Qal’at al-Bahrain, Ancient Capital and Harbour of Dilmun. The Site Museum

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QAL’AT AL BAHRAIN
ANCIENT HARBOUR AND CAPITAL OF DILMUN

THE SITE MUSEUM
Qal’at al Bahrain
Ancient harbour and capital of Dilmun

THE SITE MUSEUM

A World Heritage site
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Once the plan to design and construct a museum at the site of Qal‘at al-Bahrain was conceived, the next step was to appoint an architect for the project.

Our objective was that the architecture of the new museum should represent a unique structure that would enhance the impact of the displays and the experience of the visitor, and which should sit comfortably amidst its dramatic surroundings. The Danish architect Claus Wohlert was invited to Bahrain to submit a concept design.

When Claus Wohlert arrived in Bahrain, he spent a whole week reflecting on the location of the museum to be. He drew his inspiration from the local architectural traditions, the proximity to the sea and above all, by the long history of settlement at the site and its ancient function as a harbour. Combining all these elements, Claus Wohlert successfully designed a distinguished museum. The construction of a massive wall reflecting the successive archaeological layers on the site became the central feature of the exhibition.

The new museum was commissioned and constructed under the platform of “Invest in Culture”. It was built thanks to the generous support of Arcapita Bank and the strong belief of Arcapita’s CEO, Mr Atef Abdul Malak, in the importance of Bahrain’s cultural mission. Mr Abdulmalik recognized the potential for the chosen site, and Arcapita gave its full support to construct the museum to the high standard demanded of a UNESCO World Heritage Site.

The Qal‘at al-Bahrain site is the first in the Kingdom of Bahrain nominated as a UNESCO World Heritage site, as well as the first project under Bahrain’s “Invest in Culture” initiative. This catalogue has been produced to document the history of the site and to communicate the underlying significance of architecture as the language of civilization.

Mai bint Mohammed bin Ibrahim Al Khalifa
President of Bahrain Authority for Culture and Antiquities

Architecture, The language of Civilization
We are extremely pleased to have been able to support the construction of Qalat al-Bahrain Site Museum, and since its opening in 2008, it has been very rewarding to watch as the museum has become a popular destination for Bahrainis, school children, expat residents and visitors to Bahrain.

Bahrain is blessed in many ways, and much of the character and uniqueness of Bahrain and its people derives from its long history of civilization and the culture that has evolved as a result. Institutions such as Qalat al-Bahrain Site Museum, which records an important part of Bahrain’s most ancient civilization, are essential to preserve, document and celebrate the history that is so important in defining and differentiating Bahrain as a place to live, learn, develop and do business. At Arcapita, we recognize the value of investment in cultural landmarks such as the Qalat al-Bahrain Site Museum, and do our best to support them where possible.

All of us at Arcapita would like to congratulate Her Excellency the President of Bahrain Authority for Culture and Antiquities, Shaikha Mai bint Mohammed Al Khalifa, and her very talented team, in conceiving, planning and delivering the museum as a world class resource for Bahrain, and we hope that the many visitors will continue to enjoy visiting it, and so understand better the long history behind the evolution of modern Bahrain.

Mr Atef Abdul Malak
Chief Executive Officer of Arcapita Bank
QAL’AT AL-BAHRAIN
- the memory of an island
The inscription of Qal’at al-Bahrain in 2005 on the World Heritage List has consecrated the importance of one of the main archaeological sites in the Arabian Peninsula.

Despite its somewhat confusing name (“Bahrain Fort”), this major settlement site is not limited to a massive fortress facing the sea. It is a true “tell” (artificial hill) extending over 17.5 hectares and whose thick accumulation of archaeological layers testifies to its long history beginning with the first human installations towards 2200 B.C. and ending with the site’s progressive abandonment during the 17th cent. A.D. The archaeological works have identified a succession of urban levels, almost unique in the Gulf region.

About eight meters of dwelling layers, more or less thick according to the historical phases, separate the first Bronze Age settlement, at the base of the tell, from the great Islamic fortress and dwelling levels visible at the centre of the site. This slow elevation is explained by the difficulty, during ancient times, in evacuating the ruins of buildings which were abandoned or destroyed, and by the common practice of filling them in and using them as new foundations. Just as progressive was the development of the extension of the tell, which, during its history, generally benefited from the regular lowering of the marine level, creating new constructible areas. From the end of the 3rd millennium to the present day, itself deeply changed by the upheaval caused by numerous land reclamations, the tell at Qal’at al-Bahrain has never ceased to witness the evolution in its appearance and its surrounding landscape.

A landscape in evolution.
The archaeological tell in 1977 (left) and 2004 (right).

Opposite page: Aerial view of the northern coast of Bahrain Island, with the tell of Qal’at al-Bahrain situated in.
The access channel to Qal’at al-Bahrain explains the very long occupation of this strategic location. Its progressive silting up led to the progressive abandonment of the site during the 17th century A.D.
Favoured by a privileged access channel, naturally dug in the coral reef and foreshore, the city of Qal’at al-Bahrain – whose ancient name is still unknown – remained the principal harbour of the island for several millennia, where ships unloaded many products and commodities from the flourishing international trade, which ensured the island’s prosperity during this period. It was also the capital of the land of Dilmun, the most important ancient civilisation of the Gulf, from the end of the 3rd to the middle of the 1st millennium B.C., before becoming one of the island’s most important cities during the Hellenistic Period. During the Islamic Period, this strategic site was the object of intense international rivalry, as is shown by the successive stages of the fortress which crowns it today.

In spite of several gaps, each of the *tell’s* layers faithfully recorded the diverse phases of the island’s history, which was either in turn independent or a vassal of its rich Mesopotamian or Persian neighbours. The archaeological archive of Qal’at al-Bahrain, the essential part of which remains still to be excavated and studied, makes up the true “memory” of the Kingdom of Bahrain, and represents an invaluable archaeological, historical, and identitary heritage. Today, it is permanently preserved for the present and future generations.

The base of a stone tower (9 x 13 m, a former lighthouse?), which still marks the entrance of the channel, is apparently mentioned in a Portuguese chronicle of the 16th century, but could go back to the Tylos or even the Dilmun phases.
The steps to rediscovery

Abandoned since the 18th cent. A.D., and home to only a small village at the foot of the ruins of its fortress, the archaeological tell of Qal‘at al-Bahrain was “rediscovered” in 1954 when Peder Vilhelm Glob and Geoffrey Bibby from the Prehistoric Museum of Moesgaard, Denmark, established there the principal base of an expedition. Their pioneering excavations were conducted until 1972 and rapidly illustrated the importance of this archaeological deposit and its long succession of “cities” by identifying the site as the principal centre of the Dilmun civilization from 2050 B.C. For more than fifty years, thanks to this historical dig, the site of Qal‘at al-Bahrain has been clearly recognized as a reference archaeological field and stratigraphy for the whole Arabian Gulf area.
Since 1977, a French mission of the National Centre for Scientific Research (CNRS), founded by Monik Kervan and directed since 1989 by Pierre Lombard, has continued the research on the diverse historical phases of the tell. This new research project created the opportunity to pay particular attention to the recent phases of the Dilmun culture (c. 1500 to 500 B.C.), to the Hellenistic (c. 3rd cent. B.C. to 3rd cent. A.D.) and Islamic periods (13th to 17th cent. A.D.), as well as to reconstitute the ancient environment of the site by studying botanical, zoological and malacological (sea-shells) remains.

This team presently works in close collaboration with the archaeologists and architects from the Kingdom of Bahrain, who were notably responsible for the restoration of the main fortress from 1987 to 2005.
The Hormuzi-Portuguese Fortress ("Main Fort") under restoration by the Bahraini architects of the Ministry of Information (1988)

Bahraini archaeologists always cooperated on the field with the French team since 1977.
Of the 17.5 hectares occupied by the *tell* at Qal‘at al-Bahrain, only a small surface has been excavated. This is explained first by the slow progression of the excavation work, carried out in a difficult environment: a complex and often disturbed stratigraphy, an architecture exclusively of stone which brings about a systematic recuperation of the construction material from one level to another, etc. On the other hand, archaeologists do not aspire to carry out an exhaustive excavation of the *tell*, but on the contrary to find ways to preserve an important part of if for future generations, who will dispose of investigational tools probably superior to those currently in use. Every archaeological action, as precise as it may be, is indeed a form of destruction because any given level of sediment which is excavated cannot be reconstructed. Moreover, the architectural levels of the recent periods must frequently be removed after their study, in order to reach the older archaeological levels below.
The Central Excavation area displays a dense urban context (2005).

A recently exposed stratigraphic section, from Early Dilmun to Islam (2001).
However, from 1954 to the present day, the Danish, French and Bahraini excavations have been able to explore the diverse layers of the site and to fix their dating. These works have allowed a better knowledge of the main architectural types representative of these levels (common dwellings, palaces or defensive constructions) and of the material culture of their occupants (pottery, metal, stone ware and tools, jewelry, stone or clay inscriptions, etc.). Thanks to the discovery of several graves, the local burial customs (notably during the 1st millennium B.C.) are henceforth better understood.

The study of the ancient environment of a dwelling site is at last a crucial step in the archaeological enquiry. It allows a better understanding of the interactions between man and the milieu where he lived, hunted, bred animals, fished and cultivated land. Qal’at al-Bahrain notably presents a very original position between the palmgrove and the sea. The archaeological tell, characterized by a long occupational period, provides a unique opportunity to trace the evolution of this particular environment over several millennia, and therefore makes up an ideal ground for botanists and zoologists. Their research, intimately linked to that of the archaeologists, led to the reconstruction of the antique landscape and the evidence that most often there has been little change in it since the Dilmun period. However, the identification of animal or plant species absent today, generally confirms a better hydrologic situation, special importations or even different dietary habits during the Antiquity.
THE MUSEUM
The Museum

BY CLAUS WOHLERT AND PIERRE LOMBARD

Built along the water front, on non-archaeological, reclaimed land, the 2000 m² museum is situated at the north of the Qalʿat al-Bahrain tell. This realization draws on WOHLERT Arkitekter’s international experience, merging it with traditional, local architectural tradition to create here a unique place for sharing encounters, discovery and historical memory.

The traditional architecture in Bahrain is characterized by trim, introvert buildings free of ornamentation. Their purpose is to protect from the intense heat and sun, and to create a maximum of natural ventilation from summer temperatures in the mid-forties centigrade. Large houses are usually laid out around an interior courtyard, and have a sparse, strong architectural presence.

The traditional architecture of the Gulf and modern Nordic architecture actually share many formal properties. The site museum focuses on this familiarity, interpreting local architectural tradition with a modern language, combining it with the expectations and demands that are placed on a modern culture-historical museum.

The building lies on the water’s edge in a recently reclaimed area and consists of two elements: an elongated two-storey museum wing, housing the Museum, arrival court and Café, and a one-storey square building that houses administration and auditorium, guest apartments, technical lab and storage facilities for archaeologists, surrounding a small garden court.

The museum itself makes up the gateway to the archaeological tell. Both are connected by a discovery pathway, including audio-guide and service facilities. The museum wing lies on a podium, which forms a dock on the Gulf. After reaching the platform from which the building elevates, the visitor enters the museum through an arrival courtyard. This is covered by trellis,
The Qal’at al-Bahrain Site
Museum and its Café, as seen from the neighbouring beach
providing some shade, creating a transition between the very harsh outdoor light and the subdued museum lighting. A small fountain in the courtyard – a traditional feature in Islamic houses – adds the sound of splashing water, providing a sense of tranquillity. This interior patio gives way to the various access points: toward the sea a vast terrace borders the west façade of the building, from which a ramp gradually descends to the site. To the left, the visitor is invited to enter the Museum itself, whereas on the right, people may enter the Café.

The exhibition space, separated into six distinct sections organized chronologically, is laid out around the dramatic central display, the “Tell Wall”. This 30m long recreation of the archaeological strata, in levels corresponding to archaeological sediments, constitutes the main axis of the exhibition, and accompanies at every moment the itinerary of each visitor. From the earliest Dilmun period exhibition on the lower level, the visitor ascends to the most recent Islamic period exhibition on the upper level on the first floor through a succession of planes. At each stage of the visit, the visitor encounters the corresponding level of the “Tell Wall” which reproduces, using natural materials, the principal sedimentary or architectural characteristics (archaeological layers made either of sand,
The Early Dilmun section of the Museum, at the bottom of the Tell Wall, seen from the lobby.
The Tylos section of the Museum, at mid-height of the Tell Wall.

gravel or ash, looting pits, floors and walls in sections or elevation, etc.) like those observed in the neighbouring excavations. These chronological sections bring together over 500 objects uncovered during the excavations carried out from 1954 to 2008 by Danish, French and Bahraini teams. These discoveries are accompanied by introductory texts and detailed captions in both the Arabic and English languages.

The museum hall is primarily lit by natural daylight, both by a continuous skylight over the museum’s central exhibition element, the Tell wall, and by the characteristic facade display-cases. These are recessed in the exterior walls, forming the characteristic protuding light towers in the building’s facades. The spacious Café in the north end of the building is a two-storey space, offering outdoor service in a shaded area on the dock with magnificent views of the Gulf and the Hormuzi-Portuguese fortress.

Interior colours and textures are also inspired by traditional Bahraini architecture. The ceilings are made of hardwood coffers, referring to dark, wooden traditional ceilings. Walls are in a cream render and interior and exterior paving is Italian Santafiora sandstone, also inspired by the traditional “juss” render and clay floors.

The Qal’at al-Bahrain permanent exhibition is a useful complement to the visit of the neighbouring archaeological site, introducing the local and foreign visitors to one of the most spectacular historical places of Bahrain’s island. The museum also seeks to become an educational tool destined for the young generations of the Kingdom of Bahrain, for it safeguards their Kingdom’s most ancient roots.
The Tell Wall

The “Tell Wall”, true backbone of the permanent exhibition, aims to illustrate the concept of the entire museum. It should help the visitor, after discovering it, to remember the key message that the designers of the museum wanted to convey:

Qal’at al-Bahrain, well beyond the majestic fort that crowns it, is mainly a settlement site that has preserved, almost intact, the accumulation of its successive historical and architectural layers over 4000 years.
The “Tell Wall” shows in full-scale (about 8 m in elevation), a virtual stratigraphy similar to the one seen by archaeologists on their digs, even if for security reasons such a vertical section is never entirely exposed on the neighbouring site. It was made from materials collected locally and then applied or attached to a central concrete core (which hides two elevators for the disabled), using a technique developed by the engineers from the Bahrain National Museum. The entire construction faithfully reproduces the archaeological layers and the specific architectural features of each period: archaeological layers made of sand, gravel or ash, the architecture of floors and walls in sections or elevation, and even the looting pits of building stones dug directly on the tell during the 15th and 16th centuries A. D. by the successive builders of the military forts.

On both sides of this “stratigraphic slice”, the visitor discovers the various chronological sections of the exhibition which are located at levels that proceed higher and higher, mirroring the time line from the Bronze Age to the Islamic Period.
THE EXHIBITION
SECTION 1

The Capital of Dilmun

(2200-1750 B.C.)
The Early Dilmun city

The most ancient levels of the tell are deeply buried under the successive layers of its history.

It is thus difficult to evaluate the exact size of the very first settlement, “City I”, around 2200 B.C. In the only deep sounding where it was really explored, it revealed small domestic units built of rough stones with clay mortar and plastered floors, which neighboured a large copper workshop. The subsistence was already based on a highly organized oasis agriculture, hunting and above all fishing. The archaeological material discovered testifies that the contacts with Sumer, Oman and the Indus civilization were already well established.

The following and larger “City II”, from ca. 2050 to 1750 B.C., was a true city, spread out over a surface of ca. 12 to 15 hectares. A thick fortification wall made of rough stones has been located at several points on the site. To the north, a gate opened directly onto the beach and the anchorage which made up the principal harbour of ancient Bahrain. This quarter has brought to light evidence of an intense economic activity, probably connected with the Dilmun merchants often cited in the Mesopotamian texts.

Aside from its rampart, the other vestiges of this brilliant phase of the city’s history reveal many urban and architectural qualities rarely equalled in Bahrain and the Gulf until the Islamic period. This represents a considerable economic and human investment which could only have been mobilized by a form of public organization. Notably, a group of monumental buildings, of an exceptional architectural quality, developed in the center of the city, aligned along a street of almost 12 meters in width. They were placed in a strategic position in the tell, and most likely belonged to the Palace, center of the economic organization of the realm of Dilmun and residence of its rulers.

These monuments prospered for several hundred years until the phase of the decline of Dilmun, shortly after 1750 B.C. The city and its buildings were progressively deserted afterwards.

Clay female figurine found near the Northern Rempart (early 2nd mill. B.C.). A18798. H: 9.5; w: 4; th: 3 cm.

Aerial view of the Northern section of the rempart (2011).

An impressive section of the rempart exposed at the West of the tell (1962).
Qal‘at al-Bahrain harbour and the Early Dilmun trade

The natural access channel to Qal‘at al-Bahrain made this site into a privileged entrance point for economic exchange. Without a doubt, this function reinforced its role as the capital of Dilmun, which, at its summit towards 2000 B.C., had become an important trading crossroads between Mesopotamia, Persia, Eastern Arabia, Central Asia and the Indus region.

A specific showcase of this section of the museum is devoted to this topic. All of the artefacts displayed are representative of the diverse specialities of the neighbouring civilizations in economic exchange with Bahrain. They come from the Early Dilmun necropoleis on the island or from contemporary levels at Qal‘at al-Bahrain, and were undoubtedly carried by the city’s harbour from the end of the 3rd millennium to 1750 B.C.

Cylinder-seal showing a scene of presentation to a deity.
A11764. H: 2.6; diam: 0.5 cm.

Fragment of the neck of a jar.
The cuneiform inscription “2 pi 4 bán 7 sila” refers to a unit of measure equivalent to 167 litres. Pottery. Qal‘at al-Bahrain, North Rampart. c. 2050 B.C.
A18852. 16 x 7 cm.

Bahrain/Dilmun at the crossroads of the trading routes of the Early Bronze Age.

Cylindrical soft stone vessel. Decorated with palm trees, typical of the items from the Jiroft culture (Iran). Saar necropolis. 2000-1800 B.C. This particular object, several centuries older than the place where it was found, had probably been imported or reused at a later date in Bahrain. A7383. H: 5.5; diam: 8 cm.

The Dilmun ships

The land of Dilmun possessed a commercial fleet necessary to its maritime role.

Towards 2500 B.C., when Qal’at al-Bahrain had not yet become the capital and the economic centre of Dilmun (then probably located on the continent in the actual Eastern Province of Saudi Arabia), these specialised ships were already mentioned in the Sumerian texts. Notably, King Ur-Nanshe, ruler of Lagash, evoked in his official inscriptions that the Dilmun ships conveyed to his city “wood from faraway countries.”

With the exception of a stone anchor, found close to the gate of the Northern Rampart, which opened directly at that time onto the mooring area where the numerous trading boats were loaded and unloaded daily, the archaeological evidence of these maritime activities remains infrequent.

The appearance of these ships is revealed by rare representations on the Dilmun seals, a few descriptive elements in the Mesopotamian economic texts, but also by several archaeological discoveries in the Gulf region testifying to the presence of similar ships.
The oldest ships appear to have been constructed from bundles of reeds bound together and coated with bitumen. From Bahrain, such ships, even heavily loaded, could apparently reach the harbours of Sumer or Indus on a regular basis. Other ships could have been already built from lashed wooden planks. Among the many types of ancient boats, only one survived until a quite recent past: the warīyya (pl. warriyat), the Bahraini version of the southern Gulf shasha (pl. shoosh), a specimen of which is displayed in the Early Dilmun section of the Museum. This traditional fishing skiff from the Gulf coasts, is not naturally destined to transport goods over long distances.

The origins of this boat, built of palm fronds bound together, go back nevertheless to the farthest Antiquity, as is suggested by some representations on the Early Dilmun stamp-seals. These show, however, vessels with their highly upturned extremities, whereas the bow and stern of modern warriyat are generally cut shorter in order to give a flatter aspect to this boat.
The Bronze Age material culture at Qalʿat al-Bahrain

Due to the limitation of the archaeological diggings devoted to this early phase, the information gathered at the dwelling site of Qalʿat al-Bahrain is not as rich or as diverse as the documentation found in the contemporary Dilmun burial mounds of the island, or in the village settlement at Saar.

The important compression exerted on the Early Dilmun layers at Qalʿat al-Bahrain (generally located at more than 5 m under the surface of the site) explains why the pottery from this period is rarely discovered in the form of complete vases. The rare pieces which could be restored are presented in this museum section beside contemporary, intact pieces, yielded by several of the island’s necropoleis, but which belong to categories well represented at Qalʿat al-Bahrain. All of them illustrate the two most frequent stylistic “traditions” of the period: the local one, produced in Bahrain (”Barbar” pottery, from the name of the neighbouring temple of the same phase), and the “Eastern” tradition which groups together diverse productions coming from the Indo-Iranian areas, but also sometimes imitated locally.

Painted jar in the “Eastern” tradition.
c. 2000-1900 B.C.
A18910. H: 38; diam. max: 35 cm.
Jar in the “Barbar” tradition, with the typical “chain-ridged” applied decoration found in the earliest levels of Qal’at al-Bahrain.
c. 2100-2000 B.C.
A18853. H: 38; diam. max. 33 cm.

Large storage vessel in the “Barbar” tradition.
c. 2000-1900 B.C.
A18970. H: 50; diam. max.: 56.6 cm.
However, the stamp-seals made of soft stone (chlorite or steatite) are among the most well-known and representative artefacts of the Dilmun civilization. It was in 1957 during the excavation of the North Rampart at Qal'at al-Bahrain that the Danish Expedition uncovered the very first specimens found on the island of Bahrain. They were rapidly followed by other similar discoveries elsewhere on the site, but also at the Barbar Temple and, more recently, in the Saar settlement. The stamp-seals allowed the organization of the Dilmun trade and were used equally by individuals and public officials. Applied on contracts, clay sealings, or labels attached to goods and property, they certified authenticity or ownership. These miniature objects document one of the rare art-forms in Dilmun.

During almost 300 years that they were produced and used in Bahrain, the aspect of the stamp-seals evolved: one thus distinguishes two groups, the « Gulf seals » (from ca. 2050-2000 B.C.) and the “Dilmun seals” (from ca. 2000-1750 B.C.) which were characterized by a particular form of the reverse side, iconographic themes as

“Gulf” stamp-seal, fragmentary. A bull is associated with a short Harappan inscription (Indus civilisation). Dark green chlorite. The arrangement of the signs does not seem to transcribe here the Indus language. It could be the Dilmun one, possibly used by the local merchants following the writing system of one of their major commercial partners. Qal’at al-Bahrain, North part of site, c. 2000-1900 B.C.
A18891. Diam: 2.85; th: 1.45 cm.

“Gulf” stamp-seal. Animal (bull, scorpion or camel-spider) and symbolic (foot) representation. Grey steatite. North Rampart, c. 2000-1900 B.C.
A18872. Diam: 2.8; th: 1.6 cm.


well as a very different engraving style. The first series, particularly well documented at Qal‘at al-Bahrain, is characterized by the abundance of animal representation, or astral symbols treated generally in a fairly crude style. The later series of « Dilmun seals » uses more frequently human representation in a dynamic association with the divinities, elements from nature (animals, trees or plants) or numerous symbols, sometimes unexplained. Several objects, in the process of being engraved, confirm that the seals were made here on the site.


SECTION 2

Babylon in Bahrain

(c. 1500 -1100 B.C.)
A Mesopotamian episode

Similar to a history book with several torn pages, a hiatus of approximately 2 to 3 centuries separates the brilliant “City II” of Qal’at al-Bahrain and the following layer, “City III”. Towards the middle of the 15th century B.C. the site suddenly appears occupied by a foreign population, the Kassites, whose dynasty already reigned over neighbouring Babylonia for almost a century.

As early as 1956, the Danish excavators clearly identified the typical pottery which generally signals their presence in the Near East. These settlers from Mesopotamia had chosen Qal’at al-Bahrain to establish the residency of their governor. This residence, probably settled in the restored palace of the former kings of Dilmun, housed an active administration which left written archives, in the form of over a hundred cuneiform tablets written in the Akkadian language, which were excavated by the French Archaeological Mission between 1995 and 2003. These documents confirm the essential economic function of this palace in the centre of a city whose Early Dilmun rampart was also considerably reinforced during this time. The monument and its administrative quarter once again held an obvious strategic role in the new pathways of maritime trade in the 2nd millennium B.C.

At the beginning of the 14th century B.C. the palace was ruined by a violent fire. Afterwards, it was occasionally occupied by “squatters” but it was never to be rebuilt. As a result of this event, which still remains unexplained, the regional seat of the Kassite administration was probably transferred to the island of Failaka, in present day Kuwait.

The French archaeological mission at work in the sector of the restored palace by the Kassite settlers (Central Excavation Area, 2014).
Middle Dilmun administration, economy and material culture

The Kassite administration installed at Qal‘at al-Bahrain during the beginning of the 15th century B.C. had to organize the daily life, the supplying and the maintenance of the Palace, and to assure the commercial and diplomatic correspondence with the Babylonian capital. To that effect, a team of scribes worked actively, as is proved by the existence of cuneiform tablets, the southernmost ever found in all the Near East. These written documents were found associated with numerous fragments of clay sealings bearing the traces of traditional Kassite cylinder-seals, and used to seal tablet envelopes, jars or even the doors of storage rooms.

The one hundred or so cuneiform texts discovered are written in Akkadian and take the form of small modeled clay tablets. They are simple receipts, ration tables allowed for the employees, or short messages whose interest mostly resides in the fact that they contain in several cases a very precise calendar date, expressed in day, month and year, according to the Babylonian system. The year generally indicates a year of reign of a king of the Kassite dynasty. These tablets of unbaked clay were frequently thrown away after usage, but sometimes archived also. The document could be then baked if it were to be conserved for a long period of time.

Clay cuneiform tablet. This receipt for a delivery of goods to the Palace bears a Babylonian calendar date: “Month of aiaaru, 19th day, year 4 of Agum”. It visibly refers to the reign of the Kassite king Agum III, who ruled approximately during the mid-15th century B.C.

A18779. H: 2.6; w: 4.35; th: 1.6 cm.

This dated clay tag mentions the “second category wool” stored in the container to which it was fixed.

A18148. H: 2.45; w: 5; th: 2.4 cm.

Administrative clay tablet referring to barley collected as a tax. Illegible date on the back.

A18146. H: 3.5; w: 5.05; th: 2.1 cm.

Fragmentary sealing bearing the impression of a cylinder-seal, typical of the repertoire of the Kassite glyptic of the mid-second millennium B.C.

A18790. 4.2 x 4.25 x 2.3 cm.
Stone inscriptions are much more exceptional at Qal‘at al-Bahrain. A single limestone block, broken and apparently re-cut during the Antiquity, is apparently a commemorative inscription from the reign of the Kassite King Burna-Buriash II, who ruled between 1361 and 1333 B.C. It could correspond to the end of the presence of the Babylonian settlers at Qal‘at al-Bahrain.

Kassite, fragmentary inscription, found re-used in the eastern tower of the Coastal Fortress. ca. 1350 B.C. The name [Bur-n] a ?-bur-ia-[s] could be deciphered on the 3rd line of the front side; the text also alludes to the Palace, to the restoration (?) of a sanctuary, and to a detachment of soldiers or workers.

A18010. 41 x 31 x 13 cm.
The various mid-2nd millennium levels of the site yielded the typical pottery from the Middle Dilmun phase, often called “Caramel Ware” by the Danish Expedition. Widely manufactured in Bahrain, it imitates Mesopotamian models, principally the traditional tall footed goblet, one of the most characteristic shapes of this production at this period. A particular variant, covered by a dark red slip, was frequently excavated from the palace. Metal objects are rarer, but reveal a careful fabrication.

Tall goblets, with pedestal, found in palatial or domestic context. Pottery. The one made in the a reddish slipped pottery probably belongs to a local tradition. A18583, A18562, A18749. H: 19.5 to 28.5; diam. max: 6.7 to 8.3 cm.

Pottery vessel, associated with the earliest phase of the Kassite palace. A11158. H: 16; diam: 18 cm.

Socketed spear-head found in the Kassite palace. Copper. A1426. L: 33 cm.
At last, a madbasa, found inside the Kassite Palace, confirms the economic role of the building. This entirely air-tight rectangular room, (here diagonally cut by the moat of the later fortress), was used as a kind of heat chamber, for the production of date honey, a traditional sweetener. The oldest apparition of this typically Bahraini device thus dates from the middle of the 2nd millennium B.C.
SECTION 3

The time of Uperi

(c. 900 -300 B.C.)
The Late Dilmun period

The beginning of the first millennium B.C. follows a period of several centuries, which are more or less dark for historians and archaeologists. In the centre of “City IV” the burned ruins of the Kassite settlers’ palace were partially levelled to make room for a new building that had a very extensive surface and was several times reorganized. Can this once again be considered a palace? Following the tradition of the preceding monuments, one is tempted to attribute its earliest phase to King Uperi who ruled in Bahrain at the end of the 8th century B.C. We know of him by the official inscriptions of the great Neo-Assyrian king Sargon II, who, in his Mesopotamian palace of Khorsabad, often mentions the gifts he received from this very diplomatic ruler of Dilmun, once again independent. The monument contains a particular sector which may have been a temple, as seems to be indicated by a cult stand and what appear to be ex-voto figurines. However, archaeologists are more familiar with the second stage of this building; because of its architecture and its archaeological materials, they can easily date it from the end of the Iron Age, towards the 6th to 5th centuries B.C. Its very characteristic layout resembles that of the luxurious residencies in Babylonia, Assyria or Persia. Like its closest models from Ur or Babylon, the building has distinct public and private areas, separated by a central courtyard, and possesses a very elaborate sanitary system. It also revealed a strange practice: more than fifty snake sacrifices were deposited in bowls hidden beneath the floors in several areas of the palace.
The vast architectural complex from the 1st millennium B.C., discovered by the Danish and French teams, has still not been totally cleared. Moreover, the Northwest sector has been completely destroyed, either by digging the moat of the neighbouring fortress, or the reclaiming pits for building materials, during the medieval period.

The central part of the building presents a particularly interesting layout. Like that of the grand contemporary residencies of Mesopotamia or Persia, this sector apparently has a distinct public and private areas, separated by a small central courtyard. The oblong hall placed to the south of this courtyard, conforms with the “reception hall”, which, in the Mesopotamian palaces, becomes the most official place of the building, where the king received his honoured guests. The residence at Qal’at al-Bahrain also disposes of a very elaborate sanitary system with numerous public or private toilets. This is a residence of exceptional quality, which easily rivals its models from Ur and Babylon.

Is the combination of this particular layout and the high quality of the building’s construction important enough to determine whether this is the successor of the preceding palaces of the rulers of Dilmun and to confirm thus the political, administrative and religious purposes of this quarter? The possible existence of a sanctuary to the west, and also a zone of metallurgic workshops to the east, both directly associated with the residence, could strongly incite us to think so. However, in the absence of written documents confirming the exact function of this building, is remains nonetheless impossible today to answer this question.

Qal’at al-Bahrain, Central Excavation Area. The southern street bordering the well preserved ashlar walls of the Late Dilmun residence.
Clues for a temple?

A group of artefacts, found in a filling layer from a rectangular pillared hall, a major element in the residence contemporaneous with King Uperi, should probably be associated with the first use of this place. The best clue comes from a cylindrical fenestrated vessel stand made of pottery that is clearly a cult instrument typical of the Near Eastern Iron Age. At the beginning of the 1st millennium B.C., one is familiar with similar pieces, generally discovered in religious contexts, principally from Eastern Mediterranean, Palestine or the Levant.

More than 200 fragments from terra-cotta figurines, also discovered from this same hall, add support to this cult material for the identification of this part of the building as a small sanctuary. The majority of these figurines belongs to the same type, a bearded rider, generally holding a mount without reins, with his hands grasping the neck of the animal. The quantity itself, in such a reduced area, likely indicates ex-votos, probably intended to represent the faithful who could not enter into the temple. Other different animals are also represented, not always identifiable (n°2), as well as several hybrid creatures, half-human, half-animal.

Hybrid figurine, with bearded human head, and animal body.
Terracota. 10th / 7th cent. B.C.
A11223. 8.1 x 3 cm.

Cult stand. Pottery.
10th / 7th cent. B.C.
A11509. H: 31; diam. max: 16.6 cm.

This rectangular, pillared hall is interpreted as a possible cultual place. A stairway was giving access to an upper storey, or a terrace.
Fragmentary figurines of bearded men. Some of them still possess their head-cover, which was apparently a permanent attribute (some were found isolated). Several of these characters could have been riders, according to a complete Late Dilmun type of figurine, found at another site. Terracota. 10th / 7th cent. B.C. A11220, A11218, A11215. H. cons: 4.5 to 7 cm.

Fragmentary figurine of a horse. The hands of the rider are still visible, attached to the neck of the animal. Terracota. 10th / 7th cent. B.C. A18752. H: 12.6 cm.
The three sectors where about fifty deposits of snake sacrifices were discovered by the Danish and French teams (1957-1959, 1961, 1992), represent one of the most spectacular discoveries of the Late Dilmun phase. The containers (most of pottery and in one case alabaster) were placed at different depths in holes cut into the plastered floors of several rooms pertaining to the late phase of the building. In one of them, the holes had been carefully replastered by a similar material. In several cases, other bowls, simple pottery shards or even a wooden lid, protected the sacrificial contents of the containers. The sacrificial bowls of Qal’at al-Bahrain belong to the usual pottery repertoire of the end of the Late Dilmun period. The snakes were apparently first placed, possibly alive, in cloth bags, traces of which were often found. One or more faience or carnelian beads, on rare occasions a pearl, were sometimes deposited with the reptile. Only two species were identified: the rat snake and the sea snake, the most common ones today in Bahrain.

Snake sacrifices were unknown in the Ancient Near East. The snake, however, was a very popular creature there, especially on the Arabian...
Peninsula where it is associated with the idea of fertility. This unique evidence could be just the result of domestic practices, destined to bring divine protection, fertility and long life to the inhabitants. However, if one takes into consideration the likely cultural role previously played by this part of the edifice, one can’t therefore exclude a genuine ritual act, performed in a sanctuary still in use.

The museum proposes a restitution which faithfully reproduces the context of the 1992 discovery by the French Mission, whose interpretation is still debated.

Burials under the dwellings

At the end of the Late Dilmun period, we observe that at Qal’at al-Bahrain the dead and the living were close neighbours. Children buried in small earthenware jars, as well as many adults buried in pit-graves or in clay “bathtub-sarcophagi” have been discovered under the floor of the dwellings. This practice is totally alien to Bahraini burial traditions, where, since the Bronze age, cemeteries had been placed away from towns and villages. This was, however, common practice in Mesopotamia around the middle of the 1st millennium BC. This gives yet another indication that there was probably a Babylonian colony living in Bahrain.

The sarcophagi buried at the end of the Late Dilmun period, like many contemporary tombs, were found by archaeologists in a largely plundered state. A few rare exceptions exist however at Qal’at al-Bahrain, like a particular earthenware coffin coated with bitumen. This tomb, which contained the body of an adult male, yielded rich burial offerings, essentially made up of a bronze drinking-set. One can interpret this offering either as a group of objects linked to the burial rite and placed in the sarcophagus after the ceremony, or as a viaticum for the deceased’s voyage into the next world.

Burial bowl, with child bones. c. 6th to 5th cent. B.C.
A18907. H: 24; diam. max: 38 cm.
“Bath-tub” coffin and its burial contents.
Danish Archaeological Expedition, Central Excavation Area (1957).

The discovery of a children burial in a pottery container.
Danish Archaeological Expedition, Central Excavation Area (1958).
This unplundered clay sarcophagus, discovered in 1956 by the Danish Expedition, contained a very rich burial deposit, including several bronze vessels and utensils of exceptionnal quality.

Left: Strainer with horizontal handle. Bronze. c. 6th to 5th cent. B.C.
A18875, L: 21.2; max. w: 10.5 cm.

Middle: Situla with loop handle. Bronze. c. 6th to 5th cent. B.C.
A1884. H: 19.5; diam. max: 7.7 cm.

Hinged ladle. Bronze. c. 6th to 5th cent. B.C.
A18871. L: 25; max. w.: 5.3 cm.

Shallow bowl. Bronze. c. 6th to 5th cent. B.C.
A18876. H: 4; diam: 20.5 cm.
This badly preserved skeleton of a male individual, found in a pit-grave, was still wearing a faience stampseal around his neck.
c. 6th to 5th cent. B.C.
Similar to the adult burials in sarcophagi or the child inhumations in bowls, it is not always easy to precisely date the rare pit burials found at Qal’at al-Bahrain during the Late Dilmun phase. In this kind of burial, the deceased were placed directly on the ground, apparently dressed in a shroud (small pieces of cloth were discovered in one case), and generally accompanied by very diverse and sometimes abundant burial offerings. One wonders if this particular type of burial, which appears more or less contemporary with the previous graves, could have been reserved at Qal’at al-Bahrain for certain members of the local elite.

In one of the graves discovered in 1989, three bodies, with very poorly preserved skeletons, were placed in two successive phases. The lowest, an adult male, wore a stamp-seal around his neck in the pure Achaemenian tradition. Part of the offerings associated with the two other bodies was obviously contained in a rounded basket, with bitumen coated sides, and placed in an corner of the grave.
Daily life in the Late Dilmun period

Obviously victim of a progressive abandonment, the Late Dilmun residence did not yield as rich and diverse an occupation level as archaeologists might have expected, with the exception of objects voluntarily hidden under the floors or placed in graves. Outside of an abundant fragmentary pottery, the only discoveries were a few figurines, some jewellery, some seals and their impressions as well as fragments of stone vessels. These vessels made from steatite, easily identified by their fabrication and their characteristic incised decoration, are among the most popular objects traditionally imported from the Oman peninsula by the Bahrain inhabitants during the Iron Age.

The pottery from this phase is especially abundant and diverse. However, at Qal‘at al-Bahrain, the archaeologists gather it in a very fragmentary state, except when it comes from the few burial contexts. The clays used for its fabrication show that this pottery was for the most part locally created. The Late Dilmun potters were nonetheless largely inspired by the Neo-Babylonian and Achaemenid forms from Mesopotamia and Persia, undoubtedly copied from several imported prototypes. Towards the end of this period appears the first glazed pottery, a type which will become very popular during the following Tylos phase.

Left: Fragmentary figurine of a horse-rider. The upper part of the rider is missing. Painted terracotta. c. 5th cent. B.C. A18558. H: 10.7; L: 7.5; max. th: 3 cm.

Right: Cone-shaped stamps and sealing bulla. Clay. c. 6th to 5th cent. B.C. (Central Excavation Area). A18553, A18552. H: 2 to 2.5 cm (seals). 4.8 x 4 x 2.5 cm (bulla).
Some typical pottery types from the Late Dilmun phase, associated with graves at Qal’at al-Bahrain. A18581, A18543, A18584. H: 6.5 to 21.8; diam. max: 9 to 21.7 cm.
These pot bellow installations, associated with regular metallurgical activity within the Late Dilmun residence, were excavated in 1965 by the Danish Expedition.

Model (scale 3:5) of a copper or bronze production workshop in the residence. The piece of leather, firmly attached around the rim of the pots set into the platform, itself built of brick or stone, was activated to compress the air inside of them. A duct, often made of a simple reed, brought the propelled air to the hearth, assuring thus the heating of the crucible placed on a footed support in order to attain the 1,100°C necessary for liquefying copper (c. 950°C for bronze).

During the Iron Age, which includes the Late Dilmun phase of the 1st millennium B.C., copper and bronze were still widely used at Qal’at al-Bahrain. Towards 550-500 B.C. a copper workshop existed within the great residency itself. In 1964, an important discovery there was a pair of installations for the smelting of the metal (which no longer remain today), whose exact functioning remained unclear for a long time. The high temperatures necessary for the fusion of the metal (c. 1100 °C) were obviously obtained by an ingenious system of bellows, probably hand-operated, and partially reconstructed in a model displayed at the museum.

Metallurgy is also represented during this phase by an uncommon clay vessel, characteristic of the local production in the 6th to 5th centuries B.C., which was also hidden under the floor of the residence built in the centre of the site. Its contents, composed of various fragments of rough or manufactured silver, was for a long time considered as the supply of precious metal belonging to a silversmith. This hoard is now better interpreted as a typical example of one of the systems of proto-coinages used in the ancient Near East before the appearance of the first currencies: all of these silver fragments were in circulation and commonly exchanged during trading. Similar discoveries have been made in Palestine, Iraq and Iran.
This vessel, characteristic of the local production in the 6th to 5th centuries B.C., was hidden under the floor of the luxurious residence built in the centre of the site. Its uncommon contents, composed of various fragments of rough or manufactured silver, was for a long time considered as the supply of precious metal belonging to a silversmith. This hoard is now better interpreted as a typical example of one of the systems of proto-coinages used in the ancient Near East before the appearance of the first currencies: all of these silver fragments were in circulation and commonly exchanged during trading. Similar discoveries have been made in Palestine, Iraq and Iran.

The so-called “silversmith’s hoard” of Qa‘at al-Bahrain figures among several well-known similar discoveries from the ancient Near-East. A15057. H: 21.4; diam. max: 21.1 cm.

Closeview of a signet ring, with hieroglyphic script, contained in the silver hoard. The inscription was clumsily engraved and is unreadable. This ring could have been made in Bahrain as imitation of original jewellery imported from Egypt. A11686. H: 2.85; bezel: 2.5 x 1.3 cm.

Closeview of a coiled finger-ring with a snake’s head at one end, contained in the silver hoard. A11721. Diam. max: 2.8 cm.
The hoard consists of about 580 oxidized, diverse pieces of silver: melting smears, broken or intentionally separated pieces of rings and bracelets, and weights c. 1.2 kg.
In the steps of Alexander
(c. 300 B.C. - 400 A.D.)
The Tylos period

Around 325 B.C., the island of Bahrain is accosted by one of Alexander the Great’s maritime expeditions. Henceforth known as “Tylos”, the island undergoes an exceptional phase of prosperity, first under the tutelage of the Seleucid Empire in the 3rd and 2nd centuries B.C., and then from the 2nd century, under the Characene Kingdom, situated in the south of present day Iraq. The new culture which will develop during almost five centuries, largely influenced by the Hellenistic and Parthian worlds, is above all known from the numerous necropoleis discovered in the northern palm grove of Bahrain.

The contemporary architectural remains at Qal’at al-Bahrain show one of the rare excavated urban agglomerations from this period. Frequently ruined, they are generally simple domestic buildings which no longer remind us of the sumptuous edifices from the diverse phases of the preceding Dilmun civilization, even in the central quarter of the tell. The last remains of the city’s old rampart, apparently abandoned for several centuries, are now used as support for modest homes. There is no longer anything to indicate that the city still fulfills the role of the island’s capital. However, it remains the island’s major port which conveyed the many luxury items (glassware and goldware) imported to Bahrain.

The archaeological material yielded by the site confirms the international character of the Tylos culture that was in permanent contact with the diverse regions of the Hellenized Near East. However, the name of Tylos almost seems to disappear after the 2nd century A.D., date at which the city of Qal’at al-Bahrain once again is progressively deserted, this time for a very long period.

A daily life at the contact of the Hellenistic and Arabian traditions

The excavation of the dwelling levels of the Tylos phase has up until now been too sparse to allow a precise understanding of the daily life of the inhabitants of this harbour city during the four or five centuries when it was undoubtedly the most active. The various discoveries, however, reflect the image of a multi-cultural society where a great variety of people lived side by side, not only the descendants from the ancient population of Dilmun, but also tradesmen from diverse origins (Greece and the Eastern Mediterranean, Syro-Mesopotamia, Arabia, Persia), all bearers of their particular traditions. Figurine art, notably, reveals thus the succession and sometimes also the co-existence of representations in the pure Hellenistic style with those of well-rounded mother deities in the Semitic tradition of the Arabian peninsula.
During the entire Tylos phase, the diverse inhabitants of Qal’at al-Bahrain expressed themselves and wrote in several languages. Among these, the local language left no written trace, as was the case during the Early Dilmun phase. On the other hand, the site yielded several short inscriptions in Greek, sometimes limited to simple graffiti on a piece of pottery, and this language was undoubtedly spoken and understood by a fraction of the population, even if they were not born Greek. Aramaic, one of the principal written languages of the Near East during the Tylos period, was probably also very common among the Semitic population and used for official or dedicatory inscriptions. The South Arabic writing also appeared on objects imported from current day Yemen.

Stone block with fragmentary, badly preserved Greek inscription. Probable dedicatory or ex-voto text for the safe and sound return of a person. Limestone. A18010. 18 x 16 x 7 cm.

Fragment of a large stele, bearing a fragmentary inscription in Aramaic, probably funerary. Limestone. 1st / 2nd cent. A.D. A1872. 30 x 29,5 x 20 cm.
Vessel bearing a complete Aramaic inscription: "Barik gave this vase to Nabû". This jar was probably an offering to a temple of Nabû, the Mesopotamian god of wisdom and writing, perhaps located at Qal‘at al-Bahrain. Pottery. c. 3rd cent. B.C. A18848. H: 20.4; diam. max: 16.6 cm.

Potsherd, with a graffito. The end of a word, [- - -] GRAIOS, is probably a proper name ([T]igraios ?). Pottery. 1st / 2nd cent. A.D. A18851. L. cons: 13.5 cm.

Fragment of the rim of a large storage jar bearing an incomplete South Arabian inscription. Pottery. c. 1st cent. BC / 1st cent. AD. A18557. 30 x 15 cm.
Coin hoard found in the northern rampart area by the Danish Expedition (1970). Made up of two distinct types, all of these coins represent, on the front, Alexander portrayed as Heracles and, on the reverse, a seated figure. Contrary to the Greek prototypes showing a bearded Zeus, the figure on the reverse side, beardless and rather juvenile in looks, represents Shams or Shamash, the principal divinity worshipped then in Eastern Arabia.

A15056. H: 17,5; diam. max: 15,5 cm.
Numismatic similarly illustrates this complex process of cultural appropriation. A jar, discovered in 1970 close to the North Rampart, contains approximately 310 silver tetradrachms, imitations of the official coinage of Alexander the Great used in the Seleucid Empire. One considers today that these careful imitations were minted during the 2nd century B.C. by a regional workshop, which has not yet been located with any certainty. This exceptional monetary hoard makes up one of the most significant discoveries of the Tylos phase in Bahrain.

Coins, silver. Type 1a. On the front, the head of Heracles wearing the pelt of the Nemean Lion; on the reverse, Shamash, seated, holding an eagle and a long sceptre; at the right, vertically: \textit{ALE\v{S}ANDROU}; at the left, a South-Arabic inscription: \textit{шамс}. Type 1b, variant: on the reverse, the name Shams is reduced to the first letter: c.

\textit{A3496. Diam: 2.7 cm.}

Coin, silver. Type 2. Fairly clumsy imitation of the Alexandrine type, minted by an Eastern Arabian king known as Abi’el. Same representation on the front. On the reverse, Shamash seated, holding a horse-shaped vase and a sceptre; to the right, vertically, the Aramaean inscription “Abi’el son of Tlbs”.

\textit{A3516. 2.5cm.}
Pottery is at last an important aspect of this “international” culture. Contrary to the Tylos necropoleis on the island which often yielded unbroken and varied vessels, the contemporary discoveries at Qal‘at al-Bahrain, coming from a ruined settlement level, are more modest and often fragmentary, with the exception of a few rare pieces. However, this pottery finely illustrates the technical categories (common, slipped and glazed pottery), but also the diverse cultural traditions making up its origins. The “Arabian” tradition from the close peninsula, present during the entire period, is characterized by an interior black or red slip, often accompanied by an original pattern-burnished decoration. The glazed pottery, which on the whole develops in the later phases, between the 1st century B.C. and the 3rd century A.D., is inspired by the Hellenistic, then Parthian, types. With the exception of several items probably imported (like the Attic black glazed ware), the majority of this production appears to be local.

Incense burner. Terra cotta. 1st cent. B.C. / 1st cent. A.D.
A1741. H: 7; L: 6; w: 6 cm.

Sherd of the “Attic” type, imported. Black glazed pottery. 3rd to 2nd centuries B.C.
A18849. Diam: 14.6 cm.
“Lagynos” type vessel. Glazed pottery. 1st cent. B.C.

A8560. H: 36.8; diam. max: 26.2 cm.
Fluted bowl.
Glazed pottery.
1st to 2nd cent. A.D.
A18546. H: 7.6; diam. max: 15.1 cm.

“Pilgrim’s flask” type vessel, with moulded decoration. Glazed pottery. 1st cent. B.C. to 1st cent. A.D.
A18917. H: 17; diam. max: 17.5; max. th: 7 cm.

“Mesopotamian jar” type vessel. Glazed pottery.
1st to 2nd cent. A.D.
A18846. H: 14.4; diam. max: 13.4 cm.
Looking for a Tylos necropole at Qal’at al-Bahrain

Almost fifteen steles sculpted in bas-relief were discovered accidentally in 1991, in the private gardens to the north of Qal’at al-Bahrain. Deprived of a clear archaeological context, it cannot be excluded that these pagan images were buried haphazardly there, without having been destroyed, during the Islamic period. Their style places them into a very coherent group from the 2nd to 3rd centuries A.D. which strongly recalls the Parthian artistic tradition from the beginning of the era, typical of Mesopotamia (Hatra) or Iran (Elymais). Figures of both sexes are in full face representation, the right hand raised with the palm facing forwards, in a praying posture. This discovery suggests the proximity of a necropolis which perhaps had a special status. It is indeed exceptional to gather such an important number of these funeral monuments within in a single necropolis, as shown by the recent excavations conducted in Bahrain.

The significance of the practice which consists of placing steles, probably representing the deceased, within the graveyards of the Tylos phase, still remains unclear. In the necropoleis studied in Bahrain, each grave was not systematically associated with a stele, and certain cemeteries were even completely devoid of them. Moreover, these monuments are often placed in a type of small enclosure where one often found several steles in a group. Finally, many were not visible, often hidden below the mound of earth covering the burial. Their primary function thus doesn’t seem to mark the grave.

Stele representing a veiled woman, dressed in the Parthian style. Limestone, with eventual traces of brownish-red paint. North Palmgrove. c. 150/250 A.D. A1124. 44.5 x 27.5 x 12.2 cm.

Stele representing a beardless man. His particular costume (long chasuble, stole on the shoulder) evokes that of the priests depicted in Parthian art from Western Iran. Limestone, with eventual traces of brownish-red paint. North Palmgrove. c. 150/250 A.D. A18949. 34 x 22 x 13 cm.
Stele representing a veiled woman, dressed in the Parthian style. Limestone, with eventual traces of brownish-red paint. North Palmgrove. c. 150/250 A.D. A18911. 57 x 30 x 17 cm.

Stele representing a bearded man, dressed in the Parthian style. Limestone, with eventual traces of brownish-red paint. North Palmgrove. c. 150/250 A.D. A18912. 50 x 33 x 19.5 cm.
The construction of the Late Tylos coastal fortress

The last remains of the Tylos city were found very degraded and partially used as a stone quarry. The houses were of stone and one possessed an andron (room with benches lining three sides) in the Greek tradition. Beyond of the rampart, towards the sea, others had been built from adobe. The pottery associated with these houses was dated around 150 A.D. After this date, the city seems to have been abandoned; no written sources have revealed the reasons. Had the city been destroyed and the population migrated, or was the departure of the population spontaneous and reflected economic, political or demographic reasons?

A century or two later, a small fortress was build close to the shore, partially covering the last remains of the city. This square monument of 55m per side, equipped with towers and loopholes, with a fortified entrance to the west and a postern to the north, is constructed according to a remarkable symmetry. Uncovered to the east and south, its moat was destroyed to the west by the construction of the medieval fort. The pottery and coinage found on these floors have permitted dating the fortress from the 3rd to 5th cent. A.D. During this period, the Sasanian sovereigns dominated the eastern coast of Arabia and administered it through Arab client tribes. The Coastal Fortress must have been part of this military-administrative complex. No text mentions its construction.
Reconstruction of the Late Tylos Coastal Fortress (proposal by G. Pereira).
SECTION 5

Power and Trade in the Islamic Period

(c. 1250 - 1700 A.D.)
In the 7th cent. A.D., the adhesion to Islam by the populations of the eastern coast of Arabia brought an end to the Persian control over this region. The main town of Bahrain was then in the centre of the island, around the mosque of Suq al-Khamis, in a place known today as Bilad al-Qadim. The site of Qal‘at al-Bahrain which had been during several millennia one of the greatest harbours of eastern Arabia, had probably become no more than a simple fishing place surrounded by the palm groves during the first six centuries of the Hegira, because no construction nor artefact dating from this period have been found. Bahrain did not participate in the unprecedented surge of maritime trade between the Gulf, India, China and Africa which developed during the 9th – 10th cent. A.D., probably because of the Qarmathian domination over this region. As soon as it ended during the 11th cent. A.D., “the emporium of Uwal expanded rapidly”.

Archaeological proof of this renewal was found at Qal‘at al-Bahrain two centuries later when the old Tylos fortress was reconverted into a commercial warehouse by the Salgharid Atabaks of Fars, during the Mongol dynasty of the Il-Khans. Between the end of the 13th and the beginning of the 14th cent. A.D., the power slipped out of Mongols amirs’ hands, and the Arab-Persian dynasty of the Princes of Hormuz took control of the strait and the principal harbours of the region. A new fortress was built at the site. However, the fame of the wealth of the Hormuz realm reached as far as Europe and brought its downfall when in 1507 A.D. the Portuguese fleet took possession of Hormuz and its satellite harbours. The shipments from China were still unloaded at Qal‘at al-Bahrain and its fortress was restored a last time in 1561 A.D. But soon the maritime traffic abandoned the access channel to the site which became too shallow, to the profit of Manama.
The warehouse and its neighbouring village

After the downfall of the caliphate and the Seljukids, the establishment of the Mongols in Iran was responsible for a renewal of the maritime trade in the Gulf. Their governors in Fars appropriated all of the revenue by controlling the harbours of Qais, Bahrayn and al-Qatif. In Bahrain, the Late Tylos Coastal Fortress was restored in order to be used as a warehouse. Its layout was not modified and its defensive constructions – gate, loopholes and moat – were maintained to counter any pirate attack. Eight madbasa (date incubators), then permitted 15,000 kg of date honey to be produced and exported to China yearly. On the return trip, the ships brought back spices, but more importantly pottery from China and India as well as Chinese currency. The latest coins found in the fortress, minted by the Southern Song emperor Ningzong (1195 to 1225 A.D.), and by the Atabak of Fars, Abu Bakr Qutlugh Khan b. Sa’d (1231 to 1260 A.D.), have permitted the dating of the activity of this warehouse from the middle of the 13th cent. A.D.

Along with the Indian objects and the Chinese pottery, most of which were celadons, other pottery was discovered in and surrounding the warehouse. Much was undoubtedly fabricated in Bahrain: jars for date honey, water goblets, bowls with a white, black and blue glazed
decoration (imitation of Il-Khanid pieces). Several presented a composite geometric and animal decoration. Other pieces came from Iranian workshops: steatite cooking pots, unglazed pottery with a moulded decoration, pottery with painted decoration, and siliceous pottery from Kerman and Kashan, the last two imitating the first Chinese blue and white decorated porcelain.

The commercial activity of the warehouse brought back the population to the site of Qal’at al-Bahrain. And it remained there after the Mongol governors abandoned the warehouse, at the end of the 13th cent. A.D., which brought about the weakening, if not the end, of maritime trade. The ruin of the building itself, eaten away by the sea, became irremediable. A new village had developed rapidly over a large portion of the site, constructed above the previous archaeological levels of the tell. A suq, a hammam, a mosque and a cemetery have been uncovered by the successive teams of archaeologists. The length of the occupation is demonstrated by the restoration of the suq and the superposing of the levels of burials in the cemetery.

But in the course of the 15th cent. A.D. a new fortress was erected on the site and its successive enlargements completely covered or destroyed the village.
Left: Fragmentary female figurine, probably originating from central India. Terracotta 10th cent. AD, but found in a later context at Qal`at al-Bahrain. A18847. H: 5.5 cm.


Base fragment of a bowl. Buff ware, with yellowish glaze on brown naturalistic decoration. 14th/15th cent. A.D. A18882. 11 x 8 cm.
Chinese coin from the Song dynasty, issued by Emperor Huizong (1102-1106 A.D.). Most of these Chinese coins were found in later archaeological context at Qal‘at al-Bahrain, dating from the 13th/14th cent. A.D.
A11405. Diam: 3.62 cm.

Hoard of pearls, contained in a Murex shell. 14th/15th cent. A.D.?
A11368. H: 3.5; w: 6 cm.

Small cosmetic bottle. Green glass 14th/15th cent. A.D.
A18843. H: 6 cm.
After decades of rivalry, the Princes of Hormuz, taking advantage of the disintegration of the power in the hands of the Mongol governors of Fars, seized their commercial empire in the last years of the 13th cent. A.D. At the same period, they transferred their capital from the mainland to the island of Hormuz, thus protecting themselves from the danger of the disorder of the Fars and from the tutelage of Kerman. But above all, by installing themselves at the narrowest point in the Strait of Hormuz, they became the uncontested masters of trade with India and China for the next two centuries. It is thus, in principle, under their tutelage that the new fortress of Qal‘at al-Bahrain was constructed. However, the Princes of Hormuz several times ceded or lost their rights to the island, firstly to the advantage of the Mongol dynasty of the Muzaffarids, and later profiting the Banu Jabr. Thus, it is still difficult to determine with precision who of these protagonists was the exact backer of the new fortress.

The first phase
The new fort, constructed less than 100 m to the southwest of the 13th cent. trading outpost (the former Tylos fortress) covered a surface three times larger. It was protected from marine erosion by its elevated position which was ensured by the earth taken from digging the moat. It was however a mediocre construction, a rough quadrangle, with vulnerable walls because they were not thick enough and were too high. This fort, mentioned as a simple “enclosure” by a vizier of Hormuz as evoked by Ibn Iyas in 1521, does not appear in the first Portuguese reports about the island in 1514 and 1519. It was not more used by King Mukrin, when he defended in vain the island against the joint Hormuzi and Portuguese attack in 1521, instead preferring to entrench himself with his troops in the city he had fortified (undoubtedly Manama), and where he was killed.

The second phase
The Portuguese victory was short lived. Following an anti-Portuguese revolt on Hormuz and in several Arabian cities that depended on it, Badr al-din, the nephew of the vizier of Hormuz, became the governor of Bahrain and refused to pay the tribute imposed by the Portuguese. Anticipating a new invasion, he restored the fortress and made of it a monument capable of resisting the Portuguese and Ottoman artillery. He had walls of the fortress reinforced by a
Anonymous Portuguese drawing showing the Bahrain islands in 1535 A.D. and, on the main one, the fortress at Qal‘at al-Bahrain before the construction of the Portuguese bastions.
second enclosure. The interval between them was filled with earth in order to soften the impact of cannonballs and its top was refashioned into “boulevards” to allow the passage of artillery machines. He protected also the entrance of the fort by a triangular lower courtyard, the entrance of which had a drawbridge. Thus, in 1529, from this new fortress, Badr al-din and his 1,500 men resisted the assault of the Portuguese whose survivors, having spent all of their ammunition and decimated by the fevers, re-embarked for Hormuz.

The three architectural stages of the fortress:
1. The first enclosure (in brown), 14th/15th cent. A.D.
2. The first restoration and enlargement by Badr al-Din (in yellow), beginning of the 16th cent. A.D.
3. The Portuguese restoration (in blue), 1561 A.D.

The third phase
In 1559 A.D. the Ottomans tried in turn to take over the fortress. It was at the time under the control of the island’s governor, Jalal al-din Murad Mahmud Shah, who was then a Portuguese ally. The architect, Inofre de Carvalho, designed an ultimate layout for renovating the fortress, which was completed two years later in 1561 A.D.

In the 15th and 16th centuries A.D., the development of firearms – canons, harquebuses and muskets – which took several centuries to become efficient, was outmanoeuvred by the progress of military architecture. The first measure was to make the surrounding walls of the fortresses invulnerable to cannonballs by lowering them and filling their boulevards with tamped earth. The second, a great Italian innovation, was the conception of five-sided protruding bastions which eliminated all of the blind spots and thus capable of protecting the entire enclosure. There were also orillons to protect the gunners from enemy fire.

At Qal‘at al-Bahrain, the enclosure of Badr al-din was thus reinforced. Most importantly, three of these Genoan type bastions were constructed by Inofre de Carvalho on the northwest, southwest and southeast corners of the building. The size, orientation and the layout of each allowed for a perfect defence. The crossfire from the embrasures covered the totality of the walls and the moat, and left no possible dead angles. A hundred thousand stones, cut on the island of Jidda close to Bahrain, were necessary for this restoration.
The Hormuzi-Portuguese fortress: a construction adapted to the improvement of the artillery in the 16th cent. A.D. (2005).

1. Moat
2. Genoese style bastions, built in 1561 A.D.
3. Boulevards (baluarte), built to allow troop and artillery movement.
4. Spur tower, which protected the keep or Captain’s Tower.
5. Towers of the 1st and 2nd fortress.
7. Drawbridge leading to the Lower Courtyard from the outside.
8. Entrance to the fortress from the Lower Courtyard.
9. Keep, or Captain’s Tower
10. Arsenal.
11. Cistern.
12. Stables.
13. Portuguese chapel (?).
Finds from the fortress

Due to the long period of abandonment or transformation after the end of the military use of the fortress, very few weapons have been uncovered during the partial excavations preceding the restoration of the building. If there still is not evidence of a single heavy bronze cannon (however in use during the late phase of the fortress), a lot of stone balls of various sizes bear witness to the war techniques of the Middle Ages. During these periods, the assailants of a fortress used catapults or manjaniq which, through a system of balancing poles and counterweights, projected stones and cannonballs against its enclosure walls. They also used smaller throwing machines which propelled fire grenades or gawadir al-naft. These grenades could also be propelled by crossbows or thrown by hand, the artillery man making them spin with a string wound around their rims. In the arsenal situated to the west of the keep, a large number of these fire grenades was found, some of them still containing sulphur. They have been dated from the first two occupation periods of the fortress (end of the 14th to the beginning of the 16th cent. A.D.). An identical arsenal was found in the Hormuzi fort at Sohar in Oman. These are the only two examples of these weapons, found in their archaeological context and which still contained remains of their incendiary ingredients: sulphur and charcoal. No traces have been found of the last ingredient, naphtha, always added at the last minute.
A munition room, with several hundred of fire grenades still inside, was uncovered during the restoration of the Hormuzi-Portuguese fortress (2007).

Fire grenade (or “Greek-fire”).
c. 14th/15th cent. A.D.
A18261. H: 10.8; diam: 10.6 cm.

Stone cannon-balls,
c. 14th/15th cent. A.D.
Diam: 10 to 20 cm.
The common pottery objects, of local or regional fabrication, made up the majority of the finds coming from the fortress. The displayed artefacts are those used in the kitchens, or which were found in soldier or servant dwellings. All were fabricated on the Arab coast, some coming from Oman (Bahla), others from Julfar (present day Ras-al-Khaimah), and others maybe came from the Iranian coast, for trade was frequent between Hormuz and Bahrain. Several were imitations of objects hailing from Iran, China or Southeast Asia.

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Fragmentary large plate. Blue and white porcelain, with vegetal pattern. c. 17th cent. A.D. A16166. H: 12; diam: 35 cm.

Small bowl. Chinese blue and white porcelain, with a representation of a warrior on the inside bottom. c. 16th cent. A.D. c. 15th/16th cent. A.D. A3604. H: 5; diam: 9.1 cm

Small dish. Chinese blue and white porcelain, with vegetal pattern. c. 16th cent. A.D. A16131. Diam: 11.8 cm.

Fragment of Chinese blue and white porcelain, with representation of two players. c. 15th cent. A.D. A11370. 4.5 x 5 cm.
Among the artefacts uncovered in the fortress, the Chinese porcelain was principally destined to be sold in Bahrain and surrounding countries. During the first centuries A.D., the caravan trading in Central Asia was stimulated by the demand of the occidental world, fascinated by silk. Nearly ten centuries later, the expansion of maritime trade between southern China and the Gulf was sparked this time by the Arab and Persian passion for porcelain, with its unique texture and magical virtues. As soon as they discovered them, Muslim potters tried to imitate these celadons and blue and white decorated porcelain, by fabricating very siliceous paste, coming close to the kaolin that they did not possess. From the 16th / 17th centuries A.D., the Iranian potters, just like those in Holland, sometimes surpassed their models.

Base of large plate, originating from Iran. Siliceous frit ware, with brown, blue and white representation of a female character, under a yellow glaze.
c. 16th cent. A.D.
A16177. H: 6.7; diam: 30 cm.

Large bowl, originating from Iran. Siliceous frit ware, with brown and white geometric pattern under a yellow glaze.
c. 16th cent. A.D.
A16174. H: 12.5; diam: 24.2 cm.
Fragment of small plate. Green glass, with painted vegetal pattern. 16th cent. A.D.
A16128. H: 4; diam. max: 8 cm.

Left: Fragmentary cup. Blue glass, with painted vegetal pattern. 16th cent. A.D.
A16164. H: 3.1; diam. max: 7.5 cm.

Right: Fragmentary cup. Green glass, with painted vegetal pattern. 16th cent. A.D.
A16151. H: 4; diam. max: 8 cm.

Camel figurine (toy ?). Sandstone.
c. 15th cent. A.D.?
A3737. H: 12.5; L: 21; th: 4.5 cm.

Male figurine (toy ?). Sandstone.
c. 15th cent. A.D.?
A3741. H: 8; L: 16.5; th: 4.5 cm.
The inhabitants of the Hormuzi-Portuguese fortress of diverse social status and of varied geographic origins, often lived in the fear of invasion and knew several times this brutal reality. But they also enjoyed long periods of tranquillity as is testified from the presence of numerous artefacts from their daily life: small tools, crockery and kitchen utensils, fragments of wooden furniture, modest jewellery, items of leisure activity etc. Some of these objects were manufactured in India. Others – fragments of plates and small dishes, all of a very refined painted glass – probably came from Spain or Italy, and not, it appears, from Portugal. They probably belonged to the Portuguese officers residing in the fortress after its last restoration in 1561 A.D.
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