

On Ecology and Culture: Analogy between Contemporary and Traditional Architectures in the Gulf Region

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Abstract: *Traditional Architecture Is That Built Environment Determined Mainly By The Interaction Of The Ecological And Cultural Constraints. Nowadays, The Reinterpretation Of Our Heritage Leads To The Development Of The Advanced Building Technology As Means To Overcome The Climatic And Cultural Constraints. In These Last Fifty Years And Mainly Since The Metamorphosis Of The Urban Development, Whether In Terms Of Culture And Density, Was Done With An Unexpected Rapidity And With The Objective To Reflect Their Westernization On The Detriment Of The Use And Traditions Of The Historical And Urban Area.*

While Attention Was On The Rapid Growth And Development, Cultural Heritage Was Under Threat As The Built Environment Was Seen As A Reflection Of A TIME Rather Than Of A PLACE, And From The Architectural Point Of View The Focus Was Mainly On How It Looks Rather Than How It Works.

The New Typologies Of The Post - Modern Buildings Whether In Terms Of Scale Or Technology In Most Cities Of The G.C.C. Are Characterized By Their Insensitivity To Cultural Norms And Associated Typologies And Urban Morphology. However, Recent And Contemporary Buildings Are Developed With Reference To The Pre - Existing Matrix And Its Generative Values.

The Paper Discusses The Use Of The Ecological And Cultural Issues In The Development And Production Of The Contemporary Urban Space In The G.C.C. The Method Used For The Exploration Is After Selecting Some Major Civil Public Buildings In Different Cities Of The G.C.C., We Proceed To Their Analysis And We Discuss The Correlation Existing Between Historic And Contemporary Buildings And Urban Areas.

By Way Of Conclusion, It Is Argued That The Acceptable Meaning Of Post - Modern Urban Space Has Been To Imply The Role Of Cultural Environment In Shaping Social Relations, The Modes Of Thought, Norms And The Total Range Of Customary, Which Influences People's Adaptation. Therefore, Patterns Of Growth, Town Morphology, In Short Urban Phenomenon, Evolved Characteristics From The Interaction Between Ecology, Culture And Cognitive Structure.

Keywords: Gulf Region, Vernacular Architecture, Construction Techniques, Conservation, Interpretation, Contemporary Architecture, Critical Analysis.

1. Introduction

The Gulf Countries today are marked by the extraordinary changes brought about by urbanization. Changes that have taken place since the 1970's have been drastic. The sudden increase of the urban population has resulted in a fracturing of tradition. The social, economic and spatial metamorphoses of the towns emphasized by and under the pressure of the process of westernization and urbanization whose dimensions could be described as phenomenal¹.

These changes have inevitably a great impact on the values and particularly on the aesthetics. Development of contemporary institutions for education, health and leisure coupled with the increase of the motorization lead to the transformation of towns into cities. Cities remain the biggest challenge for testing the validity and applicability of concepts of and policies for sustainable development..

If the city is the place of conviviality, culture and concentration of opportunities for activities and services, the city is also the place for insecurity, precariousness, stress and all sorts of pollution. A basically organic and pedestrian

oriented urban pattern changed into a strictly geometric and vehicle oriented one. In parallel with the socio – economic changes in the Emirates society, new technologies have been developed or imported mainly in the form of new construction techniques, building materials and the methods of construction management.²

Now the question is what are the characteristics of the environment that might allow us to make a link between National Identity and Built form?

The city is a cultural phenomenon in its own right and tells its past, transfers together its memory. Historic buildings are the physical manifestation of memory that makes places significant. The city contains visions of previous generations side by side with an urban and cultural life in a state of constant change and urban development must be combined with the protection of cultural heritage. Preserving cultural and natural heritage, to bring it within reach of all, making cultures and civilizations better known, improving daily living conditions is what gives meaning to the sustainability of tourism development. Tourism must remain a tool and in no wise a goal in itself, it must be developed with a view to sustainability.³

² BOUDIAF BOUZID: Space, Culture and Identity; in in European International Journal of Science and Technology, Volume 4; April 2015 (ISSN: 2304-9693); U.K.

³ BOUDIAF BOUZID, ARAR MOHAMMED & SAHAR MEKKY: The impact of the commercial activities on the urban scape of the historic city center with a case study of some cities in the U.A.E. in The Third International

¹ BOUDIAF BOUZID & MUSHATAT SABA: From the Sustainable Culture to the Culture of Sustainability. In The Arab City – The traditional Context versus Challenges of Globalization, pp95-108, Issue 2, Volume 1, March 2011, LONAARD, LONDON.

The task of the Architect in or nearby historical area must be seen as a journey involving and linking together the past, present and future. The ultimate aim is the production of an environment that relates to both place and time. An expression which embodies a multi-faceted approach and which involves the urban designer in not only setting out the parameters of the future but even more so retaining the perimeters of the past. The designer must constantly recall that the historical and archeological sites which constitutes the past, forms the identity of the place. Designers should constantly be reminded that they must establish both aesthetic and cultural links between their interventions and the existing environments in all their manifest concepts. In urban design, nowadays the situation seems to be based on speculation and profit as those whom have the financial power dictate and determine the shape of our cities and towns.

2. Theoretical framework:

The use of the historical and archeological sites as a new way for the tourism developments that take their inspiration from the rehabilitation and the reconversion of the traditional architecture. In this respect they may be considered as examples of regionalist architecture. What does Regionalism mean? How is it different from the vernacular and the high style? What is its place in tourism, or more generally, culturally and economic development?⁴

Regionalism, whether critical, authentic or new, has been defined in various ways. Frampton describes regionalism as “a position dedicated to a place creation and to the sustenance of an intimate and continuous relation between the architecture and the local society it serves.” Authentic regionalism is design which penetrates to the generating principles and symbolic substructures of the past, then transform these into forms that are right for the changing social order of the present. The hope is to produce buildings of a certain character that fuse old and new, regional and universal. Responsiveness to place and creation of buildings with a timeless character have also been associated with regionalism. These statements imply that the regionalist architect needs to penetrate what is lasting worth in the present culture and in tradition. At its best, regionalist architecture is expected to contribute to the cultural and ecological evolution of a region in the direction of the values and desires of its inhabitants. In other words, regionalism promises to re-establish the bond between nature, society and architecture for the creation and sustainability of places with that timeless character. How is this to be accomplished?⁵

Characteristics of the traditional city:

The traditional city, called also medina, characterized by its vernacular architecture developed in harmony with the environment from the ecological and urban morphological points of views. In the case of the Emirates, for defensive considerations, the fort is the main building and around it, we have groups of buildings. The fort usually included a castle, providing a space on high level to watch and control the

situation. It also included a room for weapons to use them at the spot in the case of fighting. It might be possible to say that both the castle and Mrabaa were defending buildings with two or three level stories, the only difference between them was that the castle was with circular plan a the Mrabaa was with square or rectangular plan.⁶

The structure of this traditional city based on a controlled and hierarchy of roads, spaces and buildings. Narrow and steep alleyways divided the residential districts, at various widths ranging from 3-6 meters. These, led in turn to *cul de sacs*, 2-4 m long, on to which the main dwelling doorways opened.

The organization of the traditional city in a compact aggregation of smaller and larger *El-hara* (quarters). Each *El hara* was equipped with open areas, access systems and shared facilities allocated to a group of collective and individual users. This organization is an organic, arborescent and “animated” urban structure, different from the rigid uniformity which is the product of the mechanical modes of urban planning.⁷

2.1. The main components of the traditional city:

The main characteristic of the traditional city is its urban design approach (Compactness and global development rather than fragmented series of buildings seen as “objects”). From the archeological point of view, the rural environment through the organization and composition of the tribes and the physical environment had a significant role in defining the concept of the urban dwelling and its connection with its surroundings.

Each traditional city is governed by the architectural composition of a residential nature, which creates the city’s style. In the case of the Emirates, the houses are determined mainly by some physical constraints that are the climate and the availability of the material.

The harsh climate, the availability of construction materials and other geographical features have played intrinsic roles in shaping the physical characteristic of the Vernacular Architecture. The simplest and may be the oldest continuously used form of shelter throughout the deserts of the Arabian Peninsula is the tent. Tents are highly compatible with the nomadic way of life; they are also symbols of National identity because of their visual association with the traditional Bedouin tents. In urban areas, we distinguish three types of houses: the building of the inner desert cities that are adapted to the hot dry climate; the coastal building that are adapted to the hot humid climate conditions and the mountain building determined mainly by the availability of the material.

We distinguish the following types:

- a) Tent considered as a temporary shelter and used principally by the Nomads;
- b) The permanent houses built by using principally the coral for the coastal areas, and the stones for the houses in the mountains;
- c) The arish called *Biat al assaaf* and built principally by using trunks of palmaris.

2.2. The tent

The traditional tent was home and shelter for the Bedouins during the winter season. It was carried over camels during traveling. Made of animals’ skin and hair, it was easy to fold,

⁶ COLES, A., JACKSON,P.,(1975). A Wind Tower House in Dubai. London: AARP

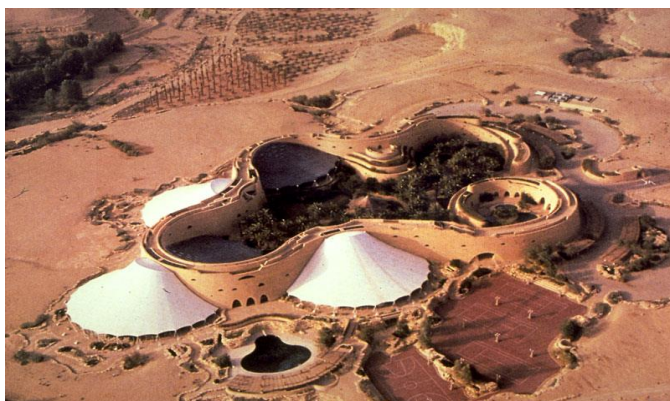
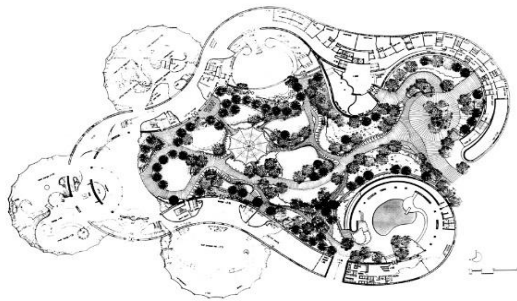
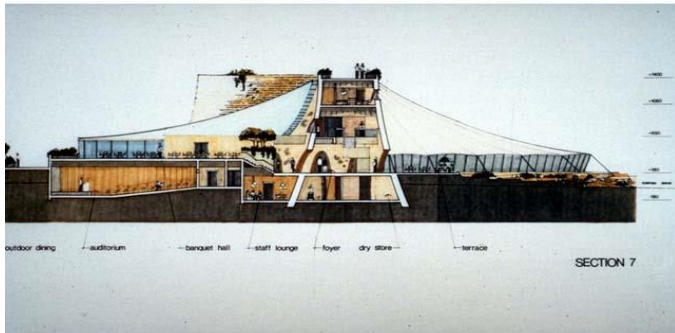
⁷ RADOINE, HASSAN, “Planning Paradigm in the Madina: Order in Randomness,” in *Planning Perspectives Journal*, 26, 4, 2011

Conference International Conference and Exhibition on Architectural Conservation , 17-19 December 2012, Dubai, U.A.E.

⁴ BOUDIAF BOUZID, 2015:And The Context Creates the Event; The relationship between Historical, Cultural and Physical Environments and the impact of Tourism in City Event, 7th International Ajman Urban Planning Conference, 2-4th March 2015, Ajman, U.A.E. (ISBN:978-0-9563748-1-3).

⁵ BLAKE G.H. & LAWLESS R.L., (1980.) *The Changing Middle Eastern City, System*, Cambridge University Press.

unfold and move around. The tent was divided into two parts; one for men and the other for women. Another tent was used for cooking and storage. The tents were arranged around the herding area or the oasis forming a circle or square with the Sheikh's (the head of the tribe) tent in the middle so that guests could recognize it. During winter season, the tribe spread over the area wherever food and water were available sometimes half an hour apart.



Tuwaiq Palace: the use of the mud brick and the tensile structure referring to the tent. The palace is in Riyadh, K.S.A. The palace was designed by Omrania and Associates in association with Frei Otto and Buro Happold. (Source of the photos : Aga Kham Award website).



King Abdulaziz Hadj Terminal in Jeddah, designed by Owings & Skidmore; the material use for the membrane is Teflon coated fiber glass. It was the largest membrane using such material. The structure is referring to the tent and using a megastructure and for each membrane, they used four pylons and cables suspending the membrane. . (Source of the photos : Aga Kham Award website).

2.3. Arish

During the summer season, the Bedouins used to live in shelters called Al Arish which were made of palm tree leaves. Al Arish was made of two parts:

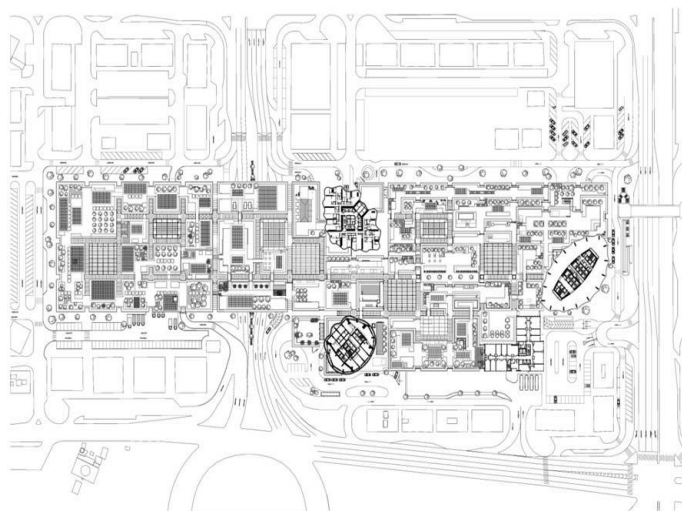
- 1) the main area 2x4 meters used for sitting and sleeping,
- 2) a small area, 2x2 meters used for cooking, storage and raising of animals. The Bedouins considered Al Arish their second home after the tent.

The traditional dwelling is based on the polyvalence of the spaces and the hierarchy of the functions: Storage, the guest area, the separation between the family area and the guest area. The roof is the space for gathering for the women and used for the other activities.



The main purpose from these two photos is to show the Arish in terms of social space and the material used. The Arish is made of palm tree leaves. And one of the characteristics of such space is its polyvalence. (Source : Ajman Museum).

Commercial buildings largely determine the contemporary Architecture in the Arabian Gulf Countries. The design of these buildings are clearly dominated by foreign Architects. Bio-climatic design features are evident in many of these buildings. The extreme climate conditions and the rich architectural heritage have motivated both foreign and Arabian architects to experiment new expressions of medium and high-rise buildings.



Ground floor of the Central Souk in Abu Dhabi (Source: website Central Souk / Norman Foster , 08th august 2017)



Al Bahar Towers designed by Aedas in Abu Dhabi, the double skins of the building is motivated by referring to the Institut du Monde Arab in Paris based on the objective of cooling and shading a building. (Source : The author).



Central Souk in Abu Dhabi designed by Sir Norman Foster. The design was inspired from the Arish. (Source: website Central Souk / Norman Foster , 08th august 2017)

2.4. Factors contributing to the growth of the traditional city:

The political, economic and religious factors have played an important role in the growth of the Medina. In spatial terms, the location of the activities has been responsible for the expansion of the city. In architectural terms, buildings have tended to conform to the restricted space available for construction. In functional terms, the buildings have given the residents a high degree of privacy, while facilitating inter-communal activities and a combination of these factors have contributed to the social values derived by the residents.

2.5. The urban structure of the traditional city:

The urban space of the old city has standard features: narrow streets, closed vistas, the open spaces given over to urban and social squares, but traditions of buildings have given rise to wide local variations. These variations give the old city its dynamic character.

The urban structure takes the form of a sequence of wide to narrow constructions. Open spaces inside the city gates narrow through connecting roads, and then open out again into social squares. This pattern is repeated throughout the city.

The mosque and the public activities are located around the social square. The social square acts as a connecting link between the mosque, the public activities, and the entrance of

the housing cluster. A common phenomenon at the level of city planning is the minaret of a mosque seen as a landmark.

2.6. The quarter or El Harat:

The structure of the medina and the identity of its quarters reflect tribal origins or ethnic issues. The urban development is done by stratification. The dwelling and houses represent a basic unit of the city's morphology, and have their own characteristics and social structure.

The composition and height of housing as a global and compact is one of the main characteristic of the traditional city. In addition to this, the minarets of the city form with the houses a distinct feature along the sky- line. Also noticeable is the homogeneity of building materials, mostly baked bricks decorated with gypsum, which enhance the city's visual value.

2.7. Esthetical factors:

In the traditional buildings, the aesthetical issue was always present and achieved by using many elements that constitute the language of the traditional buildings. This included most if not all the constructional factors starting from ventilation openings, walls, ceilings, columns, staircases and their handrails, etc. Colors also played an important role in the visual and esthetical effect of buildings. Consideration was given to provide harmony between the building elements, masses, and at the same time to the harmony between different buildings in one community. The followings are some of the apparent aesthetical considerations in the traditional buildings.⁸

1. The harmony in the use of the building materials in different types of buildings whether public or private buildings. Decorative patterns in the wooden screens (mashrabyaa) are also harmonized with each other. Natural mud color with natural brown wood color put more emphasis on the harmony between different buildings in one location.
2. The harmony between the blocks and masses of the different residential units and other buildings; generally the height is two to three levels.
3. Barageel as a tool for the thermal comfort is also used as tool determining the skyline. The proportionate height of the minarets and the Barageel define the skyline of the area and are seen as landmarks in the area.
4. The courtyard as the main component for the spatial organization and as a tool for the creation of a microclimate. From the social and aesthetical point of view, the courtyard, usually central, plays a great role in the determination of these aspects.
5. Decorative wooden patterns of mashrabyaa added beauty to the indoor (inside rooms) environment and to the outdoor (toward the court or the road) environment of the building.
6. Small openings, which were located at the higher level of walls of living rooms, formed some decorative patterns in the walls from both sides (indoor and outdoor).
7. Using some decorative patterns in the development of the veranda added beauty to the environment, the veranda is also another tool used mainly for climatic considerations. The patterns used are developed with geometric or floral patterns.



The two photos; on the left side it is a traditional house in a Fahidi District (Dubai) where it had used a wind tower (Called BARAJIL) and in the right side it is Sheraton Hotel in Sharjah where the Barajils are just part of the décor. (Source : The author).



Central Souk in Sharjah, once again the use of the barajils is just for aesthetic considerations. (Source : The Author).

Why do refer to the Vernacular?

The reasons behind the use of the Vernacular Architecture as a reference are:

- Traditional architecture responds to Cultural aspirations and social needs; in this case, the growing desire to express Identity and satisfy Social aspirations;
- Traditional Architecture is mainly based on the principles of Ecological design.

⁸ DUBAI MUNICIPALITY(1996) Elements of Traditional Architecture in Dubai. Dubai Press.

Approaches	Theorists	Principles
Aesthetical interpretations/ Formalist approach	Rudofsky, Filipetti & Tortereau	Descriptive and photographic interpretations of the built environment (Forms, details, decoration,...)
Typological Approach	Blondel, Durand, Quatmerre, Rossi, Aymonino, Muratori, Caniggia.	Classification of the buildings into types according to the shape of the plan, the geometry of the building, the material used and the spatial organization.
Evolutionist theory	Popper, Steadman, Smith, Ragon, March	The organization of the built environment had been tackled by taking into consideration the historical and chronological development. The different techniques (constructive, decorative and functional) are the main component for exploring the development of the built environment.
Social & Geographical Theory	Paglan, Braun, Mercier	The vernacular architecture is reduced to some types, which have been transmitted through the social and ethnic interactions.
Physical Explanation.	Addy, Brunskill, Taylor.	The built environment is shaped by the physical (climate & topography) and technical aspects (qualification of the labors, material & costs).
Social explanation	De Lawe, Thussein.	Defense, economy, social structure are the main aspects for the determination of the different shapes of the buildings and environment.
Cultural Factors	Levi-Strauss, Rapoport, Rykwert.	Beliefs, tradition, customs are the main issues explaining the shapes of the buildings and the interaction between Nature and Culture.

This table illustrates the different approaches on the vernacular architecture. Through this table it can be noticed that the first column is highlighting the type of approach. The second column is mentioning the authors whom are behind the development of each approach and the last column is dealing

with the principles used in these approaches. (Source: part of one of the lectures on Heritage & Conservation, author: Dr. Bouzid Boudiaf at Ajman university).

The Neo-Traditional Approach:

This approach represents a reaction to the Western thinking and prototypes. It consists of revitalizing the region's traditional Architecture and learning lessons from ancestor wisdom in dealing with climate, resources and cultural requirements as well as reviving the visual identity. The end-product resembles to old building with this visual characteristics and environmental features. The work of Hassan Fathy represents the best manifestation of this approach. This approach fails to fulfill the aspirations of people to achieve progress and living standards to those of Western Societies.

Collage Architecture:

This trend refers to superficial associations with the Vernacular in order to localize Modern designs imported from other locations around the world. Different features are borrowed from the Vernacular and pasted to the facades of Western models that are totally incompatible with the physical and cultural environments. This trend is largely dominating, and leaves little time for analysis, innovation and genuine solutions that respond to local environment.

The Eclectic Approach:

This trend attempts to integrate the old and the new to create a new Architecture reflecting its time and place. Practices in this respect incorporate selective features from the Vernacular after checking their compatibility with Contemporary demands.

The quality that we seek in a building or an environment depends on the time, place and the culture to which we belong. In our time, Culture is heavily influenced by the new technologies of information and communication to such an extent that we consider the impact of the Universalism as a new school of thought which is now challenging the ideas and styles of the so called regional. So, we can say that our time is characterized by a worldwide homogeneity on the one hand and by apparent eclectic diversity on the other. The Universalism is not only a style, it is a world view in which is included life – style, communication and welfare. It incorporates a search for dominance, sustainability and extravagance in architecture and urban design in order to gain an authentic expression of our time. This style is at its best at the relatively small scale where we are dealing much more with objects but we can already say that at the macro level, it is just a failure.

The works of Fathy, Rasem Badran and Abdel Wahed Al Wakil, however, suggest a problem in thinking about a theory of architecture. The traditional architecture is considered as a source of the architectural vocabulary and the history of architecture as the main source of the architectural theory. Site and climate, available technology and program as a statement of function and values are the key architectural components. For similar reasons, traditional architecture is seldom a spontaneous product of its local, but usually a product of ideas imposed or imported from outside and modified by local conditions. The case of mina Salam in Dubai is illustrative in a way that is a product of local ideas transformed in contemporary requirements and developed in a traditional language. One should not deny the regional impact on the development of the contemporary architecture: a wide variety of architectural ideas may be explored in the solution of an architectural problem as long as the fundamentals of realizing buildings are respected.

Main features	Main issues	Characteristics	Observations
Physical	Sprawl development; Fragmented development; Rapid development; Disproportion of the land use.	Deterioration of the traditional area; Massive and rapid public buildings with new programs; New floating cities.	Most of the buildings are developed according to the needs and the familial organization.
Socio-economical	Fragmented industrial structure; Lack of coordination; Dependency on oil; Standards of sustainable environment not reached ;	Rapid socio-economic changes; Adaptation of new technology; Urban growth with a very high percentage of urban population.	The functional issues are the main aspects shaping the micro and macro environment.
Cultural	Deterioration of traditional environment;	Misunderstanding of traditional architecture;	The city is determined and shaped principally by the financial power.

The table is a synthesis of the main aspects that are behind the metamorphosis of the urban space. (Source: Dr. Bouzid BOUDIAF; Urban growth In the U.A.E.: Challenges and Metamorphoses, in Capital Cities, Wicked Problems: Best Practices in Planning and Policy Response Mechanisms, 10th Sharjah Urban Planning Symposium, 23-25th November 2008, American University of Sharjah, Sharjah, U.A.E)

The Search for Identity:

Expressing national and local identity is one of the most critical issues influencing Contemporary Architecture in the Arabian Gulf Countries. Identity issues acquire political and cultural dimensions because they demonstrate a reaction to the domination of Western norms and models. Therefore, the Governments encourage practice that recognize local peculiarities. From the Architectural terms, the local Vernacular is considered as the main source of inspiration with its unique forms and patterns. International Construction Companies are also competing to understand and incorporate local architecture themes and utilize Vernacular metaphors in their projects.

In architectural terms, there are many features incorporated in contemporary Architecture; the main features are:

- A) The courtyard as an element of composition, distribution and spatial organization. As an element of composition, it facilitates also the cross ventilation and the daylight for the internal spaces;
- B) Thick walls and small and reduced openings create a thermal mass;
- C) In coastal areas, larger openings in opposing walls help to enhance natural ventilation;
- D) The provision of verandas and colonnaded galleries to increase shading and reduce heat gain;
- E) Wind towers called Barajeel to enhance natural ventilation, illustrating the regional Architectural Identity;
- F) Spatial Flexibility;
- G) The use of natural and local materials.

Municipal Building in Dubai by Civic Design Studio, the building includes a large open courtyard conceived as an oasis. The solid external envelop is created with small openings to minimize solar gain while most openings face the shaded courtyard as a response to the harsh climate.



The first two photos illustrate on the left side the location of Dubai Municipality and on the right the reinterpretation of the courtyard. Designed by Civic Design Studio/ Pacific Consultants International in 1979. (Source : Website : Dubai Municipality/ 13August 2017).

The third photo is to illustrate the building is seen as an iconic landmark in Dubai. The warren truss space frames that block 80% of direct solar radiation and create a pleasant shaded micro climate.(Source : Website : Dubai Municipality/ 13August 2017).





The Ministry of Foreign Affairs in Riyadh, K.S.A, designed by Henning Larsen where the impact of light on the appreciation and use of the space are interpreted the use of patio, the courtyard and holes in the facades due to the harsh climate. (Source : Aga Khan Award website).

The defiant Building Types:

Regional architecture becomes more problematic, however, when it comes to more recent urban building types, for which traditional architecture does not offer such a clear models. Certain building types opt to maintain their universal images. The modern skyscraper for instance, has become the icon of Universality and Modernism, while residential and small-scale buildings still maintain some local features derived from the Vernacular architecture. Analogies and other contextual influences, new building types, especially large scale buildings lack traditional metaphors and depend mainly on structural and mechanical developments. We can notice and without doubt, that most of the Central Business District are almost the same whether in terms of vocation, location, and typology of buildings or technology used. This development is entirely in contrast and opposed to the so-called Vernacular, Traditional or indigenous buildings that are mainly determined by the climate, the availability of the materials, the topography and the knowhow. The two approaches lead us to say that there is a dichotomy. The C.B.D. might be justified by some criteria such as the coherence and the efficiency as they are also source of the different speculations and densification. The C.B.D, we can say that at the large scale and from the ideological point of view that the New Technologies of Information and Communication led the modern urban centers look similar. This internationalization of the C.B.D. is an opportunity to explore and develop new typology taking into consideration the cultural and physical settings. This new typology based on aspects emphasizing Harmony and Humility rather than Power and Superiority. So, the interest in the Vernacular Architecture, which is not a new one, is a form of resistance and a rejection of the Universalism imposed by the Modernism.

In the Gulf, the capital cities are the main cultural, economic and administrative centers in their countries. Because of their political importance, these capitals were the focus of most of the development effort deployed by the governments. Because they are meant to be the symbols of the growth and wealth of the nation, the capital cities absorb most of the construction and development budget of these countries. If this development style succeeded in propelling some of the GCC capitals among the first class cities in the world, it has nevertheless left wide areas secluded and underdeveloped. The drastic centralization of the services, facilities and decision making in the capitals has led to their over-densification and a de-population of the small towns, traditional villages and other inhabited zones in the peripheries.

Most of the GCC countries invested heavily in Mega-projects to promote a rapid economic growth. This "oil urbanization" will become a common trait in the capital cities of the Gulf. Dubai is the fastest growing city in the region (more than 112 mega-projects were planned within its boundaries). The city's growth strategies set an example for other capitals in the region. This has resulted in numerous duplications in urban strategies, trends and even speculative approaches. All that the Gulf cities hope to achieve through development is to become global and even world first class cities. These cities, with Dubai at the lead, produced the most impressive and criticized examples of mega-projects: The palm and the World islands in Dubai, The Pearl in Doha, Durrat Al-Bahrain in Manama, and Tarut Island in Saudi Arabia. Bagaeen defines this type of development by "instant cities" or "cities within the cities". Such developments become the pivotal points of governments' actions to promote real estate products. To prepare the beyond oil transition of their economy, the GCC countries continue to invest in mega-projects. They have initiated an increasing number of service and knowledge-based developments such as Dubai Knowledge village, Education city in Doha, and knowledge oasis in Muscat.

Tourist Buildings:

Tourist developments are attracting growing attention in the gulf today. Spectacular world - class hotels are constructed in most major cities. The local government of Dubai, which is considered the commercial center of the region, is promoting tourism as one of the main income resources. Indeed Dubai has become a major tourist attraction in the Gulf. These tourist facilities include many medium and high-rise buildings, which designers strive to associate with the local context. In many cases, these associations are superficial mimetic of traditional architectural features.

Inspiration from the vernacular architecture can have far more positive and influential implications, for instance, the visual associations created through revitalizing environmental design features and local methods and materials. This approach helps in optimizing the environmental performances of buildings as well as reinforcing their cultural expression. The Mina AS Salam and Royal Mirage tourist resorts in Dubai are good examples of this approach. The aim was to create an Arabian atmosphere for the tourist to feel the magic of Arabia where fantasy and tradition walk hand in hand.

Hence, every detail in design, buildings layouts, detailing, furnishing and interior design is reminiscent of traditional Arabian Architecture. Heavy building with small slot openings. Latticed screens, shaded arcades and courtyards, domes and arches all blend together with their site to create an authentic

contemporary architecture. Though cultural expression is the major motivation for implementing traditional environmental control features.

- The expression of the importance of architecture being site-specific in the culture it carries and the environment it operates.



The Riyadh Mosque in Riyadh, K.S.A, designed by Rasem Badran referring to the urban social fabric, the plaza is used as for a spiritual and commercial services in the same time. (Source: Rasem Badran in his presentation at Ajman University, 2015).

3. Conclusion:

The rapid and unprecedented urban growth in the G.C.C. led to some spatial, physical and cultural metamorphoses of their cities. These metamorphoses are also opening doors and opportunities for the development and /or reinterpreting new technologies and architectural languages rooted in a vernacular architecture. By this manner, the region has managed to manifest itself as a point of interest to tourists given its world-class architecture. Whether or not the resultant manifestations in the built fabric have been controversial, eyes have been zooming in on the region from architectural and other experts, becoming points of reference. Such designs provide domestic examples of hi-quality design, moving from a time where the region would look outwards for design paradigms.

The selected vernacular prototypes of tents, mud-brick, arish houses and wind towers emphasize the architectural scale of the study and present the fundamental core of the comparative analysis, where such prototypes are the most identified and recognized vernacular structures of the region.

The contemporary buildings selected had the following features as a common ground between them:

- The ability to “take” from vernacular structures either directly or indirectly.
- A presentation of culture as a “façade” imposed on the architecture.
- Innovative and compelling structural and material aspects.
- The provocation of the potential and ability to hybridize the past with the present, generating novel ideas of place.
- A demonstration of a common ability of “moving forward” while emphasizing the role that culture and identity have on society and the built environment.

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