Exploring the Application of Photography in Graphic Design

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Abstract. With the continuous improvement of information technology, the era of map reading has come, the popularity of graphic design is getting stronger and stronger, and there are more and more integration and interlacing between different art disciplines, and photography is also involved as an important part and has played an active role in promoting the development of graphic design. The application of photography in graphic design enhances the visual attractiveness of graphic design works, making the images of works richer and the effect more intuitive and strong. The updating of the technical concept of graphic design also promotes the innovation of photography technology in the new era, and the two complement each other and improve each other, jointly promoting the development of the visual industry.

Keywords: Photography, Graphic Design, Advertising Design, Visual

1. Introduction

Since the industrial revolution, graphic design has developed rapidly. With the continuous improvement of information technology, the era of map reading has arrived, and the popularity of graphic design in society has become stronger and stronger, and there is more and more integration between different art disciplines, fully verifying the view that "art is connected".

In the development process of graphic design, the composition of graphic design layout has been expanding, and in addition to words, graphics, colors and symbols, photography has also been involved as an important part and has played an active role in promoting the development of graphic design. The application of photography in graphic design has enhanced the visual attractiveness of graphic design works, making them richer and more intuitive.

At the same time, a lot of modern creative photography also provides a lot of material resources for graphic design, which further improves the efficiency of graphic design and expands the application space of graphic design [1]. Conversely, the update of the technical concept of graphic design also promotes the innovation of photography technology in the new era, the two complement each other, improve each other, and jointly promote the progress of the visual industry. Therefore, the analysis and discussion of the application of photography in graphic design is of great significance to both.

2. The Relationship Between Graphic Design and Photography

With the improvement of human aesthetic needs, graphic design as the most basic technical means to create a wealth of modern practical aesthetics, and has been deeply integrated into all aspects of
human life, such as clothing, food, housing and transportation. Throughout the history of graphic design in the world, the development of technology has promoted the leap of printing technology and information technology, making graphic design have a broader stage and become an inseparable and important part of the information age. As one of the expressions of graphic design, photography is more and more frequently involved in graphic design, and as a visual language in two-dimensional space, the combination of the two has accelerated the dissemination of information.

2.1. Photography in Graphic Design
The development of graphic design has gradually changed its role as a means of commercial promotion. In addition to promoting the circulation of the commodity economy, the communication of information has always been its core connotation. When text and graphics were separated to form two branches, graphic design was still mostly created by hand. Before the advent of photography, the human eye observed the world from a highly subjective and selective perspective, which determined that graphic design could not be presented realistically [2].

After the development and popularization of photography, its high realistic meaning has greatly expanded the visual language of graphic design and changed the single expression form of graphic design. Not only that, photography can capture instantaneous images quickly and realistically, which improves the efficiency of graphic design and has a great impact on traditional graphic design [3].

2.2. Graphic Design in Photography
Photography, as a technical means of humanistic creation, has been invented since the late 1830s, although its development history is not as long as that of graphic design, but its presentation of visual images is more pure, and it can reproduce the photographed objects more intuitively and vividly, which has changed the inherent way of creating graphic design. Combined with the application of printing technology, which greatly reduces production costs and gives a unique flavor to graphic design. It has gradually been applied to all fields of graphic design, and has improved the communication effect of graphic design [4].

The introduction of photography technology not only upgrades the traditional graphic design creation methods, but also interchanges the two views in the scope of visual language, and can convey the same information through a common image. Therefore, both must follow the laws of visual form and beauty [5], whether it is composition, color and picture presentation, etc. The presentation of photography can be required according to the principles of graphic design.

2.3. The Impact of Digital Technology on Graphic Design and Photography
At the end of the 20th century, computer technology became popular and graphic design underwent radical changes. The addition of digital processing technology brought about a huge change in graphic design [6]. The computer as the main creation tool of graphic design has made the creation of graphic images more convenient.

With the addition of digital photography, it has completely changed the way images are recorded, and at the same time has greatly enriched the language of graphic design and enhanced the efficiency of the dissemination of visual elements. Under the influence of technological development, graphic design and photography have been closely combined, which has promoted the change of graphic design creation methods and design styles. Whether it is book and magazine design, layout design or poster design, all these graphic design categories that can be combined with images are associated with photography, bringing a new development of diversified forms of graphic design expression. At the same time, photography with a special flavor has been added to graphic design, creating a new sensory world.

3. The Role of Photography in Graphic Design
The progress of modern technology has had a tremendous impact on both the times and the industry. Today, the realization of graphic design has become a combination of skills and technology, and the
technical content of visual art is higher than all previous traditional forms of expression. In the graphic design combined with photography, the designer applies the core theory of visual communication more rationally, fully satisfies the psychological and spiritual needs of modern human beings through scientific visual flow and visual orientation, and reflects the humanized characteristics of modern graphic design.

3.1. Photography can Convey Graphic Design Content
As a graphic visual language, photography has the primary characteristic of being intuitive and clear, which can provide graphic design with visual elements and reproduce objects clearly and objectively, maximizing the authenticity of the objects. It can fully reflect the shape, color, texture and texture of the photographed object and beautify the object by combining various technical means, which enhances the attention of the work itself and is more conducive to strengthening the emotional communication between the graphic design work and the audience [7].

At the same time, the enhancement of digital photography technology has shortened the cycle of photographic works, which, together with the assistance of graphic design post-production technology, can make the works have a more perfect display and facilitate the expansion of multiple artistic styles. Therefore, the image elements obtained through photography are more graphic and concrete than textual expressions, and can clearly express the graphic design theme.

3.2. Photography can Reinforce Graphic Design Themes
The 21st century has completely stepped into the era of reading pictures, compared with text symbols, images are easier to read and remember. In modern graphic advertising design, visual elements have long become the main body, and the function of text symbols has gradually become an auxiliary description. Modern photography integrates the advanced concept of graphic design into it, converts it into visual elements through the form of images, reproduces objective objects clearly and distinctly, and combines visual effects such as color and texture with text to show the picture, making the content of graphic design richer and clearer, making up for the defects of single expression of text, enhancing the viewer's "picture reading interest", induce the viewer to understand the design theme, reduce communication barriers, better display the design connotation, convey the design theme, and further deepen the viewer's memory.

3.3. Photography can Reinforce Graphic Design Themes
In recent years, as the demand for graphic design in various industries has increased, graphic design in China has developed rapidly, and works of varying quality have flooded various information dissemination channels, making people's perception of judging the merits of graphic design works decline, and making graphic design lose its original shocking power.

Under this premise, how to design more innovative graphic design works is also the long-term goal pursued by the graphic design industry. Creativity, as the core point of graphic design works, has become the standard for judging the merits of graphic design works in the modern advertising industry. In the creation process of modern photography, new generation photographers have added a lot of wild creative thinking and distinctive creative elements to strengthen the creative points in graphic design works, which not only improves the efficiency, but also makes it easier for the audience to quickly comprehend the creative intent and finally achieve the purpose of communication of graphic design.

3.4. Photography can Enhance the Aesthetics of Graphic Design
Photography has summarized its own unique aesthetic characteristics in its development and has an independent way of expression. As an important part of modern graphic design, it can harmonize light and shadow, color and composition to make a perfect combination of the main compositional elements of graphic design and show the eternal classic moments. The theories of graphic design in picture composition can be applied to photography as well, and the language expression of photography conveys the soul of graphic design more imaginatively.
The excellent conditions for photography to participate in creation provide a more convenient communication channel for graphic design, and it has also become an important means of expression in the field of graphic design [8], giving a high visual enjoyment with clever intention, realistic image, and vivid interest, bringing a better aesthetic experience to the audience and directly inducing an emotional response from the viewer. Excellent photography works can also evoke the audience's deepest emotions, gain psychological recognition, immerse the audience in a beautiful vision, and fully enhance the aesthetic value of graphic design works [9].

4. Exploring the Application of Photography to Graphic Design

No matter how photography is combined with graphic design, it should follow certain design principles. Therefore, regardless of its presentation and intervention methods, it should reflect function as the first. In the process of graphic design creation, the correct way of expression is to pinpoint the balance between functionality and artistry, and not to neglect the audience's pursuit of aesthetics in order to show the functionality of graphic design, and not to neglect the information dissemination function of graphic design in order to pursue artistry, this is the primary criterion for the application of photography to graphic design.

As a design element or auxiliary technique of graphic design, photography should never override the theme of graphic design, and it should not only participate in the creation of graphic design works in the form of images, but also deeply integrate with other creative techniques, such as deconstruction, reconstruction, exaggeration, deformation, collage and other combinations into various novel techniques, so that the expression of photography fusion in graphic design presents diversified development. In addition, three-dimensional, dynamic display is also the direction of modern information dissemination, so the attempt of photography applied to graphic design is bound to go through the process from two-dimensional expansion to three-dimensional, from static development to dynamic [10].

5. Conclusion

All in all, the combination of photography and graphic design is the trend of the times, the two complement each other's advantages, and will have a closer combination in the future, which can bring richer visual enjoyment to the audience and can play a positive role in promoting the development of social economy and the expansion of the art field.

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