

# Research on Architectural Design Thinking Innovation

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**ABSTRACT** Architectural design thinking innovation is the innovative thinking activities of inside and outside area of building, in order to meet the daily life and entertainment needs. With the development of economy, people have increasingly high design requirements for the building, which requires designers to improve their innovative thinking and ability of aestheticism. It continually innovate and inspire talent during the building design, and combine the theory and actual situation, in order to develop the new realm of architectural design work. This paper will mainly analyze and discuss the architectural design innovation thinking.

## KEYWORDS

Architectural design  
Innovative thinking  
Modern building

## 1. Introduction

With the advent of the information society, “innovation” has become the term that increasingly widespread used. Innovation is the basis of the information society, and it is also a source of national progress and prosperity. Innovation has become the clarion call of the times, serve as the key for the development of individual, in taking off of companies, prosperity of the state and national revival. The objective of building design is to achieve a variety of end products of facilities, environment and others of building group, buildings and the entire area. When faced a very complex project, solving the problem in time required a very high demand of innovation, therefore, innovative architectural thinking plays an irreplaceable role in architecture. Especially for today’s informatization and globalization world, if an architect lack innovation, he will be at a disadvantage in a competitive market environment [1].

## 2. The embodiment of architectural design innovation thinking

Architectural design innovation thinking does not mean something new; in reality, each architect wants their ar-

chitectural design posed a distinct personality and characteristics which able to catch the eye, but that does not mean the strange idea is innovation. Innovation should be reflected in the combination of traditional architectural art and modern architecture art, architectural design and urban development, combination with the local regional culture when designing an architecture, and improvement of the culture, function, layout of design work.

### 2.1. The traditional culture and modern architectural design

Traditional culture is the national culture which reflects national character and style formed by the history of the evolution of nature, is the overall characterization of various ideologies, cultures, ideology of the national history. China is one of the four ancient civilizations, has a colorful traditional architecture art and brilliant achievements. The application of traditional culture in modern building design is a kind of innovative ideas for architectural design, but also a social and historical culture.

Although many people apply traditional culture in modern architectural design nowadays, but inevitably there is blunt combination, resulting in a lack of modern sense of space. Even some people simply place the traditional architectural symbol on a modern building. We shall take a positive attitude to accept the essence of traditional classical architecture, and consider Architectural Design Innovation as the standards of modern architectural design. For example, the Fragrant Hill Hotel building not only uses the traditional culture, but also reflects the characteristics of modern architecture. Its natural environment is elegant, quiet, and has a lot of historical relics, is able to represent

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the traditional Chinese classical characteristics. At the same time, it also applies Chinese classical gardens construction method, and use the elegant tone mainly used by southern gardens in color selection [2].

## **2.2. Combination of architectural design and environment**

Modern architectural design does not exist in isolation. As the architect, they must pay attention to the impact of external place and environment on the overall aesthetics of building, which must be taken into account in the design concept. Attention to the environment coordination in architectural design is an important manifestation and the most important part of architectural design innovation thinking. The combination of architecture and the surrounding environment is an art. However, this artwork is not perfect, it reminds us the importance of environmental quality. Pay attention to the relationship between architecture and the environment, find a balance point in which, so that our living environment will achieve sustainable development. The combination of architectural form design and environment form will reflect the logic law of building's inherent unity and harmony. Therefore, the modern building design should respect the integrity and diversity of environment, at the same time, the architecture and environment are combined and integrated to a whole, in order to create the overall artistic image. This is an important manifestation of new aesthetic concepts of modern architecture, and also the fully respect and recognition of modern architectural design for the urban context and environment arts.

## **2.3. Architectural design reflects the humanistic spirit**

Humanistic spirit embodied in architectural design mainly refers to the people-oriented practical purposes. Humane care manifests as humanized design in the architectural design that more convenient, more humanized indoor and outdoor environment, thus serve as an important goal of architect's thinking innovation. In the contemporary information society, fast-paced work and life makes people feel pressure. People are eager to get more personalized care in a public space and even more relaxed and comfortable feelings in private space of family life. These require designers to embody humanistic spirit in the process of innovative thinking.

## **3. Process of architectural design innovation thinking**

### **3.1. The preparation phase**

This process is primarily to investigate the innovation object. The main innovation thinking has been identified as an important issue to be resolved, gather information and try to make it systematic and generalized. At the same time, begin try to find new solutions and methods, but these methods are often impractical, hence the solving of problems crunch to a standstill. The main contents of this

process is construction plan, and the architect gradually go into the designer role, that begin to focus on digesting and understanding project mission statement. Besides that, investigation of the design goals, in order to grasp and understand the various related objective situation and the preparation before completing external conditions, which is the necessary procedure to process and load external information. The data should at least include: urban planning requirements, natural conditions, user requirements, the municipal environment, engineering economy estimates basis, special requirements, cultural background and historical and cultural features of the proposed building, etc. All the seemingly unimportant information of this stage will bring valuable design results. Once we notice the tiny valuable information during the initial design, innovative thinking will be quickly stimulated, then ideas will begin [3].

### **3.2. The conceptual stage**

Conceptual stage is divided into the blueprint stage and clear stage, a lot of good architectural design is done at this stage.

The blueprint stage corresponds to the first half of architectural design concept, the main target is to select information and pose design issue. At this stage, the architects' thinking characteristic should be more rational. The main aspects are often recording, procedural thinking, summative, and conclusive logical thinking. Selection of information is made in an incomplete information state, as the logical thinking of this time is conducive to the rational choice of designer. Clear phase corresponds to the ending of architectural concept design, in which architect was suddenly moved by a particular enlightenment under special circumstances, and a sense of innovation is generated suddenly. At this time, there is often likely to produce better architectural works. Clear stage has strong emotions and can change more obviously, this change of mood is produced in an instant, and it is a strong, sudden, that may give the architect a great stimulus.

### **3.3. The perfection stage**

This phase is designed to test whether the program was correct. After the construction program has determine the basic idea, which taking into account the various problems of environmental factors, cultural factors and others described above. These make final adjustments to the design to make architectural design tend to be more aesthetic, and the next project is closely linked to this stage, we should pay particular attention to the comprehensive considering of some technical issues. As this stage should combine to each profession closely, even if some issues are not resolved, there will be negative for the entire design concept [4].

## **4. Conclusion**

The architectural design thinking innovation methods and

innovative process in this paper will help people's thinking of the building innovation design rises from perceptual cognition to rational cognition, and have a huge help for architects to realize innovative architectural design, rationally use of innovative methods, and prevent from entering misunderstanding.

The study of definition and methods of building innovation design cannot be achieved overnight; the same as the development history of innovation, it need to sum up new definition, new ideas, in order to increase building innovation design's forward-looking and times.

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