Urban Conservation in Practice: Evidence from the United Arab Emirates

Dr Mahmoud Haggag, United Arab Emirates University, UAE
Dr Ahmed Rashed, United Arab Emirates University, UAE

Abstract

The United Arab Emirates (UAE) have had a rapid urban development since their establishment in 1971. This growth is having a great impact on the few historic urban areas. During the last decade, massive conservation efforts have been implemented in historic districts, mainly in Sharjah and Dubai in order to save the remaining of urban heritage in the UAE. In Dubai, for instance, over than 70 historic buildings were restored, others were rebuilt, and a modern urban development with traditional characteristics was implemented.

The practice of urban conservation in the UAE varies depending on each city's own set of economic and urban priorities. Abu-Dhabi, for instance, did not keep much of its older urban pattern whereas Sharjah is performing massive conservation in its historic districts, and was recognized by the UNESCO as the cultural capital of the Arab World in 1998.

The paper evaluates the role of local and national organizations in promoting urban conservation in the United Arab Emirates. Issues such as tourism and environmental concerns and their relation with urban conservation are identified. Integration between important theories and practices in dealing with historic districts is highlighted. Based on the analysis of the existing policy of urban conservation and its implementation, and the lessons learned from similar experiences, a direction for better strategy for urban conservation in the UAE is recommended.

Definitions

Conservation is "the action necessary to preserve anything of acknowledged value". Conservation is also known as "the careful management of a limited resource, in order to ensure efficiency and continuity of use" (Antoniou, 1981). Conservation is closely related to information and communication, as a "monument" transmits a message from the past to the future. In other words, this relationship has to be defined in terms of continuity and development, enabling us to learn from the past and add to it (Jokilehto, 1989). The concept of conservation includes: protection; preservation; gentrification; renewal; adaptive use, contextual design; restoration. Even so, reconstruction has been practised throughout history. The human desire to leave evidence of himself for future generations can be observed in the monuments of early historical periods, from the gigantic structure of a pyramid to the modest inscription on a gravestone. It is necessary to establish "What to conserve"? Is it the artifact or the idea that we are conserving? The answer is to balance the physical setting and urban context of these built monuments with the social values and identity that they generate (Hanafi, 1993). Furthermore, why conserve at all? It is often quicker, politically more dramatic and cheaper to bulldoze, or build on open fields.

The actions required to sustain the future of historical buildings and districts include conservation, development, tourism, environmental concerns and urban planning within its social determinant. The aim is to find a framework for integrating these conflicting actions. Conflict can be seen between urban planning development and the conservation of archeological remains. A dichotomy between history and modernity was developing to the extent that planning educators were advocating the removal of dilapidated city districts, while archeologists were fighting for their preservation. Historic districts, from a planning point of view, were obstacles to modern land uses and economic growth. This conflict made it difficult to conserve whole urban fabrics since it was viewed as anti-modernization.

New definitions of urban conservation emerged in planning education to accommodate the shift towards preserving urban history. In 1956 ICCROM was established in Rome by UNESCO, the International Centre for the Study of the Preservation and Restoration of Cultural Property. ICCROM, an inter-governmental body, assists member states in the protection of their built cultural heritage. Its functions include documentation, research and training. ICCROM has proved particularly effective in mobilising and co-ordinating conservation work during times of disaster, a trend adopted at international level in the second international congress of Architects and Technicians of Historic Monuments in Venice (1964), with the issue of the "International Charter for the Conservation and Restoration of Monuments and Sites". Also in 1965, an International non-governmental organization was established as an advisory body for the restoration and conservation of monuments and sites (ICOMOS). The new concept of "human heritage" made conservation the responsibility of all, including urban planners, city administrators and archeologists (Eisner et al, 1993).

Tourism and conservation

Tourism is of major economic importance for many countries and includes cultural, natural, commercial and educational tourism. Urban heritage is the main resource. Tourism, in the past, was naively considered to be a "natural renewable resource industry" due to its supposedly "non-consuming" attributes. This meant that tourists were thought to visit places to admire their unique character but not to consume or disturb them. Therefore few alterations and changes to the attractions were expected. Today it is difficult to justify this "non-consumptive" character, as the tourist industry has grown tremendously and studies show that the proposed benefits are illusory. Social and cultural patterns have been disrupted, consumption of resources by tourists has disadvantaged local populations, the character and quality of local identity has suffered, and profits flowing from the tourist industry have been channeled to overseas companies. The tourist industry needs to adopt more careful management strategies, so that sustainable local development can be achieved (Noorizan, 1994). Conservation and tourism are bound together inextricably, and it is vital that the problems arising out of their relationship should be closely examined with active cooperation between those concerned with conservation and those involved in the tourist industry. Local authorities within local management plans play the major role in this cooperation.

Historic sites and monuments, apart from their intrinsic value and beauty, are major economic resources and irreplaceable capital assets, contributing significantly through tourism to the earnings of foreign exchange, to local employment and prosperity, and to government taxation. Admission fees can rarely cover the cost of maintenance, repairs and operating, but if the wider benefits are taken into account, such as the customers using hotels, restaurants, cafes, and shops, then the viability of conservation projects takes on a new perspective. Considerable employment is with higher spending by. This gives a better chance of survival, and local residents can enjoy a more extensive range of facilities than would otherwise be possible (Kocabas, 1994).

Money spent on conservation is a sensible national investment producing a measurable return in terms of employment, increased trade, foreign exchange and taxation. Therefore, efforts should be made to convince all those with economic interests benefiting from tourism that investment in the conservation can often make a greater return than any other investment activity. For every unit spent on historic sites –the main purpose of the visit – an equivalent sum is spent on other items.

The debate will continue over whether to compromise tourism in favour of the environment and residents present and future, or to disrupt the environment and the population to serve tourism. There is no easy solution, only better understanding of the problem and the need to encourage more local participation, better cooperation between governments, authorities and conservation experts and those working in the tourist industry.

Environmental concerns

Over the last three decades, cities in most Gulf countries have faced social and environmental problems, with a rapid rate of urbanization. Recently, there has been a considerable growth of interest in environmental issues, in sustainability and the better management of development in harmony with the environment.

Society has not begun to understand what the human environment should consist of. We have limited social and economic action programs for “instant” solutions, but we have no comprehensive social-economic-physical conception of the total future human environment, or of how to build it beginning now and phasing through the transitional period of the next 20–30 years. Human needs and the numbers involved are great, and there are limited resources. There is, therefore, a need for efficiency. This has brought forth cost-benefit ratios and program planning and budget systems. Cost-benefit ratios measure economic efficiency; as such they are constraints on the means, not the objectives. Designers of the future environment should assimilate and transcend these management tools so that they may proceed to human-benefit ratios.

Environmental Impact Assessment (EIA) is a multidisciplinary activity that seeks to identify and predict the impact of changes on the environment and on human well-being (Glasson, 1994). The distinction between reversible and irreversible impact can be a

significant issue in an EIA. There is also the distinction between actual and perceived impacts. Individual "subjective" perceptions of impacts may influence the responses and decisions of individuals toward a proposal development. They constitute an important source of information to be considered alongside more objective predictions. Finally, all impacts should be assessed relative to the "do-nothing" approach. The EIA exercise is needed at the earliest stages of any development project, including alternatives.

The question is often: is it more important to enhance the environment or to replace it? Perhaps the more important question is to define the interpretation of "environment": is it a physical or a social phenomenon? The answer has produced conflicts. What are the costs of conservation, development and tourism, and what are the benefits for every intervention?

Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. It is necessary also to identify the main forms of constraint governing integration that will allow a sustainable outcome. This paper will focus on how to organize a system for the governmental and non-governmental bodies concerned with the urban conservation for historical environments and monuments.

Historical background of the United Arab Emirates

Major cities of the UAE are located on the Gulf as safe havens for fishing and pearl hunting ships, the main source of livelihood. Until 1790s, these areas were traditionally controlled by the *Ya'ariba* tribe. Later, different tribes ruled smaller areas, known as Bahrain, Qatar, Oman, and the UAE. *Kasimi* and Arabs of *Beni-Yass* were the two rivaling rulers for the UAE. Two major cities were established as centres for each of the rival groups: Ras Al-Khaimah for *Kasimi*, and Abu Dhabi for *Beni-Yass* (Ouf 1998).

Prior to the discovery of oil, the economy of the UAE cities depended on these traditi0nal trades. The economy was capable of supporting small settlements due to the natural difficulty of land transportation through the shallows of the Gulf shores. Consequently, settlements were dispersed independently and were never dominated under one rule.

In 1971, the UAE came into existence as an independent nation, merging seven sheikdoms (Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al-Qaiwan, Ras Al-Khaimah, and Fujairah) to take the place of the formerly British-protected trucial states. Until that time, most of population was of Arab tribal origin. They had controlled the deserts, cultivated date palms in the oases and mountain valleys, fished along the coastline, and collected pearls. Some had settled permanently in the small towns along the coast and engaged in maritime trade. Merchants from southern Iran arrived in the early 20th century. Some Indian merchants settled in the coastal areas. From the 1950s, other immigrants came from the northern Arab states. Nevertheless, the population remained small: 100,000 in 1960, and 180,000 by 1968 (Higgins, 1995).

The fast urban development that followed the 1971 federation, as well as the discovery of oil, completely changed the character of the traditional cities of the UAE. Workers from Asia, Europe and the USA arrived, increasing the population to 2.5 million by 1995 (Ministry of Planning, 1999). The original citizens represent only a minority of the population of which the great majority consists of immigrants. The dynamism of the UAE economy, boosted by vast oil revenues and relieved by the end of conflict in the Gulf, is likely to continue to attract immigrants.

The major cities of the UAE developed along the coast and around the Creek (*Khor*). Immediately beside the water ran the covered alleys of the *Souq* (the market) where goods brought in from the sea were traded. Houses were built directly above the high watermark. The merchant owners of these houses could load their boats with ease, and benefited from the cooling sea breezes. Cities located on double waterfronts increased their opportunity for fishing in all sort of climates and tide conditions. Another benefit of that semi-island location was the safety from land invasions and raids. In some cases, such as Abu Dhabi, the location was a real island, which can be reached only through the shallow water at low tide. Invasion from the landside was already difficult because of the salty shallows along the shores. The feeling of safety on the creek shore lead to the creation of the urban mass on the creek front, while fortifications were created either on the Gulf coast or on the desert fringes of the city (Ouf, 2000).

Today, in all coastal cities, corniche roads have been constructed between the houses and sea front. In some settlements, like Bastakia and Shandagha in Dubai, a row of old houses lines the creek. Close to these, a covered road leads directly into the old *souq*, still the centre of traditional life in the city (figure 1).

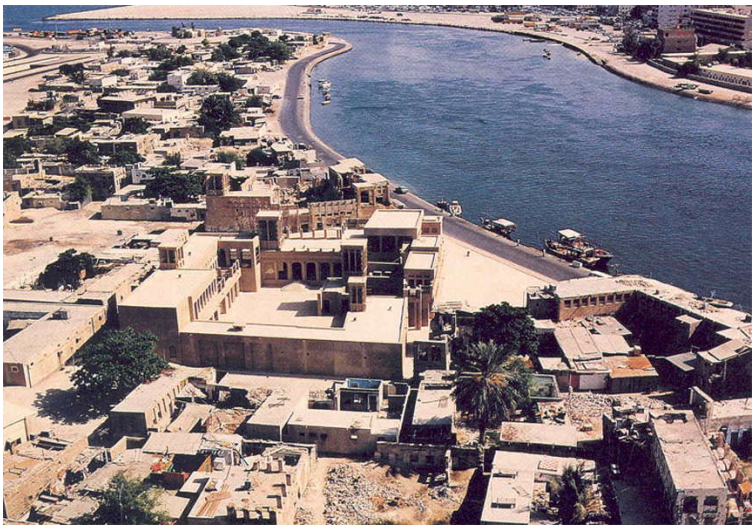

Figure 1: The old district of Shindaghah in Dubai.
Source: Kay and Zandi, 1995.

The second major component of the UAE city structure is the defensive system, including forts, watchtowers, and city walls. The defensive towers of the city wall gave the first

variation to the city skyline, punctuated by watchtowers, wind-towers and minarets. Rulers built forts as a physical manifestation of their authority, over the ages, and these forts served both as their residence and also as a place of refuge for all when at war. Some smaller forts were built by the Portuguese along the east coast of the UAE, at *Kalba*, *Khawr Fakkan*, and *Diba*. Various terms are used to refer to the forts, which is initially a square enclosure with a large courtyard. These terms are *Husn* that literally means a fortified enclosure; *Qala'a*, which means Castle; and *Qasr*, a fortified enclosure used as a residence for the ruler and his family.

The typical Islamic fort is square with towers at each corner and half-towers in the middle of each side, except on the west where two quarter-towers form the main gate. With the introduction of the gunpowder forts, developed by the Portuguese, the multi-tower form of *Qila'a* was altered and the central square or rectangular nucleus retained just a pair of diagonally opposed corner towers. A good example of such building is *Qasr Al-Husn* in Abu Dhabi.

Forts in the UAE can be grouped as shown in Figures 2a–2d (Mutwalli, 1997):

Figure 2a: Square enclosure with two diagonally placed towers (*Qasr Al-Husn* in Abu Dhabi).

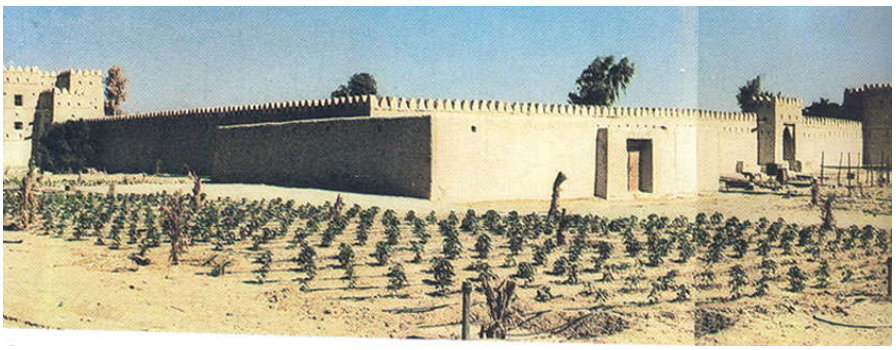

Figure 2b: Square enclosure without any tower (*Qasr Al-Muwagi'i).*
Source: Mutwalli, 1997.

Figure 2c: Free standing building, without an enclosure (*Qala'at Murayjib)*.

The watchtower has two forms: the round tower *(Burj)*, and the square tower *(Muraba'a)*. Its purpose was to control either the approach to a settlement or the use of a route The *Maqta* tower on the tiny islet in the creek of Abu Dhabi is a good example (figure 3). Similarly, two watchtowers inland of the village of *Jazirat Al-Hamra* in Ras Al-Khaimah, control the approach. Towers were also used to protect palm groves and watercourses. Watchtowers are usually high rather than wide and composed of one or two stories. An attacker would find access difficult, as the door is usually 2–3m above the ground level with no stairs leading to it.

Figure 3: Burj Al-Maqta in Abu Dabi.

The traditional architecture of the UAE cities was the result of the hot and humid climate. High-density buildings were constructed close together, creating narrow alleys, which were shaded most of the day. These alleys tended to run from north to south and ended at the creek, permitting the prevailing winds to pass through. The main traditional architectural features are the courtyards and the wind-tower. Most of the rooms look

inward with a shaded verandah overlooking the courtyard, which provides a reservoir of cool air. Wind-towers were unique and elegant architectural elements, acting as conduits for trapped air to be directed to the rooms beneath, usually bedrooms and seating areas. Figure 4 shows a typical traditional house, *Al-Sheikh Saeed* house on the creek of Dubai.

Figure 4: Al-Sheikh Saeed House in Dubai (museum of historical photographs and documents of Dubai.

Modern urban development in the UAE destroyed much of the local urban character. Such development altered the lifestyle of the people and caused a redistribution of the population among the emirates. To achieve such development, cities of the UAE turned to international planning standards that paid little or no attention to local traditional structure. Hence, a strong trend for urban conservation of historic sites is required to save the remaining urban heritage in order to inform younger generations about the old urban lifestyle of their cities and to attract international cultural tourism.

Conservation and urban heritage in the UAE

The conservation of urban heritage has become a prominent issue in most Gulf countries but in the rapid urban growth of the 1970s and 1980s, little attention was given to the conservation of urban heritage in most UAE cities: in Dubai, of 3000 historical buildings, only 371 survived (Boussaa, 2001). Urban conservation in the UAE requires understanding of the importance of cultural continuity and of the benefits of urban conservation to society. These benefits could be summarised as historical, economic, political and scientific (Nevanlinna, 1988).

Economic pressures present difficulties in urban conservation, particularly in major cities. During 1960s and 1970s, parts of historic centres of Abu Dhabi, Dubai, and Sharjah were replaced by alien structures, which were not adapted to their context. In general, both the public and property owners preferred new developments to old ones. Modern high-rise buildings were seen as proof of better times while ancient buildings looked old-fashioned and poorly maintained and represented a time when the country was underdeveloped before the discovery of oil. What was left unnoticed in these historic relics was their cultural and historical value.

Today, heritage conservation is a major issue in most UAE cities. During the last two decades, attention was given to saving the remaining heritage relics. State departments, research centres, voluntary associations, and museums have been established to undertake heritage management. Most of these are in three emirates (figure 5): Abu Dhabi, Dubai, and Sharjah. Others, including Ras Al-Khaimah, Ajman, Um Al-Qaiwan, and Fujairah, are practising their heritage conservation through museum and voluntary organizations.

	State Institution	Research Centers	Voluntary Organization	Museums
Abu Dhabi	Department of archeology and tourism, Al-Ain. History and Heritage Board. Archives and Studies Centre. Emirates Heritage Club.	Zayed Centre for Heritage and History, Al-Ain. Cultural foundation, Abu Dhabi.	National Heritage Revival Organization	Al-Ain Museum
Dubai	Historical Builsings Sections, Dubai Municipality. Archeology and Museums Section, Dubai Municipality.	Juma Al-Majid Centre for Heritage and History Culture Forum	National Heritage Organization Dubai Assoc. for Art & Theater.	Dubai National Museum
Sharjah	Department of culture and information, Department of Archeology and Tourism. Directorate of Town planning and Survey, Sharjah Municipality.	Heritage and Management Department, American University of Sharjah.	Sharjah Assoc. for Art & Theater. Dibba Al-Husn Association for Art & Theater.	Al-Hisn Museum
Ras Al-Khaimh	Studies and Archives Centre.		Ibn Majid Assoc. for Arts. Al-Nakheel Association for Arts.	Ras Al-Khaimh Museum
Ajman			Ajman Assoc. for Arts & Theater.	Ajman Museum
Um Al-Qaiwam			Um Al-Qaiwan Association for Folklore	Um Al-Qaiwan Museum
Fujairah				Fujairah Museum

Figure 5: Governmental and non-governmental heritage bodies in the UAE.
Source: Adapted from Boussaa, 2001.

Heritage management involves mitigating conflict over heritage sites and policies. It includes managing, either in the form of conservation or salvage, heritage sites. It also encompasses the collection, documentation, conservation, and interpretation of built heritage. Heritage relics have competing values to diverse groups in any particular community, and its is often the role of the heritage manager to consider and manage these values as of the conservation process (Bennett, 1998).

The Dubai Municipality has played a pioneer role in heritage management. In 1984, the Historical Building Section of Dubai Municipality (HBSDM) came into being and has been instrumental. It is composed of a Study and Research Department dealing with design and restoration projects, and a Restoration Department, responsible for execution of restoration works. A coordination framework has been established between the departments to manage and save urban heritage of Dubai.

To assist the role of HBSDM, Architectural Heritage Conservation Committee was established in November 1994 in Dubai. This committee includes architects from HBSDM, Planning and Survey Department, and Buildings and Government Housing Department. It has completed restoration work on 72 historical building in Dubai and has plans to conserve 120 more buildings by 2008 (HBSDM, 2001). It is also responsible for controlling urban growth in conservation areas. All new projects within historical urban areas need approval from the HBSDM to ensure compatibility with traditional architecture.

Dubai and the Bastikia conservation project

Over the past 30 years Dubai has been transformed beyond recognition, and most of its historic buildings have been demolished. The few old buildings, which remain, stood as isolated pockets in a new modern city. Old Dubai lies on the tip of a small line of salty water extending inland from the Creek (Khor), which divides Dubai designed historic area into west side "Bur Dubai" and the east side "Deira" (figure 6). Architectural heritage was located in both sides (forts, watchtowers, houses, mosques, and markets). Bur Dubai contains the oldest parts including Sheik Saeed House (1896), Bastikia district (started 1910), and the old Souk (market). Deira contains Deira great souk (1920), Al-Ras residential areas and the Gold Market.

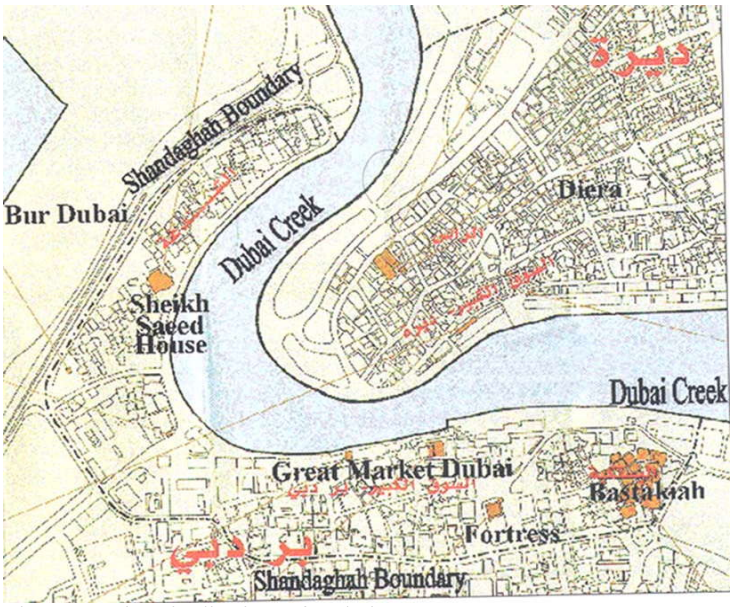

Figure 6: Historic districts of Dubai.
Source: Ouf, 2000.

Dubai Municipality has played the main role in conserving the architectural heritage of the city and its surrounding areas. Preservation was begun in 1971 with work on Al Fahidi Fort, the oldest building in Dubai, over 200 years old. After preliminary restoration efforts, Dubai Museum was established. The first target was to complete the restoration of the fort. Al Ahmadiya School and the historical village of Hatta were then restored with the assistance of consultants and local inhabitants. In 1984, *Sheikh Saeed Al-Maktoum's house*, the old house of the ruler, built in 1896, was restored (see figure 4). Today, it has been converted into a museum of historical photographs and documents of Dubai (Kumar et al, 1999).

The HBSDM has been instrumental in preserving the history and culture for posterity. The following factors were taken into consideration:

- Most of the restored houses and forts are converted into restaurants, galleries, museums, souks and motels. The main areas under renovation are in Bastikia, Shindagha and the old souk areas of Deira. These areas will become focal points for tourists and will depict the traditional architecture.

- Surveys have been carried out in the central area of old Dubai, the historical *souks* of Bur Dubai and Diera, and regulations have been put in place.

- New buildings in historical areas have to conform to traditional architectural styles. The municipality has published a Reference Book for Traditional Architecture.

- The target is to register historical buildings on the International Heritage list to enable Dubai to have a presence on the world map for heritage sites. The municipality plans to establish more non-profit organizations to work towards the restoration of historical buildings.

One of the first priorities of the Historical Buildings Section in Dubai Municipality was the conservation of Bastikia. Firstly, new erections were prohibited inside the area in order to prevent the disturbance of the original character of the area. Secondly, a consultant was appointed to undertake the Bastikia conservation project in 1994. The goal was to restore the wind-tower houses, with the intention of their adaptive reuse to make Bastikia a unique historical area of central Dubai.

Bastikia historical background

Bastikia (early 1900s) is a unique survivor of old Dubai. It has the largest remaining area of traditional wind-tower housing on the western side of the Gulf. It occupies about 60,000sq m, 300m along the creek and 200m to the southern direction (figure 7). It consists of 60 residential units, mostly double floors. The urban planning was related to type of occupancy – single family or extended family, which caused the unit form to

change with time more than once. The district went into decline due to the movement of its original occupiers and the placement of low income people.

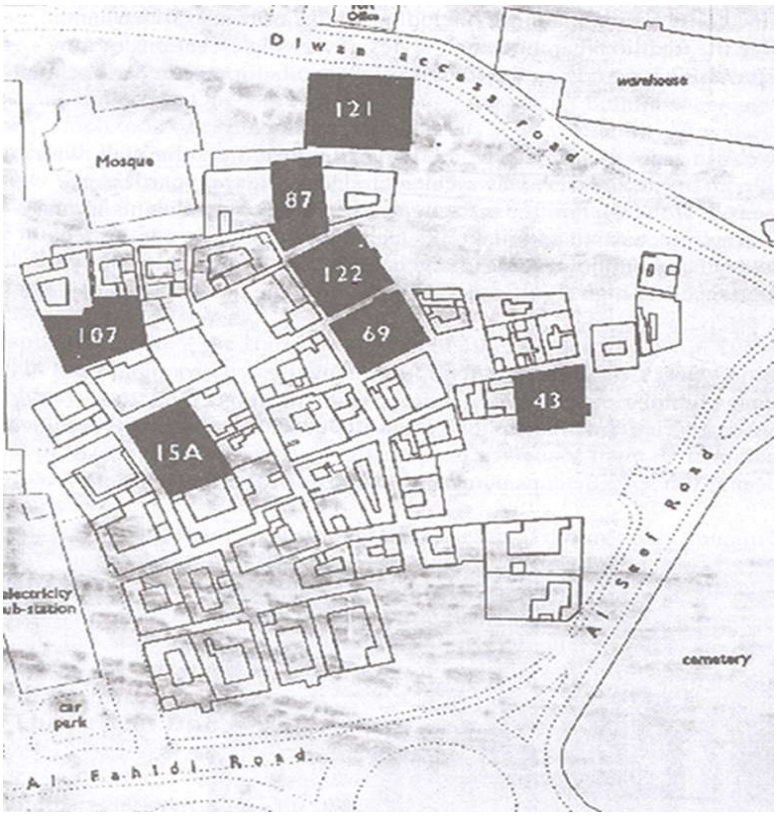

Figure 7: The historic district of Bastikia.

This part of the city reflects an important era in the historical architecture and urban conservation of Dubai. By the 1970s, most merchants who had initially taken up temporary residence in Dubai accepted Shaikh Said Bin Maktum offer to settle in the city. Many families came from the Bastak district in Iran. They built their houses near Al Fahidi Fort in Bur Dubai, close to the creek, where boats could be offloaded for the *souk* of Dubai. The settlement developed along the creek, as there is only one access that could be controlled by the inhabitants. Over the last 25 years, Bastikia district has suffered badly, with little maintenance and services continuing to decline. Crowded conditions have also accelerated the decline in the historical fabric.

Dubai Municipality has shown a great interest in the conservation of Bastikia and prohibited all new construction so as not to disturb the original character of the area. A consultant was appointed to carry out a survey of the buildings, study the architectural planning, and propose restoration work for the area, and revive it by the adoption of several legislative and design options.

After approval of the general survey and drawings, the first phase included the development of services and other facilities. The project also aimed for a framework of

comprehensive tourism and housing development. The second phase began in 1996 when the HBSDM undertake the execution of the restoration work. The third phase aimed at restoring the remaining buildings in the area.

Four stages were defined (Gray, 1995): first: a detailed survey to assess architectural quality, value and suitability for future use. Second: a site appraisal to determine opportunities and constraints, context and linkages. Third: research and analysis into realistic future uses based on market demand. Fourth: consideration of physical development options.

The conservation practice

The conservation work done in Bastikia falls under three categories: restoration, reconstruction and adaptive-reuse. Restoration of part/whole of historical buildings returns them to the original appearance of part/whole of the building. The building should have most of its authentic building components in the original location. That required information about the appearance and the traditional techniques of the building at earlier dates and the restoration work ideally uses traditional construction techniques with salvaged building materials from the site whenever possible. Reconstruction was for those demolished parts/whole of the buildings. This could be defined as *replication* (of already demolished parts/whole of the building that had enough historic graphic references and enough of the old building materials), and *rebuilding* (of demolished parts/whole of the building for no which detailed graphic materials is available). Reconstruction gave the new appearance of the building using both original new material and techniques. The role of both arch logical and conservation experts informs decisions about the detailed look of the building. This integrates with the third level of conservation, which is the adaptive reuse of different houses for suitable future uses. In this case, it was restored and reconstructed to accommodate residential activity. It was offered to rent by the municipality at a rate, which covered part of the restoration budget. Other houses were used for gallery, shops, bazaars, and even departments for the municipality.

Towards better strategy for urban conservation in the UAE

Strategy is means of achieving a desired end. In heritage tourism, strategy is the use of appropriate visitor management and interpretive practices in order to achieve two basic objectives: ensuring the conservation of heritage value, and enhancing the experiences of the visitors who interact with it (Chaffee, 1985).

Despite the fact that the objectives of saving heritage are the same throughout the UAE, there is a lack of a strategic unified framework within the emirates. Most of the heritage institutions work individually. Coordination could be achieved by establishing "The Emirates Culture and Heritage Commission" (ECHC) to link the various bodies with the decision-makers. ECHC would not be an executive body for organizing cultural activities and implementing conservation projects, but would be concerned with the operation of relevant governmental and non-governmental heritage bodies: the formulation of policies

on conservation and cultural development needs the active participation and support of the community.

The proposed commission should have representatives from different bodies of urban heritage, archeological education, research centres, voluntary associations, and national museums (figure 8).

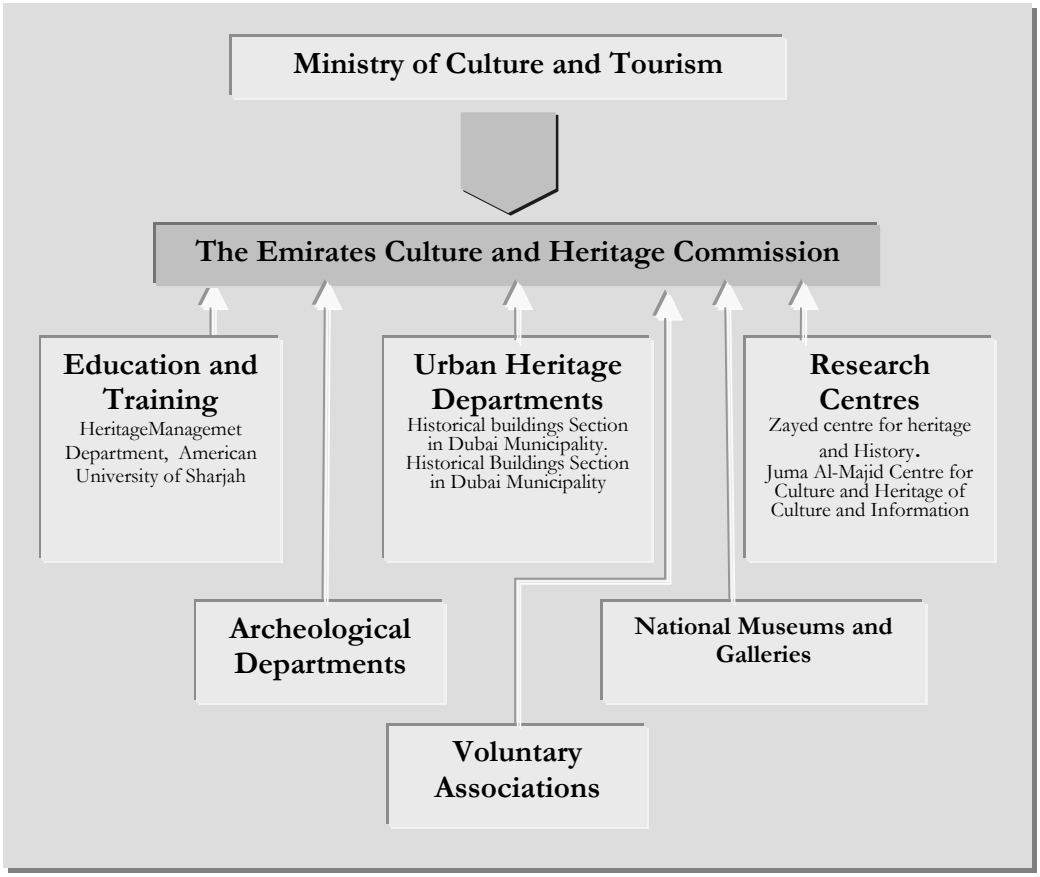

Figure 8: The proposed layout of the "Emirates Culture and Heritage Commission".

It should work under the umbrella of the Ministry of Culture and Tourism. The key responsibility of the CHC would be to formulate principles, strategies, and legislation within a unified framework to promote the long-term development of urban conservation in the UAE. The following guidelines should be taken into consideration.

- Heritage institution and decision-makers should act against the destruction and dilapidation of surviving heritage buildings and historic areas rather than relying on curative measures once damage or loss has occurred.

- Urban conservation should be taken into consideration at the early stage of developing the master plan in each emirate.

- Sharing resources and experience should be encouraged between the heritage bodies.

- The qualifications of the professional community in heritage conservation should be maintained at the highest level. The recently established Heritage Management Department, affiliated to the School of Architecture at the American University of Sharjah can accomplish this.

- Adequate funds are necessary for conservation and maintenance of urban heritage. Financial supports should be secured from industry, business and public agencies.

- Public participation, in the planning and conservation stage, is crucial and can help to avoid individualistic decisions.

- Legislation relative to the conservation of urban heritage should aim at integrating heritage conservation with the whole field of existing strategies such as urban development, tourism, academic research and public education.

Due to rapid economic growth and land value, the need for preservation has often been compromised in the course of economic development. The CHC with the cooperation of governmental bodies should be committed to protecting heritage and address the following recommended tasks:

- Strengthen coordination among relevant government departments and public bodies involved in heritage preservation and smooth conflict between those parties.

- Incorporate a cultural perspective (including heritage conservation, the aesthetic quality of city environment) in town planning and urban renewal (the EIA plays a central role at this stage).

- Enhance public awareness of the importance of heritage preservation through efforts in public education.

- Assess feasibility of converting or reconstructing historical buildings for culture-related uses.

- Balance the needs for international, territory-wide, and local cultural identity and facilities.

- Monitor effective allocation of government cultural facilities (i.e. balance tourism development with cultural heritage).

References

Antoniou, Jim. 1981. "Conservation and Arab City: Saving Islamic Cairo". Preface, The Arab Urban Development Institute, Symposium held in Medina, Kingdom of Saudi Arabia: 235.

Bennett, Lopoukhin. 1998. The Cultural Heritage: A Canadian Approach to Cultural Resource Management. UNESCO.

Boussaa, Djamel. 2001. "Towards an Inter-Emirate Urban Conservation Strategy". The 4th Sharjah International Urban Planning Symposium: Urban Growth Management. Sharjah Municipality.

Dubai Municipality. 1997. Dubai: the 21st Century. Dubai. Bin Desmal Printing Press.

Eisner et al. 1993. The Urban Pattern. 6th ed. Van Nostrad Reinhold.

Glasson, John. 1994. Introduction to Environmental Impact Assessment: Principles and Procedures, Process, Practice, and Prospects. UCL Press.

Hanafi, Mohamed. 1993. Development and Conservation: with special reference to the Turkish Town of Alexandria. Unpublished Ph.D. thesis. University of York: 18-20.

Historical Building Section. 2001. The old turned new. Unpublished document. Dubai Municipality.

Higgins, Kevin. 1995. The Emirates. Reading, UK. Garnet Publishing Ltd.

Jokilehto, J. 1989. Ethics in Conservation". Preface, Building and conservation 88 Symposium. UNESCO. Helsinki: 51

Kay, Shirly and Dariush Zandi. 1991. Architectural Heritage of the Gulf. Philip Morris.

Kocabas, Arzu. 1994. "Urban Conservation for Sustainable Development towards a Research Agenda". Preface of the 11th Interschool Conference, IoAAS, York. 28-29 March 1994: 57-61.

Kumar, P. 1999. Dubai City Focus on the Next Millennium. Dubai. Dubai Municipality.

Ministry of Planning, UAE. 1999. Annual Statistical Abstract. Issue no 24. Abu Dhabi.

Moorizan, Mohamed. 1994. "Tourism in Lagkawi: A gentle Torment". Preface of the 11th Interschool Conference, IoAAS. York, 28-29 March 1994:191.

Mutwalli, Reem. 1997. Qasr Al-Husn. Abu Dhabi. Cultural Foundation press.

Nevanlinna, Anja. 1988. “Urban Conservation in the Third World” Building Conservation 88 Symposium Report. Helsinki: 107-113.

Ouf. Ahmed. 2000. Urban Conservation Concept for the United Arab Emirates. Abu Dhabi. Zayed Center for Heritage and History.

Ouf. Ahmed. 1998. “A Historic Account for Urbanization in the United Arab Emirates: Links to the Future”. Proceeding of the 8th International Planning History Society Conference. University of New South Wales, Sydney. 15-19 July 1998.

Biographical Note

Dr. Mahmoud Haggag gained his PhD at Liverpool University, UK and is Associate Professor at the University of United Arab Emirates, in the Department of Architectural Engineering. Professional experience includes appointments at Alexandria University, Egypt; Beirut Arab University, Lebanon; and the Arab Academy for Science and Technology. He has published scientific papers in international scientific journals and conferences. He is also a practicing architect and urban designer and maintains a consultancy practice in these fields.

Dr. Ahmed Yehia Rashed, PhD, (IoAAS) UK, is Assistant Professor at the University of United Arab Emirates in the Department of Architectural Engineering. Professional Experience includes promoted the degree of Associate Professor within the Egyptian system; working at Assiut University, Egypt; Mansoura University, Egypt; and 6 of October University. Project Coordinator, Med-Campus Project No #11. Project Moderator, (HABITAT). Community Liaison, The American Research Center in Egypt (ARCE). Project Manager for various projects at (SPACE Consultant), Egypt. Published about 18 scientific papers in various conferences and scientific Journals.