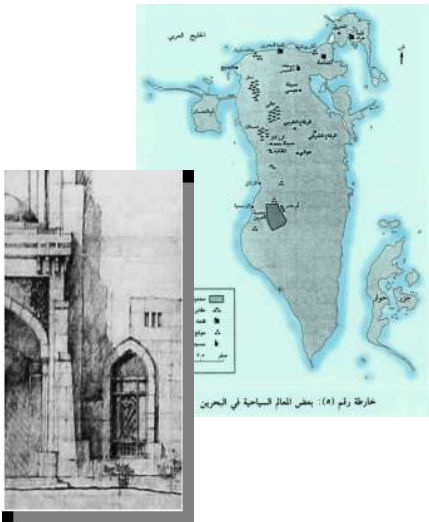


Contemporary architecture in Bahrain



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Introduction

This century has witnessed unprecedented technological advances and cross-cultural interactions causing deep-rooted changes in all facets of human life throughout the world. The speed and the size of these changes are clearly manifested in the built forms all around the world in different degrees of intensity. Bahrain and the wider region of the Arabian Gulf are no exception.

Since the 50's the built environment of Bahrain has been transforming at a rapid pace from traditional homogenous form to "modern" one exhibiting different tastes, trends and expressions. This transformation led to the loss of streams, which could be categorized into different stages namely: traditional, transitional, modern/international and, the most recent identity revivalism. In tracing these stages, the paper does not concentrate only on the physical outcomes (in age, product), but also links these transformations to complex and interrelated factors of societal, economic and cultural changes and developments. It relates buildings and the context, which generates certain architectural practices, tendencies and expressions. The paper does not, however, endorse one stage against the others, as one is the product of the others and the present is the outcome of the past. It addresses the different architectural streams, with their positive and negative aspects, as a normal evolution process in a society that has been undergoing a rapid modernization.

The State of Bahrain

a) Geography

The State of Bahrain consists of an archipelago of about 33 small islands situated halfway down the Arabian Gulf 24km from the eastern coast of Saudi Arabia and 28km from the coast of Qatar, with a total area of 691 sq km.

The largest is the Bahrain Island (586 sq km). It is connected by causeways to Al Muharraq - the second largest island - and to Sitra. Most of Bahrain is low lying and barren. Its surface is limestone covered by varying densities of saline sand that solely supports the hardiest desert vegetation. Bahrain was known for many years as "The Island of Million Palm Trees" which flourished because of the abundant fresh water springs, particularly in the northern areas.

b) Climate

Bahrain is exceptionally hot and humid in summer with temperature average of 36°C and humidity average of 85% and mild in winter with temperatures ranging between 15°C to 25°C from December to March.

c) History

The first inhabitants of Bahrain date back to around 5000 BC. They wandered over what are now the deserts of Bahrain, settling in makeshift villages and chipping tools from the flint, which the limestone rocks of Bahrain supply in abundance.

d) Language and population

Arabic is the official language, although English is widely used in business. Bahrain

SECTOR	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98
Construction	90.1	87.6	94.1	91.7	101.1	104.7	109.9	106.6	98.8	93.7	94.5
Hotels & Restaurants.	29.7	27.8	32.2	39.5	43.3	44.8	45.5	45.2	45.9	48.7	53.9
Transport & Community	117.1	122.6	127.7	146.0	146.9	155.3	168.3	162.8	166.1	168.7	192.7
Real Estate	124.3	137.4	155.6	159.4	162.2	189.0	196.0	208.1	216.2	230.2	238.9

1)

SECTOR	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98
Construction	6.3	5.7	5.5	5.3	5.7	5.4	5.2	4.8	4.3	3.9	4.1
Hotels & Restaurants.	2.1	1.8	1.9	2.3	2.4	2.3	2.2	2.1	2.0	2.0	2.3
Transport & Community.	8.1	7.9	7.5	8.4	8.2	7.9	8.0	7.4	7.2	7.1	8.3
Real Estate.	8.6	8.9	9.1	9.2	9.1	9.7	9.4	9.5	9.4	9.6	10.3

2)

is an Islamic country. Islam is the State religion and approx. 75% of the population is Muslim. There are also Christian, Jew, Hindu and Parsim inorities. The present population of Bahrain is approx. 600,000 and 60% of the population is Bahraini.

economy. The following statistics will give an idea of the actual & percentage contribution to Gross Domestic Product (G.D.P.) by different types of economic activities.

e) Trade and economy

Bahrain was the first country in the Southern Gulf Region to have oil based economy. During the 1970's the economy experienced prosperity as a result of increased oil revenues that led to a very rapid growth of the country during the 1970's and 1980's. In the early 90's the Bahrain economy entered into a period of consolidation. As the oil income declined in this decade, efforts were made to increase the non-oil revenues by means of expansion of the services, manufacturing and communications sectors, financial sector etc. The Financial Sector has made a great contribution to the transformation of the

Architects in Bahrain

In general it is observed that until 1982 Architecture was practiced primarily by Civil Engineers and various Technical Departments in the Government.

Despite the fact that a school of Architecture did not come into existence until 1990, there was a substantial number of Bahraini architects with degrees from abroad. Presently, there are approximately 100 Bahraini Architects and 150 expatriate Architects, who are registered with the Committee for Organizing Engineering Professional Practice (COEPP). These Architects are practicing in both the Public

Fig.1 Chart: Showing Approx. G D P. Values by Type of Economic Activity. (in million BD)

This shows a substantial contribution by economic activities like Construction, Hotels & Restaurants, Transport & Communication and Real Estate during 1988 to 1998.

Fig.2 Percentage Contribution to G D P. by Type of Economic Activity.

Source: Bahrain Ministry of Finance

and the Private Sector. There are a total of approximately 40 Architectural Offices presently registered in Bahrain.

Architectural Education in Bahrain

A School of Architecture was not established in Bahrain until 1990. However, there were sufficient numbers of Architects who had completed their studies abroad. In 1990 the University of Bahrain established the Department of Architecture through its Engineering College.

An average of 30 students is enrolled and 15 students graduate yearly from this department. Today the department has a total of approx. 180 students.

The faculty members of this Department consist of 12 Professors, Assistant Professors and Lecturers. The staff members exhibit an interesting mixture in terms of nationality, background, specialization that adds to the strength of the Department.

The educational system is based on a semester credit hour system. The students must complete 152 credit hours to obtain a degree in Architecture, which takes five years. The curriculum is similar to that adopted by other Gulf Universities. This covers mainly Architectural Design, Graphics & Visual Arts, Building Technology, Urban Design, Structural Design, Landscape & Interior Design. Architectural Education in Bahrain is at its early stages and the University of Bahrain has put in much effort by coordinating with various Architectural Institutions and Universities for their guidance towards upgrading this curriculum whenever necessary.

Bahrain Society of Engineers

The Bahrain Society of Engineers founded in 1972 is the only Professional

engineering society in Bahrain. It has a large number of members from a variety of engineering disciplines who are Bahrainis and expatriates (both Arab & otherwise). Under the umbrella of this society, there are nearly 88 Architects, most of who are Bahrainis.

This Society has organized a large number of educational events in the past 27 years. In particular it has endeavored to raise the level of Architecture and Building Construction in Bahrain by means of organizing a number of conferences, workshops, seminars etc. in collaboration with foreign Universities and Architectural Institutions.

The Role of Government & Private Sectors

Through observations of the past three decades, in which most of the development took place, it is seen that the government & the Private Sectors have played a significant role at different time periods in the field of construction.

I. The Role of the Government Sector

A) The Government as the Client
 The Government input was as a Client (Investor) as well as the Controller of the Architectural Practices. Most of the Housing Projects such as Isa Town, Hamad Town, AlJasra Town and Zayed Town along with their supporting infrastructure were undertaken and completed by the Government Sector. It also constructed many institutional buildings like various Ministries and Organizations affiliated to the Government Sector. During this period the Private Sector played a very insignificant role in the Building Construction.

B) The Government as the Controller
 The Government has established a Committee of Professional Practice for Engineers and Architects in 1981. The objectives of this committee are as follows:



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Fig. 3.4: A School of Architecture was not established in Bahrain until 1990. However, there were sufficient numbers of Architects who had completed their studies abroad. In 1990 the University of Bahrain established the Department of Architecture through its Engineering College.

Fig. 5.6 The Bahrain Society of Engineers founded in 1972 is the only Professional engineering society in Bahrain.



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10)

Fig. 7,8) The Private Sector until the late 80's had a very insignificant role in the Building Construction. However, the 90's have seen an increased role of the private sector activity (up to 80% of Construction) as the majority of the public infrastructure works were completed.

Fig. 9,10) Development of Architecture in Bahrain The Four Stages of Development of Architecture 1. 1800-1945 (The Traditional Architecture)

a) Categorize the Engineers & Architects and their respective offices.

b) To frame the rules & regulations to control the Architectural Practice.

c) To monitor the Practice of the various Architectural Offices.

II. The Role of the Private Sector

As stated earlier, the Private Sector until the late 80's had a very insignificant role in the Building Construction. However, the 90's have seen an increased role of the private sector activity (up to 80% of Construction) as the majority of the public infrastructure works were completed. Most of the new Projects, such as Hotels, Resorts, Shopping Complexes, Bank Headquarters, Institutional Buildings, Business Centers etc. were undertaken during this decade by the Private Sector.

Development of Architecture in Bahrain The Four Stages of Development of Architecture

1. 1800-1945 (The Traditional Architecture)

The Architecture and its elements in this period remained almost unchanged for its style and appearance. This 'set' architectural environment was mainly due to the following socio-economic factors.

a) The strong belief of the Bahraini people in the Islamic values and Arab Customs, which have been handed down from one generation to the other. These customs and values are very close to those of the neighboring Islamic cities. Privacy, neighborhood rights and street etiquette played an important role.

b) Bahrain's strategic location as an island in the middle of the Gulf coupled with the abundance of fresh water and pearl trade made it a haven of settlement from neighboring countries; thus, creating Bahrain as one of the earliest Urban settlements in the region.

The Architectural Style of this Period

The Architectural Style of this period in Bahrain (Traditional Architecture) can be defined as a mixture of different Architectural elements and simple technologies existing in neighboring countries and those commercially linked with Bahrain, such as Iraq, Iran, India & Africa.

This was very obvious from the type of material elements used in their buildings, such as:

- I) The Wind Tower or Wind Catcher (Badger from Iran).
- II) Joinery works, which mainly came from India.
- III) Roof Materials:
 - Danchal (wooden joists) from Africa
 - Bamboo from India.
 - Cane mats from Iraq.
- IV) Walls made of Local Sandstone.

2. 1946 - 1970 (The Transitional Period of Architecture)

This period can be considered as the start of the change in Bahrain where the country's economy was the most prominent factor in the change of the whole life style of the Bahrainis. Some of these socio-economic factors are listed below:

- Economic Factors**
- I) The discovery of oil in Bahrain in 1932 resulted in the transition of the Bahraini economy from a base dependent upon Pearl Trade to that of Oil, which led to the increase of Bahrainis' income.
 - II) The Government started supporting & providing public services such as electricity, water, road network etc., which considerably affected Bahrain's urban growth.

- Social Factors**
- I) The change heralded the establishment of laws & regulations by government organizations that positively affected the



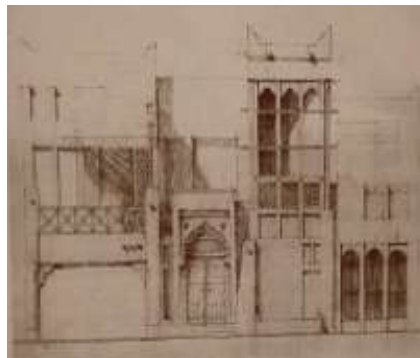
11)



12)



13)



14)



15)

Fig.11,12,13,14:DevelopmentofArchitecture in Bahrain
The Four Stages of DeveLpment of Architecture
2. 1946 -1970 (The TransitionalPeriod ofArchitecture)

daily lifestyle of the local population.
II) The birth of a new and increasingly educated generation led to the pursuit of a modern lifestyle that would suit their beliefs as well as their ambitions.
III) Bahrain started to be linked with the outside world and was influenced by political movements and cultural evolutions. This changed the preset woven pattern of their lifestyle.
IV) The arrival of the expatriate professionals in Bahrain from various parts of the world with their differing trade practices and cultures influenced the lifestyle of Bahrainis.

The Architectural Style of this Period
The Architectural style was very much influenced by the arrival of new building materials, such as concrete blocks, reinforced concrete, and new building technology. This led to two distinct styles:
a) British Colonial Style.
b) Modern Style that was adopted in some of the Arab countries such as Lebanon & Egypt.
It is important to point out that the need for new functions that triggered the development of public buildings like Schools, Hospitals, Government Quarters as well as concept of new Villas have also influenced the change from early rural development to modern Urban Development.



16)

3. 1971- 1979 (The Modern Architecture)

This period started with the Independence of Bahrain in 1971. The boom in the economy due to increase in oil revenue in the Gulf Region was the obvious force. The following related factors could be considered which changed the pace of the Architectural Development in Bahrain:

I) The drastic change in the quality and the quantum of the buildings in Bahrain due to boom in the economy led to the advent of new building technologies that were almost parallel to the Western world.
 II) The Government supported the economy of Bahrain by providing the adequate financial and banking facilities that made Bahrain a Prime Business/Banking Center in the Gulf region.

III) The Government continued to provide the Infrastructure & Services such as telecommunication, road network and the new planned urban areas in Bahrain.

IV) The life style of the Bahrainis was changed drastically due to the linkage with the outside world through the modern educational system, the establishments of social organizations, and the increase in the population due to its improved medical facilities. The latter aspect has been further affected by the influx of expatriates who came as a result of the country's meteoric development.

The Architectural Style of this Period

The Architectural style of this period was more or less a copy of the building models in the Western world. The introduction of new technologies such as steel structures, precast concrete and curtain walls has led to a new generation of buildings. It is essential to point out that the overall volume of construction during this period was almost 50 times that of the previous thirty years. This is evident through the new urban development areas such as the Diplomatic Area and Isa Town.

4. 1980 - 1989 (Post-Modern Architecture)

We can consider this period as the beginning of the matured Architecture in Bahrain. The type of Projects that reflected the architectural style was different than the one in 1970's. The Government of Bahrain continued their support to the economy by undertaking the construction of noteworthy projects such as Hamad Town, the Bahrain National Museum, the University of Bahrain, the Ba'Al Quran and the King Fahad Causeway. We can consider this period as the period of a resurgence of religious and traditional values, which was a reaction to the increased liberalization of 1970's, that supported some of the new architectural

Fig.16: Development of Architecture in Bahrain
 The Four Stages of Development of Architecture
 3. 1971-1979 (The Modern Architecture)

styles such as Regionalism and Revivalism .

The Architectural Style of this Period

The architectural styles of this period were clearer in their tendency towards Regionalism or Revivalism .However there was a continuation of 1970's copying of Modern Architectural Style, especially in residential buildings. Public and Private sectors began to realize the importance of the conservation of the Heritage buildings. There were a number of buildings renovated during this period. Shaikh Isa Bin Ali House, Syadi House, AlJasea House, Arad Fort, Bahrain Fort to name a few .

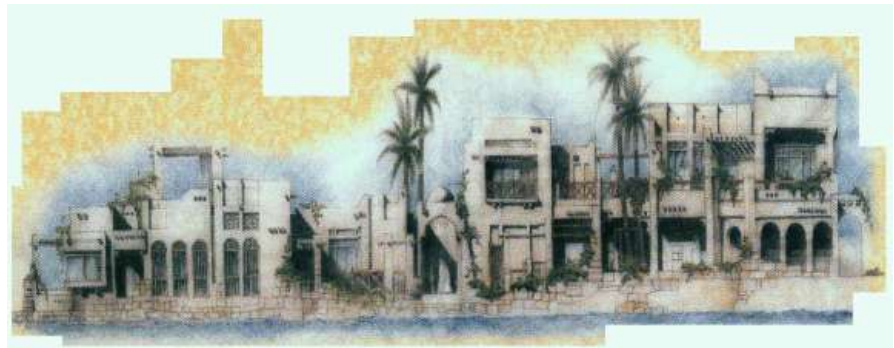
5. 1990 - 1999 Present (Identity Revivalism Architecture)

This period can be considered as the continuation of the 1980's architectural styles & trends. However, Architecture has been affected at the beginning of this decade due to the economic recession caused by the political events in the Gulf Region (The second Gulf War). The following are some of the socio-economic factors:

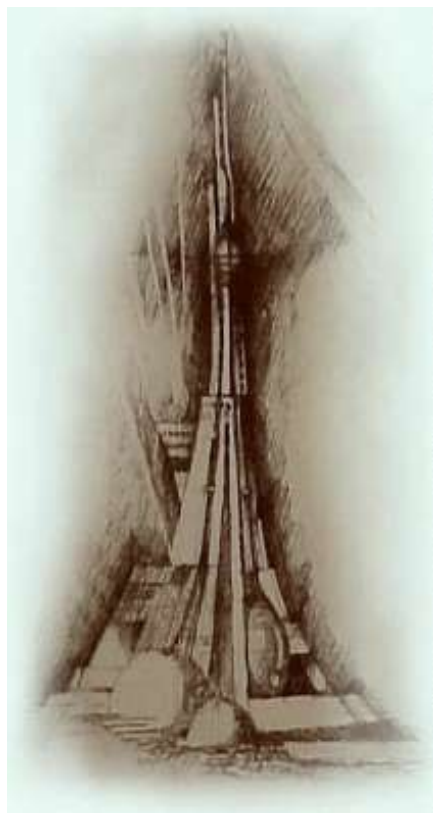
I) There is a reaction to the economic recession between 1990-1991, where a lot of construction (commercial projects) took place that was mainly supported by the Private Sector.

II) The Bahrain-Saudi causeway (King Fahad Causeway) has greatly influenced the volume of investment in the tourism sector, where a lot of tourism-based projects such as Hotels, Resorts, Entertainment facilities etc. increased considerably (e.g. number of Hotels in 1976 were 26, which rose to approximate 60 in 1999).

III) The Private sector has played a major role in the investment in the construction industry reaching nearly 80% of the total investment rising from approx. 10% from the early 1990's.



17)



18)



19)



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Conclusion

In Bahrain, architecture has adopted different styles mirroring the changes occurring in the socio-cultural, economic, and administrative characteristics. From the mushrooming international buildings of the 1970's, the 1980's is considered as the Golden Period of the Bahraini Architecture that strive to create meaningful, comprehensible and genuine buildings. These are clearly reflected not only in the size, type and quality of those buildings, but also in government support and positive developments in the professional arena. Positive developments of the 1980's have paved the way for the 1990's, which comes

Fig.17: Development of Architecture in Bahrain The Four Stages of Development of Architecture 4. 1980 - 1989 (Post-Modern Architecture)

Fig.18,19,20: Development of Architecture in Bahrain The Four Stages of Development of Architecture 5. 1990 -1999 Present (Identity Revivalism Architecture)

with maturity of local architects and increased awareness of the identity both by the officials and the public.

We, in GulfHouse Engineering, have attempted through the various projects to go beyond the simple copying of the past through innovation, interpretation, and reflection. We are trying to balance between tradition and modern simultaneously "localizing" international ideas, materials and aspirations to suit local needs. We hope that the new millennium will bring architectural achievements that truly reflect the identity of the Bahraini people and their local architecture.

