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2011 Survey Report on International Cooperation Japan Consortium for International Cooperation in Cultural Heritage

Survey Report on the Protection of Cultural Heritage in Bahrain

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Japan Consortium for International Cooperation in Cultural Heritage 2011 Survey Report on International Cooperation Survey Report on the Protection of Cultural Heritage in Bahrain December 2012

# Published by

Japan Consortium for International Cooperation in Cultural Heritage 13-43 Ueno Park, Taito-ku, Tokyo, 110-8713 JAPAN Tel: +81-3-3823-4841 Fax: +81-3-3823-4027 URL: http://www.jcic-heritage.jp/ 2011 Survey Report on International Cooperation Japan Consortium for International Cooperation in Cultural Heritage

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# Preface

In Japan, the Act on the Promotion of International Cooperation for Protection of Cultural Heritage Abroad was promulgated in 2006 to define the responsibilities of the government and educational/research institutions in international cooperation for the protection of cultural heritage in foreign countries, and to stipulate governmental measures that are to be taken, such as for strengthening the coordination of relevant institutions. The Japan Consortium for International Cooperation in Cultural Heritage was also established around this time, with the aim of bringing together government agencies, education and research institutions, and NGOs in a cooperative framework and establishing a coordinated common base. In 2007, "Basic Policies on the Promotion of International Cooperation of Protection of Cultural Heritage Abroad" were established as a public notice issued by the Ministry of Foreign Affairs and Ministry of Education, Culture, Sports, Science and Technology.

The Consortium conducts survey studies on international cooperation in cultural heritage as part of its activities to collect necessary information for promoting Japan's engagement in such cooperation. So far, these studies have been conducted in Laos, Mongolia, Yemen, Bhutan, Micronesia, Armenia and Myanmar, and the information obtained through these studies have provided the basis for commencing specific assistance in a number of cases. As part of this scheme, a study was conducted of the Kingdom of Bahrain in December 2011 as presented in this report, with the aim of collecting the necessary information for exploring the potential for Japan's future cooperation in cultural heritage protection in Bahrain.

Bahrain, with its long history, has flourished as a meeting point of different cultures since years before Christ, and boasts a diverse cultural heritage that was born from this interaction of cultures. At the same time, it was quick to embrace modernization from early on, and was the first among the Gulf countries to have an international airport. Now that its cities have become equipped with modern infrastructure, a renewed awareness has emerged of the importance of the country's own cultural heritage and the necessity of its protection and management. Bahrain exhibits a positive stance on cultural heritage protection in international frameworks, and has served as a member of the World Heritage Committee from 2007 to 2011. It is indeed a country strongly focused on promoting cultural heritage, so sharing Japan's accumulation of academic studies and experience in protective management systems can be expected not only to help establish long-term cultural exchanges between the two countries, but to solidify the relationship between the two countries that has thus far developed mainly centered on economic interactions. Particularly with this year marking the 40th anniversary of the establishment of diplomatic relations between Bahrain and Japan, implementing an initiative that seeks to take the relationship to a new level shall serve as an important test of future growth of our two countries.

We at the Japan Consortium for International Cooperation in Cultural Heritage sincerely hope this report will contribute to promoting Japan's future engagement in international cooperation on cultural heritage and to the protection of Bahrain's cultural heritage.

Lastly, we wish to extend our deepest gratitude to the Ministry of Foreign Affairs, Agency for Cultural Affairs, and other relevant institutions in Japan, as well as Bahrain's Ministry of Culture and other relevant institutions in Bahrain for their cooperation in the implementation of this study.

December 2012 Japan Consortium for International Cooperation in Cultural Heritage

# Foreword

1. This document is a report on a country assistance study conducted in Bahrain to assess the state of cultural heritage protection in the country. It has been published as a project of the Japan Consortium for International Cooperation in Cultural Heritage sponsored by the Agency for Cultural Affairs.

2. The following members were in charge of writing, editing and supervising the Arabic notations in this report.

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2. Study Overview

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3. Framework for Cultural Heritage Protection in Bahrain

Rei Harada

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Rei Harada

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3. The official name of the country is Kingdom of Bahrain, but the more commonly used name of Bahrain is used in this report.

4. The English names of sites are based on local publications and English reference materials, but in cases where appropriate English names could not be found, the Arabic names were translated into English. However, local pronunciation customs in Bahrain have been observed in the use/non-use of the definite article and in the transcriptions from Arabic.

(1) Names of places, sites and buildings

The names of places, sites and buildings have been written according to the following rules, with priority on their pronunciation.

- The first character of each word is capitalized.
- The definite article *al* is spelled in lower case, except at the beginning of a sentence, in which case it should be spelled *Al*.
- The definite article *al* and the following noun are connected with a hyphen.
- When a sun letter precedes a noun, the *I* of the definite article *al* assimilates to the initial letter of the following noun.
  Ex) *al-shamusu* (sun) → *ash-shamusu*
- The *ta' marbutah* at the end of a word is not expressed in writing (it may be expressed by the *h* character in some cases).
- The use of the long vowel (macron) should be avoided, but two same vowels may be used to express a long vowel as necessary.
  Ex) Saar

(2) Names of people

The names of people are basically written as they appear on their business cards, placing priority on their spelling instead of their pronunciation.

• The same rules as those for place names apply.

(3)Names of buildings that begin with the name of a personRules under (2) apply to the part that represents the name of a person, and rules under (1) apply to the rest of the name of the building.

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# 1. Introduction

#### 1–1. Geography and History of Bahrain

The Kingdom of Bahrain is located off the east coast of the Arabian Peninsula, and is composed of a total of 33 islands including the main island of Bahrain. The islands have a combined area of 757.5 square kilometers, or roughly the same land area as the Amami Oshima in Japan. From faraway Japan, Bahrain tends to be mistaken for a desert country, but it actually has no desert like that found in its neighboring countries. In fact, it is blessed with abundant underground water, and boasts a beautiful landscape as a green oasis afloat on the sea. Owing to this exceptional environment, humankind has engaged in diverse activities in this region since ancient times.

## Stone Age

There are no known relics from the Paleolithic Age. The oldest traces of human occupation were discovered from near the Al-Markh site on the west coast of the main island. The site shows two phases of occupation. The lower layers comprised fishermen's work areas, and contain many flints and potsherds dating from the Post-Ubaid period in Mesopotamia (early fourth millennium BC). The upper layers show clear traces of stockbreeding, and contain no pottery.

#### Early Dilmun Period (ca. 2200 BC-1800 BC)

The beginnings of the Umm an-Nar culture (Magan) appeared in the Oman Peninsula from around late third millennium BC. In the 21st century BC, the settlement at Bahrain Fort, or Qal'at al-Bahrain suddenly, grew into a city, and the Barbar civilization (Dilmun) emerged. At around the same time, Magan declined, and Dilmun rose to prominence as the capital city of Magan was transferred from Abu Dhabi to Bahrain, Dilmun succeeded all of Magan's functions.

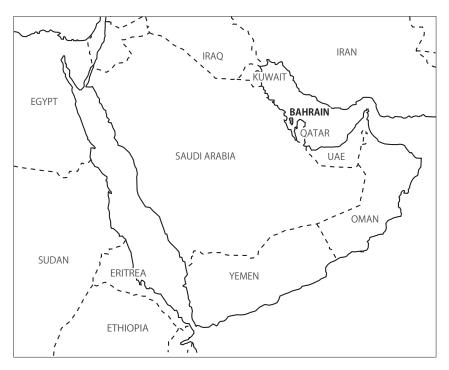


Fig.1 Location of Bahrain

The new civilization created a colonial city on Failaka Island of Kuwait, which became a gathering place for Mesopotamian and Elamite buyers who sought goods from distant places.

The Barbar culture, or the first kingdom of Dilmun, began to decline in the 19th century BC and gradually fell to ruin in the 18th century BC. Its fall is attributed to an economic crisis associated with the fall of the Indus Valley Civilization and a slowdown in merchant activities in Mesopotamia.

#### Middle Dilmun Period (ca. 1800 BC–1000 BC)

From the 15th to 14th century BC, Bahrain was ruled by the Kassites, who gained control of Mesopotamia and conquered a stone block fragment. The name of the Kassite king, Burnaburiash II (1359 BC–1333 BC), has been found inscribed on the "Durand Stone" excavated from Qal'at al-Bahrain. However, the name of "Rimun, servant of Inzak," which is mentioned in the inscription on the stone and sparked the theory that Dilmun corresponds to Bahrain, may refer to an indigenous ruler who actually governed Bahrain.

### Late Dilmun Period (ca. 1000 BC-330 BC)

A record of the Assyrian Empire indicates that "Uperi, king of Dilmun, who lives like a fish 30 beru away in the midst of the sea of rising sun" paid a tribute to Sargon II. The Achaemenid Empire, which ruled most of the region along the coast of the Arabian Peninsula, established a trading center at Qal'at al-Bahrain.

#### Tylos Period (ca. 330 BC-AD 629)

After the death of Alexander the Great (323 BC), the Gulf came under the influence of Greek culture. In Greek and Latin classics, Bahrain Island was called Tylos, and Muharraq Island was called Arados.

Tylos was also home to Greek residents, as the Gulf was situated along the trade route connecting the Mediterranean Sea and India. In 206 BC-205 BC, Antiochus III of the Seleucid Empire stopped over at Gerrha (unconfirmed) and Tylos on his way home from his expedition to India. Accompanying the decline of the Seleucid Empire, the Gulf came under the control of the Characene (Mesene) Kingdom, which rose to power in southern Iraq around 129 BC, and Bahrain became a strategic port of call along the kingdom's route to India. Around AD 240 Ardashir I of the Sasanid Empire defeated King Sanatruq of Bahrain and gained control over Bahrain. At this time, Bahrain was home to people of diverse religions, including Zoroastrians, Jews and Nestrians.

#### Islamic Period (AD 629–15th century)

In 629, Bahrain, or the region that included Awal (Bahrain Island), Al-Qatif and Al-Hasa, became Islamized.

In the Zanj Rebellion (863–883), the Bani Abdul Qais tribe in Bahrain sided with the Abbasid army and drove out the Zanj (enslaved black Africans). In 902, the Carmathian (Islamic communism) movement spread from Iraq to Bahrain, and Bahrain became part of the Carmathian state that was established in 904. The Carmathians were defeated in 1076 by Abdullah al-Uyuni, who established a new state (Uyunid Dynasty), but Bahrain thereafter fell under the influence of forces on the opposite side of the Gulf, including the amirs of Qays Island and then the Atabegs of Fars in 1235. The capital at this time was Bilad al-Qadim.

In the 14th century, Bahrain came under the control of the Kingdom of Hormuz, which acted as a hub of East-West trade. Around this time, the name "Bahrain" came to refer to the country that it is today, and its capital was relocated to Manama in the 15th century.

#### Control by the Great Powers (16th-17th centuries)

At the beginning of the 16th century, Portuguese fleets appeared in the Gulf and occupied the Kingdom of Hormuz. They then turned their attention to Bahrain, and from 1511, laid siege to Bahrain numerous times.

The Portuguese eventually gained control of Bahrain, but were then placed in the position of protecting Bahrain from other powerful countries. In fact, it was the Portuguese who repaired and expanded Qal'at al-Bahrain after it suffered damage in a battle against the Ottoman Turks, who invaded Bahrain in 1559. Although it was a war-torn period, Murad Mahmud's rule of Bahrain (1530–1577) brought peace and prosperity to the country.

From 1602, Bahrain was ruled by the Safavid Dynasty, which was in conflict with the Ottomans'. In 1717, it came to be occupied by Omanis (Yaariba Dynasty), which had succeeded in driving the Portuguese out of the Gulf.

#### Rule of Al-Khalifa (18th century – present)

Al-Khalifa family belongs to a tribe of Arab nomads from Nejd called Utoob. In 1701, they invaded Bahrain from the Qatar Peninsula, moved to Kuwait thereafter, and settled in Zubarah in the Qatar Peninsula in 1763. As a free-trade port, Zubarah flourished in both economy and culture. In 1783, after an Omani ruler of Bahrain failed in his attack on Zubarah, Shaikh Ahmad of the Al-Khalifa led an attack and conquered both Bahrain and Zubarah. Bahrain created a fleet of ships and controlled marine transport in the Gulf.

After Shaikh Ahmad's death, his two sons and descendants plunged into a period of feuds over succession and inheritance, but it was brought to an end in 1869 with the accession of Shaikh Isa bin Ali. The development of lawmaking, governmental administration, police, and the education system of modern Bahrain began during this period.

# 1–2. History of the Discovery of Cultural Heritage in Bahrain

#### **Pioneer Period**

There are vast numbers of historical cultural heritage in the Gulf countries. Ancient sites in Bahrain, in particular, have been known in Europe since the end of the 19th century, bringing scholars and amateurs from the United Kingdom and other countries to Bahrain with avid interest. Studies of ancient Mesopotamia, which began in Europe, expanded to include the Gulf region in their scope. The period from around this time to the end of the Second World War marks the early years of archaeology in Bahrain.

- 1879: Captain Edward L. Durand, a British Political Resident in the Persian Gulf, excavated two burial mounds, one large and one small, at the A'ali Burial Mounds, and discovered a stone with an inscription written in cuneiforms at Madrasa Dawood in Bilad al-Qadim. The inscription was deciphered by English Assyriologist Henry C. Rawlinson, and gave rise to the "Dilmun = Bahrain" theory, as it included the name of Inzak, known as the guardian a god of Dilmun in Sumerian mythology.
- 1889: Mr. and Mrs. Theodore Bent, an English explorer-writers couple, excavated two burial mounds, one large and one small, at the A'ali Burial Mounds. They also researched the detailed history of Bahrain since the 16th century, as well as publishing reports on the ethnography, buildings, and the people of the country at the end of the 19th century.
- 1903: M. Juannin, a Belgium explorer, excavated a burial mound.

- 1906-1908: English Colonel F. B. Prideaux excavated 67 burial mounds at the A'ali Burial Mounds and published scientific papers in the Annual Report 1908-9 of the Archaeological Survey of India. He estimated that there are close to 100000 burial mounds in total on Bahrain Island.
- 1925: English archaeologist Ernest J. H. Mackay was sent to Bahrain by Sir William Matthew Flinders Petrie, an English Egyptologist, and excavated some 50 burial mounds at the A'ali Burial Mounds. His objective was to obtain corroborating evidence for the theory that the Egyptian civilization originated with the relocation of the people of Mesopotamia to Egypt, but it was to no avail.
- 1940-1941: An American graduate student, Peter Bruce Cornwall, excavated a considerable number of burial mounds at a site believed to be the Umm Jidr Burial Mounds, and discovered the remains of a peculiar building resembling a "conference room" in Manama. He supported the "Dilmun = Bahrain" theory and refuted Samuel Noah Kramer's "Southwest Iran" theory.

During this period, all explorers and researchers were fascinated by the unusual number of burial mounds in Bahrain.

#### **Establishment Period**

During the period from the 1950s after the end of the Second World War to the end of the 1960s, a Danish archaeological expedition headed by Peter V. Glob and Geoffrey Bibby enjoyed a practically unrivaled position. The expedition implemented the following main activities in Bahrain.

- 1953: Commencement of archaeological exploration in Bahrain
- 1954: Excavation of Ain Umm as-Sujour Site
- 1954-1978: Excavation of Qal'at al-Bahrain
- 1954-1962, 1971, 1983, 2004: Excavation of Barbar Temple

The Danish expedition excavated a considerable number of burial mounds at Saar, A'ali, Umm Jidr, and other burial fields. Particularly at A'ali, some 50 small and large burial mounds were excavated in the early 1960s, and signaled the beginning of a period of preliminary surveys accompanying urban development.

In the latter half of the 1950s, the Danish expedition began archaeological investigations in the Qatar Peninsula (1956-), Failaka Island in Kuwait (1958-), the Trucial Coast (present UAE) (1958-) and the Eastern Province of Saudi Arabia (1962-). This series of investigations marked a transition from "archaeology in Bahrain" that stemmed from the search for Dilmun, to the establishment of "archaeology in the Gulf," which encompassed the entire Gulf region from the Stone Age to the Islamic period.

#### **Development Period**

From the end of the 1960s to the beginning of the 1990s, archaeology in Bahrain and the rest of the Gulf region marked an expansion from the Danish expedition's monopoly to a more international effort. The Bahraini government established the Directorate of Archaeology in 1968, and opened the Gulf region's first national museum for both archaeology and ethnology in 1970 on Muharraq Island. Meanwhile, European countries, other Arab countries and the Asian countries also joined in the study and research of cultural properties in Bahrain.

The second floor of the current national museum that newly opened in 1988 features an exhibition that depicts a part of the old commercial district on Muharraq Island. At the same time, activities were also begun during this stage to repair onsite, preserve and open to the public such historical buildings as the Shaikh Isa Bin Ali House, Seyadi House, Arad Fort, Qal'at al-Bahrain and Al-Khamis Mosque.

As is typical with economic growth, development in Bahrain brought a large risk to the country's cultural properties. A series of rescue archaeology were therefore conducted at numerous sites, including the Saar Burial Mounds prior to the construction of King Fahd Causeway (by the Arab Expedition in 1977-1979, and by Bahrain's Directorates of Archaeology from 1980 to 1982) and the Hamad Town Burial Mounds.

These surveys led to the excavation of the Saar Archaeological Site by an English expedition (1990-1999).

#### **Stable Period**

After the global economic downturn in the 1990s, the rescue archaeology accompanying the previous rush of development in Bahrain diminished, and archaeological initiatives stabilized. The preservation, restoration and utilization of archaeological sites and cultural landscapes became a mission during this period that continues to today, and Qal'at al-Bahrain was inscribed on the UNESCO World Heritage List in 2005. In 2009, 12000 burial mounds in 11 burial sites were included in the Tentative List for additional inscription. 2011 saw the opening of Qal'at al-Bahrain Site Museum, and in 2012 the historical buildings in Muharraq (Pearling, Testimony of an Island Economy) were designated a World Heritage Site.

#### Bahrain's Cultural Heritage and the Japanese

Japanese Egyptologist Hachishi Suzuki and Japanese Indianologist Masatoshi A. Konishi published an introduction of Bahrain's cultural Heritage based on local visits in 1964 and 1974, respectively, and Geoffrey Bibby's Looking for Dilmun was translated and published in Japanese in 1975. However, these efforts did not spark momentum for full-fledged studies by Japanese researchers.

From the end of 1986 to the following year, Konishi and Takeshi Gotoh visited four Arab countries in the Gulf including Bahrain in search of possibilities for promoting archaeological research. In December 1987, they conducted an excavation at the Buri Burial Mounds, and from 1991 to 1996, they re-excavated the Ain Umm as-Sujour Site and found that it used to be the site of a temple dedicated to the god of water during the Early Dilmun period.

# 2. Study Overview

#### 2-1. Objective

The Japan Consortium for International Cooperation in Cultural Heritage conducts studies of countries in need of assistance for conservation efforts with the objective of promoting Japan's engagement in international campaigns for the protection of worldwide cultural heritage. The studies focus on the state of cultural heritage protection in the country of assistance and on international cooperation initiatives of foreign countries in the field of cultural heritage. There are two types of studies: emergency studies that aim to rescue cultural heritage damaged in a natural disaster or other such situation by assessing their damage, and regular studies that are conducted to collect information for future assistance for cultural heritage protection when such assistance is requested by other countries. The countries for which the Consortium has conducted such studies in the past have included Laos and Mongolia in fiscal 2007, Australia, Germany, Norway and Sweden in fiscal 2008, Bhutan in fiscal 2009, Armenia and Micronesia in fiscal 2010, and Myanmar in fiscal 2011. This particular study on Bahrain was launched in fiscal 2011 based on a request for assistance from Bahrain and was conducted as a regular study to assess the status of cultural heritage protection and international cooperation in Bahrain with a view to exploring future potential for cooperation by Japan.

#### 2-2. Period of Implementation

December 16-23, 2011 (eight days)

#### 2-3. Study Team Members

Rei Harada (Research Fellow, Japan Consortium for International Cooperation in Cultural Heritage) Takeshi Gotoh (Special Projects Curator, Tokyo National Museum) Kiyohide Saito (Deputy Director, Archaeological Institute of Kashihara, Nara Prefecture) Masashi Abe (Research Fellow, Japan Center for International Cooperation in Conservation, National Research Institute for Cultural Properties, Tokyo)

#### 2-4. Study Objective

The study team traveled to Bahrain to assess the present state of international cooperation on cultural heritage in the country and gain a perspective on future cooperation, in response to specific requests for cooperation presented by their Bahraini counterparts. The team visited the archaeological sites of burial fields created as early as 2200 BC, the World Heritage Site of Qal'at al-Bahrain, Bahrain National Museum and the historical buildings in Muharraq, to collect information and exchange views through interviews with relevant authorities at those sites.

#### 2-5. Study Background

In 2007, Shaikha Mai bint Mohammed al-Khalifa, Assistant Under-secretary for Culture and Heritage in the Directorate of Culture and Arts in Bahrain's Ministry of Information, approached the Consortium for counsel regarding cooperation on cultural heritage protection during her visit to Japan at the invitation of the Japan Foundation. Afterwards, in fiscal 2010, a plan was formulated to conduct a country assistance study to assess the present state of international cooperation on cultural heritage in Bahrain and gain a perspective on future

cooperation. That plan was postponed, however, because some difficulty in acquiring local cooperation was anticipated, given the general election in 2010 and the accompanying reorganization of governmental ministries and personnel reassignments, as well as the hubbub of preparations for the World Heritage Committee scheduled to be held in Bahrain in 2011.

The Consortium nevertheless continued to collection information and maintain contact with researchers in Bahrain after fiscal 2011, and as a result, received a request for cooperation in the field of cultural heritage protection from a conservation and restoration officer in the Directorate of Archaeology and Heritage, Culture and National Heritage Sector, Ministry of Culture, in recognition of Japan's long years of contribution to archaeological work in Bahrain. The Consortium therefore set out to gain an accurate assessment of potential fields of cooperation that would benefit from the cooperation of Japanese experts and relevant institutions by sending a study team to Bahrain with the approval of the Consortium's planning subcommittee. However, as demonstrations associated with the pro-democracy movement had been occurring in Bahrain around this time, it was decided to dispatch the team in December 2011 when it was deemed safer, based on information from the Japanese Embassy in Bahrain authorities.

#### 2-6. Study Method

To conduct the study efficiently within a limited amount of time, Chief of Conservation and Restoration in the Directorate of Archaeology and Heritage, Culture and National Heritage Sector, Ministry of Culture, was asked to designate the cultural heritage sites for which Japan's cooperation was sought, prior to the study team's arrival in Bahrain. The survey thus focused mainly on the cultural heritage sites designated by the Bahraini side, and was conducted within the planned implementation period, with the Bahraini officer from the Ministry of Culture accompanying the team to provide detailed explanations. The team also inspected museums and other related facilities.

Interviews were held with Bahraini experts on cultural heritage protection. They were arranged mainly within the Ministry of Culture, as the ministry is the directorate in charge of cultural heritage protection in Bahrain. Pertinent information was obtained through questions that were sent to the ministry in advance of the interviews. Exchanges of views were also held, in which Japanese experts gave brief summaries of the status of cultural heritage protection and human resource development in Japan.

Contact was made with Bahrain's Ministry of Culture through the cooperation of Mr. Khalid as-Sindi, an old acquaintance of Takeshi Gotoh and an archaeologist belonging to the Ministry of Culture who was invited to Japan in fiscal 2010 by the National Research Institute for Cultural Properties, Tokyo to attend a study meeting. Thereafter, the study team received cooperation from Mr. Salman Ahmed al-Mahari, Chief of Conservation and Restoration, Directorate of Archaeology and Heritage, Culture and National Heritage Sector, Ministry of Culture.

# 2–7. Activity Log

Within a short study period that spanned a mere five days in all, the study team surveyed 22 sites and nigh historical buildings and toured four museums and related facilities.

Date	Map Number	Site Name(English)	Site Name(Arabic)
2011/12/17	1	Qal'at al-Bahrain and Qal'at al-Bahrain Site Museum	قلعة البحرين و متحف موقع قلعة البحرين
	1-1	Qal'at al-Bahrain	قلعة البحرين
	1-2	Qal'at al-Bahrain Site Museum	متحف موقع قلعة البحرين
	2	Bahrain National Museum	متحف البحرين الوطني
2011/12/18	3	Umm Jidr Burial Mounds	تلال مدافن أم جدر
	4	Hamad Town Burial Mounds	تلال مدافن مدينة حمد
	4-1	Dar Kulayb Burial Mounds	تلال مدافن دار کلیب
	4-2	Karzakkan Burial Mounds	تلال مدافن کر ز کان
	4-3	Buri Burial Mounds	تلال مدافن بوري
	4-4	Burial Mounds in Tylos Age	تلال مدافن في الُفترة تايلوس
	4-5	Qanat in Islamic Age	قنوات الري في الفترة الإسلامية
	5	Arad Fort	قلعة عراثا
	6	Historical Buildings in Muharraq	المباني التاريخية في المحرق
	6-1	Shaikh Salman House	بيت الشيخ سلمان
	6-2	Shaikh Isa Bin Ali House	بيت الشيخ عيس بن علي
	6-3	Seyadi House	بيت سيادي
	6-4	Kurar House	بیت کرار
	6-5	House of Coffee	بيت القهوة
	6-6	Abdullah az-Zayed House	بيت عبدالله الزايد
	6-7	Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research	مركز الشيخ إبراهيم بن محمد الخليفة للثقافة و البحوث
2011/12/19	7	A'ali Burial Mounds	تلال مدافن عالى
	7-1	A'ali Burial Mounds	تلال مدافن عالى
	7-2	A'ali Royal Mounds	قبور الماوك عالى
	8	Al-Khamis Mosque	مسجدالخميس
	9	Beit al-Qur'an (House of Qur'an)	بيت القرآن
2011/12/20	10	Jannusan Burial Mounds	تلال مدافن جنوسان
	11	Barbar Temple	معبد باربار
	12	Ain Umm as-Sujour Site	موقع عين أم السجور
	13	Janabiya Burial Mounds	تلال مدافن الجنبية
-	14	Saar Archaeological Site	موقع سار الأثري
	14-1	Saar Settelment	مستوطنة سار
	14-2	Saar Cemetery	مدافن سار المتشابكة
	15	Shaikh Salman Bin Ahmed al-Fateh Fort	قلعة الشيخ سلمان بن أحمد الفاتح
2011/12/21	2	Ministry of Culture	وزارة الثقافة
	16	Al-Maqsha Burial Mounds	ترور تلال مدافن المقشع
	17	Diraz Temple	معبد الدراز
	18	Mugaba Burial Mounds	تلال مدافن المقابة
	19	Shakhura Burial Mounds	يني . تلال مدافن الشاخورة
	20	Al-Hajar Cemetery	مدافن الحجر
2011/12/22	21	Suq al-Qisariya	سوق القيصرية

#### Table.1 Activity Log

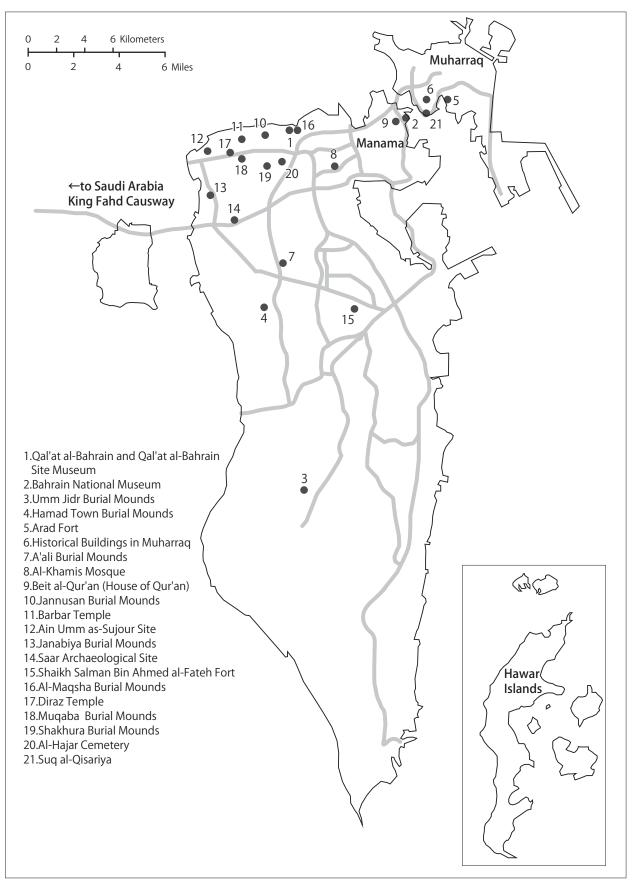


Fig.2 Enlarged map of Bahrain Island (showing the locations visited)

## 2-8. Interviews

During the five-day study period, interviews were held with a total of 11 experts mainly in the Ministry of Culture. The table below shows the interviewees in the order in which they were interviewed.

Name	Title	Affiliation	
Mubarak Mohamed Taher	Sr. Public Relations Specialist	Ministry of Culture	
مبارك محمد طاهر	أخصائي علاقات عامة أول	لة	وزارة الثقاف
Dawood Youzif	Archaeologist	Ministry of Culture	
داود يوسف	اثاري	لة	وزارة الثقاف
Abdulla Mohammed as-Sulaiti	Director of Archaeology and Heritage	Ministry of Culture	
عبد الله محمد السليطي	مدير إدارة الآثار و التراث	٦	وزارة الثقاف
Salman Ahmed al−Mahari	Chief of Conservation and Restoration, Directorate of Archaeology and Heritage	Ministry of Culture	
سلمان أحمد المحاري	رئيس قسم ترميم و صيانة الآثار	ىة	وزارة الثقاف
Mustafa Ebrahim Salman	Archaeolgy Curator	Ministry of Culture	
مصطفي إبراهيم سلمان	أمين متحف الآثار	ىة	وزارة الثقاف
Saeed Abdulla al-Khuzai	Natural Heritage Advisor (Bahraini Delegation to the World Heritage Committee)	Ministry of Culture	
سعيد عبد الله الخزاعي	خبير التراث الطبيعي الوفد البحريني بلجنة التراث العالمي	ىة	وزارة الثقاف
Haya as−Sada	Bahraini Delegation to the World Heritage Committee Unit for the Establishment of the Arab Regional Center for World Heritage (ARC-WH)	Ministry of Culture	
هيا أحمد السادة	الوفد البحريني بلجنة التراث العالمي و حدة تاً سيس المركز الإ قليمي العربي التراث العالمي	ā	وزارة الثقاف
Khalid Mohammad Ebrahim as-Sindi	Archaeologist	Ministry of Culture	
خالد محمد إبراهيم السندي	آثار <i>ي</i>	لة	وزارة الثقاف
Nadine Boksmati	Museums Advisor	Ministry of Culture	
ندين بكسماتي	خبيرة متاحف	ä.	وزارة الثقاف
Khalifa bin Ahmed al-Khalifa	Directorate of Archaeology and Heritage	Ministry of Culture	
خليفة بن أحمد الخليفة	قطاع الثقافة و التراث الوطني	ä	وزارة الثقاف
Alaa al-Habashi	Founder, General Manager (Ph.D)	Turath Conservation Group	
علاء الحبشي	مدير عام	راث الحفاظ و الترميم رة مشاريع ترميم	

#### Table.2 List of Interviewees

### 2–9. Reason for Selecting Bahrain for the Study

Archaeology and historical research in Bahrain have developed through cooperation with foreign countries, and rescue archaeology was actively conducted at one time, pushed by the wave of development accompanying economic growth in the Gulf region. In recent years, archaeological studies have advanced a step from excavation surveys to the next stage of conservation, restoration, utilization and maintenance of archaeological sites. However, while the basic groundwork has begun to take shape, concerns about the lagging development of human resources and decreasing aid from Japan and other foreign countries compared to before have prompted the Ministry of Culture to approach the Consortium to seek Japan's cooperation in the field of cultural heritage. Bahrain turned to Japan for cooperation, probably in recognition of Japan's contribution to archaeology in Bahrain through archaeological excavations conducted from the 1980s to 1990s, and of its active role in implementing human resource development programs for cultural heritage protection in Iraq and other Arabic-speaking countries. From 2000, however, there have not been many cases of Japanese cooperation to Bahrain and other Gulf countries besides the excavation project implemented in the UAE by Kanazawa University, and information on the status of cultural heritage protection in the Gulf countries to begin experiencing a depletion of petroleum resources,

## 2 Study Overview

set out a policy of constructing museums and developing into a major culture and tourism country in the Gulf. Furthermore, with 2012 marking the 40th anniversary of the establishment of diplomatic relations between Bahrain and Japan, ties between the two countries are expected to expand hereafter in a broad range of sectors. For the reasons mentioned above, it was deemed necessary to assess the status of cultural heritage protection in Bahrain and collect information for future cooperation on cultural heritage protection and tourism development, and it was judged that Japan, with its past experience in contributing to archaeology work in Bahrain, is well suited to provide effective cooperation to Bahrain into the future.

# 3. Framework for Cultural Heritage Protection in Bahrain

#### 3–1. Overview of the Domestic Framework

First of all, prior to discussing the domestic framework for cultural heritage protection in Bahrain, this section will briefly examine Bahrain's political system.

Bahrain officially declared independence in 1971, following a conflict with Iran over territorial rights. A constitution was established in 1973 and revised in 2002. The revised constitution promoted a road to democracy by changing the kingdom's regime to a hereditary monarchy and installing a bicameral legislature (four-year terms) organized through regular elections. Today, the country is governed by the Al-Khalifa family, headed by H.M. King Hamad bin Isa al-Khalifa. The king in effect has control of all three branches of government, with the executive branch composed of the following 18 ministries. The country is divided into five administrative regions.

18 Ministries<sup>1</sup> Ministry of Justice and Islamic Affairs Ministry of Foreign Affairs Ministry of Transportation Ministry of Diffense Ministry of Interior Ministry of Municipalities Affairs and Urban Planning Ministry of Finance Ministry of Works Ministry of Housing Ministry of Culture Ministry of Information Ministry of Industry and Commerce Ministry of Education Ministry of Labor Ministry of Health Ministry of Social Development Ministry of Human Rights Ministry of Cabinet Affairs

#### 3-2. Laws

For legal protection of cultural heritages sites in Bahrain, the Bahrain Antiquities Ordinance was established in 1970 and revised in 1985. In 1995, Decree Law No. (11) Regarding the Protection of Antiquities (also called Law

<sup>1</sup> Refer to Kingdom of Bahrain website, http://www.bahrain.bh for more details.

for the Protection of Archaeological Site) was newly established to take the place of the former law. Both laws are originally written in Arabic, but their English translations can be obtained from UNESCO's website.<sup>2</sup>

Chapter 1, Section 1 of Decree Law No. (11) Regarding the Protection of Antiquities stipulates that the Ministry of Information (predecessor of today's Ministry of Culture) shall oversee, protect and manage cultural heritages sites. Chapter 1 also provides for measures for cultural heritage protection and registration, and stipulates the following: cultural heritage for registration shall be selected by the Ministry of Information; cultural heritage consists of movable and immovable properties, and immovable properties shall include not only archaeological sites but other buildings as well; landowners may not claim ownership of any cultural heritage property on their land; when an urban development plan covers an area near a cultural heritage site, the Ministry of Information must disclose all pertinent information and coordinate the interests of all relevant government ministries; and the Ministry of Information shall acquire land for public purposes. Chapters 2 and on provide stipulations for excavations and excavation permission, the registration and management of cultural heritage sites, and punitive measures.

In addition to the above, written agreements that have legal binding power over cultural heritage protection (regional ordinances, conservation plans, tourism development plans, etc.) include management plans for the World Heritage Site of Qal'at al-Bahrain (Ancient Harbor and Capital of Dilmun) and the historical buildings in Muharraq (Pearling, Testimony of an Island Economy)<sup>3</sup>. The cultural landscape of the historical buildings in Muharraq is managed by a governing board that reports to the Ministry of Culture, composed of members representing the 12 relevant ministries, landowners and corporate activities.

Bahrain ratified the UNESCO World Heritage Convention in 1991 as a treaty for cultural heritage protection, and served as a member of the World Heritage Committee from 2007 to 2011. There are presently two World Heritage Sites in Bahrain: Qal'at al-Bahrain (Ancient Harbor and Capital of Dilmun) and the historical buildings in Muharraq (Pearling, Testimony of an Island Economy), which were inscribed on the World Heritage List in 2005 and 2012, respectively. There are also two cultural heritage sites and one natural heritage site listed on the Tentative List. The two cultural heritage sites are Barbar Temple (application submitted in 2001) and the Burial Ensembles of Dilmun and Tylos (application submitted in 2008), and the natural heritage site is the Hawar Islands Reserve (application submitted in 2001).

Other effective conventions include the World Heritage Convention and the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague Convention) and Protocols to the Convention. Bahrain is also moving to ratify the following: the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property; the Convention on the Protection of the Underwater Cultural Heritage; the Convention for the Safeguarding of the Intangible Cultural Heritage; and the Convention on the Protection and Promotion of the Diversity of Cultural Expressions. When it does, a revision is expected to be made to Decree Law No. (11) Regarding the Protection of Antiquities.

<sup>2</sup> Refer to UNESCO DATABASE OF NATIONAL CULTURAL HERITAGE LAWS, http://www.unesco.org/culture/natlaws/index.php?&lng=en and APPENDIX 2 \[related Law\] for more details.

<sup>3</sup> Kingdom of Bahrain 2005 *Nomination to the World Heritage List, Qal'at al-Bahrain – Ancient Harbor and Capital of Dilmun* Kingdom of Bahrain. Kingdom of Bahrain 2012 *Nomination to the World Heritage List, Pearling, Testimony of an Island Economy* Kingdom of Bahrain.

## 3-3. Administrations

The Ministry of Culture is the only government office in charge of cultural heritage protection. The country is divided into five administrative regions, but cultural heritage protection is undertaken solely by the Ministry of Culture, as no regional office administers the task. The Ministry oversees both intangible and tangible cultural heritage properties. The present Minister of Culture is Shaikha Mai bint Mohammed al-Khalifa.

The Ministry used to be called the Ministry of Information and thereafter the Ministry of Culture and Information before it became the Ministry of Culture in 2010. During the years as the Ministry of Culture and Information, the Directorate of Archaeology and Heritage under the Culture and National Heritage Sector was in charge of handling cultural heritage. Although there was a series of governmental reorganizations, ultimately placing cultural heritage administration under the Ministry of Culture had the advantage of facilitating the budget process for cultural affairs within the government.

Today, the Ministry of Culture comprises two sectors only: the Tourism Sector and the Culture and National Heritage Sector. Under the Culture and National Heritage Sector are the Directorate of Archaeology and Heritage, Directorate of Museums, Directorate of Culture and Arts, and Directorate of Music and Theater. The Directorate of Archaeology and Heritage and the Directorate of Museums are directly involved in cultural heritage protection, and engage in the following tasks.

#### • Directorate of Archaeology and Heritage

The Directorate of Archaeology and Heritage promotes the protection of tangible and intangible cultural heritage heritage and an awareness of the need to protect cultural heritage. Divided into the Heritage Section, Archaeology Section and Restoration Section, it manages cultural heritage, as well as managing archaeological excavations and surveys by foreign teams and undertaking the restoration of archaeological sites. According to interviews, there are roughly 75 members on staff in the directorate, including approximately seven members in the Archaeology Section.

#### • Directorate of Museum

The Directorate of Museum is in charge of planning and operating all museums in Bahrain. It also oversees the Bahrain National Museum from the perspective of promoting exhibitions that introduce Bahraini culture and history and contribute to tourism development.

Institutions affiliated with the Ministry of Culture include the Arab Regional Center for World Heritage (ARC-WH). It was established following the publication of the "Periodic Report on the Implementation of the World Heritage Convention" in 2000, which indicated a need to apply action guidelines for promoting understanding and implementing the World Heritage Convention in the Arab region. In response to the report, at the 2008 World Heritage Committee Bahrain proposed and received approval to establish a regional center for protection of world heritage in the Arab region as a UNESCO category 2 center. After a period of preparation, the ARC-WH was inaugurated in April 2012 with the objective of providing information relating to the World Heritage Convention in the Arab region, supporting the development of human resources for implementation of the convention, and offering logistic support in the form of fund procurement and others.

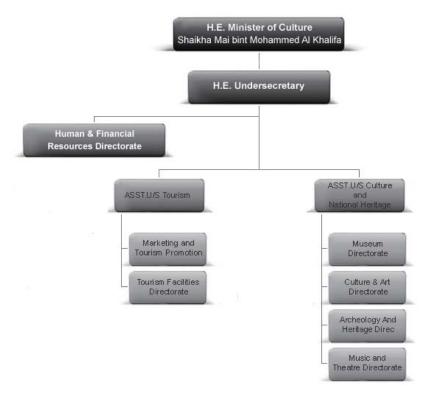


Fig.3 Organization chart of the Ministry of Culture<sup>4</sup>

# 3-4. Others

#### Status of International Cooperation for Cultural Heritage Protection

Cultural heritage protection in Bahrain has been supported by foreign countries such as the United Kingdom, France, Denmark and Japan, as mentioned earlier. However, in this particular study, there was no opportunity to inspect the work sites of foreign teams or to obtain their views.

On the other hand, the study provided an opportunity to interview foreign experts (consultants) working independently in the fields of architecture and museology. These interviews revealed that Bahrain is well prepared to receive specialized knowledge from foreign countries.

Japan, for its part, has contributed a total of 61 million yen in grant aid and 1364 billion yen in technical assistance (gross amount including fees for acceptance of 241 trainees, dispatch of 30 experts and five survey team members, and provision of equipment worth 5256 billion yen) as of fiscal 2008. No ODA has been provided since 2009, however, after the decision that was made in 2005 to graduate Bahrain from its position as an ODA recipient in view of its economic status.<sup>5</sup>

#### Human Resources Development (Educational Institutions)

With compulsory education being free in Bahrain, the country boasts a high 88.8% literacy rate. However, as there are few universities and institutions for higher education in Bahrain, students who wish to proceed to

<sup>4</sup> Refer to Ministry of Bahrain website, http://www.moc.gov.bh/ for more details.

<sup>5</sup> Refer to Ministry of Foreign Affairs of Japan website, http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/kuni/09\_databook/pdfs/04-12.pdf

graduate school go on to study in other countries, and particularly in Egypt, as it is an Arabic-speaking country. At cultural heritage restoration sites visited during this study, restoration tasks were performed by foreign workers (mainly from India), and slightly advanced tasks and field supervision were also undertaken by consultants from foreign countries.

#### Inventory

Through interviews, it was found that no inventory of cultural heritage sites exists in electronic form, but there is one on paper. It has not been confirmed, but there is said to be close to 170 sites presently registered in the inventory.

## Stakeholders

The Ministry of Culture is exclusively in charge of protecting and managing cultural heritage sites in Bahrain, so the framework for protection administration can be said to be quite simple. As consultants from foreign countries and foreign excavation teams also engage in activities through the Ministry, there appears to be smooth sharing of information and coordination of operations within the organization. As for private organizations, none were confirmed, except for the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research, which is headed by the Minister of Culture. With respect to other stakeholders, the scope of this study did not shed light on the role of local residents and beneficiaries of archaeological site preservation projects in the protection of cultural heritage sites in Bahrain.

# 4. Cultural Heritage in Bahrain

This chapter introduces the cultural heritage that was visited during this study. Needless to say, these are not all the cultural heritage sites that exist in Bahrain, but as mentioned earlier, the study focused on sites that were designated for cooperation in advance as was requested of the Ministry of Culture at the preliminary stage. For each site, information is mainly provided regarding their general overview (location, size, year of construction), research history, details, historical significance, present condition (including their status of conservation and restoration and present aid schemes), and future issues (potential for Japanese cooperation and requests from the Bahraini side). The sites are categorized into Dilmun and Tylos period sites, Islamic period sites, museums, and historical buildings, and are introduced below in this order.

4 Cultural Heritage in Bahrain

# Hamad Town Burial Mounds

# تلال مدافن مدينة حمد

The Hamad Town Burial Mounds are located north of the Umm Jidr Burial Mounds, and comprise three separate cemeteries: the Dar Kulayb, Karzakkan and Buri Burial Mounds. Several thousand burial mounds exist in total in these cemeteries. They are collectively called the Hamad Town Burial Mounds, because today they are surrounded by Hamad Town, which was constructed beginning in the 1980s. The three cemeteries have an extremely dense concentration of mostly the Late Type of burial mounds in a restricted area. They represent diverse periods in time, as burial mounds were also created during the Tylos period between 200 BC and AD 700 following the Dilmun period.

Among the burial mounds that exist in this region, the Late Type (2050 BC-1600 BC) is characterized by drumshaped mounds with low cones of sand with a ring wall encircling the foot of the cone. The mounds have a stone chamber inside capped with ceiling stones. The deceased person was buried along with such personal effects as pottery used in daily life, food items, ostrich egg shells used as drinking implements, accessories, and, toward the later years of the period, stamp seals as well. Many of the items were goods from Mesopotamia and the Indus region, indicating the exchanges that took place during this time.

The Tylos period was divided into five phases. Phase I was from 200 BC to 50 BC, Phase II from 50 BC to AD 50, Phase III from AD 50 to 150, Phase IV from AD 150 to 450, and Phase V from AD 450 to 700. The graves were mounds encircled with a ring wall around the foot of the mound, as with those of the Dilmun period. During Phases I and II, a cist slightly larger than the deceased person's body was placed inside a small mound. During Phase III, a number of plastered cists were placed inside a single mound. Plastered cists were also used during Phase IV, but plastered vaults also emerged as burial facilities during this period and continued to be built during Phase V. The graves of this period were thus characterized by a multiple number of cists in a single mound. In fact, in excavations conducted at the Hamad Town Burial Mounds, 244 burial facilities have been found in 11 mounds (Salman and Andersen 2009).

The deceased were buried along with such items as pottery, glassware, bone tools, terracotta, accessories, and coins. An image of the deceased person's bust was placed on some mounds and cists as a headstone. Part of the Hamad Town Burial Mounds has been enclosed by a fence, but rubbish lay scattered about and traces of grave robbing are seen in some places.

#### Reference

Salman, M. I. and S. F. Andersen 2009 The Tylos Period Burials in Bahrain Vol. 2, The Hama Town DS3 and Shakhoura Cemeteries, Ministry of Culture & Information.



Fig.4 Hamad Town Burial Mounds



Fig.5 Rubbish stuffed inside a cist



Fig.6 Robbed grave



Fig.7 Sign prohibiting the extraction of sand and stones



Fig.8 An excavated mound

4 Cultural Heritage in Bahrain

# A'ali Burial Mounds

تلال مدافن عالى

The south side of the A'ali Royal Mounds is scattered with several tens of thousands of small graves. From 1960 to 1961, several thousand graves were destroyed and lost as a result of bulldozing to extract stone materials and gravel from the site and to install water pipes. Fortunately, the Danish Archaeological Bahrain-Expedition conducted rescue archaeology and discovered part of the burial mounds, albeit a small part (Bibby 1965; Glob 1968). Urbanization continued to spread, however, and many of the mounds have disappeared. Moreover, the site that exists today is separated in two by a highway running north-south through the area. Prior to construction of this highway, a rescue archaeology was carried out with the participation of a survey team from Japan among other teams.

The graves are typically small, measuring about 5 to 10 meters in diameter and 2 to 3 meters in height. The burial facility is composed of a stone chamber arranged in north-south orientation in the center of the mound and alcoves attached to the ends of the chamber. Ceiling stones lay laterally over the stone chamber, and a ring wall encircles the foot of the mound. The smaller mounds tend not to have the alcoves.

These burial mounds are of the same Late Type (2050 BC–1600 BC) as the Royal Mounds, and correspond to Qal'at al-Bahrain Phase II (Højlund 2007).

Reference

Højlund, F. 2007 The Burial Mounds of Bahrain – Social Complexity in Early Dilmun. Jutland Archaeological Society.



Fig.9 Satellite view of the A'ali Burial Mounds (©Google)

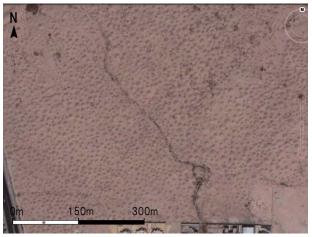


Fig.10 Satellite view of the A'ali Burial Mounds (©Google)



Fig.11 A'ali Burial Mounds in the 1980s



Fig.12 A'ali Burial Mounds



Fig.13 A'ali Burial Mounds



Fig.14 Burial mounds at risk of being destroyed for housing construction

# A'ali Royal Mounds

قبور الملوك عالى

The area to the south of the A'ali settlement, located in the central area of the northern half of Bahrain Island, is occupied by several tens of thousands of burial mounds that make up the A'ali Burial Mounds. Among them, the group of mounds at the northern end of the vast site centered on an exceptionally large mound is called the "Royal Mounds," and these display a distinctive appearance compared to regular burial mounds. The A'ali settlement expanded southward in the 1960s and had completely swallowed up the Royal Mounds by the 1990s. This situation readily allowed for predatory excavations, so that the only records that remain of the mounds are sketchy at best and do not compare in the slightest to scientific publications. However, as the graves clearly have an important significance among the burial mounds at A'ali, German archaeologist Christian Velde collected and conducted a study of past publications and materials on the present state of the mounds (Velde 1994).

The Royal Mounds largely differ from typical mounds in size and in the expanse of the surrounding area. Typical mounds are 5 to 10 meters in diameter and 2 to 3 meters in height, and are arranged close together in the thousands. In the case of the Royal Mounds, the mounds toward the north become larger, as indicated in documentations written by Colonel F. B. Prideaux (Prideaux 1912) and Ernest J. H. Mackay (Mackay 1929) and in distribution maps of the 1980s. Some 50 mounds measuring 15 meters in diameter and 4 to 5 meters in height had existed in an area to the north of a group of regular mounds, but most of them have disappeared due to the spreading of urbanization over the past 20 to 30 years. Further to the north of these mounds, there had been 14 mounds measuring 25 meters in diameter and 6 to 8 meters in height, and even further north, there had been 15 more measuring 30 to 50 meters in diameter and 10 to 12 meters in height (Højlund 2007). Among the 29 mounds, only 18 still exist today. These Royal Mounds correspond to those of the Late Type (2050 BC-1600 BC: Qal'at al-Bahrain Phase II). They have a long and high-ceilinged inner stone chamber that lies along a southwest axis, and a ring wall of vertically-stacked stones around the outer surface of the mound. The stone chambers are two-storeyed, and have a multiple number of alcoves attached to them. The walls of the chambers are painted over with plaster and have either a horizontal passage or vertical shaft as an entrance. However, in a recent reexamination, Royal Mound E was found to have stone chambers that differed from the conventional plan-that is, it was found to have two rows of two-storey chambers with alcoves attached in three places.

Today, the A'ali Royal Mounds have been completely swallowed up by urbanization. The top soil of some mounds has been partially scraped away, and there are even mounds that have a house built on top of them. The Ministry of Culture is currently taking the initiative in planning the preservation of the area as a historical site, including the construction of a site museum.

Reference

Højlund, F. 2007 The Burial Mounds of Bahrain – Social Complexity in Early Dilmun. Jutland Archaeological Society.

Mackay, E. J. H. 1929 The Islands of Bahrain, Bahrain and Hamamieh, British School of Archaeology in Egypt 47.

Prideaux, F. B. 1912 The Sepulchal Tumuli of Bahrain. Archaeological Survey of India Annual Report 1908-09, Calcutta.

Velde, C. 1994 Die steinernen Turme. Gedanken zum Aussehen der bronzezeitlichen Graber und zur Struktur der Friedhofe auf Bahrain. *Iranica Antiqua* 29: 1 63-82.



Fig.15 Satellite view of the A'ali Royal Mounds (©Google)



Fig.16 A'ali Royal Mounds



Fig.17 A Royal Mound under excavation



Fig.18 A Royal Mound under excavation



Fig.19 A Royal Mound unearthed

#### Saar Settlement

آثار سار

The site, located to the north of Shaikh Isa Bin Salman Highway, is the remains of a settlement dating from the Early Dilmun period. In contrast to Qal'at al-Bahrain, which thrived as a port city on the coast, Saar was a regular village composed of the main village area of the Early Dilmun period, a temple, and Saar cemetery.

The main village area shows the remains of an Early Dilmun period settlement situated along a limestone ridge that traverses northern Bahrain, and is the only settlement that has been excavated and surveyed over such a broad area. It offers a glimpse into the lives of the Bahraini people 4000 years ago. In an excavation survey of a cemetery conducted around 1982 by Moawiyah Ebrahim accompanying the construction of a highway, parts of a temple and other buildings were discovered from the site, and an exploratory excavation conducted in 1983 and 1985 by Hussein Kandil revealed the remains of the Early Dilmun period settlement. Then, on learning of these discoveries, Robert Killick and Jane Moon of the London-Bahrain Archaeological Expedition spent roughly 10 years, from March 1990 to May 1999, surveying the main village area and temple (Maclean and Insoll 2011).

The Early Dilmun settlement consisted of a main street, residential areas lined with houses, and a temple. The main street was 5 meters wide and 200 meters long, and ran in the northwest-southeast direction, with a number of alleys leading off it. These streets basically gave the village its rectangular shape. More than 80 houses have been unearthed to date, but it is believed that approximately 200 houses had existed in the village. The remains that are seen today date from the third phase of the site, among three phases. All houses share communal walls, and have an entrance along a narrow passage leading from the street. The walls appear to have been built by stacking limestone blocks and ultimately plastering them over. The houses were basically single storey with roofs of palm leaves tied to palm beams.

The temple is located at the highest point of the village, slightly toward the north of the center of the settlement and to the northwest of the main crossroads of the village. It not only differs from the houses that surround it, but also displays a unique structure that is not seen in other buildings of the Dilmun period. It has an irregular trapezoid ground plan, with a curious bulge in the external wall at the western corner. The inside of the building is not particularly large, and was probably used only by a small number of people at any one time, including the priests. Two square columns and one round column that ran down the center of the space inside the building supported the ridge beam. The temple was entered from an entrance in the eastern corner that faced the main street.

Rituals were held inside the temple, as suggested by a crescent-shaped altar, which represented the moon in southern Babylonian religion.

Visitors require a pass to enter the site, and information boards have been erected, but the site is conspicuously falling to ruin. Today, the Ministry of Culture is taking the initiative in planning the construction of a new site museum.

Reference

Højlund, F. 2007 *The Burial Mounds of Bahrain – Social Complexity in Early Dilmun*. Jutland Archaeological Society. MacLean, R. and T. Insoll 2011 *An Archaeological Guide to Bahrain*. Oxford, Archaeopress.



Fig.20 Main Street

Fig.21 Remains of a house



Fig.22 Temple remains



Fig.23 Information board about the site



Fig.24 Broken signs



Fig.25 Main village area

#### Saar Cemetery

# تلال مدافن سار

In 1954, a Danish expedition conducted an excavation survey of the graves at Saar with the objective of comparing earthenware found in the settlement and in the graves (Bibby 1954; Glob 1968; Bibby 1996). The graves that lay between Janabiya and Saar were selected for the excavation Aerial photos of the site taken in 1959 showed 12561 graves of the Late Dilmun Type, and in 1980, Moawiyah Ebrahim estimated that more than 15000 graves exist in the site. By the 1990s, most of the graves were lost to the wave of urbanization, just as they were at the A'ali Burial Mounds, but today they have been well preserved as the Northern Burial Complex and Southern Burial Complex.

In the Northern Burial Complex, the burial facilities have a stone chamber in the center of the grave with alcoves attached to the ends of the main chamber. The main chamber is enclosed by a lateral layer of ceiling stones. The foot of the mound is encircled by a ring wall of vertically stacked stones. The smaller the mound, the more likely they are not to have any alcove. There are three types of stone chambers: pit chambers, horizontal chambers and vertical chambers. The horizontal or vertical chambers were adopted for the larger mounds, and there were also two-storey chambers as that seen in Mound 514 (Højlund 2007). In 1992 the London-Bahrain Archaeological Expedition rebuilt a stone chamber, which today allows a glimpse of what the graves looked like in the past (MacLean and Insoll 2011).

The group of graves called the Southern Burial Complex, or "Honeycomb Cemetery," located to the south of the main village area of Saar, was discovered in an excavation conducted accompanying the construction of Shaikh Isa Bin Salman Highway, which leads to Saudi Arabia. Archaeology researchers gathered together from the Arab countries to conduct the survey. As its name suggests, the cemetery is a cluster of small graves, with the ring wall of one grave extended and connected to the next grave like the growth of cells. It is not rare for the ring wall of one grave to be attached to the ring walls of several other graves. The graves are approximately 180 centimeters long, 90 centimeters wide and 90 centimeters high, with one end attached to a ring wall.

#### Reference

Højlund, F. 2007 *The Burial Mounds of Bahrain – Social Complexity in Early Dilmun*. Jutland Archaeological Society. MacLean, R. and T. Insoll 2011 *An Archaeological Guide to Bahrain*. Oxford, Archaeopress.



Fig.26 Saar Southern Burial Complex



Fig.27 Saar Southern Burial Complex



Fig.28 A stone chamber at the Saar Southern Burial Complex

#### Janabiya Burial Mounds

## تلال مدافن الجنبية

The Janabiya Burial Mounds is a large cemetery that spreads over the hills of the northeastern part of Bahrain Island, between the villages of Saar and Janabiya. Most of the burial mounds date from the Early Dilmun period, but there are some that date back to the Middle Dilmun period. Previously, the site was regarded as two separate cemeteries—the Saar Cemetery to the east and the Janabiya Burial Mounds to the west. However, there was little reason to consider them separate, as they virtually form one large burial field. Technically speaking, if the two cemeteries are to be distinguished from each other, the two tombs (Mounds 513 & 514) that were excavated in the Saar Cemetery in 1954 by the Danish Archaeological Bahrain-Expedition headed by Peter V. Glob would belong to the Janabiya Burial Mounds.

Around 1980, Moawiyah Ibrahim of Yarmouk University estimated that more than 15000 burial mounds exist in the site, but in recent years, the Danish expedition analyzed aerial photos taken in 1959 and counted 12561 mounds that existed in the Early Dilmun period.

The first large-scale excavation survey of the site was conducted in 1977-1979 by the Arab Expedition headed by Moawiyah Ibrahim. It was a preliminary survey of the planned site of construction of a connecting road to the main causeway linking Bahrain and Saudi Arabia, and resulted in the discovery of 61 mounds and two burial mound complexes.

Large and small mounds stand alone in some cases, and in other cases, they form a group of multiple mounds by the addition of new mounds outside the existing ones. The burial mound complexes were broad groups of several hundred relatively small mounds added to the group one after another.

The Arab Expedition did not complete their excavation of the burial complex, so at the request of Bahrain's Directorate of Archaeology, M. R. Mughal of Pakistan completed the survey by excavating Area D from 1980 to 1982. Area D occupies roughly one-fourth of the entire burial complex, and was composed of 153 burial mounds that were wholly or partially encircled by an ring wall. The overwhelming majority of the mounds have a single stone chamber for one person, but some had two to four rooms, so that as many as 178 chambers were excavated in all. The latter type of chamber dated from the Middle Dilmun Period.

Most countries that have gone through a period of high economic growth have experienced the same process of excavation of archaeological sites. In Bahrain, a series of preliminary surveys of buried cultural heritage continued up to the 1990s accompanying urban development. At the Saar-Janabiya Burial Mounds, Bahrain's Directorate of Archaeology excavated a considerable number of burial mounds in conjunction with urban development projects. Some of them have been preserved in their existing state immediately after excavation, and are expected to benefit future surveys and research of the tombs. The fact that ring walls of vertically-stacked stones have remained relatively intact indicates that the Dilmun graves were not sandy mounds but cylindrical stone structures. Mounds in a half-excavated state also provide useful material for understanding how graves have changed over time.

Today, the site is fenced off for protection, and a sign has been erected, prohibiting any acts of grave robbing and sand extraction.



Fig.29 An excavated burial mound



Fig.30 An excavated burial mound



Fig.31 An excavated burial mound



Fig.32 Janabiya Burial Mounds

Reference

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### Umm Jidr Burial Mounds

تلال مدافن أم جدر

The Umm Jidr Burial Mounds spread along a hillside in an area slightly to the west of the center of Bahrain Island, and are the southernmost group of burial mounds in Bahrain, stretching east-west following the natural shape of the land. Several thousand mounds exist in all, mostly measuring 5 to 10 meters in diameter, and include both the Early Dilmun Type and Late Dilmun Type. The Early Type dates from 2300 BC to 2050 BC. These mounds are piles of gravelly sand with a flat top, and have a stone chamber inside. The foot of the mound is encircled by a ring wall. Stone chambers of this period do not have a ceiling. The Late Type dates from 2050 BC to 1600 BC. These mounds are cones of sand with a ring wall around the foot of the mound, and have a stone chamber inside, capped with ceiling stones. The deceased person was buried along with such personal effects as pottery used in daily life, food items, ostrich egg shells used as drinking implements, accessories, and, toward the later years of the period, stamp seals. Many of the items were goods from Mesopotamia and the Indus region, indicating the exchanges that took place during this time.

The burial mounds here remain mostly intact without being destroyed, a rare case even in Bahrain. Among these mounds, 30 were excavated by Peter B. Cornwall in 1940 (Cornwall 1943, 1946a, 1946b), and 251 Late Type mounds were surveyed by a Danish expedition in 1965 (Højlund 2007). Thereafter, an additional seven mounds were excavated by a French expedition in 1979 (Cleuziou et al. 1981), and 35 mounds in the northwest end of the site were excavated in a rescue archaeology conducted by the Bahrain National Museum in 2006.

The site lies adjacent to a Formula 1 circuit and a safari park. Some of the burial mounds were destroyed when constructing these facilities, but owing to their far distance from the nearest city, these mounds remain one of the most well preserved of all burial mounds in Bahrain.

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Fig.33 Umm Jidr Burial Mounds

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#### Shakhura Burial Mounds

# تلال مدافن الشاخورة

The Shakhura Burial Mounds are Tylos period burial mounds that lie on the west side of Budayya Road, southeast of Barbar Temple in the northern part of Bahrain Island. They are in close proximity to the Jannusan Burial Mounds and Al-Hajar Cementery of the same Tylos period. Mounds of various sizes exist, from small to large, but they are characterized by a thickly plastered cist or multiple burial chambers painted over with plaster built on top of a tier of stone elements. In many cases, large numbers of such burial facilities were created within a single mound. In fact, Mound 1-119-93 had 188 cists, and Mound B2 had more than 300 (Salman and Andersen 2009).

The deceased person was buried along with such items as pottery, glassware, bone tools, terracotta, accessories, and coins, and an image of the deceased person's bust was placed on some mounds and cists as a headstone.

The burial mounds at Shakhura are the largest of all Tylos period burial mounds discovered to date. However, they display an extremely poor state of preservation. There are even mounds that have been scraped away, exposing the stone chambers to the aboveground environment and leaving human bones scattered on the ground.

#### Reference

Salman, M. I. and S. F. Andersen 2009 The Tylos Period Burials in Bahrain Vol. 2, The Hama Town DS3 and Shakhoura Cemeteries, Ministry of Culture & Information.

#### Jannusan Burial Mounds

تلال مدافن جنوسان

The Jannusan Burial Mounds are located in a richly green residential area on the east side of Barbar Temple. They constitute a row of eight massive mounds from east to west, the largest of which rises to a height of more than 10 meters. The mounds date from the Tylos period, as characterized by the plastered burial chamber that even today lies partly exposed in the third mound from the east.

The site is presently fenced off for protection, and a sign has been erected prohibiting any acts of grave robbing and sand extraction, but the protection measures do not seem to be adequate. Large amounts of rubbish have been illegally dumped at the site, and materials of the stone chamber have been removed.



Fig.34 A mound destroyed by the extraction of stone materials



Fig.35 A stone chamber that lay exposed aboveground



Fig.36 Jannusan Burial Mounds



Fig.37 Jannusan Burial Mounds

#### **Al-Hajar Cemetery**

The Al-Hajar Cemetery is located south of Shakhura and west of Budayya Road. Burial facilities were made by carving out a large rock and covering a rectangular shaft with a number of ceiling stones. No mounds of sand exist, however. Approximately 150 such burial facilities have been confirmed, the older ones dating from the Early Dilmun period, but most others having being reused or rebuilt during the Middle and Late Dilmun periods. Burial mounds dating from the Tylos period also exist in this cemetery in large numbers.

The site is presently fenced off for protection, but large amounts of rubbish are scattered within the site.

#### Muqaba Burial Mounds

The Muqaba Burial Mounds are located north of Shakhura and west of Budayya Road. In its present state, the site displays large but low mounds of sand that are believed to date from the Tylos period.

The site is presently fenced off for protection, but large amounts of rubbish have been illegally dumped on the site.

#### Al-Maqsha Burial Mounds

The Al-Maqsha Burial Mounds are Tylos period burial mounds that lie on the east side of Budayya Road. As a characteristic of this period, plastered cists were adopted as burial facilities. Burial mounds remain as they were after being surveyed, allowing a view of their burial facilities and ring wall.

No measures have been taken to protect the site. Stone chambers are fractured, and rubbish lay strewn about.

## تلال مدافن الحجر

تلال مدافن المقشة

# تلال مدافن المقابة



Fig.38 Al-Hajar Cemetery



Fig.39 Al-Hajar Cemetery



Fig.40 Muqaba Burial Mounds



Fig.41 Muqaba Burial Mounds



Fig.42 Al-Maqsha Burial Mounds



Fig.43 Al-Maqsha Burial Mounds

#### Qal'at al-Bahrain

قلعة البحرين

Qal'at al-Bahrain sits on a tell on the north coast of Bahrain Island, roughly five kilometers from Manama, the capital city of Bahrain. Measuring 12 meters in height and occupying an area 300 meters  $\times$  600 meters, the tell is composed of the remains of successive settlements that existed from 2200 BC to the 16th century AD.

A Danish expedition was the first to conduct an excavation survey at Qal'at al-Bahrain. They excavated the tell annually from 1954 to 1978. In 1977, a French team also began their own excavations of the site, which are being continued to this day.

The remains of a fortified settlement that dates from 2200 BC were excavated from the lowest layers of the site. From around the latter half of the third millennium BC, the name Dilmun began to appear in ancient Mesopotamian records. This "Dilmun" is presumed to refer to Bahrain Island. Studies of Mesopotamian literature have found that Dilmun merchants engaged in marine trade in the Gulf and carried copper, gold, silver, lapis lazuli, carnelian, and various other items to Mesopotamia. As though to support this, Mesopotamia and Indus style seals and weights that were used in trade transactions, and pottery from Mesopotamia and Iran have been discovered from Qal'at al-Bahrain.

Qal'at al-Bahrain continued to be occupied by successive settlements thereafter, through the second and first millenniums BC. Today, it is dominated by the Portuguese Fort. As Bahrain was a strategic spot for maritime traffic in the Gulf, Portugal, Iran and the Ottoman Empire waged repeated battles on Bahrain Island particularly in the 16th century, to gain control of seaborne trade in the Gulf. The scene of these battles was the Portuguese Fort. In 1561, the Portuguese renovated and reconstructed the fort to its current appearance.

Qal'at al-Bahrain was inscribed on the UNESCO World Heritage List in 2005 in recognition of its outstanding universal value, and became the first World Heritage Site in Bahrain. Reconstruction and restoration work is currently underway centered on the Portuguese Fort, and the site has been outfitted with tourist passes and audio guides. In 2008, a site museum was constructed next to the site (see the page on the Qal'at al-Bahrain Site Museum).

Bahraini authorities put forth two specific requests concerning cooperation for Qal'at al-Bahrain. One was for an archaeological survey of the site's buffer zone. Qal'at al-Bahrain is surrounded by a date palm grove, which acts as a buffer zone to protect the landscape of the site. However, remains of Islamic period residences and other buildings have been discovered from the buffer zone in recent years. Excavations are being conducted, but out of concern that the buffer zone may be engulfed in urban development in the future, a request for a archaeological survey was made to the Japanese parties concerned. The second request was for cooperation on the excavation and restoration of Captain's Tower, a two-storey structure that stands in the center of the Portuguese Fort. The request emphasized the need for excavation and restoration to preserve not only the tower, but also the entire site.

#### Reference

MacLean, R. and T. Insoll 2011 An Archaeological Guide to Bahrain. Oxford, Archaeopress.



Fig.44 Satellite view of Qal'at al-Bahrain (©Google)



Fig.45 The Portuguese Fort



Fig.46 Islamic period structures



Fig.47 Captain's Tower in the Portuguese Fort



Fig.48 Remains of Islam period residences discovered in the buffer zone



Fig.49 The Portuguese Fort in the 1980s

#### Barbar Temple

معبد باربار

Barbar Temple was built during the Barbar civilization (Early Dilmun period), in an area south of the village of Barbar located near the northwest coast of Bahrain Island. It was discovered in 1954 by archaeologist Peter V. Glob, and was subsequently excavated by eight seasons of the Danish Archaeological Bahrain-Expedition up to 1961-1962. Additional excavations were conducted in 1970, 1983 and 2004 to shed light on questions that have arisen thereafter.

Prior to the excavations, the site of the temple appeared to be two mounds, one large and one small, 10 to 20 meters apart. However, the excavation revealed two buildings with a stone masonry platform (main temple and northeast temple). The main temple discovered under the large mound was the remains of temples built in three phases, which, according to a study of excavated earthenware, corresponded to Qal'at al-Bahrain Phase II. The northeast temple was built sometime close to Phase III of the main temple.

During Phases I and II, the temple was built on a rectangular platform (upper platform) measuring 25 meters on each side on top of an oval platform (lower platform) that measured approximately 50 to 60 meters in diameter. It also had a well, a pool, staircases that led to the pool, an oval enclosure, and various other ancillary facilities. In Temple II, a double circular altar was created on the upper platform. Temple III also had a rectangular platform which measured approximately 40 meters on each side, but its poor state of preservation makes any detail indiscernible, besides the fact that the temple had a well.

Artifacts unearthed from the site include a bronze bull's head, which is symbolic of archaeology in Bahrain. However, also discovered were numerous other copper and bronze items, as well as a considerable number of alabaster and calcite vessels, Dilmun stamps and clay tokens with stamp impressions. Some of the clay tokens have the same seal stamped on them as items unearthed from the Saar Settlement.

The northeast temple was discovered some 20 meters from the rectangular platform of Temple III. It also had a rectangular platform measuring 24 meters on each side, which is now believed to be an upper platform that was built on a larger lower platform. There are no traces of a building on the upper platform, but a staircase leading to an underground well chamber was discovered in the center of the platform. In the chamber were two water channels. Rather than an independent temple, the northeast temple has been interpreted as a pool belonging to the main temple during Phase III.

Barbar Temple proved the existence of a civilization in Early Dilmun, or Bahrain, and gave the Barbar civilization its name. It is the largest temple yet discovered in Bahrain, and was clearly dedicated to the Mesopotamian water god Ea or Enki, who lived in fresh water underground.

The main temple has been restored, and is attracting a steady stream of visitors to see the remains of Temple II from a tourist walkway. The northeast temple, on the other hand, has been covered with sand and cannot be seen today. The Ministry of Culture is taking the initiative in planning the construction of a new site museum next to the temple remains.

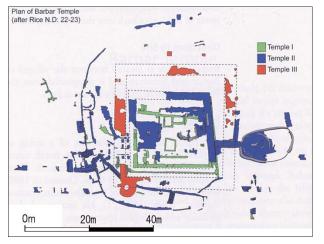


Fig.50 Plan of Barbar Temple



Fig.51 The well and pool inside Barbar Temple



Fig.52 Standing stones at Barbar Temple



Fig.53 Oval enclosure inside Barbar Temple



Fig.54 Information board about Barbar Temple



Fig.55 Bronze bull's head unearthed from Barbar Temple

#### Reference

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### Diraz Temple

معبد الدر ز

Diraz Temple is also called Diraz East Temple, as it stands to the east of the modern of village of Diraz along the north side of Budayya Road. A settlement of considerable size is believed to have existed here, but a large portion of it has been lost to development, and all that remains is some 1000 square meters including the area that has been excavated. The remains were found to be those of an Early Dilmun temple in the excavation carried out in 1983 by the British expedition headed by Michael Roaf, but no details have been reported.

The temple is made of stone masonry, with plaster used in some places. It has a small inner chamber measuring approximately 5.5 meters on each side of its outer perimeter and an entrance on the west side. A number of small rooms are attached to the east side. An orderly row of nine columns stands to the west and north sides of the inner chamber. In front of the entrance is a rectangular altar. The row of columns was thought to support a ceiling from inside the temple, but some recent studies suggest they were a group of round altars built outside the temple, in consideration of their similarity with the temple in the Saar Settlement. On the west side of these columns is a rectangular room with an inner perimeter measuring roughly 10 meters by 3 meters and an entrance on the east side. This room is part of a building composed of multiple rooms, but the other rooms have mostly been lost.

The temple was thought to have been reused in the Late Dilmun period. In fact, a bowl similar to that which was used for snake burials at Phase IV of Qal'at al-Bahrain has been excavated, although no proof has been found as to whether the same type of peculiar custom was practiced in Diraz. The room in which at least five people lay buried also dates from the same period.

In the suburbs of Diraz village where the site is located, urban development is advancing yearly, and the wave of urbanization has also reached the vicinity of the preservation area. As one of few Dilmun period temples, this temple must be preserved. As it stands now, the site is enclosed by a metal fence to prohibit trespassing, but there are gaps in the fence that allow easy encroachment. Repairing or renewing the fence, however, is still a long way from utilization of the site. Rather, meaningful utilization could be better achieved by effectively repairing the necessary parts of the site and creating pathways that allow visitors to enter the site up to a certain point. Putting up information boards would also be an effective means of promoting understanding of the site and voluntary actions for its protection among visitors.

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Clarke, A. 1981 The Islands of Bahrain. The Bahrain Archaeological and Historical Society.



Fig.56 Diraz Temple



Fig.57 Diraz Temple

### Ain Umm as-Sujour Site

# موقع عين أم السجور

The Ain Umm as-Sujour Site dates from the Early Dilmun period. It is located in an area 600 meters northnorthwest of Diraz Temple on the east side of the village of Diraz in the northeastern part of Bahrain Island. Nestled among five sand mounds are oval basins that measure almost 60 meters in diameter across the long axis, and slight elevations that stretch toward the southeast., Large numbers of carefully processed, large stone materials lay scattered about.

There is a legend associated with the formation of this strange landscape that resembles a volcano crater. It is said that Abdul Malik Ibn Marwan (685–705), an early caliph of the Islamic period, backfilled Bahrain's largest well that was located in this region to punish the villagers who reverted back to a paganism of the pre-Islamic period.

In 1954, the Danish Archaeological Bahrain-Expedition headed by Geoffrey Bibby and Peter V. Glob conducted a small-scale excavation of the site for the first time, and discovered a rectangular well chamber and an L-shaped staircase extending from the chamber under a sand mound. A particularly noteworthy item excavated from the site was a pair of stone animal statues with missing heads. The site was referred to as a "Sacred Well."

The site was re-excavated in four seasons from 1991 to 1996 by a Japanese archaeological team headed by Masatoshi A. Konishi. The re-excavation of the well structure (Well No. 1) that was discovered by the Danish team led to the discovery of a water drain extending from the well chamber. The Japanese team also discovered another extremely similar structure (Well No. 2) next to the first structure. While Well No. 1 was an aboveground structure, Well No. 2 was a semi-underground structure that was built after Well No. 1 fell into disuse and the ground surface had risen considerably. A stone altar has also been unearthed from this site, and was considered an ancillary facility of the temple, along with Well No. 1.

The Japanese team thereafter excavated the large basins and the sand mounds around it. The former were artesian springs used until recent years for agriculture. They were formed as a result of the destruction of the large stone structure that was the Early Dilmun period temple to which the two well structures belonged, and the robbing of its stone materials. The sand mounds and scattered stone materials around the basins are remnants of this destruction.

Vestiges of a settlement that had existed at the end of the Early Dilmun period or later were discovered from the southeastern elevation. Around this time, the temple had already fallen to ruin, and the pillage of stone materials had begun. Local residents used the stolen stones to build their houses, but the majority of those stones were again stolen by stone robbers in later years.

Ain Umm as-Sujour Site is an Early Dilmun period temple, but from soon after its ruin, it was subject to ongoing destruction for the purpose of obtaining its stone materials, and artesian springs were dug in search of underground water. The temple has completely disappeared, but the two well structures that belonged to the temple were preserved under the sand. These well structures and the two pools at Barbar Temple that were of similar structure were thought to lead to the underground home of the water god that the temples had probably worshipped. The ancient people of faraway Mesopotamia heard of Dilmun's belief in the water god and created a myth of Dilmun myth about Enki and Ea.

Since the surveys by the Japanese team, the site has been completely fenced off from intruders. However, an information board about the site should be erected where it can be seen from the outside, and consideration should be given to the future preservation and utilization of the site.



Fig.58 Ain Umm as-Sujour Site

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### Arad Fort

قلعة عراد

Arad Fort is located on the west coast of Muharraq Island in northeastern Bahrain. It was built in the 13th century to protect Muharraq, which used to be the center of Bahrain, and is one of the most strategically important forts in Bahrain. Its name can be found even on ancient maps of 15th century Bahrain. The name Arad comes from Arados, which referred to Muharraq Island during the Tylos period.

The fort has a rectangular plan with circular towers in the four corners. The entire fort was surrounded by a moat in the past.

A preservation and restoration project has been implemented at Arad Fort over a period of three years in the 1980s. Today, the area around the fort has been developed into a seaside park equipped with sports and leisure centers. The Arad Fort site also provides a parking lot for visitors and tourists, but unfortunately, no information boards have been put up to explain the history of the fort.

The Bahraini government is presently planning the construction of a visitor center that includes a small exhibition hall and a café to the side of the fort. There is also a plan to connect Bahrain Island on the opposite coast and Arad Fort directly by a bridge.



Fig.59 Satellite view of Arad Fort (©Google)



Fig.60 External view of Arad Fort



Fig.61 The inside of Arad Fort



Fig.62 External view of Arad Fort

# Shaikh Salman Bin Ahmed al-Fateh Fort قلعة الشيخ سلمان بن أحمد الفاتح

Shaikh Salman Bin Ahmed al-Fateh Fort is a rectangular fort constructed on top of a cliff in the Riffa District in central Bahrain, and is also called Riffa Fort. It was strategically built to command a view of the cities of Bahrain that are spread over a land that is mostly flat. It was first built by Shaikh Fraeer bin Fahal during Shaikh al-Gabrey' s rule during the 17th century. When the Al-Khalifa family came into power over Bahrain, Shaikh Salman bin Ahmed al-Khalifa built a new fort on the site of the former fort in 1812 for military purposes. After the domestic situation stabilized in the latter half of the 19th century, it was converted and used as a residence. Shaikh Isa bin Ali was born in this fort in 1848.

While displaying the style of a 19th century Islamic military fort, Shaikh Salman Bin Ahmed al-Fateh Fort is made of local materials such as limestone, soil, palm trees, and mangrove. The ceilings are mostly made of soil, but are coated with plaster and decorated with carvings in some places. A tower stands in each of the four corners; two are round and the other two are square. There are three courtyards inside the fort, which are surrounded by rooms—35 in all—used as residence. A mosque is also said to have existed inside the fort, although there are few reference materials that corroborate this fact.

In 1987, talk of a restoration plan came up, and from 1989 to 1993, the fort was restored to its original state at the time of its construction. It is now open to the public as a tourist attraction, and is lit up at night so it can be seen from afar. It thus provides useful value as a tourism resource.

Restoration has been completed and the building is in stable condition, so there are no particular issues of concern in the area of conservation and restoration. However, as no information boards have been put up inside the building, there is room for cooperation in promoting the use of the site in ways that would deepen understanding of the fort's historical significance, architectural style and restored areas.

Reference

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Fig.63 Full view of Shaikh Salman Bin Ahmed al-Fateh Fort



Fig.64 A courtyard inside Shaikh Salman Bin Ahmed al-Fateh Fort



Fig.65 A square tower at Shaikh Salman Bin Ahmed al-Fateh Fort



Fig.66 Entrance to the residential quarters in Shaikh Salman Bin Ahmed al-Fateh Fort

### Al-Khamis Mosque

مسجدالخميس

Al-Khamis Mosque, famous for its two minarets is the oldest mosque on Bahrain Island, located in the Bilad al-Qadim district along Shaikh Salman Highway. It was built in the early 8th century and was used until around the 14th century. In the 19th century, it came to be called Al-Khamis Mosque or Suq al-Khamis Mosque after the marketplace (Suq al-Khamis) that was held next to the ruins of the mosque every Thursday.

The mosque was repaired and restored by the Bahraini government in the 1950s. In the 1980s, a French expedition headed by Monik Kervan excavated the site and uncovered the ground plan of the mosque. In the 21st century, a British expedition headed by Timothy Insoll excavated part of a city that dates back to the 8th century from an area around the mosque, and revealed the previous prosperity of the Bilad al-Qadim district, which flourished as the center of Bahrain Island.

Al-Khamis Mosque has been developed into a monument park and opened to the public, but it is markedly falling to ruin. The walls that surrounded the mosque have collapsed, and the information board on the site has faded, rendering it illegible. The Bahraini government, however, has plans for the construction of a new site museum and for renovation of the park.

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#### Qanat in Islamic Age

قناة في الفترة الإسلامية

A qanat stretches north-south along the west side of Road 508, northwest of the Karzakkan Burial Mounds among the Hamad Town Burial Mounds. It drew water from a water source enclosed by a square stone wall. Today, some 300 meters of the qanat can be confirmed, but the wellhead has run dry, and a tree now stands near the northern side of the wall in the area that is thought to mark the water source in the middle of the wellhead. The shafts that were made for cleaning the inside of the qanat remain simply as a row of depressions. This qanat is said to date from the Islamic age.

#### Al-Khamis Mosque



Fig.67 The spires of Al-Khamis Mosque



Fig.68 A spire of Al-Khamis Mosque



Fig.69 Al-Khamis Mosque after restoration



Fig.70 Faded information board



Fig.71 Qanat shaft



Fig.72 The water source of the qanat

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#### Bahrain National Museum

# متحف البحرين الوطني

Bahrain National Museum was built by Shaikh Isa bin Salman al-Khalifa and opened in 1988 as the largest national museum in Bahrain. It is located along King Faisal Highway in the northeastern part of Bahrain Island. Designed by Wohlert Arkitekter A/S in Denmark, it covers a total floor area of 200000 square meters and boasts an extremely modernistic design.

The museum showcases the history and culture of Bahrain, from the Stone Age to the present, in an easyto-understand manner in seven exhibition halls: the Dilmun Hall, Tylos and Islamic Hall, Hall of Graves, Hall of Documents and Manuscripts, Hall of Customs and Tradition, Hall of Crafts and Trade, and Natural History Hall. In addition to these regular exhibition halls, the museum also features a café, museum shop, auditorium, study rooms, and special exhibition halls. The exhibits are creatively arranged to facilitate understanding. For example, the Hall of Graves provides an impressive exhibit of various types of graves from the Dilmun to Tylos periods that have been rebuilt inside the hall. Admission is a mere 0.5 dinar (approx. 100 Japanese yen), and museum hours are surprisingly long, from eight o'clock in the morning to eight o'clock at night.

Located on the same site as the museum are the offices of the Directorate of Museum, the Directorate of Archaeology and Heritage and the Directorate of Culture and Arts. In a meeting with an officer from the Directorate of Museum, the Japanese side received a specific request for a long-term workshop on museology and a training program for conservation and restoration specialists, as there are no universities in Bahrain that provide technical programs for museology and conservation and restoration work at present. The museum officer mentioned that UNESCO has sent experts to hold workshops in Bahrain in the past, but they were short-term programs that did not necessarily lead to effective results. The implementation of a long-term and systematic human resources development initiative is therefore sought.

#### Reference

Vein, P. 1993 Bahrain National Museum. Lonodn, Immel Publishing Ltd.



Fig.73 Front entrance to Bahrain National Museum



Fig.74 Artifact ledgers



Fig.75 A grave that has been rebuilt inside Bahrain National Museum



Fig.76 A stone chamber that has been rebuilt inside Bahrain National Museum



Fig.77 The Hall of Customs and Tradition



Fig.78 Storage room

#### Qal'at al-Bahrain Site Museum

متحف موقع قلعة البحرين

Qal'at al-Bahrain Site Museum, located adjacent to the Qal'at al-Bahrain site, is a new museum that opened in February 2008, displaying a refined design by Wohlert Arkitekter A/S in Denmark.

The museum exhibits some 500 items unearthed from Qal'at al-Bahrain and classified into five exhibition halls dedicated to the Early Dilmun period, Middle Dilmun period, Late Dilmun period, Tylos period and Islamic period, for easy understanding. Like the strata of the tell on which the fort stands, the older the exhibits, the lower the floors of the halls in which they are exhibited in the museum.

The museum is equipped with modern facilities, including touch panels and lifts for the disabled. Admission is a mere 0.5 dinar (approx. 100 Japanese yen), and museum hours are surprisingly long, from eight o'clock in the morning to eight o'clock at night.

A café and museum shop are attached to the museum. The café is open longer than the museum, until ten o' clock at night, and is even more popular than the museum itself, as it is located on the museum's terrace that faces the sea. At night, if offers a magnificent view of Qal'at al-Bahrain lit up with lights.



Fig.79 Front entrance to the museum



Fig.80 The site museum and Qal'at al-Bahrain



Fig.81 Exhibition hall



Fig.82 Touch panel installed inside the museum



Fig.83 Museum café

### Beit al-Qur'an (House of Qur'an)

نيت القرأن

Beit al-Qur'an is one of the most renowned Qur'an museums in the Arab world, built in the Hoora district of Bahrain's capital city of Manama in 1990 by Abdul Latif Jassim Kanoo. It exhibits Qur'an manuscripts from various periods and from throughout the Islamic world, centered on Dr. Kanoo's personal collection. The museum houses a library and mosque, and also serves as a research institution for Qur'an studies.

The collection at Beit al-Qur'an includes extremely old Qur'an manuscripts that date as far back as the seventh and eighth centuries, but some of them show considerable wear and tear. Japan may be able to cooperate in various ways to conserve and restore these manuscripts, as Japan's paper conservation and restoration technologies are among the most advanced in the world. In fact, during the study team's stay in Bahrain, the staff of the Bahrain National Museum specifically requested Japan's cooperation on the conservation and restoration of Qur'an manuscripts.



Fig.84 Beit al-Qur'an

4 Cultural Heritage in Bahrain

### Shaikh Salman House

بيت الشيخ سلمان

Shaikh Salman House, a grand house that includes 27 rooms surrounding four courtyards, was originally built by Shaikh Salman Bin Ahmed. At the introduction of the Ministry of Culture, the study team conducted an onsite interview survey with Mr. Alaa al-Habashi, an Egyptian architect and restoration expert. According to Mr. Al-Habashi, the house was restored once in the 1970s using concrete, but as the originality of the building has been lost and salt is degrading the concrete today, restoration work has performed mainly to remove the concrete by February 2012. Mr. Al-Habashi is supervisor of the restoration site.

Mr. Al-Habashi also said that studies of Bahrain's architectural history are underway, but the development of restoration workers remains an issue at hand. Indeed, workers in the field were mostly from the Philippines, Bangladesh, India and Pakistan, and none from Bahrain. Furthermore, the restoration of interior decorations using plaster and other such tasks that require specialized skills were undertaken by Egyptian workers possessing a master's degree in the restoration field. Consideration is being given to creating exhibition halls in the future, featuring the conservation and restoration work and the history of the royal family. The house is not open to the public at present, but its doors are scheduled to be opened upon completion of its restoration.

Development of skilled restoration workers is thought to be an area for potential cooperation by Japan.



Fig.85 External view of Shaikh Salman House (the tower at the far left is under restoration)



Fig.86 Inner courtyard of Shaikh Salman House



Fig.87 The inside of Shaikh Salman House



Fig.88 Restoration of interior decorations at Shaikh Salman House



Fig.89 Comparison of the interior of Shaikh Salman House before and after restoration



Fig.90 The kitchen inside Shaikh Salman House

#### Shaikh Isa Bin Ali House

بيت الشيخ عيس بن علي

Shaikh Isa Bin Ali House is located in the center of the former capital city on Muharraq Island. It was built in 1800 by Shaikh Hassan Bin Abdulla Bin Ahmed al-Fateh, and is considered the oldest of all houses that still exist in Muharraq. It was thereafter used as the residence of the Al-Khalifa family, but from 1869 to 1932, it was used by Shaikh Isa bin Ali both as his residence and as his seat of government.

The house has a simple layout, but is characterized by walls that are one meter thick to withstand the severe climate, and by a combination of materials that are available in Bahrain, such as limestone, plaster and palm trees, and bamboo imported from India. Owing to such creativity, the house is said to be cool in summer and warm in winter. The entrance area is decorated using plaster, and is fitted with a wooden door. The inside of the house is divided into family quarters, ruling quarters, guest quarters and servants' quarters. A massive wind tower provides air conditioning.

Some parts of the house were closed off for restoration, but the house is normally open to the public as a tourist attraction. In addition to a large information board at the entrance written in English and Arabic, information boards in each room facilitate understanding of the house by visitors. No information was obtained regarding the details and contractor of the restoration work, nor about future plans for management of the house.

#### Reference

Kingdom of Bahrain, Ministry of Information, Culture and National Heritage, Directorate of Archaeology and Heritage *Shaikh Isa Bin Ali al-Khalifa House*. Government Printing Press, Kingdom of Bahrain.

### Seyadi House

بيت سيادي

Seyadi House was originally built in 1905 by a well-known pearl merchant named Ahmed bin Jassim Seyadi. The inside of the house is graced with plaster decorations, wooden window frame decorations and stained glass, and is said to exhibit the craftsmanship of Bahraini artisans of the time. As the house was closed by the time the study team arrived, adequate information about the house could not be obtained. Along with Seyadi Mosque next door, Seyadi House is one of the component elements of the historical buildings in Muharraq, which were inscribed on the World Heritage List in 2012 as "Pearling, Testimony of an Island Economy."

Reference

Kingdom of Bahrain, Ministry of Information, Culture and National Heritage, Directorate of Archaeology and Heritage *Bahrain Attractions*. Government Printing Press, Kingdom of Bahrain.



Fig.91 Residential quarters and the wind tower around the innercourtyard of Shaikh Isa Bin Ali House



Fig.92 Inner structure of the wind tower of Shaikh Isa Bin Ali Hous



Fig.93 An interior door in Shaikh Isa Bin Ali House



Fig.94 External view of Seyadi House



Fig.95 Entrance to Seyadi House

## Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research مركز الشيخ إبراهيم بن محمد الخليفة للثقافة و البحوث

Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research was established in 2002 by Shaikha Mai bint Mohammed al-Khalifa, who is also the present Minister of Culture, to promote exchanges in arts and culture in commemoration of Shaikh Ebrahim bin Mohammed al-Khalifa's contribution to culture and education programs in Bahrain in the 20th century. Shaikha Mai, who still serves on the board of trustees as representative of the Center today, has renovated and uses the house of Shaikh Ebrahim bin Mohammed al-Khalifa, and has an office in the building to which a public hall has been added. The Center not only sponsors exhibitions and seminars, but also renovates and manages historical buildings located in the vicinity of the office. Among the historical buildings restored by the Center, those visited by the study team will be described later. Other buildings that could not be visited but have been restored and are in use today include Mohammed Bin Faris Sut Music House (opened in 2005), Ebrahim al-Arrayed House (opened in 2006) and IQRA Children's Library (opened in 2009).

On the whole, the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research appears more focused on community development through engagement in "soft" initiatives such as the establishment of community centers and cafés rather than the implementation of "hard" initiatives such as the restoration of cultural heritage. Furthermore, the Center's restoration policy aims not to preserve cultural heritage in their existing state, but anticipates their utilization and aims to achieve adaptive reutilization with a view to promoting the active use of historical buildings. It is particularly noteworthy that such initiatives take into consideration their utilization by local residents and not their development as a tourist resource.

In this particular survey, the study team did not acquire materials on the value assessment and architectural history of the historical buildings, and did not have the opportunity to interview the officers in charge. For this reason, there is no information on the architect, builder and management plans for each cultural heritage, nor information on whether the historical buildings restored by the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research are designated as cultural heritage in Bahrain. Nevertheless, these provide interesting examples of individually-owned cultural heritage being restored based on the action policies of the owner with the financial support of private sponsors in Bahrain. They would also provide good future reference points for examining protection concepts and frameworks through comparisons with the preservation principles and methods applied to the historical buildings of Muharraq, which have been inscribed on the World Heritage List in 2012. There may be little room for Japanese cooperation, but if and when conservation projects are jointly implemented by Bahrain and Japan, acquiring such case examples would be necessary to conduct basic research on preservation principles and methods.

#### Reference

Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research, http://www.shaikhebrahimcenter.org/index.html



Fig.96 Front entrance to the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research



Fig.97 Area around the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research



Fig.98 Public hall inside the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research

## Kurar House

Kurar House was established in 2007 with the objective of handing down to the young generation Bahrain's traditional craft called Kurar (gold-thread embroidery), which is done by women. The inside of the house has been renovated and now boasts a modern interior for displays and demonstrations of making traditional costumes embellished with Kurar embroidery.

## House of Coffee

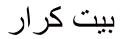
While leaving the façade untouched, the inside of the building has been completely renovated into a café, which opened in 2009.

## Abdullah az-Zayed House

Abdullah az-Zayed House is the first building that the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research restored after its opening in 2003 through the sponsorship of private companies. It was built in 1938 as the home of Abdullah az-Zayed, the founder of Bahrain Newspaper, which was the first weekly newspaper to be published in Bahrain and the Gulf region. Today, the house displays issues of Bahrain Newspaper and handwritten letters by Abdullah az-Zayed, and provides a venue for lectures and seminars about the media. The house retains its original wooden ceiling, but the inside boasts a new interior and highly modern design.

## Reference

Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research, http://www.shaikhebrahimcenter.org/index.html



بيت القهوة

بيت عبدالله الزايد

Kurar House

House of Coffee



Fig.99 Displays inside Kurar House



Fig.100 Courtyard of Kurar House



Fig.101 Exterior of the House of Coffee



Fig.102 The inside of the House of Coffee



Fig.103 Interior of Abdullah az-Zayed House

## Suq al-Qisariya

# سوق القيصرية

Suq al-Qisariya, located in a commercial area where many historical buildings still stand, comprises a dock (which has been reclaimed and no longer exists), warehouses (amara) and stores (dukkan) that were built in the latter half of the 19th century to promote the pearl trade.

The Ministry of Culture introduced Mr. Alaa al-Habashi, a restoration expert in charge of the restoration project in the area, and the study team did a walk-through of the area under his guidance while interviewing him to acquire detailed knowledge.

In 2006, the Bahraini government had been planning to tear down all of the traditional buildings in the area to build a new shopping mall. However, a protest headed by Shaikha Mai bint Mohammed al-Khalifa, present Minister of Culture, succeeded in moving the government to preserve the area of the traditional buildings.

Restoration and utilization projects are presently underway at four buildings (two amara, one dukkan, one coffee shop). Other buildings that are at risk of collapsing and require urgent treatment are being addressed by an emergency conservation and restoration team that has been organized, composed of three architects and 20 workers.

The first floor of an amara provides space for storing products called mustauda, and is kept well ventilated. The second floor is living space. The buildings are made using mangrove imported from India, and have walls made of coral stones. Some amara are being renovated into cafés, as affirmative restoration examples. As with the Shaikh Ebrahim Bin Mohammed al-Khalifa Center for Culture and Research, the study team received the impression that diverse preservation principles are at work here.

In 2012, after the survey, the group of historical buildings in Muharraq was inscribed on the World Heritage List as "Pearling, Testimony of an Island Economy." The component elements of the site consist of 17 buildings and three oyster beds for pearl cultivation. Whether the commercial facilities that were visited in this particular survey are among the buildings constituting the component elements has not been verified.

The site was inscribed on the World Heritage List in recognition of its role in the development of the tradition of pearling, for which Bahrain has been known since ancient times, and the worldwide trade in pearls, which peaked from the late 19th century to the beginning of the 20th century and led to the development of Muharraq as a merchant city. The commercial facilities and homes that are the component elements of the site have remained virtually unchanged in appearance since ancient times, and their elaborate architectural decorations are considered particularly precious, as they reflect the economic activities of the times.

The entire area that includes the historical buildings in Muharraq and the area designated as a World Heritage Site is protected by the Decree law No. (11) Regarding the Protection of Antiquities, and has been placed under the supervision of the Ministry of Culture in 2010. In 2011, the Ministry formulated a development plan for the old town in Muharraq, and also established a buffer zone. These initiatives placed the cultural heritage in the area under a more comprehensive management framework than before, and have allowed a thorough check of unplanned development and historical buildings at risk of collapse. Management frameworks have also been organized, including the establishment of a governing board for proper management of cultural heritage composed of 12 ministries, landowners and corporate representatives, and a sub-committee of experts on cultural heritage.

In the future, technical cooperation for the development of Bahraini restoration workers could be considered as an area for potential cooperation by Japan.



Fig.104 Area around Suq al-Qisariya



Fig.105 Interview with Mr. Alaa al-Habashi



Fig.106 External view of an amara



Fig.107 The inside of an amara



Fig.108 Renovation of a dukkan into a café

Fig.109 Renovation of a dukkan into a café

## Reference

Pearling, Testimony of an Island Economy, UNESCO, http://whc.unesco.org/en/list/1364/

## 5. Observations

### 5–1. Present State and Issues

This section discusses the present state of cultural heritage sites in Bahrain that has come to light through this survey and issues that have surfaced as a result thereof. First of all, interviews have shown that among the Gulf countries, Bahrain is particularly motivated to achieving growth centered on its culture. Under the leadership of Shaikha Mai bint Mohammed al-Khalifa, Minister of Culture, active efforts are being made to protect Bahrain's cultural heritage. In fact, "protection of the country's cultural and archaeological heritage" is included among the ten planning principles for development and growth in "Bahrain Economic Vision 2030," a plan that outlines the future path for national development and growth over the next 20 years<sup>6</sup>. The Bahraini government's active stance toward cultural heritage protection can also be seen in its candidacy to host the 2011 World Heritage Committee, the establishment of the Arab Regional Center for World Heritage (ARC-WH), its hosting of international academic conferences and festivals, and plans for the construction of site museums, among other initiatives. As the Islamic precepts are not as fundamentally enforced as in other Gulf countries and security is stable, Bahrain has ample potential to further develop its tourism industry in the future based on its cultural heritage.

Bahrain's framework for cultural heritage protection includes a law for protection of cultural heritage, and the government is showing a positive attitude toward ratifying various relevant conventions. Furthermore, the Ministry of Culture provides integrated administration for cultural heritage protection, and joins hands with other ministries as required. Thus, the necessary framework for cultural heritage protection and management appears to be taking shape. On the other hand, human resource development in Bahrain is lagging, and some Bahrainis are shouldering a concentrated burden. Cooperation is being obtained from consultants from foreign countries, but foreign cooperation has dropped compared to before. Today, France and Denmark are the main providers of international assistance to Bahrain, but their assistance is not long term. Going forward, it will likely become necessary to develop human resources in the country while efficiently utilizing schemes for technical transfers from foreign countries. Efforts would need to be made to raise the general level of fields related to cultural heritage protection not only through short-term workshops but also through the establishment of relevant directorates in universities, providing opportunities for long-term studies in foreign countries, and long-term employment of foreign experts.

Details of cultural heritage protection have been provided in the foregoing sections, so here let us take a look at the issue from the general perspective. First of all, the destruction of burial mounds is a major concern. Although burial mounds represent a symbolic heritage of Bahrain, they are being lost to development, and are deteriorating due to grave robbing, illegal dumping of rubbish, and unauthorized stone and sand extraction. Measures have been taken to protect them, such as by establishing relevant laws, introducing penal provisions, posting warning signs and erecting fences to enclose the sites, so future improvement is expected in terms of their environment. However, without any information boards around the sites to explain their significance, it is questionable whether the people of Bahrain, including local residents, and tourists can gain a clear understanding of the sites. Of foremost importance to proper management and maintenance of the sites is perhaps to take measures that

<sup>6</sup> Refer to Bahrain National Planning Strategy 2030, SOM, http://www.som.com/content.cfm/bahrain\_national\_planning\_development\_strategy for more details.

promote understanding of their value among as many people as possible.

At Qal'at al-Bahrain, active efforts are being made toward its utilization and exhibition. A management plan has been established, and the site has been developed with the introduction of audio guides and the construction of a site museum. However, UNESCO is prompting the formulation of a detailed conservation management plan for the site, because while an archaeological distribution survey needed to be conducted before a buffer zone could be established, some areas of the buffer zone still remain unsurveyed. A distribution survey was required, because the region had already been developed into a city in ancient times. Furthermore, the structure on the site called the Captain's Tower has collapsed and cannot be approached due to its perilous condition. Located in the center of the site, the tower commands a magnificent view of the Gulf, and is also important to gaining an understanding of the history of Bahrain and its development based on trade in ancient times. For these reasons, the cooperation of foreign archaeological expeditions is sought in excavating and developing the site.

Museums in Bahrain offer sophisticated exhibits, provide English descriptions in many cases, and have a wellmanaged display environment. An inspection of the National Museum's storage room and archives revealed that artifacts are systematically managed using artifact management cards. A paper inventory of items in storage was also available and is currently being converted to electronic format. The two conservation and restoration workers at the museum are said to be relatively experienced at their job, but the number of such workers seems to be lacking when considering the significance and quantity of the stored items. Therefore, there is a need to implement long-term training programs and other measures for the development of human resources in the conservation science and conservation and restoration fields.

The historical buildings in Muharraq have already been documented, and a plan for their management was formulated at the time of their nomination to the World Heritage List. In addition to establishing a voluntary management framework, Bahraini authorities have commenced restoration activities in part, and are otherwise moving ahead with efforts to protect and maintain the site. Through interviews, it became clear that academic studies of architectural history are already underway. However, as matters stand, onsite restoration work is performed mainly by migrant workers from outside of Bahrain, and the development of experts who possess basic to intermediate level restoration technologies is an issue. Bahraini authorities have requested Japan's assistance in providing training in technologies required for the establishment of vocational institutions, but the request does not seem as fleshed out yet as requests in other areas.

## 5-2. Possibility of Future Cooperation and Japan's Role

This particular survey revealed Bahrain's desire for long-term academic cooperation in its future efforts to achieve national development through cultural heritage protection. As there are no sites that are in danger and require urgent assistance, cooperation is expected to be needed in the areas of excavation and research. Moreover, since Bahrain has already achieved a certain degree of economic growth, personal cooperation in the form of transferring Japan's accumulated knowledge in the field of archaeological surveys would probably be appreciated more than assistance through equipment provision. For these reasons, the term "assistance" does not sit too well, and rather, actions within a "cooperation" framework seem more to be in order.

The study team proposes cooperation in the following two areas, and promotes the beginning of long-term cultural exchanges with Bahrain as it aims to become a major cultural power.

(1) Technical assistance and academic excavations for the conservation, management and maintenance of the burial mounds

Numerous burial mounds also exist in Japan and have faced the threats of development and urbanization as they have in Bahrain. In response to this situation, Japan's cultural heritage protection administration has taken measures for the protection, management and maintenance of important tombs. Archaeological artifacts are stored, preserved or displayed, and survey findings are widely shared via onsite information boards that promote understanding among visitors to the sites. Additionally, as the Mozu-Furuichi Tumulus Clusters and Asuka-Fujiwara Archaeological sites of Japan's Ancient Capitals and Related Properties have been listed on the World Heritage Tentative List, measures for their documentation and other processes required for their nomination to the World Heritage List will likely face future issues that would also apply to Bahrain. Particularly since Japan has contributed to the development of archaeology in Bahrain since the 1990s, Bahrain has high expectations of Japanese cooperation in this field.

#### (2) Preservation and maintenance of Qal'at al-Bahrain

Qal'at al-Bahrain has outstanding value as cultural heritage of Bahrain, and is also a highly popular sightseeing spot. For this reason, extending Japan's cooperation to this site would highlight the relationship between Bahrain and Japan and increase awareness of Japan's contribution to Bahrain. At present, a French team is playing a central role in working with Bahrain to maintain the site, but as the site is large, the formulation of a detailed conservation management plan that includes the buffer zone is required. A distribution survey needs to be conducted to prepare the necessary basic materials for formulation of a conservation management plan, but this should not be a problem, as personnel and project expenses are easier to estimate than with excavation projects, and such surveys require only a short period of time. Additionally, aerial photos based on 3D laser measurement, which were used in the survey of burial mounds, could also be applied to Qal'at al-Bahrain. Meanwhile, the request for the excavation and restoration of the gradually collapsing Captain's Tower was put on hold for the time being for future re-examination, pending the degree of human resources development achieved through the excavation of the graves and the distribution survey, as the project could be expected to span a long term and require a significant amount of funding.

The study team proposes to launch assistance in the above two areas through the following steps.

## (1) Sharing project information

As the first step toward providing continuous assistance to Bahrain in the future, it is necessary to communicate the present situation in Bahrain to as many researchers in Japan as possible. To begin with, the study team made the presentations in sub-committees in the Consortium. Also, the study team gave a report on this particular study of Bahrain at the Japanese Society for West Asian Archaeology in June 2012 and made a poster session report at the Society for Near Eastern Studies in Japan in November 2012. Consideration is also being given to hosting an independent conference, if necessary.

## (2) Academic exchanges through invitation and dispatch programs

Bahraini archaeological researchers shall be invited to Japan to hold exchanges with their Japanese counterparts who have advanced knowledge concerning the survey, preservation and presentation of burial mounds, and to personally inspect actual case examples of burial mounds in Japan, as Japan, in particular, employs a characteristic method for preservation and maintenance of burial mounds.

In fact, an invitation program of Bahrain archaeologists was organized by Saito with support from the Japan Foundation from December 13 to 26 in 2012. The program aims to exchange knowledge between Bahrain archaeologists and Japanese archaeologists in Tokyo, Gunma, Nara, Miyazaki, and site visits in burial mounds to learn preservation and presentation of Japanese burial mounds, and give the presentation of Bahrain archaeology to Japanese experts. Mr. Salman al-Mahari and Ms. Layla al-Ahmad were invited from Bahrain to attend the program. They visited Omuro burial mounds, Hotoda burial mounds, Kamitsukenosato Museum in Gunma, Niizawasenzuka burial mounds, Ueyama burial mounds, Umanmi burial mounds in Nara, and Saitobaru burial mounds, Nyuutabaru burial mounds, Ikime burial mounds and Saitobaru Archaeological Museum in Miyazaki.

They feed backed that they were interested in introducing guidance panels made of ceramic from Japan because the guidance panels made of metal were deteriorated in Bahrain. Also, they were interested in modern and original museum display such as Saitobaru Archaeological Museum.

Young researchers shall also be invited to universities and graduate schools in Japan, as there are few institutions for the development of young experts in Bahrain.

#### (3) Contribution to human resource development through excavations and archaeological surveys

Once the issues and visions of cultural heritage protection have been shared through steps 1 and 2 above, consideration shall be given to the implementation of excavations and archaeological surveys. According to interviews with Bahrain's Ministry of Culture, acquiring an excavation permit should not be difficult, as the ministry is in charge of issuing such permits. Therefore, excavations and distribution surveys can be conducted for the graves in question and the buffer zone around Qal'at al-Bahrain as soon as an agreement is reached between Bahrain and Japan. A long-term project shall be implemented, with Bahrain's Ministry of Culture or the Bahrain National Museum serving as a center of cooperation for the two countries. The necessary personnel for the project shall be dispatched from Japan, and shall include experts from the fields of archaeology, anthropology, conservation science, restoration technologies, museology, and architecture. They will work jointly with young Bahraini experts with a view to developing human resources in Bahrain.

There were also requests for Japan's cooperation in the fields of museology and historical buildings, but the actual properties and sites do not seem to be in a state of urgency or imminent danger compared to the two target areas mentioned above. However, in both fields, a future issue lies in the development of human resources from a long-term perspective, and indeed, requests in the field of museology emphasize human resource development through long-term training in conservation science and conservation and restoration, and requests in the area of historical buildings emphasis the development of restoration experts. Based on this awareness, cooperation projects for burial mounds and Qal'at al-Bahrain shall also be considered a means for exploring future cooperation schemes in the said two fields through detailed consultations and collection of information from stakeholders in Bahrain,.

## 5–3. The Role of the Japan Consortium for International Cooperation in Cultural Heritage

The Japan Consortium for International Cooperation in Cultural Heritage aims to contribute to international efforts for cultural heritage protection by coordinating and promoting cooperation among relevant players in Japan, and places emphasis on creating personal networks, collecting and providing information via these networks, conducting studies and research on international cooperation in cultural heritage, and increasing awareness of international cooperation in cultural heritage. With respect to the proposed cooperation projects in Bahrain, the Consortium will promote coordination and cooperation for the implementation of relevant cooperation activities on a continuous basis, and will share information and introduce experts as necessary. It will collect information on experts who are well versed in cultural heritage in Bahrain, and promote information sharing among them, as necessary. In regard to the proposed assistance plan of "(1) Sharing project information," the Consortium will assume a large role in disseminating information among its members and making information referrals to relevant institutions. As part of this effort, this particular study report will be sent to all members and disclosed on the Consortium's website. Updates of this study have been given to the Sub-Committee for Planning within the organization of the Consortium, but will continue to be given to all Consortium members, as well as to such relevant institutions as the Agency for Cultural Affairs, the Ministry of Foreign Affairs, the Japan Foundation, and the Japan International Cooperation Agency. The study team will continue to collect and share pertinent information so that invitation programs and exchanges may be planned between Bahrain's Ministry of Culture and Japanese experts, and hopes to maintain contact and continue consultations with Bahrain's Ministry of Culture as necessary.

## 5-4. Summary

The study team visited Bahrain to assess the present status of international cooperation in cultural heritage in Bahrain, seek a direction for future cooperation, and examine the specific requests for cooperation from the Bahraini side. A local survey was conducted of archaeological sites centered on the sites of burial mounds created from around 2200 BC, as well as of Qal'at al-Bahrain, Bahrain National Museum, and the historical buildings in Muharraq, and information was acquired and views were exchanged through interviews with relevant authorities at each site.

Interview surveys clarified Bahrain's intention to achieve future growth mainly through utilization of its cultural heritage, and shed light on the country's progress in establishing the necessary legal systems and administrative infrastructures. Furthermore, various issues have surfaced in terms of Bahrain's framework for cultural heritage protection. For example, in the area of burial mounds, post-excavation maintenance is needed; at Qal'at al-Bahrain, joint studies are sought for protective management of the site following its inscription on the World Heritage List; in the area of museology, long-term technical cooperation is sought in the field of conservation science; and in regard to historical buildings, there is a need to develop human resources for protection and restoration of the buildings.

The survey was limited in time, but was able to be carried out effectively owing to preliminary consultations with Bahrain's Ministry of Culture. The study team also appreciated the Ministry's cooperation in obtaining visas, arranging for transportation to the various sites that were visited, and catering to the team's various needs such as for the accompaniment of a local authority when visiting the sites.

Pro-democracy movements have begun in the Arab countries and are sweeping through Bahrain as well.

## 5 Observations

However, what was particularly apparent from the study team's short stay in Bahrain was the strong enthusiasm of the local cultural heritage protection officers and the liberal movement to acquire advanced technologies and knowledge from foreign countries. The study team hopes to maintain the relationship of trust it has cultivated with its Bahraini counterparts through this recent study and to examine future assistance measures in consultation with other relevant institutions so that long-term academic exchanges can be established as sought by Bahrain. In the end, the team hopes Japan's engagement in international cooperation for cultural heritage in Bahrain will contribute to strengthening the friendly relationship between the two countries.

## APPENDIX

## **APPENDIX 1**. Interviews

Below are summaries of face-to-face interviews that have been recorded. Information obtained through explanations and hearings while doing a walk-through of the various sites visited is as included in the sections for each cultural heritage.

1. Interview with the Director of Archaeology and Heritage, Ministry of Culture

ate/Time: Dec. 21, 2011; 9:00–10:00 ace: Ministry of Culture (building adjacent to the National Museum on the same site)	
ttendees:	
Bahraini members:	
Abdulla Mohammed as-Sulaiti (Director of Archaeology and Heritage, Ministry of Culture)	
Salman Ahmed al-Mahari (Chief of Conservation and Restoration, Directorate of Archaeology and Heritage,	
Ministry of Culture)	
Japanese members:	
Four researchers	

The study team first introduced its four researchers and gave the Director of Archaeology and Heritage an outline of the Japan Consortium for International Cooperation in Cultural Heritage, an overview of the study, and explained the objective of the study team's visit. Then, each member described his/her area of expertise using reference materials. On the Bahraini side, the Director of Archaeology and Heritage welcomed the visit by the Consortium with pleasure and some surprise, because when he tried to contact a Japanese archaeological organization via the Japanese Embassy in 2011, he received a reply from the embassy that any cooperation would be difficult in 2011, with priority being placed on disaster reconstruction efforts.

Saito: Discussed the 3D scanning and Red Relief Image Mapping (RRIM) technologies, and proposed their use in creating maps of burial mounds and inventories as an effective documentation tool.

Mr. As-Sulaiti: Expressed interest in transmission technology that can penetrate trees and houses, saying such technology would be useful in identifying cultural heritage in land such as the buffer zone around Qal'at al-Bahrain, which is covered with numerous trees that cannot be cut down.

Saito: Explained the results of excavation and restoration activities at Palmyra in Syria.

Mr. As-Sulaiti: Expressed his wish that the excavation and restoration experience gained at Palmyra be applied to the excavation and restoration of Captain's Tower.

Gotoh: Introduced past excavation surveys conducted in Bahrain.

Mr. As-Sulaiti: Said he appreciates the opportunity to learn about Japan's achievements and wishes to know more about Japan's past excavation surveys.

Abe: Explained the assistance provided by the National Research Institute for Cultural Properties, Tokyo to cultural heritage protection in West Asia.

Mr. As-Sulaiti: Expressed interest in the Institute's assistance to museums and paper restoration in Egypt, noting that Japanese paper (washi) is used for the restoration of paper.

Following the above, the study team asked the Bahraini authorities about specific requests for cooperation from Japan.

Mr. As-Sulaiti: Explained that Bahrain is working with Denmark in regard to GIS, but said he wishes to create a database inventory. He said it is an honor to be able to explore the possibility of cooperation with Japan, as Japan is well known for its advanced technologies and excavation tools. He recognizes that old technologies are partially used in Bahrain, and therefore seeks technical transfers particularly in the archaeology and conservation fields. The proposals that have been presented by the study team are excellent. Especially important is the excavation of the buffer zone around Qal'at al-Bahrain. Qal'at al-Bahrain and the sea are extremely important to Bahrain. In fact, it is believed there is a sunken ship in the sea, although a marine archaeology project can be expected to pose difficulties. Also important is to hand down traditional cultural property restoration methods to the young generation.

Mr. Al-Mahari: Preparations are now being made to establish a vocational school for the restoration of historical buildings, including wooden material, mortar, and windows. The school will be a national school under the supervision of the Ministry of Culture, and will offer a diploma upon completion. With respect to this school plan, there are many areas in which Japan's cooperation would be appreciated, so he wishes to hold continued discussions on possible cooperation schemes without limiting the scope of cooperation. Restoration and documentation activities are underway, but mainly by foreign consultants, and field workers are mostly migrants from India and other countries. In the field, experts who have completed a doctoral program are not necessarily needed, but workers with basic restoration technologies are. Therefore, the school will be intended for high school and university graduates. There are no plans to create a university that offers a master's or doctoral program in Bahrain.

As supplementary information, the historical buildings in Muharraq are also under the supervision of the Chief of Conservation and Restoration in the Directorate of Archaeology and Heritage. Restoration of the buildings has particularly high priority, as it is listed on the World Heritage Tentative List. (The historical buildings in Muharraq were listed on the Tentative List at the time of the study, but were inscribed as a World Heritage Site in 2012.)

The Japanese members were asked their impressions on having personally seen Bahrain's cultural heritage.

Saito: There are hardly any signs posted at the sites, and even if there are, they simply provide warnings against trespassing and other violations, and do not communicate the significance of the site. Some changes should perhaps be made to the signs.

Mr. As-Sulaiti: There used to be signs in the past. They have been removed for renewal, but new signs are now being prepared.

The study team said that as the results of the study will be compiled into a report, it wishes to explore the possibilities of cooperation even more specifically based on the report. They also suggested that the Bahraini authorities visit Japan to observe first-hand the state of maintenance of the many tombs that also exist in Japan. Mr. As-Sulaiti expressed interest, saying he did not know there are many burial mounds in Japan and that they are also facing the threat of development as are those in Bahrain. He took the suggestion favorably, and said if he does visit Japan, he wishes to present what he learns in Japan at a conference on archaeology in Bahrain.

The interview continued with Mr. Al-Mahari after Mr. As-Sulaiti had to leave.

### <About human resources development>

Mr. Al-Mahari: At present, there is nowhere to acquire specialized knowledge of cultural property protection in Bahrain. Mr. Al-Mahari personally studied in Cairo, but older-generation archaeologists in Bahrain used to study in Iraq and Saudi Arabia.

#### <About international cooperation>

Mr. Al-Mahari: France and Denmark are the central players in international cooperation, but they stay in Bahrain for periods of about a month, after which there is no telling when their next visit will be.

#### <The greatest threat to cultural heritage in Bahrain>

Mr. Al-Mahari: The greatest threat is landscape destruction caused by urban development and high-rise

buildings. At Qal'at al-Bahrain, a zoning-based management plan prohibits the construction of high-rise buildings in the buffer zone around the site, but no such restrictions exist at other archaeological sites. Relationships with landowners may not be a threat, but do pose a challenge. Deterioration caused by humidity is also a problem, but it is not a real threat, as the progress of deterioration occurs only gradually.

<Future relationship between Bahrain and Japan>

Mr. Al-Mahari: Hopes exchanges between Bahrain and Japan will begin as quickly as possible.

2. Interview with the Preparatory Office of the Arab Regional Center for World Heritage

Date/Time: Dec. 21, 2011; 11:30–12:30
Place: Ministry of Culture
Attendees:
Bahraini members:
Saeed Abdulla al-Khuzai (Natural Heritage Advisor, Bahraini Delegation to the World Heritage Committee)
Haya as-Sada (Bahraini Delegation to the World Heritage Committee and Unit for the Establishment of the
Arab Regional Center for World Heritage (ARC-WH))
Japanese members:
Four researchers

The Preparatory Office of the Arab Regional Center for World Heritage first explained the purpose and background to the establishment of the Center (see the foregoing section "3-3. Administrations" for details). Then, the study team conducted an interview by posing questions to the Bahraini authorities.

Question: When the Center is completed, how large will it be in terms of facilities and personnel? Answer: It will be established as planned and staffed with a director, deputy director, program officer, IT specialists and others.

Question: What type of division of roles and cooperation is planned with the UNESCO Egypt Office and Doha Office?

Answer: The Egypt and Doha Offices are Category 1 centers, while the Center is a Category 2 center. To focus exclusively on the 1972 World Heritage Convention and engage in operations for implementation of the convention, it will work with UNESCO Headquarters as its main partner. It will be composed of voting members, consisting of the Center's board members and representatives from the Ministry of Culture, Ministry of Foreign Affairs, UNESCO and the Arab country member of the World Heritage Committee for the relevant year, in addition to observers consisting of other Category 2 centers.

Question: If the Arab countries seek financial assistance, how will they be prioritized?

Answer: This is a difficult question, but high priority will be given to cultural heritage sites in danger and cultural heritage that have sustained damage in a natural disaster.

Question: What assistance will be provided to World Heritage sites in Bahrain?

Answer: Bahrain is no different from other Arab countries, and will be treated in the same manner as other countries.

Before closing the interview, the Preparatory Office of the Arab Regional Center for World Heritage noted that it wishes to continue its relationship of cooperation with the Consortium, as the two organizations share a common objective and engage in similar activities, such as collecting and sharing of information and gathering requests. In addition to cooperating on implementing projects, it wishes to share information on the best organizational structure for optimal operations, as the Consortium appears to have a similar organizational structure as the Arab Regional Center for World Heritage.

3. Interview with the Bahrain National Museums Advisor

Date/Time: Dec. 21, 2011; 13:00–14:00 Place: Ministry of Culture Attendees: Bahraini members: Nadine Boksmati (Bahrain National Museums Advisor) Japanese members: Three researchers (excluding Gotoh)

Ms. Boksmati is a Lebanese expert in museology, who has been residing in Bahrain since 2008. When asked about needs in Bahrain's museums, she replied with two specific requests, as outlined below.

1. A long-term training program in museology is needed. Short-term training has been provided intermittently to date, but some doubts remain about its effectiveness. As there are no universities in Bahrain that teach museology, it is necessary to provide museum staff with long-term systematic training in museology, instead of short-term training on individual themes.

2. Strengthening the fields of conservation science and conservation & restoration The acquisition of new technologies is necessary to compensate for the small numbers of museum staff and their advancing age. Since universities in Bahrain offer majors in chemistry, such programs should perhaps be applied to offering training in conservation science.



Photo1. At the Bahrain National Museum



Photo2. Site visit guided by Mr.Youzif



Photo3. Site visit at Qal'at al-Bahrain guided by Mr. Al-Mahari



Photo4. Interveiw with Mr. As-Sulaiti

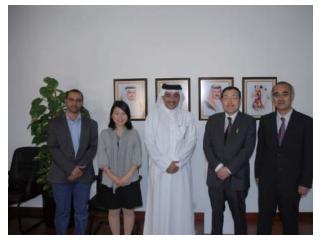


Photo5. Commemorative photo with Mr. As-Sulaiti



Photo6. Commemorative photo with Mr.Salman



Photo7. Commemorative photo with the Preparatory Office of the Arab Regional Center for World Heritage



Photo8. Commemorative photo with Mr.As-Sindi



Photo9. Commemorative photo with Ms. Boksmati

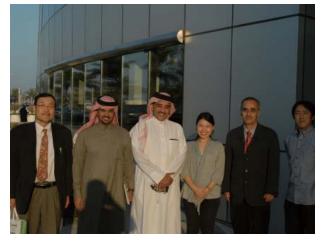


Photo10. Commemorative photo with Mr.As-Sulaiti

### APPENDIX 2. Related law

We obtained English version of "Decree Law No. (11)Regarding the Protection of Antiquities" from Bahrain Ministry of Culture.

The State of Bahrain Ministry of Cabinet Affairs and Information Directorate of Heritage and Museums

DECREE LAW NO. (11) of 1995

CONCERNING THE PROTECTION OF ANTIQUITIES

Arabic is the language of the official text of this law issued on 27th Muhrram 1416 AH, corresponding to 25th June,1995.

(This english translation of the above mentioned Law is for guidance only)

APPENDIX

### DECREE LAW NO (11) OF 1995

#### CONCERNING THE PROTECTION OF ANTIQUITIES

We, Isa bin Salman Al-Khalifa, Amir of the State of Bahrain, After referring to the Constitution; The Amiri Order No.(4) of 1975,

The Bahrain Antiquities Law of 1970, amended by Decree Law No.(17) of 1985,

The Decree Law No.(1) of 1995 Regulating the Ownership of Gulf Co-operation Council of Arabian Gulf Countries Citizen's Real Estate and Land,

The Amiri Decree No.(9) of 1995 concerning the reorganisation of the Ministry of Information,

And upon the submission of the Minister of Information,

After consulting the Shura Council,

And after the approval of the Council of Ministers,

We hereby enact the following Law:

#### CHAPTER I

#### GENERAL PROVISIONS

#### ARTICLE 1

The Ministry of Information is the concerned authority in charge of supervising all matters related to antiquities, particularly conserving and protecting them in its museums, warehouses, sites and archaeological and historical places. It is to undertake in the exploration of antiquities found in the ground of Bahrain and its territorial sea. The Ministry alone shall be responsible for deciding the archaeological and historical nature of things, sites and buildings, and determine the importance of every monument, and decide what monuments should be registered in accordance with the provisions of this Law.

#### ARTICLE 2

Anything passed on from civilisations or left over by previous generations explored or discovered whether that be a

building or a movable object relating to the arts, sciences or literature or ethics or beliefs or daily life or public events or anything that is at least 50 years of age that has an artistic or historical value is considered a monument.

Historical documents and manuscripts and related covers are considered monuments.

Remains of human and animal pedigrees and other contemporary creatures that date back to 600 calendar years are considered monuments.

It is possible, by a decision of the Prime Minister made in accordance with a proposal submitted by the Minister of Information, to consider for artistic and historical reasons an edifice or a movable object a monument if the State has a national interest in conserving and maintaining it without complying with the time limit stated in this article.

#### ARTICLE 3

Monuments are of two types:

#### (i). Immovable Monuments:

These are antiquities attached to the ground such as archaeological mounds, remains of settlements and burial grounds, fortresses and bastions, historical houses and buildings, pools and qanats, religious buildings such as temples, mosques and others whether on ground or beneath it or in the territorial sea.

#### (ii). Movable Monuments:

.....

These are movable objects manufactured to be naturally separate form the ground or static monuments, whose places it is possible to change without damaging them.

The concerned authority may consider movable monuments as immovable ones if they were part of a static monument or related to and complementing it, or part of decorations such as inscriptions, scripts, architectural elements and grave stones.

APPENDIX

#### ARTICLE 4

All monuments, movable or immovable, are considered public property that cannot be appropriated or possessed or disposed of except in cases stipulated in this law, and its executive decisions.

#### ARTICLE 5

Ownership of land does not allow the proprietor to own monuments situated on its ground or beneath it or the right to dispose them, it does not permit him the right to excavate and explore monuments, excpt in cases stipulated in this law.

#### ARTICLE 6

Destruction of movable or immovable monuments, altering or damaging, or deforming them by way of writing or decorating them or changing their features are prohibited. Bill posting, or placing sign boards in archaeological places and on registered historical buildings are also prohibited.

#### ARTICLE 7

When considering town or village planning projects, expanding, or beautifying or distributing land plots for building purposes, archaeological places and features should be maintained in accordance with the decision taken by the authority concerned in this regard. Planning or land distribution projects where monuments are found within its bounds should not be approved before obtaining the approval of the authority concerned with archaeology.

The authority concerned with archaeology should specify names of places and its special archaeological features and publish a list of them in the Official Gazette and notify the authority concerned with planning and distribution.

#### ARTICLE 8

Building and restoration permits in places close to archaeological sites and historic buildings should not be issued before obtaining the approval of the authority concerned with archaeology to ensure the construction of modern buildings with the appropriate style to match the same archaeological character.

In the case of restoration and maintenance of mosques, this should be done with the approval of the Ministry of Justice and Islamic Affairs.

#### ARTICLE 9

The Minister of Information may ask the Minister of Housing to appropriate any immovable monument in the lands of the State of Bahrain and whatever buildings required for passage and beautifying in accordance with the Land Appropriation Law for Public Interest issued by Decree No.(8) of 1970 and amended by Decree Law No.(24) of 1975.

He also has the right to appropriate any movable monument in the State of Bahrain in return for compensation to be determined by the Committee stipulated in Article (51) of this Law.

#### CHAPTER II

#### EXPLORATION AND EXCAVATION OF ARCHAEOLOGICAL ANTIQUITIES

#### ARTICLE 10

Excavation of antiquities shall mean works of digging, examining and investigating them which aim at discovering movable and immovable antiquities beneath the ground or on ground or in water streams, pools, ganats or territorial sea.

Accidental discovery of finding of antiquities are not considered excavation.

#### ARTICLE 11

The authority concerned with archaeology has the right to conduct excavation works of archaeology, and may license bodies, scientific societies and specialised archaeological missions to excavate for antiquities by a special non-transferable licence; this licence shall only be granted in accordance with the provisions stipulated in this Law, even if exploration and excavation is conducted in a land owned by the party applying for licence.

#### ARTICLE 12

The concerned authority may conduct exploration and excavation of antiquities in any place in the State of Bahrain, it should return the sites and private buildings excavated to their owners unless appropriated in accordance with the Law.

#### ARTICLE 13

The concerned authority shall publish a schedule in the Official Gazette indicating the lands and buildings required for exploration and excavation to ascertain the availability of antiquities and whether to appropriate them or return them to their proprietor. This schedule is to be supported by relevant maps whenever required.

Exploration on lands and buildings indicated in the schedule should commence within one year from the date of publication in the Official Gazette, and should be declared within one year from the date of exploration whether such lands and buildings contain antiquities or not.

In the latter case the land stated in the above paragraph should be removed from the schedule.

#### CHAPTER III

#### ANTIQUITIES EXPLORATION LICENCES

#### ARTICLE 14

Exploration licences shall only be granted to bodies, scientific societies and specialised archaeological missions after verifying their abilities and efficiencies scientifically and financially.

The concerned authority may provide the presence of technical experts from the authority who conduct antiquities exploration, and may nominate a representative on the site of exploration and excavation.

#### ARTICLE 15

The licence application form shall be submitted to the concerned authority containing the following data:

a. Name and nature of the body, scientific society or mission, past experience, number of individuals, their nationalities, academic qualifications and practical experience.

 The archaeological site required for excavation accompanied by maps indicating the demarcation of the area of excavation.

- ii. Operation Schedule, duration of excavation and its objective.
- iii. Any other conditions that the concerned authority may deem relevant in the application form.

The licence to be issued by a decision of the Minister of Information.

#### ARTICLE 16

Licensed bodies, societies or missions are obliged:

- a. to photograph and sketch the archaeological site and all excavated antiquities by common standards, and prepare a collection of photographs of the general excavation works and the excavated antiquities be they movable or immovable.
- b. to record all antiquities and provide the concerned authority with all original copies one by one in a special record to be presented to the licensing authority at the end of the season. This record is to include all scientific data of these antiquities.
- c. not to remove any part of the archaeological buildings discovered or make any modification without the approval of the concerned authority.
- d. to maintain discovered antiquities and the excavated site in accordance with common standards in this regard particularly restoring, maintaining and repairing them.
- e. to provide the concerned authority with information on excavation operations every fifteen days. This authority has the right to release this information. The licensed mission, society or body is not to announce any information on excavation works before informing the concerned authority and obtaining its written consent.
- f. to submit a brief report at the end of each season accompanied by excavation plans. The licensee is to provide data, drawings and photographs of all discovered antiquities and any additional information required by the concerned authority.
- g. to submit a scientific detailed report for publication on the results of excavations in a period not exceeding one year from the end of each season.

.

- h. to accept a representative of the concerned authority and enable him to view and supervise excavation works, findings and inspect records of antiquities.
- i. to deliver all discovered moveable antiquities at the end of each season to the concerned authority and bear its packing expenses and transport them to a location specified by this authority; and not to remove them from the site of excavation before obtaining the consent of the concerned authority.

#### ARTICLE 17

The licensed bodies, scientific societies and mission are to allow the visit of representatives of the concerned authority whenever they desired so. It shall allow visits of archaeologists provided they maintain scientific copy rights of the licensee.

#### ARTICLE 18

If the licensed body or society or mission breached any condition stipulated in Article (15) of this Law, the concerned authority may suspend excavation works immediately till the breaching is ceased and if this authority deems this breach serious it may cancel the licence by a decision of the Minister of Information.

#### ARTICLE 19

If the body, or the society, or the mission ceased excavation during two seasons in two consecutive years without an acceptable excuse by the concerned authority, the Minister of Information may cancel the licence issued, he may also grant a licence of excavation in the same area to any other body or society or mission.

#### ARTICLE 20

The licensed body or society or mission is to publish the scientific findings within five years from the date of ending its operations, or the concerned authority may do so itself or may allow individuals or bodies to do so with no objection on the part of the licensee.

#### ARTICLE 21

All discovered antiquities found by the licensed body or society or mission are property of the State and should not be relinquished, particularly those that form integrated collections representing the civilisations of the country and its history, arts and crafts, nevertheless, the Minister of Information may grant the licensed body or society or mission specimens of bones, pottery fragments and organic materials for the sake of study and laboratory analysis or for purposes of teaching in order to encourage researchers of archaeology to facilitate their mission. This grant is only possible after the submission of the scientific detailed report referred to in clause(g) of Article (16).

#### ARTICLE 22

The concerned authority is to co-operate with scientific bodies and excavation missions in conducting a few archaeological excavations. Terms and conditions of this co-operation and its scientific, technical and financial aspects are to be defined in the excavation licenses or in special licences.

#### ARTICLE 23

Anyone who discovers or finds an archaeological antique without holding an excavation licence should report to the concerned authority or the nearest Public Security Station within 72 hours from the date of discovery or finding of this antique, otherwise he will be considered in possession of an antique without a licence.

The concerned authority by taking into consideration the importance of the antique should grant a suitable reward for the person who discovers the antique or finds it or reports it.

#### ARTICLE 24

The concerned authority and national excavation missions are to be exempted from paying customs duties on instruments, equipment and apparatus imported for archaeological excavation works, restoration, equipping museums and their archaeological centres and artistic and archaeological exhibits.

A temporary release on instruments and equipments that foreign archaeological excavation and restoration missions bring into the country is to be allowed. These missions will finally be exempted from paying customs duties if they give up these

equipments in favour of the concerned authority or national archaeological missions. They will pay customs duties if at the end of their operations they decide to dispose these equipments to other parties.

#### ARTICLE 25

By a decision of the Minister of Information - after the approval of the Cabinet - entry fees may be imposed for visiting museums or archaeological sites. The value of the entry fee for each museum and archaeological site may be fixed separately.

#### CHAPTER IV

#### REGISTRATION OF ANTIQUITIES, THEIR MAINTENANCE AND DISPOSAL

#### ARTICLE 26

The concerned authority is to list immovable and movable antiquities that are presented to it in accordance with the provisions of this Law and register what it considers registerable and compile relevant data in records especially prepared for this purpose. Registration is to be done in accordance with terms and conditions of a decision issued by the Minister of Information.

Antiquities considered as registered are those listed in the intended records on the date of enacting this Law must be re-registered in accordance with the provisions of this Law.

#### ARTICLE 27

In compliance with the provisions of Article (35) of this Law, anyone owning or in possession of a movable antiquity before the commencement of this Law, shall submit it to the concerned authority for registration within six months from the date of enacting this Law and notify the concerned authority within seven days from the beginning of possession, and the concerned authority in both cases is to return the antiquity to its owner or possessor after registering it and give him a certificate of disposability if it is not required to be registered or keep it self after paying compensation in accordance with the provisions of Article (51) of this Law.

#### ARTICLE 28

Individuals or private bodies are not permitted to dispose of movable antiquities registered in their names before obtaining a permission of the concerned authority; the State shall have the priority of purchasing those antiquities. Owners are to inform the name of the buyer if available, his address and the price offered to the concerned authority.

The State may purchase movable antiquities with the knowledge of the concerned authority, and with the price defined by the Committee stipulated in Article (51) of this Law.

#### ARTICLE 29

Owners of movable registered antiquities are not permitted to repair and restore them except with the approval of the concerned authority and under its supervision. They may carry out repair and restoration work at the technical laboratory of the concerned authority for a reasonable fee.

#### ARTICLE 30

Owners of movable antiquities are to deliver them to the concerned authority whenever the latter require them for study or photographing them, or draw them, or making moulds for them, or write about them, or to keep them temporarily in an exhibition, or museum, provided they are returned to their owners in the same condition they were delivered in after fulfilling the purpose for which it was taken.

#### ARTICLE 31

The concerned authority conveys the decision of the registration of immovable antiquities owned by others to the Directorate of Land Registration at the Ministry of Justice and Islamic Affairs to have it entered in the Land Registry, and inform this to the owners of those antiquities. The decision of registration shall be published in the Official Gazette.

#### ARTICLE 32

If the registered immovable antiquities resulted in damages for its owner, he may ask for compensation for this damage from the concerned authority provided the owner files his demand within two years from the date of informing him of the decision of registration or from the date of publication in the Official Gazette whichever is earlier. The compensation to be estimated in accordance with the Law of Appropriation of Land for Public Interest issued by Decree Law No.(8) of 1970 and its amendments.

### ARTICLE 33

The act of registration of immovable antiquities and informing its owner in accordance with the provisions of Article 32 will result in the following obligations:

- (i). Not to demolish the whole realty or part of it except with a written approval from the concerned authority.
- (ii). Not to appropriate the land or realty, but adjoining lands may be appropriated after the approval of the Minister of Information as a result of a proposal from the authority concerned with antiquities.
- (iii). Not to allow any right of easement of the realty to others.
- (iv). Not to allow renovation of the realty or changing its features in any way except by permission from the authority concerned with antiquities; works permitted shall be carried on under the direct permission of the concerned authority.
- (v). Not to dispose of the realty to a Non-Bahraini national except with a written approval from the Ministry of Information.
- (vi). The owner is obliged to obtain a written approval from the concerned authority in respect to any disposal incurred on the realty, by stating the name of the purchaser and his place of residence; and at the time of disposal inform the purchaser that the realty is registered with the authority concerned with antiquities; and that authority is to express its opinion within thirty days from the date of informing it of its application for approval of disposal. Lapse of this period without a reply is considered disapproval.
- (vii). The concerned authority is to conduct at any time at its own expenses what it considers necessary maintenance and restoration works to all immovable antiquities.

#### ARTICLE 34

The concerned authority shall arrange immovable antiquities and historical buildings for receiving visitors; it shall also display their artistic qualities and historical characteristics. It may convert any of them into museums and permanent or temporary exhibitions and provide them with the necessary conveniences through agreements with concerned Government authorities.

#### ARTICLE 35

Trading of immovable and movable antiquities related to the civilisation and history of Bahrain is prohibited. Current traders are granted a period of grace of one year to rearrange their positions and dispose of antiquities in their possessions after registering them. After this period the antiquities remaining with them are considered as collected items and the provisions relating to the possessions of antiquities stated in Chapter IV of this Law will apply.

#### ARTICLE 36

Without a breach of Article (39) of this Law trading in antiquities is permitted in accordance with the terms stipulated in the said article after providing a list of the antiquities in the possession of the applicant to the authority concerned with antiquities. This authority shall issue a trading licence for one year and renewable thereafter for an annual fee to be determined by a decision of the Minister of Information after the approval of the Cabinet.

#### ARTICLE 37

Subject to the provisions of the previous two articles, it is permissible to trade in movable antiquities registered with the authority or antiquities which according to the authority need not be registered with it.

#### ARTICLE 38

Trading licence in antiquities should contain the name of the trader and his family name, his place of residence and the location of his business.

#### APPENDIX

#### ARTICLE 39

Every licensed trader trading in antiquities shall comply with the following conditions:

- (i). To keep official records prepared by the concerned authorities for this purpose indicating the contents of his warehouse concerning antiquities in detail and the selling and buying dealings that he conducts daily and to present these records whenever requested by the employees of the concerned authority.
- (ii). To make available to the employees of the (Directorate) of Antiquities during inspection every item of antiquities he possesses and provide necessary facilities.
- (iii). To provide the concerned authority with photographs of the antiquities in his possession if required.
- (iv). To provide an annual list of every item of antiquities that he buys or sells to the concerned authority at the time of renewal of the licence with details of the item and the name of the seller and new buyer.
- (v). To display on the forefront of his store a signboard indicating that he is licensed to trade in antiquities and to display in a conspicuous place of his store a notice in Arabic and English indicating that the export of antiquities outside is subject to the licence issued by the concerned authority.

#### ARTICLE 40

The licence issued to a trader for trading in antiquities can either be cancelled or may not be renewed by the concerned authority if he violates the provisions of this Law.

If the concerned authority cancelled the trading licence or decided not to renew it, the trader should cease from buying antiquities but is allowed to sell what is in his possession during a renewable period of one year by paying the fee stated in Article (36), if antiquities remained in his possession after the licensed period it would be treated as the registered antiquities in the possession of individuals in accordance with provisions of Article (27).

In the above cases a new licence may not be issued to the trader before the lapse of one year at least from the halting of his trading in antiquities.

#### ARTICLE 41

Export of antiquities abroad is prohibited, nevertheless, it is allowed by a special licence from the concerned authority to export movable antiquities if proven that its export, does not in any way diminish the archaeological heritage of the State, and that identical items are available at museums, and that can be dispensed with.

#### ARTICLE 42

Anyone willing to export antiquities which are in his possession shall apply to the concerned authority for permission with the following data:

- (i). The name of the exporter, his family name, his profession, his place of residence and his nationality.
- (ii). The place of export of antiquities and the name of the addressee.
- (iii). The means by which the exporter obtained the antiquities intended for export.
- (iv). Description of the antiquities and a list of its number, kind dimensions and its estimated price.

The applicant shall display the antiquities to the concerned authority before its export.

#### ARTICLE 43

The concerned authority, may, after examining the antiquities intended for export, allow the export or refuse it or buy what it deems fit of these antiquities at the estimated price in the export application, unless it comes to know that an obvious discrepancy is found between the value stated in the export application and the value estimated on its part with the knowledge of the Committee stipulated in Article (51) of this Law. In this case the latter value is upheld provided a decision of purchase is issued by the Minister of Information.

#### ARTICLE 44

The applicant for export shall pack, at his own expense, the antiquities licensed for export under the supervision of the concerned authority.

#### ARTICLE 45

The exporter of antiquities shall present the export licence to the Customs officials, Post, Public Security and other officials whenever requested, these officers are to confiscate any antiquity the possessor of which does not hold the required licence and hand them over to the concerned authority.

#### CHAPTER VI

#### PENALTIES

#### ARTICLE 46

Without prejudice to any harsher penalty provided under the Penal Code or any other law, any violation of the provisions of this Law and the decisions issued in its implementation shall be punishable with the penalties stipulated in the following articles.

## ARTICLE 47

Anyone who smuggled or takes part in smuggling antiquity outside the country shall be punishable with imprisonment and with a fine of not less than five thousand Bahraini Dinars and not exceeding twenty thousand Bahraini Dinars, and in this case a verdict is required to be passed by confiscating the antiquity as evidence of the crime for the benefit of the concerned authority.

## ARTICLE 48

Any one who:

- (i). carried out excavations of antiquities or helped or instigated such acts without a licence;
- (ii). demolished, damaged, destroyed or deformed any antiquity including changing its features or amputating any part of it;

shall be punishable with imprisonment for a term not exceeding seven years and with a fine of not less than three thousand Bahraini Dinars and not exceeding ten thousand Bahraini Dinars.

#### ARTICLE 49

Any one who:

- (i). traded in antiquities in violation of the conditions stipulated in this Law;
- (ii). did not present the concerned authority a list of the antiquities he owns or in his possession at the time of application of this Law, or did not present them to the concerned authority during the period specified in Article (27);
- (iii). forged or imitated or faked an antiquity for purpose of fraud and deception or circulated or presented for circulation any of these antiquities;
- (iv). made moulds or models of antiquities and used them without licence from the concerned authority;
- (v). discovered or found or knew of the discovery and finding of an antiquity and did not report it in accordance with the provisions of this Law;
- (vi). presented false data or information or untrue documents or instruments in order to obtain a licence in accordance with the provisions of this Law;
- (vii). declined or failed to deliver the concerned authorities antiquities discovered or found, whether he was holding a licence of excavation or not.

shall be punishable with imprisonment and with a fine of not exceeding one thousand Bahraini Dinars or by any of these penalties.

#### ARTICLE 50

In addition to the penalties stipulated in this Law, a verdict would be issued whereby the antiquities involved in contravention of this Law would be confiscated for the benefit of the concerned authority, a verdict would also be issued to force the violator to demolish and remove any constructions or buildings or any other thing constructed or introduced or planted in violation of the provisions of this Law or the decisions issued to implement it.

If the convict did not execute the judgement during the period the concerned authority shall execute the judgement at his expense and demand the actual costs.

#### CHAPTER VII

#### FINAL PROVISIONS

#### ARTICLE 51

A committee formed by a decision of the Minister of Information shall estimate compensations and define the price and cost and expenses stipulated in Article (9 Paragraph (2), 27, 28, 50) of this Law. Those involved may complain to the Minister of Information, against the Committees decision within sixty days of the date of notification through a registered letter, otherwise the estimation made by the committee would be final. If no reply is given to those involved by the Minister of Information during this period, the complaint would be considered as rejected.

In case of rejection of the complaint, those involved may appeal to the Civil High Court within sixty days from the date of notification by a registered letter.

#### ARTICLE 52

The employees commissioned by a decision issued by the Minister of Information shall have the power to prove any violations of the provisions of this Law and the decisions issued for its implementation and refer it to the Public Prosecutor for investigation.

#### ARTICLE 53

The concerned authority shall co-ordinate with the relevant bodies and authorities to guarantee the protection of antiquities, museums, historical buildings and archaeological sites, to preserve and maintain them.

#### ARTICLE 54

The Bahrain Antiquities Law of 1970, amended by Decree Law No.(17) of 1985 is repealed herewith and any clause that contradicts the provisions of this Law is also repealed.

#### ARTICLE 55

The Minister of Information shall issue the necessary orders for the implementation of the provisions of this Law.

#### ARTICLE 56

The Ministers, each in his respective capacity, shall implement the provisions of this Law, which shall come into effect from the date of its publication in the Official Gazette.

> Isa bin Salman Al-Khalifa Amir of the State of Bahrain

Issued at Rifa' Palace on 27th Muharram 1416 AH, corresponding to 25th June 1995 AD.

## APPENDIX 3. Obtained materials

The materials below are for your information. The materials order by publication years.

1. Materials obtained during the survey

Title	Author	ISBN	Year	Cover
Archaeological Sites in Bahrain	Salman al−Mahari	987–999580–0567	2009	1
The Tylos Period Bruials in Bahrain vol.2: The Hamad Town DS 3 and Shakhoura Cemetaries	Mustafa Ibrahim Salman & Soren Freds Iund Anderse	Unknown	2009	
The Tylos Period Burials in Bahrain	Soren Freds Iund Anderse	978–877934–3733	2007	3
The Early Diumun Settelment at Sa'ar	Robert Killick & Jane Moon	0-7103-0470	2005	Tetribuser Contractor
Al-Muharraq: ARCHITECTURAL HERITAGE OF BAHRAINI CITY	John Yarwood	99901-37-19-6	2005	A Minimure
Bahrain National Museum	Bahrain National Museum	0 907151-78-7	1993	NUMBER OF
Bahrain National Museum Archaeological Collections vol.1: A Selection of Pre-Islamic Antiquities From Excavations 1954–1975	Pierre Lombard and Monik Kervran	Unknown	1989	
The Burial Mounds of Bahrain	Flemming Hojlund	978-878841-5457	Unknown	
Mosaic: A journey through the multi-faceted world of Bahrain's Arts snd Crafts	Dr. Ali Hasan Follad	978–99901–92–68–1	Unknown	Mosaic
101 Things to See & Do in Bahrain	Sarah Clarke <i>et al.</i>	Unknown	Unknown	101

## 2. Available materials in Japan

Title	Author	ISBN	Year	Cover
An Archaeological Guide to Bahrain	Rachel Maclean and Timothy Insoll	978–1–905739–36–3	2011	An Anta-analogical Guide to Bahrain Back Macar and Hamiyani
Oman, UAE & Arabian Peninsula	Jenny Walker, Stuart Butler, Andrea Schulte-Peevers, Lain Shearer	978–1–74179–145–7	2010	Coman, UAE & Arabian Peninsula
Burial Mounds of Bahrain: Social Complexity in Early Dilmun	Flemming Hojlund	978-8788415452	2008	THE BURIAL MOUNDS OF ANIRAN Mindle of Month (Month) The Mindle of Month) The Mindle of Month)
The Early Dilmun settlement at Saar	R.G.Killick, Jane Moon	978-0953956111	2005	Every Datasets Britisher
Qal'at al−Bahrain a trading and military outpost	Monique Kervran, Fredrik Hiebert and Axelle Rougeulle	2-503-99107-6	2005	State of the second sec
The Barbarber Temples (Jutland Archaeological Society)	H.Hellmuth Andersen Hojlund Flemming	978-8788415278	2003	The Reder Torque
Islamic Remains at Bahrain (Jutland Archaeological Society Pudlications, 37) [Hardcover]	Karen Frifelt	978-8788415100	2002	Luse dan Islamic Remains in Bahrain
Early Dilmun Seals from Saar	Harriet Crawford	0-9539561-0-5	2001	DIRMUN SEALS PROMACE
Dilmun Temple At Saar	Harriet Crawford, Robert Killick, Jane Moon	978–0710304872	1997	DUNCN Famile Fau

Title	Author	ISBN	Year	Cover
Qala'at al−Bahrain: v.1: The Northern City Wall and the Islamic Fortress	Flemming Hojlund, H. Hellmuth Andersen, Peder Mortensen	978-8772885742	1994	Quốc đi đượng 1
Bahrain Through the Ages: The History	Abd Allah ibn Khalid Khalifah, Michael Rice	978–0710302724	1993	Bahrain through the ages the History and the History and the History and the History and the History
Madinat Hamad Burial Mounds-1984-85	Indian Team Leader K.M. Srivastava. Bahrain National Museum	-	1991	MARRAT HAMAD
Bahrain Through the Ages: The Archaeology	Shaikh Abdullah Bin Khalid Al− Khalifa, Michael Rice	978–0710301123	1986	Bahrain through the ages the Archaeology
Life and Land Use on the Bahrain Islands: The Geoarchaeology of an Ancient Society	Larsen, Curtis E.	9780226469065	1984	Bartland Hard
Bahrain Map	The Ministry of Information	-	-	RAHRAIN MAP
Bahrain and Manama City	International Travel	_	-	

## 3. Pamphlets

Title	Publisher	Cover
Masks: Beauty of the Spirits	Bahrain National Museum	mills,k.s
Qal'at al-Bahrain: Capital of Dilmun and its Ancient Hsarbour	Ministry of Culture	and the second second
Qal'at al-Bahrain: Ancient Harbour and Capital of Dilmun	Ministry of Culture	
Bahrain Attactions	Ministry of Informatino Tourism Affairs	Edución Constantina Constantina Edución
Shakh Ebrahim Bin Mohammed Al- Khalifa Center for Culture and Research	Shakh Ebrahim Bin Mohammed Al- Khalifa Center for Culture and Research	
Beit Al Qur'an	Beit Al Qur'an Museum	a Histor
Project of establishment of an Arab Regional Centre for World Heritage(ARC-WH)- as category 2 centre under the auspices of UNESCO	Ministry of Culture & Information	Andreas as an end of the second

