Msheireb Museums
Doha, Qatar

Architect
John McAslan + Partners

Client
Msheireb Properties

Design
2012

Completed
2016
Msheireb Museums
Doha, Qatar

I. Introduction

The project involved the restoration of four surviving historic houses in Msheireb, the first historic settlement in Doha, Qatar, and the creation of four museums telling different facets of the story of modern Qatar in these restored buildings. The restoration process included the sensitive introduction of contemporary interventions when necessary to enable the structures to function as public buildings without compromising their architectural integrity. The architecture of the historic buildings was used to inspire the larger Msheireb scheme, covering 31 hectares and comprising over 100 buildings. This scheme presents a sustainable, walkable urban environment in contrast to most contemporary urban development schemes in the Middle East. It is responsive both to its historical context and to the natural environment.

II. Contextual information

A. Brief historical background

The area of Msheireb is one of the oldest neighbourhoods of Doha. Four important houses remained, one of which, built in 1913, belonged to the founder of the state of Qatar (Mohammed bin Jassim), and another to a prominent slave trader (Bin Jalmood) who also traded in goods with Saudi Arabia. Company House, built in 1920, was the headquarters of Qatar’s first oil company, and the Radwani House built around 1900 was lived in by the Radwani family for 70 years. Around the four houses were numerous later structures of negligible architectural significance. The aim was to restore the houses and develop a museological presentation focusing on the memories of the place. (Dhikhrayat al-Makan)

The historic houses were in different states of preservation. At one end of the scale, the Radwani House was well preserved, while at the other, large sections of the historically significant Bin Jassim House had disappeared, but its original features could be traced using 1950s aerial survey photos, which allowed the accurate re-creation of missing features. A conservation management scheme was developed and used to guide the process of intervention. Archaeological work undertaken by University College London as part of this project was the first such work carried out in the area, setting an important precedent.

Msheireb Properties purchased the area of 31 hectares around the four historic houses as part of a planned development scheme to offer an alternative to most urban development in Qatar – a walkable urban scheme that would create a modern urban neighbourhood, free from a reliance on vehicles and developed ‘smartly’.

It aimed to be the first sustainable downtown rehabilitation scheme, with all of its buildings achieving a LEED Gold or Platinum rating. It was designed to be smart in terms of developing a passive architectural/urban solution. For example, the main route through the site runs north-south, and the buildings step up from north to south, so that they all take advantage of the north wind. The public squares are also oriented north–south to maximise shading. The buildings have thick walls and small windows so that they do not overheat. Historical street patterns were determined and respected. District water-cooling systems are very efficient and water-saving, as is the sewage treatment. Photovoltaic cells also ensure that that the scheme capitalises on the sunny climate.
The larger Msheireb project is based on seven steps that underpin its approach. These are: social integration through urban design; focusing on extended families; kinship ties; social activity; local economy; collective identity; and an elevated awareness of the environment. An intensive three-year research process studied all aspects of Qatari architecture, including materials, designs, layouts and decorations, as well as underlying concepts such as durability, functionality and aesthetics.

**B. Local architectural character, including prevalent forms and materials**

The local architecture consists of plastered rubble walls, and wooden beamed ceilings (mangrove wood) with woven reed matting. Residential architecture tends to include expansive courtyards; walls tend to have a series of recesses topped by wooden lintels. The architecture is simple, but appealing to contemporary eyes because it is rectilinear and has a repetitive rhythm. Decorative elements include carved stucco panels, tripartite features and decorative corbels.

The recessed articulation of the façades creates a dramatic effect because of the interplay of light and shadow.

**C. Climatic conditions**

Doha has a hot and generally humid, desert-like climate.

**D. Immediate surroundings of the site, including architectural character, access, landscaping, etc.**

The four museums are surrounded by modern architectural construction developed as part of the Msheireb project, including numerous other buildings designed by John McAslan, such as a mosque adjacent to the Bin Jassim House. The Radwani House in particular is in very close proximity to a modern building, creating a striking relationship between the historic old structure and the higher new construction.

There is a landscaped area between three of the houses, filled with white pebbles, reeds, shrubs and trees, and benches. It creates an attractive public space between the restored buildings. A road running between the Bin Jassim House and the other three house museums leads to Msheireb’s cultural forum (also designed by McAslan) and to the Souq Waqif area, a reconstruction of the old Souq – effectively imitating a historical network of commercial structures that once stood there.

**E Topography of the project site**

Generally flat. Souq Waqif is at a lower level than the Msheireb area.

### III. Programme

**A. History of the inception of the project; how the project was initiated**

The project was initiated by Her Highness Sheikha Moza bint Nasser, and is part of a much larger scheme to create a modern urban centre to Doha that takes its cue from historic cities – presenting an alternative to the automobile-reliant urbanism that characterises much of Doha.
The idea of environmental sustainability was an important principle in the development of this project, which was not just about presenting a different aesthetic or architectural alternative, but one that addressed environmental issues and could offer an example for the nation to follow.

The project was underpinned by several years of research about the history of the area and of Qatar, and this was used to develop the design approach as well as the museography. Very detailed design guidelines were used to ensure that new development in the Msheireb properties would create the desired urban solution.

According to the Msheireb Properties website, the project’s aim is:

“To re-energise the core of the city and create a hub of activity, where people return once again to live, work, shop and spend time with family and friends. The design of the urban space draws on traditional techniques for dealing with climate, and emphasises close-knit pedestrian districts where all amenities are within close walking distance.

Msheireb Properties launched an international competition in 2008 to select the best architects to design a world-class urban landscape for this seminal project. The challenge was to find those that could interpret in modern terms, a vernacular that could bridge the gap between the Doha of the past and the Doha of tomorrow. The ultimate winners were selected from a shortlist of 10 firms out of 94 by an eminent jury of academics and architects.”

**B. How were the architects and specialists chosen?**

The architects were invited to submit a proposal for the museum scheme following earlier work in Msheireb, including the Cultural Forum and the Mandarin Hotel, a mosque and a school. This project was a later phase of their work.

**C. General programme objectives**

The programme was to restore the four historic houses that survived from the early 20th-century Msheireb settlement and to convert them into museums that would cater to a national and international audience, telling facets of the story of Qatar. When the architects were commissioned, the top-level museological themes had already been identified, but it was the responsibility of the architects to further develop the museology and to deliver the complete project. The four restored historic houses were conceived as the heritage heart of a much larger urban regeneration project, one inspired by the houses themselves and the urban context that had shaped them.

Themes to be expanded upon through the four complementary museums were: the urban history of Qatar; the history of industry, including the oil industry in Qatar; the ways in which Qataris lived in the early 20th century; and, due to the history of the Bin Jalmood House (which was owned by a slave trader), the history of the slave trade in Qatar and the wider region.

**D. Functional requirements (i.e. architect’s brief)**

The architect’s brief was to restore the four buildings, design the landscape between them, and convert them into museum spaces that could serve as the centre of cultural heritage for the Msheireb development. One important component of the scheme was for the four domestic buildings to function as national public buildings, and to be able to accommodate a range of cultural activities including exhibitions and the display of valuable artefacts in an appropriate setting.
The conversion of the houses for public use needed to ensure that while their infrastructure was robust and appropriate, it did not detract from or compromise the historic fabric.

IV. Description

A. Building data

Site area: 10,350 m² (part of a bigger scheme, extending on 31 ha)
Ground floor area: 6280 m²

B. Evolution of design concepts, including

1. Response to physical constraints – siting, climate, plot ratios, etc.

The physical constraints were those defined by the architecture of the four historic houses – in particular, some of the spaces were too small to accommodate large audiences, and in fact, apart from the expansive courtyard spaces, there were no interior spaces large enough to accommodate large gatherings.

The design concept was to intervene through the creation of new spaces where necessary in the most discreet and least disruptive way possible. In the Bin Jalmood House, this was achieved through the creation of a large subterranean chamber without affecting the historic superstructure of the house. In Company House, a modern theatre space was added on one side of the house, retaining the visual appearance of the most important view of the building, while effectively creating necessary museum space. In the Bin Jassim house, a new structure was inserted on one side of the courtyard, respecting the proportions and articulation of the original building. The Radwani House, preserved as a house museum, and the smallest of the four structures, has not undergone major interventions.

2. Response to user requirements, spatial organisation

The requirements of this project involved creating contemporary museum spaces that could house state-of-the-art interpretive material while also providing appropriate space for the display of artefacts on occasion. The intervention needed to create climate-controlled spaces in some areas of the museums, without making unnecessary changes to the historic buildings.

The response was to identify the most important features of each building and to ensure that these were not compromised. Larger-scale interventions were designed to be discreet (the subterranean chamber in the Bin Jalmood House being a prime example). In areas where open spaces needed to be enclosed, this was done in a manner to indicate clearly what the modern interventions were. For example, in some cases, it was necessary to enclose courtyards and this was done using a cast lattice, evoking the traditional patterns of Qatari stuccowork, yet clearly contemporary in expression – reminiscent of a star-filled sky.

In the Bin Jalmood House, where it was necessary to glaze and screen some of the colonnades, the newly inserted screens were offset so as to indicate that they were contemporary interventions and not part of the original arcade.
3. **Landscaping**

The landscaped area of Company House, Bin Jalmood House and Radwani House is extensive, and has been designed in a robust manner to ensure that it does not require extensive maintenance. The intervention is contemporary in feeling, yet reflects both the traditional flora of Qatar, as well as some contemporary interpretations of Qatari “street furniture” such as long benches.

A number of water features have been added as part of the landscaping. These create very delicate reflections of the architecture, both old and new. They recall the meaning of the word Msheireb – “a drinking place”.

The outdoor areas have been effectively lit to accommodate night-time use – a big part of life in the Gulf given the harsh sun and the heat.

C. **Structure, materials, technology**

For the restoration work, the structural work involved consolidating the existing structures and reinstating missing elements. A thorough analysis of building techniques and materials enabled the use of appropriate materials, and the project team became very well acquainted with traditional Qatari construction techniques.

Most materials are local, including for modern interventions such as the cast lattice used to enclose the courtyards and the pre-rusted steel sheets used as cladding for the theatre space in Company House.

1. **Structural systems; in restoration projects, structural interventions**

The structural interventions required to make the historic houses function as museums were, in some cases, large-scale but were very discreet. The most obvious example is the huge subterranean space in the Bin Jalmood House, which manages to create a really accommodating multi-purpose space that is hidden under the historic house.

A second large-scale intervention is the theatre space created at the entrance of Company House. In this case, the design approach was to make it visible and prominent, thereby visually setting it apart from the historic fabric of the house itself, yet not in an obtrusive manner.

In some cases it was necessary to connect adjacent rooms to create larger interior spaces - and when this was done the edges of the original spaces were related (as pilasters and beams) to prevent visitors from misunderstanding the original layout of the historic buildings.

The contemporary interventions enabled all infrastructure (wires, cables, ducts, etc.) to be cleverly hidden out of sight.

2. **Materials**

For conservation work, traditional materials were used, and a sound understanding of these was developed through the study of a traditional house from a different site that had been dismantled and kept in storage for future reconstruction.
The materials used for reconstructing missing or dilapidated sections of historic buildings were those traditionally used: stone, gypsum, mangrove branches, reed matting.

For modern interventions, modern building materials were used – including locally cast GRC panels, pre-rusted steel, concrete, glass and marble.

The intervention respected the traditional finishes of the local architecture: namely gypsum, as well as wooden beams with matting for the roofs. The traditional architecture of Qatar is an off-white colour (the natural colour of the gypsum rendering), and this was respected.

In the subterranean space created in the Bin Jalmood House, the architects created an unrendered raw concrete space, imparting a sense of the contemporary and of a modern gallery.

2. **Construction technology**

   Traditional rubble wall construction was used for the restoration of the historic houses. With modern interventions, in order to be able to intervene without adversely affecting the historic fabric itself, modern building technology was used (for the subterranean gallery, for example).

3. **Building services, site utilities**

   One element of the project that the architects are particularly proud of is the way they managed to hide building services which were necessary to make the buildings function as contemporary museum spaces. Lighting has taken the form of an overhanging system that runs through the galleries, containing all cabling in an extremely neat manner. Interventions such as toilet facilities have also been very deftly handled – ensuring that the historic feel of the four houses is not compromised.

**D. Origin of:**

1. **Technology**

   Local and indigenous in the case of interventions in the historic fabric. Modern interventions, while not necessarily local in origin, were locally produced, following a rigorous testing process to produce elements to the exact specifications and finish required.

2. **Materials**

   Local materials were used.

3. **Labour force**

   The labour force is local, including builders with knowledge of how to work on traditional rubble buildings.

   The labour force is local.
4. **Professionals**

The professional team was diverse in origin, including local Qatari professionals leading the Msheireb Properties side of the project.

The architects relocated to Qatar in order to be at hand to deal with any site issues, and were therefore able to immerse themselves in the project.

V. **Construction schedule and costs**

A. **History of project design and implementation, with dates**

Commission: 2011  
Design: 2012 – 2012  
Completion: 2016

B. **Total costs and main sources of financing**

Total cost of the Msheireb project: 5.5 billion USD, financed by Msheireb Properties.

C. **Comparative costs (if relevant)**

D. **Qualitative analysis of costs (per square metre, per unit, etc.)**

Not applicable.

E. **Maintenance costs (heating, cooling, etc.)**

F. **Ongoing costs and “life performance” of building, in terms of materials, maintenance, etc.**

Not available.

VI. **Technical assessment**

A. **Functional assessment (use)**

The museums function as public facilities that tell Qatars the story of their identity and heritage. This is done through multimedia displays, as well as the display of objects, and in the case of the Radwani House, also through the use of traditional furnishings to capture the authentic spirit of the house as it would have been used as a residential structure.

In addition to the day-to-day use of the buildings, they are also used to house temporary events (textile and fashion displays and art exhibitions, for example).

The open spaces of Company House and other areas of the development serve as informal meeting spaces – places for social interaction in a pristine historical setting.
The museums are used by both formal and informal groups: for example, multi-generational visits by Qatari families and guided tour groups including of international tourists.

The four museums tell the story of the following: the area of Msheireb and its history, as well as the history of the ruling family; the history of industry, especially of the oil industry; the history of regional slavery; and the way that traditional houses were used as spaces for living.

The quality of the museums and the fact that Sheikha Moza herself is a patron and supporter of this project means that while hosting “the man on the street” most of the time, the museums are also used for state-sponsored arts events that bring in prominent figures.

B. **Climatic performance, lighting, natural and/or mechanical ventilation, sun control, insect control, acoustics, orientation, etc.; description of systems developed and utilised**

The mantra of sustainability that underpins the Msheireb scheme played an important part in shaping the development of this project. It would have been easy to propose a scheme where complete climatic control would have been implemented in all the museum spaces. However, the architects preferred to rationalise climatic control by limiting it to areas where it was absolutely necessary, while allowing some areas of the buildings to remain without it. This is especially true of the Radwani House, where very limited climatic control was introduced (in the entrance only) in order to retain the authenticity of the house and draw attention to the traditional ways in which Qatari architecture responded to the climate.

C. **Response to treatment of water and rainfall; discharge of water, and retention and release system(s), if any**

Not of particular significance.

D. **Environmental response; adaptation to the natural environment; adaptation to native flora and fauna**

Native flora were used for the landscaping in the courtyards of the houses, and in the spaces around them.

E. **Choice of materials, level of technology**

Traditional materials and construction technology in the case of restoration work. Contemporary materials and construction techniques for modern interventions.

F. **Response to, and planning for, emergency situations, i.e. natural disasters, floods, winds, fires, earthquakes, etc.**

Not applicable.

G. **Ageing and maintenance problems**

None were observed during the site visit. The architectural team discussed the fact that durability was something of great significance in this project: they made sure that design details and materials would not require extensive maintenance to ensure that the project aged well. This was especially true of features of the urban landscape, such as the water features – which were designed to be both attractive and durable.
H. **Design features: massing and volume, articulation of spaces, integration into the site (topography and neighbouring buildings)**

The modern interventions are very well integrated into the historic site – complementing the traditional architecture, while in a subtle way remaining distinct from it. This is especially apparent in the modern interventions in the Bin Jassim and Bin Jalmood Houses. The theatre space in Company House adds a distinct contemporary touch with its pre-rusted steel façade while paying homage to Qatar’s industrial heritage, captured in the history of this building and in its current museology. A thorough understanding of the proportions of building openings, and the relationship between solid and void, especially in the traditional colonnades, enables the contemporary interventions to capture the spirit of sober simple elegance of Qatar’s architectural traditions.

The contemporary architecture surrounding the four restored houses respects their traditions, and even though many of the surrounding buildings are higher, they do not detract from the Museums project – in fact, they come across as an evolution from it.

Even though some of the design interventions are large in scale, they do not dominate the historic fabric. This is an apt reflection of the level of thought that has gone into the design of this project.

I. **Impact of the project on the site, in terms of increased circulation or vehicular movement, changes required for infrastructure (particularly for projects in high-density areas), etc.**

The project creates movement towards the Msheireb site, but in a positive rather than a negative way. It is worth noting that this project is part of a much larger urban regeneration scheme which has created a new neighbourhood by building on the local past. While this will generate vehicular movement, one thing to note is that the entire scheme is one that provides a pedestrian-friendly environment where people can interact with the city without relying on cars. As such, this is a project about changing urban perspectives and relationships, and presenting a new alternative for city living in Qatar.

J. **Durability and long-term viability of the project**

The project will last for a long time as it is has now become embedded in the culture of Doha and is an important landmark for the city. It also serves as a gateway to the Msheireb development at large, which is starting to come into its own, and will undoubtedly become a vibrant hub in the centre of Doha. The growing use of the museums for cultural activities, and in fact, the commodious spaces created by the architects as well as the large house courtyards make this project very usable and flexible. The minimal physical intervention in the Bin Jalmood House, for example, means that the museum spaces can be used without having to worry about damage to artefacts (as most of the interpretation is either digital or 2-D, meaning that the spaces can be used for other activities).

K. **Ease and appropriateness of furnishings, interior design and furnishing**

Furnishings have a pleasing effortlessness about them – especially the courtyard furniture, as well as the elegant monochromy of the scheme. There is a harmony between the architecture and the way in which the museums have been furnished, and the contemporary interpretive content.
VII. Users

A. Description of those who use or benefit from the project (e.g. income level, socio-cultural profile, etc.)

The project benefits a wide range of visitors including a large number of young Qataris, some visiting with their families and others as part of organised trips, for example school visits.

The museums are popular for intergenerational family visits, and the themes covered by the four museums complement each other well.

B. Response to project by clients, users, community, etc.

1. What do architectural professionals and the cultural “intelligentsia” think about the project?

The cultural intelligentsia recognise the value of the project, and often see the restored houses and the museology as two sides of the same coin. The theme of slavery highlighted in the Bin Jalmood House seems to be one of the most thought-provoking and intriguing themes, and the delivery of personal narratives from descendants of former slaves has been mentioned by several visitors as something moving. Young Qataris who were asked about the project noted that it was appealing, and also unconventional to them.

The local press writing about the project notes that it sheds light on both the architecture and the way that people lived in Qatar, and pay special attention to its engagement in addressing sensitive issues such as slavery, commending the fact that it raises awareness, and that it is pioneering in tackling a generally hushed subject.

The project has received a significant number of awards including, in 2018, the Building Awards: International Project of the Year, and in 2017 the Civic Trust Award, the International Architectural Award – Chicago Athenaeum and the Landscape Institute Awards (Highly Commended).

2. What is the popular reaction to the project?

Visitor comments are generally very good or excellent, noting both the beauty of the restored houses, and the stories the museums tell. Many visitors note the Bin Jalmood House as being particularly interesting because of the stories it tells about slavery, which are moving. Several comments express an appreciation of the telling of a difficult history – something not very common in the Middle East, where history is often presented in a rose-coloured manner.

3. What do neighbours and those in the immediate vicinity think about the project?

It is not easy to answer this question as many of the neighbouring buildings are in the final stages of construction, but visitors from the immediate vicinity are likely to share the sentiments summarised in the paragraph above. It is easy to see why the project is popular: it has created very tranquil, comfortable spaces that feel simultaneously contemporary and traditional, and it allows for a leisurely exploration of Qatar’s heritage, giving visitors much to reflect on.
VIII. Persons involved

A. Identification of project personnel and their roles in the project (e.g. client, architect, planner, consultant, craftsmen, etc.)

Client: Msheireb Properties
Architectural manager: Fatima Fawzy, Msheireb Properties
Architect: John McAslan + Partners
Project director: Fanos Panayides
Landscape architect: John McAslan + Partners
Local architect of record: Arab Engineering Bureau
Engineer: BuroHappold
Cost consultant: Davis Langdon/AECOM
Museum planner: Barker Langham
Exhibition designer: Ralph Appelbaum Associates
Lighting designer: GIA-Equation
Contractor: QACC, Qatar
UCL Archaeology: Dr Robert Carter
Heritage adviser: Mohamed Ali Abdullah

IX. Bibliography

List of publications

Msheireb Museums: A Living Heritage (project publication)
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High Life (British Airways), November 2017
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Architectural Record, May 2018
The Plan, June 2018
https://www.telegraph.co.uk/travel/24-hours-in-qatar/doha-history/
Numerous articles in the Arabic press including:
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https://dohanews.co/what-you-need-to-know-about-msheireb-museums-in-qatar/
https://pointandshootwanderlust.com/msheireb-museums-doha-qatar/

Seif El Rashidi
May 2019
The architecture of the historic buildings was used to inspire the larger Msheireb scheme.

Four historic courtyard houses from the early 20th century in Msheireb have been restored to accommodate and create four museums that appear as a central element of downtown Doha.
The immediate surroundings of the site are modern architectural construction developed as part of Msheireb project.

The modern interventions are well integrated into the historic site and the traditional architecture.
The Radwani House is very close to a modern building, creating a contrasting effect between the historic old structure and new construction.

The Radwani House is a house museum that presents a local family life and traditions and tells Qataris the story of their identity and heritage.
Archaeological works in the Radwani House were carried out by UCL. These excavations were the first to take place in the city centre.
Many visitors are local families eager to learn more about their history.

Company House: the Auditorium Space is a striking modern intervention, capturing the industrial theme of this museum.
View of the modern interior of Company House Museum.

View of the enclosed courtyard, an example of the contemporary interventions developed to convert the houses into modern museum spaces.
In the Bin Jalmood House, where it was necessary to glaze and screen some of the colonnades, the newly inserted screens were offset so as to indicate that they were contemporary interventions and not part of the original arcade.
Bin Jalmood House, old structure on the left and new structure on the right.

The modern structure on the right leads to a huge subterranean gallery space.
In the Bin Jassim House, a new structure was inserted on one side of the courtyard, respecting the proportions and articulation of the original building.
The challenge was to find a balance between contemporary architecture and local heritage conservation.