

architectural traditions, the vernacular as found in the local mud brick Najdi architecture, and the monumental as expressed in such works as the Alhambra. It provides office space for 1,000 employees; meeting, conference and prayer rooms; banquet, library, auditorium, exhibition and parking facilities. Inspired by the traditional *souq*, different energy conservation strategies were employed including the use of thick walls, high quality insulation, *mashrabiyyas*, and small windows. The Tuwaiq Palace, a central cultural facility for the Diplomatic Quarter in Riyadh, is another striking example. The concept is based on a sinuous spine that winds in on itself and reaches a length of 800 meters. Inspired by regional fortresses, the design includes three white tents attached to the main building that face the inner gardens. The tents minimize the surface area exposed to the hot afternoon sun. The Great Mosque of Riyadh and the urban development of Qasr al Hokm district, is another stunning example that represents a conscious endeavor at interpreting the past.

Other examples that attempt to balance tradition and modernity in search of a unique identity can be identified in the Qatar and Emirates. The old campus of Qatar University, the Post Office in Doha and kindergarten prototypes throughout the UAE are clear manifestations of such endeavors. However, key interventions representing exploratory novelties with different interpretations have emerged here and there throughout the region including the Sheraton Hotel-Doha, the Sheikh Khalifa Stadium in Abu Dhabi, the Intercontinental Hotel Muscat and Al Thawra Hospital in Yemen.

POST-Oil Architecture: Global Flows and Service Hubs From 1990s to the present day

Since the mid-1990s, a number of theorists and urban researchers have embraced the concept of the space of flows. Manuel Castells argues that contemporary societies are structured around flows of capital, information, technology, images, sounds, symbols, and objects of consumption. While the notion of such flows can be easily validated, his assumption that the global city is not a place but a process has been proven untrue. This is clearly evident in the rise of cities such as Abu Dhabi, Doha, Dubai, and Manama to the class of global cities; these are witnessing unprecedented and continuous urban development and growth processes. In contrast, Arjun Appadurai labelled global cities as "scapes" of flows. Appadurai identified five types of scapes: *ethnoscapes*, *mediascapes*, *financescapes*, *technoscapes* and *ideoscapes*.

Applying Appadurai's terminology, emerging hub cities in the Arabian Peninsula can be regarded as *ethnoscapes*, that is, environments created by the need for workforce and the interaction of diverse cultures; places where large numbers of expatriate workers and professionals live, work, or visit. High Rise towers such Burj Khalifa in Dubai and Doha Tower are clear manifestations of these scapes. Additionally, public libraries and museums are cases of cultural flows. They include the King Fahd National Library in Riyadh, Museum of Islamic Art in Doha, and the famous proposed museums of Saadiyat Island of Abu Dhabi.

Cities in the Peninsula can also be envisioned as *mediascapes*, spaces that are generated by the expanding role of media as a result of the revolution in information technology. Developing media cities and controversial TV news channels, such as Al-Jazeera in Doha and Al-Arabiya in Dubai are clear manifestations of the important role of media in the Middle East today. Further, some cities on the peninsula, such as Dubai or Manama, can be viewed as *financescapes*, places that are created by flows of capital and the establishment of transnational corporations and stock exchanges. In addition, these emerging cities can also be regarded as *technoscapes* and *ideoscapes*, challenging and stimulating environments that reflect the influence of telecommunication technologies and the resulting spread of ideologies. Industries in the free trade zone of Dubai, Masdar Institute in Abu Dhabi, the Education City and Qatar Science and Technology Park in Doha, the KAUST-King Abdulla University of Science and Technology, north of Jeddah, and German University of Technology – GU Tech in Oman are clear models in this context.

By and large, these 'scapes' are important players in the shaping of social and professional practices and the resulting spatial environments that accommodate them. They accentuate the role global flows play in shaping contemporary development processes. Cities like Abu Dhabi, Doha, Dubai, and Manama are commonly referred to as global cities since they are exposed to more flows than cities like Jeddah, Kuwait, Muscat, and Riyadh. However, some cities have acquired a geo-strategic importance: through the shift of global economic forces, they have developed into central hubs between the old economies of Western Europe and the rising economies of Asia. In the context of regional and international competition between cities, new challenges are emerging and making their mark on the regional and world stage. Architecture and urbanism in the Arabian Peninsula continue to be regarded as a crucial catalyst for cities to sustain their position in the shifting milieu of global flows and knowledge economies that are identified as one of the driving forces for urban development. This includes international services, high-tech industries, and trans-cultural higher education institutions. While

Dubai has set the stage as an exemplar of a global city, its vision and progressive practices have prompted other regional cities to move forward; these are now emerging as urban and architectural competitors in the frantic race to be the first to develop and construct futuristic new cities and implement large scale urban regeneration projects.

The development of a post-oil economy in the Peninsula has led to a new way of understanding cities as a future asset that can sustain and widen the economic prosperity of the region. The main consequence of this has been the attempt to open markets and interweave with global business. While Dubai has been the major trend-setting center for this new tendency, due to its visionary introduction of new methods for creating and maintaining vast urban growth, and thus garnering international attention, other cities, such as Doha, Abu Dhabi and Manama have also followed suit. Recently, these cities have begun to embrace policies in order to develop similar projects and strategies.

Currently, the Arabian Peninsula can be considered as one of the largest construction sites in the world, and the resulting transformation of the built environment has led to a new, more dynamic and more functional type of city – the emerging service hub. In recent years, the growing economic and cultural competition between countries has increased the speed and extent of new urban developments. The urban development strategy introduced by Dubai during the 1990s has become the blueprint for the new rulers of Abu Dhabi and Qatar, and has enticed them to modernize urbanism and to establish their capitals as international service hubs. Bahrain can also be considered one of the pioneers regarding economic diversification strategies, initiated by its decline, due to limited reserves in oil production and refining in the 1970s. A causeway to Saudi-Arabia built during the 1980s, and more liberal investment policies and strategies in the financial sector have been major factors in progressive economic developments within the service sector in Bahrain. In the case of Dubai the introduction of freehold property laws at the end of last century was a catalyst for exponential growth in recent years.

While Dubai, Abu Dhabi, Doha and Manama are currently the main centers of contemporary post-oil urbanism, other cities in the UAE, Oman, Kuwait and Saudi Arabia have also been witnessing rapid urban transformation processes. The rapid growth of Dubai, for instance, has resulted in the establishment of dormitory settlements in the smaller, less affluent northern emirates of the UAE due to lower land prices and service costs. Furthermore, the successful marketing of Dubai as an international tourist destination and hub has led to increasing tourism for Oman due to its emphasis on a unique cultural heritage and more diverse landscapes. One recent consequence has been the initiation of large-scale real estate projects in the form of master planned developments in Muscat and its surroundings. The Iraq invasion of 1990 prevented similar developments in Kuwait while the increasing influence of conservative Islamic elements in the Kingdom of Saudi Arabia has disabled the implementation of urban development strategies undertaken by large scale development companies to establish international service hubs. Nevertheless, recent projects, such as King Abdullah Economic City north of Jeddah and the City of Silk in Kuwait are preliminary attempts to keep up with the new development realities of cities in the region. In the future, these cities will face challenges to become more competitive regarding growth on one hand while taking the necessary measures to consolidate, and develop more sustainable urban structures on the other.