

Analysis on the Formation Reasons for Traditional Urban Building Styles in Dubai

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ABSTRACT The paper indicates the traditional buildings in Dubai, analyzes the influential factors of the traditional urban building styles in Dubai from the local policies, natural environment, and religious culture, and indicates the reasons for the architectural styles in Dubai, so as to provide the reference experience for the building and exploration of modern buildings.

KEYWORDS

Buildings
Traditional style
Policies
Natural environment
Religious culture

1. Introduction

Ideological and cultural beliefs of Islam as well as geography, climate, social environment to adapt to the situation, is Dubai ancient building two very significant features. At the same time in the form of traditional buildings from different countries to settle the residents brought a variety of exotic style mash together. Dubai architectural elements are: parapet, pull windscreens, arcade, wind towers, pick balcony (India), and other decorations.

2. Governmental factors affecting on traditional style of architecture in Dubai

2.1. Incentives

Dubai government earlier use of oil revenues to build a number of residential houses, each housing with a variety of traditional Arabic architectural style for the style. To encourage residents to carry forward the traditional style in the construction of a house or villa, so expertise to provide low interest loans to a group. It is required to apply for low-interest with local traditional architectural design to the relevant government departments to review, in order to obtain loans. This makes the government of Dubai city architectural style nationalization thought to be implemented.

2.2. Protection policy

Apart from the Dubai government is committed to the modernization of the building, the building is also spared no effort to protect traditional style. In order to make Dubai building harmonious style, the government required the construction of commercial buildings and residential buildings citizens implementing government regulations issued by the relevant laws, according to the traditional architectural style of the design of new buildings to ensure the architectural style nationalization. Dubai city building, we saw drawn from traditional architectural elements and decorative arts inspiration into the modern architectural decoration, effectively preventing the city building Europeanization tendencies [1].

2.3. Future generations inherit traditional culture

In order to inherit the traditional national heritage, the Dubai government also repair monuments, rebuilt *Merck figure jose sheikh* palace, as well as restoration of the oldest Ahmadi and Dan Yier school bazaars.

3. Natural environmental factors affect the traditional architectural style of the city of Dubai

3.1. Geographical and climatic conditions

In order to adapt to the hot temperatures in Dubai, Dubai residents from the building and construction timber. The structure and layout of the space has emerged very strong local characteristics.

3.2. The use of local materials

Dubai building the presentation of the distinctive characteristics of local decoration, from the choice of ground material. Specific geographical, geological and local materials determines the texture, structure, form, color and other

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aspects of the building, and gives a unique local characteristics. (1) Palm tree. Dubai palm tree is the mother tree, its trunk dense texture, external hard inner soft, resistant to moisture corrosion, are preferred materials. Often used to make furniture, doors, walls and covering the skeleton building roofs. (2) Adobe. Because in the desert tropics, most readily available construction materials is the adobe. As Housing surface material or wall material, adobe has kept insulation and heat resistance and heat resistance, for indoor temperature regulation play an effective role in the non-often suitable dry climate, large temperature difference between day and night city of Dubai, while also showing earthen local specialties. (3) Gypsum and coral. Gypsum and coral are also local materials, it can better fire protection, before many wealthy people used as a material for building a house, and now people together based on years of experience, in order to fulfill the material characteristics and reasonable use of the building for each parts of the structural member.

3.3. Wind tower-the world's first air-conditioning

Dubai tropical desert, in the absence of air conditioning in the ancient era, locals clever exchanges with nature to create a wind tower. Wind tower is Di Baite some architectural elements, not only beautify the roof decoration, rich city day boundaries, also played a strong practical to adapt the mechanism Dubai climate.

3.4. The layout space

Most of the existing building in Dubai with an internal courtyard complex spatial layout, this space layout not only for general housing, it is also used in public buildings and religious buildings. Given the local dry climate is hot, sand is also large, the entire house was enclosed within a wall of high, so not only can withstand wind and other inclement weather outside, it can also block the sun exposure and heat radiation spread. This enclosed space modeling conducive to energy conservation [2]. (1) Living room layout. Top towering wind tower inlet air flow path formed, the living room is the main indoor activities, but it is also a gathering place for heat, air can pass through the heat away, as well as reduce the indoor temperature; ventilation and cooling played a good Effect. Because of the layout of the space closed, except for the top wind towers can be light. There are no external lighting holes, so the wind tower has good lighting effect, to meet people's needs. (2) Courtyard layout. Garden space is by the water space and shade into space group. For life in the arid desert of Dubai people who attach great importance to water and greenery, the garden trees vegetation outdoor space will be enveloped in the shade, not only block the sunlight also reduces the building's exterior temperature, while reducing the heat transfer. Courtyard pool and shade forming a natural air conditioning system, so that the ambient temperature drops, and play humidification to improve the surrounding

climate. (3) Loggia layout. Dubai is in the hot, dry climate is large temperature difference between morning and evening, so typical of building features Wai Yan Colonnade, only play traffic function also has a life function, because the loggia space is a transition from the indoor space to the outdoor space for locals. It provides a convenient and comfortable outdoor space.

4. In socio-religious factors on the Dubai city building traditional style

4.1. In local traditional culture

Traditional Culture religious influences performance impact on the building's centralized local habits and architectural modeling in. Different characteristics and habits of people living, reflected in the region form the contents of the building is different, so the formation of a distinctive architectural form, such as in the form of the door, in the form of windows, pool orientation settings, spatial layout.

4.2. In Islamic culture

Islamic architecture is an integral part of the Islamic culture. It is with India, China Eastern and said three construction building system.

4.2.1. Building space layout features

(1) Privacy. Private enclosed courtyard layout widely used in residential and public buildings not only because of improved indoor micro-climate, but also because the relevant provisions of Islam, when the local women to go out, to dress wrapped tightly in. Its privacy features in two areas: the relatively closed and completely closed. (2) Introversion [3]. Private property is one of theology in Muslim life, it is even more important by emphasizing the inherent nature of the layout reflects not reflected by the appearance. The use of the yard for Dubai locals, not only for protection, but also illustrates the dominant position in the Islamic architecture of the introverted characteristics.

4.2.2. Water space

In Islamic architecture culture, reflecting the people's yearning for water in dry weather environment, this is not only with the local natural environment inseparable from the city, but also religious and social inextricably associated. Christians need to water a "net ritual" express reverence Allah, in the city of Dubai in the building, almost all with a pond and fountain, forming a water space, which also need religion.

4.2.3. Shade space

Dubai indoor and outdoor courtyard like planting trees and flowers, this phenomenon has deep engraved social roots. "Quran" is mentioned: the state-owned eight days, seated on the seven days, is the long shade-covered oasis, very quiet and elegant environment. Private building exterior withstand the dust out of reality, seen it all over the

place the flowers, the grass, the trees, to the people to create a beautiful scene heaven, comfort living in dry and hot environment people's hearts.

4.2.4. Building exterior decoration

Islam in its religious teachings formed the architectural features. (1) Abstract special sign. "Allah is the only faith to dominate" —except Allah, anyone, God, he was not eligible to receive local Christians worship. This doctrine formed the strict rules, cannot appear figurative character or animal pattern decoration. "Koran" Allah reveals in the book about the Arabic language is to express, so the text has a huge development potential for a variety of decorative forms. So we have seen is a decorative mainstream line, shape, color planes of abstraction-based plant design, text form patterns. (2) Rich features. Islam considered later life are interrelated, and this life is reflected in the locals on the richness of architectural decoration, in their building, we almost could not find no decorative part of the roof painted, wooden doors, plaster board floral, stained glass and other decorative techniques and diverse, rich in content. (3) Inheritance and bearing borrowed characteristics. Buildings in Dubai, there are many decorative techniques come from the draw religious architecture. Arch is an important symbol of Islamic architecture, the arch appears with the materials and structure of an essential relationship. But now arch has lost the original structure and function, and simply as a decorative effect, thus further out of the important elements of Islamic decorative culture.

5. Conclusion

It is because of respect for traditional culture, adhere to its own national characteristics, combined with the local natural landscape and climate rational use of local materials and the perfect combination of modern materials, the traditional elements into modern buildings. Therefore, in Dubai city building, go anywhere know they are in the Arab world. It is well worth our reference, China has 56 ethnic groups, each ethnic region of natural climate, lifestyle, culture and so different, we can fully rational use of local resources, from local ethnic reasonably abandoned buildings and traditional elements and modern life combine to build and exploration of modern architecture.

Conflicts of interest

These authors have no conflicts of interest to declare.

Authors' contributions

These authors contributed equally to this work.

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