



First Archaeological Activities by the University of Naples L'Orientale in Dhofar, Sultanate of Oman

Roberta Giunta, Alexia Pavan Italian Archaeological Mission at Al Baleed (Oman)

A new archaeological mission was set up in Al Baleed, in the region of Dhofar (Sultanate of Oman), as a result of preliminary agreements established in 2020 between Roberta Giunta of the University of Naples L'Orientale (UniOr), and Ali Al Mahrooqi, Director of Surveys and Archaeological Excavations of the Ministry of Heritage and Tourism of the Sultanate of Oman (MoHT). An official five-year agreement was signed in 26th July 2022.¹

The first two campaigns – co-directed by R. Giunta and A. D'Andrea, in close collaboration with A. Pavan² – took place in December 2021-January 2022, and July 2022.

On-field activities were preceded by:

- An in-depth study of the results of surveys and excavations conducted by different missions between 1952 to 2020 (Fig. 1),³ specially the missions directed by F.P. Albright (The American Foundation for the Study of Man-AFSM, 1952-1964), P.M. Costa (Ministry of National Heritage and Culture, 1977-1981), M. Jansen (German expedition of RWTH-Aachen, 1996-2003), M. Ibrahim and A. Al Tigani (Sultan Qaboos University, 1996-1997), J. Zarins and L.S. Newton (Office of the Adviser to H.M. the Sultan for Cultural Affairs, 2005-2011), and A. Pavan (Office of the Adviser to H.M. the Sultan for Cultural Affairs/Ministry of Heritage and Tourism, 2016-2020);⁴
- Analysis of the preliminary data from a brief site visit in December 2019 (Pavan, Laurenza, Valentini 2019);
- Study, inventory, classification and cataloguing of the Museum Collection artefacts discovered during the excavations at the site since Jansen's campaigns.⁵

During the first campaign, it was decided to open some tests on a mound located immediately west of the central north-south road axis of the old walled town, southwest of the area named as "B" by Costa (1979, pl. 48a).

The outcrops of the building appeared noteworthy because the location of the mound and its orientation towards Mecca suggest that the building was a mosque. In this area, Costa discovered two monolithic stone columns over 3 meters high, bearing interesting decorative motifs with vegetal decorations, carved on light bas-relief, on the base and on the capital (*ibid.*, pls. 48b, 49a).

¹ The Mission was made possible thanks to funding from the Italian Ministry of Foreign Affairs and International Cooperation (MAECI), UniOr and the International Association for Mediterranean and Oriental Studies of Rome (ISMEO), and thanks to the logistic support and assistance in Oman of Ali Al Kathiri, Director of the Land of Frankincense Sites Department, Said Al Amri, Supervisor of Al Baleed archaeological site and Ali Al Mahri, Head of Surveying and Excavation Section – Heritage Department.

² A. Pavan was Director of the archaeological excavations at the citadel of Al Baleed from 2016 and 2020, as a consultant for the Office of the Adviser to HM the Sultan for Cultural Affairs, then Ministry of Heritage and Tourism of the Sultanate of Oman. Pavan's project was the first on the site to be conceived as multidisciplinary from the outset, and it included the involvement of different specialists. Their contributions proved fundamental to reconstruct the history of the site's citadel.

³ The results of these preliminary studies were presented at a round table held at UniOr in Naples on June 18th 2021 and published in 2022 (D'Andrea *et al.* 2022). A presentation of the Proceedings, entitled *Recent Activities and Studies on Al Baleed Archaeological Site by the Italian Mission of the University of Naples L'Orientale*, was held at the Museum of the Frankincense Land, Salalah, on 18th July 2022 by R. Giunta, A. Pavan and A. Antonelli.

⁴ For a summary of all the activities carried out at Al Baleed archaeological site and related bibliographic references, see D'Andrea, Giunta, Pavan 2022; for a review and reconsideration of the survey activities at the site, see D'Andrea 2021.

⁵ These activities are still in progress and should result in the implementation of a web database.



Fig. 1 - The archaeological site of Al Baleed; the investigated areas of the 1952-2020 missions; points in orange indicate the mapping of mounds with handheld gps (Elaboration by R. Valentini, 2021)

The first excavation trench, about 1.50m wide, was opened from the south-east corner to the south-west corner and up to the height of the ledge. It exposed the east-west oriented wall of the building, the outcrops of which had been identified. This wall, 14.50m long and with a maximum preserved height of 1.68m, defined the southern perimeter. It presented two buttresses 2.50m apart (respectively: width 67.5cm, depth 55cm; width 68cm, depth 50.5cm). Two openings, each 1.10m wide, were found but already walled-up in antiquity.

The second trench, 1.40m wide, was dug to identify the western wall of the building where the miḥrāb

niche must have been located if the building was a mosque. In the middle of the wall, about 7m from the south-west corner, excavations led to the discovery of the semi-elliptical niche (width 80cm, depth 65cm, max. preserved height 60cm), in a good state of preservation, originally flanked by two columns (Fig. 2). The square housings (20×20cm) and some fragments of the stone bases of the two columns were also found.

The complete western wall of the building was brought to light through digging a third trench, a northward extension of Trench 2. Because the lengths of the western and southern walls were equal, it was concluded that the mosque was squared in plan, measuring 14.5×14.1m and built on a terrace. It followed an architectural feature occurring in the whole Dhofar till recent times (Costa, Kite 1985, p. 147).

A floor was found in the area in front of the $mihr\bar{a}b$ consisting of a thick layer of white plaster, well levelled and perfectly preserved from the niche and up to the southwest



Fig. 2 - The $mihr\bar{a}b$ of the mosque (Photo by R. Giunta, 2022)

corner. North of the niche, the floor was instead covered by a second floor, grayish in colour, made by plaster but more compact and less chalky, to be interpreted as the result of a subsequent rearrangement of the pavement.

As far as stratigraphy is concerned, a thick layer of collapse (about 60cm) was found, made of sand mixed with blocks and other construction material. A not very compact sandy layer, about 20cm thick, was

found below this level. It is probably related to Aeolian action. The investigations have returned a small number of findings, mostly fragments of plaster – some of them of relevant thickness – and a very few pottery sherds.

A photographic documentation campaign of this mosque and a photogrammetric proximity survey were also conducted. The orthophotoplane and the 3D digital model, scaled on two points measured on the ground and verified with other control points, constituted the entire graphic documentation of the building (Fig. 3).

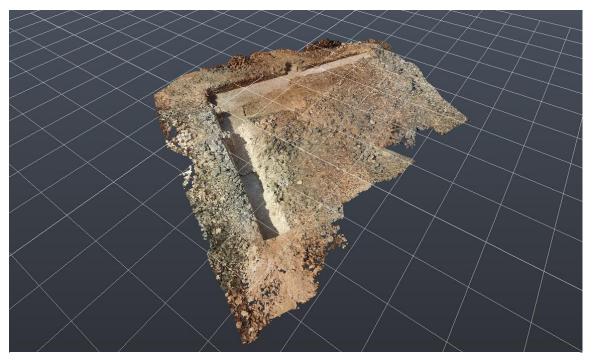


Fig. 3 - Isometric view of the mosque (Elaboration by R. Valentini, 2022)

During the campaign of July 2022, the following activities were carried out:

- Survey in the ancient cemeteries of the so-called funerary mosque at Al Baleed archaeological site and at Al Rabat site;
- Visit of some sites located on the oriental side of the Dhofari coast and to the site of Raysut.

Cemeteries

The mosque located near the central area of the site of Al Baleed and surrounded by a large cemetery (hence the name "funerary mosque") was the subject of the investigations conducted by Sultan Qaboos University, Muscat, Sultanate of Oman, in 1996 and 1997 (Ibrahim, Al Tigani 1997). The state of preservation of the cemetery area, surrounding the mosque on three sides, is currently fair. Almost all of the graves located within the enclosure are devoid of epigraphic stelae, as evidenced by a cursory topographical survey carried out in the north-east sector of the area. Based on the morphological aspect, on the content of the inscriptions and on the style of Arabic script (coarse cursive), the few surviving funerary stelae occurring in this area, which are mainly concentrated in the north-west corner outside the enclosure, betray a date to a period not earlier than the 17th century. A preliminary topographic survey was conducted north of the mosque, inside the enclosure, and it included also the documentation of the epigraphic funerary stelae, still *in situ*, located in a small funerary space placed outside the enclosure, in the north-west corner of the mosque.

The visit to the cemetery of Al Rabat was made possible thanks to a special permit obtained from the Ministry, as the area is located within a property of the Diwan of Royal Court of the Sultanate, and it was conducted with the assistance of Mr. Fahad Salim Bait Omani Al Jabri, a researcher based in Salalah who

⁶ So far, the only epigraphic survey carried out in the Salalah area and the related study concerning tombs and epitaphs was conducted by Oman (1983, 1989), former professor at the University L'Orientale in Naples, in the late 1970s. His investigations focused in the cemetery area west of the site, in five suburbs of the city of Salalah and in the shrine of Bin Ali al-Alawi in Mirbat.

carried out some study activities focused on this cemetery area. The cemetery area is very large and developed around a small mosque whose state of preservation is still identical to that documented by Costa in the late 1970s (1979, fig. 4, pls. 47a,b). It is a small mosque with a rectangular prayer hall divided into two naves by a row of three pillars that runs parallel to the $qibl\bar{\iota}$ wall, and it was originally covered by a flat roof (Fig. 4).



Fig. 4 - The mosque of Al Ribat; external view of the qiblī wall (Photo by A. Pavan, 2022)

The *miḥrāb* niche is semi-elliptical and protrudes outside the *qiblī* wall. There are still visible traces of the plaster that covered the central part of the *qiblī* wall and the inside of the upper part of the *miḥrāb* (Fig. 5). About one hundred graves have been documented during the brief survey carried out in the cemetery area of Al Rabat, almost all located still in their original position and provided with epigraphic stelae. The stelae are rectangular in shape, vary in size and are distinguished mainly by their upper part. At the current state of research, it is possible to state with a good margin of certainty that this cemetery still preserves an interesting number of burials and graves with stelae dating from the 13th century onward, constituting one of the few archaeological records to date of Rasulid rule in Dhofar.

In Mirbat, about 100km east from Salalah, the mausoleum of Bin Ali al-Alawi and the associated cemetery was the subject of a short preliminary visit. It is a shrine with two domes,⁷ in an excellent state of preservation, dedicated to a shaykh from Hadramawt, died in 556/1160. The monumental tomb bears two stelae, one in wood on the north side,



Fig. 5 - Al Ribat mosque: the *miḥrāb* (Photo by A. Antonelli, 2022)

one in stone on the south side. The first decipherment of the epitaph, albeit partial, was proposed by Oman (1983, p. 287).

⁷ Costa and Kite (1985, pp. 131-158) provide a brief description of the shrine and emphasise the importance of the building whose dome type is not uncommon in Southern Arabia. "The building doubles up the basic cell plan to create an oblong double domed unit with delightful 'pixie-hat' domes" (*ibid.*, p. 152).

Survey

Thanks to the support of the Ministry of Heritage and Tourism, a number of sites located along the oriental coast of Dhofar have been visited with Ali Al Mahri, Head of Surveying and Excavation Section. The purpose of these brief surveys was to gain knowledge of the main ports situated east of Al Baleed and certainly in connection with it, as well as to verify their state of preservation by establishing comparisons with documentation acquired in the past years mainly by Cleuziou and Tosi (1999), and Newton and Zarins (2017, pp. 48-49). During the survey, a photographic campaign of the ruins of the buildings and of the oldest burials was conducted; surface material, especially pottery, was collected, allowing for a preliminary chronological frame of the settlements. The sites of Hasik, both Hasik Qadim and Hasik Siq/Suq al Hasik, Sadah and Mahalla, located along the coast east of Salalah, were visited.

Hasik Qadim (Coordinates: 17° 23' 53.1" N - 55° 17' 22.5" E)

The site is located along the coast, about 200km north-east from Salalah, on a terrace about 5m high, located on the northern bank of a small wadi, whose estuary is today silted-up. Three main archaeological evidences were surveyed at the site from south to north (Fig. 6): the village (17° 23' 53.1" N / 55 17' 42.5" E), a large shell midden (17° 23' 57.2" N / 55° 17' 44.8" E) and a cemetery (17° 23' 59.4" N / 55° 17' 44.7" E).

The village covers an area extending between 3 and 5 hectares (see Cleuziou, Tosi 1999) with stone houses consisting of several rooms, some single-



Fig. 6 - Hasik Qadim, satellite image (after Google Earth®) with location of the three main archaeological evidence

cell buildings to be interpreted as warehouses, and a mosque. A defined urban layout seems to be lacking. The elevations of the masonry compartments reach, and in some cases exceed, 2m. The construction technique is based on sack masonry which employs as building material irregularly hewn blocks, arranged in



Fig. 7 - Hasik Qadim, the *miḥrāb* of the mosque (Photo by A. Antonelli, 2022)

not-regular horizontal rows, with stone flakes and small stones inserted between edges. The material is a local dark-granite, whose colour ranges from brown/anthracite to grey/black, with rare inserts of yellowish stone building blocks, which is, interestingly, the construction material employed for the mosque. The mosque is a square building $(5\times5m)$ with a single entrance located in the southern wall and preceded by steps. The construction technique consists of yellowish-coloured building stones arranged in rows of large blocks alternating with rows of small stones. It is worth mentioning that this is the only building constructed with this technique on the whole site. The $mihr\bar{a}b$ is carved into the west wall (Fig. 7).

A cemetery area is located on the north and western sides of the mosque. The graves are made of three to four courses of rectangular blocks and covered with small rubbles. A large cemetery, located about 200m north of the settlement with about 200 tombs, has been surveyed as well. Most of the tombs are composed of

⁸ An archaeological survey of Dhofar was conducted by Zarins and Newton, below the egis of the former Office of the Adviser to HM the Sultan for Cultural Affairs, between May 2008 and June 2009. The reconnaissance results fed into a database that was consulted by the authors in Salalah and into an Atlas (Zarins, Newton 2013).

small enclosures and they are provided of vertical anepigraphic stelae. It is however worth mentioning that some of the graves are grouped on clusters bounded by a stone fence and some of them are featured by a niche supposed to contain a light, a very rare feature in the area. Iron tools, fragments of glass bangles, pottery sherds of Bahla ware, Blue and White porcelain, Stoneware, Green glazed ware, Grey Turkish ware, Coarse Red ware were collected during the survey, allowing to the date the ruins to the 17th century or later, confirming the date put forward by Cleuziou, Tosi (1999, p. 13) during their visit at the site.

Hasik Siq / Suq al Hasik (Coordinates: 17° 23' 53.1" N - 55° 17'44.7" E)

The site is located about 10km south of Hasik Qadim, directly on a beach facing the sea and sided by the lagoon made by wadi Attabarran. According to Cleuziou and Tosi (1999, p. 14) the site has the appearance of a proper archaeological mound, not easy to recognize today (Fig. 8). The archaeologists identified two construction phases: the older one consists of well-built dwellings made of four rooms, the more recent of less dense rectangular or circular structures. A number of boat-shaped tombs, littered by fragments of sea shells, and a possible well have been documented at the site,



Fig. 8 - Hasik Siq, satellite image (after Google Earth®)

beside some circular structures related to the storage and processing of fish noticed by Cleuziou, Tosi (1999, p. 14). Pottery sherds of Coarse Red ware, Local ware, Sgraffiato, Yellow or Turquoise glaze, Green glaze, Stoneware have been found (Figs. 9, 10). The very preliminary study of the materials allows proposing a chronological frame from 13th to 16th century, slightly later compared to the date put forward during the previous surveys. The cemetery located on a terrace south of the beach, was not documented during our survey.



Fig. 9 - Hasik Siq, fragments of bowls in Sgraffiato ware, 13th century (Photo by A. Pavan, 2022)



Fig. 10 - Hasik Siq, fragments of vessels in Stoneware, 14th-15th century (Photo by A. Pavan, 2022)

⁹ 10th-13th century according to Cleuziou, Tosi; Abbasid period according to Newton, Zarins 2017, p. 48.

Sadah (Coordinates: 17° 02' 56.1" N - 55° 04' 32.7" E)

Sadah is a small sheltered harbour with good anchorage that today, 10 as in the past, has benefited from fishing-related resources. Unfortunately, nothing of the ancient site survives (Fig. 11), but traces of the use of an old quarry are still evident in the area of harbour. A number of ancient structures, which were photographed in 2004 by one of the authors, have been completely destroyed and any trace is today visible. Albright (1982, p. 81) in the 1950s, was the first to conduct an exploration, albeit limited, of the site. He reported an ancient village built from the "water's edge along both sides of the



Fig. 11 - Sadah, satellite image (after Google Earth®)

wadi". A cemetery would have been located along the north-eastern side of the wadi, opposite the modern town. Already in Albright's time it is reported that all the ancient stones have been re-used for the construction of the modern buildings, a practise which is supposed to be continued until very recent times. During the survey conducted by Zarins in 2008, the ancient site was found to be located near and below the "Boys' School" of the modern town, where the presence of a shell midden between 1 and 1.5m high is also recorded. During the excavation conducted by Albright (1m deposit), the presence of "Hymiarite and al-Balid period sherds" was recorded, which could therefore allude to a pre-Islamic occupation, followed by an Islamic one. Prospecting conducted by Zarins in 2008 led to the identification of two occupation periods. There is also a date of 714, obtained through C14 analysis (Newton, Zarins 2017, p. 47).

Mahalla (Coordinates: 17° 05' 00.3" N - 55° 06' 37.9" E - Mahalla 1; 17° 05' 02.8" N - 55° 06' 46.0" E - Mahalla 2)

Mahalla is the largest site among the ones surveyed and it is composed by three settlements: Mahalla 1, which occupies the eastern part of the site, far from the two other locations; Mahalla 2 which stands on the west, and Mahalla midden which is located on the eastern side of the settlement (Fig. 12). A wadi, forming a small and protected lagoon, divides the site in two parts. The largest number of ruins is concentrated at Mahalla 2 where the masonry structures reach a height of about 2m. The building material is the local dark granite worked in dressed and un-hewn masonry blocks. A circular tower has been recorded in the eastern portion of the Mahalla



Fig. 12 - Mahalla, satellite image (after Google Earth®). Mahalla 1 on the left (eastern settlement); Mahalla 2 at the centre (western settlement); Midden on the right

2. Fragments of Bahla ware, Fine Grey incised ware, Turquoise and Yellow glaze ware, Blue and White Porcelain, Red Local ware were collected during the survey and allow proposing a date for the settlement not earlier than the 17th century. However, pottery sherds dated to the 2nd cent AD have been registered during previous survey at the site despite most of the material has been dated by J. Zarins between 1200 and 1600 AD (MoHT 2021, p. 91).

¹⁰ The port is today renowned for the abalone trade.

Raysut (Coordinates: 16° 56' 02.3" N, 54° 00' 30.3" E)

Raysut was the only site we visited along the coast west of Salalah. The site is located on the top of the promontory which overlooks Ras Raysut, the area which corresponds to the actual Salalah port, about 30m on the seaside. It is currently fenced by a wall provided of a gate (Fig. 13). Phillips (1972, pp. 158-161) conveys information about the presence of a wall with a defensive function — of which scanty remains were visible on July for the abundant vegetation —, built along the west and south sides, but absent along the overhang to the east. He also reports that the dwellings, simple in plan, were made



Fig. 13 - Raysut, satellite image of the archaeological area fenced by a modern wall (after Google Earth®)

from semi-dressed stones and rested directly on bedrock. Brief excavations carried out by the American Foundation for the Study of Man revealed two phases of occupation: the earliest was found at the eastern slope (Area A); the most recent at the north-western corner (Area B). Phillips also notes a close similarity between the walls of Raysut and the older walls of Al Baleed. Albright (1982, p. 80) discusses the location of the site by asking questions about the livelihood of the population and how the water supply could be managed. He considers that its existence can only be explained as a "lookout for schools of fish or for enemies coming by the sea". He also provides some measurements: maximum width 42m to the precipice to the east, 75m along the north-south axis. Area A is located in the southern, higher part. There are rooms with long walls perpendicular to the sea, and internal dividing walls. These rooms have been abandoned due to the gradual erosion of the cliff and became a jetty area. Area B occupies the north-western corner of the site; the rooms are built against the boundary wall. Albright does not propose any dating: the building technique is compared to that of Al Baleed as well as Sumhuram. The site was eventually reoccupied by Bedouins who reused the stones to build temporary shelters. Newton and Zarins (2017, p. 50) quote that "behind the older village are two cemeteries with boat-shaped graves" and that "on the headland a fortified settlement was located and examined, similar in nature to that found at Khor Rori". As far as the surface finds are concerned, very few pottery sherds have been collected during our survey, but they seem however confirm the idea put forward by Newton, Zarins (ibid., p. 51) of a late pre-Islamic occupation of the site, later followed by a Medieval occupation.

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