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Toward an Appreciation of the Diversity of Architectural Forms

Economics of Traditional Buildings in Yemen

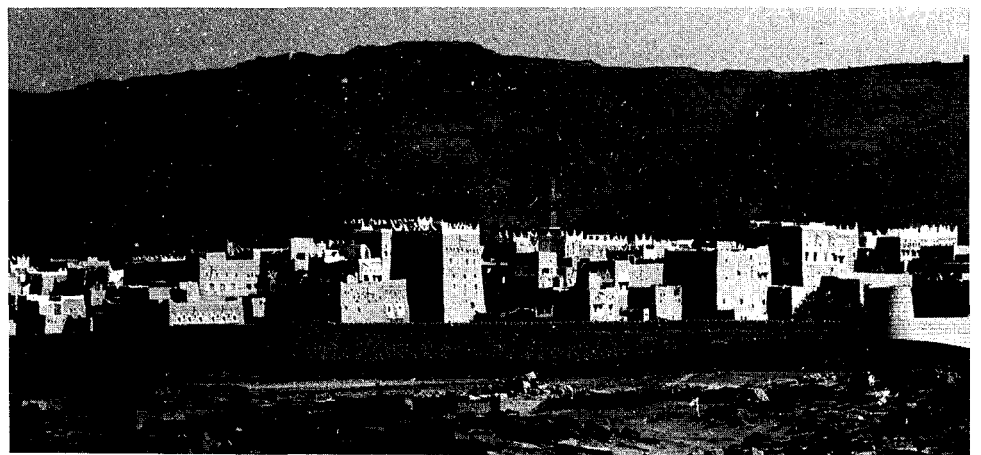
Alain Bertaud

In Yemen there are buildings under construction, buildings built in recent decades and others two hundred years old. One is not always able to see the difference. Many architects love this architecture and find it very beautiful. Beauty is not the point. I happen to like this architecture very much, but the important point is that it is the people who make it like this, because they are in full control of their houses. I am not saying now that Yemen is the "City of Light," although to many it is close to it.

You may not see any form here which is familiar to you, but I trust that nobody

will dare to say that Yemeni architecture is not Islamic because there are no arches or stalactites.

This is an architecture which is under full control of the people. Is that going to last? I am not sure and this is a problem. How many people have access to this type of housing? One point that we have not discussed so far is, which part of a housing stock is slum? We are talking about people living in slums or people living in public housing. Solutions are really linked to the numbers of people. It may be possible to relocate ten thousand people, but not one million.



Saada, a town in the northern Yemen Arab Republic

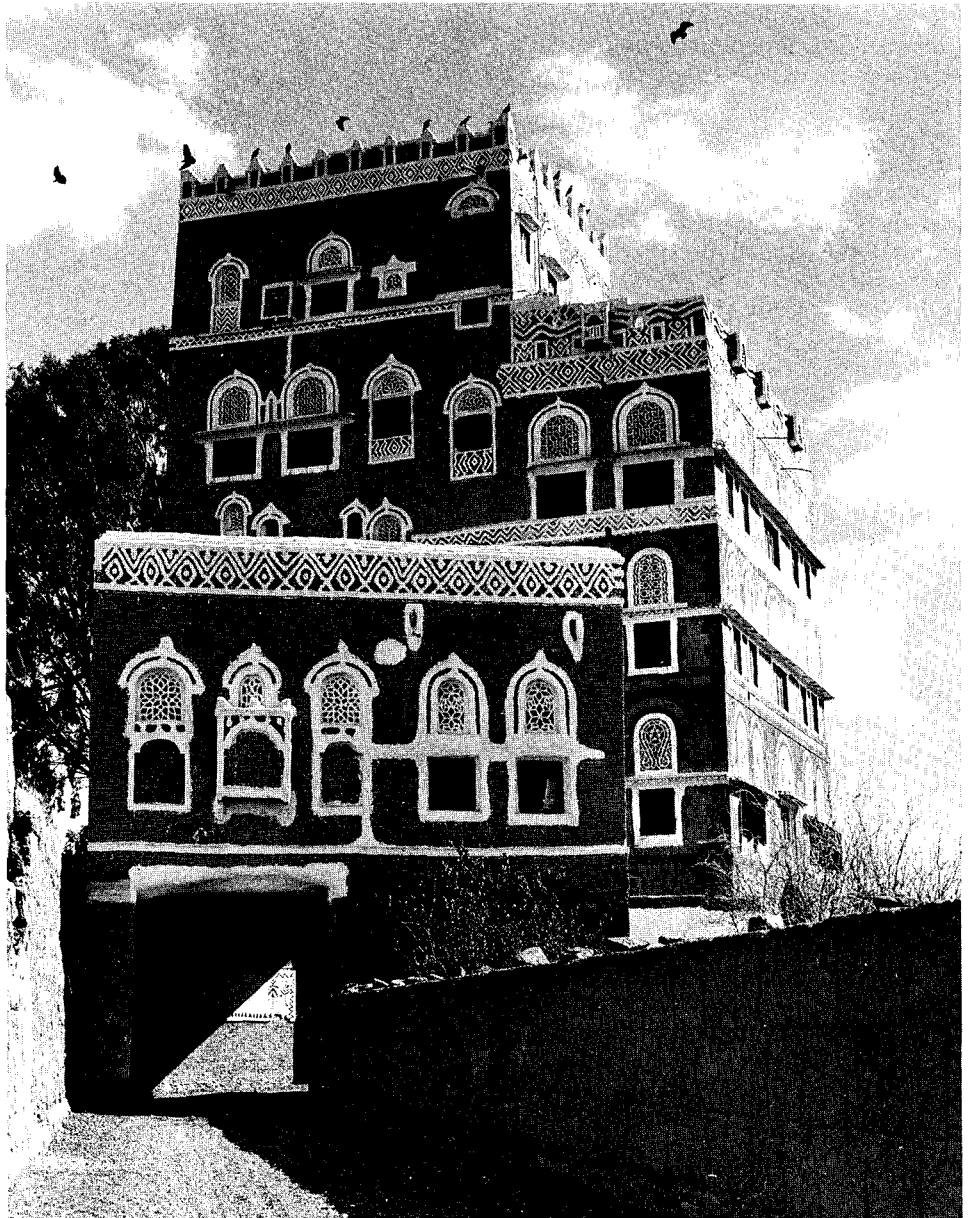
Photo: A. Bertaud

Yemen has a varied environment. There is the desert, extremely hot climate, extremely cool climate with some plateaus as high as three thousand metres, and some places have monsoons. In each area, you have an architecture that is completely different but, at the same time, is an extremely high quality of architecture. When I say architecture, I'm talking about housing. You will not find the Fatehpur Sikri or the Taj Mahal or the Al Azhar Mosque, but each village is a Fatehpur Sikri. Could it be that the manifestation of Islam in Yemen is the adaptation of man to nature in the extreme economy of means for a maximum of use? Terraces are cultivated during the whole year and it rains only for two or three weeks. Everything has to be ready for those three weeks. If there is one mistake in the way the fields are connected together, if there is one stone missing, the whole ground washes away. Then people must starve and die, because there is no way out. There are no banana trees at the corner! They have nothing else.

A village in another area uses volcanic stones for building. The extreme care and labour put into this architecture is characteristic.

Now, look at the economics of it. How much space does each family have? How much room per inhabitant? You will be amazed. This is rural housing. Usually, in developing countries, rural housing is in a most sorry state. Here, each house has a bathroom. This is in a country where people have a GNP of \$80 per capita, so there must be something wrong with our economic analyses.

In another part of Yemen, there is much more rain. It is completely different when we look at the details of the architecture. Yet, there remains the same quality of building, the same quality of space and the source of it all, the complete control of the inhabitants over the building. They are the masters of the technology, the masons are the people of the village. The building materials are local ones and they are free. Every country has stones. It happens that the Yemeni know how to cut them very



Yemen Arab Republic former Palace of the Imam, now Hotel Raudah

Photo A Bertaud

quickly and very cheaply. And that is why they can afford this type of housing. Stone is abundant so there is no problem of depletion of the material.

In other villages houses are made of mud. In the Tihama Plains some are made of reeds. Each time there is the same quality of space, the same comfort.

An aerial photo of Sana'a shows very interesting features of the densities, the way in which the spaces are allocated. Empty space is not leftover space. It has not been bought by speculators. It is land which has been allocated to the mosques. It is a garden irrigated by the water of ablution from the mosque and onions are growing in it, a good way of keeping it green and clean. In the old city the density is lower than 350 per hectare with buildings which are up to eight stories high. There is one family, an extended family, living in each house with only one bathroom on each floor. I could give you the detail of the figures and the amount of floor space per inhabitant but the most important thing, of course, is the distribution of floor space among the different income groups. It is not a high density for an Arab city. The Casbah of Algiers has 1600 people per hectare. I do not propose Yemen as a model. In entirely new sections of the town, there is little difference between old houses and new houses.

The craftsman knows his job. He is an artist with no ego to defend. He does not have to make something to show that he has done it. Still, he puts some individuality into it.

In a rich man's house, or a poor man's house, status is more important than cost and function. All the floors are not used. The people accumulate little wealth; they build higher because they like it, because it is cheap and because they can afford it.



Sana'a, Yemen Arab Republic. The aerial view shows the gracefully tended gardens of the city centre, where water used in the mosque is recycled for agricultural purposes

Photo: A. Bertaud