ISLAMIC ARCHITECTURE IN DUBAI: RENEWAL AND CONTEMPORANEITY

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ABSTRACT

Throughout history, Islamic architecture has been in a continuous process of synthesis. As Islam spread across lands, architecture adapted to specific functions required by the then-new religion, and its teachings. On the other hand, countries which accepted Islam as a religion, were able to impose their culture and history on what we call today "Islamic Architecture", making it one of the most diverse architectural movements in history. However, architecture of Muslim communities affected by colonization, then globalization has been struggling to uphold its identity. In addition, there has been strong, one-directional calls by historians and orientalists to strictly preserve known past Islamic elements and styles, which hindered the contemporaneity of today's Islamic architecture. Through analysis of a number of architectural movements in the city of Dubai, one of the youngest, most rapidly growing cities in the world, this paper argues that Islamic architecture still holds the capacity to adapt, absorb and blend in a continuous process of synthesis and renewal despite globalization sweeping today's Muslim communities. Not only has this been a historic trend, but also a necessity for those communities to be able to uphold their identity and thrive in a globalized world. Dubai is a living example of this adaptation. Through all four forms of resistance as defined by Hobbs: modernization, heritagization, hybridization and bioclimatic hybridization, architecture of the city demonstrates how Islamic architecture today is still able to survive through adaptation, not only through preservation.
Keywords: architecture, Dubai, environmental performance, heritagization, hybridization, Islamic architecture, Islamic identity, modernization, Muslim cities.

1 INTRODUCTION

Islam is a religion that emerged in the Arab peninsula in 621 AD, particularly in Mecca and Medina, occupied then by nomadic tribes, mostly dwelling tents and simple structures built using locally-available material. Islam today is the world's second-largest religion, and the fastest-growing major religion in the world, which spread across continents, and is fused into numerous cultures.

Islamic architecture thus did not pre-exist, some even argue its existence in the first place [1], [2]. However, the position of the author of this paper is that it has always been in dynamic interactions with civilizations as the religion spread and got adopted by people from across the world; it grew as a product of new spatial needs from one side and inherited cultural values from another.

Communities which accepted Islam, needed to create new spaces for worship, spaces which adapt to the teachings of the then-new religion, that dictated respect to individual privacy, family values, role of communities, and imposed clear set of ethics and beliefs as listed by Ben-Hamouche [3]; vicegerency (Khilafa), Islamic citizenry (Umma), legal framework (Shari-aa), customs (Urf) and innovation (Ijtihad).

On the other end, when Islam was accepted in a country or a region, it inherited its values, traditions, arts and architecture, adapted them to Islamic learnings and made them its own, respecting its uniqueness, and thus creating very diverse architectural forms, individually reflecting each region.

A strong example of how the spread of Islam had been a cause of cultural migration across regions is Islamic architecture of the Gulf area, highly influenced by the art and architecture

which migrated to the region with traders from neighboring Iraq, Persia and India [4]. Patterns of the city, spatial configurations, architectural elements, and decorative ornamentation were noticeably, in many cases, inherited from ancient Mesopotamian and other pre-Islamic patterns. These adaptations have always been rooted in the availability of local resources, mostly; natural and human [5], as well as being highly adaptable to local climatic conditions [6].

2   COLONIZATION, GLOBALIZATION AND THE IDENTITY CRISIS

However, this has never been a steadily growing trend, Islamic architecture has been subject to successive destructive influences due to the decline and fall of the Muslim empire. Ahmed [7] explains that after a rapid, dramatic rise in seventh-century Arabia, Islamic history faced what he calls "tortuous, inevitable decline". The decline, he claims, continued to the middle of the thirteenth century in the Middle East, specifically when the Mongols captured and sacked Baghdad in 1258. From then on, he argues, "Muslims faced a steady decline making European colonization almost inevitable".

Al-Ragam [8] quotes Ellen Jawdat's words, making a sincere point on how the then-fully grown Islamic architecture in the region has been affected: "At a time when traditions and more are in upheaval, the architect, no matter how diligently he seeks to mirror his culture and base his designs on real social patterns, is bound to be aware of conflicts between the traditions of the past and the demand of the rapidly changing present." She further explains that this conflict came in numerous forms which were dictated by the ruling elite, who relied on European building experts dictating their building techniques and planning methods, claiming that the elite reinforced "Eurocentric prejudices" about Arab and Muslim societies which they invaded [8]. This dramatically affected the traditional Muslim built environments. How communities made decisions on their social and built environments; this has changed from a bottom-up rule to an up-down one [5], [8]. This process which generated the morphology of Islamic towns was lost.

Hobbs [5] claims that traditional buildings were a reason behind the success of this lost experience of the Islamic medina (city); its architecture and experiences. He lists these experiences as; living within one's means and avoiding excess, recycling materials, consuming less energy, tuning architecture to climate with local materials, designing from the inside out for efficient use of space, promoting a sense of neighborhood, adopting appropriate technologies, revitalizing local retailers offering local goods, minimizing vehicular traffic, sharing responsibility for common spaces, and combating social decay.

Loss of architectural identity, was not only caused by political reasons, but also by discursive ones. For example, the construction boom which caused the gradual replacement of traditional and vernacular methods, the need for local architects who may replace expat experts and get to make decisions for their local communities, and detachment of residents from nature, which affected their belongingness and sense of place [5], [8].

However, Arab societies developed what Al-Ragam [8] describes as "projects of resistance". This trend generally tends to happen during nostalgic periods following periods of destruction, and helps add value to the lost identity and heritage of the built environment, while challenging the dominance of western models.

She argues that, in order for architecture of resistance to succeed, projects have to be observable and reproducible, they also have to meet the high demand in building industry, while coping with the global architectural and construction movement [8]. This resistance was presented in multiple ways and levels, which are described in the following section.

3 FORMS OF ARCHITECTURAL RESISTANCE IN THE ARAB–MUSLIM WORLD

There has been a number of approaches in the literature describing how Islamic architecture was able, and may be able, to resist. Islamization, as described by Ben-Hamouche [3] is one; a means of survival and growth by which architecture of the region found its way to growth through adaptation. He argues that through Islamization, mechanisms in Islam which historically allowed for absorbing civilizations should still take place to reach a definition to new Islamic architecture. However, although I find that he lays a strong argument on how Islamic teachings are applicable to many human practices, including architecture, I believe that this is a relatively rigid approach that does not necessarily allow for Islamic architecture to grow outside religious dictations.

Hobbs [5], however, offers four more universal, broader forms of resistance which are applicable to the case of Dubai; to modernize, synthesize (hybridize), heritagize, and finally to environmentalize.

Advocates of modernization on one hand, argue that change is inevitable in the era of globalization. It is a deconstructing approach, where old buildings and quarters are razed and replaced with alien, modern architecture which occupy their footprint. This certainly took place in the region starting the 1960s, after discovering oil.

On the other end of the spectrum, heritagization calls for making built heritage contemporary through strict conservation, given the promising economic return on conserved buildings and districts under UNESCO, this approach offers a noticeable benefit to new cities in the Middle East, and has also been adopted by Dubai after the UNESCO winning bid of Dubai Creek in 2012 [9].

Midway, synthesis, or hybridization, found a way to balance tradition and regionalism and to integrate the old and new. Seen as a difficult task, designers adopting this approach need to answer to the possibilities which both identities offer to re-define contemporary Islamic architecture. Unfortunately, and in many occasions, this has been a "cut-and-paste" practice as witnessed in a number of pseudo-traditional architectural forms in Dubai, which better served in attracting tourists rather than benefiting the local community.

However, a more promising, and effective form of hybridization successfully emerged while taking into consideration the cultural and environmental origins of regional architecture as well as its Islamic origins; namely bioclimatic architecture, which involves traditional climatic architectural adaptations, in high-tech construction. This approach takes into consideration building climatic performance and adds it into the equation, which results in new vocabulary in the local architectural language.

The following sections present the fact that Dubai, during its relatively short architectural journey had to experiment with all forms of resistance presented above, in an attempt to regain its Arab–Islamic identity in a contemporary, sometimes futuristic, setting.

4 DUBAI: THE JOURNEY OF CONTEMPORANEITY

Dubai has been a trading hub since the ruler exempted foreign traders from taxes in 1894 [10]. This has culturally exposed the then-young town to migrating cultures from the neighbouring countries of Iraq, Persia and India, including art, architecture, construction techniques and human resources. The simple architecture allowed the fusion of Islamic teachings, climatic considerations, social needs, and influences from those cultures.

Nowadays, Dubai is one of the fastest growing metropolitan areas worldwide according to a January 2015 report from the Brookings Institute [11], with allowed for deeper, and more extensive exposure of the city to global cultures.

Architecture of the city had to go through a rough adaptation journey in a relatively short time. This journey reflect all four forms of resistance highlighted in the previous section where the Islamic identity in architecture was challenged, but also adapted in different ways.

4.1 Modernization

In the 1960s, a sudden oil wealth, visionary plans from the side of the sheikhdoms, called for major city development, characterized by being fast and attention-grabbing. Heavy construction and westernized, modern architectural typologies dominated the scene [12], [13], being highly influenced by post-colonization politics; loss of Islamic identity was inevitable.

Sheikh Rashid Tower designed by John R. Harris [14] is an early example of the globalized architecture in the city, adopting modernists' architecture. However, Islamic figurative reference in this building is quite evident, with a shy presentation of repetitive patterns and geometric motifs in façade treatments providing an interplay of light and shadow [15] (Fig. 1).

This trend continues until the 1990s towards the architecture of "Spectacle", with developers seeking "the bigger, taller, larger, grander, faster and more spectacular" [16]. By the end of the 20th century, iconic, high rise, high-tech architecture wrapped in curtain walls dominated the skyline of the city, producing well-serviced, dust-free interiors and Manhattan-like exteriors, without taking environmental performance into account (Fig. 2). This trend was successful in grabbing international media attention and occupy architectural debates while alienating the city from its local Islamic identity.

Meanwhile, the fabric of the old city stood intact, but stopped being an effective contributor to the architectural scene. But it still acted as an active trading hub, mostly occupied by traders, labour, and seekers of less costly merchandize.
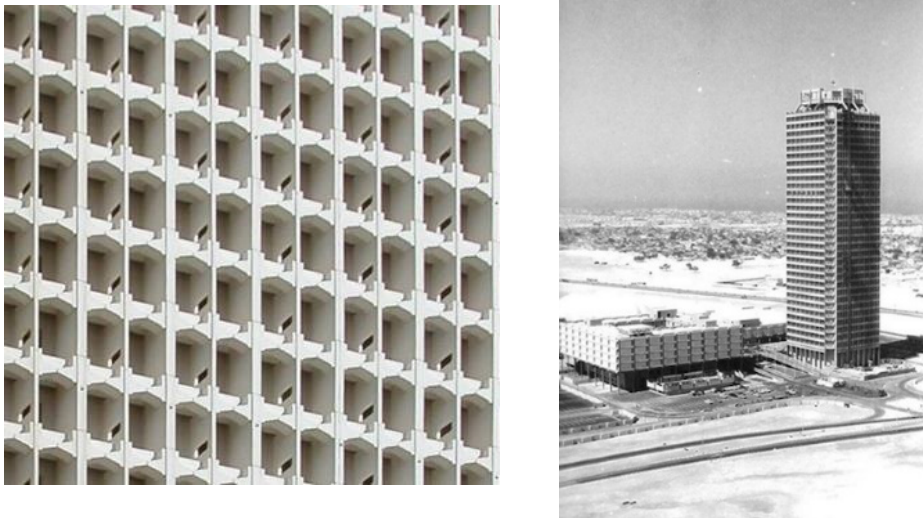

Figure 1: Façade detail at Sheikh Rashid Tower, the World Trade Centre Complex. Architect John R. Harris and Partners, Dubai, 1979. *(Source: Mezaina, 2017.)*

Figure 2:   The sky line of Sheikh Zayed road, the heart of modern Dubai, with high density, glass-wrapped towers. *(Source: Author.)*

4.2 Heritagization

In 2012, the UAE bid for six sites to be given UNESCO World Heritage status [18], as a reflection of the government's suddenly surging awareness of the existing architectural heritage, and protect what is left of the architectural heritage. The bid resulted in accepting one of the six sites; Khor Dubai (Dubai Creek), as a UNESCO heritage site [9]. The government then, fully invested its conservation efforts in a number of old districts and buildings in the areas of Bur Dubai and Deira located on both sides of the creek, where the city initially originated (Fig. 3). Conservation projects took place allowing for full protection of the dense urban fabric and the traditional architectural elements of old buildings.

Narrow alleys (sikkas) were fully conserved to provide day-long shading, and passive wind cooling. Compact building forms made walkability possible in the extreme weather conditions. Wind towers (barajeel) and air pullers still contributed in lowering interior temperatures, while confirming the skyline of the old city [4].

Construction materials used during conservation, were still confined to locally available ones; palm-tree trunks and fronds for roofs and shading elements, mountain stones and mud for walls, while gypsum panels and gypsum powder were used for floral and geometric ornamentation [4].

Economic rewards to such type of resistance proved to be promising, not only financially but further to maintain Dubai's position in the global scene.

4.3 Pseudo-traditionalism (hybridization)

Half way between modernization and heritagization, hybridization has always been an option. In the case of Dubai, this took place early-on in the form of pseudo-traditionalism, where Islamic imaginary was still referenced using superficial figurative motifs, with complete lack of performance-based references [19].

(a)
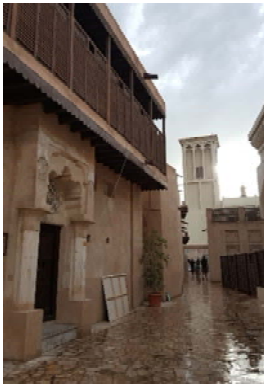
(b)

(c)

Figure 3:   Examples from architectural conservation projects across Dubai. (a) Gold and Spice market; (b) Bastakiya district; and (c) Textiles market. *(Source: Author.)*

An example of this form of resistance is Ibn Battuta Mall by Nakheel (Fig. 4), where an intent to display scientific advancements through the trail which the Muslim scientist, writer Ibn Battuta took during his historic journey, led to a linear, successive alignment of over-ornamented spaces displaying international retail brands. Although the rich display attracted a large number of tourists and residents, and argued to be a generator of collective memory to the diverse city [20], it lacked the originality of Islamic architecture, mostly when it comes to performance and function.

Another example is Souk Medinet Jumeirah (Fig. 5), the high-end multiuse touristic destination by Jumeirah Group, where imitations of Islamic ornamentation were used to create a modern, air-conditioned development. The design ignored functional aspects of traditional buildings inherited by Islamic and local architecture of the city.
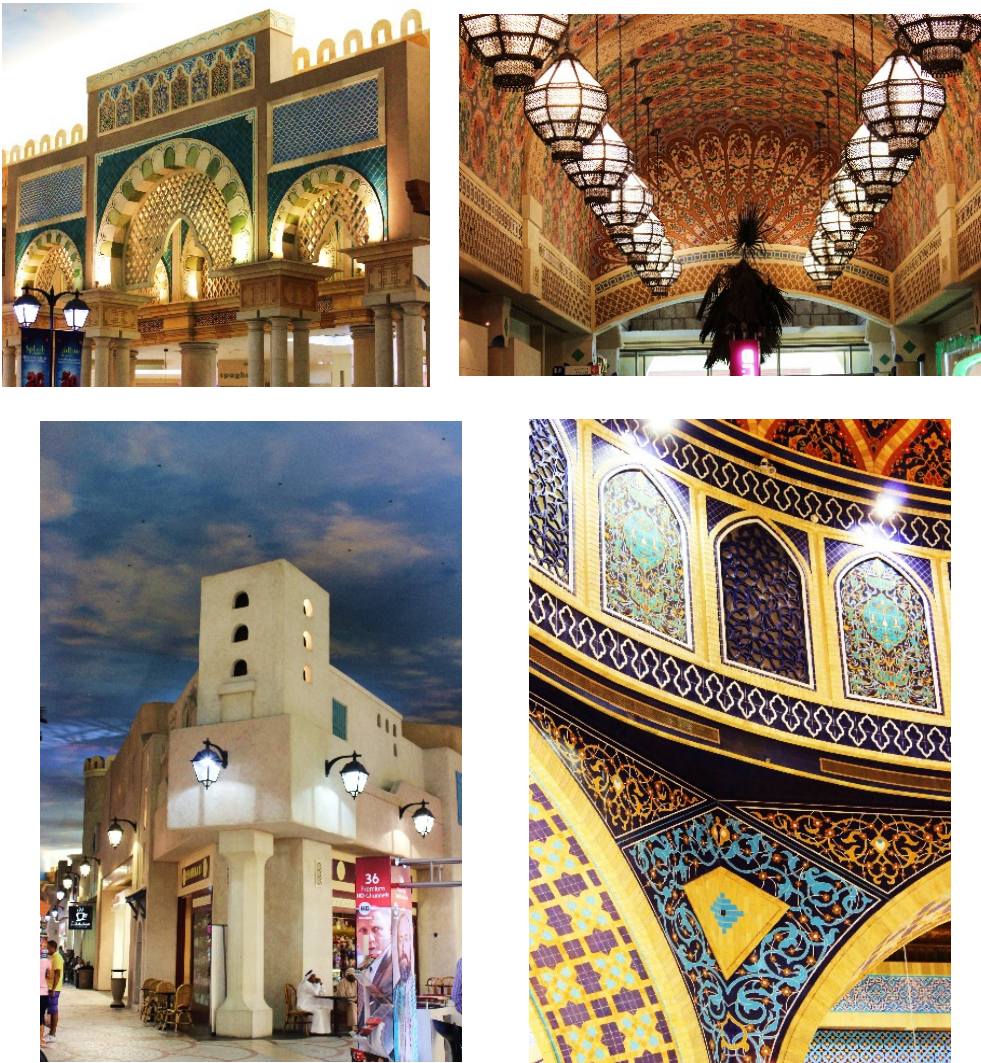

Figure 4:   Ornamentation and figurative Islamic motifs at Ibn Battuta Mall. *(Source: Author.)*

Figure 5: Ceiling and exterior treatments at Souq Medinet Jumeirah. *(Source: Author.)*

4.4 Bioclimatic hybridization

The economic crisis of 2008, was a direct awakening call for developers in the area to seek answers to more essential questions and needs, to create more culture and environment-oriented, and human-friendly alternatives to replace the architecture of spectacle and the face-lifting solutions [17]. Although the need for break-through architecture and seeking attention was still a necessity for the country's vision, references to the traditional elements and the local identity started to show more respect to originality and more attention was given to functional aspects rather than superficial ornamentation.

During the last decade, local developers like Meraas were able to break through the market with successful alternatives in this arena through a series of low rise developments, offering life-style oriented architecture. The qualitative manner in which this architecture has evolved was able to learn from precedent architectural practice while progressing towards the future.

On the functional side, shaded pedestrian outdoor and indoor walkways made a strong return in the new developments. Shading elements reflect the advancement in the construction industry, where local materials were replaced by modular manufactured ones (Fig. 6), which occasionally hosted cultural, artistic, or political messages through interactive display.

A new version of the double wall of air pullers, is recreated using light modular second skins which shade exterior walls, and likewise aim at reducing the heat effect on interior spaces, giving an opportunity to display colour, texture, or even art (Fig. 7). At a number of occasions, layered skins created buffer zones encouraging the re-introduction of outdoor walkability which has long been forgotten.

Although not all elements of environmental regulators made a functional come-back; but reflections of their figurative presence was strong, namely; the cubic volumes of barajeel (wind towers) which were mostly occupied by mechanical systems of service ladders, as all interior spaces are still fully air-conditioned.

Figure 6: Interior and exterior shading treatments at City Walk district. *(Source: Author.)*
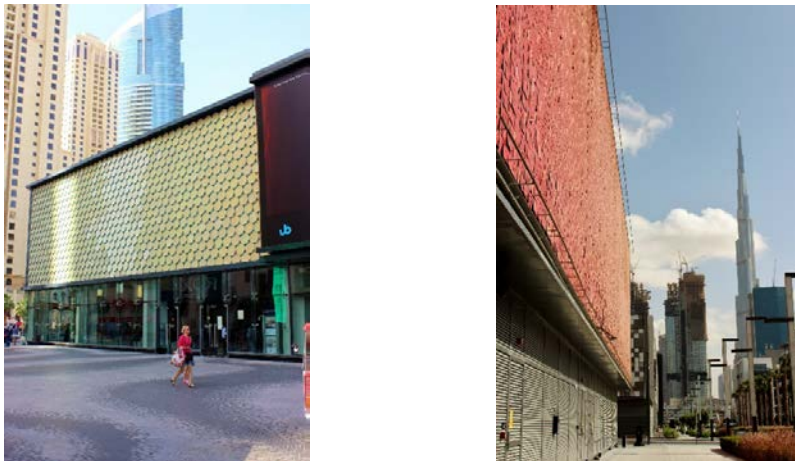

Figure 7: Second skins used to shade building facades at The Beach and City Walk districts, constructed using modular light metal elements. *(Source: Author.)*

Local materials were replaced by industrialized ones due to the implementation of new manufacturing and construction processes, which mostly produce repeating abstracted shapes or units (Fig. 8).

5 CONCLUSION

Dubai, the melting pot of the Middle East, was able in a relatively short period of time to experiment through its architectural journey, in search for its own local, visionary identity as the Muslim city of the future. Although, it presents to the world applications of different approaches to contemporaneity of Islamic architecture, it proves to learn from its own lessons.

Figure 8:   Inherited forms and masses replicating wind towers (barajeel) and self-shading volumes at Box Park District. *(Source: Author.)*

I believe that the city which experienced the losses caused by absolute modernity and abandonment of identity, and also learnt that pure heritagization, unarguably valuable, does not meet the contemporary needs of its diverse residents, the futuristic vision of its rulers, and the architectural anticipation it offers to the world.

Currently, Dubai is offering to the world a new model of functional form of resistance, bioclimatic hybridization, where it is attempting to provide contemporary architectural solutions, learn from traditional architecture, while regaining its Islamic identity, and overcoming the superficial, figurative narrative of the "Spectacle". This is taking place through the adaptation of state-of-the-art construction solutions, experimenting with new materials offered in the market, while revisiting the functional aspects of traditional, Islamic architectural solutions; so far this has been successful with shading elements, pedestrianization, building masses, and references to patterns inherited from this era.

However, this success, from my point of view, is incomplete. This journey still needs the intervention of new generations of local architects who are consciously informed with regional challenges, who prioritize the country's vision, and its Islamic local identity in their practice.

Another challenge is political; in origin, Islamic communities collectively made decisions regarding the built environment, in a bottom-up approach. However, in the case of Dubai it is made through a top-bottom decision making process by its visionary rulers. Despite the fact that community participation, and social sustainability is not in the scope of this paper, it is something which current stake-holders should be aiming at in order to ensure growth towards the Muslim city of the future.

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