

## **Contemporary Architecture in different areas of the Arab world:**

### **Redefining identity through a new built environment.**

"The constraints of the environment made sobriety [qanaa] and frugality [kafaf], the most recommendable virtues . The ideology of development increases needs and the push to satisfy these needs this is contrary to the life style that is in keeping with the environment". 1

**Abstract:** This paper tries to shed light on post traditional environments mainly within the Arab area in a post global civilisation. The main concern of the research is how to accommodate local traditions with modern techniques. Some chosen projects implemented in some parts of the Arab world are dealt with in relation to the expression of cultural and social identity through the built environment. . These projects address aspects of the built environment such as the development of an architectural formal language. The focus of the work is on methods, achievements and implications. The findings laid out the basis for a search for a new architecture appropriate to the present Arab world.

#### **1. Introduction:**

This paper is an attempt to identify some of the lessons which can be drawn from different projects chosen as case studies. What meaning do they have for present and future Arab architecture? What are the methods, achievements, and implications? To answer these questions in full is not yet possible, and I shall limit myself to a few observations to initiate further thought and discussion.

The case studies dealt with in this paper imply a variety of strategies in the working of a physical environment and are, perhaps instructive not only as individual cases but as a whole. Even more, the entire group as a search for a new architecture appropriate to the present and future Arab world. Yet one can consider these projects as representative of architectural thinking and activity in the

countries of the Arab world. As opposed to the Arab traditional built environment which is : "An end product of an interaction between constant elements such as the Charia-Islamic law-, the climate and variable elements such as economic and industrial means, that is to say a product of a societal process" 2. The new built environment, product of technologies generated elsewhere has meant that modernisation came in as a finished piece, rarely filtered through collective experience within a nation and thus ill adapted to its particular needs. For instance in traditional environments the architecture of the house and that of the mosque has always been an extension of each other, modern buildings broke this link. Today's architecture of the mosque is given a treatment as if it is something of an other age. It is no use having a mosque that looks as if it was done in the 15<sup>th</sup> century era and a modern housing scheme that looks as if it comes from today's New York, London, or Paris. The traditional built environment still has valuable lessons for the architects and planners creating new environments, but the prognosis of its survival is uncertain. The physical presence of a vast and varied architectural heritage which has not, for the most part, been integrated into the international language and culture of architecture remains a challenge to all architects building in the Arab world. The heritage is there to accept, to reject, or to engage in a dialogue by understanding its concepts and its idioms, and by building upon it. 3

The study sample chosen in this paper as worthy of recognition reflects the diversity of needs and resources within the Arab world. All of these projects address critical aspects of the built environment such as the development of an architectural formal language and of building skills.

## **2. Case study one: The Maadher Project [Algeria]**

To begin with, some relevant approaches had been implemented in the Algerian context. The most advanced articulation of an Algerian contemporary architecture can be found in buildings and projects by Hany El Miniawy and Abderahman El Miniawy who partly collaborated with the architect Aly Seradj. The works of these young Arab architects are closely connected to the Islamic past without contradicting present day conditions. 4

The projects by the El Miniawys reflect the use of local materials and the acceptance of local traditions as the major goals for their design. But one should mention that the Algerian experience with improved local materials started as early as 1942 when a very rational and impressive regional hospital in Adrar [southern part of the country] using stabilised soil was erected by the Belgian architect Michel Luychx. 5. The El Miniawy project was the experimental village of Maadher near Msila, one of the thousand new villages of the agrarian revolution.

### **2.1 Method of approach:**

The village is built of mud bricks made on the site and consists of four houses grouped around a shared courtyard each house having in addition its own private courtyard.[see figs 1-2]. Since the villagers were nomads, it is difficult to talk about the appropriateness of permanent housing to life style. The housing is certainly appropriate to the local climate and economy, and the cluster of four units around an open space for the women, allows for social interchange 6. Typical of a production oriented attitude, however, the government as client has divided housing into three categories: urban, semi urban, and rural; so that the programme, which at the beginning did not even include the courtyard, failed to relate satisfactorily to people's needs.

It was only after the architects had finished several projects in Algeria -housing projects in Sidi Khaled and Ouled Djellal in the southern part of the country-, that the government came to appreciate the importance of some of the missing elements and agreed to accept them.

### **2.2 Achievements:**

El Miniawys project in Maadher with its simple vaulted forms is seen as a research for appropriate building system, in which a new labour intensive method of construction developed into an architectural language as an achievement.

The project responds to the harsh climate, fits the needs of its users and establishes a quietly impressive presence in its flat, semi arid surrounding. It has to be said that the project provides an environment in which people can live, work and practice their spaces harmoniously and to the fullest. This is architecture of and for the people, meeting their needs and concerns locally, providing a setting for health and life.

### **2.3 Implications:**

The contemporary use of a traditional building language in a search for a new architectural idiom is identified as an implication. The project also reflected the period of transition in Algerian architecture, marked by the experimentation and the search for environments responsive to human needs. In my opinion, it helped to redefine architecture as it attempted to resolve the most basic and critical issues confronting the poor people of Algeria. On the political side, the project made the policy-makers more involved in the promotion of the locally available materials. In their 2nd five year plan (1985-1989), the authorities stressed the use of the materials: «The aim for the construction based on local materials is fixed at 90 000 dwellings/year, during the decade 1990-2000, 30% of these constructions should be built with stabilised soil". 7

### **3. Case study II: Hassan Fathy's project in Kuwait**

The second project to be dealt with is Hassan Fathy's emir house in Kuwait City. Kuwait is the capital of the country of the same name. On its road to the twentieth century, it has lost almost all traces of its old life. A variety and complexity of old streets and buildings are replaced by so called universal spaces: department stores, super-markets, and motorways. Everywhere buildings are erected without identity and context. The result is a confused expression of cultural values. and has destroyed the built environment grown out of tradition.<sup>8</sup>[see figs 3-4 ] Sheikha Husa , daughter of the late emir, and her husband Sheikh Nacer have been fighting hard to preserve some of Kuwait inheritance. They asked Hassan Fathy, the grand old Egyptian architect to build their house. Hassan Fathy has long been pleading for an Arab architecture grown out of tradition. This

house is the latest testament of the great philosopher builder who has influenced so many architects throughout the world.

### **3.1 Method of Approach:**

As advocated by Hassan Fathy, the building was made in traditional mud brick, all hand made on site. It is genuine and authentic modern Arab architecture. As champion of indigenous buildings, he proved the graceful mud brick structures to be both economical to build and admirably suited to the climate. Fathy taught us the value of the vernacular environment. The project gave an idea of charm, dignity, and intelligent arrangements in the traditional house. The intricate system of inner courts is essential for the Arab way of life. The spaces complement and enhance each other, each having its own social function for men to gather, for women to look after the children. See fig [5].

Sheikha Hussa said 9:

"Although we are doing it for our own comfort, I think it is a cultural thing too because what is culture after all? It is the man's response to his environment and to his needs, both physical and spiritual. We feel, as Arabs and Muslims that we should have indigenous architecture. It could be a projection of us, of our spiritual beliefs and way of life".

She also mentioned in the same interview:

"Unfortunately when people build their houses they think they have captured the spirit of Arab and Islamic architecture by adding some elements such as arches and decorative elements. But what they are doing is just superficial, it is a facade. They have not reached the essence of Arab and Islamic architecture that is the volume, the space, and man in relation to the room he lives in."

The most visible cultural manifestations of the Arab world are in their buildings. Building like the Emir's house will help people understand that the search for roots is a way to gain personal and collective identity for which many communities struggle. This project building has a quality of space and harmony which complies with Arab and Islamic needs.

### **3.2 Achievements:**

As an achievement, the Emir's house project deserves special attention for its sensitive revival of craftsmanship and culture sensitivity as a whole. The design of the house goes well beyond the simple reproduction of past environments. Its volumes are judicious sober, and genuine. Its

extraordinary harmony with the context as well as its multipurpose use and the ambience of its inner space gives it great distinction.

### **3.3 Implications:**

As an implication of Hassan Fathy's work, the modern architect has to exercise his creative genius and his artistic sensitivity in creating without losing touch with the established tradition, preserving the implicit and not overlooking the same spiritual and social virtues or the cultural values as in the past 10. Hassan Fathy taught us the value of the vernacular environment. He also showed us that architecture is the most important element of culture and that culture may be defined in terms of the interaction between the intelligence of man and his environment and the satisfaction of both his spiritual and physical needs.

## **4. Case study III: The Hadj terminal**

The third main project to be dealt with is the Hadj terminal project in Jeddah [Saudi Arabia]. Jeddah is a thriving red sea port of Saudi Arabia. Travellers who arrive by air as most people do are struck by the sight of huge tents, 210 tents to be precise. These form the roof of the famous Hadj terminal built by the American firm "Skidmore Owings and Merrill" .see figs [6-7]. It won the Aga Khan award for the best Islamic design in 1985. The master jury cited 11:

"For the brilliant and imaginative design of the roofing system, which met the awesome challenge of covering this vast space with incomparable elegance and beauty. The Hadj terminal structure has pushed known building technology beyond its established limits while demonstrating that such a massive structure can still be light and airy, a twentieth century echo of the traditional tent structures that have worked so well in desert climate."

### **4.1 Method of Approach:**

The plan of this terminal consists of two separate but identical tent-roof pavilions, separated by a landscaped mall. It is only used during the month of the El Hidja, when nearly one million Muslim pass through this terminal on their way to Mecca; 40 miles away, a pilgrimage every Muslim has to make once in his lifetime. Its main function is to provide the traditional nomadic hospitality for the

traveller in need of shade, water, food and sanitation. Many pilgrims remain there for several days before the buses pick them up for their final destination. No conventional building could have coped with such a demand. The large tents made of Teflon coated fibreglass fabric are suspended by steel cables from concrete girders. A formidable technical achievement. The roof reflects heat and lets the air circulate keeping an even temperature of 80°f while the thermometer outside soars to 130°f. The use of a vast tent sitting in the desert was a practical answer of great visual strength. A solution sensitive to Islam's past and yet tuned to the demand of the future.

The light, airy structure of the Hadj terminal echoes in gigantic form the traditional tent encampments of nomadic tribes. The project has the capacity to handle 1 million pilgrims/year. The terminal is in two halves each consisting of five equal modules. Each module comprises twenty one tent units suspended from tapering steel pylons. The elegant open structure allows the air to circulate, while the translucent fibreglass fabric roof maintains a tolerable temperature inside the terminal for the tens of thousands of pilgrims that may find themselves there at the same terminal.

#### **4.2 Achievements:**

The Hadj terminal project reflects the search for consistency with historical context and for innovation. It works by association. The designer has been inspired by the Bedouin tent. In this way the project catches the imagination of the people, leading them back to their roots. The late Fazlur. R. Khan who designed the tent roof structure considered it as a very Saudi place. The tent does not copy the tent of the past but it is a form of the future, so it caters for today's needs -air travel.<sup>12</sup>

#### **4.3 Implications:**

The tent structure of the Hadj terminal is an important contribution to the development of an architecture relevant to the Arab world. As a concept and in its execution, it is a work of exceptional originality. The size of the structure and the uniqueness of the Hadj phenomenon itself

that prompted its erection, place it beyond the pale replicability. The design will undoubtedly serve as a source of inspiration for designers throughout the Muslim and Arab world for generations to come.

## **5. Discussion**

The earlier examples [from Algeria and Kuwait] should be seen as part of a continuing tradition, choosing locally available materials and methods of construction and thereby blending superbly with their surroundings. The latter one echoes how to accommodate local traditions with modern technology and hence produce an environment that the community can identify with. The entire group of cases studies developed in this paper praises the creative and generative process, in which the imagination of the architects, the skills of local artisans and craftsmen, the needs of individuals and communities, and the implicit survival of the environment must interact. Relatively speaking, these projects are appropriate to the climate, culture, life style and economy of their particular places. United by their Arab heritage and belief in Islam, the above cited countries where the projects were implemented clearly articulate the alternatives of contemporary Arab architecture in general. John Warren puts it as follow 13:

"Islam is manifested in a way of life. If that life is reflected in the way the architecture is used, it is sympathetic to that way of life. There, it will become authentic. But I cannot make it Islamic by sticking things on it".

We have to clarify what is Arab architecture and built environment? I think it is not a style but a way of life imposed by a certain faith, and this has been reflected in architecture and the built environment. The built environment reflects the ideals of an age and the character of the people can be analysed through their built environment and architecture as much as that of an individual through his hand writing. We should bear in mind that they can be few places which have seen so many tries to solve the problem of how to accommodate local traditional environments with modern way of life and techniques. Of course there is no tradition in the Arab culture for many of the new buildings: banks, airports TV stations, no model to refer back to and this is truly a



dilemma. It is obvious that modern problems need modern solutions. Asserting a cultural identity is difficult anywhere, but particularly in the Arab world where the lure of high technology has diluted traditional environmental equilibrium. As long as there remains a close relationship between architecture and the community it serves, one can predict the future architecture and built environment of the Arab world will be able to find appropriate answers to modernity.

Post Arabic traditional environment is not a fashion but an extension of what is constant in nature, the spirit of the people, the place, and the sun. In order to preserve this varied and rich Arabic traditional environments two paths seem to be followed; shall we go towards an approach which will be more recognisable in the sense some Arabic features may be applied to the design of buildings-simple images people can associate with. We might list a number of buildings implemented that reflect this approach; Kuwait airport by Kenzo tange, Kuwait new parliament by the Danish architect and designer of the Sidney opera house Yurn Outsen. Sometimes a simple design can be used to great effect; Kuwait water towers designed by the Swedish firm headed by Sune Lindstrom remind us of tall palm trees in an oasis. Many of these buildings work by association. In this way they catch the imagination of the people leading them back to their roots. Or shall we take the other approach where the design must be done according to the conditions of the climate, the views, in other words pursue the conventional procedures in architectural design and the list of examples here is very long. But much of what is built is an unhappy mixture of western architecture with token arches and vaults thrown here and there. This is surface dressing. The result is a confused expression of cultural values.

In the era of global civilisation the Arab world cannot ignore modern technology, but it has to rationalise it, readapte it and to make the tool of the culture. That means technology is in the service of the culture and not the other way around. People of the Arab world are more aware now and more concerned with their heritage and with their culture. The most visible cultural manifestations in the Arab world are in their buildings. Buildings like these examples will help people to understand that the search for roots is a way to gain personnel and collective identity for

which many communities struggle. Failure to understand this is at the root of the failure of modern architecture in the Arab world.

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