THE THINKING OF MIXED USE FROM A PERSPECTIVE OF THE HUTONG PROTECTION

YANG Yang* & WU Songnan** & HUANG Tianhang***

 * School of Architecture, Tsinghua University, 100084, Beijing, China, Email:yang-yang03@mails.tsinghua.edu.cn
 ** School of Architecture, Tsinghua University, 100084, Beijing, China, Email:wsn05@mails.tsinghua.edu.cn
 *** School of Architecture, Tsinghua University, 100084, Beijing, China, Email:hth08@mails.tsinghua.edu.cn

ABSTRACT: Beijing Urban Planning and Design Institute creatively put forward a new concept "Mixed-use Land" (in 2004), in order to meet the need to increasingly development of Beijing old city. This is the first time that the concept of mixed use is used in the management level of the land-use planning of the Historical and Cultural Protected Area in China. This paper intends to show the advantages and disadvantages of the mixed use from a perspective of the Hutong protection, which is mixed with the author's research experiences in the project of *Measures for the Administration of the Protection of Beijing Hutong*. First, this paper gives a thorough introduction of the concept of mixed use. Then the second part analyzes the contradictions between the mixed use and the Hutong protection, and gives the thinking of a feasible solution. The third part proposes a Hutong classification based on the materials of the Hutong commercial land survey. In the end, this paper brings forward some feasible suggestions on the present land-use planning and administration.

KEYWORDS: mixed use, Hutong protection, Hutong classification, new managerial strategies

PREFACE

Nowadays, with the development of market economy, especially considering the current booming cultural and creative industry, such as the restaurants, bars and characteristic shopping zones within the old area of Beijing, it's more and more becoming a contradictory between the protection of Historical and Cultural Area of Beijing and the further development. In 2004, Beijing Urban Planning and Design Institute worked out the latest land-use planning of Historical and Cultural Protected Area of Beijing and creatively put forward a new concept, "Mixed-use Land". It's defined that Mixed-use Land consists of 80% Residential Land and 20% Commercial-financial Land. This is the first time that the concept of mixed use is used in the management level of the land-use planning of the Historical and Cultural Protected Area in China.

As the chief traffic road of Beijing old city, the Hutong protection always faces numerous challenges. Both the renovation of historic buildings and the concentration of commercial facilities have caused the contradictions between protection and development. This paper intends to show the advantages and disadvantages of the mixed use from a perspective of the Hutong protection. And it's hoped that some useful suggestions would be found for the further development of the land-use planning of the Historical and Cultural Protected Area.

1 THE INTERPRETATION ON MIXED USE

1.1 Research summary of mixed land use

So far, in China the research of the issue of mixed land use is always from the concept of compatible urban land use (ZHENG Zheng, GU Yuan, 2001; SIMA Xiao, ZOU Bing, 2003) and the urban land use

classification (SUN Hui, LIANG Jiang, 2002; ZOU Bing, WU Xiaoli, 2002).

Studies on compatible urban land use are focused on the issue of rational land-use under the market-oriented economic. Through the analysis of the concept compatible urban land use and its related factors, ZHENG Zheng and GU Yuan (2001) bring forward several suggestions on improving the planning and administration. ^[1] Further, SIMA Xiao and ZOU Bing (2003) discuss the causes and evaluation criteria of land-use compatibility. Their research shows not only a more comprehensive explanation of the concept, but also the administrative principles. ^[2]

Studies on the urban land use classification intend to answer the contradictions between the land use planning and administration in China. By the analysis of the development of the urban land use classification standards in China, as well as comparison of the practice between China and the U.S., SUN Hui and LIANG Jiang (2002) advocate that land use classification should be according to the service scope and construction scale of the public facilities. ^[3] Different with SUN Hui and LIANG Jiang, ZOU Bing and WU Xiaoli (2002) suggest that the land use classification should also pay attention to the investors and users of the public facilities in order to avoid externalities of the market economy. With Shenzhen as the case, they try to divide the public facilities land use into two categories: non-profit facilities and facilities with commercial potential. The former should be strictly regulated by urban planning in terms its land uses while the later should be navigated to maximize the land value to adapt to the market economy. ^[4]

So in China, the present research of mixed land use is focused on the theoretical study of compatible urban land use and the classification of urban land use, while the mixed use in Historical and Cultural Protected Area has not been involved. Based on these existing results, this paper intends to show some suggestions on improving the present mixed use planning in Historical and Cultural Protected Area through the analysis of the causes and contradictions of commercial and residential land use mix.

1.2 Causes of mixed use

As the land-use planning plays an important role in the administration of the urban land use, the mixed use planning has a huge impact on the protection of old city. The commercial and residential land use mix is mainly promoted by the development of social-economic and the implementation of new protected policy, and some detailed analysis is as follows:

(1) The demand of the social-economic development. Although almost all the land in Historical and Cultural Protected Area was residential in the old time, today some parts of it have changed to be commercial land use. There are two main reasons: ①The improvement of living standard of old city residents encourages the growth of commercial facilities. ②The outstanding location advantages of the Beijing old city, as well as the landscape, culture, history and other unique resources, make the rapid development of cultural & creative industry. Obviously, the increase of the commercial land in Historical and Cultural Protected Area is a product of the social-economic development.

(2) The demand of the implementation of new protected policy. According to the master plan of Beijing city (2004-2020), the protection work of Beijing old city has went into a new stage, self-renovation. The new plan says, "The renovation of old buildings should be decided and carried out by the property owner, as well as comply with the standards made by the government". This new regulation is going to promote not only the growth of individual transformation events, but also the commercial use of the old buildings. As a result, the original administration of the residential land use should be more flexible.

2 CONTRADICTIONS BETWEEN MIXED USE AND HUTONG PROTECTION

2.1 Content of the contradictions¹

Since the historical and other reasons, the phenomenon of mixed use between commercial and residential land, as well as the contradictions between mixed use and Hutong protection, has existed for a long time. Usually, we could find the performance of the contradictions in the following two aspects:

¹ To make description easier, without special instructions, the word "contradictions" is referred to "contradictions between mixed use and Hutong protection" in this paper.

(1) Commercial and residential environment conflict. It means the pollutions of the commercial activities make negative impact on the residential environment. The noise, light, fumes and other pollutions caused by the commercial activities do harm to not only the surrounding residential areas, but also the quality of the traditional buildings.

(2) Commercial and residential style conflict. It means the appearances of the commercial buildings make negative impact on the traditional scene of Hutong. Compared with the other city areas, the administration should pay attention to protecting the living environment as well as the traditional scene in Hutong area. When the traditional residential buildings are filled with commercial functions, their appearances should be quite different. For example, the elevations of the restaurants, bars and characterized retails are always designed in a unique way to attract guests' attention. Obviously, it's opposite to the protection of the traditional scene of Hutong area.

With the implementation of "Mixed-use Land", now the mix of commercial and residential land use is legal. However, currently necessary attention hasn't been paid to the contradictions between mixed use and Hutong protection, as a result, with the increase of the mix between commercial and residential land use, as well as the expansion of the contradictions, the traditional Hutong environment faces irreparable damages.

2.2 Analysis of impact factors of the contradictions

Since the situation of the mix of commercial and residential land use is different from one place to another, the effects of the contradictions aren't the same, either. There are two kinds of factors which affect the effects:

(1) The business content of a commercial facility determines the effect of its environment pollution. For example, compared to the restaurants and bars, the community retails make no noise and fume pollution and have little harm to the surrounding residential environment.

(2) The original scene of Hutong determines the effect of the appearances of commercial buildings. For instance, compared with the traditional residential Hutong, the one, concentrated with more commercial facilities, more likes a commercial street. Obviously, the appearance of a commercial building has less effect on the original scene of "a commercial street" than a traditional residential Hutong.

2.3 Contradictions and land-use planning in historical and cultural protected area

Based on the analysis of the content and impact factors of contradictions between mixed use and Hutong protection, we can get the following three basic conclusions:

The contradictions between mixed use and Hutong protection comprise commercial and residential environment conflict and style conflict.

②Commercial and residential environment conflict is mainly determined by the business content. It means the effect of the contradictions changes by the commercial facilities.

③Commercial and residential style conflict is mainly determined by the original scene of Hutong. It means the effect of the contradictions changes by the location of commercial facilities.

Therefore, the basic principle of solution of the contradictions is: considering the business content of the commercial facilities and the original scene of Hutong, each Hutong should have its own administration measure, which contains both environmental and appearance standards.

However, the present statement of this mixed use, which we could find in the land-use planning of Historical and Cultural Protected Area, is only that "Mixed-use Land consists of 80% Residential Land and 20% Commercial-financial Land". Apparently, the content of "Mixed-use Land" contain nothing with the appearances of buildings, it causes the lack of administration of commercial and residential style conflict. And since the "Commercial-financial Land" consists of kinds of land uses in existing urban land use classification (see Table 1), it can't be used to solve the commercial and residential conflict, either.

So it's concluded that, the existing land use planning of Historical and Cultural Protected Area couldn't solve the contradictions between mixed use and Hutong protection unless it has further regulations on the business content and appearance of the commercial facilities.

Code		Uses	Content
C2 Commercial-financial		Commercial-financial	
		land	
	C21	Commerce	Department stores, shopping malls, professional retail & wholesale stores, and their supporting facilities, such as small-sized workshops, warehouses etc.
	C22	Finance and insurance	Banks and the branches, credit cooperatives, trust investment companies, stock exchanges, insurance companies etc.
		Trade and consultation	Trading companies, firms, and their consulting organizations
	C24	Service industry	Restaurants, photo studios, barber shops, bathhouses, household repairs, traffic ticket offices
	C25	Hotel industry	Hotels, guest houses, holiday villages and their supporting facilities
	C26	Market	Kinds of independent markets, such as farm produce markets, commodity markets, industrial product markets etc.

 Table 1
 land-use classification for commercial-financial land

Source: Adapted from Urban Land Use Classification and Land Use Planning and Construction Standards (GBJ 137-90), 1991.

3 RESEARCH OF COMMERCIAL LAND USE OF HUTONG

After the analysis of the content and influencing factors of the contradictions between the mixed use and the Hutong protection, the following part intends to discuss the distribution rules of the contradictions by studying the survey materials on Historical and Cultural Protected Area, and then put forward some feasible solutions.

3.1 Survey on commercial land use of Hutong

The author and some colleagues who are working in the project of *Measures for the Administration of the Protection of Beijing HuTong* have taken a thorough survey of commercial land use of Hutong in May, 2008.

The survey includes all the 1115 Hutong within the 2nd ring road of Beijing. We use photos to record the commercial storefronts and classify them, according to the Hutong which they are belong to. Through the

classification, we can get three conclusions: 1) the number of Hutong which have commercial facilities; 2)

the number of commercial storefronts in each Hutong; 3the business content and size of each commercial storefront through the analysis of the photos.

By the analysis of ①, we can know the proportion and distribution characteristics of the Hutong which

have commercial facilities. Based on ② and ③, we can get the number of commercial facilities and the business content in each Hutong. Since the number of commercial facilities can reflect the scene of Hutong and the business content and size of those commercial storefronts can reflect the degree of environmental pollution, we could know the degree and specific performance of contradictions in each Hutong, which is the key to the solution.

3.2 Classification of mixed use of Hutong

Based on the analysis of the survey materials of commercial land use of Hutong, the author finds that the number and business content of commercial facilities in Hutong could reflect the commercial concentration level and service scope. The further analysis is as follows:

() The number of commercial facilities reflects their concentration level. Since the better location a Hutong is at, the more attraction it has for commercial land use. Those Hutong which have good location

advantages have a large number of commercial facilities and a high level of concentration.

(2) The business content of commercial activities reflects the service scope. Since commercial facilities with large service scope need better location than those small ones, and the business content is also related to the location condition of Hutong.

③Both the number and business content of commercial facilities are sensitively affected by the location condition of Hutong, so, to some degree, the commercial facilities number and business content should have a inner relationship between each other. It means, those commercial facilities with large service scope are preferred to locate in the Hutong with a large number of commercial facilities, as well as with a high level concentration. While those ones with smaller service scope usually locate in the Hutong with a smaller number of commercial facilities, as well as with a smaller number of commercial facilities.

Based on the information of number and business content of commercial facilities in each Hutong which we get from the Hutong survey, the author proposes to divide Hutong with commercial facilities into three categories by the service scope and concentration level of the commercial facilities: (see Table 2, Fig. 1.-3.)

①City level commercial Hutong. Such Hutong are in the old urban areas and have good reputation. They own the highest level of concentration of commercial facilities in all three categories, as well as the largest service scope. The commercial facilities mainly belong to tourism, leisure and entertainment industry, and their consumers come from the whole city, or even all over the world. Most of these Hutong have been redeveloped by the government, and the appearances of the buildings look like the scene of Hutong in the old urban areas.

②Community level commercial Hutong. Based on the location advantages, such Hutong have a relatively high level of concentration. These commercial facilities mainly offer life services for surrounding communities. Since these Hutong have not been redeveloped by the government, all the commercial buildings are only transformed from those old residential ones and their appearances have a negative effect on the original residential scene of Hutong.

③Scattered-type commercial Hutong. In general, they are in the old urban areas and have smaller service scope. In addition, the commercial facilities in this kind of Hutong are community retails. Most of them gather in the intersection of Hutong and meets the daily life needs of those residents there. Compared to the community level Hutong, the number of commercial facilities in such Hutong is very small. These commercial buildings are also transformed from those original residential ones, so most of them don't have a satisfactory appearance.

Category name	Number	Percentage	Category name	Number	Percentage
City level commercial Hutong	14	1.3%	Scattered-type commercial Hutong	195	17.5%
Community level commercial Hutong	36	3.2%	Residential Hutong	870	78.0%

Table 2the statistical number of Hutong in each mixed use category

Source: Provided by the project of Measures for the Administration of the Protection of Beijing HuTong, 2008.



Figure 1 City level



Figure 2 Community level



Figure 3 Scattered-type

commercial Hutong

commercial Hutong

commercial Hutong

3.3 Comparison analysis of three Hutong categories

After studying and analyzing the service scope and concentration level of commercial facilities in each Hutong, all commercial Hutong have been divided into three categories. Now the paper is going to discuss the difference among them.

(1) Comparison analysis of commercial and residential environment conflict. Since commercial and residential environment conflict is mainly determined by the business content of the commercial facilities, the paper proposes to discuss the environmental pollution degree in each category by comparing the business content.

Since the commercial facilities in city level and community level commercial Hutong have a large service scope and a huge number of consumers, they usually cause some negative impacts on the surrounding residential environment. Especially the noise, light, fumes and other pollutions which are made by restaurants and bars disturb residents' daily life. Generally speaking, the commercial and residential environment conflict is very evident in city level and community level commercial Hutong. It should be paid enough attention to keep residential environment from being polluted. However, the commercial facilities in scattered-type commercial Hutong are mainly small community retails, as well as have little pollution, therefore, such kind of Hutong doesn't have the serious commercial and residential environment conflict.

(2) Comparison analysis of commercial and residential style conflict. Since commercial and residential style conflict is mainly determined by the original scene of Hutong in which commercial facilitates are located, the paper proposes to discuss the different effect of appearances of commercial buildings in each category through the comparison of the original Hutong scene.

With a large number and a high level concentration of the commercial facilities, there is little residential land use in city level and community level commercial Hutong. As a result, the commercial and residential style conflict should reflect the whole commercial environment and its traditional culture, but not the conflict between commercial buildings and traditional residential style. So the commercial and residential style conflict in city level and community level commercial Hutong is smaller. Such kinds of Hutong should pay their attention to create a business environment full of traditional cultural instead. On the contrary, with fewer commercial facilities, almost all the scattered-type commercial Hutong have traditional residential scene, so the commercial and residential style conflict is still significant in these Hutong.

4 SUGGESTIONS ON MIXED-USE LAND

Above, the paper has discussed the difference and characteristics of those contradictions in each Hutong category. Now it's going to bring forward some suggestions on the present land use planning and administration for a more rational mixed use of commercial and residential land:

(1) Now the classification of mixed use of commercial and residential land is too general. We should formulate different land compatibility table and environmental pollution control standards for mixed use area which are based on the service scope of each commercial Hutong category. For example, restaurants and bars can be promoted in the city level commercial Hutong, but retails such as metal goods and utensils should be limited. While in a community level commercial Hutong, the commercial facilities such as restaurants and bars, which usually cause serious noise, light and fumes pollutions, should be strictly administrated for protecting surrounding residential environment. However, with the exception of the commercial facilities which have little impact on the surrounding residential environment, the others should be prohibited in a scattered-type commercial Hutong.

		The classification of Hutong			
		Scattered-type commercial	Community level	City level commercial	
		Hutong	commercial Hutong	Hutong	
Uses	es Bars X		P^1	Р	
	Restaurants	P^1	Р	Р	

Table 3 diagrammatic sketch of a land compatibility table for mixed-use in Hutong

Repairs	\mathbf{P}^1	Р	Х
Retails	Р	Р	P^1
Barber	Р	Р	X
shops			

Note: P = Permitted, X = Prohibited, $P^1 = Permitted$ as a conditional use, and figures are illustrative only.

(2) Formulating different commercial building appearance standards for mixed use area based on the concentration level of each commercial Hutong category. It can not only protect the original residential scene of residential and scattered-type commercial Hutong, but also is good for developing new appearances which are suitable for commercial Hutong. Apparently, the standards will be conducive to promoting a new harmonious blend of commercial buildings in city level and community level commercial Hutong.

(3) With the market-economic development, the concentration level and service scope of commercial facilities in each Hutong will be changed. As a result, the business condition of commercial Hutong should be investigated regularly, as well as the mixed use category of each Hutong should be revised, in order to keep the administration of land reasonable.

POSTSCIPT

According to the practical condition of Hutong, the paper analyzes the content and impact factors of the contradictions and proposes the present plan and administration are not effective enough for the Hutong protection. Furthermore, the author brings forward different land use compatibility table and building appearance standards for each kind of Hutong based on the classification research. It's hoped that the conclusions of this paper might promote the development of land use planning and administration in Historical and Cultural Protected Area, and the Hutong protection.

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