Application Research of Digital Media Technology in Graphic Art Design

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Abstract: The rise of digital media has affected the development direction of graphic art design to a certain extent. The combination of digital media technology and art provides a method for design innovation. By analyzing the specific application of digital media in graphic art design, this paper innovates new methods and new situations of graphic art design, which integrates technology and art, breaks the inherent methods and forms of art design, and provides future development of graphic design. direction.

1. Introduction

The current methods and concepts of art design and innovation generally permeate people's daily lives and enhance people's understanding of art and life. This not only transforms people's lifestyles, but also innovates the way art is designed and created. The combination of art and digital media has diversified the thinking and expression of design. The addition of digital media and innovative art design concepts and methods have played a positive role in the development of the design industry.

2. Overview of Digital Media Technology and Graphic Art Design

2.1 Digital Media Technology

The essence of digital media is the use of the Internet as a carrier of communication for media products that disseminate information. Broadly speaking, digital media has a wide range, such as digital TV, e-books, touch-screen electronic products, and 3D movies, all of which belong to digital media. Media that uses digital technology as a basis for existence can be referred to as digital media. There are two main types of digital media media. One is a new media method that has been transformed from traditional media digitization, such as digital magazines, digital photography, digital cinema, digital broadcasting, and so on. The other is a natural digital product, such as Internet TV.

2.2 Graphic Art Design

Graphic art design actually belongs to a form of visual expression, which can express the designer's thoughts by using symbols, graphics and words. In recent years, the application of graphic art design has not changed greatly. While digital media is in the ascendant, it has added vitality to the development of graphic design. The graphic design includes daily product packaging design, logo design, star poster design, book illustration design, magazine cover design and so on. Graphic design combines various factors such as graphics, logos, characters and colors to express design ideas and carry out large-scale printing and publicity to ensure the rapid dissemination of information.

2.3 The Nature of Digital Media Technology in Graphic Design

First, interactivity. Digital media technology can attract people to join the art design team, design art, appreciate art, and improve art. Close the distance between public life and art design. Second,

comprehensive. The comprehensiveness of digital media technology mainly includes the variability of form and the sensory complexity of the human body. Digital media technology takes advantage of the audience's requirements for professional technology and art, and uses science and technology to process related videos and pictures, so that art design can be transmitted in visual, auditory and tactile sense. Third, entertainment. The nature of art media entertainment shows that it is gradually moving towards the masses. People's daily lives are inseparable from artistic design, such as online pictures and electronic works. The popularity of the Internet has made digital media art more popular and civilian.

3. The Application of Digital Media Technology in Graphic Art Design

3.1 The Use of Digital Media and Graphic Art Design

Digital media technology has been driving the development of graphic design. Under the influence of digital media, graphic art design has gradually changed the abstract graphics and static expression techniques. In 1961, American scientist M. Heiling advocated the use of virtual design methods to establish the concept of a real city. People can experience the feeling of walking on the city road in his design. This design allows people to experience a variety of complex sounds and vibrations at the same time. This solution was only applied after the rapid development of network technology in the 1980s.Graphic art design has two aspects in the expression of virtual language:

First, the visual aspect. Virtual reality is a technology that creates a physiologically sensible experience for the audience. It guides people to experience the world and understand the world. Let people refresh their knowledge of the world. For example, take the bus billboard on the streets of London as an example. The things in the billboard are translucent like glass, and the blocking part of the stop sign is combined with the unobstructed part. The magic is that if there is a bus passing the platform, the screen of the billboard will show different pictures, some are the "ufo" flying in the face, some are the "monster hand" in the sewer, the pedestrians are pulled into it, and some are suddenly from the sky. Some of the bombs that fell, some were tigers that suddenly appeared on the platform. Waiting is boring, but people who see these pictures while waiting for the bus will find it interesting and interesting to watch or take pictures. The design concept of the advertisement is to use the camera to capture the road information on the billboard, and to use virtual reality technology to display different worlds on the advertisement screen. This kind of interesting advertising design can eliminate the boring of everyone waiting for the car, create an immersive, "immersive" psychological suggestion for the audience, and the audience has different experience in the cross environment between reality and virtual.

Second, the aspect of interaction. When visual objects and specific operations in graphic art design and digital media technology applications are based on real-world objects and related operations, the audience can immediately understand how to use them. Intuitive things tend to be more influential in the audience. In the historical development and change, some expression methods of graphic art design are similar to this theory. For example, take a clothing sales website as an example. The website provides models of three-dimensional virtual characters of various shapes, skin colors, face shapes, and hairstyles. The audience first selects the virtual characters[1] that are close to their appearance when browsing the clothing of the website. Website re-use technology converts the ready-to-wear garments into simulated costumes for customers to place on the virtual model for "try-on". This method can provide customers with convenient choices. These two virtualized graphic designs visualize the expression to compensate for the shortcomings of static images. This design will give the audience a strong sense of immersion and a sense of psychological resonance and participation.

In the era of rapid digitalization of science and technology, the digitalization of the media has replaced the paper media. Digital media has grown faster than the traditional publishing industry, indicating that people's reading habits are changing. In 1990, mixed reality technology was developed. The design principle is to accurately calculate the angle and position of the camera, supplemented by image processing, and the static plane image on the screen is displayed in the real

world and can interact[2].However, the technology began to be used in a small field, but with the popularity of computer technology, the combination of this technology and other fields has been strengthened, and the application range has been increased. For example, in an Omega watch advertisement, the customer simply opens the app, points the camera at the advertisement, clicks Start, and points the camera to the customer's wrist. The customer's wrist in the phone seems to be really wearing the product. This technologically-sound graphic design allows the audience and the seller to interact with the advertisement as a medium. It does not require the customer to go to the counter to try on it. The user can try on the watch in the advertisement anytime and anywhere, saving the customer's time. It brings a fresh sense of product experience, and it is convenient to have no time to go to the audience of the counter, and expand the way for people to become product consumers.

The combination of digital media technology and graphic art design images can enhance the fun of the product and help create a good brand image. For example, Goodnight Lad's children's illustration book is called "magic book."The book has a total of 33 pages. The book cover is equipped with a two-dimensional code. After scanning with a mobile phone, it is directed at the picture in the book. The cartoon characters are active on the paper. The design of such books vividly and intuitively displays the cartoon characters in the books, inspiring children's reading interest and enthusiasm. In general, when a normal person accepts external information, the visual occupies 70% and the hearing occupies 20%.Designers need to combine vision and hearing when creating a work, so that people can intuitively feel the information and fully integrate science and technology with visual environment design.

3.2 The Humanized Application of Digital Media and Graphic Art Design

Graphic art design needs to be viewed by the audience's eyes and created around the "people-oriented" service concept. The humanized graphic design not only needs to process the text and images to the audience, but also needs to pay attention to the inner feelings of the audience[3].Fully understand people's physical and psychological feelings and guide them to have emotional communication with the product itself. Graphic design needs to use the interactivity of digital media to explore in two ways:

First, the interactive use of graphic design. The advent of digital media has led to the creation of interactive graphic designs. This design combines modern aesthetics with surrealism to create an open imagination for designers. Designing print ads requires combining the performance of graphic design with the medium of communication to find scientific methods for information transfer. The audience is no longer a blind recipient, but becomes part of the design of the work. Interactions essentially belong to each other. Interactive design can create interactions between digital media, advertisers, and audiences. For example, taking a razor advertisement as an example, the advertisement communication platform is a touch screen electronic terminal, and the razor in the advertisement moves with the movement of the human hand, where the customer's hand moves, and the beard of the model is scraped clean in the advertisement. The prominent feature of this advertisement is to establish an interactive relationship with the customer.

Second, the design emotionalization under the combination of multiple elements. Design can be seen everywhere in life, and the combination of graphic design and digital media technology can make the development of the former more potential. Combining digital elements with graphic design produces amazing results. For example, in a weather forecasting software with a high domestic download rate, people's terminal devices are used as windows to enter the weather forecast environment for language broadcast. If the forecast is rainy, the audience will hear the rain of the drip, combined with the raindrop animation on the screen, as if the user really saw the rain. The software combines flat display with weather sounds, greatly increasing the amount of downloads. Therefore, attracting the attention of the audience needs to stimulate its senses. Print ads can use a variety of sensory elements to fully integrate with graphic design, causing the audience to resonate emotionally. Enable customers to gain self-awareness and emotional value when they consume. In addition, the "people-oriented" service concept is the core of graphic design. The

graphic art design under the background of digital media needs to focus on the user, fully investigate and analyze the audience in the design preparation stage, and comprehensively analyze the design, digital technology and market conditions to provide new ideas for graphic design.

4. Conclusion

Digital media art has been widely used in the field of art design, and the cultural influence and economic benefits of graphic design have always existed. In the collision of design trends, application technology innovation, and social innovation thinking, digital media interacts with graphic art design and influences each other. New and new media art forms are displayed in front of the public, opening up for the future development of graphic design. Sex and inclusive.

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