

ARCHITECTURAL HERITAGE CONSERVATION AND SUSTAINABILITY
APPLICATIONS OF TRADITIONAL HOUSES IN DUBAI, UNITED ARAB
EMIRATES

Laila Mahmoud Hassan Tony
PhD Researcher in Islamic Archaeology
Faculty of Arts, Minia University

Abstract

This research deals with the preservation of heritage and sustainability applications in traditional houses in Dubai through three axes, including: the importance of architectural heritage, preservation of architectural heritage, and sustainability applications for traditional houses in Dubai.

The first axis deals with the importance of architectural heritage, which is highlighted in several aspects, the most important of which are the civilizational, scientific and tourism aspects. The civilizational aspect is highlighted by the fact that traditional buildings are a translation of history, and the importance of architectural heritage lies in a set of values, the most important of which are: the economic dimension, the cultural and urban dimension, the social dimension, and the environmental dimension.

The second axis, which deals with the preservation of architectural heritage, deals with the concept of preservation, which includes protection; improvement; renewal; adaptive use, contextual design; and restoration. In addition to methods of preserving architectural heritage, the procedures that must be taken, and the levels of preservation of architectural heritage, which is represented in the preservation of Al Fahidi/Bastakiya area, the Shindagha area, and the restoration of traditional houses such as the House of Sheikh Sa'eed bin Maktoum Al Maktoum, and the House of Abdullah Amiri (Majlis Galleria).

The third axis deals with sustainability applications for traditional houses in Dubai, and includes: sustainability, the relationship between preserving architectural heritage and sustainability, sustainability standards for the urban heritage environment, documentation and sustainability of the urban heritage environment, investment activities and multiple uses of urban heritage sites.

Keywords: heritage, sustainability applications, heritage houses in Dubai, urban heritage, Al Fahidi/Bastakiya area, Shindagha area

First: The importance of urban heritage

The areas with cultural heritage such as the city of Dubai, which preserves its archaeological and cultural heritage represented by traditional houses, are among the most important areas within the scope of modern historical cities, as they often represent the authentic historical part and represent a black and white relationship between them and the modern areas due to their difference.

The methods and foundations followed in the work of preserving the historical areas of the city of Dubai follow in most cases a methodology that is consistent with the place, function and value of the monument. The techniques used in preserving the heritage are represented by several aspects, including the modern, the innovative and those compatible with historical values and architectural vocabulary, according to the needs of the historical buildings and the requirements for their preservation.

Since there were several attempts and experiments that followed methods with a specific technology through the technical progress of experts in restoration and preservation of historical areas with an assessment of problems and how to deal with them, and that there are new techniques created by environmental conditions and helped to create new characteristics that can be dealt with in order to preserve the architectural and urban heritage. In some cases, some techniques appeared that interacted with the archaeological group through the components of the materials and their vocabulary, and experts in this field followed the idea of diligence with solutions and alternatives, in accordance with these terms and the foundations and methods of dealing with cases of preserving architectural and urban heritage¹.

The study of the economic evaluation of conservation projects provides an opportunity to think more objectively and helps formulate the right questions. It also provides the decision maker with an overview of the costs and impacts associated with any project, and identifies possible alternatives and research recommendations to do so by working on completing the fine details that require high-level craftsmanship².

The importance of architectural heritage is highlighted in several aspects, the most

¹ Serag El-Din, Ismail (2002). Revival of Historic Cities. Bibliotheca Alexandrina, Alexandria.

² Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations for the economic feasibility of preserving the urban and architectural heritage of historical areas,
https://www.researchgate.net/profile/Hossam_Elborombaly/publication/

important of which are the civilizational, scientific and tourism aspects. The civilizational aspect is highlighted in the fact that traditional buildings are a translation of history. The scientific aspect of architectural heritage can be observed through what induction and measurement constitute as one of the scientific methods in the field of urban sciences. It is noted that there is a global trend towards localizing and preserving local heritage. The importance of architectural heritage lies in a set of values, the most important of which are the following:

1. Economic Dimension

Architectural heritage is one of the sustainable resources: it provides the opportunity to diversify and sustain investment resources. One of the distinctive characteristics of existing architectural heritage buildings is that they represent resources that can be invested in; while at the same time preserving architectural heritage and re-employing it in a way that achieves other investment opportunities, from which financial and economic returns are achieved in a balanced and sustainable manner. Architectural heritage is a vessel for most cultural tourism activities, and constitutes an attraction for global and local tourism alike.

Architectural heritage is a means of providing more job opportunities. It is certain that investing in architectural heritage sites leads to many economic, social and cultural benefits resulting from rehabilitation and employment projects for many landmarks. In addition, architectural heritage site development projects provide job opportunities and establish some commercial or cultural centers that achieve additional value as a result of their establishment than their establishment in any other place.

The economic dimension in conservation operations is of great importance as it ensures maximizing the benefits and returns from heritage resources represented in the built environment and accompanying economic activities, whether from an economic, social or environmental perspective. Awareness of economic principles ensures levels of efficiency for conservation programmes within heritage sites and encourages the implementation of such programmes.

The importance of the field of conservation economics lies in analyzing the actual values contained in cultural heritage sites and thus resolving the complexity that may arise from the processes of selection, evaluation and comparison, providing a sound reference that can be relied upon in relation to investment and financing for conservation programmes, and a deeper understanding of the preference and appreciation of the community for heritage

elements through which the processes of participation can be directed within a framework of realism and effectiveness.¹

Architectural heritage is also a means of reviving traditional professions and crafts; as architectural heritage sites are considered a vessel for practicing and displaying traditional handicraft products that are on the verge of extinction. Small workshops and factories are established in or next to the invested heritage site to manufacture mats, carpets, kilims, baskets, traditional folk costumes, and to manufacture what is old and traditional such as weapons, metal, pottery, and glass artifacts, jewelry, and decorative tools, in addition to leatherwork, woodwork, ivory, papyrus, and others².

2. Cultural and urban dimension

The cultural dimension left by previous civilizations has given it customs and traditions that have had an impact on shaping the character of the place and its inhabitants, as well as affecting its behaviors and way of dealing, as well as the character of the place. We see this clearly in the form and nature of the place in the old city of Dubai, where the character of the buildings is influenced by Islamic architecture with its rich vocabulary and the character of privacy that has been added to its facades from the internal solutions and the closure on the inside. The courtyards in the middle of the houses, we find this feature present in the design of the city and its enjoyment of the same values and its influence by the character and traditions inherited from the Islamic civilization³.

Architectural heritage is the reference model for every nation that wants to preserve its cultural identity among nations. It is also a witness to an architectural experience that highlights the meanings, values, and architectural identity associated with it. Peoples who are keen on their cultural identity control the extent of material change in their heritage, which affects the tangible and apparent characteristics of the urban environment. Architectural heritage also includes many foundations, principles, and lessons that reflect

¹ Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations, p. 3.

² Darwish, Mahmoud Ahmed (2016). The problem of preserving and sustaining urban heritage (Sheikh Saeed House in Dubai as a model), the Fourth International Conference on Preserving Urban Heritage: Sustainable Heritage, a Global Vision, Local Experiences, Dubai, pp. 2-4. Darwish, Mahmoud Ahmed. Problematic of preserving the architectural heritage and its sustainability (Sheikh Sa'eed house in Dubai for example), International Journal of Innovation and Scientific Research (IJISR), Vol. 27, No. 2, November 2016, pp.354-364.

³ Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations, p. 3.

an aspect of the national identity of the state to display its historical dimension and the authenticity of its people and civilization. In addition to architectural and artistic contents, architectural heritage is closely linked to Islamic heritage, and thus the characteristics and features of this heritage and the foundations of Islamic teachings agree, as simplicity is evident in the form and design of the constructed and manufactured materials without harming their functions and assigned uses.

3. Social Dimension

The development of architectural heritage contributes to increasing awareness in the local community; through programs and events held in heritage sites, interaction with visitors, and the acquisition of new knowledge and professions; investment in heritage sites also contributes to achieving regional balance and thus providing job opportunities for local communities¹.

4. Environmental Dimension

The Islamic civilization emerged in the Arab environment with a climate and traditions that took on a distinctive character in the environmental features of elements and patterns from other civilizations that coexisted over centuries. Since the environmental dimension in the design of the historic houses in the city of Dubai had the greatest impact on the archaeological surroundings and the old area from the nature of the climate that affected the designs of the buildings, whether in the facades or spaces (inner courtyards), this affected the urban fabric and gave it a distinctive feature from other cities, especially European ones that were built at the same time, but the difference in the environment and the changing social life added another character to the character of the place. Also, the building materials that were used at that time were environmentally friendly materials (stones and wood), free natural materials that breathe and coexist with the climate and are not repulsive to society.

Thus, we find that the environmental dimension played a major role in establishing the life of the community and the character of the place in a comprehensive manner, without any doubt, and that the proximity of these ancient buildings and narrow-width roads and the presence of small squares and turns created a distinctive archaeological environment and brought together the qualities and characteristics of the Arab community, which enjoys privacy and inherited customs and traditions based on tolerant values, unlike what exists in

¹ Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations, p. 4.

the West in terms of distance and cold climate, which affected the formation of the fabric of society¹.

Second: Preservation of Architectural Heritage

1. The concept of preservation

It is the action necessary to preserve anything of recognized value. Preservation is also known as the careful management of limited resources, in order to ensure efficiency and continued use.

The concept of preservation includes: protection; improvement; renewal; adaptive use, contextual design; and restoration.

The actions required preserving the future of historic buildings and areas include environmental conservation, development, tourism, environmental concerns, and urban planning within their social determinants. The goal is to find a framework to integrate these conflicting actions.

The conflict between urban planning development and the preservation of archaeological remains can be observed. The dichotomy between history and modernity was developing to the extent that planners were in favor of removing dilapidated city areas, while archaeologists were fighting for their preservation. Historic areas, from a planning perspective, were obstacles to modern land uses and economic growth. This conflict made it difficult to preserve the entire urban fabric because it was seen as anti-modernization.

The new concept of “human heritage” has made its preservation the responsibility of everyone, including urban planners, city managers and archaeologists².

The concept of urban conservation, rather than the restoration of individual monuments, has only recently gained recognition. In addition, the role of the wider urban fabric as a supportive fabric for important historic buildings has only recently become accepted.

The social dimension has been neglected worldwide in general and in the UAE in particular. While greater emphasis has been placed on physical improvements and tourism promotion within protected areas due to commercial priorities, the real needs of the local community living in historic urban centers have been neglected. Moreover, local users,

¹ Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations, p. 5.

² Haggag, M., & Rashed, A. (2003). Urban Conservation in Practice: Evidence from the United Arab Emirates. AEJ - Alexandria Engineering Journal, 42(2), p. 250.

owners, tenants and visitors are not fully involved in shaping protected areas¹.

This is why urban conservation is concerned with at least three interrelated objectives; physical (preserving buildings), spatial (the relationship between spaces and their use), and social (users, the local community and the population as a whole).

2. Methods of preserving architectural heritage

Includes rebuilding old buildings, restoring heritage pieces and buildings, and trying to bring the monument to a state close to its state at the time of its construction, and reviving the heritage area as a whole to what it was before by adding activities and facilities that existed before, and upgrading the area urbanally, socially and economically, by adding activities that are compatible with the requirements of the era, and reusing the building for the same purpose for which it was built or using it for a new use².

There are three variables that affect the success of changing the use of existing buildings to new uses: the building's compliance with the needs of the new use program, the economic feasibility of making the necessary changes in exchange for reconstruction, and the commitment to reuse, as the restoration of damaged parts, no matter how extensive and comprehensive, is not sufficient. It is necessary to take measures to ensure the future protection of heritage areas.

3. Measures to be taken

Preventing the demolition or change of historic buildings and heritage areas except through clear plans that take into account the values and importance of those areas and the best methods for dealing with them, removing encroachments and construction violations that distort heritage areas and buildings, choosing the scope of preservation areas and the method of dealing with them and their components, managing preservation projects in a manner that ensures their continuity and maintenance after the completion of preservation work, establishing laws and legislation regulating dealing with archaeological areas, appropriate reuse as the best means of preserving urban heritage, anticipating all causes of deterioration and taking appropriate measures to stop them in a timely manner, and

¹ Hadjri, Karim & Boussaa, Djamel, Architectural and Urban Conservation in the United Arab Emirates, p. 17

² Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, p. 5. Mahgoub, Yasser Othman Moharam (1995). The Impact of Modern Urban Development on Architectural Heritage in the Emirates - Case Studies in Dubai and Al Ain, Symposium on Preserving Architectural Heritage in the Emirates (June 3-5, 1995), p. 179.

determining treatment methods that allow the preservation of urban heritage in an ideal and sustainable manner.

The preservation of architectural heritage has become a prominent issue in most Gulf countries, but in the face of rapid urban growth in the 1970s and 1980s, little attention has been paid to the preservation of architectural heritage in most cities in the United Arab Emirates: in Dubai, of the 3,000 historic buildings, only 371 have survived¹.

In 1958, Sheikh Sa'eed bin Maktoum died, and his son Rashid, who had largely been responsible for the government of Dubai, became the ruler. Shortly after assuming power, Sheikh Rashid established a municipal council (Pl. 197), which later became the basis of the municipal administration².

The need for good infrastructure in Dubai and planning for further development of the city led to the engagement of British architect and town planner John Harris, who was involved in planning Dubai for 10 years, starting with his first master plan in 1960, which was updated in 1965, and a new proposal was proposed again in 1970. John Harris stressed the need for a degree of preservation of the old city, where preserving the best old buildings was part of a living process in which good new buildings were encouraged. For this reason, he proposed a survey of old buildings worthy of preservation and/or restoration to ensure that future development was based on a policy of restoration³.

The review also pointed out the importance of effective control over planning and building regulations, especially in the historic areas of Dubai. The study concluded that Al-Bastakiya area, as the last remaining historic area in the Arabian Gulf, should be preserved for present and future generations⁴.

In 1984, the Historic Buildings Department was established in Dubai Municipality and played an active role. It consists of the Studies and Research Department, which deals with design and restoration projects, and the Restoration Department, which is responsible for implementing restoration works⁵. A coordination framework was established between

¹ Haggag & Rashed, *Urban Conservation in Practice: Evidence from the United Arab Emirates*, p. 257.

² Assi, Eman (2020). *Role of Municipalities in the Urban Planning of Post-Oil Gulf Cities: The Case of Dubai, United Arab Emirates*, p. 5.

³ Assi, *Role of Municipalities in the Urban Planning of Post-Oil Gulf Cities*, p. 7.

⁴ Hadjri, Karim & Boussaa, Djamel, *Architectural and Urban Conservation in the United Arab Emirates*, p. 18.

⁵ Haggag & Rashed, *Urban Conservation in Practice: Evidence from the United Arab Emirates*, p. 258.

departments to manage and preserve the urban heritage in Dubai.

To assist the Historic Buildings Department, the Architectural Heritage Preservation Committee was established in November 1994. This committee includes architects from the Historic Buildings Department, the Planning and Surveying Department, and the Government Buildings and Housing Department¹. In the 1990s, Dubai Municipality established the Historic Buildings Restoration Unit in the municipality². The most important works of the unit are summarized as follows³:

- Surveying and studying all historical buildings in the Emirate of Dubai.
- Documenting all historical buildings with pictures and drawings.
- Creating an integrated archive on traditional architecture and building materials
- Conducting historical research in the field of ancient architecture and the development of the city.
- Creating an architectural heritage library that is a reference for research, studies and researchers.
- Providing suggestions and recommendations regarding the restoration of old buildings, markets, castles and mosques.
- Forming an integrated team of engineers, technicians, professionals and administrators to manage restoration projects and carry out restoration and maintenance work on historical buildings.
- Studying traditional materials, preparing them, recording them and conducting experiments on them to demonstrate their suitability for the prevailing climatic conditions.
- Conducting experiments to use construction methods and old materials and develop them in a manner that suits the requirements of modern life.
- Holding seminars, giving lectures and printing publications on traditional architecture,

¹ Haggag & Rashed, *Urban Conservation in Practice: Evidence from The United Arab Emirates*, p. 258; Hadjri & Boussaa, *Architectural and Urban Conservation in The United Arab Emirates*, p. 18.

² Bukhash, Rashad Mohammed (1994). *Preserving the distinctive Gulf urban heritage in the Emirate of Dubai*, p. 98. Bukhash, Rashad Mohammed (1995). *The role of the Urban Heritage Preservation Committee in Dubai Municipality*, Symposium on Preserving Urban Heritage in the Emirates (June 3-5, 1995), p. 207.

³ Darwish, Mahmoud Ahmed. *The problem of preserving and sustaining urban heritage*, pp. 2-3. Haggag & Rashed, *Urban Conservation in Practice: Evidence from the United Arab Emirates*, p. 257; Assi, *Layers of Meaning and Evolution of Cultural Identity*, p. 42.

heritage and the history of the region.

- Since its establishment, the unit has carried out several projects with the aim of preserving these buildings to be a symbol for future generations and benefiting from them in adopting traditional ideas, designs and decorations, namely¹:

- Including the adoption of traditional ideas, designs and decorations, which are:

- A. Restoration of Al Fahidi Fort.
- B. Restoration of the old Ahmadiya School.
- C. Restoration of the archaeological village of Hatta.
- D. Restoration of a group of old towers.

The municipality is also carrying out several important projects in this field, which are²:

- A. Developing and maintaining the old markets in a traditional manner to serve the global commercial position that Dubai occupies.
- B. Restoring and maintaining the buildings overlooking the creek in order to highlight the beautiful traditional facade of the city.
- C. Restoring a group of important buildings in different places in the city of Dubai.
- D. Establishing a group of specialized museums to preserve the heritage and history of Dubai, the most important of which are:

- Dubai Museum (Pl. 198): It includes the halls of the history of Dubai, the old city of Dubai, the desert, the sea and antiquities.
- The Museum of Historical Photos and Documents is located in the house of Sheikh Sa'eed bin Maktoum Al Maktoum³.
- Heritage House: It represents a traditional house with all its furniture and sections.
- Al Ahmadiya School: It represents the old schools in Dubai and the method of education and its development.

4. Levels of preservation of architectural heritage

¹ Bukhash, Rashad Mohammed (1994). Preserving the distinctive Gulf urban heritage in the Emirate of Dubai, p. 491. Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, pp. 2-3. Haggag & Rashed, Urban Conservation in Practice: Evidence from the United Arab Emirates, p. 258.

² Bukhash, Rashad Mohammed (1994). Preserving the distinctive Gulf urban heritage in the Emirate of Dubai, pp. 498-499-502.

³ Darwish, Mahmoud Ahmed. Problematic of preserving the architectural heritage and its sustainability (Sheikh Sa'eed house in Dubai for example), International Journal of Innovation and Scientific Research (IJISR), Vol. 27, No. 2, November 2016, pp.354-364

The levels of preservation of architectural heritage vary according to the size, type and importance of architectural heritage, and include preservation of heritage elements, which is usually done through museums to preserve artifacts and archaeological elements after restoring and treating them in a scientific manner that ensures their survival and safety, and on a single building such as restoration and renovation operations of heritage buildings and converting them into museums or tourist attractions, and on a group of buildings in the event of the presence of an adjacent heritage group, and on a heritage corridor in the event of the presence of a group of heritage buildings that represent a connection between one area and another, and on an entire heritage area¹.

A. Preserving Al Fahidi/Bastakiya area

Over the past 30 years, most of Dubai's historic buildings have been demolished. The few remaining old buildings are isolated pockets in a new modern city. Old Dubai lies at the tip of a small saltwater strait running inland from the Creek, which divides the historic Dubai area into the western side of Bur Dubai and the eastern side of Deira. Bur Dubai contains the oldest parts including the Sheikh Sa'eed bin Maktoum Al Maktoum House, Al-Bastakiya area and the old souk². Bastakiya originally consisted of sixty houses built by wealthy Persian immigrants from the city of Bastak. Most of the original inhabitants migrated to the new part of Dubai called Satwa after the discovery of oil in 1969³.

With its twenty-five wind towers⁴, Bastakiya represents the largest concentration of this

¹ Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, p. 177. Mahgoub, Yasser Othman Moharam. The Impact of Modern Urban Development on Architectural Heritage in the Emirates, p. 17. Abdelmonem, Mohamed Gamal & Loehlein, Gisela (2007). Sustainability in Traditional Houses in the UAE Potentials and Improvement of Buildings Abilities, the Second International Conference of Dubai Conservation, p. 4.

² Mahgoub, Yasser Othman Moharam. The Impact of Modern Urban Development on Architectural Heritage in the Emirates, p. 169. Haggag & Rashed, Urban Conservation in Practice: Evidence from the United Arab Emirates, p. 258.

³ Awad, J.; Arar, M.; Jung, C.; Boudiaf, B. (2022). The Comparative Analysis for the New Approach to Three Tourism-Oriented Heritage Districts in The United Arab Emirates. *Heritage*, 5, 2464-2487, p. 2470; Boussaa, Djamel (2014). Urban Heritage and Tourism in the Gulf: The Case of Dubai In The UAE, *Journal of Tourism And Hospitality Management*, Vol. 2, No. 4, p. 179.

⁴ Olroyd-Robinson, Keith. The Urban Architecture of Al Bastakiyyah, Published In "The Architecture of The United Arab Emirates" By Salma Samar Damluji, p. 197; Boussaa, Urban Heritage and Tourism in The Gulf, p. 179.

type of architecture anywhere on this side of the Gulf.

The area contains traditional one- or two-storey houses of historical value, rich in traditional architectural elements such as wind towers, wind turbines, columns and beautiful wood and plaster decorations¹.

Unfortunately, more than 50% of Bastakiya was demolished in the 1970s for the development of a new office complex. Meanwhile, the old houses were used as warehouses and labour camps for foreign workers².

The Dubai Municipality intended to dismantle the remaining parts of Bastakiya in 1989. The British architect Rainer Otter began the campaign to preserve it and wrote a letter to Prince Charles (now King Charles) in the United Kingdom to visit the United Arab Emirates. After his arrival, he visited Al-Bastakiya heritage area with Rainer Otter. He suggested preserving the area, and the Dubai Municipality cancelled the demolition plan³.

One of the top priorities of the Historic Buildings Section of Dubai Municipality was to preserve Al-Bastakiya area. No new construction was allowed within the area to prevent any disturbance to the original character of the area. A consultant was appointed to carry out Al-Bastakiya Conservation Project in 1994. The consultants surveyed the buildings, studied the architectural planning and proposed restoration and revitalization works for the area through the adoption of several legislative and design options, with the aim of adaptive reuse to make Bastakiya a unique historical area in the heart of Dubai⁴.

Dubai Municipality has shown great interest in preserving Al-Bastakiya area and has prohibited any new construction in it so as not to disturb the original character of the area. After approving the general survey and drawings, the first phase included the development of other services and facilities. The project also aimed to establish a framework for comprehensive tourism and housing development. The second phase began in 1996 when

¹ Alnuaimi, Maitha Mohammed (2007), *Daylighting Techniques Used in Indigenous Buildings in The United Arab Emirates (UAE), An Investigative Approach*, MA, Texas A&M University, p. 19; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 179.

² Awad, Et Al, *The Comparative Analysis*, p. 2470; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 179; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 179.

³ Dubai Municipality, *Preserving the urban heritage in Dubai.*, p. 56.

Awad, Et Al, *The Comparative Analysis*, p. 2470; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 179.

⁴ Dubai Municipality, *Preserving the urban heritage in Dubai.*, p. 56.

Haggag & Rashed, *Urban Conservation in Practice: Evidence from the United Arab Emirates*, p. 259.

the Historic Buildings Section undertook the restoration works¹. The third phase aimed to restore the remaining buildings in the area.

The restoration works carried out in Al-Bastakiya area included: restoration, reconstruction and adaptive reuse. The restoration of part/whole of the historical buildings restores them to the original appearance of part/whole of the building. The restoration works optimally used traditional construction techniques with building materials salvaged from the site.

The reconstruction of those demolished parts/whole buildings was carried out. The reconstruction gave the building a new appearance using new original materials and techniques.

A. Preserving the Shindagha area, it was the original location of the ruling Al Maktoum family, which developed around Sheikh Sa'eed's house, built in 1896²; around 1958, when the ruler's palace was moved from Shindagha to Zabeel, the area was abandoned and left to slowly decay and disappear.

The Shindagha district also attracted public and governmental attention to transform the site into an exhibition of Emirati heritage. In this case, after the demolition of the original buildings, the Dubai Municipality launched an ambitious plan to scientifically reconstruct them. In 1991, the Dubai authorities decided to launch a massive development project for the area. The house of Sheikh Sa'eed bin Maktoum Al Maktoum was restored and was well promoted through the media, conferences and newspapers, which encouraged the local authorities to review their previous decision and chose to develop the area and make it a tourist destination³. The Shindagha Historical District Revitalization Project dates back to March 1996. The project aims to restore the history of Dubai by creating a tourist heritage village along the creek (Pl. 1).

B. The village consists of two main areas: the Marine Heritage Area, the centre of which is the Diving Village, and the Heritage Village, where the restored Ruler's Residence, "Sheikh Sa'eed Al Maktoum House", is located.

In addition to the two heritage villages, a long pedestrian walkway has been proposed

¹ Dubai Municipality, Preserving the urban heritage in Dubai., p. 56. Haggag & Rashed, Urban Conservation in Practice: Evidence from the United Arab Emirates, p. 259; Lnuaimi, Daylighting Techniques, p. 20.

² Boussaa, Urban Heritage and Tourism in the Gulf, p. 177.

³ Boussaa, Urban Heritage and Tourism in the Gulf, p. 177; Boussaa, Urban Heritage and Tourism in The Gulf, p. 177.

along the creek, starting from Shindagha Fort and ending at the entrance to the creek. Several gathering places and activity areas have been created between the two ends of the walkway¹.

The meeting points near the Diving Village, Sheikh Sa'eed House and the Heritage Village are used for folklore activities. With appropriate lighting to enhance the traditional image of the area, the entire surrounding area has become an important attraction for tourists and local visitors.

The construction work took a full year, and the two heritage villages were opened to the public in March 1997, coinciding with the opening ceremony of the Dubai Shopping Festival. Since then, they have become the main centre for heritage and folklore activities, which are presented during the annual Dubai Shopping Festival².

C. Restoration of traditional houses

- Sheikh Sa'eed bin Maktoum Al Maktoum House

In 1981, Dubai Municipality decided to restore Sheikh Sa'eed's house, and assigned a consultant to prepare the studies and executive plans. In 1983, a contracting company was assigned to implement the project. The project took into account the preservation of the original architectural and formative elements and the highlighting of the original composition of the building and its structural components³.

The renovation project of Sheikh Sa'eed Al Maktoum House in the Emirate of Dubai is considered one of the most important projects to preserve the architectural heritage in the Arabian Gulf region and an example to be followed in the technical approach to revive any building with a distinctive architectural character, provided that the working condition of the building is not subject to restoration. The environment in which the house is located was taken into consideration when preparing the renovation project, as it is built on land very close to the seashore at a depth of only one and a half meters, and the seashore is only 25 meters away from the house. Therefore, all technical precautions that must be followed in such a case were taken in terms of the building foundations and building materials to avoid the problem of salty groundwater, and the general atmosphere of Dubai's

¹ Boussaa, *Urban Heritage and Tourism in the Gulf*, p. 178.

² Boussaa, *Urban Heritage and Tourism in the Gulf*, p. 178; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 178.

³ Dubai Municipality, *Preserving the urban heritage in Dubai*, p. 11.

environment, which is characterized by high humidity and heat in the summer like other countries of the Arabian Gulf¹.

In the renovation of the building, a reinforced concrete structure was used, for the general shape of the house, which is based on concrete foundations, and these foundations were taken into account to prevent them from being affected by salty groundwater, and then the structure was covered with old stones that were originally present in the old building, taking into account that all electricity, water and sewage extensions and connections are hidden².

The method followed in rebuilding Sheikh Sa'eed Al Maktoum's house will ensure that the house will not undergo any basic maintenance work until approximately 30 years have passed at the very least, because the method followed in rebuilding Sheikh Sa'eed's house is a completely scientific and well-studied method³.

- The house of Abdullah Amiri (Majlis Galleria)

This house, now Majlis Galleria, is the oldest art gallery in Dubai, and both the house itself and its walled garden, planted with bougainvillea and henna, have undergone several restorations.

The original house was built in 1945 by Abdullah Hassan Al Awadhi, and for a number of years served as a khan for guests from Oman, Bahrain, Lingah and Qatar, including the Sheikh of Dibba and his entourage⁴.

The Amiri family moved in in 1973, and the house became a rental property, after an eviction order was issued by the Dubai Municipality in 1988. A restoration was carried out by architect Darwish Zandi in the spring of 1989. The gallery was open from 1989 to 1998,

¹ Al-Khalifi, Mohammed Jassim (2003). *Traditional architecture in Qatar*, Doha: Department of Museums and Antiquities, p. 202.

² Al-Khalifi, Mohammed Jassim (2003). *Traditional architecture in Qatar*, Doha: Department of Museums and Antiquities, p. 202. Darwish, Mahmoud Ahmed. *The problem of preserving and sustaining urban heritage*, p. 15. Dubai Municipality, *Preserving the urban heritage in Dubai.*, p. 11.

³ Al-Khalifi, Mohammed Jassim (2003). *Traditional architecture in Qatar*, Doha: Department of Museums and Antiquities, p. 202. Darwish, Mahmoud Ahmed. *The problem of preserving and sustaining urban heritage*, p. 15.

⁴ However, in 1957 Abdullah Hassan Al Awadhi sold it to Mir Abdullah Amiri who later partnered with Alison Collins to convert it into a gallery. Biln, John & El-Amrousi, Mohamed (2014). *Dubai's Heritage House Museums: A Semiosis of Melancholy*, Tdsr, Volume XXV, Number II, p. 32.

before being renovated again in 1999 and reopened the same year.

Third: Sustainability applications for traditional houses in Dubai

1. Sustainability

Sustainability and sustainable development mean meeting the needs of current generations without compromising the needs of future generations, i.e. providing a better quality of life for everyone now and for future generations¹.

Sustainability is an environmental term that describes how biological systems remain diverse and productive over time. For humans, sustainability is the ability to maintain the quality of life we live in the long term, which in turn depends on the conservation of the natural world and the responsible use of natural resources. The term sustainability has become broad and can be applied to almost every aspect of life on Earth, from the local to the global level and over different time periods.

The term sustainability was first used in the 1980s to mean human sustainability on the planet, and this paved the way for the most common definition of sustainability and sustainable development, defined by the United Nations Commission on Environment and Development on 20 March 1987: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

At the 2005 World Summit, it was noted that achieving this requires reconciling social, environmental and economic demands, the three pillars of sustainability. This view can be expressed using three overlapping areas, indicating that the three pillars of sustainability are not mutually exclusive, but rather mutually reinforcing².

The heritage represented by traditional houses in Dubai has a great value that is manifested in the cultural and historical heritage, which constitutes the memory of homelands and the identity of societies. These precious treasures were the product of continuous human minds and efforts, and human communication that resulted in an intellectual and creative legacy

¹ Abdelmonem & Loehlein, Sustainability in Traditional Houses, p. 4; Haggag, M., & Rashed, A. (2003). Urban Conservation in Practice: Evidence from The United Arab Emirates. AEJ - Alexandria Engineering Journal, 42(2), p. 254. Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, p. 6.

² Wikipedia contributors. (2024, January 8). Sustainability. In Wikipedia, the Free Encyclopedia. Retrieved 08:07, January 13, 2024, from <https://en.wikipedia.org/w/index.php?title=Sustainability&oldid=1194249161>

passed down through generations, and formed a bridge for rapprochement and communication between different peoples and cultures, and a rich cultural heritage from which countries set out to build their modern renaissance.

The importance of heritage lies in its shared human value, and in being an irreplaceable legacy in the event of its extinction, which the UAE realized early on, so it made every effort to preserve and protect the landmarks of world heritage and protect them from extinction, and established an institutional work system with clear plans and goals, which worked to achieve many achievements in this field, believing that human heritage is a common heritage for all humanity, and preserving it is a shared responsibility among all countries of the world.

The sustainable development process is based on three pillars: economic growth, social progress, and protection of the environment and natural resources¹.

1. Linking the preservation of architectural heritage to sustainability

The preservation of architectural heritage must be linked to sustainability to solve the problem of architectural heritage represented by traditional architecture, and the preservation of archaeological and heritage buildings, by adopting restoration as a mechanism for maintaining and preserving these buildings, and shifting to the concept of sustainable preservation that addresses the principles of sustainability and the levels, policies and mechanisms for preserving architectural heritage.

Sustainability is a broad term that has been used since the 1980s to mean human sustainability, and this paved the way for the most common definition of sustainability and sustainable development, as the United Nations Commission for Environment and Development defined: Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability is based on three pillars, the achievement of which requires reconciliation between social, environmental and economic demands, and sustainable development indicators contribute to assessing the extent of progress in areas of achieving sustainable development in an effective manner, which results in taking many decisions on economic and social policies.

Sustainable development indicators are usually divided into economic, social and

¹ Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, p. 6.

Abdelmonem & Loehlein, Sustainability in Traditional Houses, p. 5.



environmental indicators that reflect the extent of success in achieving sustainable development.

The sustainability of urban heritage is represented in its adaptive reuse, which is a set of operations that employ a new type of use for an old building or site other than the one for which it was designed, in order to extend its functional life by adapting and adapting its performance to contemporary functional needs. The process of reducing the impact of destructive or harmful factors after their identification, the optimal and appropriate reuse of the type of heritage building, the rehabilitation of the urban fabric and its heritage buildings, and the functional revival of the heritage building are essential operations for the purpose of investing in the irreplaceable urban heritage and protecting it from extinction.

Since the beginning of restoration and preservation projects, Dubai Municipality has paid great attention to developing awareness activities to raise the awareness of Dubai residents about the city's cultural heritage, within the framework of a comprehensive campaign to enhance the sense of belonging to the city among younger generations.

Dubai's approach to heritage preservation is closely linked to the desire to foster a "national identity" for Emirati citizens, an issue of particular importance in Dubai where Emiratis make up only about 10% of the population and where young citizens have never known the world their parents and grandparents lived in. Dubai's heritage has also been used as an opportunity for integration for non-Emirati residents of the city, showcasing Dubai's traditions and culture to foreign residents.

The reconstruction of heritage buildings and neighbourhoods in Dubai thus takes on meanings that challenge many preconceptions about this controversial practice. The reconstruction of heritage in the Arabian Gulf region is the result of a reaction to the rapid and comprehensive changes in the urban and social environment caused by the oil "boom", and can be seen as an expression of the strong aspiration of the population to reconnect with their roots and identity¹.

Neighbourhood reconstruction aims to preserve a deeply felt collective memory in the midst of unprecedented demographic movement, landscape transformation, and technological change. Reconstructed heritage structures based on careful research, documentation, and traditional building techniques can become sites where contemporary

¹ Ricca, Simone, *Urban Heritage in the Arabian Peninsula*, p. 114; Boussaa, *Urban Heritage and Tourism in The Gulf*, p. 177.



communities can be encouraged to preserve and pass on specific forms of tangible and intangible heritage to younger generations.

The preservation and re-creation of a major historic urban center gives Dubai a unique position in the Gulf context. While Doha and Abu Dhabi have invested in modern museums and cultural institutions designed by world-renowned architects, Dubai has been able to leverage a specific architectural heritage to attract discerning visitors.

However, in a city undergoing constant transformation such as Dubai, heritage policies and strategies can also evolve rapidly. Preserving Dubai's rich and pluralistic heritage is not a one-time "given" for all, but is constantly threatened by the dynamics of the metropolis, where new ideas and new plans are constantly being put forward in an endless city. The inclusion of Khor Dubai on the World Heritage List in the coming years could be effective in preserving the quality of the site and in maintaining and enhancing its traditional economic dynamics and heritage significance¹.

Tourism is of great economic importance to many countries and includes cultural, nature, commercial and educational tourism, and urban heritage is its main resource². In the past, tourism was viewed as a "renewable natural resource industry" because of its supposed "non-consumptive" properties. This meant that tourists were thought to visit places to enjoy their unique character but not to consume or disturb them. Therefore, some modifications and changes to the attractions were expected. Today, it is difficult to justify this "non-consumptive" character, as the tourism industry has grown enormously and studies show that the proposed benefits are illusory. Social and cultural patterns have been disrupted, the consumption of resources by tourists has deprived local people, the nature and quality of local identity has been affected, and the profits flowing from the tourism industry have been directed to foreign companies.

Tourism is of great economic importance to many countries and includes cultural, nature, commercial and educational tourism, and urban heritage is its main resource. In the past, tourism was viewed as a "renewable natural resource industry" because of its supposed "non-consumptive" characteristics. This meant that tourists were believed to visit places to enjoy their unique character but not to consume or disturb them. Therefore, some modifications and changes to the attractions were expected. Today, it is difficult to justify

¹ Ricca, Simone, *Urban Heritage in The Arabian Peninsula*, p. 115.

² Haggag & Rashed, *Urban Conservation in Practice: Evidence from the United Arab Emirates*, p. 251.



this “non-consumptive” character, as the tourism industry has grown tremendously and studies show that the proposed benefits are illusory. Social and cultural patterns have been disrupted, the consumption of resources by tourists has deprived local people, the nature and quality of local identity has been affected, and the profits flowing from the tourism industry have been directed to foreign companies.

The tourism industry needs to adopt more careful management strategies, so that sustainable local development can be achieved. Environmental conservation and tourism are inextricably linked, and it is important that the problems arising from their relationship are closely examined through active cooperation between conservationists and tourism industry participants. Local authorities play a key role in this cooperation within local management plans¹.

Historical sites and monuments, apart from their intrinsic value and beauty, are major economic resources and irreplaceable capital assets, contributing significantly through tourism to foreign exchange earnings, local employment and prosperity, and government taxes. Entrance fees rarely cover the cost of maintenance, repairs, and operation, but when the wider benefits, such as customers’ use of hotels, restaurants, cafes, and shops, are taken into account, the viability of conservation projects takes on a new perspective, Greater employment opportunities with higher spending.

This gives a better chance of survival, and local people can enjoy a wider range of facilities than would otherwise be possible. Money spent on conservation constitutes a sensible national investment that produces a measurable return in terms of employment, increased trade, foreign exchange, and taxes. Therefore, efforts should be made to convince all economic stakeholders benefiting from tourism that investment in conservation can often yield a greater return than any other investment activity. For every unit spent on historical sites - the main purpose of the visit - a similar amount is spent on other items².

Since January 1997, when the Department of Tourism and Commerce Marketing³ took over the promotion of tourism and trade, there has been a renewed focus on promoting

¹ Abdel Kadir, Huda Abdel Rahim. The economic role of sustainable tourism in the United Arab Emirates, (A Study in Economic Geography), International Journal of Research in Social Sciences (IJRSS), Volume 6, Issue 12, December 2016, pp. 450-483.

² Haggag & Rashed, Urban Conservation in Practice: Evidence from the United Arab Emirates, pp. 251-252.

³ Boussaa, Urban Heritage and Tourism in The Gulf, p. 175.

Dubai as an ideal tourist destination.

2. Standards for the sustainability of the urban heritage environment

The process of adopting a new and specific type of use for a historical building includes a set of standards and principles that contribute efficiently to determining the best type of use for this building, which requires not negatively affecting the architectural and heritage value.

These standards include: factors related to the nature of the building, its architectural features, its construction characteristics, its location, its neighborhoods, the microclimate, the characteristics of the environment in which it is located, the nature of its functional performance, the infrastructure available on the site, construction techniques, the extent to which elements can be damaged, the type of finishing materials and facade details, the level of change to the original building, the available periodic surveys, the limited number of users for construction purposes, the age of the building and its durability, and other factors related to these aspects.

Cultural factors relate to the identity of the building, its heritage and historical value, the characteristic of the spirit of the place in its urban fabric, the historical incidents related to it, and the multiplicity of meanings associated with it in relation to the different sects and ethnicities within society. Social factors are represented in the nature and demographics of the society, and the availability of the necessary craftsmen and technicians for structural changes and new use.

Financial and economic factors are related to urban legislation and building codes, funding sources for implementation to sustain the activation of the new use or the cost of future building maintenance, the building's ability to create financial and economic opportunities for the community, the possibility of self-financing the building through the new use, the expected financial results in the distant future, and the balance between the cost and the cultural value of the building.

Making the wrong choice of the type of new use for the heritage building in isolation from these criteria may often harm its architectural value and accelerate its extinction. Historical buildings can be invested in by reviving them and extending their life by performing a new function, as the process of employing adaptive use provides a valuable opportunity to adopt such functions with a lower financial budget and in a shorter time, especially when such resources are lacking.



In the event that additional spaces are needed for the purpose of adapting and employing the new use of a specific heritage building, the required results can be achieved by adding an adjacent building (or more)¹, especially when these buildings do not have a high architectural value. Therefore, the process of reconstructing and rehabilitating the building is considered one of the best methods in the field of rehabilitating and using historical buildings globally.

3. Documentation and sustainability of the urban heritage environment

The urban heritage includes foundations and principles that must be considered, understood and measured, to help develop our contemporary urban environments at the level of cities and urban planning, and at the level of urban vocabulary. The sustainability of heritage environments with their architectural and urban contents is a goal that countries strive to achieve, as it confirms their identity.

Studies targeting the preservation of heritage environments vary. There is no doubt that studies documenting and recording all elements of architectural, urban and archaeological heritage contribute to determining the degree of heritage in terms of time and space, and identifying heritage problems and preservation requirements, the levels of which vary according to the age of heritage buildings, their condition, circumstances and the surrounding environment. Based on this, the appropriate type of preservation is chosen between re-employment and use or just restoration and protection. It is necessary to have all the information and details of the building, in terms of horizontal projections, sectors, structural condition and other data. Here, raising, documenting and recording these buildings are a necessary and important step before starting any operations, whether for restoration or preservation.

Architectural documentation and registration are the first steps towards sustaining heritage environments, as they lead to: increasing awareness of the importance of urban heritage as a cultural and economic resource, identifying ways to protect heritage and reuse it within a contemporary framework, deducing planning and design foundations and standards for developing heritage environments, identifying environmental and cultural factors affecting the fabric and character of local architecture, highlighting the economic value of urban heritage and its importance in economic development, and exchanging experiences and

¹ Abdelmonem & Loehlein, Sustainability in Traditional Houses, p. 4. Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, pp. 1-7.

expertise in the field of documenting, recording, classifying, preserving, and rehabilitating urban heritage sites.

It is recognized that investing in urban heritage sites is not only a goal in itself, but also extends to the purpose of preparing them so that they are suitable for holding many investment activities and events, the demand for their products and the desire to see them increases, especially when they are practiced in urban heritage sites that add, with their authenticity and beautiful decorations, additional value to the basic value of those heritage or non-heritage products of activities and events.

4. Investment activities and multiple uses of urban heritage sites

They are considered, in their entirety, investment opportunities to achieve cultural, economic and social benefits. We can point to investment activities within urban heritage buildings to preserve them from extinction, which include: employment as a residential place, or as national museums, to preserve and maintain folk heritage of all kinds, or as drawing and plastic arts workshops, or as markets to display popular and non-heritage products whose value is linked to the value of urban heritage sites, and employment as places to practice crafts where craftsmen working in the manufacture of traditional and heritage products of all kinds add a heritage fragrance to the value of their products; which constitutes an integration between the craftsman and the place where the craft products are manufactured, among the investment activities that can be established: using the squares as sites for practicing folk arts.

As for investment activities in the squares surrounding urban heritage sites, the optimal investment in urban heritage sites is to take advantage of all the environmental spaces of urban heritage buildings, by establishing some investment activities in open squares, provided that these investments do not lead to visual distortion or cause disturbance or other aspects. Among the investment activities that can be established: using squares as sites for practicing folk arts. Since 2012, Dubai Municipality has been working hard to include the historic center and the creek on the UNESCO World Heritage List. This ambitious challenge, which the city authorities identified as a priority project, allowed for the review and updating of the city's preservation strategy, and the development of a more modern and dynamic vision for sustainable "heritage" that includes not only historical buildings, but also the economic dynamics related to traditional trade, the urban waterway

(Dubai Creek) and urban formation¹.

The sustainability of urban heritage is represented in its adaptive reuse, which is a set of operations that employ a new type of use for an old building or site other than the one for which it was designed; in order to extend its functional life by adapting and adapting its performance to contemporary functional needs. The process of reducing the impact of destructive or harmful factors after their identification, the optimal and appropriate reuse of the type of heritage building, the rehabilitation of the urban fabric and its heritage buildings, and the functional revival of the heritage building are essential operations for the purpose of investing in the irreplaceable urban heritage and protecting it from extinction².

Al-Bastakiya area consists mainly of 50 houses, some of which have been converted into museums, restaurants, cafes and art galleries, such as: Abdul Razzaq Abdul Rahim Al Bastaki House (Bastakiya Nights Restaurant) (Pls. 2-3), Mohammed Saleh Fikri House (Currency Museum) (Pl. 4), Abdul Rahman Farouk House (Dar Al Nadwa) (Pl. 5), Mir Abdul Wahid Ali Mir Amiri House (Stamp House), Mohammed Sharif Sultan Al Ulama House (Architectural Heritage and Antiquities Department), Abdullah Mohammed Al Bastaki House (House of Events), Abdul Qadir Abdul Rahman Rashidi House (Architectural Heritage Society Headquarters) (Pl. 6), Abdullah Amiri House (Galleria Council) (Pls. 7:10), Arabian Tea House (Pls. 11:13), XVA Gallery (Pls. 12:17), and Coffee Museum (Pls. 18-19)³.

The Dubai Shopping Festival is one of the largest family festivals in the world. Every year since its launch in 1996, the event attracts millions of people from around the world, a large part of who take the opportunity to visit heritage sites. During these festivals, a number of key locations are allocated, ranging from the Global Village to other sports and entertainment venues.

This annual event has breathed new life into old Dubai. Today, it attracts many tourists and local visitors to the Sheikh Sa'eed Al Maktoum House and the surrounding heritage and diving villages. This latter was perhaps a great incentive for the Dubai authorities to launch a new program to rebuild 30 other traditional houses in Shindagha to make the entire area a complete heritage district.

¹ Ricca, Simone, *Urban Heritage in the Arabian Peninsula, the Experiences of Jeddah and Dubai*, p. 113.

² Darwish, Mahmoud Ahmed. *The problem of preserving and sustaining urban heritage*, p. 6.

³ Awad, Et Al, *The Comparative Analysis*, p. 2470.

A number of traditional houses in Shindagha have been restored and reused, such as: Sheikh Sa'eed bin Maktoum Al Maktoum House, Sheikh Obaid and Juma bin Thani Al Maktoum House, Sheikh Juma bin Maktoum Al Maktoum House (Museum of Traditional Architecture / Saruq Al Hadid Museum) (Pls. 20-21), Sheikh Hasher bin Maktoum Al Maktoum House (Museum of the Crossing of Civilizations) (Pls. 22-23), Sheikha Moza bint Sa'eed Al Maktoum House (Horse Museum), Sheikh Sa'eed bin Maktoum Al Maktoum House (Secondary House), Camel Museum, Guest House - First Section (House of Poetry) Guest House (Second Section).

Sheikh Sa'eed Al Maktoum's house has been restored as a public museum, and alongside this house, 150 other traditional houses have been restored. Four of these have been converted into museums, and the Dubai Municipality is restoring more historic houses and 23 secondary museums.¹

Sheikh Sa'eed bin Maktoum House Museum is a classic example of a rebuilt heritage house that has been transformed into a local museum. The museum consists of several pavilions that cover the history of the founding of the emirate, including: the Al Maktoum pavilion, whose exhibits include the history of the development of political and social life and foreign relations, within a collection of historical photographs representing many forms of national and historical events; the restoration project pavilion, which includes photographs of the restoration stages and engineering plans for this project to highlight the emirate's cultural history; the marine life pavilion, whose exhibits represent a vivid expression of the aspects of living and professional life of the residents of the beaches extending for more than seventy kilometers on the Arabian Gulf coast; and the social life pavilion, which is a vivid expression of the aspects of social life in old Dubai, where photographs of various lifestyles are displayed, in addition to architectural landmarks, ancient means of defense, and images of folk arts.

On the other hand, there is the desert pavilion, in which Bedouinism is the origin of civilization, and the pavilion highlights aspects of Bedouin life in its various forms; and the coins pavilion, which includes two sections, one of which displays ancient coins and the other specializes in displaying the emirate's postage stamps.

There is also a collection of paper currencies, along with a collection of letters, agreements, decrees, maps and drafts showing the history of modern Dubai, and the

¹ Awad, Et Al, The Comparative Analysis, p. 2467.

documents wing, which displays forms of the development of civilization in the emirate, through displays of manuscripts that include letters, treaties, agreements and special decrees, maps of the emirate and the Arabian Peninsula, and pictures of the city of Dubai dating back to (1822), and an exhibition of rare photographs taken in Dubai during the period between (1948-1953)¹.

The museum offers a broad and multifaceted vision of life in Dubai, impressing visitors with the richness and diversity of its heritage. This is enhanced by the views of the city from the upper-floor balconies overlooking Dubai Creek. The museum 'prepares' visitors to see the city as a contemporary and vibrant version of its curated collections. At the same time that the Sheikh Sa'eed Museum fosters a general historical and cultural sensibility, the figure of Sheikh Sa'eed recedes from view. The focus on the general view inevitably draws attention away from the biographical details of the museum's owner and namesake.

This sense of lacklustre interest is reinforced by the explicit curatorial strategy of limiting the explanation to brass labels that briefly identify the essential facts about the objects on display and the names of the people depicted in the photographs. The obscuring of personal and biographical context embodied in the decision not to expand on the frame of the photographs or the situations depicted creates a reception that is incomplete, and essentially a melancholy feeling. Visitors to the museum initially have a strong sense of the availability of the objects and people who constitute the subjects of the exhibition, but this hint of presence is immediately undermined by a sense of dislocation or loss. The sense of presence and availability that visitors gain is thus only enough to indicate what remains absent and seemingly irretrievable.

This steady erosion of the sense of personal biography – an emphasis that might be expected in such a museum, which is advertised in the name of the museum itself – is reinforced by the architectural treatment undertaken to renovate the house and convert it into a museum.

The most obvious feature of this building is the variety of niches, solid walls and wind

¹ Al-Kuwaiti, Sheikha Ali (1995). Old Buildings and Their Use in Modern Architecture, Symposium on Preserving Architectural Heritage in the Emirates (June 3-5, 1995), p. 325. Darwish, Mahmoud Ahmed. The problem of preserving and sustaining urban heritage, p. 16. Dubai Municipality, Preserving the urban heritage in Dubai, p. 11. Biln, John & El-Amrousi, Mohamed (2014). Dubai's Heritage House Museums: A Semiosis of Melancholy, Tdsr, Volume XXV, Number II, p. 29.

towers that aesthetically break up the monotony of the solid facades. But these elements also once created specific qualities within a living house, such as views of the outside, the entry of daylight and the circulation of fresh air. These original uses have largely been replaced in the restoration by museum uses, where the display of objects is of paramount value (for example, the blind entrances were used to display items from museum collections)¹.

A proper understanding of the original functions of these building elements is also suppressed by a formal strategy of dramatic interior and exterior lighting, which presents the house as an object of aesthetic contemplation rather than a place for personal, family and official life. In the courtyard of the Sheikh Sa'eed Museum, exterior lighting and spot lighting focus attention on the beauty of the seven arched plaster panels in the blind niches of an ordinary building. Indeed, the overall quality of the lighting, combined with the effects of the paint and the wall surface, often makes it appear as if the light is emanating from within the windows, niches and barjeels, rather than being cast from outside. So-called boutique lighting, which has recently become popular with heritage restoration committees, tends to heighten the visitor's sense of the raw materiality of the building as an object. Such a strategy, which distinguishes the building from its context, history and everyday reality, is typical of heritage house museums in Dubai.

Today's liwans typically open into rectangular rooms containing displays of photographs, stamps, local jewellery and documents, with contemporary models of traditional dhows placed as spatial centrepieces. However, many of the original openings from these rooms have been closed off from the outside to create interior niches that recall and complement the entrances that appear on the exterior of the building.

When the openings remain open, the objects displayed near the windows appear against relatively bright backgrounds, a strategy that tends to increase ambient reflectivity and suppress much of the objects' detail and colour. As with the opaque brass labels used to identify objects and images, rather than explain them, these lighting patterns drain the privacy of the displayed collection, just as exterior lighting and renovation highlight the presence of the architectural piece while downplaying its origins and historical use.

The overall effect is a sense of abstraction and loss, as attention is focused on the collected objects, the events depicted and the fabrics of the building, and away from the social,

¹ Biln & El-Amrousi, Dubai's Heritage House Museums, p. 29.

personal and cultural meanings of the objects themselves. The ultimate effect of this strategy is to make the museum's ostensible object – the life, existence and times of Sheikh Sa'eed bin Maktoum – present, in a way, but only as a ghost glimpsed in the spaces. Remnants of a life now gone. Ultimately, the House Museum remains an integral part of its local urban context, but has now been renovated beyond recognition as a piece of living architectural history¹.

The success of the appropriate reuse of Sheikh Sa'eed House as a museum was achieved, but the complete reconstruction of the house lost its historical and past scent, as the project to renovate Sheikh Sa'eed Al Maktoum House in the Emirate of Dubai is considered one of the most important projects to preserve architectural heritage in the Arabian Gulf region and an example to be followed in the technical method of reviving any building with a distinctive architectural character, provided that the general condition of the building is not subject to restoration.

The environment in which the house is located was taken into consideration when preparing the renovation project, as it is built on land very close to the seashore at a depth of only one and a half meters, and the seashore is only 25 meters away from the house. Therefore, the technical precautions that must be followed in such a case were taken in terms of the building's foundations and building materials to avoid the problem of salty groundwater, and the general atmosphere of Dubai's environment, which is characterized by high humidity and heat in the summer like other Gulf countries².

In its reuse as a gallery, Mir Abdollah Amiri's house is perhaps the most extreme example of a heritage house treated almost purely as an object without history, context or meaning beyond its function as a scaffold for displaying collectible objects.

This quality is enhanced by the gallery's location in a tourist area that no longer supports the specific activities from which the original house derived its public presence. External lighting is an important aspect of the Majlis Galleria's dazzle strategy, the aim seemingly being to suggest something magical or extraterrestrial that has no connection to the

¹ Biln & El-Amrousi, Dubai's Heritage House Museums, p. 30.

² Mahgoub, Yasser Othman Moharam. The Impact of Modern Urban Development on Architectural Heritage in the Emirates, p. 174. Fouad, Narmin Ahmed Mohamed. Architectural Elements of Coastal Houses on the UAE Coast in the Eighteenth and Nineteenth Centuries AD, Master's Thesis, Cairo: Faculty of Archaeology, Cairo University, 2022, p. 177.

everyday world. At the same time, the architectural elements of the house's interior have become little more than supports or frames for displaying artworks for sale. What were once openings through which family members could glimpse the surrounding street life, and through which sunlight could flood the house, have been filled in and transformed into display niches.

Almost all of the interior walls, originally mostly bare, have been used to display paintings and other two-dimensional works, severely compromising any sense of spatial expression or structural support in the process. Even the wind tower, perhaps the most significant heritage element in a heritage house in Dubai, has been repurposed for lighting, obscuring its original purpose as a ventilation device. There is no longer even a pretense that the original spatial uses, or historical events, have a place in the restored structure. The constant rotation of temporarily displayed artworks reinforces the sense that this house is no longer a place of meaningful residential heritage.

The combined effect of eroding historical meanings and obscuring the site by lighting effects effectively takes the Abdullah Amiri House out of context – especially at night when it seems completely removed from everyday life. In this sense, the effect is similar to that of the National Museum of Dubai, which has been isolated from its surroundings. In fact, the changes made by Majlis Galleria have transformed the Mir Abdullah Amiri House into something more like a stand-alone vault for storing and displaying valuables.

It is more a box of surfaces and compartments than a historic residence. Perhaps given the commercial and practical demands that accompany an undertaking like Majlis Galleria, none of this should come as a surprise. What should come as a surprise, however, is that the Mir Abdullah Amiri House, even in its new use, is still considered to be an idealised and meaningful work of heritage preservation. As such, it is certainly a key element in how heritage is interpreted and presented in Dubai¹.

A more eccentric approach to the restored heritage is evident in the House of Sheikh Obaid and Juma bin Thani Al Siraj Gallery, located in the former home of Obaid and Juma bin Thani.

This institution presents specific interpretations of Islam through graphic representations that transcend local and cultural boundaries. The exhibition is very popular, and its success is partly due to the building's location in a busy area with high traffic.

¹ Biln & El-Amrousi, Dubai's Heritage House Museums, p. 34.

On the first floor, visitors are taken through a series of rooms that tell the scientific miracles of the Qur'an, then move through narratives of the creation of the universe, the messages of Islam, and the meaning and significance of the "final message".

The second floor continues this narrative, with exhibitions titled "Judgment," "Eternal Bliss," and "Eternal Curse." It is important to note that the message delivered and the media used to do so are alien to the physical envelope of the Emirati house and local Islamic traditions. Instead, the exhibition promotes a specific and codified expression of Islam through its drawings and brochures, as well as through seminars presented on a temporary stage in the center of the courtyard.

The original function of the house as a public place of domestic life has been transformed into a centre of religious education, whose mission is largely shaped by organizational intention¹.

The perspective of Arab culture and Islam presented in the exhibition did not exist in Dubai in any of the pure form proposed. In a multi-ethnic coastal city that has for centuries relied on the practical assimilation of multiple cultures and religious traditions for its commercial survival, this simply was not possible.

However, the exhibition uses many of the same effects as other heritage houses in Dubai to produce its message. This includes wrapping the house and covering its wall surfaces with powerful multimedia screens that effectively erode any sense of it as a physical object with its own presence and meaning. Local history is thus erased, whitewashed and written away, and the house becomes a new billboard dominated by a new visual narrative, rather than the historical substrate or supporting space around which it unfolds.

Indeed, the Obaid and Juma Bin Thani House, built in 1917, is of historical significance as one of the first houses to reflect the prosperity of the Shindagha area at a time when the local pearl trade was flourishing. But in its repurposing, not only are specific references to such local culture identified, but all traces of life, family, social reality, the fluctuations of economic fortune, the drama of political intrigue, and the simple evidence of everyday usage have been relentlessly erased.

Together, these qualities underscore the practical meaning and historical significance of such a house, especially in this cultural context. But the media, images, and textures reproduced in the exhibition exclude any sense of collective memory that might have

¹ Biln & El-Amrousi, Dubai's Heritage House Museums, pp. 30-31.

resulted from less intrusive entries, and the displays fatally obscure the essential architectural character and original function of the house.

The setting of the house is also crucial to understanding its meaning, both now and in the past. The local people, their shops, crafts, customs, and the commercial activities of the nearby market are part of the context of the site. But these too are overridden by the exhibition's display function, and its site appears as little more than a scaffold and a catchment for the exhibition's ideological efforts. In other words, the Al-Sarraj Gallery uses the house's physical integration with its context to support the movement of visitors, but refuses to acknowledge that its physical surroundings are a significant part of what gives it historical and contemporary meaning.

In this example, the house remains embedded as a physical object in its context, but no effort is made to connect it in meaningful and specific ways to the surrounding urban fabric. At the same time, the building's original uses as a dwelling have been eliminated, as have all signs of domestic occupation and local significance. As a result, the house suffers from an extraordinary erosion of historical meaning. In fact, this erasure of historical traces is even more extensive than that of Sheikh Sa'eed Museum, even if both houses remain rooted in different ways in the urban fabric¹.

Conclusions

- This research addressed the preservation of heritage and sustainability applications in heritage houses in Dubai through three axes, including: the importance of architectural heritage, preservation of architectural heritage, and sustainability applications for traditional houses in Dubai.
- The importance of architectural heritage is evident in several aspects, the most important of which are the civilizational, scientific, and tourism aspects. The civilizational aspect is evident in the fact that traditional buildings are a translation of history, and the importance of architectural heritage lies in a set of values, the most important of which are: the economic dimension, the cultural and urban dimension, the social dimension, and the environmental dimension.
- The study of the preservation of architectural heritage addressed the concept of preservation, which includes protection; improvement; renewal; adaptive use;

¹ Biln & El-Amrousi, Dubai's Heritage House Museums, p. 31.

contextual design; and restoration. In addition to the methods of preserving architectural heritage, the procedures to be taken, and the levels of preserving architectural heritage.

- the research addressed the procedures that were taken with regard to preserving architectural heritage, which were summarized in: conducting a survey and study of all historical buildings in the Emirate of Dubai, documenting all historical buildings with pictures and drawings, creating an integrated archive related to architecture and traditional building materials, conducting historical research in the field of ancient architecture and the development of the city, creating an architectural heritage library that is considered a reference for research, studies, and researchers, presenting suggestions and recommendations regarding the restoration of old buildings, markets, castles, and mosques, forming an integrated team of engineers, technicians, professionals, and administrators to manage restoration projects and carry out restoration and maintenance work for historical buildings, studying traditional materials, preparing them, recording them, and conducting experiments on them to demonstrate their suitability for the prevailing climatic conditions, conducting experiments to use construction methods and ancient materials and developing them in a manner that is consistent with the requirements of modern life, holding seminars, giving lectures, and printing brochures related to traditional architecture, heritage, and the history.
- The study of the preservation of architectural heritage included the preservation of Al Fahidi/Bastakiya area, Al Shindagha area, and the restoration of traditional houses such as Sheikh Sa'eed bin Maktoum Al Maktoum House, and Abdullah Amiri House (Galleria Council).
- The research included a study of sustainability applications for traditional houses in Dubai, including: sustainability, the relationship between the preservation of architectural heritage and sustainability, standards for the sustainability of the architectural heritage environment, documentation and sustainability of the architectural heritage environment, investment activities and multiple uses of architectural heritage sites.

References

Abdel Kadir, Huda Abdel Rahim. The economic role of sustainable tourism in the United Arab Emirates, (A Study in Economic Geography), International Journal of Research

- in Social Sciences (IJRSS), Volume 6, Issue 12, December 2016.
- Abdelmonem, Mohamed Gamal & Loehlein, Gisela (2007). Sustainability in Traditional Houses in the UAE Potentials and Improvement of Buildings Abilities, the Second International Conference of Dubai Conservation.
- Al-Barambali, Hossam El-Din Hassan. Scientific methods and foundations for the economic feasibility of preserving the urban and architectural heritage of historical areas, https://www.researchgate.net/profile/Hossam_Elborombaly/publication/
- Al-Khalifi, Mohammed Jassim (2003). Traditional architecture in Qatar, Doha: Department of Museums and Antiquities.
- Al-Kuwaiti, Sheikha Ali (1995). Old Buildings and Their Use in Modern Architecture, Symposium on Preserving Architectural Heritage in the Emirates (June 3-5, 1995).
- Alnuaimi, Maitha Mohammed (2007), Daylighting Techniques Used in Indigenous Buildings in The United Arab Emirates (UAE), An Investigative Approach, MA, Texas A&M University.
- Assi, Eman (2020). Role of Municipalities in the Urban Planning of Post-Oil Gulf Cities: The Case of Dubai, United Arab Emirates.
- Assi, Eman (2022). Layers of Meaning and Evolution of Cultural Identity: The Case of Wind Towers in Dubai, Conservation.
- Awad, J.; Arar, M.; Jung, C.; Boudiaf, B. (2022). The Comparative Analysis for the New Approach to Three Tourism-Oriented Heritage Districts in the United Arab Emirates. Heritage, 5.
- Biln, John & El-Amrousi, Mohamed (2014). Dubai's Heritage House Museums: A Semiosis of Melancholy, Tdsr, Volume XXV, Number II.
- Boussaa, Djamel (2014). Urban Heritage and Tourism in The Gulf: The Case Of Dubai In The UAE, Journal of Tourism and Hospitality Management, Vol. 2.
- Bukhash, Rashad Mohammed (1994). Preserving the distinctive Gulf urban heritage in the Emirate of Dubai.
- Bukhash, Rashad Mohammed (1995). The role of the Urban Heritage Preservation Committee in Dubai Municipality, Symposium on Preserving Urban Heritage in the Emirates (June 3-5, 1995).
- Darwish, Mahmoud Ahmed (2016). The problem of preserving and sustaining urban heritage (Sheikh Sa'eed House in Dubai as a model), the Fourth International

- Conference on Preserving Urban Heritage: Sustainable Heritage, a Global Vision, Local Experiences, Dubai.
- Darwish, Mahmoud Ahmed. Problematic of preserving the architectural heritage and its sustainability (Sheikh Sa'eed house in Dubai for example), *International Journal of Innovation and Scientific Research (IJISR)*, Vol. 27, No. 2, November 2016.
- Dubai Municipality, Preserving the urban heritage in Dubai.
- Fouad, Narmin Ahmed Mohamed. Architectural Elements of Coastal Houses on the UAE Coast in the Eighteenth and Nineteenth Centuries AD, Master's Thesis, Cairo: Faculty of Archaeology, Cairo University, 2022.
- Hadjri, Karim & Boussaa, Djamel, Architectural and Urban Conservation in the United Arab Emirates.
- Haggag, M., & Rashed, A. (2003). Urban Conservation in Practice: Evidence from the United Arab Emirates. *AEJ - Alexandria Engineering Journal*, 42(2).
- Mahgoub, Yasser Othman Moharam (1995). The Impact of Modern Urban Development on Architectural Heritage in the Emirates - Case Studies in Dubai and Al Ain, Symposium on Preserving Architectural Heritage in the Emirates (June 3-5, 1995).
- Olroyd-Robinson, Keith. The Urban Architecture of Al Bastakiyyah, Published In "The Architecture of The United Arab Emirates" By Salma Samar Damluji.
- Ricca, Simone, Urban Heritage in the Arabian Peninsula, the Experiences of Jeddah and Dubai.
- Serag El-Din, Ismail (2002). Revival of Historic Cities. *Bibliotheca Alexandrina*, Alexandria.
- Wikipedia contributors. (2024, January 8). Sustainability. In Wikipedia, the Free Encyclopedia. Retrieved 08:07, January 13, 2024, from <https://en.wikipedia.org/w/index.php?title=Sustainability&oldid=1194249161>



Pl. 1: The Heritage Village in Shindagha District



Pl. 2. Abdul Razzaq Abdul Rahim Al Bastaki House
(Bastakiya Nights Restaurant)



Pl. 3. Abdul Razzaq Abdul Rahim Al Bastaki House
(Bastakiya Nights Restaurant)



Pl. 4. Coin Museum



Pl. 5. Abdul Rahman Farouk House (Dar Al Nadwa)



Pl. 6. House of Mr. Abdul Qadir Abdul Rahman
Rashidi (Headquarters of the Urban Heritage Society)



Pl. 7. House of Abdullah Amiri (Galleria Council)



Pl. 8. House of Abdullah Amiri (Galleria Council)



Pl. 9. House of Abdullah Amiri (Galleria Council)



Pl. 10. Abdullah Amiri House (Galleria Council)



Pl. 11. Arabian Tea House Café



Pl. 12. Arabian Tea House Café



Pl. 13. Arabian Tea House Café



Pl. 14. Gallery



Pl. 15. Gallery



Pl. 16. Gallery



Pl. 17. Gallery



Pl. 18. Coffee Museum



Pl. 19. Coffee Museum



Pl. 20. Sheikh Juma bin Maktoum Al Maktoum House (Museum of Traditional Architecture / Saruq Al Hadid (Museum Civilizations))



Pl. 21. Sheikh Juma bin Maktoum Al Maktoum House (Museum of Traditional Architecture / Saruq Al Hadid (Museum Civilizations))



Pl. 22. Sheikh Hasher bin Maktoum Al Maktoum House (Museum Civilizations)



Pl. 23. House of Sheikh Hasher bin Maktoum Al Maktoum (Museum Civilizations)