



Viewpoints Special Edition

# Architecture and Urbanism in the Middle East

The Middle East Institute





# Middle East Institute

The mission of the Middle East Institute is to promote knowledge of the Middle East in America and strengthen understanding of the United States by the people and governments of the region.

For more than 60 years, MEI has dealt with the momentous events in the Middle East — from the birth of the state of Israel to the invasion of Iraq. Today, MEI is a foremost authority on contemporary Middle East issues. It provides a vital forum for honest and open debate that attracts politicians, scholars, government officials, and policy experts from the US, Asia, Europe, and the Middle East. MEI enjoys wide access to political and business leaders in countries throughout the region. Along with information exchanges, facilities for research, objective analysis, and thoughtful commentary, MEI's programs and publications help counter simplistic notions about the Middle East and America. We are at the forefront of private sector public diplomacy. *Viewpoints* is another MEI service to audiences interested in learning more about the complexities of issues affecting the Middle East and US relations with the region.

To learn more about the Middle East Institute, visit our website at http://www.mideasti.org

Cover photos, clockwise from the top left hand corner: Abu Dhabi, United Arab Emirates (Imre Solt; © GFDL); Tripoli, Libya (Patrick André Perron © GFDL); Burj al Arab Hotel in Dubai, United Arab Emirates; Al Faisaliyah Tower in Riyadh, Saudi Arabia; Doha, Qatar skyline (Abdulrahman photo); Selimiye Mosque, Edirne, Turkey (Murdjo photo); Registan, Samarkand, Uzbekistan (Steve Evans photo).

Viewpoints Special Edition

# Architecture and Urbanism in the Middle East

## Introduction

MEI's special edition of *Viewpoints* on "Architecture and Urbanism in the Middle East" is an opportunity to celebrate the beauty, diversity, and vitality of the built environment of the region. It is also an opportunity to consider the challenges facing architects, designers, and developers in their efforts not only to preserve the rich cultural heritage of Middle Eastern cities but to shape these urban spaces in ways that address the physical and socioeconomic pressures occurring within them.

Indeed, as the contributors to this volume demonstrate, the Middle East's built environment is at an important juncture. There are major choices to be made if the region's urban development is to meet the needs and expectations of its peoples. The 15 essays comprising this volume are snapshots of the built environment arcing from the Maghreb through the Levant to the Gulf.

Taken together, the essays suggest the need for a new paradigm of designing Middle Eastern urban spaces for sustainability — comprehensive in that it encompasses all physical components of human settlements such as buildings, streets, public spaces, and infrastructure; balanced in that it supports physical and economic growth while accommodating the traditional and cultural needs of the local community; responsive in that it protects and enhances the health, safety, and general wellbeing of inhabitants; and innovative in that it incorporates new technologies into designs so as to reduce the stress on the natural environment.

# Doha: Between Making an Instant City and Skirmishing Globalization

### Ashraf M. Salama

A tiny peninsula off of the Arabian Peninsula, Qatar has become one of the major global producers and exporters of Liquefied Natural Gas (LNG). The wealth produced by Qatar's oil and gas exports has generated a construction boom in its capital, Doha, and the surrounding area. This resulted in significant growth at all levels, from urban development and infrastructure provision to cultural and educational facilities.



Figure 1: Four Seasons Hotel, an example of Global Architecture.

Historically, Doha was a fishing and pearl diving community. Today, the city is home to more than 90% of the country's nearly one million people, the majority of whom are professionals from other countries. Until the mid-1960s, the majority of the city's buildings were individual traditional houses that represent local responses to the surrounding physical and socio-cultural conditions. During the 1970s, Doha was transformed into a modern city. However, in the 1980s and early 1990s, the development process was slow compared to the prior period due to the overall political atmosphere and the heavy reliance of the country on the resources and economies of neighboring countries.



Dr. Ashraf M. Salama holds BSc, MSc, and PhD degrees in Architecture. He is Professor of Architecture and currently holds a Reader in Architecture Position at Queens University Belfast, and has held academic positions in Saudi Arabia and Qatar. He was the Director of Consulting at Adams Group Architects in Charlotte, North Carolina (2001-04).

The recent rapid development of Doha is associated with a fast track urbanization process, marked by large scale office towers and mixed use developments. In its modernization process and the attempt to follow the city of Dubai as an example of a global urban image, the city has adopted international building standards — state of the art glass towers with few attempts to fuse the modern with the traditional. However, the pace of development puts the city and the country in the category of "Instant Cities." The government is supporting large-scale infrastructure development and high profile institutional and cultural building projects,



Figure 2: Headquarters of Ministry of Economy and Commerce, an example of Global Architecture.

#### Salama...

the majority of which are designed by well known international firms and star architects. Despite the shortcomings inherent in any swift urban development process and the resulting global architecture, innovative approaches to design and the creation of responsive environments are being developed sporadically around the city.



Figure 3:An academic cluster, Qatar University campus.



Figure 4:An attempt at establishing local identity, Qatar University campus.

One of the early attempts to establish a local architectural identity against modernism and post-modernism was the Qatar University campus designed by the Paris-based Egyptian architect, Ahmed El Kafrawi. The campus is located on an elevated site 7 kilometers (km) north of Doha in Al Markhiah District and 2 km from the Gulf shore. The program accommodates main campus buildings such as a central library, an administration building and an information technology centre; five colleges (arts and sciences, education, engineering, business administration, *Shari'a* and Islamic studies); student activities and sport and recreational facilities; an educational technology building; and central services units. Based on an octagonal unit design idea, wind-tower structures are designed to provide cool air and reduce humidity. Towers of light are also introduced and intended to control the harsh sunlight. The abundant use of *mashrabiyas* (traditional screened windows) and some stained glass also serve to mediate the environment. Open and partially covered courtyards, planted and often with fountains, are plentiful throughout the site. The architect placed strong emphasis on natural ventilation, one of the many ways in which he related to traditional architecture of the region. As specific models he used the few still existing wind-tower houses in Doha and modernized the basic principle.





Figures 3 & 4: Liberal Arts and Sciences Building, Education City, Qatar Foundation

#### Salama...

As the discourse continues on the dialectic relationships between tradition and modernity, the contemporary and the historic, and the high-tech and the environmentally friendly, I have selected two important buildings that represent physical and intellectual statements: the Liberal Arts and Science Complex designed by the Japanese architect Arata Isozaki and the Texas A & M University Engineering College designed by the world-renowned Mexican architect Ricardo Legoretta.

The first statement is that of Arata Isozaki, who is well known for his innovative projects over the past 30 years and for his deep interpretation of the contexts in which his designs are developed. He designed the Liberal Arts and Sciences building (LAS), which is a focal point for all students in the Education City. Occupying an area of approximately 22,000 square meters and developed over a period of 21 months, the building was designed to accommodate the Academic Bridge Program (APB), a preparatory program for enhancing the academic background and experience of high school graduates from Qatar and other countries in the Gulf region. The ABP addresses the universal problem of students' academic and cultural transition from high school to the university, but has been designed specifically to address the needs of students in the Gulf region. A visually striking and architecturally stunning project, the building is designed around a theme developed from traditional Arabic mosaics that are evocative of the crystalline structure of sand. This design was based on intensive studies to evoke the essential characteristics of the context while introducing new interpretations of geometric patterns derived from widely applied traditional motifs.





Figures 5 & 6:Texas A&M University College of Engineering, Education City, Qatar Foundation

The second statement is by the AIA Gold Medal award-winning Ricardo Legoretta, who in his design of the Engineering College of Texas A & M University continues to root his work in the application of regional Mexican architecture to the wider global context. Typically, his work is recognizable for its bright colors and sustained attempts to amalgamate local traditions and contemporary needs. Legorreta uses elements of Mexican regional architecture in his work, including bright colors, interplays of light and shadow, central patios, courtyards, and porticos, as well as solid volumes. Over a construction period of 19 months and on an area of 53,000 square meters, the College was opened in 2007 with a total capacity of 600 people, including students, faculty members, and teaching staff. The concept is based on introducing two independent but adjoining masses linked by large atria: the Academic Quadrangle and the Research Building. The

#### Salama...

overall expression of the building demonstrates masterful integration of solid geometry and a skillful use of color and tone values. Accessibility is well articulated where five main entries that lead to the inside of the building are introduced: two pedestrian entries, a car and vehicle entry, a service entry, and finally an entry tower. The lower floor accommodates car parking, locker rooms, and ancillary facilities.

While these two buildings represent conscious endeavors of two prominent architects toward creating responsive educational environments that meet the aspirations of the founders of the Education City and their society, it remains to be seen how the new buildings in the same campus will fit in harmony — visually, spatially, and functionally — with those already discussed and with the overall plan of the Education City. It also remains to be seen how the designs of other international and local architects will contribute to the continuing discourse on global architecture versus the emerging attempts of a culture of resistance.

