Experience and inspiration in shaping urban cultural space: Cases of London, Paris, New York and Tokyo

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Abstract. Urban culture place is the concentrated embodiment of urban vitality, which has increasingly become the focus of urban construction. It’s of great practical significance for improving city quality and realizing sustainable development to study the shaping methods of urban cultural space. In this paper, four international cities’ status quos of cultural space development are chosen for case studies. The spatial types are classified into three levels: “integration-functionality-serviceability”. The shaping methods include strategic guidance, shaping diverse cultural spaces, forming characteristic cultural industries, and promoting the equalization of cultural facilities. Based on the above, it is proposed that in the important period of urban transformation and development in China, we can learn from international experience in terms of creating urban image, formulating cultural development planning, developing creative industries, and improving urban cultural atmosphere and vitality, and achieving the goal of diverse cultural space, abundant cultural activities, accessible cultural facilities and prosperous cultural establishment.

1. Introduction

Under the background of economic globalization and post-industrialization, the competition between cities has changed from material elements to urban cultural elements, from economic development orientation to promoting social equity. Economy and culture have deeply integrated. Developed cities have carried out a large number of culturally-oriented urban renewal and regeneration practices and formed many mature development models[1]. Facing an important period of urban development transformation, culture has become a critical breakthrough in economy, society and spatial construction in China. With the development of economy and the improvement of living standards, the people's need for material has turned to the demand of spiritual culture, and the sharing of cultural space for everyone has reached a consensus in the world. The Habitat III meeting confirmed the importance of culture for the sustainable development of cities and human beings and ensured cultural diversity as an important embodiment of citizen participation, social inclusion and fairness[2].

Therefore, in the context of globalization and human-oriented concept, how to ensure the inheritance of cultural uniqueness, promote culture to contribute urban economy, create rich cultural space, and provide equal public cultural services have become important research topics. From the perspective of urban cultural space shaping, this paper selects four international cities of London, New York, Paris and Tokyo as typical cases to study shaping methods, based on whose current status quo, and provides development ideas and countermeasures that can be used for reference.
2. Research status quo of urban cultural space

With the rise of consumerism culture and the improvement of citizens' spiritual needs, urban cultural space has been an important part of modern urban space, and gradually become the research focus in anthropology, sociology, geography, and urban planning and management. The researches mainly focus on conceptual definition[3], spatial characteristics[4], formation mechanism[5], spatial evolution/geographical distribution[6], scale/type division[7] and so on. On the one hand, these studies deeply analyze the connotation characteristics of urban cultural space, descriptively analyze its current status quo through quantitative statistics, and reveal the general law of its development characteristics; on the other hand, these studies provide guiding opinions based on the means of planning design and public management to achieve a vibrant and good development of the urban cultural space.

Due to the development of urban cultural economy, the city has diverse functions and abundant cultural types. As a result, the current researches have formed different standards for urban cultural space and different spatial scales (Tab1.). It is hard to promote a unified standard to analyze and joint manage perfectly. Lack of systematic integration of different types of cultural spaces, it is impossible to correctly recognize the overall cultural space of the city. In addition, the current researches and practices are limited to how to shape the domestic urban cultural space and lack the collation and references of international urban experience. Facing renewal and transformation, the protection and development of historical and cultural blocks, and the adjustment of economic and industrial structure have brought opportunities and challenges to the creation of urban cultural space in China. Therefore, this paper introduces the construction experience and standards of foreign culture advanced cities, such as London, Paris, New York and Tokyo, to reveal the development trend of cultural space, and proposes a wide range of cultural space classification standards and cultural space shaping methods in line based on China’s reality.

| Standard          | Cultural space types                                                                 |
|-------------------|--------------------------------------------------------------------------------------|
| Spatial scale     | 1. Integral urban cultural image space, cultural division, cultural area and cultural facilities |
|                   | 2. Urban overall cultural texture, urban cultural zoning, characteristic style blocks, cultural space nodes |
|                   | 3. Macro-scale strategic cultural region, medium scale cultural facilities and micro-scale cultural atmosphere |
| Demand hierarchy  | Basic space, lifting space and landmark space |
| Cultural function | 1. Creative cultural industry space, traditional historical and cultural space, modern performing space, cultural exhibition space, cultural activity space, belief culture space |
|                   | 2. Urban nodes or landmarks, historical and cultural blocks, cultural and creative industrial parks, cultural and industrial gathering areas |
|                   | 3. Cultural ecological space, cultural industrial space and cultural undertaking space |
| Time sequence     | Historical cultural space, modern cultural entertainment space |
| Spatial elements  | Point-like cultural spatial elements, linear cultural spaces, planar cultural spaces and urban spatial landscape bases |

(Sources of the table: Reference [3-10])

3. The status quo and shaping methods of international urban cultural space

To form a unified standard to analyse the current situation of cultural space in four cities, it is necessary to reclassify the cultural space in order to achieve full coverage of the urban cultural spatial elements. Space not only has scales, but also has functionality. According to the classification in Table 2, urban cultural space can be divided into three categories: integral space, functional space and service space.
Table 2. Classification standard of urban cultural space

| Type            | Definition                                                                 | Contents                                                                                     |
|-----------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Integral space  | Representing the overall style of the city, the spirit of the city, the image of the city, etc. Macro scale | 1. Urban spatial structure and Landscape pattern<br>2. Urban integral image<br>3. Main axis of city |
| Functional space| Cluster with similar cultural functional element spaces. Medium scale       | 1. Educational Cultural Space: mainly refers to higher education space such as universities,<br>scientific research institutions and so on.<br>2. Creative Culture Industry Space: A park with creative design services as the leading industry<br>3. Historical and cultural protection space: Relying on historical blocks, various types of sites, cultural protection units, cultural relics, etc.<br>4. Characteristic cultural space: Space with typical urban features, such as financial space<br>5. Ecological culture space: Large city park |
| Service space   | Public cultural facilities, serving the citizens as the main function. Microscopic scale | 1. Public cultural space: Public service facilities at all levels, public event place<br>2. Independent consumer culture space: Cultural and commercial complexes, theaters, cinemas, bookstores<br>3. Micro-city culture: Festive events, spontaneous cultural organizations or events |

3.1. Integral cultural space

3.1.1. Urban cultural image. London, Paris, New York and Tokyo are the four most comprehensive cities in the world, which have significant global influence in economics, culture and education. The most prominent point is that they all have distinct urban cultural images. The most representative title in London is the “World Financial City”. The most striking feature of Paris is the world of art and fashion. New York is a world-famous cultural capital of the world, and inclusiveness is its greatest feature. As a post-war reconstruction city, Tokyo has more embodied the progress of modern education and technology.

3.1.2. The overall pattern of urban cultural space. In the open street map, extracting dozens of cultural facilities such as museums, theaters, libraries, bookstores, etc., and using nuclear density analysis to discriminate the cultural spatial structure of four cities (Figure 1). The spatial distribution of London's culture is generally characterized by a high-intensity centripetal agglomeration and a form of radiation development along the main roads in the city. The cultural space of Paris is abundant and broad, covering almost all the inner urban areas, and the overall situation of “central agglomeration + peripheral expansion”. The New York Cultural Space center is located in Midtown Manhattan and Lower City. The sub-centers include Williamsburg in Brooklyn, Prospect Park, and Astoria in Queens. The core area of Tokyo culture is Chiyoda-ku, which is based on traditional culture and preserves the culture of the Edo period completely.
3.1.3 Urban culture axis. Affected by geographical factors and historical development, there are urban spatial axes coming into being. The urban axis guides the urban layout and forms a rich spatial sequence. It is also a concentrated carrier of urban culture, reflecting the cultural characteristics and ideology of the city, representing the spiritual outlook and unique charm of a city. And it is an important part of the urban cultural space. London and Paris rely on natural elements to form the Thames axis and the Seine axis. New York and Tokyo use the urban roads as carriers to create Fifth Avenue in Manhattan Axis, “Shinagawa Shibuya Shinjuku” ring axis (Figure 2.).

3.2. Functional space
Through combing the functional urban cultural space of the international city (Figure 3), the four cities’ cultural space types are various, and the spatial distribution has certain regularity. In the core area of the city, historical cultural space is mainly composed of commercial consumption, creative culture and education. The large-scale ecological cultural space is mostly distributed on the edge of the urban center, which can improve the natural environment, and provide the public with places to relax and enjoy; it also controls the development of the city and increases the aesthetics of the urban layout. Meanwhile, the composite cultural space has become one of the trends in the development of international urban cultural space. For example, educational cultural space often promotes the development of creative cultural space, consumer-oriented commercial cultural space and creative culture. Space also has a highly complex trend.
Figure 2. City axes of London, Paris, New York and Tokyo

Figure 3. Functional cultural space distribution of London, Paris, New York and Tokyo
3.3. Service space

Facing the daily life of citizens, the service space is an important carrier to meet the spiritual and cultural needs of the residents. It mainly includes public cultural facilities at all levels (such as museums, libraries, art galleries, cultural centers at all levels, etc.) and micro-cultural activities (Such as festival activities, residents' spontaneous cultural organizations).

4. International cities' cultural space shaping methods

Through the status quo of the international urban cultural space, it can be found that the creation of each urban cultural space has both unique personality and similarities. The characteristics stem from the differences in the roots of culture, and the commonalities are reflected in the diversity of cultural spaces and their means of shaping. Therefore, it is of great significance to explore the driving mechanism behind the diversified urban cultural space.

4.1. Creating a city's overall cultural image

High-level strategic planning and the holding of big events are two important means of shaping the overall image of the city. In terms of high-level strategic planning, the four world urban cultural spaces follow the planning paradigm of “diversified current needs, overall urban vision, cultural development orientation, space/policy support system” (Table 3).

In addition, the big event strategy has increasingly become an effective way to shape, disseminate and market the image of contemporary cities. It has a huge impact on economic, social and political aspects of the city. Representatives are sports events, cultural festivals and special exhibitions.

Table 3. Basic paradigms of cultural planning of four global cities

| Strategic planning  | London            | Paris            | New York         | Tokyo                                    |
|---------------------|-------------------|------------------|------------------|------------------------------------------|
| Vision goal         | City for all Londoners | Ensuring global appeal in the 21st century | Growth, equality, sustainability, resilience | Creating the future: Tokyo's long-term outlook |
| Cultural development goals | Love London, increase cultural creativity and participation | Global culture and creative capital | All New Yorkers have easy access to cultural resources and cultural activities | Achieve the best Olympic and Paralympic Games in history |
| Space/policy support system | Protect and develop historical heritage, highlighting the importance of world heritage sites | Provide funds and technical support to cultural institutions in poor areas to create public art and projects | Do a good job of ensuring the success of the 2020 Olympic Games and inherit the assets after the meeting |  |
|                     | Identify strategic landmarks, landscape corridors and management frameworks to shape the image of the city at a strategic level | Promote cultural cooperation | Welcome to the city of visitors from all over the world |  |
|                     | Support culture, creative industries and night economic development | Encourage the community to hold cultural events | Create an art and culture city and promote Japanese culture to the world |  |
|                     | Create a pluralistic public space to meet the cultural needs of the citizens | Expand the use of public space such as parks |  |  |

(Source: According to the four urban development plans [11-16])
4.2. Creating diverse and functional cultural space

4.2.1. Protecting historical cultural space. First of all, through the formulation of laws, historical districts are delineated and strictly protected, and historical environmental protection is regarded as an important link between urban planning and construction. Secondly, historical heritage is dynamically updated and utilized as local resources, such as the “Areas for the Valorisation of Architecture and Heritage in Paris” emphasizes the integration of heritage with urban sustainable development, achieved its own value by exploring resources. Meanwhile, establishing a financial security system, which is carried out by the state and local governments’ Special funds, is mainly used for cultural and artistic activities and construction of facilities to protect local history. In addition, public participation in the protection of historical and cultural space is increasingly becoming a part of social civilization.

4.2.2. Constructing clusters of higher education research culture. High-level university clusters are also representative cultural symbols of cities around the world. The gathering of institutions of higher learning and scientific research institutions can promote the sharing of information, the flow of knowledge, and improve the innovation and competitiveness level of cities.

4.2.3. Improving urban ecological and cultural space. The main measures are to improve the urban green space rate and to create characteristic landscapes. Taking the renovation of the Thames in London and urban renewal as an example, the water is firstly purified through legislation, construction of large sewers, and water quality monitoring. Secondly, the Greater London Strategic Plan is formulated to guide the urban renewal orientation and coordinate the “public-private-community” tripartite benefits. The river is regarded as a key component of urban transport, leisure and tourism resources, and the public field. In addition, this strategy maintains the spatial quality of the waterfront landscape, rationally divides the spatial function, constructs a strategic open space, and optimizes the urban spatial structure.

4.2.4. Creating a representative urban characteristic space. According to the development experience of international cities, the key to solving such dilemmas is to coordinate multiparty interest, exert the autonomy of social forces, and integrate real-life functions. The city could get new life through urban renewal or urban design.

4.3. Encouraging the development of cultural and creative industries

First of all, the rise of the creative industry is inseparable from the support and guidance of the government. France established the Ministry of Cultural Affairs to guide culture and art. The UK has set up a special group for creative industries to guide the development direction. The institute reforms the cultural industry, increases the budget, attaches importance to the economic contribution of the cultural industry, opens museums and art galleries, and encourage individuals to develop freely to promote the creative industries’ significance. Secondly, the creative industry needs an inclusive cultural environment and talents pooling. Finally, the success of the creative industry is the result of a combination of multiple forces. The creative industry in New York takes the knowledge economy as its core content and market-oriented development. Besides, incorporating multiparty investment and implementing diversified management methods, encouraging the introduction of non-cultural sectors and foreign capital are critical ways to realize strategies to expand abroad. In Tokyo, the government has adopted a wide-ranging participation from all walks of life and has raised funds from various sources. It actively organizes events and setting up international cultural funds around the world to promote innovation and development of cultural and creative products.

4.4. Supporting the layout of cultural facilities oriented to social equity

The supply of facilities in the strategic planning of the four global cities is social-equity oriented, including not only the fairness of spatial distribution, but also the needs and preferences of different groups[17]. First, the number and types of facilities should be improved to meet the modernization needs
of residents; secondly, demand-oriented classification of facilities and division of land units will help to assess facilities and improve coverage and efficiency; the principle of moderate tilt, whose targets are the vulnerable groups such as the elderly, the disabled, children, and the poor.

5. Thoughts on the development and promotion of urban cultural space in China
The analysis of the international urban cultural space shaping path has reference value for China's urban transformation development and urban space reconstruction, but the differences between political system, cultural roots and social development period require us to base ourselves on the status quo of the country to explore suitable local development path. Four aspects below are essential.

5.1. Protecting historical resources and focusing on cultural heritage
Firstly, history and culture should be respected. In the process of urban modernization, the relationship between traditional culture and modern life should be dealt perfectly, economic development and historical protection. Secondly, the protection of urban historical and cultural heritage is not a static preservation of material form, but a dynamic protection of the city's growth process. Despite of establishing three levels of protection planning and systems of “historical and cultural cities, famous towns, famous villages, historical and cultural blocks, historical sections, traditional styles and districts, cultural security units and excellent historical buildings”, the reproduction of original life scenes should be supported to integrate culture into the context of urban development.

5.2. Formulating a long-term cultural development strategy and multicultural space and shaping the image of a global city
To shape the image of the city on a global scale, first of all, we should arrange the cultural development from the perspective of the city's overall planning strategy and formulate a vision of urban development with broad consensus; in addition, promoting the reform of cultural institutions and coordinating the development direction of urban culture should be emphasized. Secondly, the cultural space plan should be actively connected with the urban master plan, which could make it of legal significance and guidance, and help to build multilevel and all-round cultural space planning system in the future; combining the development vision with the physical space is a correct way to promote the implementation of cultural planning. Thirdly, the comprehensive utilization of cultural facilities should be encouraged to realize the goal of resource sharing, integration and development, and to form multicultural space and perfect public cultural facilities system to ensure the accessibility and fairness of cultural facilities. Finally, the city should pay more attention to urban propaganda and interpret big events to show the world the economic strength and cultural heritage and attract more international attention and increase the visibility of the city.

5.3. Creating inclusive environment and developing knowledge economy
It can be known from the study of the target cities that the rise and development of the creative industry needs to be based on strong cultural heritage, sufficient intellectual support, certain economic foundation and corresponding supporting policies. For cities with more developed economies or certain industrial bases, it is recommended to use “creative cities” as the development goal for top-level design, with cultural resources and human resources as the leading factors, and make cultural, creative, knowledge interface with the market to further liberate cultural productivity and expand urban culture development space.

5.4. Promoting multiparty public participation and stimulating urban cultural vitality
Public participation is one of the important methods of urban governance. Government, enterprises, citizens and non-governmental organizations (NGOs) are public participation subjects in shaping urban cultural space. The government undertakes tasks of optimizing the allocation and management of cultural resources, improves the basic supporting facilities, provides financial support for cultural industry development to create a good urban cultural environment; enterprises play an important role in
cultural innovation and financial support, and high-quality enterprises have the "linkage effect", which drives the development of other industries and regions to form a cultural format with certain influence; the citizens are the vital interests body of urban culture and space, and also the builders of urban cultural vitality, whose main behaviors include cultural excavation and cultural inheritance, cultural consumption and decision-making supervision; the NGOs can fairly evaluate whether the stakeholders are “offside”, which could not only protect the vulnerable groups, but also effectively monitor whether the cultural indicators are up to standard or whether cultural space meets the standard. Therefore, it is necessary to promote the new public management form, encourage multiple parties to participate in the decision-making and implementation process of urban cultural space shaping, and build a bottom-up interactive mechanism.

6. Conclusions
This paper takes four cases of London, Paris, New York and Tokyo to analyse their cultural space status, and at least four aspects of experience can be drawn. The first is to respect for history and culture. History is the root of life and the source of creativity of a city. It is also a critical resource for cities to participate in global competition. Secondly, it is necessary to arrange cultural development from the strategic level of urban master planning and combine with physical space to shape the image of the city in the world. We should encourage the comprehensive utilization and integration of cultural facilities, which could form a multicultural space and a multilevel public cultural facilities system to ensure the accessibility and fairness of cultural facilities; furthermore, we should promote the development of cultural industries, especially creative industries. On the one hand, it focuses on the cultivation and introduction of creative talents and builds a “talent of talents”; on the other hand, it builds a “production, study and research” conversion platform to promote the transformation of creativity and knowledge into technology, which could improve the urban industrial structure and enhance the city’s core competitiveness. Finally, we must pay attention to the combination of government and NGOs, introduce social forces to create a special space and create a cultural atmosphere, so that the public can truly participate in the urban cultural heritage and creation, and increase their sense of belonging to the city. The pattern of cultural space shaping is not unique. The key is to fully exploit and utilize the local superior resources to find its own path to success.

References
[1] Kun D, Li T 2015 Urban Planning International. 30 41-45
[2] UN-Habitat 2016 The New Urban Agenda. 1 9-11
[3] Chengxu W 2006 Planners. 04 69-72
[4] Mushan W 1996 Yangtze River Forum. 05 53-57
[5] Run L, Yongchun Y and Xiaolei R 2017 Economic Geography. 02 114-123
[6] Shangyi Z, Miaomiao J and Liping W 2006 Journal of Beijing Normal University. 06 127-133
[7] Min Z, Xue L and Fei W 2007 Urban Studies. 05 13-18
[8] Li S, Wei L and Bin W 2016 Urban Planning Forum. 03 63-70
[9] Tengfei W, Renfeng M 2018 Progress in Geography. 11 1567-1580
[10] He H 2010 China Construction. 06 87
[11] Mayor of London 2013 London cultural prosperity plan. 01 21-38
[12] Mayor of London 2016 The London Plan. 0231
[13] Mayor of Paris 2013 île-de-France 2030. 01 16-28
[14] Mayor of Paris 2012 Culture dans les villes mondes. 03 85
[15] Mayor of New York 2015 One New York: The Plan for a Strong and Just City. 03 8-21
[16] Tokyo Metropolitan Government 2014 Creating the Future - Tokyo’s Long-Term Outlook. 02 24-29
[17] Scott D, Jackson E L.1996 Journal of Park and Recreation Administration1 1-17