

# Bayt al-Muraykhî: a later Islamic pearl merchant's house at Dalmâ, Abu Dhabi Emirate

by Geoffrey King

Architectural drawings by David Connolly

## Introduction

The Bayt al-Muraykhî is a pearl merchant's house on the western side of the town centre of Dalmâ, at the southern tip of the island of the same name (*Plate 1*). Dalmâ island is located 40 kms off the coast of the United Arab Emirates, and is the most populous of the islands of the Western Region of Abu Dhabi Emirate. In its design, the Bayt al-Muraykhî is unique among the extant traditional buildings of the Gulf, combining secure ground-floor rooms with thick walls and an elegant upper floor room where business was conducted by a local pearl trader in the 20th Century. The house was built by Muhammad b. Jâsim al-Muraykhî who also founded a mosque which bears his name and which stands just to the east of the Bayt al-Muraykhî pearl-house (1).

When first recorded by the Abu Dhabi Islands Archaeological Survey (ADIAS) (2), the Bayt al-Muraykhî stood in a garden on a traffic island. In 1992, it was impossible to photograph the house from a distance as it was surrounded by tall trees. It stood close to the old shoreline, although this shoreline had been completely masked by landfill as the island had been enlarged in modern times. The lower rooms of the house had served as a local natural history museum until the late 1980s but this museum had fallen into disuse by 1992. The building

had seriously deteriorated when ADIAS first visited it and the floor in the eastern part of the upper room was collapsing.

Following the initial recording of the Bayt al-Muraykhî and the neighbouring mosques in 1992, ADIAS drew the attention of the Abu Dhabi authorities to their importance and Dr ʿAbd al-Sattâr ʿAzzawî of Sharjah Directorate of Antiquities was commissioned by the Public Works Department of Abu Dhabi Emirate to carry out restorations on behalf of the local *baladîya*, consolidating and stabilising the buildings and restoring them with sensitivity and accuracy (3). It is thanks to the prompt action of the Abu Dhabi authorities and the work of Dr ʿAzzawî and his team that Dalmâ's traditional Islamic buildings now survive. Since the completion of the restorations, the Bayt al-Muraykhî has become a local museum once more, the display including Islamic pottery excavated during the restoration of the Bayt al-Muraykhî and the al-Muraykhî mosque (4).

With its location in the midst of the southern Gulf pearl beds (5), Dalmâ was an important centre of the pearl trade in the early 20th Century, as it probably had been for a long period before that, for the town has the best sweet water wells in the whole region and a good anchorage. Indeed, artesian water supplies were so

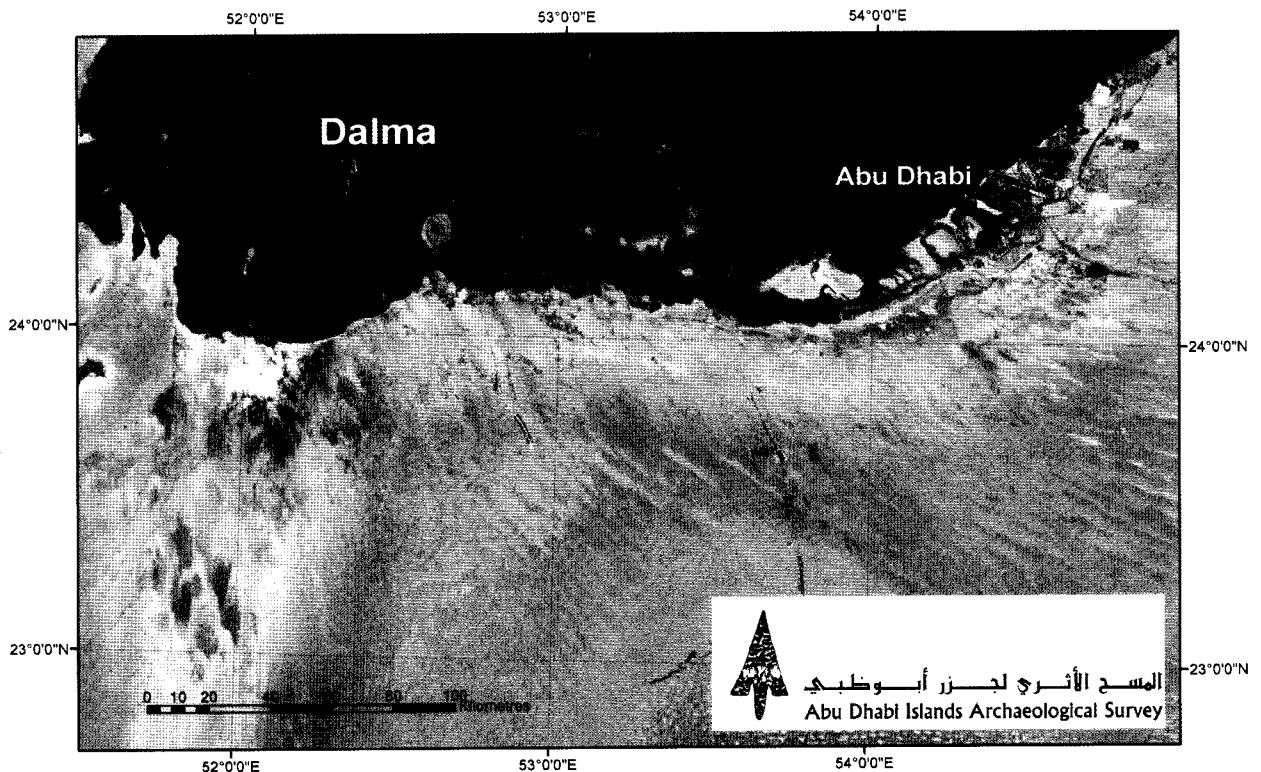


Plate 1: Map, Western Region, Abu Dhabi

reliable that Dalmâ was in a position to export water to other places along the coast, including the island of Abu Dhabi. According to J.G. Lorimer writing in 1908, the Abu Dhabi government derived a revenue of 5000 Maria Theresa silver dollars per annum from taxing the Dalmâ pearl trade (6). Given this taxation revenue, the income to the merchants must have been high in relative terms and local anecdotal evidence repeatedly emphasizes that pearling was the mainstay of the economy in the pre-oil period.

Diving at the pearl fisheries took place in summer but in the colder weather of winter, people would wade out to the shallow beds off-shore to collect pearl-oysters. At the end of the summer pearling season, there would be a temporary market at Dalmâ at which accounts would be settled between the merchants and the boats' crews. So many Indian traders would come to the Dalmâ market that it was nicknamed "Bombay" by the local people (7). It is in this context of a prosperous community engaged in the Abu Dhabi pearl trade early in the 20th Century that the elegant Bayt al-Muraykhî pearl house must be seen,

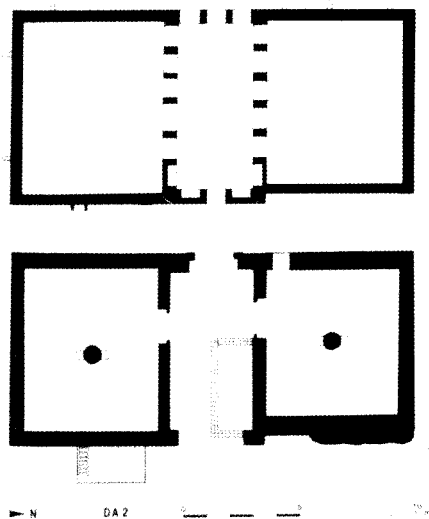


Plate 2: Ground-plan, Bayt al-Muraykhî, Dalmâ, drawn by David Connolly for ADIAS.

combining a lower storey vault for keeping pearls safe and a fine chamber above in which business would be conducted.

### The date of Bayt al-Muraykhî

According to the local people, the Bayt al-Muraykhî and the nearby mosques were constructed by al-Huwâla Arab craftsmen from the Iranian shore and islands on the opposite side of the Gulf. The house and the neighbouring mosques belong to the same Islamic building tradition of the Gulf and they appear to all be of the same general date. The only one of the four traditional-style Islamic buildings at Dalmâ to have a foundation inscription is the al-Dawsarî mosque, which dates it to Shawwâl, 1349/March, 1931 (8) while a graffito inscription that was incised in plaster in the portico of the Sa'îd b. 'Alî al-Muhammadî mosque has the date of 1377/1946. In the absence of other firm dating information, these inscriptions in the al-Dawsarî and al-Muhammadî mosques must be taken as providing a general *terminus ante quem* for the Dalmâ traditional

Islamic buildings as a group, since they are all similar in style to each other. The conclusion that these buildings were constructed in the early decades of the 20th Century is supported by information given to ADIAS by the people of Dalmâ.

The limited excavations that were made while the foundations of the Dalmâ buildings were being stabilised during the restorations revealed the wall-traces of earlier unrelated buildings to the north and east of Bayt al-Muraykhî and at the al-Muraykhî mosque. Judging by the unstratified ceramics recovered, the underlying structures were later Islamic, though pre-dating the house. This pottery, which today is on display in the Bayt al-Muraykhî and at the al-Muraykhî mosque museums, has yet to be studied (9).

### The design of the building

#### a) The exterior

The Bayt al-Muraykhî is constructed of beach stone which was revealed during the restorations when the old

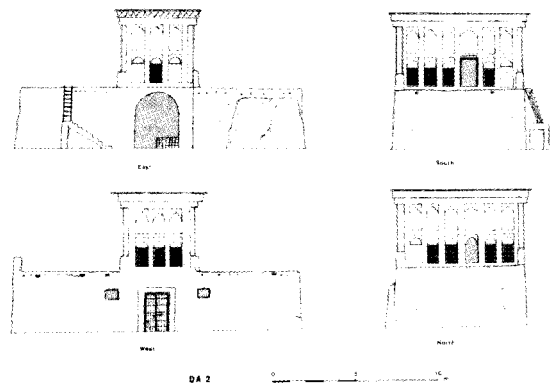


Plate 3: Elevation, Bayt al-Muraykhî, Dalmâ, drawn by David Connolly for ADIAS

covering of plaster was stripped off and replaced. There were terraces on either side of the upper room, forming the roofing of the ground-floor chambers below. The only access to this upper storey in 1992 was a wooden ladder fixed above a platform on the east side of the building, leading to the south terrace. It has now (2004) been replaced by a built staircase by which one ascends to the upper floor.

The secure ground-floor rooms of Bayt al-Muraykhî lack windows. There is a single entrance on the east side of the building leading into a central passage that gives access to the secure ground-floor rooms on either side (Plates 2,3). There is another external doorway at the west end of the passage. The old eastern door is now displayed in the Bayt al-Muraykhî museum but it was still in situ in 1992 (Plate 8).

The ground-floor measures externally 17.55 m. x 8.14 m. The south room internally measures 5.87 m. x 6.75 m. and the north room measures 6.02 m. x 6.28 m. The central east-west passage between them is 3.26 m. in width.

Close to the Bayt al-Muraykhî to the north is a date

press, a *madbasa* (Plate 5) which was excavated during the restorations but there was no trace of it visible on the surface in 1992 when the Bayt al-Muraykhî was first recorded. A modern superstructure was subsequently built over the *madbasa* to protect it.

The upper storey of Bayt al-Muraykhî includes two terraces, one to the north and one to the south of the central room built over the ground-floor central passage (Plates 6,7). The terraces form the roofing of the ground floor rooms.

The southern terrace measures 6.75 m. x 7.66 m. and the northern terrace measures 6.52 m. x 7.85 m. These terraces are surrounded by a low wall forming a balustrade, 40 cm. wide. Both terraces were pitched to the west in 1992, so that rainwater could flow off through four square wooden channels projecting ca 30 cm. from the building on that side. At the NW corner of the northern roof terrace was a vertical post, 36 cm. x 39 cm. and just under 1 m. high, of no obvious purpose.

Between the terraces, the upper floor chamber is set on an east-west axis, directly above the ground floor passage. It measures 7.02 m. x 3.28 m. and is built in the usual pier and panel system of construction found throughout the Gulf region. It has windows, a series of *bâd girr* (mid-wall wind catchers) (10) and blind arches arranged in two registers, in the manner customary in traditional buildings in the region. The chamber was made as cool as possible in the harsh summer environment of the Gulf by the numerous windows and the clustering of *bâd girr* at the east end. In cooler or windy weather, the wooden window shutters could be closed and the ventilator slots of the *bâd girr* could be shut off.

At the SW and SE corners of the upper storey

room are two curved quarter pilasters on squared plinths. There are corresponding pilasters at the NE and NW corners.

The single entrance leading into the upper chamber from the south terrace is offset to the east, rather than centrally located. It was preceded in 1992 by a 10 cm. high doorstep of beach rock, 40 cm. in width. The entrance is vaulted by a round arch, matching the narrower rounded blind arches over the windows of the upper room.

The southern door flaps had vanished by 1992 but the door-frame remained, measuring 1.90 m. x 1.20 m. There were still some hinges in place and rust stains where other hinges had vanished. The wooden lintel of the frame had a damaged Qur'anic inscription of which the following was legible: "*Sayafi-ka-hum.....wa.....al-sami' al-'alim*" (11) : "But [Allâh] will suffice you against them, and [He] is the All-Hearing, the All-Knowing".

In the lower register of the south wall there are three identical rectangular windows at the western end. They are each surmounted by a blind rounded arch set back 2-3 cm. within a rectangular panel. These windows are subdivided by horizontal wooden cross pieces and there are eight vertical iron bars in each window, spaced 6 cm. apart. East of the entrance is another single window, identical to the three to the west while in the final panel to the east is a mid-wall wind catcher, a *bâd girr*. The windows once had wooden shutters but all were missing in 1992: today, they have been replaced.

In the upper register is a rank of rectangular recesses containing blind broken arches with lobes. The arches are again set back 2-3 cm. from their rectangular frames. The crowns of the arches are alternately either ogees or rounded. The blind arch with an ogee over the

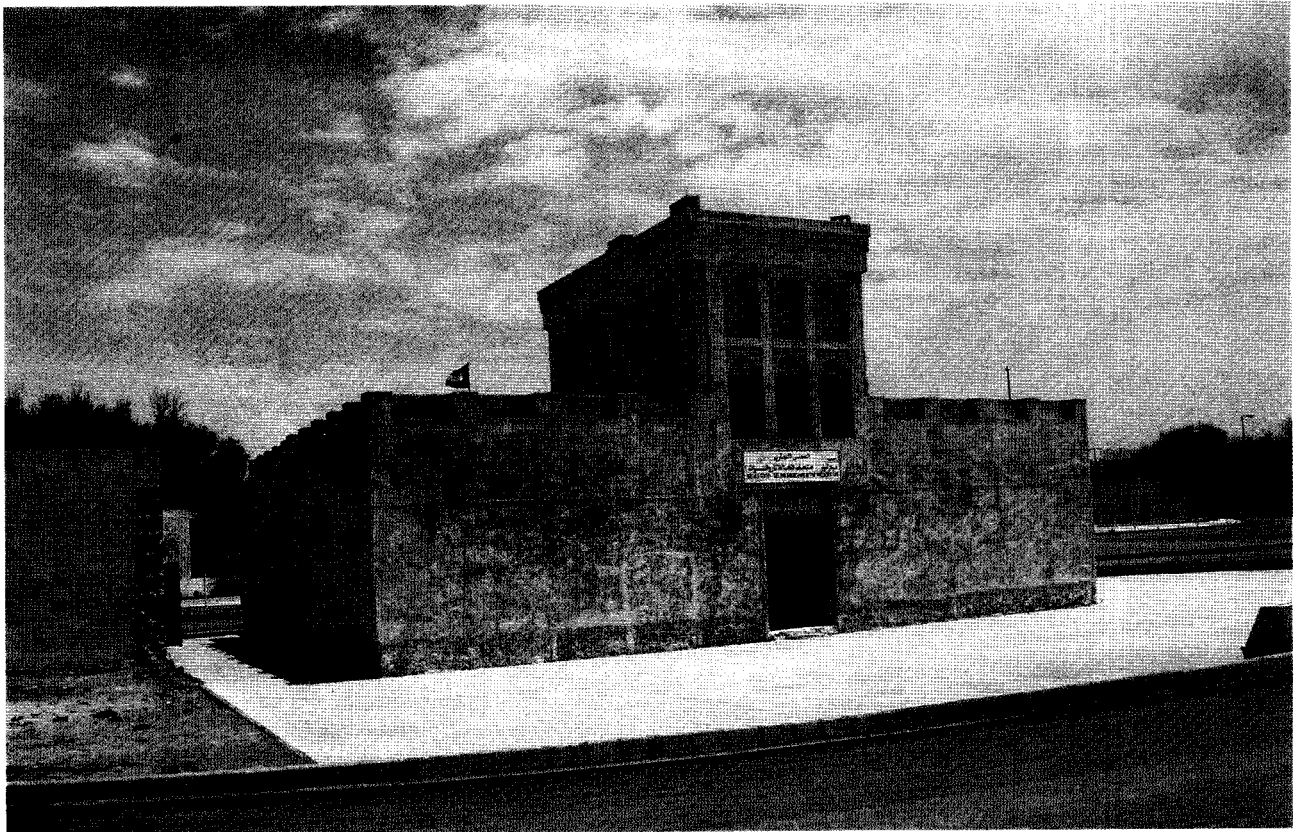


Plate 4: General view, Bayt al-Muraykhî, Dalmâ, from the west.



**Plate 5: Madbasa, Bayt al-Muraykhî.**

entrance is wider than the other blind arches.

The wall is terminated by eaves which are set forward slightly from the plane of the rest of the wall on all four sides of the building. They are plain at this uppermost level except at the east end, where there is a dog's tooth relief motif.

The exterior surface of the north side of the chamber follows the same design as the south wall, with the corners again marked by pilasters on rectangular bases. The lower register on the north side consists of rectangular windows measuring 1.21 m. x 0.76 m., all set back 7 cm. from the surrounding frames. They were originally closed by metal grilles and have round-headed blind arches in the register above. The design of the north wall differs from the south wall only in the location of the doorway leading to the north terrace, which is set centrally, in contrast to the south door which, as we have seen, is off-set from the centre. The north entrance is of the same width as the flanking windows, in contrast to the main door on the south side which is wider.

The exterior faces of the east and west walls of the upper storey are treated in a similar manner to the south and north walls. At the east end there is a mid-wall *bâd girr* ventilator on either side of a central window while at the west end of the building, there are three windows in the lower register and no *bâd girr*. The upper register at the west end consists of blind broken arches crowned with ogees flanking a broken lobed arch over the central window.

#### **b) The interior**

The interior articulation of the walls corresponds to the exterior with respect to the treatment of the windows, the *bâd girr* mid-wall ventilators and the disposition of the blind panels in the upper register (*Plate 6*). The lower windows and the *bâd girr* are set back from the plane of the wall by 1-1.5 cm. on the interior.

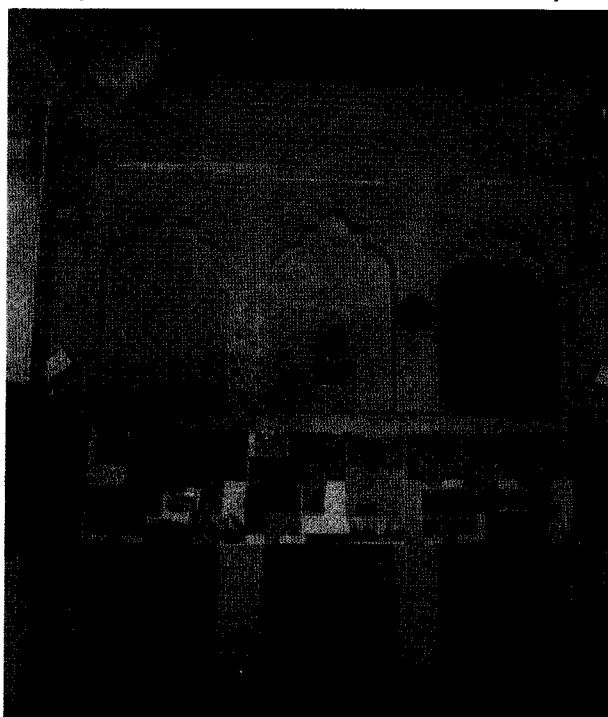
The uppermost part of the wall below the cavetto is terminated by a dog's tooth moulding in relief

in the same manner as on the exterior of the east wall surface. This dog-tooth decoration below the cavetto runs around all of the uppermost part of the room. A triangular panel is cut off each of the four corners of the ceiling above the cavetto. The triangular panels are decorated although nowhere was the motif clear in 1992 and in some cases, the decoration had been virtually obliterated by renewal of the plaster. Similar decorative plaster triangles are found in the al-Muraykhî mosque and in the Bayt Jâsim b. 'Abd al-Wahhâb at Dârin on the Eastern Saudi island of Târût (12).

At the east end of the interior are three ranks of recesses. In the lower rank in the centre is the rectangular window arrangement noted already in the account of the exterior, each surmounted by a round lunette. To either side are the mid-wall wind-catchers, each also surmounted by blind, round-headed arches. On the next level, above the blind arches, are rectangular blind panels. That in the centre has a blind broken lobed arch and there is a blind arch with an ogee on either side. The design of the interior surface of the west wall is identical to that of the east wall, except that the mid-wall *bâd girr* are replaced by windows, as we have seen already.

#### **Discussion**

The Bayt al-Muraykhî pearl house is the only commercial structure of this character to have been recorded anywhere in the Gulf. It combines the need for security for valuable merchandise - the lower storey has



**Plate 6: Bayt al-Muraykhî, Dalmâ. Interior of the upper storey room**

the solidity of a bank vault - with the provision of a fine room on the upper floor where the pearl-merchant, Muhammad b. Jâsim al-Muraykhî, could conduct business in as cool an environment as the pre-modern Gulf could provide.

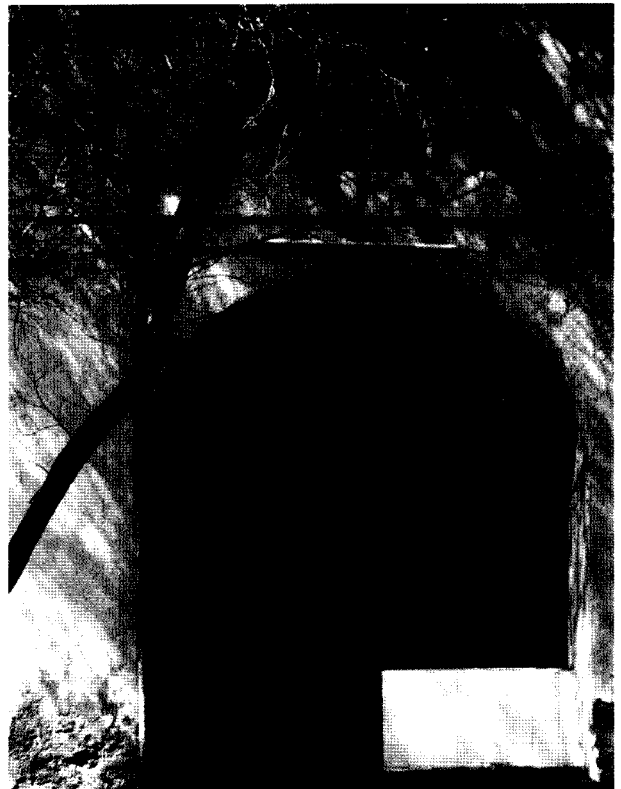
The airy upper room with its open windows and its *bâd girr* ventilators is designed for a pre-electricity, pre-air conditioning age, to take advantage of the slightest

breeze in the oppressive humidity and heat of a Gulf summer. Such cooling devices were essential given the nature of the climate and these systems are probably of great antiquity.

While parallels for the combination of strong rooms and the upper floor chamber do not seem to survive elsewhere, the upper floor chamber in itself has numerous extant parallels. In essence this is the standard pavilion-like chamber ubiquitous in the Gulf in the pre-modern period. The pier and panel construction method lends itself to the insertion of the *bâd girr* mid-wall wind-catchers and windows to admit the slightest breeze, while simultaneously excluding sunlight, essential in the oppressive humidity and heat of a Gulf summer.

Parallels for the upper chamber in terms of general appearance, design and ventilation systems and in the treatment of decoration are found in Qatar, Bahrain, Târût and al-Jubayl, the latter both in Eastern Saudi Arabia (13). A house at Wakra in Qatar is close in design, in decoration, and in its *bâd girrs* to the Bayt al-Muraykhî (14). A free-standing chamber in the Bayt ʿAbd al-Wahhâb at Darîn on Tarût island off the Saudi coast is also very similar (15). The Bayt al-Muʿayyad house at Samahîj, Bahrain (now lost) also comprised a series of individual chambers of this type, in effect modules that together comprised a complex courtyard house.

The broken lobed arches in Bayt al-Muraykhî correspond to those in the Wakra house and in the Bayt ʿAbd al-Wahhâb in Tarût. They are also similar to those in the old ʿUtayba mosque in Abu Dhabi city, the predecessor of the present Shaykh Khalîfa b. Zayed



**Plate 8: The eastern door to Bayt al-Muraykhî in 1992**

which is now entirely restored, it is of a standard design and is of a width encountered everywhere throughout the Gulf and the rest of the Arabian littoral. The determining factor is the average length of the imported mangrove poles (ca 3 m.) which were used in roofing (17). Allowing 20-30 cm. for the ends of the poles to rest on the walls of the given structure, the use of these poles tends to give rooms and mosque aisles a uniform width of about 2.70 m. - 2.80 m. throughout the Arabian coastal area wherever mangrove is used for roof construction.

Bayt al-Muraykhî and the neighbouring mosques in Dalmâ are among the few surviving examples of the traditional Islamic architecture of the Gulf region, lost elsewhere in Abu Dhabi Emirate. The house, by the accident of its survival, is a unique instance in the UAE of a building specifically designed for dealing in pearls, a trade conducted in the relative comfort of the upper chamber. Below, the heavy walls of the windowless lower rooms protected the pearls, the valuable stock that was the basis of the past prosperity of Dalmâ and Abu Dhabi Emirate.

#### Notes

1. Apart from the al-Muraykhî mosque, there are two other old mosques nearby in Dalmâ, the al-Muhannadî mosque and the al-Dawsarî mosque. These mosques are the subject of a forthcoming study in *Tribulus* by the present author.

2. G.R.D. King, Abu Dhabi Islands Archaeological Survey (ADIAS 1): An Archaeological Survey of Sir Banî Yâs, Dalmâ and Marawah, (21st March to 21st April, 1992 (Trident Press, London, 1998), p. 52. The Bayt al-Muraykhî pearl house was given the site coding of DA 2 during the ADIAS survey of 1992. The recording of the measurements and initial description of Bayt al-Muraykhî were carried out by D. Connolly and F. Baker, members of the 1992 ADIAS team. Their description of the building was revised and refined by Dr Cristina Tonghini and the present writer in 1993 and this forms the basis of the present paper.



**Plate 7: Bayt al-Muraykhî, Dalmâ. South side of the upper storey**

mosque (16), and such arches were clearly a standard form throughout the Gulf region in the 19th and early 20th C. The blind plaster grilles and blind panels and arches in the Bayt al-Muraykhî are also ubiquitous throughout the area, as are the rectangular windows with pierced grilles.

As to the roof construction in the Bayt al-Muraykhî

3. 'Abd al-Sattâr 'Azzawî, *Murshid al-mubânî al-turâthiyya fî jazîra Dalmâ*, Abu Dhabi (1418/1996).

4. Mr Fâtiḥ Mohammed Abdullah, who worked on the restoration with Dr 'Azzawî, has been responsible for organizing the museums and curating them since the restorations were completed. He is the present custodian of the museum displays in the Bayt al-Muraykhî pearl house and al-Muraykhî mosque. Visitors requiring access can contact him on mobile (050) 5164389 – Fax: (02) 8781110 – email: fathy516@hotmail.com.

5. The National Atlas of the United Arab Emirates, United Arab Emirates University, Al Ain (1993), pl. 22.

6. J.G. Lorimer, *Gazetteer of the 'Persian Gulf'*, Calcutta (1908), IIA, p. 409.

7. ADIAS team members were told this by residents of Dalmâ during the 1992 season of fieldwork.

8. This inscription incised in plaster is now in the Bayt al-Muraykhî museum.

9. Among the later Islamic pottery and Far Eastern imports displayed in the Dalmâ museums are alkaline blue glazed sherds which are of Sasanian/early Islamic date. Their presence should be considered in terms of the fact that sherds of the same type and period have been found along with later Islamic sherds to the NE of the al-Muraykhî mosque, in an Islamic graveyard (Site DA 7).

10. A distinction must be drawn between the wind-tower type of *bâd gîrr* which is encountered in the Gulf countries and in southern Iran and the mid-wall ventilator type seen in the Bayt al-Muraykhî and elsewhere in the region (see G. King, *The Traditional Architecture of Saudi Arabia*, I.B.Tauris, London (1998), p. 206-7). The term *bâd gîrr* is used to describe both the wind-tower and the mid-wall ventilator types.

11. Qur'ân II, sûrat al-Baqara, 137.

12. G.R.D. King, "Islamic Architecture in Eastern Arabia". *Proceedings of the 10th Seminar for Arabian Studies* 8 (1978), p. 28, Pl. 11.

13. G.R.D. King, "Bayt al-Mu'ayyad. A late nineteenth-century house of al-Bahrayn", *Arabian Studies* IV (1978), pp. 27-45.

14. G. King, *The Traditional Architecture of Saudi Arabia*, pp. 200-207; Muhammad J. al-Khulayfî, *Al-'Imârat al-Taqlidiyya fî Qatar*, Doha (1990), p. 129, Pl. 52.

15. G.R.D. King, "Islamic Architecture in Eastern Arabia", *Proceedings of the 10th Seminar for Arabian Studies* 8 (1978), pp. 15-28.

16. P. Hellyer, *From Under Desert Sands, ADCO's 40 years of Oil Exports 1963-2003*, ADCO, Abu Dhabi (2003), p. 17.

17. The Gulf mangrove is insufficiently straight to be used and poles are imported from beyond Arabia.

**Dr. Geoffrey R.D. King**  
**Department of Art and Archaeology**  
**School of Oriental and African Studies,**  
**University of London**  
**Thornhaugh Street,**  
**LONDON, WC1H 0XG**  
**e-mail: gk3@soas.ac.uk**



Plate 9: Bayt al-Muraykhî, Dalmâ. Exterior of the upper storey room: view from the NE.