

# Analysis of Computer Graphic Image Design and Visual Communication Design

Ying Yang

Jilin Electronic Information Vocational and Technical College, Jilin, Jilin, 132021, China

Email: 33246186@qq.com

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**Abstract:** Computer is one of the core contents of the current science and technology field. The development of computer technology can be traced back to the 20th century. With computing as the core, the content of the image field has been developed. The calculation reduces the error in the drawing process, emphasizing The precision of the drawing. Since then, modern precision drawing has become one of the core contents of computer technology. It has gradually developed a series of contents such as computer graphic image design and visual communication design, which has strengthened the content of the current design field and also gave birth to visual communication design. Computer graphics and image design courses and other corresponding content. This article will start from the basic content of computer graphics and image design, and comprehensively develop computer graphic image design and visual communication design analysis.

## 1. Introduction

Computer graphic image design and visual communication design are two branches of computer graphics function development. Computer graphics image mainly emphasizes the drawing of graphics, which is precision, and completes high-precision drawing through calculation. The visual communication mainly emphasizes the linkage between people and computers, and cares about the subjective feelings of people, which is a kind of artistic design content [1]. Usually, visual communication is a kind of art-oriented drawing, while computer graphic image design is mainly high-precision drawing of engineering. Although both are the development of computer graphics content, their fields are different [2]. To explore the relationship between the two, you need to have an in-depth understanding of them, especially the characteristics of the two. Then this article explores the following content:

## 2. Computer Graphic Image Design Basic Content

### 2.1. Computer graphics image design application calculation instead of basic design

One of the basics of computer graphic image design is the use of calculations instead of basic designs. Computer graphics and image design mainly relies on data for high-precision drawing, so the content of each part is fixed. The input of these fixed data can form a complete design without first drawing, then design Then calculate the content. The transformation from part to whole of the drawing work is achieved. Instead of the first overall in the traditional drawing design, then divide the situation. It can also be seen that the computer graphic image design focuses on the fineness of each part, rather than the overall content, or the overall design content is essentially completed by the high-definition characterization of each part. Generally speaking, such a method is more commonly used in construction projects.

### 2.2. Computer graphics image design application calculation instead of basic painting

At present, in computer graphic image design, calculation is generally used instead of basic painting. In computer graphic image design, painting is generally considered as a collection of data content. In computer graphic image design, the formula is generally used instead of painting content,

and then Through programming, directly form the content of the painting. In the current computer graphic image design, the corresponding content of the painting has almost been abandoned, and the traditional tools such as the mouse drawing board have been removed, and the engineering drawing work is used as the main content. At the same time, the drawing of computer graphics and image design is mainly the traditional two-dimensional drawing content, which is used to express the Abstract. relationship between the various parts, and does not express the concept of the whole as similar to other types of drawing. In computer graphic image design, the most important concept is the accuracy of the foundation.

### **3. Visual Communication Design Basic Content**

#### **3.1. Visual communication design delivers content by medium**

Visual communication design is a brand-new industry that emerges from the computer graphics function. It mainly expresses certain content through drawing. In visual communication design, the content is transmitted through the medium. There are two main types of content: the first one is the traditional data content, that is, through drawing to express a specific data, such as size, length and other content, of course, the use of the book is not the specific data content, but relative a data content. For example, in the visual communication design advertisement of Burger King, in order to highlight the big burger, a burger bigger than the human is drawn. The second is the expression of emotion. The biggest feature of visual communication design is that it can fully express emotions. This is not the traditional drawing, but also has an artistic atmosphere.

#### **3.2. Visual communication design uses computation to enhance creativity**

In visual communication design, computing is also one of its core contents, mainly using calculations to emphasize its creativity. The visual communication design also uses the computer to complete the corresponding drawing, so the input of the data can very well see the content of the visual communication design. In order to better express some content, the calculation can be performed by the computer. Such as the exaggerated manipulation of the tension, you need to be strictly calculated, how to be considered exaggerated. Under normal circumstances, the expression of exaggeration in painting may be imperfect due to the limitation of painting ability. For example, some small drawings cannot be completed by humans. But it can be calculated to complete the corresponding content. If you want to design a more exaggerated burger advertisement, you can design a big burger, and countless people look at the image like an ant. You can calculate the proportional content by calculation.

#### **3.3. Visual communication design is subject to economic factors**

The core of visual communication design is commercial design, so in visual communication design, we must pay attention to the influence of economic factors. The content of economic factors directly determines whether the corresponding content of visual communication design can effectively benefit directly in the market. If the content of visual communication design cannot obtain revenue, it means that the content of visual communication design does not meet the needs of enterprises. Failed works. Therefore, the content of visual communication design is not unlimited, but the constant change of the corresponding content of economic factors can ensure that the content expressed by visual communication design meets the needs of the market. At the same time, the commercial value of visual communication design is also a measure of the ability of visual communication designers.

#### **3.4. Visual communication design is subject to the influence of the audience**

Visual communication design is a service-oriented content, which is to help enterprises to complete the corresponding design, so as to effectively play the content of advertising. Therefore, in the visual communication design, it is necessary to consider the situation of the audience. Different audiences need to correspond to different contents, and can not complete the visual communication design according to the personal concept of the visual communication designer. Otherwise, the

visual communication design will be poor. The situation arises. For example, in the design of young audiences, visual communication design should choose more youth elements to achieve the effect that young people love. In the design of the old audience, the visual communication design should choose more old elements. If the youth element is chosen, it will often cause the elderly audience to understand, and it will not reflect the value of visual communication design. .

#### **4. Comparison of Computer Graphic Image Design and Visual Communication Design**

##### **4.1. Computer graphic image design and visual communication design background comparison**

Computer graphic image design and visual communication design are two completely different contents, and the background of their appearance is completely different. Computer graphics and image design appeared late, mainly because computer graphics and image design is more dependent on computer computing technology. Computer graphics technology cannot be developed under the condition that computer computing technology is not mature. Because the core content of computer graphic image design is still high-precision drawing, such as high-precision drawing in architectural design, any deviation may lead to the failure of computer graphic image design. Therefore, in the late twentieth century, the computer graphics design industry emerged with the development of computer computing technology. Especially in the late twentieth century, the corresponding companion products of the computer also appeared rapidly, and the instruments and drawings of various measurements were completed together, and the computer graphics image design gained an opportunity for development. Compared with computer graphic image design, visual communication design appeared earlier, mainly because visual communication design itself relies on the idea of visual communication designer and the various needs of customers, so the main content is design and art. The accuracy of the drawing is not high, mainly to express some ideas. Therefore, after World War II, with the development of business, visual communication design began to appear. At the same time, almost all major companies in the United States began to use visual communication designers to produce advertising content, thus changing the situation of a market.

##### **4.2. Computer graphic image design and visual communication design task comparison**

Computer graphics and visual design and visual communication design are completely different in terms of tasks, because the focus of the two is completely different. First of all, in the computer graphics image design, the content of the task is mainly high-precision drawing, such as architectural drawing, each part has a strict scale, and the accuracy of each part is very high. Computer graphics design will also fail if there is a problem with accuracy. Therefore, at the task level, computer graphic image design pays more attention to the actual value, which is the Abstract.painting embodiment and data representation of the actual content. At the same time, at the task level, the content of computer graphic image design often does not have emotional expressions and other content. As long as the data is reproduced with high precision, any other elements are redundant for computer graphic image design. So the core of computer graphics image design is computing. In visual communication design, the main emphasis on creativity and ideas, creativity and ideas are enough to represent the content of visual communication design is successful and what customers need. Especially in the visual communication design, the focus is on the expression of emotions and the guidance of ideas, and conveys some specific information. Therefore, in terms of tasks, visual communication design focuses on the function of information transmission. As long as the information is successfully transmitted to the audience, the work representing the visual communication design is successful. For the accuracy and other aspects, there is no general requirement in visual communication design, but for emotional aspects, visual communication design is usually strict, especially for many visual communication design requirements, rather than at a glance.

### **4.3. Comparison of computer graphic image design and visual communication design**

In the comparison between computer graphic image design and visual communication design, the design is completely different, mainly because the content used in the design is completely different. In computer graphics and image design, the main content is 2D drawings and 3D drawings. These drawings do not have any painting content, mainly structural drawings, which are simple structural contents, and do not contain any emotional elements. It's just the simplest data content, especially the data content that expresses the relationship between the parts. Therefore, in computer graphic image design, the core content is actually the integration and embodiment of various data. In some cases, computer graphic image design has not even been associated with a simple picture, just a simple data charting. Therefore, the design of computer graphic image design is the line. As long as the line is straight and the scale is correct, the content of the computer graphic image design is successful. In visual communication design, more emphasis is placed on the design of emotions and content, which expresses a specific kind of information to achieve the effect of advertising. Therefore, in the visual communication design, more elements are used, whether it is lines or graphics or colors, etc., which are the most basic content in visual communication design. Each visual communication design needs to use a large amount of content with specific meaning. To focus on the theme of visual communication design. Therefore, the current visual communication design emphasizes the expression of images and ideas from the figures, shapes, colors, etc. This is the content of visual communication design and computer graphic image design.

### **4.4. Comparison of computer graphic image design and visual communication design technology**

In computer graphic image design and visual communication design, the technical level is essentially different. Although both of them are based on computer graphics technology, the types of technologies used are essentially different. Because of their different cores, The demand for technology is different. In computer graphic image design, the main emphasis is on various scale tools and accuracy calculation tools. At the heart of these technologies are tools for better accurate computer graphics design, ensuring high-precision graphics for computer graphics. The main core of this series of technical software is still computing. All the technologies are developed around computing, and the content of computer graphics and image design is continuously accurate until the customers who achieve computer graphics and image design can be satisfied. Especially in some buildings, it is necessary to calculate the corresponding content in reverse after completion, thus ensuring the accuracy of computer graphic image design. In visual communication design, more attention is paid to the content of the painting tool itself, that is, the technical content used in visual communication design, mainly the content of design, such as image design, color selection, etc. The centralized table selects the characteristics of the visual communication design. In the visual communication design, the color tones often show thousands of colors, which is to better express the design concept in visual communication design. Therefore, visual communication design and computer graphic image design have been completely separated on the technical level, forming two different branches.

## **5. Conclusion**

In summary, the computer field is developing rapidly, and various industries relying on computer technology are also developing rapidly. Computer graphic image design and visual communication design are all products of computer graphics development, but the two are essentially different, although Both emphasize the drawing function, but in the actual process, computer graphic image design mainly focuses on high-precision drawing, focusing on real restoration. The main content of visual communication design is to emphasize art design, emphasizing the harmony between people and design content, and better fulfilling people's pursuit of beauty. If you want to better develop computational mapping technology, you need to better penetrate and compare the two design contents to ensure that the development of graphics technology will not deviate from the

mainstream routes. Through the research of this paper, the above various differences are obtained, and the corresponding contents are elaborated.

## **References**

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