# Planning and reconstruction of the old city in the future

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**Abstract.** With the acceleration of urbanization, the renovation planning and renovation of old urban areas have become an important issue. This article conducts an in-depth analysis of a case study on the renovation and planning of an old urban area in China, exploring how to achieve modernisation and sustainable development of the old urban area while preserving its historical and cultural heritage This article adopts a case study method, selects typical cities as research objects, deeply analyses the practical process, effectiveness, and challenges of urban renovation planning and old house reconstruction, and proposes corresponding strategic suggestions. Through detailed analysis and comparison of the case, the aim is to provide useful reference and guidance for other cities in terms of renovation planning and old house reconstruction.

Keywords: component, urban renovation planning, old house reconstruction, urbanization

#### 1. Introduction

The old urban area, as a symbol of the city's history and culture, carries rich historical memories and cultural heritage. However, with the changes of the times and the development of urbanization, problems such as ageing facilities and environmental degradation in old urban areas have gradually become prominent. How to achieve modernization and sustainable development of old urban areas while protecting historical and cultural heritage has become a focus of attention for urban planners and scholars. Heritage is the contemporary usage of a past and is consciously shaped by history, its survivals and memories, in response to current needs for it. If these needs and consequent roles of heritage, whether for the political legitimacy of governments, for social and ethnic cohesion, for individual identification with places and groups, or for the provision of economic resources in heritage industries change rapidly, then clearly this paper expects the content and management of that heritage to do likewise. The uses made of heritage are drastically changing but so also is the way that heritage is currently managed. What is happening, as well as how is however uncertain and investigated here. The revolutionary eradication of a rejected past, a return to some previous pasts or the beginnings of a new passed in the service of a new present are all possibilities. Answers are sought to these questions through the examination of a selection of cases of types of heritage cities and their management in the region. Heritage is the contemporary usage of a past and is consciously shaped by history, its survivals and memories, in response to current needs for it [1].

# 2. Case Analysis

### 2.1. Research Background

This article selects old urban areas in China as a research case. This old urban area has a history of thousands of years, rich historical and cultural heritage, and unique architectural styles. However, with the development of cities, problems such as ageing facilities, traffic congestion, and dirty and disorderly environments in the old urban areas are becoming increasingly serious, which restricts the further development of the old urban areas.

#### 2.2. Important Factors in Urban Planning and Reconstruction

Cultural Heritage: How to preserve and inherit the historical and cultural heritage of the city in reconstruction, and avoid cultural loss.

Ecological balance; How to ensure urban development while ensuring that the ecological environment is not damaged, and achieve harmonious coexistence between humans and nature.

Social Harmony: How to ensure that the rights and interests of residents are not violated during the reconstruction process, and achieve social stability and harmony [2].

Sustainable Development: During the renovation process, planners also fully considered the sustainable development of the old urban area. By introducing green buildings and green transportation systems, as well as promoting measures such as energy conservation and emission reduction, the old urban area will become more environmentally friendly, energy-efficient, and sustainable after renovation.

#### 3. Some Specific Cases

The bund, as a landmark area of Shanghai, has undergone multiple reconstructions. During the reconstruction process, Shanghai emphasized cultural inheritance and ecological balance. By preserving historical buildings and increasing the reconstruction protests for green spaces, a win-win situation between culture and ecology has been achieved. However, in terms of social harmony, the reconstruction of the Bund has also faced opposition and protests from residents. This is mainly due to improper handling of issues such as demolition and resettlement during the reconstruction process [3].

# 4. Beijing 798 Art District Reconstruction Case

The transformation of Beijing 798 Art District from an abandoned industrial park to a creative and vibrant art district is a successful case of urban reconstruction. During the reconstruction process, the 798 Art District focused on cultural inheritance and social harmony. By preserving the original architecture, and introducing artists and creative industries, cultural inheritance and innovation have been achieved. At the same time, through reasonable planning and management, the rights and interests of residents are not infringed upon, and social harmony and stability are achieved [4].

So, in these cases, this paper can easily find that renovation and reconstruction are very important for a city's development. It will make the city better. In the context of national spatial planning, the renovation and renovation of old cities should be mainly based on the actual living needs of residents, with the basic goal of creating a higher quality and level of living environment for urban residents. This will play an auxiliary role in promoting urban economic development and increasing consumer demand, thus achieving optimization and improvement of the overall old city renovation planning and design scheme. When planning and designing the renovation of old cities, value creation should be achieved while minimizing investment, and a living environment that is suitable for the current development characteristics should be created to ensure the transformed urban area. Enhanced the functionality of its architecture, laying a solid foundation for improving the quality of life for residents

In the specific implementation process of urban renewal, it is necessary to strictly adhere to the basic principle of "integrity", emphasizing the integration with regional characteristics. When creating forms and designing content, it is necessary to combine the style and characteristics of local architecture, with a focus on designing distinctive residential forms. Based on this, various existing

materials should be fully utilized to comprehensively consider and analyze them, making them a holistic and unified architectural style [5].

Ensure the rationality of architectural spatial layout. In the process of urban renewal, for certain spaces that must be updated, if the surrounding areas have special requirements for landscape visual corridors, then special attention should be paid to the updated interface of that area; And it is necessary to control the actual planning and design closely, ensuring that the original prominent characteristics can still be maintained after renovation and design. This requires relevant personnel to use the original layout form as the basis and appropriate concepts in specific planning and design work. In areas where complete modifications are required, appropriate measures such as reconstruction or direct demolition should be taken based on local conditions and needs. The overall style, layout, and volume of newly built buildings and facilities should be designed based on the surrounding natural environment to ensure harmony

#### 5. Comparison of Case Studied between Changsha City and Hengyang City

As a cultural city with a long history, Changsha City is facing problems such as ageing old urban areas and outdated infrastructure. In recent years, the Changsha Municipal Government has actively promoted urban renovation planning and old house reconstruction projects. In terms of planning strategy, Changsha City pays attention to protecting the historical and cultural landscape, and repairs and protects buildings with historical value; At the same time, optimises urban spatial layout, improves infrastructure, and enhances the quality of life of residents. In the implementation process, the government plays a leading role, integrates resources from all parties, and forms a joint force; At the same time, it introduces market mechanisms to attract social capital to participate in urban construction; Emphasizes public participation and widely solicits opinions from residents. After several years of efforts, the urban renovation plan and reconstruction of old houses in Changsha City have achieved significant results, giving the city a completely new appearance and significantly improving the quality of life for residents. However, in practice, there are also challenges such as funding shortages and difficulties in demolition [6].

Hengyang City, as a rapidly developing emerging city, is facing problems such as unreasonable urban spatial layout and lagging infrastructure. To promote the sustainable development of the city, the Hengyang City Government has implemented urban renovation plans and old house reconstruction projects. In terms of planning strategy, Hengyang City focuses on optimizing the layout of urban space and enhancing the rationality of urban functional zoning; At the same time, increases investment in infrastructure and improves the living conditions of residents. During the implementation process, the Hengyang Municipal Government focuses on introducing market mechanisms to attract social capital to participate in urban construction; At the same time, strengthen government supervision to ensure the smooth implementation of planning schemes. After several years of efforts, Hengyang City has achieved significant results in urban renovation planning and old house reconstruction, with a more reasonable urban spatial layout and more complete infrastructure. However, in practice, there are problems such as insufficient protection of historical and cultural heritage and difficulty in demolition and resettlement [7].

Through the analysis and comparison of urban renovation planning and old house reconstruction cases in Changsha and Hengyang cities, it can be found that there are certain differences in planning strategies, implementation processes, effectiveness and challenges between the two cities. Changsha City pays attention to historical and cultural protection and public participation, and has achieved significant social benefits; Hengyang City, on the other hand, focuses on optimizing urban space and infrastructure construction, achieving rapid urban development. However, both cities are facing common challenges such as funding shortages and demolition difficulties.

Based on the above case analysis, this article proposes the following strategic suggestions: Firstly, urban renovation planning and old house reconstruction should focus on protecting historical and cultural landscapes to achieve sustainable urban development; Secondly, the government should play a leading role, integrate resources from all parties, and form a joint force; At the same time, introducing

market mechanisms to attract social capital to participate in urban construction; Once again, pay attention to public participation, widely solicit opinions from residents, and ensure the scientific and feasibility of planning schemes; Finally, strengthen supervision and evaluation to ensure the smooth implementation of planning schemes and achieve expected results [8].

Through in-depth analysis and comparison of urban renovation planning and old house reconstruction cases in Changsha and Hengyang cities, the successful experience, existing problems, and reasons of urban renovation planning and old house reconstruction are summarized, and corresponding strategic suggestions are proposed. These suggestions have important reference significance for other cities in terms of renovation planning and old house reconstruction. In the future, with the advancement of urbanization, urban renovation planning and old house reconstruction will still face many challenges. Therefore, it is necessary to continuously explore and innovate planning strategies and implementation methods to meet the needs of urban development and promote sustainable development of the city.

#### 6. Some Specific Issues in the Renovation Process

The original spatial layout of old houses is unreasonable. Many old houses in old residential areas have an unreasonable internal spatial layout. Disorderly activity lines and other issues make it difficult to meet the living needs of modern people. For example, the living room is smaller, while the kitchen and bedroom are larger; The bedroom lacks a foyer and privacy; The bathroom is relatively small and does not have a dry or wet partition; Wait a minute.

ctory buildings or commercial buildings but were later converted into apartments or residential buildings. When the function of a building changes, the interior space of the house needs to be redefined; If the layout is not rearranged properly, the interior space will appear messy and unable to meet the living needs [9].

The frequent occurrence of quality problems in old houses is influenced by factors such as long-term disrepair and ageing materials, and many old houses have

Various quality issues have emerged, such as peeling and mouldy wallpaper, poor wall insulation, discolouration and deformation of the floor, leakage of bathroom pipes, damage to kitchen check valves, deformation of cabinet doors due to prolonged use, and severe ageing of electrical wires. The ageing of old house materials can cause inconvenience to residents and affect their quality of life. If there are structural cracks, inclined walls, and other problems in the old house, it will pose a great threat to the life and property safety of residents.

The decoration of the old house does not meet the current requirements. The design style of the house is closely related to the era in which it was renovated

The decoration of old houses often does not coordinate with the current living environment. Many old houses are designed and decorated by residents themselves, without a clear design style. Modern interior design includes various design styles, such as modern minimalist style, new Chinese style, Nordic style, Japanese style, etc. The emergence of these styles has a great promoting effect on the renovation design of old houses. In addition, in real life, some old houses will be used as wedding houses, and most residents will renovate the previous decoration. At the same time, some children want to improve their parents' lives and make them live more comfortably, and they will also consider renovating their old houses Authors and Affiliations

# 7. Design Principles for Old House Renovation

# 7.1. The Relationship between Architecture and People

Adhere to the principle of people-oriented and grasp the key points of renovation. Designers should start from the most concerned issues of residents and adhere to the design principle of "peopleoriented". In short, designers need to delve into the living habits of residents and study what kind of design can make them more comfortable. Because many residents of the old house are elderly and children, designers should pay attention to addressing a series of issues such as privacy, agefriendliness, child safety, and insufficient per capita usable area when renovating the old 124 2023/03 REAL ESTATE WORLD room. If elderly people are living in the old house, designers need to pay attention to the anti-slip properties of the floor and tiles and install facilities such as handrails next to the toilet. If only young people live in old houses, designers should not only focus on comfort and convenience during the renovation design process, but also make the house reflect the personality, highlight style, and meet the living needs of young people. If there are children in the old house, designers need to consider leaving enough space for children to move around, ensuring the safety of doors, windows, furniture, and power supply. For example, designers can install child safety locks on windows, etc [10].

# 7.2. The Relationship between Architecture and Region

Adhere to adapting measures to local conditions and achieve precise policy implementation. Designers should clarify renovation goals and develop reasonable renovation plans. Firstly, in the process of renovating old houses, designers should clarify the geographical location of the old houses and consider the local climate conditions. For example, when an old house is located in the humid and hot south, designers can use modern waterproof coatings for moisture-proof treatment; When the old house is located in a windy and rainy coastal area, designers need to reinforce the original building structure and enhance the wind resistance performance of the old house. Secondly, designers need to optimize the lighting and ventilation issues of old houses, such as increasing the lighting area of windows, using glass doors and partitions indoors, and installing fresh air systems indoors. Once again, designers need to address issues such as the lack of insulation in old houses. In this regard, designers can upgrade ordinary doors and windows to double-layered aluminium doors and windows with broken bridges. These doors and windows not only have good thermal insulation effects, but also have good airtightness, impermeability, and wind resistance. In addition, designers can also install insulation materials on the walls. Finally, designers should pay attention to the reasonable division of space in old houses, and try to make the limited space meet the needs of residents. When small old houses are difficult to meet the spatial needs of residents due to their small size, designers need to make comprehensive use of the space. For example, the living room should be designed as a multifunctional living room that integrates functions such as meeting guests, dining, rest and entertainment, so that the study room can have multiple functions such as learning and working, sleeping and resting, dressing up, leisure and entertainment.

# 7.3. The Relationship between Architecture and History

Adhere to the principle of prioritizing protection and emphasizing historical heritage. Designers should improve the living conditions and environmental quality of old houses while showcasing urban characteristics and continuing the historical context. China is a multi-ethnic country, with different social customs and cultural backgrounds in different regions. In the process of renovating old houses, designers should consider local cultural factors to preserve the local cultural characteristics of the house. In addition, not only does each city and region have different historical cultures and styles, but each family also has its history, with inherited items that carry the family's history or old objects that accompany the old house through ups and downs, such as tables and chairs left by grandparents. For elderly people, they have a deep emotional attachment to old houses that they have lived in for a lifetime. When renovating and renovating old houses, designers should make reasonable use of these old objects, so that the elderly can not only yearn for a new life but also miss the past. Designers should not erase the crystallization of these histories, but rather inherit and innovate them reasonably within the overall cultural background, making them a unique landscape in the new home.

# 7.4. The Relationship between Architecture and Environment

Adhere to green environmental protection and integrate technology. Intelligent designers should take the health and comfort of residents as the starting point, and incorporate green and environmentally friendly building decoration materials and modern intelligent electrical appliances into the renovation of old houses. At present, China actively promotes a sustainable development strategy and advocates green production. In response to the national call, in the process of renovating old houses, designers should try their best to avoid environmental pollution caused by decoration, choose environmentally friendly and pollution-free materials, especially pay attention to the formaldehyde content of some boards and paints, and avoid using building materials with chemical composition exceeding national standards that can cause great harm to people's health. Moreover, designers should also pay attention to selecting energy-saving materials to avoid waste caused by excessive decoration. With the progress of society, people are paying more and more attention to the quality of life. The development of artificial intelligence technology can comprehensively improve people's quality of life. For example, whole-house smart appliances can achieve the interconnection of all things. Residents can control the TV, electric curtains, air conditioning and other household appliances in the house through voice, and can also use mobile phones to remotely control electric clothes hangers, intelligent heated toilets, sweeping robots, intelligent dishwashers, etc. At present, there are also many ageing-friendly products on the market. For example, automatic induction night lights can facilitate elderly people to wake up at night, and automatic gas stoves can prevent elderly people from forgetting to turn off the fire and causing fires. The application of these new intelligent products can provide people with a more comfortable, safe, and fast living environment. Therefore, when renovating old houses, designers should make reasonable plans based on the space, age of the homeowner, and economic situation of the house, use appropriate technology and intelligent products, and comprehensively improve the comfort and convenience of the old house.

# 8. Conclusion

Urban renovation planning and reconstruction is a complex and important process that requires urban planners to fully consider key elements such as cultural heritage, ecological balance, and social harmony. By conducting in-depth analysis and drawing on successful cases, this paper can better address the challenges and problems in the process of urban reconstruction, and contribute to the sustainable development of cities.

In the future planning and renovation of the old urban area, this paper should pay more attention to the protection and inheritance of historical and cultural heritage, while also paying attention to the sustainable development of the old urban area. By introducing more innovative concepts and advanced technologies, this paper can build the old urban area into a beautiful city full of historical and cultural heritage, as well as a modern atmosphere

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