* (2016) S. Anastasio, P. Gilento, R. Parenti, Ancient Buildings and Masonry Techniques in the Southern Hauran, Jordan, *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 4 (4), pp. 299-320.
- Annucci, A. (2018) Kilwa Coins from Husn Al Baleed: A Preliminary Note, in Pavan *et alii* 2018, pp. 232-233.
- Annucci, A. (2020) Coins: The Kilwa Issue, in Pavan et alii 2020, pp. 194-197.
- Antonelli, A. (2021) Le aree funerarie di contesto islamico nella piana di Ṣalālah (Dhofar, Oman meridionale). [Unpublished MA Thesis, University of Naples L'Orientale]. Napoli.
- Ayers J., R. Krahl eds (1986) Chinese Ceramics in the Topkapi Saray Museum, Istanbul: A Complete Catalogue, 3 Vols., London.
- Bacharach, J.L. (1989) The Court-Citadel: An Islamic Urban Symbol of Power, in T. Yukawa, *The Proceedings of International Conference on Urbanism in Islam* 3, *The Middle Eastern Culture Centre*, pp. 206-245, Tokyo.
- Baldissera, E. (1991) Le iscrizioni nel Palazzo di Ğabrīn (Sultanato di Omàn), *Quaderni di Studi Arabi* 9, pp. 29-91.
- Baldissera, E. (2001) Appendix. Calligraphic Inscriptions, in Costa 2001, pp. 241-263.
- Balfour-Paul, J. (2004) *Indigo in the Arab World*, London (1st ed. 1997).
- Belfioretti, L., T. Vosmer (2010) Al-Balid Ship Timbers: Preliminary Overview and Comparisons. *Proceedings of the Seminar for Arabian Studies* 40, pp. 111-118.
- Benkari, N. (2017) The Defensive Vernacular Settlements in Oman: A Contextual Study, *International Journal of Heritage Architecture* 1 (2), pp. 175-185.
- Bent, J.Th. (1895) Exploration of the Frankincense Country, Southern Arabia, *The Geographical Journal* 6 (2), pp. 109-134.
- Bent, J.Th., M. Bent (1900) Southern Arabia, Soudan and Socotra, London.
- Blue, L. (2002) Myos Hormos Quseir al-Qadim: A Roman and Islamic Port on the Red Sea Coast of Egypt A Maritime Perspective, *Proceedings of the Seminar for Arabian Studies* 32, pp. 19-21.
- Blue, L. (2006) Sewn Boat Timbers from the Medieval Islamic Port of Quseir al-Qadim on the Red Sea Coast of Egypt, in Connected by the Sea: Proceedings of the Tenth International Symposium on Boat and Ship Archaeology, Roskilde 2003, pp. 598-610, Oxford.
- Blue et alii (2011) L. Blue, J. Whitewright, R. Thomas, Ships and Ships' Fittings, in L. Blue, D. Peacock (eds), Myos Hormos Quseir al-Qadim, Roman and Islamic Ports on the Red Sea, Vol. 2: Finds from the Excavation 1999-2003, pp. 179-209, Oxford.
- El-Bokhari (1903) Les traditions islamiques, traduit de l'arabe par O. Houdas et W. Marçais, Vol. 1, Paris.

- Borgese et alii (2019) D. Borgese, A. Gratteri, A. Tilia, Emergency Interventions at Husn Al Baleed, Salalah (Oman). Securing the Fortified Palace at Al Baleed site. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Bosworth, C.E. (1986a) Rasūlids, in *The Encyclopaedia of Islam*² 8, pp. 455-457.
- Bosworth, C.E. (1986b) Sadr, in *The Encyclopaedia of Islam*² 8, pp. 748-751.
- Bosworth, C.E. (1986c) Sayyid, in *The Encyclopaedia of Islam*² 9, p. 115.
- Bosworth, C.E. (1986d) Sharīf, in *The Encyclopaedia of Islam*² 9, p. 329.
- Bosworth, C.E. (1986e) Shaykh, in *The Encyclopaedia of Islam*² 9, pp. 397-398.
- Bosworth, C.E. (1996) The New Islamic Dynasties. A Chronological and Genealogical Manual, Edinburgh.
- Braginsky, V.I. (2007) Sufi Boat Symbolism: Problems of Origin and Evolution, *Indonesia and the Malay* World 26 (74), pp. 50-64.
- Bystron, A.M. (2020) Pottery from the al-Zubārah Suq, Proceedings of the Seminar for Arabian Studies 50, pp. 37-51.
- Carswell, J. (2000) Blue & White: Chinese Porcelain Around the World, London.
- Carter, H.J. (1844-46) A Descriptive Account of the Ruins of El-Balad, Transactions of the Bombay *Geographical Society*, pp. 225-237.
- Carter, H.J. (1846) The Ruins of El Balad, The Journal of the Royal Geographical Society of London 16, pp. 187-199.
- Carter, H.J. (1847) Description of the Frankincense Tree of Arabia with Remarks on the Misplacement of the Libanophorous Region in Ptolomey's Geography, The Journal of Bombay Branch of the Royal Asiatic Society 2 (11), pp. 380-389.
- Carter, J.R.L. (1975) Graves of Three Descendents of Badr Bū Tuwayriq in Zafār of Oman, Arabian Studies 2, pp. 211-212.
- Carter, R., J. Naranjo-Santana (2011) Muharraq Excavations 2010. Oxford Brooks Archaeology & Heritage (OBAH). [Unpublished report; www.academia.edu/628941/Muharraq Excavations 2010; last consulted August 2021].
- Carter et alii (2020) R.A. Carter, B. Zhao, K. Lane, C. Velde (2020) The Rise and Ruin of a Medieval Port Town: A Reconsideration of the Development of Julfar, Arabian Archaeology and Epigraphy 31 (2), pp. 501-523.
- Carvajal López et alii (2019) J.C. Carvajal López, M. Giobbe, E. Adeyemo, M. Georgakopoulou, R. Carter, F. Sakal, A. Bianchi, F. Al-Na'īm, Production and Provenance of Gulf Wares Unearthed in the Old Doha Rescue Excavations Project, Proceedings of the Seminar for Arabian Studies 49, pp. 51-68.
- Chittick, N. (1980) Sewn Boats in the Western Indian Ocean, and a Survival in Somalia, The International Journal of Nautical Archaeology 9 (4), pp. 297-309.
- Ciuk, C., E. Keall (1996) Zabid Project Pottery Manual 1995. Pre-Islamic and Islamic Ceramics from the Zabid area, North Yemen, Oxford.
- Cooper et alii (2020) J.P. Cooper, A. Ghidoni, C, Zazzaro, L. Ombrato, Sewn Boats in the Qatar Museums Collection, Doha: Baggāras and Kettuvallams as Records of a Western Indian Ocean Technological Tradition, *The International Journal of Nautical Archaeology* 44 (3), pp. 371-405.
- Costa, P.M. (1979) The Study of the City of Zafār (al-Balīd), The Journal of Oman Studies 5, pp. 111-150.
- Costa, P.M. (1983) Notes on Settlement Patterns in Traditional Oman, The Journal of Oman Studies 6 (2), pp. 246-268.
- Costa, P.M. (2001) Historic Mosques and Shrines of Oman, Oxford.
- Costa, P.M., S. Kite (1985) The Architecture of Ṣalālah and the Dhofar Littoral, The Journal of Oman Studies 7, pp. 131-153.
- Craufurd, C. (1919) The Dhofar District, The Geographical Journal 53 (2), pp. 97-105.
- Creasman, P.P. (2013) Ship Timber and the Reuse of Wood in Ancient Egypt, Journal of Egyptian History 6 (2), pp. 152-176.
- Cribb, J., D.T. Potts (1996) Chinese Coin Finds from Arabia and the Arabian Gulf, Arabian Archaeology and *Epigraphy* 7, pp. 108-118.

- Crowe, Y. (2002) Persia and China. Safavid Blue and White Ceramics in the Victoria and Albert Museum 1501-1738, London.
- Cruttenden, C.J. (1836) Journal of an Excursion from Morebat to Dyreez, the Principal Town of Dofar, *Transactions of the Bombay Geographical Society* 1, pp. 184-188.
- D'Andrea, A. (2021) Reconsidering the Topography of al-Balid: A Preliminary Review of the Graphical Documentation. Annali dell'Università di Napoli "L'Orientale" 81, pp. 39-50.
- D'Après, M. (1794) Description of the Coast of Arabia between Aden and Morebat, in J. Huddart, J.-B.N. De Mannevillette (eds), The Oriental Navigator or New Directions for Sailing to and from the Indies, also for the Use of Ships Trading in the Indian and China Seas to New Holland, pp. 151-153. London.
- Dalrymple, A. (1784) Memoir of a Chart of the East Coast of Arabia from Dofar to the Insland Maziera. From an Eye-Draught Taken by Capt. John. S. Smith in December 1781, London.
- Darley-Doran, R.E. (1990) History of Currency in the Sultanate of Oman, Muscat.
- D'Errico, E. (1983) Introduction to Omani Military Architecture of the Sixteenth, Seventeenth and Eighteenth Centuries, *The Journal of Oman Studies* 6, pp. 291-306.
- Diler, O. (2009) *Islamic Mints*, Istanbul.
- Dupoizat, M.F., N. Harkantiningsih (2007) Catalogue of the Chinese Style Ceramics of Majapahit: Tentative Inventory, Paris.
- First Regional Office of Fine Arts (2016) Study of the Phanom-Surin Shipwreck. Ratchaburi.
- Flecker, M. (2000) A 9th-century Arab or Indian Shipwreck in Indonesian Waters, The International Journal of Nautical Archaeology 29 (2), pp. 199-217.
- Flecker, M. (2010) A 9th-century Arab Shipwreck in Indonesia, in R. Krahl et alii (eds), Shipwrecked. Tang Treasure and Monsoon Winds, pp. 101-119, Washington.
- Fox, C.S. (1947) The Geology and Mineral Resources of Dhufar Province, Muscat and Oman, South-East Arabia (Published by the order of the Sultan of Muscat and Oman and Dependencies https://www.qdl.qa/en/archive/81055/vdc 100058143542.0x000001).
- Frampton J. ed. (1971), The Most Noble and Famous Travels of Marco Polo Together with the Travels of Nicolò De' Conti, New York.
- Franke Vogt, U. (2002) Remarks on the Classification of the Pottery from Al-Balid, Dhofar (Oman), Bonn. [Unpublished Report].
- Franke-Vogt et alii (2003) U. Franke-Vogt, T. Urban, D. Voyakin, Al Baleed Archaeological Park Archaeological Mission. Preliminary Report of the First Season, April 7th-May 2nd, 2003. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Freeman-Grenville, G.S.P. (1957) Coinage in East Africa before Portuguese Times, *Numismatic Chronicle*, pp. 151-175.
- Fusaro, A. (2018) The Study of the Pottery from the Husn: A Brief Introduction, in Pavan et alii 2018, pp. 216-220.
- Fusaro, A. (2019) New Project on Islamic Ceramics from al-Balīd: Chronology, Technology, Tradition, and Provenance, *Proceedings of the Seminar for Arabian Studies* 49, pp. 129-146.
- Fusaro, A. (2020a) The Islamic Port of al-Balīd (Oman), between Land and Sea: Place of Trade, Exchange, Diversity, and Coexistence, Journal of Material Cultures in the Muslim World 1, pp. 67-95.
- Fusaro, A. (2020b) Materials from Husn al-Balid. Local Pottery, Regional Wares and Ceramics from Other Islamic Lands, in Pavan et alii 2020, pp. 180-185.
- Ghazanfar, S.A. (1992) Quantitative and Biogeographic Analysis of the Flora of the Sultanate of Oman. Global *Ecology and Biogeography Letters* 2 (6), pp. 189-195.
- Ghidoni, A. (2018) The Ship Timbers from Al Baleed, in Pavan et alii 2018, pp. 226-229.
- Ghidoni, A. (2019) Building Pâris' Beden Seyad: A Replica of the Omani 19th-century Sewn Fishing Vessel, *The International Journal of Nautical Archaeology* 48 (2), pp. 360-376.
- Ghidoni, A. (2020) The Ship Timbers, in Pavan et alii 2020, pp. 190-194.
- Ghidoni, A. (2021) Sewn-plank Construction Techniques in the Western Indian Ocean: Evidence from the Timbers of Al Baleed, Oman, in G. Boetto, P. Pomey, P. Poveda (eds), Open Sea, Closed Sea: Local and

- Inter-Regional Traditions in Shipbuilding. Proceeding of the Fifteenth International Symposium on Boat and Ship Archaeology, Marseilles, pp. 225-232, Paris.
- Giunta, R. (2012) Coins from al-Balid (Oman). A Preliminary Report. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Giunta, R. (forth.) Some Considerations Regarding the Attribution to Mas'ūd III of the Royal Palace at Ghazni. Annali dell'Università di Napoli "L'Orientale" 82.
- Golombek, L. (2003) The Safavid Ceramic Industry at Kirman, *Iran* 41, pp. 253-270.
- Golombek et alii (2013) L. Golombek, R.B. Mason, P. Proctor, E. Reilly, Persian Pottery in the First Global Age. The Sixteenth and Seventeenth Centuries. Arts and Archaeology of the Islamic World Series, Vol. 1, Leiden.
- Groves, P. (2010) Strongholds of Heritage. Forts and Castles in Oman, Dubai-Abu Dhabi-London.
- Guest, R. (1935) Zufār in the Middle Ages, Islamic Culture. Hyderabad Quarterly Review 9, pp. 402-410.
- Haines, S.B. (1839) Memoir to Accompany a Chart of the South Coast of Arabia from the Entrance of the Red Sea to Misenát, in 50° 43' 25" E, The Journal of the Royal Geographical Society of London 9, pp. 125-156.
- Haines, S.B. (1845) Memoir of the South and East Coasts of Arabia, Part II, The Journal of the Royal Geographical Society of London 15, pp. 104-160.
- Hansman, J. (1985) Julfar, an Arabian Port. Its Settlement and Far Eastern Ceramic Trade from the 14th to the 18th Centuries, London.
- Hardy-Guilbert C., G. Ducatez (2004) Al-Šiḥr, porte du Ḥaḍramawt sur l'océan Indien, Annales Islamogiques 38, pp. 95-157.
- Hardy-Guilbert, C., A. Rougeulle (1995) Archaeological Research into the Islamic Period in Yemen: Preliminary Notes on the French Expedition, 1993, Proceedings of the Seminar for Arabian Studies 25, pp. 29-44.
- Hardy-Guilbert et alii (2005) C. Hardy-Guilbert, M. Kervran, C. Picard, H. Renel, A. Rougeulle, Ports et commerce maritime islamiques. Présentation du programme APIM (Atlas des ports et itinéraires maritimes du monde musulman), in Ports maritimes et ports fluviaux au Moyen Âge. XXVe Congrès de la SHMES, pp. 79-97, Paris.
- Hermann, F. (1999) Excavation of the Northern City Wall. March 1-April 4, 1998. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Hirth F., W.W. Rockwill (1911) Chau Ju-Kwa: his Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries, Entitled Chu-fan-chi, St. Petersburg.
- Hoorn C., M. Cremaschi (2004) Late Holocene Palaeoenvironment History of Khawr Rawri and Khawr Al Balid (Dhofar, Sultanate of Oman), Palaeogeography, Palaeoclimatology, Palaeoecology 213, pp. 1-36.
- Hornell, J. (1941) The Sea-going Mtepe and Dáu of the Lamu Archipelago, *The Mariner's Mirror* 27 (1), pp. 54-68.
- Horsburgh, J. (1801) Description of the Coast of Arabia from Aden to (Cape) Ras-Al-Gat; and from hence to Muscat, in Directions for Sailing to and from the East Indies, China, New Holland, Cape of Good Hope, and the Interjacent Ports: Compiled Chiefly from Original Journals at the East India House, Vol. 1, pp. 217-225.
- Horton, M. (1996) Shanga: The Archaeology of a Muslim Trading Community on the Coast of East Africa, London.
- Hourani, G.F. (1963) Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times, Beirut.
- Ibn Baṭṭūṭa (2008) Ibn Baṭṭūṭa. I viaggi (ed. by Claudia M. Tresso), Torino.
- Ibn al-Mujāwir (1951-1954) Tārīkh al-Mustabşir (ed. by O. Löfgren, S. De Goeje), Leiden.
- Ibrahim, M., A. Al Tigani (1997) A Report on Two Seasons of Sultan Qaboos University Excavations at Al-Balid, Dhofar 1996-7. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Insoll et alii (2016) T. Insoll, S. Almahari, R. MacLean, S. Priestman, M. Al-Mearaj, N.J. Overton, Bilad al-Qadim Revisited: Recent Archaeological Research at the Al-Khamis Mosque, Ain Abu Zaydan and Abu Anbra, Bahrain, Arabian Archaeology and Epigraphy 27, pp. 215-242.

- Jamme M. (1998) Working Programme of the Teaching and Research Area, Urban History, al Balid, the Campaigns September 1995-April 1998. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Jansen, M. (1999) Interim Report of the Campaigns Carried Out on the Archaeological Site al-Balid, Salalah, Sultanate of Oman, 1995-1998. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Jansen, M. (2001) Al-Balid Technical Report. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Jansen, M. (2002) Interim Report of the Campaigns Carried out on the Archaeological Site al-Balid, Salalah, Sultanate of Oman, 1995-2001. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Jansen, M. (2003) Documenting al-Baleed, Site Atlas, 1996-2001, RWTH-Aachen.
- Jansen, M., ed. (2015) The Archaeological Park al-Baleed, Sultanate of Oman. Site Atlas along with selected technical reports 1995-2001, Muscat.
- Johnstone, T.M., J. Muir (1962) Portuguese Influences on Shipbuilding in the Persian Gulf, The Mariner's Mirror 48 (1), pp. 58-63.
- Jumprom, J. (2014) The Phanom Surin Shipwreck: New Discovery of an Arab-style Shipwreck in Central Thailand, Southeast Asian Ceramics Museum Newsletter 8, pp. 1-14.
- Jumprom, J. (2019) Recovery of a Lost Arab-styled Ship at Phanom-Surin, the Wetland Excavation on Site in Central Thailand, in A. Srisuchat, W. Giessler (eds), Ancient Maritime Cross-cultural Exchanges, pp. 226-247, Bangkok.
- Kay, H.C. (1892) Yaman, its Early Medieval History, London.
- Keall, E.J. (1983) The Dynamics of Zabid and Its Hinterland: The Survey of a Town on the Tihamah Plain of North Yemen, World Archaeology 14 (3), pp. 378-392.
- Keall, E.J. (1991) Drastic Changes in 16th Century Zabid, Proceedings of the Seminar for Arabian Studies 21, pp. 79-96.
- Keall, E.J. (1992) Smokers' Pipes and the Fine Pottery Tradition of Hays, Proceedings of the Seminar for Arabian Studies 22, pp. 29-46.
- Kennet, D. (2004) Sasanian and Islamic Pottery from Ras al Khaimah. Classification, Chronology and Analysis of Trade in the Western Indian Ocean, Oxford.
- Kervran, M. (2004) Archaeological Research at Suhār 1980-1986, The Journal of Oman Studies 13, pp. 263-281. al-Khazrajī (1906) The Pearl Strings: A History of the Resúlivy Dynasty of Yemen (ed. by E.G. Browne, R.A. Nicholson, A. Rogers), Leiden–London.
- Kobyliński, Z. (1995) Ships, Society, Symbols and Archaeologists, in O. Crumlin-Pedersen (ed.), The Ship as Symbol in Prehistoric and Medieval Scandinavia, pp. 9-19, Copenhagen.
- Koschick H. (1998) The Excavations of the City Wall, 9/1-9/27 1998. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Kuwayama, G. (1997) Chinese Ceramics in Colonial Mexico, Honolulu.
- Lambourn, E. (1999) The Decoration of the Fakhr al-Dīn Mosque in Mogadishu and Other Pieces of Gujarati Marble Carving on the East African coast, *Azania* 34, pp. 61-86.
- Lambourn, E. (2003) La production de marbre sculpté à Cambaye au Gujarat et son exportation dans l'océan Indien (XIIIe-XVe s. ap. J.C.), in J.M. dos Santos Alves, C. Guillot, R. Ptak (eds), Mirabilia Asiatica, coll. South China and Maritime Asia, pp. 109-252, Wiesbaden.
- Lambourn, E. (2004) Carving and Recarving: Three Rasulid Gravestones Revisited, *Arabian Studies* 4, pp. 10-29. Lewis, K. (2012) Al Baleed Preliminary Research Prospectus October 2012. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Lewis, K. (2013a) Al Baleed Excavation Report & Procedures Manuals Summer 2013. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Lewis, K. (2013b) Land of Frankincense: Archaeological Excavations at Al-Baleed Inaugural Season Summer 2013. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.

- Lewis, K. (2013c) Al Baleed Summer 2013 Field Report. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Lewis, K. (2014) Al Baleed Summer 2014 Excavation Field Report. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Lewis, K. (2015) Al Baleed Excavation Field Report 2015A Results of the Summer 2015 Campaign of the American Archaeological Mission to the Land of Frankincense, Oman. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Li Zihan et alii (2021) Li Zihan, C. Doherty, A. Hein, Rediscovering the Largest Kiln Site in the Middle Yangtze River Valley: Insights into Qingbai and Grey-greenish Ware Production at Husi Kiln Site Based Bulk Chemical Analysis, Archaeological *Anthropological* Sciences on https://link.springer.com/content/pdf/10.1007/s12520-021-01464-4.pdf.
- Lischi S. (2016) Al Baleed Preliminary Report on the small finds. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Lorimer, J.G. (1915) Gazetteer of the Persian Gulf, Oman, and Central Asia. Vol I. Historical. Part IA & IB, Calcutta.
- Lydekker, C.J. (1919) The "Mtepe" Dhau of the Bajun Islands, Royal Anthropological Institute of Great Britain and Ireland 19, pp. 88-92.
- Manguin, P.-Y. (2001) Shipshape Societies: Boat Symbolism and Political Systems in Insular Southeast Asia, *Techniques & Culture* 35-36, pp. 373-400.
- Marshall, B. (1989) The Journeys of Samuel Barrett Miles in Oman, between 1875 and 1885, The Journal of Oman Studies 10, pp. 69-75.
- Mason, R.B., E.J. Keall (1988) Provenance of Local Ceramic Industry and the Characterization of Imports: Petrography of Pottery from Medieval Yemen, *Antiquity* 62, pp. 452-463.
- Mason et alii (1989) R.B. Mason, J.R. Hallett, E.J. Keall, Provenance of Islamic Pottery from Yemen: INAA and Petrographic Analysis, in Y. Maniatis (ed.), Archaeometry: Proceedings of the 25th International Symposium, pp. 543-550, Amsterdam.
- Mathews, C.D. (1959) Non-Arabic Place Names in Central South Arabia, in Akten 24sten Internationalen Oreintalischer Kongress [Sektion V: Semitisk], Munich, pp. 259-262, Wiesbaden.
- McCaughan, M. (2013) Symbolism of Ships and the Sea: From Ship of the Church to Gospel Trawler, Folk *Life* 40 (1), pp. 54-61.
- Medley, M. (2006) The Chinese Potter: A Practical History of Chinese Ceramics, Singapore (1st ed. 1980).
- Miles, S.B. (1919) The Countries and Tribes of the Persian Gulf, Cambridge.
- Miller et alii (1988) Miller, A.G., M. Morris, S. Stuart-Smith (1988) Plants of Dhofar, the Southern Region of Oman: Traditional, Economic, and Medicinal Uses, Muscat.
- Mitchell, H.W. (1970) Fakhr al-Dunya and Nasir al-Dunya: Notes on Two East African Topics, *Numismatic* Chronicle 7th series 10, pp. 253-257.
- Mitchiner, M. (1977) Oriental Coins and Their Values. Vol. 1. The World of Islam, London.
- Mitsuishi, G., D. Kennet, with contributions from J. Szuchman and R. Hawker (2013) Kiln Sites of the Fourteenth-Twentieth-century Julfar Ware Pottery Industry in Ras al-Khaimah, UAE, Proceedings of the Seminar for Arabian Studies 43, pp. 1-14.
- Miyata Etsuko (2019) Ceramics from Nagasaki: A Link to Manila Galleon Trade, in Wu Chunming, R.J. Sanchez, Liu Miao (eds) Archaeology of Manila Galleon Seaports and Early Maritime Globalization, pp. 161-172, Singapore.
- Moreland, W.H. (1939) The Ships of the Arabian Sea about A.D. 1500, The Journal of the Royal Asiatic Society of Great Britain and Ireland 1, pp. 63-74, 173-192.
- Moule, A.C., P. Pelliot (1938) Marco Polo. The Description of the World, London.
- Museum of the Frankincense Land (2007) = The Museum of the Frankincense Land. The History Hall (Office of the Adviser to His Majesty the Sultan for Cultural Affairs), Muscat.
- Narrative (1833) = Narrative of Voyages to Explore the Shores of Africa, Arabia and Madagascar, Performed in H.M. Ships Leven and Barracouta under the direction of Captain W. F. W. Owen by command of the Lords Commissioners of the Admirality, in Two Volumes, Vol. I, London.

- Newton, L.S. (2010) Shrines in Dhofar, in L. Weeks (ed.), Proceedings of the Death, Burial and the Transition to the Afterlife in Arabia and Adjacent Regions, pp. 329-340, Oxford.
- Newton, L.S., J. Zarins (2010) Preliminary Results of the Dhofar Archaeological Survey, *Proceedings of the* Seminar for Arabian Studies 40, pp. 247-266.
- Newton, L.S., J. Zarins (2014) A Possible Indian Quarter at al-Baleed in the Fourteenth-Seventeenth Centuries AD?, Proceedings of the Seminar for Arabian Studies 44, pp. 257-276.
- Newton, L.S., J. Zarins, (2017) Dhofar through the Ages. An Archaeological, Ecological and Historical Landscape, Muscat (2nd ed. Oxford 2019).
- Nicolini, B. (2017) Oman's Maritime Activities throughout the Indian Ocean: 1650–1856 CE, in A. Al Salimi, E. Staples (eds), Studies on Ibadism and Oman, Oman. A Maritime History, Vol. 9, pp. 141-159, Hildesheim-Zürich-New York.
- Nucciotti, M., G. Vannini, (2019) Light Archaeology and Territorial Analysis: Experiences and Perspectives of the Florentine Medievalist School, *Archaeologia Polona*, 50, pp. 149-169.
- Nutzel, H. (1891) Munzen der Rasuliden, Berlin.
- Oman, G. (1982) The Burial Stelae of Muhammad "Sahib Mirbat". Studia Turcologica Memoriae Alexii Bombacii Dicata, pp. 387-401, Napoli.
- Oman, G. (1983) Preliminary Epigraphic Survey of Islamic Material in Dhofar, The Journal of Oman Studies 6 (2), pp. 277-289.
- Oman, G. (1989) Arabic Islamic Epigraphy in Dhofar in the Sultanate of Oman, *Papers on the Archaeology* and History of Oman, pp. 189-198.
- Ory, S. ed. (1999) De l'or du sultan à la lumière d'Allah. La Mosquée al-'Abbās à Asnāf (Yémen). Damas.
- Owen, J. (1998) Al Balid Lagoon Survey, The History and the Results. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Palace Museum (2019) = The Palace Museum, The Institute of Cultural Relics and Archaeology of Zhejiang Province, The Longquan Museum (2019) Longquan qingci tai you chengfen tezheng yanjiu 龙泉青瓷胎 釉成分特征研究 [The Ingredients Property of the Body Glazes of Longquan Celadon Products], in Palace Museum - Zhejiang Provincial Museum - Lishui Municipal People's Government (eds), Tianxia Longquan. Longquan qingci yu quanqiuhua. Juan san: fengxing tianxia 天下龙泉。龙泉青瓷与全球化。 卷三:风行天下. Longquan of the World. Longquan Celadon and Globalization. Vol. III: A Worldwide Fashion, pp. 316-323, Beijing.
- Pâris, F-E. (1843) Essai sur la construction navale des peuples extra-Européens ou Collection des navires et pirogues, Paris.
- Pavan, A. (2015) Preliminary Report of the IMTO Excavations on the Husn of Al Baleed (husn15a). October-December. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Pavan, A. (2017-18) Husn Al Baleed: Civil and Military Architecture along the Indian Ocean in Medieval Times, Journal of Indian Ocean Archaeology 13-14, pp. 28-41.
- Pavan, A. (2018) Part 1: Excavations at husn al-Balid, in Pavan et alii 2018, pp. 211-216.
- Pavan, A. (2019) Husn Al Baleed, scavo e consolidamento di un castello fortificato lungo la costa del Dhofar / Husn Al Baleed, Excavation and Consolidation of a Fortified Palace along the Coast of Dhofar, in D. Frenez. M. Cattani (eds), 40 anni di ricerche archeologiche italiane in Oman. Sognatori / Dreamers. 40 Years of Italian Archaeological Research in Oman, pp. 155-157, Roma.
- Pavan, A. (2020), Fieldwork and Study of the Materials: The State of Art, in Pavan et alii 2020, pp. 173-180.
- Pavan, A. (2021) Husn Al-Baleed: A Mediaeval Fortified Castle along the Omani Coast. Preliminary Results from the 2016-2017 Excavations, in Ch. Darles, L. Khalidi, M. Arbach (eds), Contacts between South Arabia and the Horn of Africa, from the Bronze Age to Islam. In honor of Rémy Audouin, pp. 269-278, Toulouse.
- Pavan, A., S. Lischi (2016) Preliminary Report of the Excavations on the Husn of Al-Baleed February March 2016 HUSN16A. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.

- Pavan, A., C. Visconti (2020) Trade and Contacts between Southern Arabia and East Asia: The Evidence from al-Balīd (Southern Oman), Proceedings of the Seminar for Arabian Studies 50, pp. 243-257.
- Pavan et alii (2018) A. Pavan, A. Fusaro, C. Visconti, A. Ghidoni, A. Annucci, Archaeological Works at the Fortified Castle of Al Baleed (Husn Al Baleed), Southern Oman: Preliminary Results from the Fieldwork and the Study of the Materials, *Egitto e Vicino Oriente* 41, pp. 211-234.
- Pavan et alii (2019) A. Pavan, S. Laurenza, R. Valentini, Masonry and Building Tecniques in a Medieval City Port of the Sultanate of Oman: Preliminary Typological Atlas at al-Balid, Newsletter di Archeologia CISA 10, pp. 321-346.
- Pavan et alii (2020) A. Pavan, A. Fusaro, C. Visconti, A. Ghidoni, A. Annucci, New Researches at the Port of Al Baleed and its Castle (Husn): Interim Report (2016-2018), The Journal of Oman Studies 21, 2020, pp.
- Peshkov, Y. (2001) Preliminary Report on Excavation Activities for the Spring Campaign, March-April, 2001. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Peshkov, Y., D. Voyakin (2001) Report on Excavation Activities for the Autumn Campaign, November-December, 2001. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Peterson, J.E. (2004) Oman's Diverse Society: Southern Oman, Middle East Journal 58 (2), pp. 254-269.
- Peyton, W. (1983) *Old Oman*, London.
- Phillips, W. (1971) Unknown Oman, Beirut.
- Phillips, W. (1972) History and Archaeology of Dhofar. [Unpublished PhD Thesis: University of Brussels, Belgium].
- Pirazzoli-t'Serstevens, M. (1988) La céramique chinoise de Qal'at al-Suhâr, Arts Asiatiques 43, pp. 87-105.
- Porter, V. (1987) The Art of the Rasulids, Appendix, in W. DAUM (ed.), Yemen: 3000 Years of Art and Civilisation in Arabia Felix, pp. 232-253, Innsbruck.
- Porter, V. (1988) Three Rasulid Tombstones from Zafar (Porter). Journal of the Royal Asiatic Society, pp. 32-44.
- Powell, A. (1998a) The Archaeological Park of al-Balid, The Great Mosque. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Powell, A. (1998b) Al-Balid Archaeological Park, Sultanate of Oman. March 1997, Summer 1997, and March 1998: The Citadel. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Powell, A., S. Al Salmi (1997) The Campaign 1 July-30 October, 1997. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Powell, A., S. Al Salmi (1998) Al-Balid Archaeological Park, Summer Season 1997: The Northern Area and Access Path. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Power, T. (2015) A First Ceramic Chronology for the Late Islamic Arabian Gulf, Journal of Islamic *Archaeology* 2 (1), pp. 1-33.
- Prados, E. (1996) Traditional Fishing Craft of the Tihamah and Southwestern Arabian Coast, The American *Neptune* 56 (2), pp. 89-115.
- Prins, A.H.J. (1982) The Mtepe of Lamu, Mombasa and the Zanzibar Sea, *Paideuma* 28, pp. 85-100.
- Qin Dashu, Chang Jung Jung, Shan Yu (2017) Early Results of an Investigation into Ancient Kiln Sites Producing Ceramic Storage Jars and Some Related Issues, Bulletin de l'École française d'Extrême-Orient 103, pp. 359-384.
- Raban, A. (1971) The Shipwreck off Sharm-el-Sheikh, Archaeology 24 (2), pp. 146-155.
- Reinhardt, E. (2000) Al Balid Harbor Site Formation: Evolution of the Ancient Harbor at Al Balid, Oman. Sedimentological and Micropalaeontological Evidence. [Unpublished Report, McMaster University, Canada].
- Rougeulle, A. ed. (2015) Sharma. Un entrepôt de commerce médiéval sur la côte du Ḥaḍramawt (Yémen, ca 980-1180), Oxford.
- Rougeulle, A., Zhao Bing (2015) L'occupation des XVIII^e/XIX^e siècles, in Rougeulle 2015, pp 433-444.

- Rougeulle et alii eds (2014) A. Rougeulle, H. Renel, G. Simsek. Ph. Colomban, Medieval Ceramic Production at Qalhāt, Oman: A Multidisciplinary Approach, Proceedings of the Seminar for Arabian Studies 44, pp. 287-315.
- Rugiadi, M. (2007) Decorazione architettonica in marmo da Gaznī (Afghanistan). [Unpublished PhD Thesis, Università di Napoli L'Orientale].
- Sassu et alii (2017) M. Sassu, J. Zarins, L. Giresini, L.S. Newton, The 'Triple R' Approach on the Restoration of Archaeological Dry Stone City Walls: Procedures and Application to a UNESCO World Heritage Site in Oman. Conservation and Management of Archaeological Sites 19 (2), pp. 106-125.
- Saunders, J.P. (1846) A Short Memoir of the Proceedings of the Honourable Company's Surveying Brig "Palinurus", during Her Late Examination of the Coast between Ras Morbat and Ras Seger, and between Ras Fartak and the Ruins of Mesinah, The Journal of the Royal Geographical Society of London 16, pp. 169-186.
- Saunders, B.J.O. (2013) The Trade and Distribution of Ceramics in the Western Indian Ocean 1250-1550 AD. An Analysis of Current Available Assemblages from Arabia, Iran and East Africa. [MRes Thesis, Department of Archaeology, Durham University. [http://etheses.dur.ac.uk/7316/ Last consulted August 2021].
- Schreurs, J. (2009) The Ruins of Al Baleed, Salalah, Dhofar, South Oman. Mainly Archaeological Description. [April 2009: online: http://home.kpn.nl/~janm_schreurs/AlBaleed.htm].
- Serjeant, R.B. (1963) The Portuguese off the South Arabian Coast: Ḥaḍramī Chronicles. With Yemeni and European Accounts of Dutch Pirates off Mocha in the Seventeenth Century, Oxford.
- al-Shahrī, A.A. (1994) Zufār: kitābātuhā wa-nugūshuhā al-gadīma, Dubai.
- Al Shamsi, K. (1999) The Excavation of a Small Mosque. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- SICA X = S. Album (1999), Sylloge of Islamic Coins in the Ashmolean 10: Arabia and East Africa, Oxford.
- Sidebotham, S.E. (2011) Berenike and the Ancient Maritime Spice Route, Berkeley-Los Angeles-London.
- Smith, G.R. (1985), Ibn al-Mujāwir on Dhofar and Socotra, Proceedings of the Seminar for Arabian Studies 15, pp. 79-92.
- Smith, G.R. (1988) The Rasūlids in Dhofar in the VIIth-VIIIth/XIII-XIVth Centuries. Part I, Journal of the Royal Asiatic Society, pp. 26-37.
- Smith, G.R. (2002) Zafār, in Encyclopaedia of Islam² 11, pp. 380-381.
- Smith, G.R. (2008) A Traveller in Thirteenth Century Arabia / Ibn al-Mujāwir's Tārīkh al-Mustabsir (The Hakluyt Society, Third Series, no. 19), Aldershot, U.K.
- Smith et alii (2012) L.M.V. Smith, M.D.S. Mallinson, J.S. Phillips, A.H. Adam, A.I. Said, H. Barnard, C.P. Breen, G. Breen, D. Britton, W. Forsythe, J. Jansen van Rensburg, T. McErlean, S. Porter, Archaeology and the Archaeological and Historical Evidence for the Trade of Suakin, Sudan, in D.A. Agius, J.P. Cooper, A. Trakadas, C. Zazzaro (eds), Navigated Spaces, Connected Places: Proceedings of Red Sea Project V, pp. 173-186, Oxford.
- Smith, J.S. (1783) An Eye Draught from Dofar to Shoal Cliff on the Coast of Arabia Taken in December 1781 on Board his Majestys Ship San Carlos, publ. by A. Dalrymple, Harrison William (Bibliothéque nationale de France, Département Cartes et Plans, GE DD-2987, 6719.
- Sprenger, A. (1864) Die Poste und Reiserouten des Orientz, Leipzig.
- Sprenger, A. (1875) Die Alte Geographie Arabiens, Bern.
- Stevens, T. (2001) Documenting al-Balid, Spring Campaign 2001, March-April. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Ströber, E. (2016) The Collection of Chinese and Southeast Asian Jars (martaban, martavanen) at the Princessehof Museum, Leeuwarden, the Netherlands. [https://files.friesmuseum.nl/files/1/8/2/3/jars_research_Eva.pdf].
- TEI = Thesaurus d'Epigraphie Islamique (Fondation Max van Berchem, Genève). [http://www.epigraphieislamique.uliege.be/thesaurus/].
- Thesiger, W. (1959) Arabian Sands, London.
- Thomas, B. (1932) *Arabia Felix: Across the Empty Quarter of Arabia*, London.

- Urban, T. (2001) Report on Archaeological Activity 11/30-12/13, 2001. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Valentine, W.H. (1911) Modern Copper Coins of the Muhammadan States, London.
- Varadarajan, L. (1998) Sewn Boats of Lakshadweep, Singapore.
- Varisco, D.M. (1993) Texts and Pretext: The Unity of the Rasulid State under al-Malik al-Muzaffar, Revue des mondes musulmans et de la Méditerranée 67, pp. 13-24.
- Visconti, C. (2020) Chinese and East Asian ceramics, in Pavan et alii 2020, pp. 185-189.
- Visconti, C., A. Pavan (2021) A Noteworthy Chinese Assemblage in Arabia: Recent Discoveries from al-Balīd, Sultanate of Oman, *The IASA Bulletin* 26, pp. 24-26.
- Vosmer, T. (1996) Watercraft and Navigation in the Indian Ocean: An Evolutionary Perspective, in *The* Prehistory of Asia and Pacific. Colloquium XXXII: Trade as a Subsistence Strategy. Post Pleistocene Adaptations in Arabia and Early Maritime Trade in the Indian Ocean. XIII International Congress of *Prehistoric and Protohistoric Science*, pp. 223-243. Forlì.
- Vosmer, T. (1997) Indigenous Fishing Craft of Oman, International Journal of Nautical Archaeology 26 (3), pp. 217-235.
- Vosmer, T. (2007) The Development of Maritime Technology in the Arabian Gulf and Western Indian Ocean, with special reference to Oman. [Unpublished PhD Thesis, Curtin University of Technology].
- Vosmer, T. (2017) The Development of Boatbuilding Technologies and Typologies, in A. Al-Salimi, E. Staples (eds), *Oman: A Maritime History*, pp. 185-222, Hildesheim.
- Vosmer, T. (2019) Sewn Boats in Oman and the Indian Ocean, The International Journal of Nautical Archaeology 48 (2), pp. 302-313.
- Walker, J. (1936) The History and Coinage of the Sultans of Kilwa, *Numismatic Chronicle* 5th Series 16, pp. 43-81.
- Wang Xiuli (2018) The Arabs Living in Coastal China during the 10th-13th Centuries, Revue historique de l'Océan Indien (Association historique internationale de l'océan Indien, Routes, Flux et Réseaux en Indian océanie du VIIIe siècle à nos jours), pp. 202-214.
- Ward, C.A. (2000) Sacred and Secular: Ancient Egyptian Ships and Boats, Philadelphia.
- Ward, C. (2001) The Sadana Island Shipwreck: An Eighteenth-Century Merchantman off the Red Sea Coast of Egypt, World Archaeology 32 (3), pp. 368-382.
- Ward, C., C. Zazzaro (2010) Evidence for Pharaonic Seagoing Ships at Mersa/Wadi Gawasis, Egypt, *International Journal of Nautical Archaeology* 39 (1), pp. 27-43.
- Watson, O. (2004) Ceramics from Islamic Lands, London.
- Whitcomb, D.S. (1988) Islamic Archaeology in Aden and the Hadhramaut, in D.T. Potts (ed.), *Araby the Blest*. Studies in Arabian Archaeology. pp. 176-263 (Carsten Niebuhr Institute Publication 7), Copenhague.
- White, G.L. (1999) Archaeological Park, al-Balid. Preliminary Report for the Autumn Campaign, 1999. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- White, G.L. (2000a) Archaeological Park al-Balid, Preliminary Report of the Citadel Excavations. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat—Salalah.
- White, G.L. (2000b) Preliminary Report of the Citadel and City Wall Excavations for the November-December Campaign, 2000. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- White, G.L., P. Unterlechner (1999) Al-Balid, Archaeological Park, Citadel Northwest Corner. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- White, G.L., P. Unterlechner (2000) March 2000 al-Balid Archaeological Park, Spring Campaign-March, 2000. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-
- Williams, J., ed. (1997) Money: A History, London.
- Wood, N. (2007) Chinese Glazes: Their Origins, Chemistry and Re-creation, London Philadelphia.
- Yule, P. (1998a) Notes on Local Pottery at Al-Balid. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.

- Yule, P. (1998b) Preliminary Report on the Sondages at al-Balid. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Yule, P. (1999a) The Excavations, February 20-April 2, 1999. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Yule, P. (1999b) Report of the Excavations at al-Balid, October 2-December 13, 1999. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Yule, P. (2015) Early Mentions of Dhofar, Al-Baleed, in Jansen 2015, p. 3.
- Yule, P., K.K. Muhammed, S. Simon (2005) al-Balid Pottery Report on Al-Balid Pottery Reference Collection. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- Yule, P., K.K. Muhammed (2006) Report on Al-Baleed Pottery: Reference Collection. RWTH Aachen University. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah.
- von Zambaur, E. (1968) Die Münzprägungen des Islams. Zeitlich und örtlich geordnet. Vol 1: Der Westen und Osten bis zum Indus mit synoptischen Tabellen, Wiesbaden.
- Zarins, J. (2007) Aspects of Recent Archaeological Work at al-Balīd (Zafār), Sultanate of Oman, *Proceedings* of the Seminar for Arabian Studies 37, pp. 309-324.
- Zarins, J., M. al-Jahfali (2012) Preliminary Report on the 2011-2012 Field Season at Al Baleed. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Zarins, J., L. Newton (2006) Al Baleed 2005 Season. Preliminary Report. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat-Salalah
- Zarins, J., L. Newton (2012) Al Baleed: Ancient Zafar, Sultanate of Oman. Report of Excavations, 2005-2011 and Salalah Survey. [Unpublished Report, Office of the Adviser to His Majesty the Sultan for Cultural Affairs], Muscat–Salalah.
- Zazzaro et alii (2017) C. Zazzaro, R. Loreto, C. Visconti, An Eighteenth-Century Merchantman off the Red Sea Coast of Saudi Arabia, Proceedings of the Seminar for Arabian Studies 47, pp. 253-263.
- Zhang Ran (2016) An Exploratory Quantitative Archaeological Analysis and a Classification System of Chinese Ceramics Trade in the Western Indian Ocean: AD c. 800-1500. [PhD Thesis, Durham University. http://etheses.dur.ac.uk/11747/].
- Zhao Bing (2015a) Chinese-Style Ceramics in East Africa from the 9th to 16th Century: A Case of Changing Value and Symbols in the Multi-partner Global Trade, Afriques 6. https://journals.openedition.org/afriques/1836.
- Zhao Bing (2015b) La céramique chinoise à Sharma: pour un essai d'étude typo-chronologique et spatiale, in Rougeulle 2015, pp. 277-321.
- Zhao Bing (2017) The Production of Storage Jars in China and Southeast Asia: A Vibrant but Little-Known Artisanal Practice, Bulletin de l'École française d'Extrême-Orient 103, pp. 259-265.
- Zhao Bing, P. Lombard (2005) La céramique chinoise importée avant 1500 à Qal'at al-Bahreïn: fouilles françaises 1989 à 2002, Taoci 4, pp. 105-116.
- Živković, J., T. Power, M. Georgakopoulou, J.C.Carvajal López (2019) Defining New Technological Traditions of Late Islamic Arabia: A View on Bahlā Ware from al-Ain (UAE) and the Lead-barium Glaze Production, Archaeological and Anthropological Sciences 11, pp. 697-709.

General index

Aachen University, 17, 23, 33, 137, 150	Başra, Iraq, 121
'Abbāsids, 16, 118	Belitung, Indonesia, 68, 77
'Abd al-Kādir b. 'Abd al-Waḥīd b. Wāthik	Bent, Th. and M., 7, 15, 17, 19, 149
Ibrāhīm b. al-Muzaffar 'Amr b. 'Alī, Malik al-	Berenike, Egypt, 68, 70
Fattāḥ, 140	Bin 'Afīf, Dhofar, 137, 138, 140
'Aden, Yemen, 87, 90, 119, 121	Bin 'Alī, Dhofar, 137
al-Afdal al-'Abbās (r. 1363-1377), 119	Birmingham, UK, 122
Afghanistan, 20, 118	Bisya, Oman, 128
Africa / East Africa / Eastern Africa, 67, 70, 82,	Bohemia, 121, 122
101, 104, 107, 118, 120, 122, 126, 129	Bombay, India, 5
Aḥmad b. Manjawī, 3, 15	Bowen, E. (1694-1767), 5, 13
Aḥmad b. Muḥammad b. 'Abd Allāh b. Mazrū'	British East India Company, see East India
al-Ḥabūdī, 4, 8, 9, 11, 12, 15	Company
al-Ahmadiyya, Dhofar, 4, 15	British Foundation for the Study of Arabia, see
Āl Bū Sa'īd (1749-), 89	International Association for the Study of Arabia
'Alī b. 'Umar al-Kathīrī, 137	al-Bukhārī, Muḥammad b. Ismā'īl (810-870), 3, 4
American Foundation for the Study of Man, 15,	Cambay, 137, 139
23, 33, 127, 150	Canton, China, 129
'Āmir III b. Dāwūd / Ibn Da'ud (r. 1517-1538),	Carter, H.J., 5, 6, 7, 9, 10, 14, 15, 16, 18, 19, 20,
121	149
'Amr b. Ja'far, 140	China, 4, 5, 23, 67, 101, 102, 103, 104, 105, 106,
Anhui, China, 103	107, 128, 129, 133
Anxi, China, 106	Cruttenden, Ch., 6, 7, 16, 19, 149
Arabia / Arabian Peninsula / South Arabia,	D'Après, M. (1707-1780), 5
Western Arabia, 1, 4, 5, 6, 15, 23, 67, 70, 71, 84,	Dahrīz / Dareez / Diriz / Dyreez, Dhofar, 6, 7, 18,
87, 88, 90, 101, 103, 104, 106, 108, 118, 122,	19, 22, 149
127, 128, 129	al-Dakhiliyya, Oman, 128
Arabian Gulf, see Gulf area	Dalrymple, A. (1737-1808), 5
Arkansas, University, 151	Dehua, China, 103, 106, 111, 128
Asia / East Asia / South Asia / Southeast Asia, 1,	Delhi sultans (1206-1526), 120
31, 67, 82, 84, 85, 86, 89, 90, 101, 102, 103,	East Africa / Eastern Africa, see Africa
104, 106, 107	East Asia, see Asia
Asnāf, Yemen, 20, 21	East India Company / East India companies /
Austria, 122	British East India Company, 5, 23, 122, 105, 122
'Awgad / Audád, Dhofar, 6, 30, 137, 138, 140,	Egypt, 31, 50, 67, 68, 70, 71, 82, 84, 88, 89, 99,
145, 149	106, 107
al-'Ayn, United Arab Emirates, 87	Europe / Western Europe, 5, 89, 90, 103, 105, 122
'Ayn Fard, Dhofar, 8, 15	Exeter, University, 24, 67
Ayyūbids (in Yemen; 1174-1229), 15	Fachang, China, 103
Bā 'Alawī, Dhofar, 137, 137, 138, 140, 141, 142,	Far East, 5, 128
145	Fars, 88
Bachiene, W.A. (1712-1783), 5	Fartaca, see Rā's Fartak
Badr Bū Ṭuwayriq / Badr Bū Tuwariq (r. 1516-	Fāṭimids (909-1171), 117
1568), 121, 137	Fayşal bin Turkī (r. 1888-1913), 122, 126
Badrīyat bint Ja'far b. Badr Bū Ṭuwayriq, 140	Francis I (1708-1765), 122
Bahla, Oman, 28, 31, 84, 85, 89, 95	Fujian, China, 102, 103, 104, 105, 106, 107
Bahrain, 68, 69, 75, 89, 121	Geneva
Bahrain National Museum, 69	Max van Berchem Foundation, 81
Balkh, Afghanistan, 15	George VI (r. 1936-1952), 122, 126
Banī-bū Ḥasan, Oman, 118	Ghaznavids (977-1186), 20
Barakat Trust, 72	Ghazni, Afghanistan, 20

al-Khazrajī, Muḥammad b. Ibrāhīm (d. 1258), 16, Guangdong, China, 102, 104, 106, 107 Gujarat, 21, 107, 137, 139 18, 30, 117, 119 Gulf area / Gulf land / Gulf regions / Persian Gulf Khor Rori, Dhofar, 9, 127, 128 / Arabian Gulf, 67, 82, 84, 87, 88, 89, 99, 104, Khuriya Muriya Islands, Red Sea, 4 Kilwa / Sultanate of Kilwa, 119, 124 106 Gulf of Suez, 5 Kirmān, Iran, 86 Habūda / Habūza, Hadramawt, 15 Land of Mahra, 3 Lisht, Egypt, 70 Ḥabūdids, 15, 16, 17, 31, 118, 142 al-Ḥaddād, Dhofar, 137, 138, 140 London Hadramawt / Wādī Hadramawt, 6, 7, 15, 16, 30, British Museum, 128 83, 84, 90, 104, 122, 137, 138 Victoria and Albert Museum, 21, 139, 140, 141 Hāfa / Haffer / Al-Hafa / El Hafa / El Hafah, Longquan, China, 102, 103, 105, 107, 109, 128 Dhofar, 6, 149 Ma'din, Afghanistan, 118 Haines, S.B., 5, 6, 149 Maḥmūd b. Aḥmad al-Kūsī, 15 al-Hamdānī, Abū Muḥammad al-Ḥasan (893-Mahra, see Land of Mahra 945), 3, 4 Majapahit, Giava, 101 al-Harjā', Oman, 8, 15 Mamluks (1250-1517), 120 Hāsik, Dhofar, 3, 4 Manjū, see Minjuids Hays, Yemen, 87, 90 Mangabād, Egypt, 50 Hijaz, 122 al-Manṣūr 'Umar I (r. 1229-1250), 15 Hormuz, Iran, 15, 122 al-Manşurā / Mansura / al-Manşūrah, Dhofar, 4, 8, Horsburgh, J. (1762-1836), 5 15, 31, 149 Hubei, China, 103 Marbato, see Mirbāţ Hungary, 122 Maria Theresa (r. 1740-1780), 122 al-Mas'ūd Yūsuf (r. 1215-1229), 8, 15 Husi, China, 103 Ibn Battūta, Abū 'Abd Allah Muḥammad (1304-Mecca, 6, 17, 138 1369), 11, 17, 67, 102 Mexico City, 107 Ibn Dawud, see 'Āmir III b. Dāwūd Ming (1368-1644), 4, 89, 103, 104, 106, 107, 108 Ibn Ḥawqal, Abū'l-Qāsim Muḥammad (10th c.), 3 Minjuids / Manjū / Manjawiyyūn / Minjui, 4, 7, 9, Ibn Khaldūn (1332-1406), 3, 4, 8, 15 15, 16, 21, 31 Ibn al-Mujāwir (13th c.), 4, 6, 8, 9, 14, 15 Mirbāt / Morbat / Morbát / Marbato, Dhofar, 3, 4, Ibrāhīm b. Yūsuf, al-Wāthiq Nūr al-dunyā wa'l-5, 12, 13, 15, 26, 70, 137, 139, 141, 145, 150 dīn (r. 1292-1311), 15, 16, 18, 21, 119, 140 Mombasa, Kenya, 70 India / Indian continent / Indian subcontinent / Fort Jesus, 70 Sub-Indian continent, 4, 5, 23, 67, 82, 84, 85, Mongols (1206-1634), 104 104, 107, 120, 124, 122, 128 Moresby, R. (1794-1854), 5 Indian Ocean, 1, 3, 4, 5, 11, 23, 29, 30, 31, 67, 68, Mughal (1526-1858), 121 69, 70, 71, 77, 89, 101, 102, 103, 104, 105, 107, Muḥammad b. Abī Bakr b. Sa'd, 21 108, 128 Muhammad b. 'Alī, 141, 142 International Association for the Study of Arabia / Muḥammad b. Aḥmad al-Manjawī, 15 British Foundation for the Study of Arabia, 71 Muharraq, Bahrain Iran / Iranian regions, 67, 82, 84, 86, 87, 88, 89, Pearling Site Museum, 68, 75 107, 128 al-Mukha, Yemen, 84 Iraq / Iraqi regions, 82, 86, 87, 88, 89 Muscat, Oman, 1, 122, 126, 129 Istanbul Italian Embassy, 1 Ministry of Heritage and Tourism, 1, 24, 127 Topkapı Saray, 105 Jabrīn, castle, Oman, 69, 70, 71, 77, 79 Ministry of National Heritage and Culture, 23, Jiangxi, China, 102, 103 53, 150 Jingdezhen, China, 102, 103, 105, 106, 107 National Museum of Oman, 21, 104, 105, 106, Jordan, 47 112, 127 Julfar / Julfar al-Mataf, Oman, 85, 88, 101, 106 Office of the Adviser to His Majesty the Sultan Kathīrī (1395-1967), 16, 30, 31, 121, 137, 142 for Cultural Affairs, 1, 24, 47, 53, 117. 127, 131, Kawd am-Saïla, Yemen, 84 134, 136, 151, 152 Sultan Qaboos University, 17, 137, 151 Kenya, 70, 104 Khashm Nādir, Saudi Arabia, 106 al-Mustansir (r. 1226-1242), 15

Sadh, Dhofar, 26 al-Muzaffar Yūsuf I (r. 1250-1295), 15, 16, 18, Safavids (1501-1722), 89, 121, 128 119, 123 Myanmar / Martaban, 102, 107, 110 Ṣāḥib al-Ḥadra, 138 Nabīla bint al-Muzaffar Yūsuf I, 18 Salālah / Sallálah / Silalah / Solahlah, 2, 3, 6, 16, 18, 24, 25, 26, 28, 68, 81, 84, 90, 121, 127, 129, Nagasaki, Japan, 106, 107 Nanfeng, China, 103 137, 138, 142, 143, 149, 150 al-Nāṣir Aḥmad (r. 1400-1424), 120 Land of Frankincense Sites Department, 2, 24, Nașr II (r. 914-943), 118 Nelli, N. (ca. 1533-1575), 4 The Museum of Frankincense Land, 19, 20, 24, Nizwa, Oman, 127 71, 118, 120, 121, 127, 128, 129, 131, 132, 133 Oman Across Ages Museum, 127 Salālah Gharbiyya, 137, 140 Nufa (Zafār), Dhofar, 4, 104 Salūt, Oman, 128 Ortelius, A. (1527-1598), 4 Archaeological Gallery, 128 Ottomans (late 13th c.-1924), 31, 106, 120, 121 Sāmānids (819-1005), 118 Owen, W.F.W., 5 Samarkand, Uzbekistan, 118 Oxford Saudi Arabia, 70 Saunders, J.P., 6, 7 Ashmolean Museum, 121 Paris Sawankahalok, Thailand, 106 Bibliothèque nationale de France, 4 Sayf b. Sultān (r. 1692-1711), 122 Pedra Branca, Singapore, 106, 107, 114 Seiyun, Yemen, 137 Persian Gulf, see Gulf area Sharma, Yemen, 84, 103, 106 Philippines, 106 Shibām, Yemen, 15, 17, 31 Pisa al-Shihr, Oman, 4, 121 University of Pisa, 81, 152 al-Shisr, Oman, 118, 119, 122, 128 University of Pisa, Department of Structural Singapore, 106, 114 Engineering, 25 Sīrāf, Iran, 15, 31, 88, 104 Polo, M. (1254-1324), 4, 67, 120 Smith, J.S. (d. 1796), 5 al-Qāhira, Dhofar, 4, 8, 15 Socotra, 4 Qal'at al-Baḥrayn, 101 Somalia, 121 Qalhāt, Oman, 1, 8, 12, 85 Song (960-1279), 103, 120, 129, 136 Oing (1644-1911), 31, 89, 104, 105, 108, 128, 133 South Arabia, see Arabia Quanzhou, Cina, 104, 129 South Asia / Southeast Asia, see Asia al-Qūf, Dhofar, 137, 138, 140 Sub-Indian continent, see India Qușeir al-Qadīm, Egypt, 67, 70 Şuḥār, Oman, 11, 103, 104 Ramusio, G.B. (1485-1557), 4, 13 Sulayhids (1047-1138), 117 Rā's Aḥmar / Ràs el Ahmar, Oman, 6 Sulaymān II b. Salīm I, the Magnificent (r. 1520-Rā's Fartak / Fartaca, Saudi Arabia, 4, 13 1566, Ottoman sultan), 121, 125 Rā's Fartarsh, Saudi Arabia, 5 Suleyman I, see Sulaymān II b. Selīm I Rā's al-Khayma, United Arab Emirates, 87, 89 Sultanate of Kilwa, see Kilwa Rā's Sukra, Oman, 6 Sumhuram, Oman, 23, 127, 128 Rassids (Zaydi Imams of Yemen; 897-1962), 117 Syria, 47, 82 Rasūlids (1228-1454), 12, 15, 16, 17, 18, 21, 30, Ţāhirids (in Yemen, 1454-1517), 120, 121 31, 104, 107, 117, 118, 119, 120, 121, 122, 142 Ta'izz, Yemen, 16 Raysūt / Rìsùt, Dhofar, 3, 4, 5, 12, 30 Tang (618-907), 129 Red Sea, 5, 68, 70, 106 Tanzania, 104, 119, 121 al-Ribāt / Robat, Dhofar, 4, 5, 6, 7, 8, 9, 16, 18, Ţāqa / Thaàkah, Dhofar, 6, 26 19, 21, 22, 137, 138, 139, 140, 141, 142, 145, Taymūr b. Fayṣal (r. 1913-1932, sultan of Muscat 149 and Oman), 122, 126 Rome Thailand, 102 International Association for Mediterranean and Tihama, Yemen, 84, 87, 98 Oriental Studies, 137 Tübingen, Germany, 119 Ministry for Foreign Affairs and International 'Umar I (r. 1229-1250), 15 Cooperation, 2, 137 Umayyads (661-750), 16 Ruqaiyat bint 'Amr b. Ja'far b. 'Amr b. Badr Bū United States, 127 Tuwayriq, 140 Uzbekistan, 118 Sadana Island, 106 Vietnam, 102

Virginia, 127, 150

Wādī Dawka, Oman, 23, 128

Wadi Gawasis, Red Sea, 70

Wādī Hadramawt, see Hadramawt

Wanli (1573-1620), 105

Washington

National Museum of Asian Art, Smithsonian

Institute, 127

al-Wāthiq, see Ibrāhīm b. Yūsuf

Wubār, Dhofar, 23, 128

Xuanzong (r. 1425-1435), 105

Yāqūt al-Hamawī, Shihāb al-Dīn (1179-1229), 3

Ya'rubids (1624-1749), 89, 122

Yemen, 1, 2, 15, 16, 17, 20, 21, 31, 67, 82, 84, 87,

88, 89, 90, 98, 117, 118, 119, 122, 123

Yuan (1279-1368), 103, 104

Zabīd, Yemen, 87, 90, 117, 119, 121, 125

Zafār / Zafār I, Yemen, 117, 118, 123

Zaydi Imams of Yemen, see Rassids

Zhangzhou, China, 104, 106

Zhao Rugua (1170-1231), 4, 104

Zhejiang, China, 102

Zheng He (1371-1435), 104

Ziyādids (818-1018), 117

Zuray'ids (1080-1175), 117