

# Application of Graphics and Color Language in the Public Space of Modern Cities

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**Abstract.** It aims to explore the experience design application of graphics and color language in the modern urban public space. We concretely analyzed the response of the graph language and the public space, the resonance of color language and human's emotion, and the visual elements integrated into public space with people's coordination on a basis of experience from the daily life of modern urbanization with the crowd in close contact with the public space. We made a joint analysis of the link response with object perception experience in the public space between graphics and color language, and proposes relevant design and application rules. The rational design and application of graphic and color language in public space is an effective measure for people's behaviors that introduction of interactive and awakening of participation consciousness in space. Visual stimulation can effectively stimulate people's emotional perception of square experience, and help to build a place which is oriented and identified with by the subject to meet the demands of the subject to create a beautiful experience and belonging in the urban public space.

## 1 Introduction

Eliel Saarinen said: "Show me your city and I can tell what your people are mentally pursuing." The cities economic development and population growth have led to modern cities to increasingly exhibit monotonous mechanical beauty. When cities construction is focused on scale and sensory stimulation while neglecting the emotional needs of residents who are real users of urban public space. As a part of people's living space, urban public space should not only serve as a place for residents to produce and live but also become a space for residents' emotional exchange [1]. The rational use of the individuals external perceptual behavior is the most direct way of seeing, and language is considered to be the graphic and color transference of one's own personal expression in the public space of a city. Audience design effective visual elements in the square, permeate the interaction between human and space, and make people acquire a good experience space, so as to promote the harmonious coexistence of the space. Transforming urban social interaction behavior into a part of individual life memory so as to improve the relationship between people and society, people and the city.

## 2 Graphics and color language and modern urban public space

### 2.1 Graphics and color's language concept

The reason why the graphics and colors in visual elements can be called "language" is because its expression is very similar to the "language" of people's cognition [2]. Languages of graphic and color as the most common linguistic expressions in the world compared with other expressions. Which have the influence of high-intensity communication across national boundaries, regions, time and space and age groups, and are the most representative expressions and communications besides written language the way. Graphics and colour language is the most flexible expression in the process of perception of visual's elements. It is a vividly and intuitively way for shows of bored information and make the psychological and spiritual interaction with people subjectively by visual means.

### 2.2 The current situation and development of modern urban public space

Under the influence of social and economic development, the public space environment of modern cities shows the trend of homogenization. At the same time, the density and height of the residents' housing rising and threats to the quality of life of residents when the proportion of the area provided to the population for leisure and relaxation

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has fallen sharply in urban space. The American sociologist Ray Oldenburg defined urban public space as an area beyond living space and working space. Urban public space is an important gathering place of urban residents in their lives, and it is also an important way to promote the communication of residents' social interaction and to improve the emotional communication between residents and cities.

### 3 Graphics and color language applications in modern urban public space design methods

Based on the theory of human needs of Maslow, the need for emotional affiliation becomes a deeper psychological need after the city meets the basic needs of residents. In the modern urban life with abundant material conditions, most people's demand for cities has gone from basic functional needs to psychological. As an open space for urban population activities, public space undertakes the main carrier of the main body's need for urban experience perception. People's activities and perceptions in public space become the dominant behaviors of people in the process of urban experience. People's activities and perceptions in public space become the dominant behaviors in the process of urban experience. Graphics and colour as the basic elements in the visual communication technique of expression, through visual perception arouse the audience from the psychological and spiritual experience stimulus and association reaction, so as to promote emotional resonance with human and space perception in the depth of experience.

#### 3.1 The integration of special color graphic language that corresponds to space

Visual elements in public space show the cultural temperament of a city, it is bearing the weight of the civilization of a city, reflects the city's life ideal and passion, but also a contemporary art form of the city [3]. In the public space environment, the characteristic graphics language that is interacted with the space. It is not only able to beautify the space image in the visual appearance, but also create a lively atmosphere for there, and let the urban public space become the art district in daily life, and led to people enjoy the enjoyable experience in the public space activities.

The basic operation means of graphic language design is to combine and reconstruct the simple shapes, such as points, lines and faces, which form squares, circles and triangles. In order to form association with people in the experience of life and learning in the premise of mental and psychological, to achieve graphical language through visual interaction and communication. In the environment of space and human interaction, the identity transformation of graphics language becomes a local expression in space. According to the specific function and architectural structure of

space, it is necessary to integrate graphic art into space environment design, so that the connection of graphics and space environment is inseparable, and the two are interdependent and mutually reinforcing [4]. The combination of the graphics language with the space environment and the space environment can be combined with each other, so it can coexist with the urban public space environment and coexist harmoniously.



Figure 1. Water Scene in the Park with Water Ripple.

Take the waterscape of the park with water ripple as an example, as shown in figure 1. Designer with water as a starting point, will the water wave on the form is simplified to a number of big radian bending curve, and then through the combination of the rule and deformation, forming abstract graphics, water ripple at the bottom of the application in the water, water ripple graphics and waterscape space environment theme is consistent, mutual echo. Waterscape in space boundary with downy curve, and the combination of waterscape water ripples at the bottom of the graphics, the characteristics of soft water itself, clever show incisively and vividly, highlight the space characteristics of the water to dissolve into space at the same time, make the graphics and the space form a relationship of mutual echo. By means of artistic expression, they combine the two organically, so that they can produce changes in the unity, and create harmony in the change, that is, the interrelation between the whole and the local, the contradiction and the unity [5].

#### 3.2 Selection of emotional color language with spiritual resonance

Kandinsky once said that color is a way of directly affecting the mind. Color has the essence of emotional effect, and the main way of acting on the audience is the subjective consciousness and experience association brought by color. The color environment of city square has a direct influence on the experience of people in space and the depiction of overall impression. In terms of language transfer, the content delivery efficiency of the material information of color language is far from that of graphic language, and her communication influence mainly lies in the emotional infection of the spiritual energy. The international color consulting association puts forward the theory of "color experience pyramid" from the perspective of individual perception and experience, and indicates that the stimulation of color is

the process of physiological reaction to personal experience [6].



**Figure 2.** The theme square.

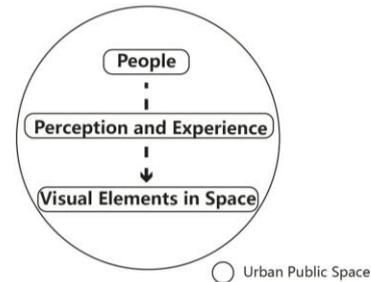
Color is a color coat of urban public space, and it is also a visual language which is very expressive in the process of conveying emotion and expression to people. The colorful environment can enhance the attraction of the space and promote the positive integration of the crowd into the space. Figure 2 square as an example, the theme of the designer in whole space with large area exaggerated color language, and the buildings and the surrounding environment and space photograph echo, form the theme color space, and transfer the happy atmosphere to the audience. In public space of the theme square use relatively more lively colour, this kind of colour has the characteristics of high saturation, brightness and contrast is relatively strong, and has the features such as excitement, passion and happiness, often can bring happy to the audience psychological experience. The designer expresses the entertainment atmosphere of space by color, and drives the audience's participation in the space, and emotionally resonates with the audience on the psychological level.

The proper color language can improve the overall quality of public space. The color is used in the urban public space to display color in the space decoration, but also pay attention to color and space and the relationship between people. Reference integral space planning quality and the use of people's aesthetic habits, and then take appropriate color to match the corresponding facilities form, objective factors such as material, the surface texture, and finally to achieve change in unity, contrast of the effect of the harmonic [7].

### 3.3 Integration of visual elements in public space coordinated with human beings.

The good experience of human beings in the process of urban public space activities is the key to determine the coordination between space and people. Experience is, in fact, a good feeling in consciousness when a person attains a certain level of emotion, physical strength, intelligence, or even a mental state [8]. In the city square, the human's experience of space can decompose the point line relationship between human and square space environment, as well as the coordinated connection reaction. As shown in figure 3, space is the carrier of human social activities and the expression of visual elements. Visual elements in space as a "point", the experience of spatial behavior to become a "line", as

hosting environment and facilities of public space reflects the carrier of the experience of the visual elements and link into a "plane", and finally form a complete process of spatial experience.



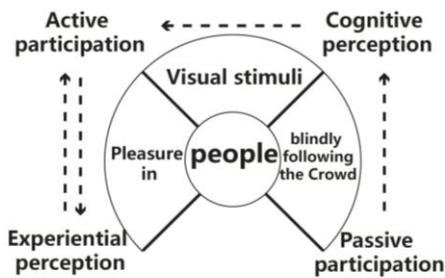
**Figure 3.** Visual intervention linking response.

The rapidly modernization of current city leading to the construction of urban public space means more for scale, homogeneity, replication, single mode caused by space environment, the use of visual elements too rational and indifference, directly reduce the person's experience in space. But the more important is the lack of social interaction in the third space, it can be used as an connection for man as subject, it is the process of experiencing the environment, but also a kind of protection and regression to the history, experience, emotion, memory and other behaviors in human cognitive space [9].



**Figure 4.** A graphic of history lay on the ground floor of Japanese park.

See figure 4 for the ground in a public space in Japan. These words is full of special significance to the graphics, the designer as a visual elements into the ground paving design of the square, with text and graphics expression tells the story of the development history of Japan, the ash black colour to use more highlights the history has gone. In the process of design, the graphic design is subconsciously used to record the graphic design of historical events as a normal, light-jumping lattice, and arouse people's participation in space in the subconscious. Walking on the graph of recording history, it is as if the history of temperature is returned, awakening the memory to touch the inspiration of people's emotional experience of space.



**Figure 5.** Visual Element Intervention Strategy

Visual sense is the most efficient and intuitive way to perceive the external environment, and its process can be decomposed into visual cognition and information interpretation. The visual image of urban public space is the first step in the contact between the subject and the experience place, which directly influences the production of the good relationship. The graphics and color language in the space both provide the visual communication way for the city to communicate with people, and it is also an important factor influencing the experience. The external visual image of urban public space is established, and the internal good experience is the key to arouse people's emotional stability and interaction in space. As shown in figure 5, the motive and the positive degree of the object entering the urban public space are used as the measurement criteria, and the motivation of the crowd is divided into active participation and passive participation. After this effect, according to whether the behavior of the person in public space will affect the occurrence of the occurrence of the event, the object perception behavior is divided into experiential perception and cognitive perception. The people who actively participate in the space will embrace the space to expect the psychology, and in the process of perception, it is easier to develop the experience. In the process of experience gained by the pleasant feelings will further stimulate again the enthusiasm of the active participation in the urban public space, the experience of trigger more initiative behavior, to form a good experience for a virtuous cycle. So it is going to be pleasure when the subject in the process of activities in public space, and the memory of the personal experience will becomes to the memory of city public, so as to establish emotional connection between the object and the city.

Passive participants' perception of space is more likely to stay in the superficial perception of cognition, and more of the experience level of blindness. Effective visual element intervention can stimulate the recognition of space in spirit, so that passive participation is transferred to active participation. Use visual elements to mobilize people active participation in the urban public space, built in the city square and good operation

mechanism of social interaction, through the social interaction involved in the individual experience turn into a part of the city public memory, make social participation subjectivity is embodied in the wisdom of the city's practice patterns in [9].

## 4 Conclusion

The development of the design is closely related to the society, and the development of urban public space reflects the development of the city. The visual representation mode represented by the graphics and color language in the square space is an effective way to create spiritual interaction between cities and people. It can further reduce the irrational and indifferent phenomena brought by urban modernization, so that the design intervention of visual language plays a bigger role in the process of urbanization. Graphics and colour language is formalized expression of visual communication, through the visual elements of urban public space, promote people to the city active cognitive awareness, thus obtains the city and the interaction between people, gain good experience.

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