



URBAN COLOR DESIGN IN JIUJIANG URBAN PLANNING

Wanping Shangguan¹, Pisit Puntien², Chanoknart Mayusoh³

Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University

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ABSTRACT

Urban color research, it is a noun that describes the current state of the city. And is one of the important expressions of urban culture. Nowadays, there are not many colors in the city that can truly impress people. The main problems appear in: 1) The "one color in a thousand cities" phenomenon is quite common; and 2) The color pollution is serious. And the difficulty of identifying the city as a whole has intensified. Therefore, scientific urban color design can improve the environmental function of the city. Successful urban design and planning can add to the charm of a city. The objectives of this study are: 1) to study the importance of color in art and culture, landscape colors related to urban planning of Jiujiang city; and 2) to analyze and generate color matching schemes for color combination design of urban buildings in urban planning and simulated urban planning. This study was conducted by Mixed Methods Research, Qualitative Research and Quantitative Research. In the qualitative research methodology, Survey Field Practice Gather Jiujiang's natural environment color, explore the local "traditional culture color". Literary exploration, to understand the cultural characteristics, geographic and climate information of a city. And Interviews and questionnaires were conducted and conducted for population and samples of 16 Jiujiang residents and 9 foreign visitors from other cities in China to define color schemes, attributes and color controls by region; in the quantitative research method, 30 samples were evaluated for analysis, development and Satisfaction with the colorful design of Jiujiang City with its cultural connotation and distinctive style.

The results show that the overall color of the city in the landscape is related to urban planning, including: Jiujiang city architectural color, public place color, natural color in order to reflect the ecological beauty and cultural heritage, can add characteristics and charm through the harmonious and orderly urban color. Urban color has outstanding cultural connotation and characteristics, and creates a color combination scheme for urban architectural design in urban planning and simulated urban planning. According to the local traditional color survey based on natural color, collection of landscape, natural environment and art and cultural information, the cultural image, historical resources and modern cultural resources, to facilitate memory and popularization.

Keywords: City color, Color discrimination, Color symbol, Color perception

¹Doctoral Student of Philosophy Program in Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, E-mail: s62584948005@ssru.ac.th

²Advisor in Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, E-mail: pisit.pu@ssru.ac.th

³Visual Arts and Design, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, E-mail: chanoknart.ma@ssru.ac.th



Introduction

Because of the rapid development of urban construction, the traditional urban construction has been unable to meet the needs of the social production mode, the speed of urban transformation is accelerating day by day, and the replication of the new urban construction mode is becoming increasingly fierce. Whether it is a small county or a big city, it is common to build a new city to create a large-scale city image. These rectangular concrete structures are all gray tones. Behind the imperfect color is the lack of design culture and urban spirit. Urban color design is closely related to the local cultural characteristics, so it can be expressed through color design in the process of urban planning.

This paper will explain the design role of color in urban planning through the defects of the current Jiujiang urban color and integrate the regional cultural characteristics of Jiujiang.

Research Objectives

1. To study the importance of color in art and culture and in landscape color related to Jiujiang urban planning.
2. To analyze and create the urban building color combination scheme design used in urban planning and simulate the form of urban planning.

Literature Review

1. Concept and cultural significance of urban color

"Urban color" refers to all the colors expressed outside the urban public space (Zhao, 2014). Color exists in all the places of human settlements and the city. Color is an important part of the urban living environment, and it is closely related to the daily life of citizens. Functional planning, ecological environment, landscape and other factors are also related to the color of the city. The color of the city is the primary factor to show the national culture of the region (Wu & L, 2006), is an important historical data, and has important cultural significance. Urban color reflects the history and culture of a city, it is accumulated in the development history of the city. The color of a city, It can not only shape the overall image of the city, but also enhance the psychological identity of the people living in the city (Zhan & Zhou, 2011).

2. Current status of Urban color design in China

Since ancient times, China has been a colorful and colorful country. The extraction of natural colors is an inspiration for development and architectural design. From the song dynasty painter Zhang Zeduan "qingming festival, shanghe figure" this painting can feel the strong city color, the ancient city color diversity from wooden buildings, mountains, rivers, land, street and architectural style, shop billboards, roads, green plant and other factors developed, all table, now the regional characteristics and regional culture. However, in modern times, most of the buildings are built of reinforced concrete and new materials, which also brings convenience and speed to development, and leads to the spread of color collocation, which is because of the unreasonable use of color in urban construction. Especially after the implementation of the national reform and opening up policy in 1978 and began to build a bridge between the eastern and Western cultures, with the increasing cultural exchanges between the East and the West, the design industry and other related industries began to learn from the architecture of western countries (Li, Tian, Wu & Yang, 2018). In the modern national construction boom, people began to obsessed with the western great modern construction engineering, instead of the ancient style of Chinese building without confidence and pride, these cause every city in China looks the same, all the color design are completely similar, in addition to the appearance of the building, the road layout and the landscape design is slightly different, basic is thousand city, lack of regional characteristics and regional culture. Most of the residential area color design tends to emphasize the prominent personality, blindly pursue eye-catching and conspicuous, Ignoring the relationship with the original natural elements and the continuation of urban culture, making



the color group between the district isolated, lack of cultural heritage and obviously incompatible, More unable to inherit the cultural characteristics of the city (Sun & Ying, 2015).



Figure 1 Beijing, Guangzhou, Shanghai, and Shenzhen

Source: Zhang Zhenhua, http://news.ycwb.com/2021-03/24/content_1552213.htm,
<https://www.enterdesk.com/bizhi/50706-279792.html>, <https://zhuanlan.zhihu.com/p/407407295>

Why is there a "color disease" in China? The main reason is the lack of perfect urban color planning, and for a long time, there is no deep understanding of the colored buildings and the environment. This leads to the chaotic use of color in architecture. Chinese architecture boasts a "European" and "modern" style, however, this design has lost its own history and culture. The failure to learn the essence of ancient Chinese culture is the reason for the emergence of "rootless style" design. In addition, it also makes the image of The Chinese city fall into the situation of "Chinese people are not satisfied and foreigners do not accept".

3. Status quo of color design of Jiujiang City

3.1 Less color types, without the same pattern

Architectural color is an important part of urban color, and the variety of architectural color is a phenomenon in the process of urban development. Glass curtain wall buildings are a new landmark of the city and almost in every city. The design of the city has no own characteristics and no color discrimination system. Therefore, the use of color is chaotic, the lack of the city main color that makes the city stand out. There are also many color problems in residential communities, including unnecessary imitation, no regional characteristics, no regional uniqueness and the inability to spread regional culture (Bian & Li, 2015). The design of residential communities tends to be based on uniqueness, committed to focus on attracting attention, and ignoring the original natural elements. As a result, the colors of each community are very different, and they cannot be integrated and lack cultural background, making the community disharmonious and unable to inherit the cultural characteristics of the city.



Figure 2 Jiujiang City, Nanchang City

Source: <https://new.qq.com/rain/a/20210611a0300i00>, <https://www.tudinet.com/read/19835.html>



3.2 Random color design in the city

Urban commerce is the main reason for the confusion of the use of urban colors. Developers and operators want their buildings to have unique properties, regardless of the balance and coordination of colors, they like to choose the most fashionable and bright materials and colors to decorate the appearance of the building, so these color combinations are inappropriate and unfavorable for Jiujiang. As a tourist city with a unique culture, Jiujiang needs to choose the main colors and limit the use of chaotic colors in buildings to keep the city pure. So avoid using colorful light boxes or billboards, and limit the use of too bright colors in buildings to show the fashionable design style of modern technology. From a micro perspective, the aforementioned decoration may not have much impact, and even some buildings can live in harmony with the surrounding environment. However, while throughout the city, we notice how disorderly and unbalanced the use of color is, some of which may cause serious visible color pollution to the



public. In addition to the mainstream may affect the use of color, if the "leaders, will" and "developers will" are not consistent, it may lead to a color disaster.

Figure 3 Current situation of Jiujiang City

Source: Researcher photo taken

3.3 Design to demonstrate inappropriate competence

Culture is an interpretation code of societies (Dingil, Rupi, Schweizer, Stasiskiene & Aalipour, 2019). So is urban culture, In the process of rapid development of the city, the speed of the cultural deposits, the excavation of characteristic culture has not been deep. China's urban color research started late, and there is no color management standards and requirements, which brings the problem of thousands of cities. The improper color design that does not conform to the image of the city did not increase the elegance of the city, but also lost its own characteristics. Jiujiang Culture, lushan mountain is a high international influence of cultural mountain, should cultivate and promote "mountains, rivers, lakes, city" as a whole, the humanities and natural landscape into the city image, create high quality, humanized urban public space environment, development has distinctive features and strong culture, the breath of ancient and modern "is famous for humanitarian charm, ecological green city of rivers and mountains, beautiful livable city".



Figure 4 The Lushan Mountain, the Yangtze River and the Poyang Lake

Source: Wanping Shangguan

Methodology

The Jiujiang city collects information by interviewing, observing, and recording the urban color structure issues related to the natural environmental landscape. Arts and culture use mixed methods research (Mixed Methods Research), in combination with qualitative research (Qualitative Research) and quantitative research (Quantitative Research). Field surveys were used to observe and record the color data in the urban environment. Interviewed and use questionnaires from experts, local residents and other area visitors. Sample collection used 16 Jiujiang residents and 9 foreign visitors from other cities in China; the quantitative study used 30 samples for analysis, development, and design satisfaction assessment. The operation steps are shown in Figure 5.

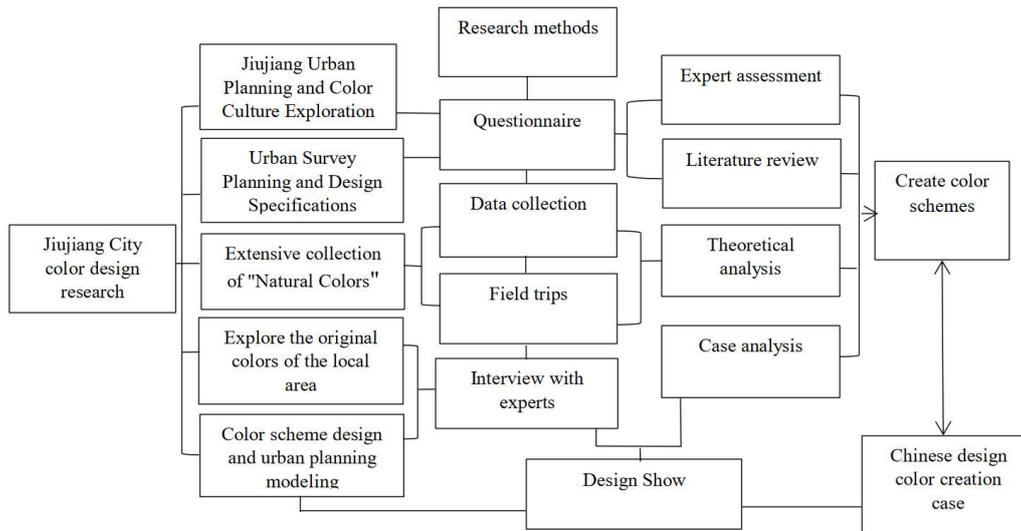


Figure 5 The conceptual framework of the study

Source: Wanping Shangguan

Research Results

The overall color forms the structure of "two belts and four zones". The "two belts" are the Lushan belt around the guide and the coastal belt along the Yangtze River in the north. The "four zones" refer to the ancient city district, new city district, Chengxi port area and Chengdong port district. The figure shows that according to the urban development strategy of eastward expansion, westward advance, south control and north expansion, the trend of the main color center and the urban area and belt, as well as the color trend relationship between them. Jiujiang It enters the color trend of "cold east, warm west, warm south, cold north, medium gray". The city colors are arranged from south to north, the color trend is from warm to cold, from center to east and west, and the tone trend is from gray to bright (Figure 6).

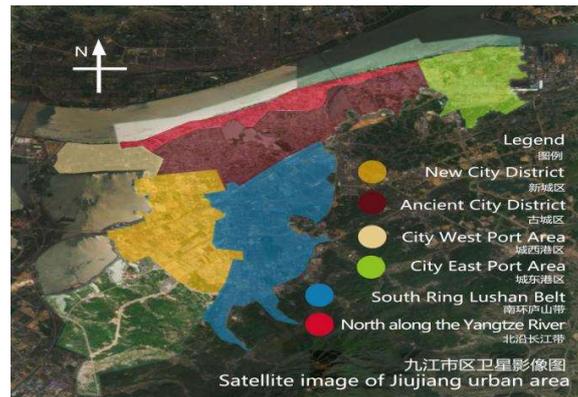


Figure 6 Tonal trend of the "two zones and four zones" structure
Source: Wanping Shangguan

1. Color zoning planning

Under the guidance of the overall color theme of "lakes and mountains in the blink of an eye", each district of Jiujiang city has formed a unique and relative color positioning. According to the planning structure of "two zones and four zones", combined with the tone positioning of each zone, summarize the tone keywords of each zone, and describe the tone trend of each zone, and convey the tone layer of each area (Figure 7).

1.1 Ancient city district (Xunyang District) - Blue bricks and black tiles v (1)

The ancient city inherits the original historical context and highlights the style as a famous historical and cultural city. Most of the planned walls are composed of a series of blue bricks with different brightness and temperatures, and the roof is dominated by gray tiles (Figure 7).

1.2 New urban area-Brown tile warm wall

To a large extent, the new city retains the style of the new city, mainly with modern commercial property. Most of the main colors of the planned walls are warm gray, such as brick red and light yellow, and most of the roofs are reddish brown (Figure 8).

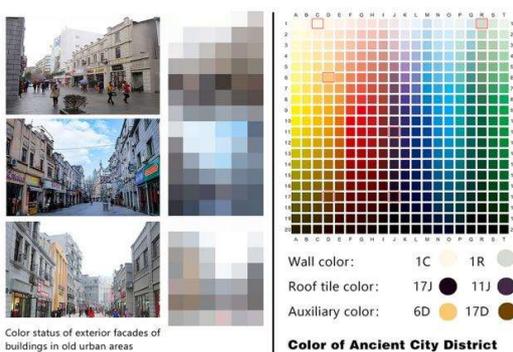


Figure 7 Old city building color design

Source: Wanping Shangguan

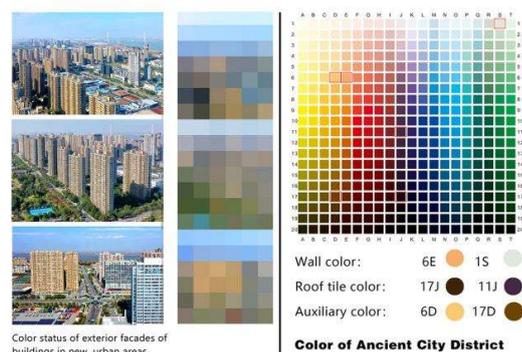


Figure 8 New city building color design

Source: Wanping Shangguan



1.3 West Port area - bright and warm tone

The main tone of the harbor area in the west of the city is the warm tone of medium and low brightness, while the tone used in other areas are relatively bright and rich. Use a small amount of light gray and the main color of the roof are brown and red (Figure 9).

1.4 City Donggang District - Light gray heavy color

The main industrial buildings in Chengdong Port District are factories and parks, and the main colors are relatively light and decorated with heavy colors. The main colors of the planning wall are mainly yellow gray and light white, followed by light gray, and the roof is mainly sky blue, supplemented by dark gray (Figure 10).



Figure 9 City west building color design

Source: Wanping Shangguan

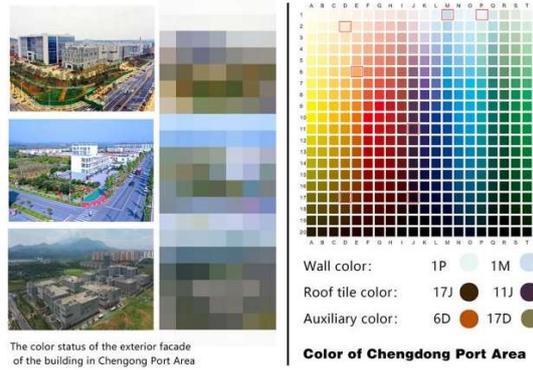


Figure 10 City East building color design

Source: Wanping Shangguan

1.5 The Yangtze River coastal belt - elegant gray and quietly elegant shallow

The coastal zone of the Yangtze River is integrated with the waterfront landscape of the Yangtze River, Bali Lake and Gantang Lake. The layout tone is elegant and lively. Most of the colors of the walls are light gray and brown, and the roof is mainly dark gray and reddish brown (Figure 11).



Figure 11 Color design of buildings along the Yangtze River

Source: Wanping Shangguan

1.6 ring Mount Lu belt - warm brown and colored ash

The surrounding areas of Lushan Mountain are integrated with Lushan Mountain, with rich vegetation. The planning colors are mainly red and brown, yellow, gray, beige and other warm colors, supplemented by low brightness colors. The main tone of the planning wall is warm brown, while the main tone of the roof is mainly light gray and bright red brown (Figure 12).

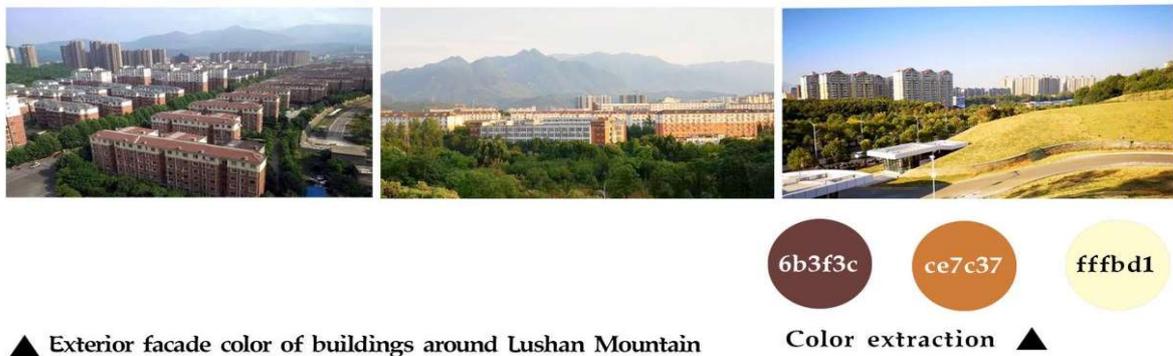


Figure 12 Color design of buildings around Mount Lu

Source: Wanping Shangguan

Conclusions and Suggestions

The field of urban research is multidisciplinary incorporating insights from other fields. Urban Planning, Design and Management (Hussein, Stephens & Tiwari, 2020). Jiujiang Color planning is a part of the current urban planning. The system design according to the academic principles, so as to create a unique, bright and complete rich atmosphere, interview and get Jiujiang tone information. Jiujiang is a famous tourist city with a long history, is one of the "top ten charming cities in China", so the use of corresponding colors to add the taste of the city, is very important to create Jiujiang overall color scheme tourism brand.



1. Study the importance of color and culture and art in the landscape related to Jiujiang urban planning. Landscape color related to urban planning includes: Jiujiang city building color artificial decoration color, public places, roads, color, urban symbols, signs, sculpture, facilities, etc., and lakes, trees, rivers, natural ecological landscape color, to reflect the beauty of ecosystem and cultural heritage, through the color of the city add personality and charm, Jiujiang urban planning harmonious and orderly, urban color has prominent cultural connotation and characteristics, in order to facilitate memory and popularization.

2. Explore local traditional colors on the basis of natural colors, and create urban planning color combination scheme and design urban architectural color combination scheme in the simulated urban planning. Understand the characteristics of local building materials in collecting landscape data, natural environment and cultural works, and collect colors from the new culture of the city, which is the color scheme of Jiujiang architecture in urban planning. When planning urban color, we must recognize Jiujiang, the characteristics and positioning of cities, looking for cultural image and historical resources, as well as profound modern cultural resources.

The study of urban color is to investigate the urban representation system from different angles, properly locate the urban main color, and provide new solutions for the design and application of urban color.

Suggestions of usage instructions for urban paints. Urban color design can be used as an important reference standard for urban landscape and urban culture construction. The colors of the city are shaping the landscape of the city. Improve the image of the city, inheriting regional culture and other aspects play an outstanding and irreplaceable role.

Urban color design can provide a reference for the protection of regional traditional culture and historical buildings. Architecture is related to the social and historical context. Culture, era can be reflected through the color of architecture. Architectural color is a kind of culture. A concrete expression of a special way of thinking while protecting historical buildings. And protect the essence of traditional culture. Urban color design is a reference for the construction of city symbolic colors and symbolic functions of urban colors. Cities are known for their unique colors. Because the city's colors directly reflect the historical context and overall style of the city. Therefore, the application of urban color design is a construction reference for the character and taste of the city. It is a symbolic expression that characterizes the city.

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