Research on Urban Space Resources Control and Characteristic Style——Taking Outdoor Advertising as an Example

Tang Yunting ¹, Huang Junlin ², Chen Zhonghua ³
Changsha Planning Information Service Center, Changsha, China
234384203@qq.com (Yunting Tang ), 361132825@qq.com (Junlin Huang ), 454326820@qq.com(Zhonghua Chen )

Abstract. Outdoor advertising, as one of the important means of commercial, public welfare information dissemination and city image management, plays an important role in the city. Especially in the construction of new urban tourism area, it can provide scientific and reasonable technical support for planning, construction management and decision-making of urban planning. Based on the practice of outdoor advertising zoning planning project in Dawangshan tourist resort of Xiangjiang New District, Changsha City, this study, on the basis of in-depth study of current situation and planning, uses spatial syntax and big data model analysis method, combines with urban planning management and industrial demands, to analyze and construct the outdoor advertising spatial planning layout structure that matches the overall function of the city and coordinates with the function of the zoning. On this basis, the control and management area of outdoor advertisement is delineated, and the index system of the control and control of outdoor advertisement zones is established through the regional differences and grade differences of outdoor advertisement settings

1. Introduction
Under the background of urbanization and prosperity of economic development, the demand for setting up and using outdoor advertisements is increasing day by day. [1]Outdoor advertisements are not only a means of communication for the development of advertising industry, but also juxtaposed with urban systems such as architecture, transportation and greening to form the geographical space and visual interface of a city, which is one of the identifications of a city and a modern urban environment. An important part of the construction layout. [2]It is like a business card of a tourist city, which is nourished by urban culture and conveys to the outside world the spirit of the city. However, in the actual construction, outdoor advertisements in new tourist areas lack effective planning, construction and management, outdoor advertisements are arranged in disorder, not in harmony with the surrounding environment, and the quality of construction style is not high, which seriously affects the landscape environment of new tourist areas, and also brings difficulties to urban management. Therefore, rational layout and guidance of outdoor advertising planning and management, coordinate the spatial distribution of outdoor advertising resources, enhance the image of the city, promote the attraction of leisure business in new tourism areas and enhance the ability of urban management have practical guiding significance.
2. Outdoor Advertising and New Tourism Zone

2.1. Outdoor Advertising Overview
Outdoor advertisement refers to the facilities such as physical characters, images, electronic display devices and physical entity modelling, which are set up for all the public, mainly commercial and public service advertisements, attached to the exterior of buildings or in outdoor public places and roads.

2.1.1. Classification of Outdoor Advertising. The classification of outdoor advertisements can be distinguished according to their nature of use, location and form of setting. This research mainly aims at dividing into public welfare, business and self-use according to nature, wall surface, column, projection and so on according to form, spray painting, three-sided turning, LED and so on according to technology.

2.1.2. The Role of Outdoor Advertising. Outdoor advertisement carries the content and form of mass media, and appeals for various aspects of urban development and social life are relatively large; therefore, it will have a greater visual impact in the urban space settings, and play a huge role in publicizing the image of the city, transmitting the positive energy of the city, and deepening the corporate culture.

2.2. Summary of New Tourism Areas

2.2.1. Summary of New Tourism Areas. With the continuous expansion of cities and the suburbanization of urban boundaries, new urban districts have emerged, which are characterized by their inheritance and independence with the central urban areas; new tourist districts are new districts with tourism resources and leisure regional characteristics, which can organically integrate urban production, life, tourism and leisure, and activate the soft power of urban culture.

2.2.2. Characteristics of New Tourism District. The characteristics of new tourist areas are as follows.

| Serial number | Characteristics of New Tourism District | Influence factor |
|---------------|----------------------------------------|------------------|
| 1             | population                             | Urban Population: Industrial Import Population + Old City Population Spillover |
|               |                                        | Tourism Consumption Population: Leisure Tourism Population + Second Residence Population |
| 2             | type of operation                       | Derivative formats: leisure business, culture and entertainment, sports activities, exhibition meetings, health care and old-age care... |
| 3             | space                                  | Space: leisure blocks, sports halls, theme parks, characteristic towns, leisure and entertainment complex... |
| 4             | Customer orientation                   | Living Masses, Micro Travel Groups, Short-term Holiday Groups |

2.3. Existing Problems of Outdoor Advertising in New Tourism District
The setting of outdoor advertisements in new tourism zones often goes through the game process of various stakeholders in practice. Blind construction can easily lead to the problem of inadequate rationality of the setting of advertisements. There are some problems that the regional characteristics of the setting of advertisements are not obvious. At the same time, some outdoor advertisements are set close to road intersections and the safety of the setting of advertisements is not good.

3. Outdoor Advertising Planning in New Tourism District

3.1. Characteristics of Outdoor Advertising
The planning features of outdoor advertisement in new tourism area are as follows: on the one hand, the uniqueness of the research object, the planning setting of outdoor advertisement is located in new tourism area, which is different from traditional outdoor advertisement in terms of space environment, regional economy, service population and other factors, and the planning requirements are also affected by many factors; on the other hand, the long-term guidance. Considering the current situation
of outdoor advertisement planning and setting is affected by many factors, and with the rapid development of economy and urban society, the influencing factors also change tremendously. Therefore, the characteristics of planning should have a long-term planning guidance to promote and adapt to the continuous development of outdoor advertising industry.

3.2. **Principles of Outdoor Advertising**

The compilation of outdoor advertisements should follow the principles of conforming to scientific theory and planning, laws, regulations and technical specifications, and the total amount control requirements of superior planning.

3.3. **Outdoor Advertising Compilation Method**

On the one hand, the method of making outdoor advertisements can adopt the method of zoning control. Through the analysis of factors such as current location, construction situation, population vitality, traffic facilities points, planning positioning and special lighting control of the upper level, delimit areas of general control, strict control, prohibition of setting and key display; from advertisement location, nature, specifications, types, technology, brightness, illumination, etc. On the one hand, we can use the guidance control method to guide the rigidity and elasticity control index; on the other hand, we can use the simulation analysis method, such as GIS technology, large data analysis, three-dimensional simulation technology, to analyze the current situation and planning settings of outdoor advertising.

4. **Ideas and contents of compiling research**

This research carries out the planning work according to the following technical routes.

![Figure 1: Technical Route of Outdoor Advertising Zoning Planning in New Tourism District](image)

5. **Research, Guidance and Practice: Taking the Outdoor Advertising Planning and Design of Dawangshan in Changsha City as an Example**

5.1. **Problem-oriented, positioning research**

5.1.1. **Current situation and problem evaluation.** Dawangshan is located in Xiangjiang New District, Hunan Province, and to the East is Xiangjiang River. It takes advantage of the good natural conditions and location advantages of Tongxi Port, Jinjiang River and Dawangshan to be a modern livable new city for tourism in Changsha. The area is rich in tourism natural resources, and also has a vibrant economic development area. The total land area is about 27.27 km². Relying on a map of red line approved by Changsha Planning and Approval System and a technical map of GIS big data analysis (current population thermodynamic map, current facility point distribution map and current bus station distribution map), the main problems in outdoor advertising settings in the district can be analyzed and summarized.
The main problems existing in the present situation are as follows:

1. All of them are located in mature areas, and the advertising quality is low, which is inconsistent with Dawangshan's high-positioned tourist resort, affecting the overall image of the space;
2. Some advertisement locations do not match the building nature, and do not meet the requirements of Changsha outdoor advertisement setting technical standards.

5.1.2. Planning Interpretation and Location Analysis.

i Interpretation of Planning. Dawangshan is located in the strategic development plan of Xiangjiang New Area. It is an international tourist resort, with tourism vacation, leisure and entertainment, and entertainment office as the main areas.

ii Location Research

(1) Location analysis
According to the superior planning and the principles of guiding the situation according to circumstances, adapting measures to local conditions, enhancing the characteristics of city image, safeguarding public interests and orderly management. Therefore, the planning of Dawangshan film advertisement is positioned as outdoor advertisement with a sense of times and strong sense of science and technology, which is in harmony with the characteristic space of "facing international tourism vacation, ecological wisdom residence" and landscape style. It is divided into five functional areas, of which the core area is the tourist holiday center.

(2) Overall layout
Controlling the overall layout and reasonable density of outdoor advertisements is not only conducive to making full use of the city's advertising environment resources, but also to harmonizing the outdoor advertising style with the city's image and style.

Comprehensive analysis shows that the area planning constructs a "one-center, two-axis, three-node" advertising layout structure: One heart: the central advertising distribution core is the main node of Dawangshan area advertising settings; two axes: the advertising distribution main axis along Tanzhou Avenue and the advertising distribution sub-axis along Bachelor's Road; three nodes: the northern advertising node, the southern advertising node and the Baxizhou advertising node.

(3) Distribution of Style Settings
Combining with the superior planning, the advertising area of Dawangshan District is divided into six scenic areas, and the general rules for the management and control of outdoor advertising in scenic areas are worked out.

5.2. Research on Setup Analysis and Control

5.2.1. Control zoning. According to the nature of land use and spatial structure, and based on the principles of strict control, flexible reservation, orderly development and distinctive features, this planning delimits: key exhibition area, prohibited setting area, general control setting area and strict
control setting area. Dawangshan Outdoor Advertising Planning Control is mainly prohibited zones, accounting for 66.25%. Agroforestry and water land are mainly distributed in the eastern and western parts of the region. The main display areas are commercial land around Tongxi Lake, and the general control areas are commercial land at the intersection of Tanzhou Avenue and Lianping Road, entertainment land on the southern side of Xiangjiang Happy City, Ocean Park and Bachelor's Road.

5.2.2. **Configuration of Control Indicators**

**i Classification of Control Indicators.** In order to further clarify the requirements of advertising control in the four districts, referring to Guangzhou Model, Xiangjiang New District Outdoor Advertising Layout Planning and Changsha Road Outdoor Advertising Detailed Planning, the land management and control indicators are defined from the aspects of advertisement location L, advertisement nature P, advertisement specification S, advertisement type F, advertisement craft M, advertisement brightness, advertisement illumination E, advertisement theme I, etc., which are divided into control indicators and guiding indicators. Mark.

**ii Spatial Control Distribution.** Advertising partition guidance aims to determine the strategy and control requirements of outdoor advertising according to the different regional characteristics of the city. Among them, the fragmented guidance focuses on the management and control from the perspective of urban spatial characteristics, while the zoned guidance focuses on the management and control from the perspective of the intensity of advertising settings. According to the distribution of advertising capacity, the proportion of advertising capacity of large commercial buildings in key exhibition areas and the intersection of Tanzhou Avenue and Lianping Road is controlled within 35%; the proportion of advertising capacity of external walls of other commercial buildings is controlled within 25%; the proportion of advertising capacity of external walls of buildings in entertainment buildings and residential areas is controlled within 15%. According to the distribution of advertisement illumination, the high illumination area mainly distributes in the Happy City of Xiangjiang River, Ocean Park and other key exhibition areas, and mainly foils the happy atmosphere.

5.3. **Regional Identity and Advertising Planning with Spatial Characteristics**

5.3.1. **Interpretation of Regional Characteristics.** The Dawangshan area is adjacent to the Xiangjiang River, with Guanyin Port as its regional center and Tongxi Port as its water resources are abundant. Most of the mountains in the area are Dawangshan, and the wetland resources in the base are abundant. With the eastern island, the ecological and natural landscape is good. The area fully possesses the natural features of Changsha Mountain, Water, Continent and City. At the same time, Dawangshan has Zeng Guopan cemetery and Tongxi Temple with Huxiang cultural characteristics, which also adds beautiful scenery to the characteristic tourist new town.

5.3.2. **Fusion of Characteristic Spatial Layout and Tourism Landscape.** "When creating city characteristics, we should pay more attention to the city's history and culture, and strive to excavate the cultural connotation of the city. Characteristic has connotation, style has soul. Therefore, through the combination of advertising planning spatial structure, land development value, urban spatial
planning and urban design requirements, four key outdoor advertising areas of Dawangshan film are
determined. The northern entrance portal of the Dawangshan area, the northern business group of the
Dawangshan area, the Dawangshan tourism and vacation service center, and the Baxi Island Water
Paradise of the Dawangshan area.

In view of the layout and development requirements of outdoor advertising planning, the
advertising settings of all kinds of land plots in Dawangshan Tourist Resort Complex Area are set up
according to their own characteristics.

5.3.3. Advertising Setup Management. In the management of outdoor advertising settings, the
requirements of advertising control indicators are defined in the way of plot plans, which directly
guides the formulation of detailed planning of road outdoor advertising.

6. Exploration on the Operating Mechanism of Outdoor Advertising
According to the overall orientation of outdoor advertising in the new area, on the one hand, [9]
referring to the top-level design of strengthening the physical mechanism of "planning, construction
and management" in Shenzhen, the authority and responsibility boundary between governments at all
levels and departments can be established from the aspects of design, approval and supervision.
[10] Effectively standardize the integration standard of outdoor advertising investment, management,
setting and operation and maintenance, clarify the relationship between the operation subject and the
construction subject, and take responsibility for the operation and maintenance of outdoor advertising
in the early, middle and late stages; on the other hand, it can unify the management of outdoor
advertising maintenance, unify the management of outdoor advertising from the perspective of the
new district, and carry out market-oriented operation and unified integration with multi-party
cooperation. Prosperity of cultural industry in the new area to provide quality services.

7. Conclusion
Based on the practice of the special planning and design of outdoor advertisement in Dawangshan,
Changsha, this paper strengthens the research of outdoor advertisement settings which are in line with
the principles and characteristics of the construction of new tourist areas. By analyzing the
combination of compulsion and guidance control elements, the paper forms an advertising control
system of control zoning + control guidance, and carries out fine control in the form of plot plans,
which has a certain extent to the construction and management of outdoor advertisement. Reference
significance.

Reference
[1] Zeng, X.C, Ji R.Y. (2010) Re-discuss the compilation method of the overall planning of urban
outdoor advertising settings --- Take Nanjing as an example. Planning innovation: China
Annual Urban Planning Conference, 1-10.
[2] Cheng, J. (2008) Research on the image positioning design of outdoor advertisements in tourist
cities: Take Chengde outdoor advertisements as an example. Hebei University.
[3] Li, K. M. Song, R. Hu, F. Hu, Z. Y. (2013) Study on the Method of Urban Outdoor Advertising
Planning. Journal of Urban Planning, 155-157.
[4] Zhou S Y. (2018) Exploration of planning and management of outdoor advertising settings in
Yaohai District, Hefei. Planning and Design, 96-98.
[5] Qiu, X.H. (2003) Urban Outdoor Advertising Planning. Urban Issues, 70-78.
[6] Liu, S. J. Jiang, X. M. (2014) Overall layout and control of outdoor advertising space in new urban
districts: Taking outdoor advertising planning and design in Quinli New District of Harbin as an
example. Planner, 71-77.
[7] Yang, Y.F. Xiao, L. J.Wu, M. (2011) From Single Advertising Management to Integrated Place
Coordination: Technical Exploration of "Special Plan for Outdoor Advertising Settings in
Suzhou City". Planner, 39-43.
[8] Chen B.Z. (2009) City Style and Characteristics - From Street Aesthetics. Planner, 8-11.
[9] Deng, H. P. Li, J. J. Meng, Q. Wei, C. (2017) Research on Outdoor Advertising Planning and Management System in Guangzhou and Shenzhen. Planner, 44-50.
[10] Li, Q.L. (2015) Analysis of Outdoor Advertising Media Planning in the Construction of New Urban District: Taking Qujiang New District of Xi'an as an Example. Shanxi Normal University.