UDO KULTERMANN

CONTEMPORARY ARCHITECTURE

IN THE

ARAB STATES

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Renaissance of a Region

McGraw-Hill

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the firm. The Salmaniya Medical Center, a 550-bed hospital, is central to the health-care system of the country. The five-story complex with two wings contains separate inpatient accommodations for men and women on all floors, and diagnostic, therapy, and service departments on the ground floor. The Hamad General Hospital is a similar type of building, a five-story, 660-bed hospital in two wings, with special sun protection devices on the exterior. The Gulf Technical College, consisting of 2I classrooms, a lecture hall, and a language laboratory, encloses the interior space as much as possible from the sun's rays.

Commercial architecture in Bahrein reflects a variety of foreign influences; the American firms Skidmore, Owings & Merrill (United Gulf Bank and Al-Bahrein Arab African Bank) and Caudill, Rowlett & Scott (Bahrein Monetary Agency Building); the Swiss firm of Alfred Roth in collaboration with Bahreini engineer Khalil al-Zayani (headquarters of the National Oil Company of Bahrein); and the English firm of Raglan Squires (New Bank on Government Road). Squires was also the architect for the Bahrein Hilton (1972–1975), the Ramada Hotel, and the Palmeira Apartments (1978), all in a stereotype architectural form often seen in international buildings.

引 QATAR

Qatar is a small sheikhdom (II,437 square kilometers) on a peninsula in the Persian Gulf, located southeast of Bahrein and bordering Saudi Arabia.

In 1949 its population was about 20,000; as of 1992, its population was about 484,000, including a large number of Iranians and Pakistanis, many of them living illegally in the country. The per capita income in 1991 was U.S. \$13,730, one of the highest in the world. The capital city is Doha and the head of state since 1972 has been Sheikh Khalifa ibn Hamad al-

Thani, a member of the ruling Al-Thani family, numbering approximately 4000 to 5000.

The Qatar peninsula was populated as far back as 50,000 B.C. and had close relations to Mesopotamia and the area that makes up current-day Saudi Arabia. Its history and developments parallel those of the other Gulf states, including fighting between rival family groups. In 1820 a treaty with England and the Trucial Coast, as the area was then called, secured the passage to India. As a punishment for piracy Doha was bombarded in 1821 by the British, and again in 1867 by the Bahreinians. After numerous other conflicts with England, the Ottoman Empire, and the ruling Al-Thani family, the country gained its independence in 1971.

Qatar was a city with very few important buildings until recently, when it began inviting leading international architects to design buildings for the ruling family and for educational and cultural purposes. The task here—as elsewhere in the Arab world—is to balance new necessities while preserving Qatari tradition. A case in point is the emir's palace, which was transformed into the National Museum by Michael Rice, in collaboration with the architects Tony Irving and Gordon Jones.

The renovation was completed in 1975, and the old cultural monument was basically preserved but changed to take on a new function. The existing structure and the additions, which cover an area of 47,500 square meters, are surrounded by a wall with open and closed spaces designed to assimilate the character of the old palace. The official brochure of the new museum states the buildings' goals as follows: "Whilst they are designed in sympathy with the houses of the original site, the new buildings do not attempt to reproduce or simulate their traditional forms except perhaps in the colonnade which fronts the Museum of the State; rather, all the buildings are formed by the same architectural principles,



Michael Rice, Tony Irving, and Gordon Jones

National Museum

Doha, Qatar

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Courtesy: Aga Khan Award for Architecture, Geneva

evolved in particular by Islamic Societies, in the handling of mass and interior space."

Among the official projects commissioned by the Qatari government were those given to Kenzo Tange and James Stirling, The Architects Collaborative, Georges Candilis, and Günter Behnisch. The as yet unbuilt designs by Stirling and Tange for a government center (1976–1977) consisted of groups of similar individual units for the different ministries along the shore of the gulf. The National Theater and University of Information was built by the English firm Cico

Triad in 1976–1980; like their Doha Club Building (1977), it adapted local architectural traditions to contemporary technical necessities. It contains large open courtyard spaces with gardens and water basins as well as a large indoor auditorium with seating for 500 people.

The Arab architect Samir Khairallah was capable of capturing the spirit of traditional Arab architecture within the limitations of an official feudal building typology in his four VIP guest palaces in Doha (1975). While the four palaces are independent of each other in their complex



Samir Khairallah

VIP guest palaces

Doha, Qatar

1975

Photo: U. Kultermann, New York

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arrangement and formal expressiveness, they can be seen as one of the first steps toward an Arab identity manifested in architectural form.

Other Arab architects active in Doha include the Iraqi architects Mohamed Saleh Makiya (Al-Siddis Mosque and Al-Andalous housing) and Rifat Chadirji (cinema, 1972), the Lebanese Jafar Tukan (plan for a mosque in Um Said; office building, 1981), Abdelhalim I. Abdelhalim (Oman ibn Affan Mosque, 1984) and Rasem Badran (Museum of Islamic Arts, 1997). Badran's plan for the Museum of Islamic Arts won first prize in an international competition. Charles Correa from India, Richard Rogers from England, James Wines from the United States, and the Iraqi architect Zaha Hadid participated in this competition.

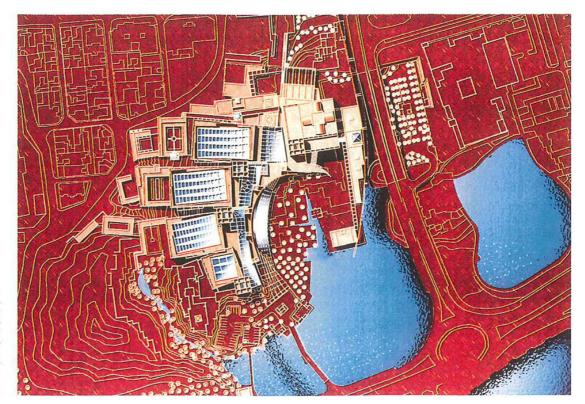
Oleg Grabar described Abdelhalim's mosque design as follows:

In two key ways the Qatar project is a truly fascinating innovation. First of all, it picked up

from the Muslim tradition not so much a system of forms, a morphemic structure, as a set of principles, a semantic structure. It asserts, powerfully, almost brutally, that complex geometry is the organizing force of a monument and thus rediscovers principles which have been worked out by the mathematicians of Baghdad and of Central Asia in the I0th and IIth centuries.

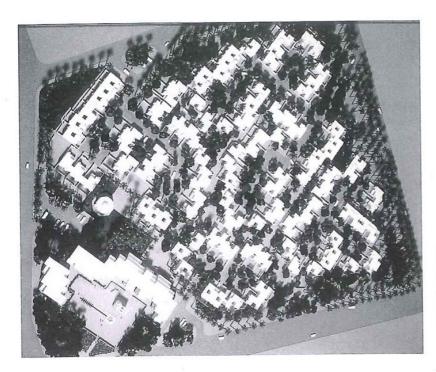
By far the most important of these projects for Doha is the Al-Andalous housing complex designed by Makiya, a complete neighborhood with communal facilities. On a site west of the city, Makiya proposed an inward-looking residential environment consisting of clusters of I0 to I5 individual houses. Here is how the official brochure describes the design.

The defined cluster form reinforces the concept of residential territory. Residents will be



Rasem Badran
Museum of Islamic Arts
Doha, Qatar
1997
Courtesy: Rasem Badran,
Amman

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Mohamed Saleh Makiya
Al-Andalous housing
Doha, Qatar
c. 1990
Courtesy: Mohamed Saleh
Makiya, London

able to identify themselves in respect of the territory of belonging. A hierarchy of territory levels can be established starting at the boundary of the individual plot which in turn lends itself to the defensive boundary of the cluster and ultimately ending at the boundary of Al-Andalous site which is defined by the green belt surrounding the site.

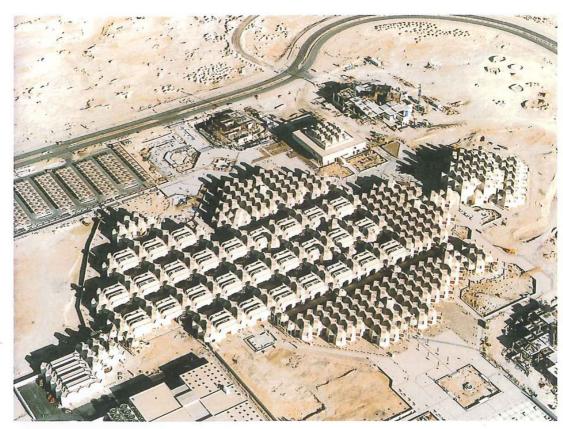
The new University of Qatar was designed by an Arab, the Egyptian architect Kamal El-Kafrawi. It fulfills the contemporary need for a large campus with all the technological and managerial requirements while still retaining the spiritual presence of Islam. From the outset, El-Kafrawi rejected the idea of designing and building in the traditional way. Instead he insisted on incorporating modern technology only as far as it was needed to benefit the total academic community. He also rejected the importation of building forms from Europe and America, as, in his opinion, these alien forms would disturb the perception and experience of an Islamic environment. El-Kafrawi therefore had to find a way that would appropriate features of both

Western technology and traditional architecture and merge the two into a new form.

When El-Kafrawi was commissioned by UNESCO to plan the University of Qatar in 1973, then called Gulf University, he carefully researched the traditions and architecture of Qatar. His project began to take shape in 1975, actual building began in 1983, and the first phase was completed in 1985. The campus is on an elevated site in Al-Markhiah, about 7 kilometers from Doha and 2 kilometers from the gulf shore. It contains colleges for education of men and women, a civil engineering college, and a college of sciences. The colleges for men and women are on opposite ends of the campus, and the approaches to the various campus facilities are separated. Additional buildings include a mosque, a main auditorium, a library, and a cultural center, as well as staff housing and recreational facilities. Instead of corridors and enclosed stairways, circulation within the campus is provided by a system of internal, partly covered courtyards, which is more appropriate to the hot climate and the Arab cultural tradition.

CHAPTER ELEVEN

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Kamal el-Kafrawi
University of Qatar
Doha
1983–1985
Courtesy: Kamal el-Kafrawi,

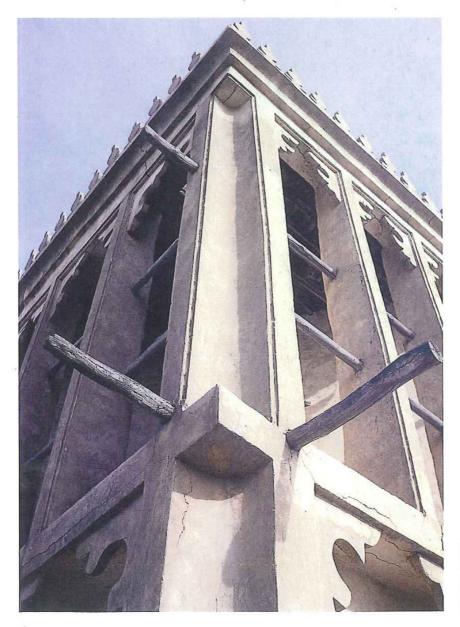
Cairo



Kamal el-Kafrawi
University of Qatar
Doha
1983–1985
Courtesy: University of Qatar,
Doha

186 चिड The architect put strong emphasis on natural ventilation, one of the many ways in which he relates to traditional architecture of the region. He used the few still-standing wind tower houses in Doha as models and modernized the basic principle. In the official brochure, the architect noted that "not only are the Tower of Winds a substitute for mechanical ventilation and air conditioning in case of power failure, but they also characterize the outline of the University buildings and relate to the cultural environment." The fascinating results successfully integrate a traditional element into a

contemporary design, connecting past and present. Another such element is the use of natural light in both the academic and residential buildings in order to control the intense sunlight of the region. Traditional devices that had successfully been used for centuries were reinterpreted and made part of the new design. The lowering of illumination levels for visual and psychological comfort were made possible by combining scientific research and traditional methods. The devices include the use of indirect light, as practiced in all traditional buildings of the region, the use of screens in carved tim-

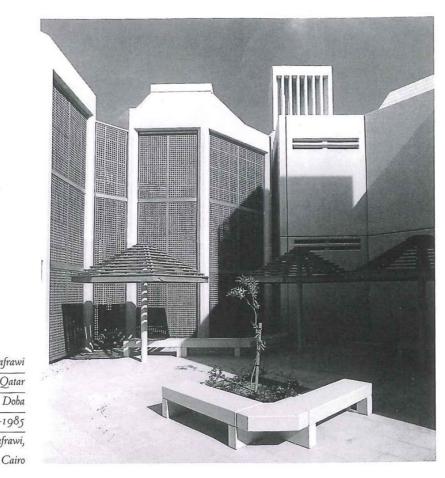


Ancient wind tower house

Doha, Qatar

Photo: U. Kultermann,

New York



Kamal el-Kafrawi University of Qatar Doba 1983–1985 Courtesy: Kamal el-Kafrawi,

ber in the tradition of the Arab mashrabeyas, the admission of light from shaded surrounding areas, and the use of diffused overhead lighting from large openings in the roofs.

These structuring elements gave form and meaning to the individual lecture halls as well as the residential units and created an awareness of cultural identity. The architect expressed his thoughts when he summed up his design philosophy in the official brochure:

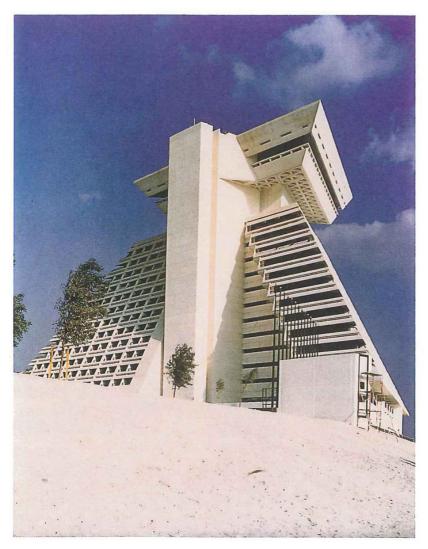
Architecture is a tangible expression of a civilization, the product of the intellectual, social, economic and political activity of a whole people; construction technology is simply the tool with which to give form to this expression. One has therefore closely to analyze the environment of villages, towns and cities in the Arab

world, to determine the effects of Western contemporary architecture. Since the technology has been applied without the philosophy which underlies it, the modern buildings are foreign to the area, which shows how far Arab architecture has lost direction, and the profound effect this has on the individual and his environment. One has to reconcile the immediate need for the import of modern technology with the needs also to adapt it for use in the local environment. This implies considerable study of the needs and aspirations of the individual.

A number of important buildings were designed by foreign architects, mostly from England. Among them were major hospitals in Doha. The State Hospital by the firm of John R. Harris won a competition in 1953. It was built as a large complex on a desert site half a mile west of the city. As it was one of the first major constructions nearly all the material had to be imported. The same firm built the Women's Hospital in Doha in 1981-1983. The Hamad General Hospital, built by the firm of Llewelyn-Davies in 1972, is a fivestory complex with two wings; it is located 3 kilometers from the city, close to the Rumaillah Hospital.

Other building complexes have had a strong impact on the changing face of Doha. The Doha Sheraton and Conference Center (1984-1985) by William L. Pereira includes a I6-story, 430-room pyramid-shaped hotel and adjacent conference center with an auditorium for 750 people. The interior is dominated by a 13-story atrium surrounded by luxury guest rooms, each with a terrace. The complex is the most prominent structure in the northern part of the city and has become the focal point of the new diplomatic quarter. It has also been featured on a Qatari postage stamp. In order to build it, the coastline had to be expanded by a large landfill.

The headquarters building for the Gulf Organization for Industrial Consulting (GOIC), built in 1984 by John S. Bonnington, is located in the new district of the city facing the corniche. It houses a conference center, a library, and a com-



William L. Pereira Doha Sheraton Hotel and

Conference Center

Doha, Qatar 1984-1985

Courtesy: Pereira Associates,

Los Angeles

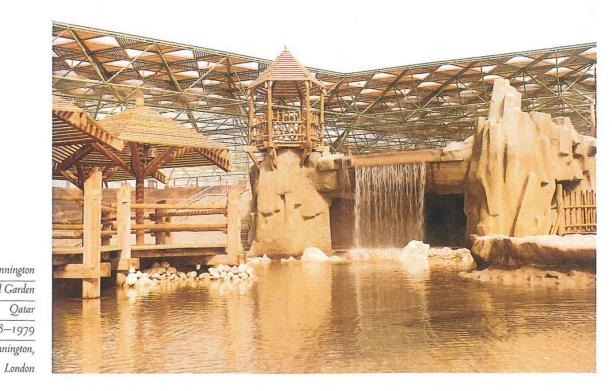
CHAPTER ELEVEN

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John S. Bonnington
Gulf Organization for
Industrial Consulting (GOIC)
beadquarters
Doha, Qatar
1984
Courtesy: John S. Bonnington,

London



John S. Bonnington
New Zoological Garden
Qatar
1978–1979
Courtesy: John S. Bonnington,

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puter center. Conceived in the shape of round vertical cylinders that contain services, and interconnected horizontal office floors surrounding an internal atrium, the building offers a flexible solution for uninterrupted internal functions.

The New Zoological Garden (1978–1979), also by Bonnington, is located 15 kilometers south of Doha. A large (20 hectares) environmental area, it is structured partly by covered pavilions and terraces that make it possible to view herds of oryz and gazelle in their natural habitat.

Among the numerous other commercial buildings in Doha are the New Bank on Government House Road by Raglan Squires; the First National City Bank (1969), the Qatar Monetary Agency Central Bank (1977), and the Qatar National Bank (1977), all by Tony Irving; the plans for Doha International Airport by C. W. Fentress and J. H. Bradburn (1996); as well as the fascinating design for 500 senior staff houses on the West Bay in Doha by John S. Bonnington.

The confederation of the United Arab Emirates was established in 1971 and consists of seven emirates, or sheikhdoms. Located on the southwest coast of the gulf, it covers a combined territory of 77,700 square miles and has a population of about 2 million (1993 estimate), of which only 12 percent are UAE citizens; the remaining 88 percent are foreign workers, mostly from the Indian subcontinent. The individual sheikhdoms are Abu Dhabi, Dubai, Sharjah, Ajman, Umm al-Qaiwain, Ras al-Khaimah, and Fujairah. The major cities are Abu Dhabi, functioning as the capital of the UAE, Dubai, Al-Ain, and Sharjah. The immense oil resources have made the federation one of the richest areas in the world. The per capita income in 1992 was U.S. \$14,000. The head of state since 1971 is Sheikh Zayed bin Sultan al-Nuhayan (born c. 1920).

As in the other Gulf states, the history of the UAE can be traced back to the third millennium B.C., parallel to the time of the Indus Valley culture in India. The region was later populated by Semitic tribes from the Nile Valley and ruled by the Mesopotamians. In modern history the Gulf states, also later called the Trucial states, were dominated by the Portuguese, the British, the French, and the Dutch. A British invasion in 1819 brought it under British control, which lasted until its independence in 1971.

Contemporary architecture is strongly determined by commercial buildings, and the domination of foreign architects is clearly visible, even though Arab architects are also practicing in the UAE. For example, Mohamed Saleh Makiya designed the Dubai Hilton Hotel in 1973, the Diwan al-Amiri in Dubai in 1984, and the Dubai Retail Market in 1983; Jafar Tukan designed the Ministry of Finance Building in Abu Dhabi in 1979 and a number of commercial and residential complexes; Rifat Chadirji designed the National Bank of Abu Dhabi in 1970; and Maath al-Alousi planned the Deira Greek Corniche recreational facilities in Dubai in 1978.

Two of the most ambitious competitions were dominated by foreign architects. Among the architects seeking the commission for a conference city in Abu Dhabi in 1975 were Kisho Kurokawa from Japan, C. F. Murphy from the United States, and Wilhelm Holzbauer from Austria. Competing in the 1988 competition for the new university town of Al-Ain were, among others, Kisho Kurokawa, Arthur Erickson, and Skidmore, Owings & Merrill. Kurokawa's design for the university town, which won first prize, integrated new demands with elements from the regional past, thereby establishing a new level of architectural identity. Neither of these projects was yet built.

The municipal building in Dubai, 1974–1980, designed by the Tokyo firm Civic Design Studio, with Kazuyuki Matsushita as the