

Book Review

Traditional and Modern Architecture in Saudi Arabia*

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Shelter in Saudi Arabia is basically a study of the effect of climate on traditional buildings in Saudi Arabia, although the ambitious title creates the expectation of a more comprehensive study of architecture and construction in Saudi Arabia. Nevertheless, it is a well written and documented study, with regard to the topics addressed. It is of particular value to the students of architecture as it gives a wide view of the architectural traditions in the different regions of Saudi Arabia. Its analysis of the implications of the traditional forms to the present practice of architectural design is rather weak, but overall, it is a book worth reading and adding to one's own library.

The book is divided into twelve chapters, of which the first five serve as an introduction to the environmental and cultural setting of Saudi Arabia. This is more valuable to the Western reader who needs more background information on Saudi Arabia than to the Saudi reader. In the next five chapters the author develops the main theme of the book which is the classification of building forms in Saudi Arabia into four main types according to regional climates: hot arid zone (central region), hot humid zone (western coastal region), composite climate zone (eastern coastal region), and upland climate zone (southwestern mountainous region). The last two chapters are a commentary on modern building forms in light of traditional ones.

The climatic classification is a logical one. Indeed, no one can argue with it as the climate, along with the available building materials, are the two major determinants of building forms, especially in a technologically primitive society where mechanical air-conditioning was not available. In the hot-arid zone, buildings were built of mud and characterized by a central court (atrium), thick walls and small openings. The central court was the main source of light and ventilation for the house as buildings

* A Review of Kaizer Talib, *Shelter in Saudi Arabia*, Academy Editions, London, 1984, 144 p., illustrated.

were built attached to each other. The thick walls provided insulation from the outside heat and the few small openings minimized the thermal conductivity of walls. As humidity is low or nonexistent during the summer, there was no need for large windows to allow sufficient air movement.

The situation is different in the hot humid climate of the western region, where there is no winter to speak of and where high humidity necessitates continuous air movement within the house. Thus, outside walls are punctured with large openings to allow adequate cross ventilation. These large windows are screened with elaborate woodwork (mashrabiya) to provide sufficient privacy to the occupants of the house. The zone of composite climate, where humidity and aridity take place at different times of the year, exhibits aspects of both hot humid and hot arid zones. Large screened windows, and the use of air vents and courtyards, characterize the architecture of this region. Houses in the upland zone, where winter is very cold, are detached tower-like buildings with thick walls and small openings. Excellent illustrations of many examples of different forms abound in the book.

For the contemporary architect, the last two chapters are of primary importance, since they summarize the relevance of traditional architecture to modern methods of design and construction, and evaluate the latter in the light of the environmental and cultural setting of the area. Unfortunately, these are the two weakest chapters of the book. Instead of a realistic analysis of the impact of modern technology on traditional building forms, the author indulges in romantic lamentation on their disappearance and offers implausible explanations for the widespread use of new forms. Commenting on the disappearance of courts from contemporary housing in Saudi Arabia, for example, Mr. Talib makes the following observation in page 128:

“The replacement of the courtyard by the central salon makes the space an important place of congregation and communication for the family. One may find the concepts of such villas similar to those in Egypt, Syria, Lebanon and Jordan whence many of Saudi Arabia’s past and present engineers and architects come. Thus, Saudi villas are directly influenced by the houses types in nearby Arab cities rather than by those in the West.”

This is a rather simplistic explanation for a very complex phenomena. Yet, a more plausible explanation is not that difficult to find. Houses in Saudi Arabia were traditionally built in dense neighborhoods with narrow winding streets that accommodate pedestrians and animal-drawn carts. Internal courts were used to provide light and air circulation. Houses were built of materials found near the site, such as mud and local stone. Roofing materials were mostly derived from palm tree trunks and other local trees. With the increase of national income associated with the discovery of oil, the last thirty years have witnessed a dramatic change in building forms and urban patterns.

The three most important factors in this change are the large increase in the number of cars, the introduction of reinforced concrete, and the widespread use of mechanical air-conditioning. The car required wide streets for passage and parking, and made it possible to build in areas that are far from city centers. Reinforced concrete allowed the construction of spaces in shapes that were simply impossible to obtain with traditional building materials and techniques. Finally, air-conditioning made the use of internal courts unnecessary, even costly. The introduction of electricity and air-conditioning has made life immensely more comfortable. The traditional house, despite its much admired ingenious adaptation to the environment, is uncomfortably hot during the long summer season. Thus, when people were able to afford air-conditioning they quickly availed themselves of it. As a result, the internal court disappeared as people preferred the comfort of an air-conditioned salon, and because people wanted to reduce the cooling load by reducing the area of walls exposed to the outside hot air. Therefore, the disappearance of the internal court was not because of the Saudi home-owners having been unduly influenced by non-Saudi Arab architects as Mr. Talib claims.

As the climatic imperative became less dominant, people became more free in the design of their houses, using larger windows that allowed in more light and view, and opting for detached houses that provided a greater degree of privacy and eliminated party-wall disputes with the neighbors. Houses became extrovert to the outside instead of being introvert to an interior court as before. This necessitated a perimeter property wall to preserve privacy and security. But according to Mr. Talib, the concept of the modern Saudi villa "... is based on derived ideas of ownership from other Arab countries, and it does not constitute a visible building type in the communal architecture of rural communities." (p.127).

In conclusion, *shelter in Saudi Arabia*, is a valuable documentation of the effect of climate on the traditional housing forms in Saudi Arabia. Mr. Talib advances a logical typology for the classification of traditional housing forms based on climatic variations in Saudi Arabia. However, Mr. Talib's explanation of the advent of modern building forms in Saudi Arabia is lacking in scientific rigor. On the whole it is a useful study of traditional building forms in Saudi Arabia, a subject on which the available literature is very scant.