

# Research on The Application of Visual Communication Art Based on Computer Image Technology

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## Abstract

In the long-term development process of computer image design in China, a series of visual communication rules that meet its own aesthetic needs have been gradually constructed, and the aesthetic feeling of formal language, national unique cultural accomplishment, philosophy and aesthetic thoughts are projected from these mature visual communication rules. The author believes that with the development of The Times and the changes of the society, people's thinking concepts and aesthetic standards are more changeable than before. This article to comb systematically the basic thought and theory of visual communication, the computer graphic design combined with the creation of visual communication space can try to break through the traditional mode, fusion of western ideas, visual communication thinking space overall building, at the same time, the development of computer image for reference standards and some scenic spots, for new forms of visual communication.

**Keywords:** Computer Image Design, Visual Communication, Color, Scenic Spots;

## 1. Introduction

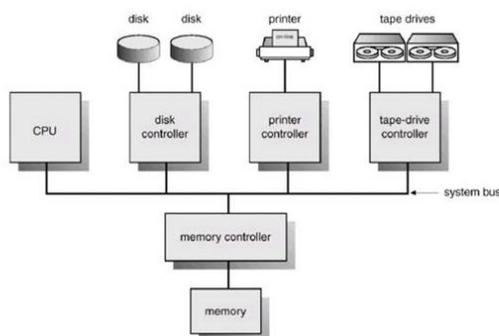
With the rapid development of China's economy, people's living standard has been improved in recent years. More and more people begin to pay attention to holidays, business activities and some recreational activities. In recent years, China's catering industry has also witnessed significant development<sup>[1-3]</sup>. For example, some restaurants such as Beijing Hotel and Changlong Hotel have impressed tourists deeply. It is only a form of computer image design, but does not involve the system of computer image design theme of the expansibility, and the progress of the society and the development of information need to further match. In ancient China, people have already realized that visual communication is "the essence of painting", attached great importance to the position of visual communication in the whole process of computer image design of the hotel, and believed that the computer image design should be refined

before. The author thinks that along with the continuous renewal of concept of people's lives and development, the style of the traditional space makes people tired, how under the background of the composition of computer image fusion concept, visual communication thinking space overall building, at the same time learn from the development of computer image standard and the traditional Chinese painting art, to carry on the new breakthrough in the form of visual communication, so as to achieve the visual form of innovative development, is the current our country computer image design needs to be one of the difficult problem of thinking<sup>[4-6]</sup>.

## 2. Visual communication design based on computer image technology

The visual communication planning of space pays more attention to dialectics and the law of integrity,

and there is corresponding analysis in the ancient painting theory. Han Zhuo in the Song Dynasty also analyzed the contradictions and antagonistic relations of things in nature in his work Pure Complete Works of Mountains and Rivers. The law of contradiction and opposition is also throughout in the overall visual communication planning of the space. Visual communication of traditional space planning should be from the opposite and unified point of view to understand the situation and problems, and the conception, structure, etc, rather than a simple straightforward to "visual communication planning" interpreted as "external form structure", the content and forms of dialectic, the relationship between reality and imagination, etc for flexible processing, and according to the characters of times development continuously optimize and improve the visual communication space planning laws.



**Figure 1.** Visual communication based on computer image technology.

The restaurant can accommodate more than two hundred people at the same time, and reasonable layout, safe access. The overall computer image design is centered on the theme of "leisurely", restoring the feeling that customers feel at home. In the modern society, our life is full of many kinds of electronic products. On the one hand, these products facilitate our life, on the other hand, they make us lazier and more dependent on electronic devices. The natural thing is the most appropriate, a scenic spot provides such a quiet, peaceful, friendly natural environment, so that people can feel beautiful in the quiet, in the natural taste of home.

The space of a scenic spot adopts the creation methods of "echo of edges and corners" and "painting with blank space", instead of the creation of artistic conception by the way of painting scenes directly. For example, the "camelina" hall in a scenic spot has developed China's traditional space and corner visual communication planning in a very comprehensive way. On the one hand, it has carried out prominent and concise conception and management in the computer image design rules. On the other hand, the use of mountains and rivers can achieve a profound visual artistic conception. This kind of corner visual communication planning will lead the viewer's eyes to the vast distance, which makes people linger on and forget to return, and also gives people a feeling of being at home.

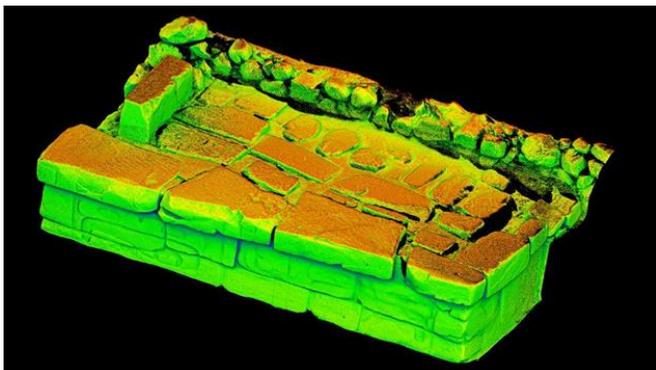
### 3. Computer image design combined with visual communication space planning computer image design method

*3.1. Meaning and attribute of visual communication*  
Visual perception is an important way for people to understand and appreciate the world. From a physical point of view, the formation of color is the reflection of light through the object produced by the different dispersion; But from the point of view of spatial composition, to really understand color, one must first understand light in depth. Light itself has no color properties, while color products are colors acquired by the human brain through visual communication perception. The so-called panoramic and bird's eye view visual communication planning methods in computer image design mainly make a macro summary of what the artist sees and thinks by means of scatter perspective and landscape shifting, and express them in the same space, thus creating a more artistic space. And western focus perspective in the design of computer image is different, our traditional way of panoramic visual communication planning more prominent perspective vision scope, highlight the main image, according to the law of beauty things will be different space and time to carry on the summary, let a space from the concept of time and space of scenic spots, pay more attention to

artistic performance; However, the practical application of corner visual communication planning in space pays more attention to the application of white space skills, and adjusts different colors in space to carry out corresponding innovation.

### *3.2. Computer image design combines visual communication with space application and human feelings*

Through the understanding and improvement of the spatial visual communication planning by the computer graphic designer, a vivid and imposing scene can be effectively created. And the so-called opening and closing visual communication planning refers to the development of the situation of spatial visual communication planning and the echo of the theme. As for the "opening and closing" of visual communication planning in computer image design, these two aspects are also relatively opposite. Through the power of "opening" and the power of "closing", the visual communication planning of various pictures can be organically echoed, as shown in the 3d computer image design drawing in Figure 2 below:



**Figure 2.** A fuller computer 3D image design.

So - called space full visual communication planning, also known as the full visual communication planning. It is mainly through the comprehensive processing of the object image of the space, to make the content of the space more rich and substantial, which leads to the traditional computer image design and the pursuit of the simple effect of a great distance. Traditional computer graphics design pays more attention to living and eating. And some

white space is paid attention to when the overall visual communication planning of scenic spots, and the so-called "the place without drawing into scenic spots", "how" intangible and tangible raw is also hope to customers more imagination space, but with the changing of people's ideology, aesthetic demand diversified development, also in the west in the design of computer image plane composition effect to domestic computer graphic design artist also pay more attention to use of the space space, which in recent years have been full of visual communication planning form, through the imagination to construct a special artistic environment.

Color itself is aesthetic, and different colors can create different atmospheres. Thus can be more convenient and fast to establish the overall pattern, so that the overall momentum of the space for harmonious development. And on the basis of this refined treatment, by breaking the local balance for a new balance treatment, so that the overall layout more full. Therefore, it is not possible to strictly distinguish it from the traditional full visual communication planning. These two visual communication planning styles are also influencing each other. In the process of modernization transformation, they can make greater strides and possess the current distinctive spirit of The Times.

### *3.3 Application principles of computer image design combined with visual communication space planning*

#### *3.3.1 Fully consider functional requirements*

Computer image design style decorative type of visual communication planning mainly include type of visual communication planning elements, but unlike traditional drawing style is: decorative type visual communication planning and pay more attention to the strengthening of the decorative effect, through draw lessons from aesthetics and the form of folk art, let whole visual communication planning more able to meet the needs of the masses. Ding Shaoguang, a Chinese contemporary heavy color painter, attaches great importance to the study of folk art and Chinese traditional art, and absorbs the ideas

of western modern painting school for fusion, forming a very distinctive decorative visual communication plan, integrating domestic and foreign decorative characteristics, and presenting a more gorgeous and complex decorative aesthetic feeling. For example, the difference between a business room and several rooms or large bedrooms requires some adjustment in the computer image design.

### *3.3.2 Reasonable collocation of visual communication*

The innovation of modern spatial visual communication planning is to strengthen the consciousness of composition as a whole. This also includes the enhancement of the concept of clumps and the overall enhancement of the concept of "points, lines and planes". On the one hand, modern art painters pay more attention to the content, form and composition of computer image design. On the other hand, the reasonable collocation of visual communication planning absorbs the perspective characteristics of western computer image design and light and shadow processing methods, so that the traditional space has a more far-reaching development. At the same time also enhanced the space depth and realism of the space.

### *3.3.3 It meets the visual communication needs of computer image design combined with space in a scenic spot*

With the emergence of art Nouveau style in the 19th century, computer image design is no longer a traditional independent art. Computer image design is closely related to the environment around us. And with the development of the current information age, computer image design has become more far-reaching in terms of form, content and material. The mutual reference of different kinds of computer image design art can make the computer image design new materials to be developed. In the combination of computer image design and space computer image design of a scenic spot, we find that the mounting and display of computer image design art is also included in the scope of visual

communication planning. The continuous development of modern spatial visual communication planning is rooted in the long national culture of China, so it is closely related to the traditional spatial visual communication planning of China. It is very important to inherit and develop the overall visual communication planning concept of the space. However, due to the different times, the spatial visual communication planning is also constantly developing, which needs to reflect the characteristics of The Times and the meaning of the form of visual communication planning in computer image design, which also requires that modern spatial visual communication planning should be integrated with a variety of arts for development, with a certain inclusiveness.

### *3.3.4 Follow the emotional law of visual communication*

Different colors can bring people different psychological feelings, which should be paid special attention to when designing visual computer images in space. For example, red and orange bands give people positive, warm, loving and energetic feelings. Green conveys a sense of peace and natural serenity. Different colors have different meanings. When a scenic spot carries out visual communication planning, it is basically grasped from the whole, which is more perceptual and subjective on the whole. It also pays more attention to the processing of "meaning" and "environment", and the relationship between content and form is also entangled by the content of computer image design. The form as a whole does not achieve true independence, only become the computer image design content accessory. Such a situation does not mean that the ancients did not understand the form of spatial visual communication planning, but that its constituent behavior did not form a system. Traditional visual communication planning rules and plane composition rules also have many similarities and differences, so as to more highlight the "Ba-Yu" characteristics of a scenic spot space.

**4. A scenic spot computer image design combined with visual communication space planning computer image design scheme**

*4.1. Public space visual computer image design*

As the most obvious part of the external space, the color adjustment of the public space needs to create a more positive, warm and harmonious feeling. Therefore, strong color contrast can be used for computer image design to provide customers with certain contrast and surprise.(figure 3)



**Figure 3.** Visual communication scene based on computer image technology.

Pen and ink interest constitute the space of the bone, gas and nerve, no ink performance space is no flesh and blood, space pen and ink interest gorgeous and elegant demeanor, all formed in the movement of pen and ink. The basis of the movement of brush and ink lies in the "dharma". In modern high-rise buildings, the lobbies of many buildings are all the same. In this aspect, some painters in a scenic spot dare to break the ordinary rules and create innovative space effects out of nothing. For example, in the four scenes in Figure 4, you can see the fusion of classical and modern computer graphic design art. A scenic spot allows the flowers in the lobby to grow more freely and gradually spread out. The ubiquity of life and the beauty that can emerge from it. A certain scenic spot is also so dare to break the traditional logic thinking, let the thought more empty, its surprising sense of space and visual communication planning form makes a certain scenic spot computer

image design aesthetic full.



**Figure 4.** Computer image design combined with visual communication art design.

As the saying goes, "Everything has its own rules to follow". The walkway computer image design of a scenic spot is also very high-end and simple, using a variety of different materials, and using the dividing line to skillfully computer image design a sense of hierarchy. The display items in the corridor are displayed in the way of a museum. Cong Yun "tourist scenic corridor computer image design planning innovation is first in the sense of formation has been strengthened overall. This also includes the enhancement of the concept of clumps and the overall enhancement of the concept of "points, lines and planes". On the one hand, modern art painters pay more attention to the content, form and composition of computer image design, which improves the convenience of communication between customers and service personnel.



**Figure 5.** Visual communication after computer image processing.

#### 4.2. Visual computer image design of guest room space

Guest room is the most important place for customers to relax and relieve fatigue. Therefore, in the computer image design of this area, the overall visual communication should make people feel relaxed and quiet. Generally, light-colored or warm color computer image design should be chosen.(figure 5)



**Figure 6.** Visual communication application of scenic guest rooms.

The computer image design of a guest room in a scenic area is very intelligent, curtains, Windows, mirrors can be controlled by electric intelligence, and the transparency in the room is full. The mirrored computer graphics in the room enhance the sense of space. The computer graphics of the guest rooms are designed in warm and soft tones to make people feel at home.

#### 4.3. Spatial visual computer image design of the restaurant

The restaurant in a scenic spot mainly adopts light coffee, lemon and coral as the computer image design for spatial visual communication. The main purpose is to enhance customers' appetite, let them eat in less strong light, and create a more warm and harmonious dining environment. Although different customers may be in different states at the time of dining, the need for special space should be reduced and the planning and computer image design should be based on the needs of most customers.



**Figure 7.** Computer image design combined design after computer image design.

### 5. Conclusion

The computer image design of a scenic spot combines the traditional Oriental features and the contemporary Western features, which can be summarized in one word: "original reproduction". By adopting the natural materials and artificial production of Bayu, combining computer image design with computer image design by special means, and reflecting the internal conditions of Bayu area, it can make the finishing point. Select characteristic furniture and accessories in the local environment, improve the corresponding environment, to wake up people's association. Treatment technology at the same time, through the adoption of a certain space, the space in a good relationship with material collocation, by using computer image design language of visual arts affective expression, visual communication space planning is throughout the entire image in the language, a variety of relatively fragmented object by dedicating to the processing of visual communication planning, turns the idea of disordered orderly thought, idea and conception of effective combination, constitute a unique artistic style.

The mutual reference of different kinds of computer image design art can make the new material of computer image design get developed. In the combination of computer image design and space computer image design of a scenic spot, we find that the mounting and display of computer image design art is also included in the scope of visual communication planning. The continuous development of modern spatial visual

communication planning is rooted in the long national culture of China, so it is closely related to the traditional spatial visual communication planning of China. It is very important to inherit and develop the overall visual communication planning concept of the space. But because of the different age, space planning is the development of visual communication, need to reflect era characteristics and computer graphic design of visual communication planning form itself, it also requires the modern visual communication space planning shall be carried out in a comprehensive variety of art development, have a certain tolerance, the following design combined with computer image visual computer image design in principle to carry out reasonable computer graphic design.

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#### **References**

- [1] Wang Y. Research on the visual communication design based on technology of computer graphics[J]. *Advanced Materials Research*, 2013, 846-847:1064-1067.
- [2] Yelu, Zhang. Research on the application of computer image processing technology in art creation[C]// *The 2014 Pacific-Asia Workshop on Computer Science in Industrial Application(CSIA 2014)*. 0.
- [3] Xiong, Jie X . Research on the application of computer virtual image technology in artistic photography[J]. *Advanced Materials Research*, 2013, 846-847:1355-1358.
- [4] Dong-Fei L , Wei C , Gen-Peng C. Research and application of the image search algorithm based on LIRE[C]// *Computer Science and Network Technology (ICCSNT), 2012 2nd International Conference on*. IEEE, 2013.
- [5] Hu X . Research on the application of computer-aided art image generation based fractal method[J]. *Revista de la Facultad de*

*Ingenieria*, 2017, 32(3):1-9.

- [6] Vijverberg J A , Loomans M J H, Koeleman C J , et al. Two novel motion-based algorithms for surveillance video analysis on embedded platforms[J]. *Proceedings of Spie the International Society for Optical Engineering*, 2010, 7724(2):77240I-77240I-9.