Analysis of Residential Design Concept from the Phenomenon of McMansion

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Abstract. McMansion is a phenomenon in architectural design, whose emergence can be attributed to socio-cultural development, folklore history, economic development, public psychology and other factors, thus being an inevitable phenomenon of social development as well as a miniature of society. By observing the phenomenon of McMansion, exploring its causes, and exposing its essence, we can summarize the principles that should be followed in the design of residential buildings, and contribute to the development of residential design to make it better meet people's needs. Drawing from lots of previous studies and cases, this article focuses on the study of McMansion, discusses the principles that should be followed in the overall design and individual design of residential buildings, and puts forward the idea that the design of the residential buildings should return to the essence of architectural design.

Keywords: McMansion, architectural design, residential design.

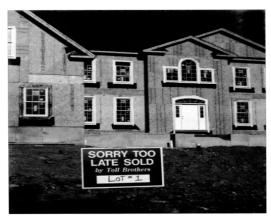
1. Introduction

Architectural design and planning is the art of beauty, whose beauty is reflected not only in the drawings but in the way a designer combines natural conditions for a building such as geographical location, geological conditions and natural environment, and its social conditions such as folk culture, economic development and urban planning so as to create a harmonious integration of nature and humanity and make architecture truly serve people's lives. Being a comprehensive discipline, architecture design is a miniature of the development of human history. Therefore, architectural design concepts keep changing along with the development of society. British aesthetician Robert L. Scranton proposed that architecture should be practical, regional, technical, overall effective and public, who also initiated architectural aesthetics. Later, the idea of architecture aesthetics is fully expressed in postmodern architectural aesthetics (functionalism, futurism, expressionism), and contemporary architectural aesthetics (anti-formal aesthetics, regional aesthetics, deconstructing architectural aesthetics, ecological architectural aesthetics) [1]. Through lots of literature review and case analysis, this article starts with the concept of architectural design, then analyzes the phenomenon of McMansion based on post-modern architectural aesthetics and deeply explores the reasons for this phenomenon, and finally puts forward the principles that should be followed in the design of residential buildings.

A McMansion is considered to be a grand house that violates the overall design principles of architecture, typical of which is the Western building shown in Figure 1. While some scholars of architectural design have put forward the concepts of McMansion from different perspectives, this article believes that McMansion has the following three characteristics. First, it is abrupt and exaggerated, not conforming to the holistic principle of architectural design. Second, it violates the principle of utility and excessively pursues luxury decoration at the cost of practical use. Third, it lacks principles for planning, and the building itself doesn't embody the characteristics of a specific region and can't be integrated into the overall urban planning. There are many McMansions with such characteristics, whose essence is no longer architecture. Instead, they become a symbol of wealth and identity, and may even be over-packaged consumer goods. It is undeniable that the emergence of this phenomenon is historically unavoidable. Taking Western countries as an example, the emergence of the royal families, the rise of the nobility, the accumulation of wealth, and the manifestation of social status lead people to pursue "fabulous and dreamy" living environment. However, all this has also created regions with one area having numerous grand houses and the other area full of slums, thus aggravating the imbalance of economic and social development.



Michelozzo (and Brunelleschi), Palazzo MediciRiccardi, Florence, begun 1445, Seen from the via Cayour



McMansion under construction, 2013 Westchester County, NY Fig 1. Examples of McMansion

Some scholars have criticized McMansions, who think that they run counter to the scientific nature of architecture but show subjective expression of the owner or designer of the house and the owner's own rights, status, wealth and personal aesthetic preferences. Ada Louise Huxtable expressed, "in the world of dream-house McMansions, the preferred style is Grotesquely Grandiose. Unencumbered by architects or accuracy, developers offer a mind-boggling mix of Rapunzel towers and pretend Palladian, Jacuzzis and surround-sound." Besides, other scholars believe that McMansions record and display history, truly reflecting the social realities and people's ideology at a specific time. This article believes that the phenomenon of McMansion is inevitable against certain stage of human and cultural development and caused by intricate anthropological reasons. However, in the context of contemporary society, the development and spread of this phenomenon is not advocated and the design of residential buildings should return to the essence of architectural design—providing conditions for more people to live safely and conveniently. Instead of its commercial value, the social and economic value of a building should be given priority in its design. In a word, true architecture should be in harmony with its surroundings, not being commercialized or wasting resources.

2. Reasons for the Phenomenon of McMansion

Some scholars in the field of architecture believe that McMansions waste evrionment resources, encourage irrational and lacish comsuption, broaden the income gap, and make people excessively pursue grand houses but dismiss affordable housing [2]. In modern society, there are still many people in the dilemma of solving housing problems and repaying housing loans. Emerging in Florence during the Renaissance, a McMansion is an architectural expression using a lot of exaggeration and symbolism. In comtemporary society, McMansions are still in large numbers. For

example, rural villas in the affluent areas of Jiangnan in China usually demonstrate wonderful aesthetic tastes by the combination of traditional Jiangnan style of dwellings such as hanging hills or hard-mountain roofs and traditional Chinese courtyards, baroque windows and doors and several Roman Ionic orders, and a pair of Chinese stone lions serving as the guardian. Although it is seemingly harmonious and beautiful, such mixation is actually a patchwork at its core. Huaxi Village in Jiangyin of Jiangsu Province, known as "the world's best village", gathers China's Tiananmen Square, the Great Wall and Wuting Bridge, the French Arc de Triomphe, the US Capitol, Australia's Sydney Opera House in its 35 square kilometers of land, becoming a famous hodgepodge of ancient and modern Chinese and foreign architecture. In addition, being a small region, it also boasts self-built Huaxi Golden Tower and various hotels with modern glass curtain walls for receving tourists [3]. In terms of its formality, Huaxi Village seems to conform to the "deconstructionist" thinking put forward by Jacques Derrida—logically negating the traditional basic design principles (aesthetics, mechanics, and function) and creating new meanings by reversing and reconstructing the relationship between existing vocabulary. Based on the concept of deconstruction, breaking, superimposing, reorganizing, individual, and the components themselves are emphasized. In other words, a sense of fragmentation and uncertainty is created by rejecting entity and unity. However, from the perspective of connotation, such mixation actually runs counter to the idea of eliminating authoritarianism in deconstruction [4].

This article summarizes the reasons for the emergence of the McMansion phenomenon from the four aspects, including design concept, social environment, public psychology and cultural customs. From the perspective of design concept, the aesthetics of architectural design has been given many excellent interpretations during its hundreds of years of development. The emphasis and core of many design concepts are different and later the interpretation of design ideas varies from person to person. For example, Walter Gropius, representing the Bauhaus school in modernism, advocated the "new unification of art and technology" in 1923. Ludwig Mies Van der Rohe believes that the modernist design is characterised by "Less is more" [5], meaning that the appearance of architecture should be expressed by simple geometric lines. This concept was proposed based on the technological development and cost-effective requirements of the industrial era. As for the postmodernist concept, American architect Robert Venturi mentioned in his masterpiece The Complexity and Contradiction of Architecture that "I love the complexity and contradiction of architecture...This complex and contradictory architecture is underpinned by the rich and uncertain modern experience and the inherent experience of art." [6]. Robert Stern, repreentative of postmodern architecture, summarizes postmodern architecture as "Contextualism, Allusionism, and Arnamentation"[7]. It can be seen that the essence of post-modern architecture is to restore the historical connection cut off by modernism. Besides, post-modernism calls for the return of multi-dimensional expression of traditional culture in architecture, and the return of human-centered instead of machine-centered design in terms of nature and ecology. This is also a selective return, that is, drawing on traditional culture as a source of inspiration for architectural art to get rid of the monotonous "cubic box" style created by modernist architecture. As for China, the influx of modernism and Western ideas reached the peak of modern times in the 1980s. On the one hand, Chinese people came to know these new theories. On the other hand, too many theories were introduced at the same time hardly enabled people to have enough time to truly undersatnd each of them, thus leading to a large number of McMansions.

However, in real life, people are likely to interpret the modern as a simple style mainly composed of lines and the post-modern architectural design concept as formalism and decorativeism. In fact, this is not the case. There are connotations or applicable conditions behind each architectural design concept or style. However, people's neglect of this connotation or condition will lead to deviations in the design of certain architecture. The development of any thing is inseparable from the changes in the social environment and economoic development, so is the design of buildings or houses. Since people in the Renaissance age had different standards for aesthetics, they prefered some different types of architecture. Therefore, buildings and houses are the products of different social backgrounds and economic development. The change in social

wealth will also bring about the change of people's aesthetic preferences. In other words, McMansions are products appearing in different social environments. For architects, if the design concept, social environment, and economic conditions are objective factors, the owner of a building or house is a more complex subjective factor. Different people in the society have different perceptions of residential houses. Some people think that a house is just a house, and people only have the right to use it; some people think that a house is a symbol of status, identity and wealth; some believe that a house represents the quality of life and their living environment demonstrates their living standards, their pursuit of life, the state of life and their tastes; some other believe that from the perspective of economics, the essence of a house is a commodity used for exchange and the complexity and luxury of its construction directly affect its value and price. Therefore it can be seen that the different needs of different people for houses play a sigificant role in the appearance of McMansions. Behind this demand is people's recognition of their social roles, status, and social identities. In China, some parvenus excessively pursue grand houses due to the psychology of "showing off" "bringing honer to the family", and "worshiping foreign goods or ideas". Driven by the benefits related to political achievements, commercial opportunities and business profits, some government staff or commercial organizations blindly cater to the aesthetic taste for grand houses of the public at the cost to the economy and utility of houses, encourging the pursuit of McMansions by use of unconventional and strange promotion. In addition to being influenced by time, everyone's life is also affected by regional culture embodied in local folk customs or culture. And such long-established ideology, religious beliefs, cultural customes play an indispensable role in the design of buildings and houses. This is because it is easy for people to embody their beliefs and customs in the environment where they live and this embodiment can hardly be changed.

In summary, the phenomenon of McMansion is caused by many complicated factors, which is result of the interaction between objective environment and subjective consciousness. Howeve, dialectical perspective will help people better understand the history of architecture, and properly apply it in the design of residential buildings.

3. Principles Should be Followed in the Design of Residential Buildings

The design of the residential building involves individual and overall differences. The overall construction of residential buildings often forms a village or a community, which needs to take into account the overall planning of the architectural style so as to ensure that the buildings can be integrated with their surrounding environment. It is also necessary to well consider the appropriateness of the spatial layout, the lighting of the house, the density and height of the house, and the orientation of the house, which will affect the comfort level of housing. Besides, the design of public space also needs to be emphasized, which requires careful calculation and consideration in the overall planning. Since social and economic development has achieved a relatively high level in recent years, people's demand for public space is gradually increasing, such as parking space, leisure activity space and even space for entertainment facilities. In the design of some Chinese residential communities, public space and proper layout are neglected due to the excessive pursuit of the number of houses built. This design results in excessive density between houses and squeezed public space, thus creating a compact and tense feeling. The sustainability of an architectural design, being a conservative and eco-friendly design concept, is mainly reflected in the selection of construction materials and the consideration for the future development of a residential community. The construction of residential communities will change with the development of society. Although the design or construction of a residential community just lasts for a certain period, the finished residential community will exist and develop for quite a long time. Therefore, the design of a community should take into full account its future development or change with a long-term, sustainable perspective. A residential community cannot be separated from its surrounding environment, transportation, and infrastructure. Therefore, in the design of residential buildings, it is also necessary to pay attention to interacting with various factors in the region. Specifically, the interaction with the residents can make the design of the houses more people-centered; the

interaction with regional culture helps the community keep local cultural and folk specialties because this rich and meaningful cultural trait proves that this community is not simply a copied and pasted architectural design; and the interaction with traffic or commercial facilities can make it more convenient for the residents living here. Therefore, interactivity is a vivid manifestation of regional and convenience in the design of residential buildings. In China, the design of residential houses currently more refers to the transformation and restoration of rural villages or old communities, which mainly serve low- and middle-income residents. For instance, based on traditional settlements, the restoration of village houses in Zhejiang Province keeps its traditional settlement landscape and enriches the settlement space by constructing various community forms. Changes in the community are diverse, including change in size, change in unit type, and change in community plane combinations as shown in Figure 2, all of which result in good balance between houses. It can be seen from Figure 3 that the planning of the Xinmin Residential Community in Huanxi Village combines settlement landscape and group space, and integrate nature and humanity, convenience of accommodation, economy and utility, thus reflecting the economic and practical principles of architectural design.

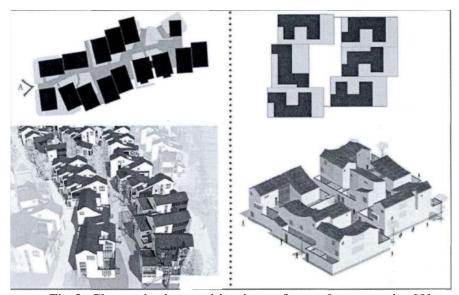


Fig 2. Change in the combinations of a rural community [8]

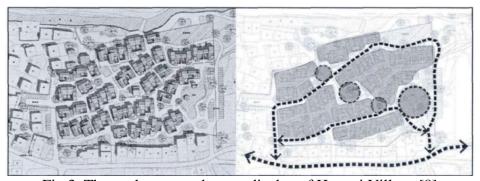


Fig 3. The settlement and space display of Huanxi Village [8]

The design of residential communities should pay attention to both the overall and the individual planning, that is, the design of each house. This article believes that the design of each house should follow the principles of safety, comfort, convenience, utility and economy. Among them, safety is the bottom line and red line of architectural design and construction, which is the most basic and most important principle that can't be violated. Since each house is related to the safety of the occupants' life and property, the safety principle is the first principle that should be followed. Comfort and convenience demonstrate the humanization of a house. Although houses are defined as goods in economics, the selection of houses is also the selection about settling down for most

people. Therefore, a house is the synonym for a home. The Chinese have attached great importance to "home" since ancient times, which represents comfort and warmth. This is way the design featuring comfort and convenience usually causes the emotional resonance of the occupants. The principles of utility and economy mean that a design doesn't excessively pursue a complex, grandiose, and luxurious style, or regard a house as a symbol of wealth. Instead, these two principles regard a house as a necessity of people's life and focus on reducing cost and pursuing higher practical value in design and construction.

4. Summary

Taking the phenomenon of McMansion as an example, this paper discusses the principles that should be followed in the design of residential buildings and proposes the concept that the planning and design of residential buildings should return to the essence of architecture itself and be carried out with scientific and rigorous attitudes. It suggests letting professionals do the professional job, reducing the impact of profit-seeking on architectural design, enabling architecture, besides being a mirror of social history, to get better inheritance and development on the basis of achieving economic and social values, and returning architectural design to rationality and science. Finally, architectural design and planning require rational attitudes and perspective, as well as humanistic care and warmth. Only by combining rationality with humanities can architectural planning and design be on the right track and better reflect the feelings and values of architecture.

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