

## Conference Paper

# Urban Renewal Design-A Probe into the Reconstruction Mode of Urban Villages in Xi'an

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## Abstract

The problem of villages in the city is a problem left over by the history of different stages of urban development. It is like a piece of "urban psoriasis" that affects the construction of the future city. How to explore a reasonable urban village reconstruction mode is of great significance for the future development of the city. In this paper, based on the investigation and analysis of the existing urban village construction environment in Xi'an, the author proposes the imagination of future living space mode of the village in the city, and explores how to transform the existing construction environment space of the village in Xi'an City to reconstruct the new urban public living space, thus effectively driving the urban regional vitality, reasonably integrating villages in the City into the existing urban space development, and giving the village a new function and vitality.

**Keywords:** Urban village reconstruction; Urban space; Urban regional vitality

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## 1. Research Background

### 1.1. What is the village in the city?

#### 1.1.1. Formation background of the village in the city

The city is a network system that is interspersed with various economic markets such as housing, labor, land and transportation located in a limited space area, while the village is an area that is mainly engaged in agricultural production and have more dispersed population distribution than towns. The village in the city is somewhere in between. The main reason is that under the background of urban-rural dual structure and rapid development of urbanization in China, the rural area, which was once located in the marginal area of the city, has been concluded in the planning of urban area and belongs to the part of the city in the regional position, but it still maintains the rural form of the village in terms of land ownership and management systems. Although the residents of the village in the city live in the city, they can no longer engage in production in agriculture as a large amount of cultivated land has been expropriated. At the same

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time, since the internal management system and planning of the village in the city are different from those in the city, the residents of the village in the city still maintain the life mode of the village.

The later evolution of the village in the city is mainly related to the planning of the city in the early stage. In the process of rural development to the city, the village in the city is located in a superior position. In addition, the villagers have no land to cultivate, so they can only rely on the rental of housing and land to maintain the economy. Under the background of urbanization, faced with the constant influx of foreign population and driven by interests, local residents are free to increase and expand their houses. Due to the lack of forward-looking and reasonable and effective planning scheme in the early stage, it results in disorderly land use of villages in the city, confusion of infrastructure construction, and frequent occurrence of safety management problems

### **1.1.2. Urban village type**

According to the space development, village size, and population size, the villages in the city can be divided into mature urban villages, growing urban villages and breeding urban villages. According to the regional location, they can be divided into urban centers where there is no agricultural land anymore, environs area where there is a small part of agricultural land, and exurb where it owns most of agricultural land.

### **1.1.3. Advantages and disadvantages of the village in the city**

The advantage of the village in the city: First, in the process of urbanization, a large number of migrant people poured into urban space, and the villages in the city provided temporary accommodation and relatively suitable living space for these migrant people, which played a buffer effect. Second, a large number of migrant people make up for dirty, tiring and dangerous jobs in cities and improve the lack of urban jobs. Third, when the rural people are faced with urban life, they cannot find a suitable job due to the current situation of landless, as well as lack of skills and academic qualifications. The lease of housing and land in the village of the city just satisfies their daily economic income, which plays a role in maintaining social stability.

The disadvantage of the villages in the city: First, the villages in the city are generally in the center of the city, and the land wastage is serious. Second, the supporting facilities of the villages in the city are imperfect, the hawkers and petty dealers are concentrated, there is no unified plan, and the environment is dirty, disorderly and bad. Third, the

population structure of the village in the city is more complex, the quality of the villagers is low, and the problem of public security is serious. Fourth, the population of the village in the city is linked by geographical and consanguineous relationships with serious independence, closure and exclusivity.

## 1.2. Current situation of village in Xi'an City

### 1.2.1. Basic situation

The permanent resident population in Xi'an is about 8.83 million. In 2002, there were 624 administrative villages in the six districts of main urban areas of Xi'an, including 187 urban villages in the built-up areas. By the end of 2016, Xi'an had completed the transformation and renovation of 189 villages in the city.

### 1.2.2. Distribution characteristics



**Figure 1:** Distribution of villages in Xi'an City Source of the picture: Network.

The position of the village in Xi'an City is relatively scattered. Basically, in all directions, and administrative regions, there are a certain number of villages in the city. As Xincheng District, Lianhu District, and Beilin District are located in the central area of Xi'an, the city construction is faster, and the number of villages in the city is small. Most of the villages in the city are concentrated in the urban area from the second ring road to the third ring road.



**Figure 2:** Dongsanyao Village in Xi'an City Source of the picture: Network.

### 1.2.3. Environmental status

There are prominent contradictions in the inner space of urban villages, mainly focusing on the following points: First, all agricultural land of the village in the city is transformed into urban land, the villagers no longer engage in agricultural production, and the economic sources mainly rely on lease of housing and land, resulting in continuous construction and expansion of houses for obtaining higher profits, thus forming unreasonable architectural space such as “thin strip of sky”, “kissing building” and “not watching the sky”. Second, the management system of villages in the city is chaotic, which leads to the random occupation of public street space by small businessmen and hawkers, and the destruction of normal street space scale. Third, the population structure of the village in the city is complex, the quality of the villagers is low, the proportion of foreign population is large, and no good environmental awareness of has been formed. The villagers have a low sense of identity with the living space, which leads to the dirty, disorderly and bad environment of the villages in the city. Fourth, there is a lack of public activity space in the urban villages, and the villagers often move on both sides of the street or in abandoned buildings, causing frequent safety problems.

### 1.3. Foreign research cases

Since the problem of villages in the city involves the land system and the interests of farmers, it belongs to the unique phenomenon of the development of urbanization in China. Slums in foreign countries are often used to compare with Chinese urban villages, and there are similarities in community characteristics, demographic characteristics and landscape characteristics. Therefore, to some extent, the reconstruction mode of slum

is worthy of our reference. The slum reconstruction in foreign countries emphasizes the process of gradual and orderly renewal, and abandons the large-scale demolition and reconstruction. In the concept of transformation, more emphasis is placed on the coordination of human and space scales, as well as effective integration of human and urban society. In the process of transformation, it is from the initial single transformation of living space to the rational construction of residential, infrastructure and public space, and these aspects are indeed missing in the process of urban village reconstruction in China.

#### 1.4. Analysis of reconstruction of villages in Xi'an City

The current reconstruction mode of villages in Xi'an City mainly focuses on the reconstruction of high-rise buildings on the original base, emphasizing the return of original living area of the villagers. However, this reconstruction has only completed the transformation of the village, but has not formed a good connection with the urban space. The reconstructed community space has nothing to do with the previous ones. During the transformation process, it only focuses on the renovation of residential space, but neglects the improvement of relevant facilities and infrastructure. Neither the original living habits of the villagers have been continued, nor have they completely solved the previous problems.

Furthermore, new community after the renovation has not curbed the development of villages in the city, and new villages in the cities have appeared in some marginal areas of the city. The reason was that the migrant people still had a demand for the living space of the villages in the city. As long as such a demand exists, the new village in the city will continue to emerge, and the problems of the village in the city will not be fundamentally solved.



**Figure 3:** Villagers' daily needs Source of the picture: Network.

Finally, in the new community after the renovation, the villagers were unable to adapt to the new space. In some possible spaces, the former village was spontaneously formed, which destroyed the originally planned community space. Therefore, whether the community space should be created, or should maintain the original place culture and respect the continuation of neighborhood culture, thus increasing the sense of identity of the villagers and identification between different communities.

## 2. Research Purpose and Significance

### 2.1. Research purpose

The village in the city has always been the most critical step in the development of urbanization. The existing mode of village transformation in the city is largely identical but with minor differences. After the transformation, the problems become increasingly obvious. Whether there are more transformation models to solve a series of problems existing in the current transformation, such as the economic sources of villagers, continuation of neighborhood culture, improvement of supporting facilities, as well as more public activity space, and drive the cultural and economic vitality of surrounding areas through the transformed urban village space, which are exactly the purposes of this paper.

### 2.2. Research significance

The problem of the village in the city is a “double-edged sword”. If solved properly, it will contribute to the development of the city, and can even promote the urban development and drive the economic vitality of urban area. If solved poorly, it may delay or even hinder the normal urbanization development and cause social instability. Therefore, in this paper, the author attempts to find a suitable development model for urban villages in the future to add the diversity of urban space.

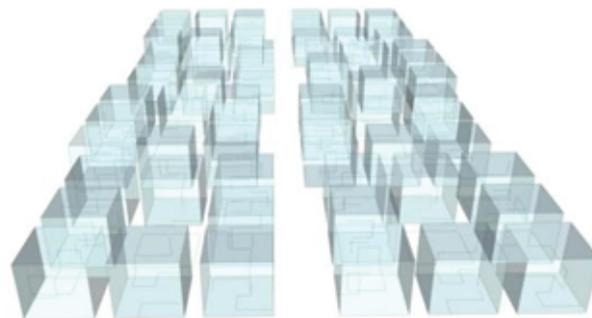
## 3. Space Design

### 3.1. Design strategy

First, the transformation design of the village in the city should not be the simply and crude demolition and reconstruction. It should respect the complexity and diversity of urban space, continue the existing urban space, and take into account the living

habits of the villagers on the original basis for optimization and improvement, and integrate urban villages into the urban space structure reasonably. Second, the income of most villagers comes from the economic compensation of housing and land. In the process of reconstruction of the village in the city, it should not only pay attention to the compensation of the original living space area of the villagers, but also pay attention to the compensation of villagers' original living space, but also consider whether the reconstructed urban space can create more living space for villagers, which is the fundamental way to solve the problem of village resettlement in the urban village. Third, urban space should not be an equalization space. The diverse urban space should be shaped to serve different groups of people. Whether it can create urban public spaces that are suitable for residents' activities in surrounding cities through the reconstruction of urban villages, stimulate the vitality of surrounding urban areas, which should be considered in the process of urban village reconstruction.

### 3.2. Design plan intention



**Figure 4:** Concept of planning intention Source of the picture: drawn by the author.

In terms of integrated planning, road integration is carried out on the existing basis to form a clear road-level relationship between main road and auxiliary road. At the same time, according to the human comfort ratio at the street scale, the building height and road width are adjusted to create a reasonable sense of street and roadway scale. a certain area of public space areas, such as small event squares are delimited to serve the needs of villagers for outdoor activities, gatherings, sports, conversations, etc. The public area can also be organically connected with the road to form the planned landscape node to serve the urban public space demand of the residents outside the village.

The building group has the unified building height to maintain the consistency of overall scene of the village in the city. A small residential building group can be formed

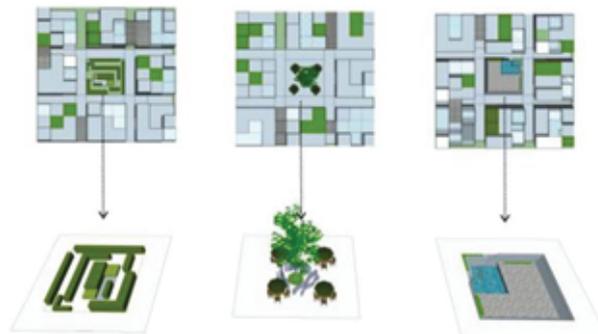


Figure 5: Concept of courtyard Source of the picture: drawn by the author.

by 8-9 households. The courtyard space is arranged in the middle to serve the daily outdoor activities of the residents around the courtyard. The shared platforms and gardens should be added to meet the daily needs of residents to dry clothes and grow flowers. Moreover, it can enhance the connection between residents and continue the neighborhood culture.

According to the current population structure and needs of the villagers, the construction form of single building can be the form of “downstairs store and upstairs dwelling”. One floor of business model can be set according to the villagers’ own condition, which not only solves the self-sufficient economic source of the villagers, but also increases the commercial and accessible space for the ground walking space of the villages in the city. According to the population structure, the upper space can be set as the villagers’ own space, rental of foreign population space, small studio and so on to meet the diversified needs of migrant population.

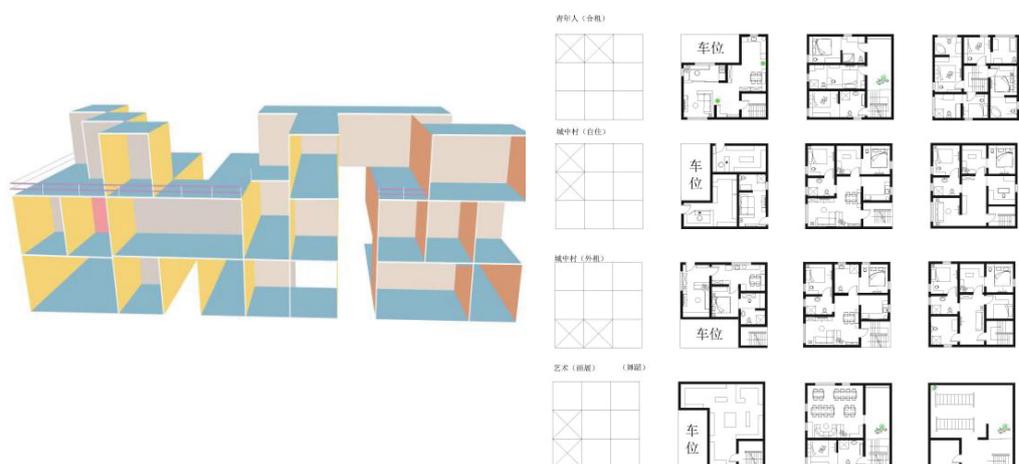


Figure 6: Concept of single building Source of the picture: drawn by the author.

The purpose of the whole transformation mode: First, create the employment space and solve the daily economic resources of villagers. Second, create a variable super-structure space according to different needs of migrant population. Third, improve and optimize the existing environment space of villages in the city, and form the landscape hierarchy relationship between the street node landscape space-building group courtyard landscape space-vertical landscape spaces of single building. Fourth, introduce the architectural mode of downstairs store and upstairs dwelling, create an open urban walking space, and effectively integrate the urban village into the original structure of the city to provide a living and leisure place for the surrounding residents.

#### 4. Summary

The urban village problem is an inevitable problem in the process of urbanization. Can we consider the future transformation model from the point of view of humanization, and really pay attention to the villagers' living habits and needs of foreign population, and have a relationship with the original space of the city? It may be the fundamental way to solve the problem of urban villages

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