

# The combination of architectural design and urban planning

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**Abstract:** In the process of urban planning in our country, the design of architectural project always plays an important role. At the same time, in the design stage, urban planning is also a component that can not be ignored. It will not only affect people's quality of life, but also contribute to urban development and economic growth. However, in order to realize the organic integration of the two, there are still many practical problems to be solved in operation. This paper gives a brief overview of architectural design and urban planning and their correlation, focusing on the analysis of the combination of the two strategies, so as to provide reference and reference for relevant personnel.

**Keywords:** architectural design, Urban planning, unite

## 1. Introduction

At present, with our country entering the new era comprehensively, in the process of our the value of urban planning and architectural design gradually highlights. Therefore, in the design, the focus should be on the development direction of the city, with the help of professional technical means, to enhance the synergy and consistency of the two sides. In recent years, with the influx of large of rural residents, there are more obvious risks such as shortage of housing resources and pollution inside the city. In order to fundamentally solve such problems, we should use scientific methods to combine architectural design and urban planning to create high-quality living space for residents.

## 2. Overview of urban planning and architectural design

### 2.1 Urban planning

In the development process of our country, the planning and construction of cities are usually the more important part. As it is related to the strategic layout of the country, it should focus on the actual situation at the present stage, combined with the background of The Times, deeply consider the of residents, and realize the reasonable allocation of limited resources. The completion of the above operations can not only fundamentally adjust the overall division of the city, strengthen the application efficiency of resources, provide convenient conditions for people's production and life, but also build a healthy and stable living space to meet the subjective needs of residents. In the planning stage of the the main road construction, landscape design, pipeline line planning, etc., the above links are the main content of urban planning. With the progress of science and technology, traditional public buildings long been out of line with the current era. In order to reduce the possibility of risk problems and the prosperous operation of the city, the architectural design scheme should be improved and updated according to the current situation to lay a solid foundation for urban development <sup>[1]</sup>. In addition, in the actual application process, it is necessary to use the correct way to improve the application efficiency urban resources in an all-round way, control the height and distance of buildings within a reasonable range, and comprehensively analyze the geological environment of the region. In addition, it is more necessary to conduct in-depth analysis of the human environment, geographical status, the overall structure of existing buildings, and the internal atmosphere of the city in the region, effectively meet people's subjective needs, improve people's quality of life, and provide benefits for work and and implement effective planning of urban space.

## **2.2 Architectural design**

Up to now, in the planning process of the city, with the passage of time, various construction projects have been erected. In the new era, related industries are also facing new development opportunities. According to the analysis of previous experience, the more important link in architectural design is to use scientific and technological means to improve the timeliness of architectural project design based on internal structure, performance, main features and other contents. In addition, in the actual operation stage, we should also carry out in-depth discussion on the hidden problems that may exist in it. Using the above steps, after the completion of the field visit, the staff can develop scientific and reasonable engineering drawings that meet people's subjective needs. Based on the analysis of previous experience, it can be seen that in the process of architectural design, the main characteristics of the project are the content that relevant personnel need to pay attention to <sup>[2]</sup>. In the new era, with the rapid growth of the national economy, while the material world has been fully satisfied, people's attention to the spiritual world has gradually increased. At the same time, the spatial layout of the building project has also been highly valued by the community. Because of the close relationship between internal architecture, performance and efficiency of use, it is also important for staff to be aware of the risks that may arise during the building design phase.

## **3. The relationship between architectural design and urban planning**

### **3.1 Differences**

Practice shows that there are strong differences between urban planning and architectural design, and there are some differences in the application standards of the two.

First, in the construction phase of the city, the relevant departments have already formulated clear operating rules for it, resulting in the application process, greatly reducing the difficulty of operation. On the contrary, although different architectural designs have strong commonality and interactivity, the main structure is relatively simple, and the staff should focus on specific architectural projects and carry out partial optimization and update under the main urban framework, fundamentally showing the use performance and construction significance of architectural projects. It can be seen that in the process of architectural design, the staff should have a strong knowledge reserve to ensure that the construction project can be completed within the predetermined time period.

Second, the concepts of urban planning and architectural design are also different. Among them, the key content of urban planning is the development direction of the city. To this end, the staff should take the relevant links as the entry point, and formulate scientific construction plans based on the current situation of the city, so as to ensure that the city can always be in a stable development mode and meet the subjective demands of residents. Similarly, in the process of architectural design, compared with modern architectural projects, their own strategic concepts are more idealized. In the traditional sense, staff usually need to consider the weaknesses of the architectural projects on the basis of the original. In other words, improving the overall structure of the construction project can achieve the established work objectives <sup>[3]</sup>.

Third, in the process of design, the two are also different. Compared with architectural design, urban planning requires a lot of time and economic cost. On the contrary, when designing buildings, the staff often only need to use professional mechanical devices to present the drawings in front of people.

### **3.2 Guidance and restraint**

Up to now, urban planning has a strong guiding and binding effect on architectural design to a certain extent. In the architectural design, urban planning can give it a certain strategic guidance. In addition, in the design stage of landscape projects and civil buildings, urban planning has important practical significance. To this end, the staff must not only complete the adjustment of the internal structure and development direction of the city, but also help the economic growth rate and environmental improvement in the actual operation process, and lay a solid foundation for the subsequent urban construction. In other words, in the process of urban planning and construction, architectural design is a more important part. The formulation of scientific and reasonable planning schemes is conducive to adjusting the spatial structure of the city and meeting the construction needs of the project. However, urban planning also has a strong influence on architectural design. In the

development stage of the city, the architectural structure is a prominent feature, and in the planning stage of the city, it also has a strong practical significance. Even so, in the actual planning stage, the staff should adhere to the correct ideas and concepts in the architectural design, and should not only rely on personal subjective assumptions, so as to avoid the risk of running counter to the theory and practice in the process of urban construction. In addition, since architectural design is the focus of urban planning, it should focus on the current era background, understand people's requirements, optimize the external and internal spatial structure of the building, rationally divide the functional main body, and help the stable operation of the city.

#### **4. The integration strategy of urban planning and architectural design**

##### ***4.1 Improving the review mechanism***

In the preliminary preparation stage of the project, when the design of the construction plan is completed, in order to achieve the effective application of the scheme, it should be transferred to a third party for trial. To this end, the industry should develop a complete audit mechanism. To this end, the staff should use advanced science and technology to strengthen the timeliness and stability of the audit mechanism to ensure that the established program can be applied in practice. It can be seen that in the process of urban planning, the overall quality of the building scheme is the link that relevant personnel need to focus on, which can effectively improve the construction efficiency and application life of the project. First of all, in the formulation of the audit mechanism, a strong directional conclusion should be made on the urban planning scheme to determine whether the architectural design level can meet the requirements, so as to strengthen the overall level of urban planning. Secondly, in the stage of urban construction, scientific methods should be used to realize the organic integration of tradition and modernity, and in-depth discussions should be carried out according to the status quo and development prospects of the city, so as to ensure that the construction project can effectively present the cultural environment of the region, so as to promote the high-level operation of the city. Finally, we should use scientific and technological means to optimize and improve the evaluation mechanism of architectural design, realize the deep combination of urban planning and architectural design, and make full preparations for the subsequent urban development.

##### ***4.2 Realize design collaboration***

In the process of building design, the staff can use urban planning as a reference. At the same time, urban planning is the embodiment of architectural design. It can be seen that there is a certain correlation between urban planning and architectural design. Therefore, in the actual operation stage, we should attach great importance to the cooperation between the two sides. In this way, it can not only achieve the perfect interpretation of the program, but also effectively promote the stable development of the city. First, the introduction of scientific and technical means in the design stage of the architectural scheme. With our country entering the science and technology era, optimizing the spatial layout of the city has strong practical significance. Therefore, in the architectural design, the uniqueness of the structure should be enhanced based on the planning direction of the city<sup>[4]</sup>. Second, focus on the internal structure of the city, in the architectural design stage, fully combined with relevant content, formulate a plan that meets the standard, strengthen the scientific nature of urban planning. Due to the relatively large coverage area of urban planning, it is not necessary to pay too much attention to the planning work of the internal structure of the city, but also to comprehensively explore the human environment and geological structure of the region, take a longer view, and highlight different levels of planning. Third, due to the strong particularity of the city itself, it is necessary to formulate a directional plan based on its main characteristics, deeply consider the significance of the existence of different regions within the city, enhance the synergy and stability of the structure, highlight the value of the existence of relevant structures, and present the main characteristics of the city and the cultural environment of the region to people. Realize the coordination and complementarity of various types of environment, reduce the possibility of risk problems, strictly prevent the excessive consumption of resources, show the diversification of architectural structure, and enhance the coordination degree of architectural design and urban planning.

##### ***4.3 Control design direction***

In the interior of the city, architectural projects are not only a part of the cultural landscape that

cannot be ignored, but also can present the cultural heritage of the city to people in an all-round way. It can be seen that it can not only improve the aesthetic degree of urban environment, but also has far-reaching practical significance. First of all, in the architectural design stage, we should use a scientific way to control the development trend of urban planning and architectural design, improve the consistency of the two, and highlight the main characteristics of the city. Secondly, in the actual operation stage, due to the uneven level of personnel within the team, a few designers fail to understand the local characteristics in advance, and often regard the construction project as a single existing project. It will not only cause the main style of the building and the city to deviate from each other, but also may lead to unnecessary risks. Therefore, in the design stage of the project, it should be based on the development direction and strategic layout of the city, and make full use of the local cultural heritage and ecological environment to enhance the coordination of the scheme. In this way, relevant personnel can clarify the specific direction of architectural design and improve the overall level of architectural design.

Although urban planning and architectural design do not interfere with each other, there is a certain correlation between them. To this end, the staff should also be combined with the current actual situation to carry out a deep analysis. First, learn from the experience and lessons of western countries, apply advanced technical means, and carry out architectural design and urban planning simultaneously. The completion of the above links can not only effectively promote the high-level development of the city. It can also realize the rational use of architectural design scheme. Second, although at this stage, in the process of combining the two, there are still more risk problems to be solved, compared with developed countries, China is still in the initial stage. Even so, with the passage of time, with the positive pioneering spirit, it is also conducive to the full integration of urban planning and architectural design. The in-depth analysis of the communication between the two sides can provide convenient conditions for the urban development of our country.

#### ***4.4 Pay attention to design needs***

In the process of architectural design, relevant personnel should not focus their attention on urban planning and pay too much attention to the integration of urban construction. The key to the implementation of architectural project design is to create a high-quality living environment for people, so as to promote the stable development of the city. The construction link is regarded as an important part of urban planning, so as to achieve the perfect embodiment of architectural design. Therefore, in order to realize the coordinated development of urban construction and architectural projects, designers should apply advanced technical means according to the subjective needs of project owners, avoid conflicts between the two, and meet people's demands for life.

#### ***4.5 Master the connotation of the plan***

Entering the planning stage of the city, in the early preparation work, the project designer should have a comprehensive understanding of the information related to the project and make clear the future development direction of the city. With the continuous influx of rural labor into urban areas, the per capita area of the city is shrinking. For this reason, if the relevant personnel do not increase the level of fidelity to such issues, the design of plans and drawings may deviate from the reality, and fail to ensure that the city can always maintain a stable development situation. In the actual operation process, we should always adhere to the scientific concept, actively carry out in-depth exchanges with staff at all levels, clarify the application direction and storage capacity of various resources, improve the scientific design scheme and planning method, and apply the relevant content to the actual place. In addition, the staff should make use of their own knowledge reserves to realize the deep integration of urban volume and existing resources. During the design process, the internal environment, cultural heritage and development direction of the city should be integrated into one. On the existing basis, the technical optimization should be completed to meet the development needs of the city and lay a solid foundation for the subsequent project construction.

#### ***4.6 Organic integration of tradition and modernity***

As an ancient civilization with five thousand years of cultural deposits, our country has profound cultural deposits in the long history of thousands of years. To this end, entering a new development cycle, in the planning stage of the city, the staff should also skillfully use all kinds of cultural symbols, and apply them to the building structure, internal structure, building materials selection and other links.

Among them, in the design stage of the external structure of the building, relevant personnel can use elements with Chinese culture to realize the organic integration of tradition and modernity [5]. For example, in the design stage of landscape architecture, the elements of Chinese houses can be introduced. In addition, we can also actively use all kinds of traditional building materials, such as jutile, black brick and other materials, and integrate them into modern buildings. In this way, it can not only highlight the rich cultural connotation of the Chinese nation, but also realize the deep combination of architectural design and urban planning. In the process of interior decoration, the use of totems, textures and other ancient symbols, the application of traditional techniques, the expression of modern elements, enhance the ornamental value of the building structure, bring people the ultimate visual enjoyment, enhance the artistic connotation of architectural design.

## 5. Conclusion

In summary, with the continuous improvement of economic growth, the efficiency of urban construction also shows an upward trend. In order to promote the deep integration of urban planning and architectural design, in the process of scheme design, the relevant departments should formulate and optimize the evaluation mechanism to enhance the authority and professionalism of the evaluation. In addition, the spatial division within the city should be implemented according to the actual situation to highlight the functionality of different areas. Always adhere to the scientific development strategy, complete the reasonable allocation of resources, strengthen the design level at the same time, lay a solid foundation for urban planning.

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