

TRANSFORMATION OF ROADS' FEATURE
PROTECTION: STATUS AND FUTURE
THINKINGS OF SHANGHAI'S FEATURE-
PROTECTED ROADS: BASED ON THE CASE OF
YUYUAN ROAD IN SHANGHAI

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Abstract: During the decades of the formation and development of historic roads in Shanghai, the urban connotation has different traces in different times. Feature-protected roads are one kind of urban heritage because they have the characteristics of urban form and urban culture. However, in the process of protection, the work of protecting feature-protected roads has been confront with certain difficulties due to the imperfection of the theory and the technology. This paper tries to answer the question what are the realistic problems and dilemmas faced by the feature-protected roads under the background of rapid development and transition of the city? And what aspects should be focused on in the protection work? It combs the basic characteristics of the relevant planning of Shanghai feature-protected roads and analyzes the requirements of the management and control of feature-protected roads in Yuyuan Road Historical and Cultural Area and the status of its protection, aiming to explore the highlights and problems in the protection process. Finally, this paper tries to put forward the optimization direction aiming at the problems in the protection work, which can provide the protection of historical landscape and the continuation of cultural tradition under the concept of shareable development.

Keywords: feature-protected roads; Yuyuan Road in Shanghai; planning control; protection status

1. Introduction

Shanghai is one of the national historic and cultural cities. It has rich history and culture, gathers many excellent modern buildings and revolutionary histories, and forms a unique urban style. In order to strengthen the protection of style and features, in July 2002, Shanghai promulgated *the Regulations on the Protection of Historic and Cultural Areas and Excellent Historical Buildings in Shanghai*. In 2005, it completed the protection planning of 12 historic and cultural Areas in the Central City and *the Planning for Landscape Protection Road in Historic and Cultural Areas in Central Shanghai*, as well as identified 144 landscape protection roads and streets (hereinafter referred to as landscape protection roads) in each historical and cultural area.

This paper attempts to start from two aspects: related planning control and actual protection situation of landscape protection roads, briefly combing the basic characteristics of Shanghai landscape protection planning



and trying to take Yuyuan Road (West Section) as an example to analyze its problems in related planning control and actual protection situation, in order to obtain and understand the highlights and problems in protection work of Shanghai landscape protection roads.

2. Brief Comment on the Planning and Management of Landscape Protection Roads in Shanghai

2.1 Overview of Management, Planning and Research of Lane Protection Road

The author sorted out the policy documents directly related to the style and features of roads : the *Opinions on the Planning and Management of the Style and Features Protection Roads (Streets) in Shanghai* (hereinafter referred to as "*Opinions*") which approved by the Shanghai Municipal Government in 2007 put forward the specific requirements including management mechanism, management requirements, planning basis and procedures, planning content, control elements and other aspects for landscape protection roads. This normative document would remain valid for nearly 10 years. In 2015, the Shanghai Municipal Government issued the notice of the *Municipal Government on Extension of the Validity Period of the Notice of the Municipal Planning Bureau Approving Some Opinions on the Planning and Management of the City's Landscape Protection Road (Street) by the Shanghai Municipal People's Government*, which clarified the guiding role of the "*Opinions*" extended to April 2020.

The planning related to landscape protect roads are as follows: ①the *Protection Planning of Historic and Cultural Areas*"(2005) for each area; ②*the Planning for Landscape Protection Road in Historic and Cultural Areas in Central Shanghai* (2005) approved by Shanghai Municipal People's Government; ③*the Planning for Landscape Protection Road* (after 2007) which some districts of the central city have already compiled. Among them, planning ① is the core of the landscape protection system, with the regulatory detailed planning as the carrier of the protection planning, and the main results are the planning text, instructions and drawings. Planning ② determines 144 landscape protection roads in 12 historic and cultural areas of the central city and carries out the overall planning and protection of "original flavor". 64 of them are classified as "*first-class protection roads*" and the other 80 as "*two-four-class protection roads*", which require detailed protection planning and strict protection of landscape protection roads. Planning ③ is a detailed and constructive planning for a particular landscape protection road under the guidance of the above two planning, which deepens and refines them. However, the project still remains in individual districts and hasn't cover all the landscapes and roads.

The research related to landscape protect roads are as follows: (Guo Jian, 2008) probes into the planning work of landscape roads, and analyses the difficulties, ideas, technical contents and interactive connection of management in landscape road protection planning combining with practice. (Hou BinChao, 2008) analyses the process of determining the road for the protection of Shanghai's scenery and the characteristics of the protection work and puts forward some suggestions on how to further promote the protection of historic street landscape and strengthen the function of public activity space on streets. (Sha Yongjie, 2009) takes Wukang Road as an example to study the history and protection planning of landscape protection roads and explore the protection planning mode at the level of constructive detailed planning combined with the protection comprehensive renovation project of Wukang Road. (Sha Yongjie ,Wu Jiang, 2013) studies the comprehensive protection planning of some streets of Hengshan Road-Fuxing Road historical and cultural landscape area in Xuhui District from 2011 to 2013, and probes into the deep problems of design management and implementation. Since then, Shanghai-style cultural writers have paid more attention to the style and road, describing the style and road in the form of literary works (Chen Danyan, 2014).

To sum up, the time of compiling and approving the planning, issuing the management documents and concentrating on the related research is 2005-2009. Since 2010, the implementation and management process of



the planning has been the main task. However, up to now, the normative documents have not been translated into laws and regulations, the protection planning has not been fully covered, and the related research is still less.



Figure1: Scope map of 12 historic and cultural areas in central Shanghai (Source: planning for landscape protection road in Xuhui District, Shanghai)



Figure2: Distribution map of landscape protection roads (streets) in central Shanghai (Source: Self-drawn by the author)

2.2 Main Characteristics of the Planning and Management of Landscape Protection Roads in Shanghai

2.2.1 Incorporation into the Heritage Protection System

The establishment and protection of 144 landscape protection roads have been incorporated into the planning and management system of Shanghai historic heritage protection in. The determination of landscape protection road has perfected the three-level urban historical heritage protection planning and management system established in Shanghai, which combines the key protection (excellent historical buildings) - street landscape protection (landscape protection road and street) - regional protection (historical and cultural area).

2.2.2 Classified management and clear focus

The historic backgrounds and the surrounding conditions of landscape protection roads are different, resulting in the different landscape situation. While 144 landscape protection roads have been identified, four-types landscape protection roads have been classified and corresponding protection and management requirements have been put forward. The environment of each scenic area in the central city is complex and the difference is significant. So, classifying 144 scenic roads and putting forward corresponding key requirements of protection and management is the basis for the long-term development of the work. They are very in line with the principles of classification of heritage protection.

2.2.3 Protection planning has limited coverage and its legal status needs to be upgraded

In the actual investigation process, the author found that although *the Opinion* has been published for more than 10 years, but so far most of the historic and culture areas have not carried out landscape protection road planning within. Taking Yuyuan Road historical and cultural area of as an example, its scope spans Changning and Jing'an districts, the section in Jing'an district has worked out *the detailed planning of North Maoming Road and Yuyuan Road in Jing'an District* for the eastern section of Yuyuan Road. However, the detailed protection planning of the section in Changning district has not been carried out so far.

2.2.4 Focus on top-down and neglect residents' participation

Street is closely related to people's life as a transportation and public activity space. The functional characteristics along the street and neighborhood communication mode are the source of vitality of the landscape protection roads. However, the protection of both regulatory and revision levels is based on the planning authorities, ignoring the use of residents around the landscape roads, and adopting a top-down planning model. Such practices often lead to the gradual replacement of residential functions and the relocation of aborigines, leading to high-end, personalized commercial stores and gradually separates from the consumption level of aborigines. The original life was replaced by a strong commercial atmosphere, the authenticity of history is left just with "empty shells".

1. Current situation of landscape road protection -- A case study of Yuyuan Road (West Section) landscape protection road

3.1 Research Objects

The historical and Cultural District of Yuyuan Road is one of the 12 historic and cultural areas in the central Shanghai, transforming from the residential area of the middle and high level citizens of ancient Shanghai. Though it has undergone a hundred years of vicissitudes (in 2018, held various commemorative activities of "Centennial Garden Road"), its residential function is still the main function and has the corresponding public service function. The historical and cultural area spans Changning and Jing'an districts. On the whole, Yuyuan Road and other historic protection roads are like the space skeleton, linking four cultural and conservation units and 46 excellent historical buildings.

The protection plan of Shanghai Yuyuan Road Historic and Cultural Area locates its protection goal as "restoring the original senior residence and matching landscape function of Yuyuan Road historic and cultural Area, strengthening the existing public service functions such as education and administration, and forming a relatively simple but closer to the overall function orientation of the historical prototype". The whole plan takes Yuyuan Road as the core carrier to build life functional spindle. In the historic and cultural areas has five identified landscape protection roads (see Tables 1 and 3 for details) and each road has corresponding protection requirements (see Table 2 for details).

Road name	Origin-destination	Planning road grade	Current Width (m)	Adjust the red line (meter)	Classification of Landscape Protection Road
Yuyuan Road	Changning Road-North Urumqi Road	Secondary trunk road	15.2	Maintain the original form	Third-type
Wuyi Road	Dingxi Road-Yan'an West Road	Access road	20	20	First-type
Zhenning Road	Xinzha Road-Yongyuan Road	Access road	12-15	20-24	Third-type
North Urumqi Road	North Urumqi Road-Yongyuan Road	Access road	12.2	18-24	Third-type
Wan Hang Du Road	Kaixuan Road-Hua yang Road	Access road	12	20	Fourth-type

Table1: List of roads protected in Yuyuan Road historic and cultural area (this paper takes Yuyuan

Road as an example) (Source: protection planning of Yuyuan road historic and cultural area,

translated by the author)



Classification of Landscape Protection Road	Features	Protection requirements			
		Road width	Building Protection along the road	Other protected objects	Control index
First-type	Protecting buildings and preserving historic buildings along roads are distributed centrally, and their features are obvious. The roads maintain historical width and basically maintain the original spatial scale.	No widening.	Strict protection of protecting and preserving historic buildings along the road. The general historic buildings whose scale and style are basically in harmony with the surrounding protection and preservation of historic buildings should also be mainly preserved, renovated and repaired.	Courtyard, greening, ancient and famous trees, distinctive wall, pavement, street furniture, street trees, etc.	Building height, volume, style, color, form, width, retreat distance, building spacing, etc.
Second-type	There are a certain number of protected buildings and historical buildings along the road, and a certain number of other buildings and development plots.	Generally, keep historical breadth and original scale.	Conservation buildings and historical buildings along the road a should be preserved.	—	Height, volume, style, form, width, distance and space should be coordinated with the surrounding historical buildings.
Third-type	There are a certain number of protective buildings and historical buildings along the road, but the proportion of protective buildings and historical buildings along the road or on one side is small.	It can be properly broadened according to the planning of the width of the red line, the protection of buildings along the street, the preservation of the location of historical buildings, street trees, greening and other factors.	A small number of protective and preservation historical buildings which are in contradiction with road widening can be treated by displacement, partial demolition and opening of arcade buildings according to building protection requirements. The ratio of height to width of planned streets should be close to the original proportion of streets.	—	Appropriate control of building height, style, scale, retrogression distance and spacing of development blocks along the road.
Fourth-type	The distribution of historic buildings along the road is less, but the road grid, scale and alignment of the	—	—	—	—



	road have certain characteristics.				
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Table2: List of classified protection requirements for Shanghai landscape protection roads (streets) (a case study of Yuyuan Road historical and cultural area) (Source: the author sorted out according to the *Yuyuan Road historic and cultural area protection plan*)



Figure3: Planning map of core protection scope and construction control scope of Yuyuan Road historical and cultural area (green one is landscape protection road) (Source: the *Yuyuan Road historic and cultural area protection plan*)

Yuyuan Road is divided into three sections according to administrative boundaries and roads: eastern, western and middle. The western section between Changning Road and Jiangsu Road belongs to Changning District with a total length of 0.91 km. Changning District has not formulated the landscape road protection plan at the level of constructive detailed planning for the western area. At present, the protection of Yuyuan Road landscape road (the western section) is mainly based on the historical and cultural area protection plan and *the Opinions*. According to *the Opinions*, the whole neighborhood section shouldn't carry out construction, repair and renovation activities due to the lack of protection planning for road.

The author makes a field investigation on Yuyuan Road (West Section) and the buildings along the street and tries to review the existing problems of the relevant protection planning through the analysis of its protection status.

The research area determined by the author is the envelope range of buildings along both sides of Yuyuan Road. The main section of the road is 15.2 meters wide, two-way lanes are about 9 meters wide, two sidewalks are 2.5 meters wide and plane trees are planted on both sides. Among them, there are 6 excellent historic buildings in Shanghai, and about half of them are protected buildings and historic buildings. In the whole length of the north-south interface of the street, the business interface accounts for about 61%, mainly clothing, banking and catering functions; the residential interface (including 17 entrances and exits) accounts for about 19%, mainly in the form of fencing; other public service interfaces (nursing homes, youth palaces, police stations, kindergartens) account for about 17%; other interfaces or those underdetermined functions due to the construction are about 3%.

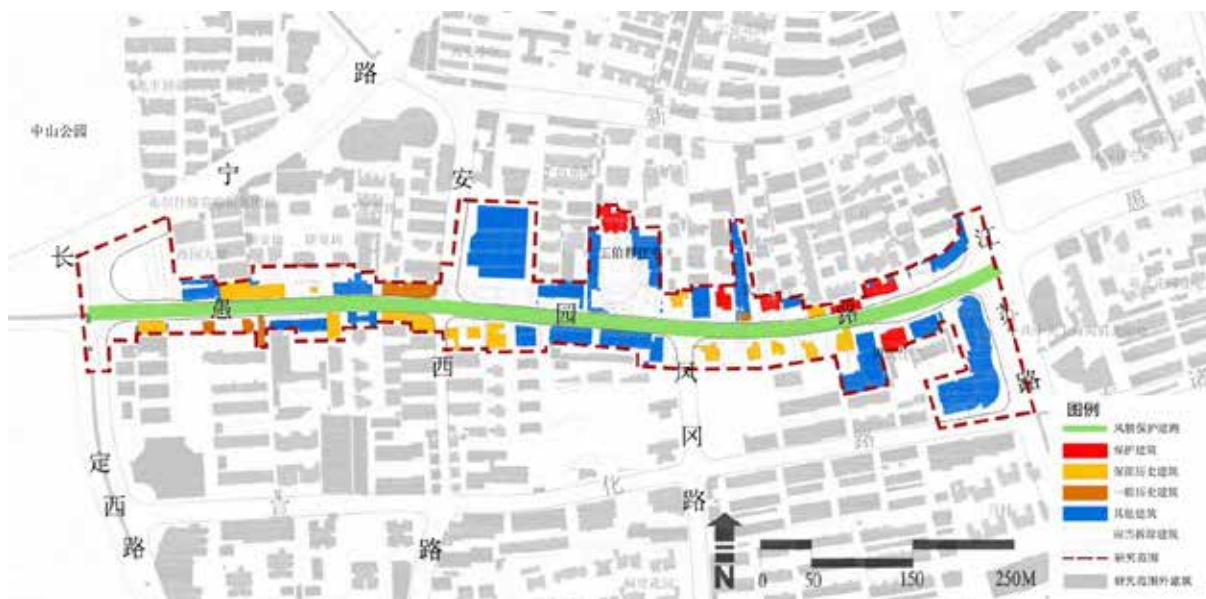


Figure4: Scope of investigation: Yuyuan Road landscape protection road (west section) and buildings along the street (Source: drawn by author)

3.2 Current Situation of Yuyuan Road (West Section) Protection Based on Investigation

In the investigation, the author found the following problems:

3.2.1 The "packaging" destruction of the elevation along the street at the bottom reflects the backward concept of managers and mechanical implementations of landscape protection.

The elevation along the street is an important carrier of the "appearance" of the landscape road. Taking the elevation along Yuyuan Road as an example, the whole block is based on the light- yellow cement brushed elevation and dark red brick wall. The structure is preserved intact, beautiful, and the color is harmonious and unified, which is certainly of historical and cultural value. However, in the investigation, the author found that the facades of historical buildings and general historical buildings are facing "packaging" destruction. The main reason is that the managers' concept of landscape protection is backward, lack of the understanding of the authenticity protection of buildings, and mechanized implementation of landscape protection requirements.

The "packaging" destruction of building facades along the street is mainly embodied in the aspect of landscape destruction. In order to create an orderly and color-coordinated street facade, some building columns and stores employ light gray dumb imitation wood shell wrapping and replace it with the shop name of a unified font. The same practice exists at least three places within the scope of study (Figure. 9). All the buildings involved are historical buildings. Compared with the old photos before renovation (Figure. 8), the original appearance of these buildings is mostly dark red brick pillars, with the door covered with ripe brown and warm grey cement. Although the style of the signboard is different, the overall tone is in harmony with the surrounding features; while after renovation the cold grey imitation wood quality is "neat and uniform", it actually hides the original appearance, making people unable to perceive the architectural history and original features.

In the interview, the author learned that such renovation was recently required by the city's competent department. Most shopkeepers believe that this transformation has affected the promotion of shop characteristics, and generally believe that "the original appearance is more flavor". The intention of the competent authorities is to sort out the original cluttered stores and facades in order to achieve orderly and tidy street commercial interface. However, this neglect of the original appearance of the building is not smart enough, reflecting the lack of adherence to the principle of heritage authenticity protection by the competent authorities. Mechanized

implementation of the requirements of landscape protection, brings about the actual "protective damage" to the landscape.



Figure 5 The landscape of the street elevation after "package" renovation (Source: Author's self-photography)



Figure 6 Renovation details (1) (Source: Author's self-photography)



Figure 7 Renovation Details (2) (Source: Author's self-photography)



Figure 8 The landscape before the renovation of the street façade (Source: Baidu Street View Map)



Figure 9 Distribution of the same remediation method (green is the remediation point in the figure) (Source: Self-drawn by the author)

3.2.2 the disorderly refraction environment of street facades above the second floor reflects

insufficient guidance and participation of residents in protection

The main type of land used on both sides of Yuyuan Road is residential land. Therefore, in implementing the protection planning of landscape roads, some considerations have been made to achieve the balance between environmental improvement and meeting the needs of residents, such as setting up air-conditioning external hood for residential buildings from the second floor to above. But in the investigation, the author found that a large number of air conditioners were not hanging freely according to the requirements (Figure. 10). In addition, the disordered wire network, the additional drainage pipe and other problems also seriously damaged the street style, and even drilled holes in the wall to facilitate the access of lines (Figure. 11) and pipes. In the aspect of window updating, most users use silver aluminium alloy window frame to replace the original dark red grid window frame (Figure 12).

This reflects the problems of both residents and managers. On the one hand, it is not the residents that ignore the impact of these practices on quality and beauty, but they lack expertise and skills, platforms and mechanisms for communication and coordination in the process of updating and are unwilling to bear excessive expenditure to

maintain their appearance. On the other hand, managers often pay attention to the form of protection work in place, but usually neglect the supervision and guidance in the implementation process. For example, there is little tracing after setting up the shield, so that the residents who are lack of protection awareness destroy the appearance after installing the external aircraft.

In fact, the effect of indoctrinating the concept of protection to the residents is often far from expectation. A better way is to learn from France's experience in urban heritage and development of residential areas, and to encourage residents to fully participate in the work of landscape protection by using incentive policy of "carrot + stick" as incentive and punishment, so as to better "live regenerate" the historical heritage.



Figure 10 Air-conditioned External Aircraft that not Suspended in Required Position (Source: Author's self-photograph)

Figure. 11 Disturbed wires and pipes (Source: Author's self-photography)

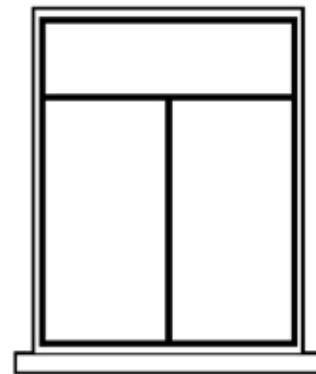
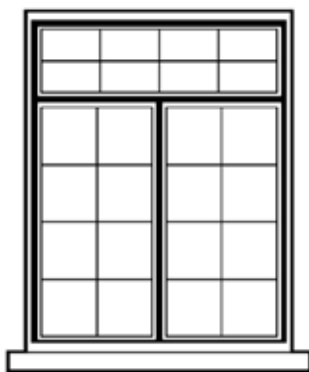


Figure 12 Original dark red window frame (Source: Self-drawn by the author)

Figure 13 Silver Aluminum Alloy Window Frame (Source: Self-drawn by the author)

3.3.3 Random repetition of architectural renovation reflects the lack of relevant protection rules and irregular approval process

During the author's investigation, Yuyuan Road staged an aesthetic saliva war about the random and repeated facade modification. In pursuit of the concept of new fashion, a street art gallery employs overseas designers to transform the bottom facade of No. 1173 Yuyuan Road with flat black and white lines as the main elements (see Figure 15 for details). From the protection plan of Yuyuan Road, we can see that the building is classified as other buildings and the requirement of such buildings should be reconstructed or demolished, reconstructed or constructed in harmony with the features of historical and cultural area. The facade renovation of such buildings should be in harmony with the surrounding features.



Figure 14: The surrounding features of Fiu2 Art Museum (Source: Author's self-photography)



Figure 15: Fiu2 Art Museum after its facade renovation (Source: Sina Microblog)



Figure 16: Fiu2 Gallery Facade Restoration (Source: Author's self-photography)

It can be clearly seen that the facade style of the exhibition hall after renovation is obviously inconsistent with the surrounding features (compared with Figure 14), which seriously violates the planning requirements. Therefore, only a few days later, it will be required to rectify and restore its original appearance. The method of restoration is to use coatings to cover the newly modified coatings and complete the restoration in color. The head of the gallery declared that :“ The administrative procedures were complete and legitimate, and the streets and media were accepted. However, when an individual passed by accidentally, he would negate the effectiveness of the previous administrative procedures because he wanted to mobilize administrative power." Regardless of their weak awareness of landscape protection in the transformation activities in the historic and cultural areas, if what they say is true, there are indeed irregularities in the process of examination and approval. The right of approval for the construction in the scenic area is in the competent planning department of Shanghai. Obviously, "street acceptance" doesn't have any effect on the transformation activities in the scenic area. The irregularity of the examination and approval process leads to the repetition and arbitrariness of building renovation, which should not be paid by the shopkeeper only.

Another problem reflected by the phenomenon is the lack of Yuyuan Road landscape protection planning mentioned above, and the delay in compiling relevant protection rules, which makes the competent authorities lack detailed and effective basis for approval. The details of judging "harmony" and "disharmony" of landscape and features should be further clarified in the protection planning. It is suggested that a "positive list" be established for coordinated transformation of style and features, and that objects such as pillars, doorways and steps be listed as elements that must be retained as they are, so as to materialize the unalterable objects and avoid repeated acts of destruction, such as those that are restored after the completion of the approved transformation scheme.

3.3.4 Priority of road capacity transformation reflects the difficulty of coordination among multi-authorities, which can not meet the deep-seated rehabilitation of neighbourhoods.

At present, according to the planning requirements, the width of Yuyuan Road (West Section) is maintained at 15.2 meters except for the widening of the roads at Jiangsu intersection and Dingxi intersection of Yuyuan Road at both ends. According to the location of the red line in the road system planning of the protection plan of the historic and cultural area, the intersection of Yuyuan Road in Jiangsu Province is widened reasonably. While the red line requirement of Dingxi intersection of Yuyuan Road in the planning is expressed as the one-sided widening of the north side (position ① in Figure 17). However, in the actual investigation, it is found that the traffic situation is complex due to the intersection of the three lines at the road intersection. In line with the principle of giving priority to road capacity, the ② section of the road is also widened. The non-motorized lanes are located outside the red line of the road, which violates the regulatory requirements in comparison with the planning.



Figure17: Red Line Map of Road Planning at Dingxi Intersection of Yuyuan Road (Source: the author draws his own picture according to the protection pla)



Figure18: reasonable broadening of ① (Source: Author's self-photography)



Figure19: irrational broadening of ② (Source: Author's self-photography)

Due to the particularity of both traffic functions of landscape characteristic, it is necessary to coordinate and balance the opinions of multiple authorities in the actual protection process. Municipal landscaping, environmental sanitation departments and transportation departments have played a certain role in the related work of renovating landscape roads, but they have different emphasis on the renovation work, and even conflict with each other. Irrational renovation behavior is prone to occur in the case of poor coordination and lax auditing. However, the protection of landscape roads has been incorporated into the heritage protection system. Regulations and repair regulations are the carriers of protection work and have legal effect. Any construction activities in scenic areas need to ensure the principle of "priority of protection" according to law. It is urgent to promote the renovation work led by planning departments and participated by many departments. Therefore, the planning and protection of landscape roads should be more comprehensive, and the protection of landscape roads should be taken as a grasp to promote the deep revival of neighborhoods.

4. Discussion on the Optimum Direction of Landscape Road Protection

4.1 Perfecting the compilation of protection planning and upholding the protection according to law

In terms of laws and regulations, it is necessary to speed up the incorporation of the requirements for road protection into the legal system and enhance the legal effectiveness of protection. In terms of planning, in the context of the increasingly detailed control system, the formulation of landscape road protection planning can be combined with urban design, giving full play to the flexibility and participation of urban design, and enhancing the rationality of decision-making. On the basis of improving protection planning, we should adhere to the principle of priority of protection according to law.

4.2 Cross-administrative cooperation and multi-sectoral consultation

Landscape protection roads are often not confined to a single administrative region. Due to the limitation of administrative boundaries, protection planning is divided into sections. The protection planning of landscape protection roads should carry out cross-regional cooperation and work out jointly so as to avoid the occurrence of different treatment situations. In addition, we should understand the particularity of landscape roads as historic heritage and solve street-related issues through multi-sectoral consultation.

4.3 Government guidance, residents involvement, making full use of flexible measures of market

The first problem found in the survey is due to unreasonable intervention by the competent authorities, while the second problem is due to inadequate intervention and inadequate guidance. The government should explore the flexible role of market mechanism in urban heritage protection under the condition of protecting public interests and strictly abiding by the bottom line of urban heritage protection and be a good rulemaker and supervisor. The government should neither dominate the implementation nor the neglect of destruction, transform the identity and establish a consultation platform instead so that willing residents and competent institutions can cooperate. May be PPP model is a good choice to achieve a win-win situation of style protection and quality improvement.

4.4 Promoting the concept of protection and drawing lessons from advanced international experience

By using advanced theories and methods such as "historic urban landscape" and making a more detailed study of historic and cultural landscape areas and road protection, protection planning based on research can be elaborated. It is important to combine the needs of protection and development to face the dynamic management of urban heritage. And drawing on the advanced protection experience of foreign countries to form a landscape road protection system with Shanghai characteristics.



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