





Aurel von Richthofen

DESERT SPRAWL

Cities like Dubai have become synonyms for development in the Persian Gulf region. The Sultanate of Oman has been subject to great changes as well as a result of its rapid urbanisation. But even though Oman is following a different path than the countries surrounding it, it has yet to become a model of sustainable spatial development.

New type of building: The recent villas in Oman are the complete reversal of the country's traditional courtyard houses and compact oasis settlements.

Even when coming in for a landing it quickly becomes obvious that this place is nothing like Dubai. Flat buildings in various shades of beige sprawl out around Muscat as far as the eye can see. Since the 1970s the Sultanate of Oman's capital city has been transformed from a small harbour town into a linear city the size of Los Angeles, while being only one quarter as dense however.

The urbanisation of Oman can be explained by looking at local tribal culture and the topography, as well as at the city's planning history. Although the Sultan's family have ruled the country for many generations, numerous tribal leaders (sheiks) continue to have the final say about development within their own provinces. Unlike Dubai, where one clan rules a city state, this federal structure has led to decentralised development that is also reflected in the urban development. And thus the harbour cities Salalah, Sur and Sohar have retained their importance as centres of trade. In the interior of the country the former capital city of Oman, Nizwa, continues to be a cultural attraction. The oasis Buraimi and its twin city Al Ain in the United Arab Emirates are also developing at a rapid pace.

The capital Muscat, however, has remained the political and economic hub of the country during this ongoing period of growth that began in the 1990s. Two thirds of Oman's population now either live in Muscat's catchment area or on the narrow Al Batinah coastal plain that stretches along the Indian Ocean.

Transformation of the landscape

Muscat's geographical location on the eastern-most tip of the Arabian Peninsula between the 2,000-metre-high Hajar Mountains and the Indian Ocean requires a different type of planning than that used for places along the flat shores of the Arabian Gulf. Large-scale infrastructure like storm water retention dams, motorways and power lines have allowed for the development of barren and remote areas. In doing so, entire wadis and mountaintops have been sacrificed. Most Omanis continue to have little appreciation of their landscape, although the Ministry of Tourism uses the slogan "Beauty has an Address" to promote the country and encourage ecotourism.

From an urban planning perspective, the development that has occurred in Oman thus far is functional and automobile-friendly. In 1991 the German office Weidleplan developed a layout for a modern capital city. The plan's zoning follows the principle of a division of functions: Residential areas are separated from production sites, and recreational areas and commercial centres are spread throughout the city. Motorways criss-cross the landscape, cutting gigantic swaths through the rocky desert.

The drawbacks of having low, widely spread-out buildings are the endlessly long roads, monofunctional residential developments and a city that continues to fan out in all directions. Commuters often spend more than two hours a day in their cars, and public transport is not (yet) available. Although the coun-

try's resources are limited and its sources of energy are dwindling, a dependency on cars, an irreversible destruction of the landscape and increasing urban sprawl are still thought of as desirable and unavoidable signs of progress.

One house per couple

A rapid demographic change has gone hand-in-hand with Oman's economic boom, and one Omani custom is that every young couple is given a piece of property and a house, free of charge, by the Sultan. As there is no property transfer tax, residential property is dealt with as it is in the game of Monopoly. And with few exceptions, the state protects its own population from foreign investors. The housing market has thus become one of the most important capital instruments for Omanis, who have discovered that detached family homes are the ideal type of housing: "Omani Villas" are now being built on almost all of the plots of land provided by the Sultan. On the 600-square-metre-plots, the unofficial minimum size for an Omani family, up to 360 square metres of living space may be built.

The villas represent the typological inversion of the traditional courtyard buildings and compact oasis settlements. The living area has been turned inside out, with the result that more and more space and energy are being wasted. The religiously based need for privacy is guaranteed by metre-high walls built around each plot, leaving the remaining outdoor space and streets deserted. The freestanding

Signs of the rapid urbanisation in Oman: Infrastructures like motorways and towers cut through the desert and transform the landscape.





buildings are completely exposed to the scorching local heat. Walls made of hollow concrete blocks transfer the heat to the inside of the buildings, where air-conditioners strain to cope with it. Electricity and desalinated water are produced through the consumption of natural gas. As a result of subsidised prices, energy-saving methods of construction cannot compete, and for the same reason photovoltaic systems have not been successful either.

Urbanisation without a future

The vernacular architecture that was developed in harmony with the culture, landscape and climate is now losing ground as western suburbs are copied. With each property that is developed and each additional kilometre of motorway, Muscat moves further away from the opportunity it had to develop itself as a sustainable Arab city.

Because each Omani couple builds itself a house and the city continues to grow, construction projects have become the most important topic of the day in Oman. Major infrastructure projects are considered to be the yardstick of development within the Sultanate. A network of motorways already covers the entire country. In order to build the section along the coast even fishing villages and valuable agricultural areas were sacrificed. A cargo port in Duqum in the south is being constructed in order to compete with Dubai. Although Muscat's international airport has suffered a major setback, it is hoped that it will

one day be a hub for air traffic between Europe and Asia. And the new 1,000-kilometre-long railway line being built from Salalah in the south to the United Arab Emirates will also pass through Muscat. Up to now European companies such as Strabag have been able to secure the lion's share of these projects, but competition from China is growing.

The rapid development of the Sultanate is a race against time. Within a generation the oil and natural gas fields will have dried up. By then it is hoped that the infrastructure will be in place and the economy diversified. This is the same strategy that neighbouring countries with considerably more resources are following. In its haste to build, the country is constructing things that are not connected to any particular infrastructure projects, and yet questions about sustainability are not being asked. Whether the numerous buildings, streets, harbours, railway lines and cultural centres can still be operated in a post-fossil future is indeed doubtful.

Sustainability models in Oman

But what would sustainable urban development in Oman look like? For the past four years this question has been addressed by a research group in Muscat under the working title of "Urban Oman". It quickly became clear the concepts of sustainability that have spread out across the Arabian Peninsula have all been imported, meaning they will likely fall short of their objectives. Sustainable urban and architectural devel-

opment must include economic, ecological, social and political dimensions on an equal footing and must adapt them to local conditions.

With regard to Oman, this means protecting its landscapes and cultural spaces. The current trend towards widespread sprawl has destroyed many habitats. The ubiquitous detached villa is completely exposed to the sun and heat, and consumes vast quantities of energy in both its construction and maintenance. Transformation processes must also be carried out in rural areas. From an economic perspective, conventional fields of work such as oasis cultivation and fishing must be protected, as these continue to form the basis of existence for many Omanis. The traditional economy helps preserve the cultural landscape. Dependence on automobile traffic and fossil fuel resources can only be reduced through a public transport network.

At the political level, the state-sponsored distribution of land must be reconsidered. Instead of receiving gifts from the Sultan, citizens should be given rights of participation and must take responsibility for the design of their environment. Planning processes need to be transparent, inclusive and participatory. Tentative approaches in this direction have been made since the advisory parliament (Majlis Al Shura) has begun to deal with the question of housing. In this way capacities for dealing with and controlling densification and land management issues have slowly been built up. This may indeed be a first step towards a post-fossil fuel future.

Suburbs are growing rapidly and construction projects are becoming steadily more and more important. Muscat, Oman's capital city, is now the size of Los Angeles.