Graphic Design and Visual Processing of Computers

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Abstract: It's vital for graphic designs to have aesthetics. In the later period, computer graphic designs can rely on technical platform and graphic software. The designs are closely connected with visual impressions and impacts. Therefore, it's studied in the work on the connections between them with the graphic designing theories, concepts and visual impressions.

1   INTRODUCTION

Computer image is the most widely used in the field of graphics. Based on the technique and computer software, the graphic processing in the later period will remedy the photography to realize the visualization and modification of images (Feng Xun, Tang Xiaohua, Liu Meilian, 2013). Therefore, it's possible for the computer graphic designs. Nowadays, there are quite a few fields and styles based on computer graphic designs. It will directly influence people's visual impressions on how to realize the best design effects. There is a potential connection between graphic design and visual processing. Therefore, the real graphic visualization and visual diffusion will come true through the relationship coordination.

2   CONCEPTS OF COMPUTER GRAPHIC DESIGNS

The computer graphic design is a relatively modern form. Transferring from papers to computers, images are becoming more intelligent and visual. As the purpose is to satisfy people's needs and realize aesthetic feelings. For graphic images, the designs are very important both in the early and late stage. New feelings can be shown in old images through processing in the later period. The premise of designing computer graphic images is based on many basic factors (Wei Hui, Liu Chun, 2013). Therefore, it takes advantage of computer techniques and software to make brand-new graphic images.

However, the concept based on the graphic images is the most important in design. The designing concept is the soul, and the expression of graphic meaning will not come true until concepts are conveyed.

2.1   Design of Concepts of Computer Graphic Images based on Aesthetics

The short-term memory in nature shows the significance of pictures. As pictures come out due to people's wish to remember the past. Graphic images are given more contents due to the development of techniques and occurrences of photography. Beauty is a kind of pursuit, as well as a kind of enjoyment. It's very important to show beauty in the field of graphic images. It's successful to have pictures showing people aesthetics. Meanwhile, aesthetic transmission should be based on designer's aesthetics while designing computer graphic images (You Yuhu, Liu Tong, Liu Jiawen, 2013). It's relatively easy for computer graphic images to have aesthetic designs. Can we realize the transmission of aesthetic designing concepts with computer technology? To achieve these goals, it's needed to analyze as follows:

First, transmission of designing concepts of subjective aesthetics; based on designer's awareness, subjective aesthetics add aesthetic feelings to designing concepts, and create pictures of subjective aesthetics. Subjective aesthetics is a relatively abstract designing concept, showing an individual's understanding. It means the designed computer graphic images will not be accepted by the majority. Therefore, subjective aesthetics is a designing

concept belongs to the minority. However, it enjoys both necessities and developing potentials for computer graphic designs to convey the concepts of subjective aesthetics. Although the objective aesthetics are popular, someday people will have aesthetic fatigue. Therefore, it's worthwhile to advocate concepts of subjective aesthetics.

Second, designing concepts of objective aesthetics; computer graphic images will mostly tend to objective aesthetic designs, because it can be recognized widely with the help of objective aesthetics. It's easier for people to accept direct aesthetics. While abstract aesthetics need further understanding to be accepted. Meanwhile, the concepts of graphic designs, which are based on the computer technology, will tend to objective aesthetics. As the traditional graphic designs are deeply rooted, designers are willing to express their feelings with brushes. While the computer emphasizes more on the glaring colors and standard lines, it has more advantages in showing objective aesthetics.

2.2 Design of Concepts of Computer Graphic Images based on Ideology

Any picture shows an artistic conception, as well as a theme. The expression of a theme conveys the ideology. It's easier to connect with subjective aesthetics when studying graphic ideology transmission. However, some differences actually exist. It takes advantage of technology to finish the design of computer graphic images. Computers are stricter and more accurate in controlling lines and colors. However, designing of graphic images is not so accurate. Sometimes the anomaly and defect will highlight the graphic image. Therefore, advantages of computer graphic images also have defects. There're two possibilities in expressing ideology with computer graphic images.

First, the design of computer graphic images fully utilizes the computer technology. Therefore, it's accurate in drawing lines and using colors, especially in showing hard lines with brush tools. All these are important advantages. With the help of relevant software and operation platform, it shows a hale or beautiful picture in the most accurate and beautiful way. Sometimes, the transmission of ideology needs the accurate expression, and the computer graphic images will do a good job.

Second, it's obvious that computer graphic images have advantages in painting intelligently with the principle of sensor. However, due to the need of something irregular, powerful and unconstrained style, computer graphic designs will be deficient. The high accuracy and intelligent imagination affects the expression of images to a large extent. It's difficult for computers to draw some messy and tonal differences, or something not following the rules. Therefore, computer graphic images will not always demonstrate the ideology perfectly.

3 PRINCIPLES OF COMPUTER GRAPHIC DESIGNS AND COLOR MATCHING

Designs of computer graphic images should follow some principles, including the designer's ideology and theme. However, something needs to be solved will affect the design in the process. As the theme is the soul of a picture, the design needs to satisfy the most basic elements. A high quality design fully expresses a thought to make audiences understand the designer, so that the graphic design pays.

Besides, it emphasizes color matching more in graphic design. Therefore, it influences the graphic comfort to a large extent. In order to ensure the integrity of the image, not only the artistic conception should satisfy the designer, but also the color matching should cater to people's appreciation. Therefore, an image of high quality should meet the following requirements:

First, it's required that the color matching is reasonable, as well as relatively full difference of warm and cool color. Meanwhile, soft degrees of whole picture should be guaranteed. The realization of soft degree lies in the rational use of color to make painting style aesthetic.

Second, standard of painting style should cater to the requirements of modernization, the too dark or depressed one should not appear. Modern society always pursues the positive energy. The simple and sunshine style appeals more to people's aesthetics.

In all, the computer graphic design emphasizes the improvement of design efficiency, real reduction and accuracy of the color.

4 VISUAL PROCESSING EFFECTS OF COMPUTER GRAPHIC IMAGES

In computer graphics, mainly we design initial pictures, which not influenced by outside environment. However, in real jobs, pictures are the premises, and people do the later processing. We mainly deal with the photographed pictures in later processing, and it's quite common for computer

graphic later processing. It emphasizes visual effects to make colors and tonal appeal more to requirements, so that it can be used in different conditions. The later processing and visual adjustments of computer graphics are based on the editable digital image and the principle of minimum unit pixel. In daily lives, it's quite common to do visual processing of computer graphics. Therefore, it's necessary to analyze from the following aspects:

4.1 Adjustment of Color in Improving the Visual Effects and the Contrasts

Color expresses the way to emphasize the sensory effects of image. It's aimed to show visual impacts and visual aesthetics with contrasts. Color is always adjusted in the process of computer graphic design. For example, cool color is added to bright images to create silence and mystery. It's a relevant color adjustment related to real needs to form special visual effects and strong visual impacts. Besides, visual contrast is widely applied in the computer graphic images, aiming at adjusting the dual tone in the opposite way to form computer graphics based on anti tones. The creation and later process of these images will form a strong visual contrast. Meanwhile, they will improve the picture's potential infection to the largest extent and add many characteristics to the whole picture.

4.2 Later Processing of Adjusting the Sharpening and Fuzzy Visual Effects

It needs later processing because some details in the picture will not be demonstrated or covered while using. For example, the picture of a car, especially the private ones, need to cover the plate. The way to deal with the plate will be associated. So that sharpening and fuzzy are the two most common ways in visual processing and later processing of pictures.

4.2.1 Visual Effects of Fuzzy Implementation

The blurring represents fuzzy process of certain district. However, there are many different ways of fuzziness in the actual use. Gaussian blur is the most commonly used software, and it mainly deals with subtle changes with blur effects. It has great advantages in the process, covering without seeing less. Therefore, the gaussian blur is commonly used. Especially with the help of the fuzzy radius of

relatively small diameter, it's more capable of achieving the blur effects.

4.2.2 Realization of Effects of Clear Visual Texture by Sharpening

The later process of some pictures, especially the small size ones, will adopt the method to make the textures clearer. However, the principle of sharpening is not to deepen the texture, but to make the bright one brighter, darker one darker. The whole picture will be in order, and visual texture cleaning will appear in strong contrast. Therefore, to make later process more appeal to visual aesthetics, it follows regulations to achieve the prediction, based on real needs.

5 CONCLUSIONS

The development of computer technology pushed forward the techniques of graphic images. It allows the application of higher level software and techniques in the graphic field, changing the traditional viewpoint of image. Meanwhile the graphic image processing based on computer technology can design images satisfying real needs with the help of excellent later processing. And the key of designing is to ensure your picture has subjective awareness and demonstrates the theme and ideology with colors and lines. However, the later process deals with visual effects according to real needs. The adjustment of color is to make images have impact forces after improving visual shocking sense. However, common operations such as the sharpening and guassian blur are to make excellent imaging. In all, it's relatively easy and highly efficient in dealing with computer graphic images. Designer with subjective awareness can design pictures he/she enjoys. The later process further promotes the overall composition of pictures and realizes the real intelligent designing.

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