

PLANNING APPROACHES TO PRESERVATION AND RENOVATION IN NANLUOGU XIANG AREA

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ABSTRACT

On the basis of a thorough and detailed investigation into the present condition and communal problems in Nanluogu Xiang area, the City Research Group of the Institute from Architectural and Urban Studies, Tsinghua University, has accomplished some tentative studies and produced some planning policies. This paper attempts to tackle the problems in preservation and renovation of the overall physical environment, in this area. In addition, a further discussion is made on a few common problems, such as the scale and effect of Old City preservation and renovation, redistribution of land value, public participation and support, and protection of interests of residents and the district.

Situated in the southeast of Gulou (Drum Tower) of the Old City of Beijing, Nanluogu Xiang neighborhood is surrounded by Di'anmenwai Street, Jiaodaokou South Street, Gulou East Street and Kuanjie Street, covering about 84 hectares' of land. At present, Hutong are well laid out and courtyard houses nicely preserved in the center of this neighborhood, and the entire neighborhood is one of the most important single-story courtyard house preservation areas in Beijing. Ju'er Hutong, which has been partly rehabilitated, lies in the northeastern corner of the neighborhood and takes up 8.2 hectares of land.

With the view of working out a preservation and renovation plan of Nanluogu Xiang are, the Inner City Research Group from the Institute of Architectural and Urban Studies, Tsinghua University, has conducted a thorough and detailed investigation into the physical condition and communal issues such as the present state of land occupation, property ownership and quality of houses, transportation, afforestation, composition and financial situation of residents, and put forward some tentative planning policies regarding the preservation and renovation of this area. This paper attempts to approach several aspects of the issue.

I. PRESERVATION AND RENOVATION OF NANLUOGU XIANG

1. Preservation of the Overall Environment

Many characteristics of the original urban design of Beijing city are reflected in the street-alley system of Nanluogu Xiang neighborhood. In this area, there are now four municipal and twelve district cultural relics, fifteen important historical remains, as well as plenty of buildings and structures, which are also significant components of the traditional townscape. The investigation reveals that there still exist a few courtyard houses constructed during the period of the

Republic of China (1912-1949), the windows, gables and balustrades of which are of the Western style, for European style was highly regarded at that time.

With respect to the preservation and renovation of the physical conditions of Nanluogu Xiang area, we put forward the following principles: a) Strictly delimit the boundary of single-story courtyard house preservation area. Building in this area must not exceed the maximum height of 6 meters, and the style should be that of traditional courtyard house. b) Different preservation and renovation measures are to be taken according to the particular cultural, historical and aesthetic values of various factors which

constitute the traditional feature. Buildings, structures and cultural relics associated with special significance and value should be rendered under strict preservation; Hutong, streets important for the constitution of traditional townscape should be improved; building and structures, which are over-torn or repugnant to the eye, should be reconstructed or demolished.

In compliance with the two principles, the following schemes are proposed:

- (1) The traditional wide street and narrow Hutong system deserves preservation. Except that several Hutongs are widened in light of the infrastructure requirement and traffic demand in this area, the closed and continuous pattern of other Hutong is to be maintained and developed.
- (2) Building with important cultural value and other courtyard houses, historic buildings and structures should be under strict preservation.
- (3) The lingering charm of traditional Hutongs can be mainly attributed to the conventional building and structures with strong local color and historical, cultural features, such as screen walls, horse-tying stones, gateways, old and big trees, and the distinctive spaces formed by them. All of these should be adequately preserved and enhanced in planning.
- (4) Proper preservation is indispensable for the few courtyard houses and components of "European style" erected during the period of the Republic of China, for they are representative of a period in the development of the area and in the entire history of modern architecture in Beijing.
- (5) As for the large number of aesthetic components and carved decorations of buildings and structures in conventional courtyard houses, more effective management should be conducted in the course of rehabilitation. Efforts are to

be made to preserve the original state of such authentic historic artifacts by reutilizing them in renovation and reconstruction.

2. Preservation of the Residential Function and Social Network of the Neighborhood

Nanluogu Xiang area had always been inhabited by high officials and noble lords in history, except that small pieces of land along the present Gulou East Street and in the northwestern corner were used for business purposes. Right now, its residential area takes up 64.5% of the total land area, while the residential percentage of the entire East District is as low as 24.3%. Evidently, Nanluogu Xiang area is now serving as an important residential area of single-story buildings. The courtyard houses now inhabited varies in scale, and house rights are in confusion. The allocation of dwelling houses and transfer of house rights since the liberation result in the present variances in educational standard and income level. Dwellers of various social status and professions live together without discrimination. After years of development, a complex social structure network has been formed among the inhabitants, and contacts between residents are regular and harmonious. To retain the traditional accommodating function of the single-story courtyard houses in the preservation area is also an important aspect of conservation. The protection of this area entails the preservation of its residential function, its present social structure and the status quo of this complex inhabiting style for all kinds of dwellers as much as possible. Nanluogu Xiang area is expected to be more vigorous after renovation.

3. Renovation of parking lot and resting space

The character of Hutong lies in its small size, closed layout, continuity, and scarcity of public open space. It has long been a thorny problem in the preservation of traditional

townscape to develop public open space such as parking lots and public lawns. The common practice of residential quarters to use indented space on one or both sides of streets as parking lots is hardly feasible in this case, for the continuity of conventional Hutong layout has to be preserved. Moreover, if this method were adopted, it would be inevitable to further widen Hutong, not only causing more damage to the traditional townscape, but also overloading the traffic capacity of Hutongs. Therefore, to solve the problem of local transportation, restriction can be put on one-way roads and pass-by traffic so as to reduce the traffic pressure on Hutongs. The parking problem of local residents can be solved by breaking up the whole into parts. That is to say, some torn single-story houses between or inside these courtyards can be demolished in the course of rehabilitation and renovation, providing space for several small public parking lots for the use of dozens of courtyard nearby. With little land occupation, each parking lot can provide enough space for seven or eight cars for dozens of courtyard nearby (calculated on the basis of the assumption that one third of residents own cars; two or the three families live in one courtyard). This kind of design also ensures overall plan of the small space inside courtyard and public activity space outside.

This layout of parking and resting space brings little damage to the original structure of courtyard houses, and is convenient for local dwellers. That the exits of Hutongs, building of structures of traditional style (gateways, etc.) can be constructed to minimize the damage to the Hutongs and form a unique characteristic.

4. Rehabilitation and Utilization of Various Courtyard Houses

Technical measures should be taken in the rehabilitation of traditional courtyard houses on order to make them meet the needs of modern life.

Municipal and district listed building of favorable condition can be changed into

office buildings, public exhibition centers or museums. This, on the one hand, will enhance the historical cultural atmosphere of this area; on the other hand, it will be advantageous to the preservation of those building. Take Mao'er Hutong and Keyuan Garden as examples. Due to its large number of listed buildings, better quality of courtyard houses and distinctive architectural features, Mao'er Hutong is planned to be rebuilt into pedestrian street, museums, exhibition centers or Folk Custom Street. Keyuan Garden is a traditional garden building and it will be reconstructed into as small park or lawn, on the basis of present conditions and with some repairs.

The majority of the courtyard houses are occupied by a population of 27,400. Due to the urban population growth, many temporary dwellings and sheds have been built wherever there's room in these courtyard houses since liberation. At present, these courtyard houses are shared by many household and the housing conditions are very poor. The households with an average floor space per capita below 4m² amount to a percentage of 22.0; the households with an average floor space per households below 20m² total a percentage of 46.7; a percentage of 70 households use temporary dwellings or sheds as kitchens or residences.

Generally speaking, the houses are of poor quality. As far as structure is concerned, Class 3, Class 4 and Class 5 houses add up to a percentage of 97.5.

The whole area is in a backward state and are lacking in many basic facilities such as piped gas system, proper kitchens, toilets, piped water and drainage system, heating system and good ventilation. 94.9% household rely on coal-burning or homemade heating system. Indoor water-supply system is only available to 48.6% households; the other 51.4% households still depend on a public water-supply system in the courtyard.

On the basis of the principle that a large number of courtyard houses will be preserved as dwelling place, these courtyard houses will be preserved, rehabilitated and utilized in

different ways according to their quality and ownership.

According to the plan, the courtyard houses of favorable condition in the 6-meter-high conservation area will be rehabilitated entirely and this rehabilitation will focus on reuse. In general, those courtyard houses belong to Class 2 houses, occupying 6.4 hectares (21% of the total residential land area of the whole neighborhood). They are planned to be used as residential land area for high-standard single-household courtyards. Each household will occupy an average land area ranging from 250 m² to 300 m² and an average building area of 130 m².

The Class 3 courtyard houses of good conditions in the 6-meter-high conservation area will be rehabilitated entirely and some of them will be rebuilt according to the style of traditional Chinese courtyard houses. They will be use as average or high-standard residential area. Each courtyard will be shared by two or three households, each of which has an average building area of 80 m². Courtyards of this type will occupy a land area of 4.5 hectares, 15% of the total residential land area of the whole neighborhood.

In order to increase the building density, some dilapidate courtyard houses (their quality are generally below Class 3), located in or near the 6-meter-high conservation area, will be demolished. The new houses will follow the pattern of traditional Chinese courtyard houses and will be of average standard. Each household will occupy an average building area of 60 m². Courtyards of this type will occupy a land area of 19.3 hectares, 64% of the total residential land area of the whole neighborhood. The floor area ratio above 0.6.

After renewal, the conservation area will have a population of 5,000 and a land area of 18.5 hectares. Not counting Ju'er Hutong which occupies 8.2 hectares, the residential area of the whole region amounts to 30.1 hectares, and will have a population of 10,000. As a result, 17,000 people will have to move away. Influenced by the floor area

ratio of courtyard houses, the density of population is low.

II. SCALE AND EFFECT OF REHABILITATION

Nanluogu Xiang Area is full of dilapidated houses, and demand upgrading rehabilitation. Restricted by the economic situation and other condition of the city and Nanluogu Xiang Area, the rehabilitation cannot be accomplished in one move. The dilapidated building of Nanluogu Xiang Area stretch for scores of hectares. Therefore, many knotty problem lie ahead of us: Where to start? What is the reasonable scale of each rehabilitation? Comparatively speaking, Class 4 and Class 5 houses are easier to handle; while Class 3 houses are rather difficult to arrange. One way is to take expedient measures. With some basic maintenance, they can continue to be used for many years. The renewal of the Class 3 houses in Nanluogu Xiang Area should focus on renovation. (This is just the guiding principle in the above-mentioned rehabilitation plan of courtyard houses). We suggest that small-scale renewal be adopted. It has the following advantages. Firstly, some funds can be saved for the urgent renewal of Class 4 and Class 5 houses. Secondly, it can ovoid the occurrence of such cases as in some parts of Beijing, where houses were rebuilt into simple and almost boring layout courtyard houses. Thirdly, it has adaptability and is organic renewal which more harmoniously fits the original surroundings, and is thus more advantageous to environmental protection of the city. Fourthly, small-scale rehabilitation accord with the existing policy, and can thus decrease the impact on the city's ability of self-adjustment. In the course of Rehabilitation of Dilapidated Housing (RDH), many inhabitant have to find their own temporary accommodation. Unfortunately, the number of houses which can be rented freely is very limited, and only a few resident can turn to their work units, their relations, or their good friends for help. Small-scale rehabilitation is beneficial to these resident,

since it provides them with a better change of finding temporary accommodation. Finally, it is advantageous to attracting resident's participation and the preservation of social network. The courtyard houses now inhabited are of various size and diversified quality. Under such a condition, dweller will have more room for selection if natural renewal and reconstruction are allowed -- some new dweller move into Nanluogu Xiang Area by purchasing houses, and some resident continue to live there by repairing their houses themselves. Such a diversity of choices, in turn, will result in the mixed composition of residents; namely, people of various status, from all walks of life, and of diversified educational levels will live in the same neighborhood. After rehabilitation, the houses will be self-contained suites and will consequently have more privacy. New courtyard houses will provide the residents with more opportunities to meet and contact with one another, and is helpful to the development of a harmonious relationship among neighbors and the retention of the original social network. The rehabilitation of their traditional function--residential function, and the retention of a cohesive community life are two key factors in preserving Chinese courtyard houses and bringing vigorous life to them.

III. SEVERAL PROBLEM CONCERNING THE PRESERVATION AND REHABILITATION OF THE OLD CITY

1. Rational Redistribution of Land Value

During the RDH of Ju'er Hutong in Nanluogu Xiang Area, a land-occupying work unit entered the real estate market directly and indirectly, and attempted to create difficulties for development company by means of the land it occupied. It asked for high price and would move away only when its demands was satisfied. Case like this is of common occurrence and increases the difficulty of renewal project. For some formidable sections which were hard to rehabilitate, some development company gave a little subsidy or even no subsidy. As a result,

renewal of these sections could not be completed properly. The above-mentioned two cases seriously hinder the success of the renewal project. Many work units, located in the Old City, entered the real estate market with the land distributed gratis in the period of planned economy or sold by the government at a reduced price. Some enterprises which occupy much land in the Old City tried to shift from second order of enterprises to third order of enterprises, and some enterprises vied with one another in moving away. Such an phenomenon sometimes results from government adjustment (In case that no financial aid is available, the government will permit some enterprises to enter the real estate market with their land and try to obtain some of their funds for renewal and moving away, by means of land differential income). Sometimes, however, some enterprises just seize the opportunity of RDH and line their pockets with public funds. The government has spent a huge sum developing the land; undoubtedly, the land and the wealth it brings should belong to the government. However, for the time being, the nation has no efficient way to prevent such a large sum of intangible assets from losing. This, in turn, result in the inequality in the redistribution of national wealth by urban enterprises.

The renovation of Nanluogu Xiang is more difficult than that of other areas because the constructable floor area ratio is very low. The funds come partially from the financial allowance, but mainly from the housing development of the city and district. The RDH should be the obligation of the whole city for quite a period of time. The concept of whole-city economic balance ought to be taken into consideration in fulfilling funds balance and relocation etc. of the RDH areas, and in the equitable redistribution of social wealth as well. Among the "Four Combinations" of Beijing RDH strategy, the combinations housing renewal with new housing development and with real estate management both involve the problems of balance of funds and interests. However, concerning the combination of renovation

with management, the problem such as how to deal with the loss of intangible assets, how to assess and fairly distribute the lost intangible assets between the state and the collective demand urgent solution.

It is suggested that the assessment of fixed assets, building and land of each enterprise and institution should be done as soon as possible, so that during the process of RDH, the values of house property and land property are separated. Then according to specific situation the state will compensate or recall partial (or the whole) land property of the enterprise being renovated in order to reduce the loss of the country. Moreover, on the basis of this principle, we can fairly distribute the interests of the developed land, and the fairly bear the needed funds for renovation. We will also be able to make the interests flowing into the enterprise from intangible to tangible. Only in this way can we be in line with the policy of "development compensates for RDH", reach the balance of RDH funds in the whole city, achieve the fair competition of real estate developers and that of the enterprises in the Old City area, purposefully help some important enterprises with the limited funds, find a way out of the present situation in which the residents and enterprises in the Old City area wait for the state's development only, and bring into full play the power of the individual, enterprise, and state.

2. Public Support and Participant

The respect for the original residents has a direct bearing on the public support of the project. From the point of view of social benefits, to maintain a certain returning rate is a means of winning public support. But with the increase of the returning rate, the number of salable housing will be reduced, which is a drawback to funds balance for development companies. At present the purchasers of marketable building are mainly people in trade lines or senior managerial staff, who are quite different from the original residents in social status, social contacts and life style. An investigation into the Phase II renovation of Ju'er Hutong

demonstrates that the returning rate being 23.5%, the residents who move back are arranged in two courtyards, which to a certain extent maintains their original social network. But disruption still cannot be avoided. It is difficult for the returning residents and the newcomers to get along well with each other. Their relationship is for less congenial than that among the former courtyard residents. It will take a long time to develop a harmonious social atmosphere. The Ju'er Hutong project is more successful than many other rehabilitation projects in social benefits. In Nanluogu Xiang area, technical measures are taken to improve social benefits.

- 1) To build a lively residential area with traditional customs in Nanluogu Xiang area, we need the support and participation of many residents and the maintenance of a certain returning rate, the returning residents living near each other. Ignorance of the interests and wishes of the original dwellers can bring about bad influence on people's social life and physical environment, which means sending the residents to another form of slum. The real meaning of slum does not lie in the shabbiness of physical conditions, but in the serious social problem. The solution of such issues as the residents' social contacts, living standard, medical treatment and education of children etc. has a bearing on the achievement of public support and social stability.
- 2) The preceding scheme of small-scale rehabilitation as well as the renovation and utilization of courtyard housing is proposed partially on the basis of public participation, which is the key factor in gaining public support. Public participation involves the residents' spiritual and material understanding and support. Material support, namely the residents' economic participation, is the most direct and effective means of participation. The complexity of planning and renovation makes it necessary to provide the residents with some

predictable and unpredictable chances in order to increase feasible choices. The direct participation of the residents is one of the means by which they create more opportunities.

3. Protection of the Interest of the Residents and the Area

Among the employed residents in Nanluogu Xiang, individual businessmen constitutes 0.3%; workers, 46.9%; unemployment, 14.2%. The Proportion of workers is 10% higher than that of the other areas of the city. What is more, there are a lot of workers whose enterprises have ceased production partly or wholly. There also exist temporary dweller (about 3.5%), who make a living on the Old City surroundings and the cheap letting of houses.

The district economy and small business of Nanluogu Xiang area is fragile. As to some indigenous small business, during renovation it is important to take into consideration the sources of customers and good as well as the various commercial connection with the Old City. This kind of small business is the common phenomenon of the Old City, the revival of which depends basically on the economic revival of these low-income people.

The adjustment of industrial land conforms to the overall planning and long-term interests of the polluting factories. But some small street enterprises in Nanluogu area can hardly bear the burden of moving, especially moving out, due to their tight budget. Most of these small enterprises, such as small bookbinding factories, printing factories and food factories, only produce low-noise pollution. Some of them need not be moved out of city, and in fact, cannot be moved out. The reason is that these enterprises are mostly small-investment and low-profit street-owned factories, whose income is an important source to stabilize street or residential institutions. They also provide employment

to some old and weak people as well as the working posts of some welfare personnel. Therefore these enterprises not only serve as the extra economic source of the streets, but more importantly, have bearing on the stability of society. To deal with them, outside the single-story building protection area a piece of affordable land is selected which has little influence on the surrounding area. The buildings on this land is of poor quality; after renovation the floor area ratio will be increased to some extent. To concentrate enterprises to some degree will enable them to share basic facilities and interests.

In short, the renovation of some small business and industries which concern the residents' life and the regional economy should be carefully designed. Conscious support should be provided to them.

No matter it is renovation of Nanluogu Xiang or the whole Old City area, the principal requirement should be to preserve historical customs and regional characteristics, improve physical environment, revive economy and make steady progress in achieving a long-term social prosperity.

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