The Creative Philosophy of Visual Communication Art Design in the Era of Big Data

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Abstract: The rapid development of big data has generated great transformation in information transmission of people. Therefore, to make visual communication art design align with the times, it is necessary to conduct innovations in new ways under the original thinking mode. Therefore, this paper discusses the creative philosophy of visual communication art design in the era of big data, showing the trend of humanization, diversification, popularization, and innovation to provide new ideas for developing visual communication art design.

Keywords: big data era, visual communication art design, new thinking

1. Introduction

Development is the eternal theme of our times. Under the impact of the information technology revolution, new media emerged one after another. In this context, visual communication art design needs to reflect on itself, seek a new development direction and inject new vitality into the design based on media[1]. For designers, this is both an opportunity and a challenge; the opportunity means a broader field of research, which can improve their design level. On the other hand, challenge refers to the requirement for designers. It is just like survival of the fittest, and they have to constantly improve their strength and exploit new areas so that their thinking becomes more updated. Therefore, we must recognize the digital era's development characteristics and thinking mode to lay a solid theoretical foundation for future design research.

2. Exploration

2.1. Humanization

From conception to implementation, good design should meet the basic needs of people's orientation. With the transformation of the contemporary consumption concept from material to spiritual consumption, visual communication art design gives more attention to humanistic care, and its development tends to be in contact with nature[2].

Human needs are put at a higher level in the digital era as coded messages lack the emotion that traditional media should have. Thus the fading of humanity leads to our craving for human kindness, so we should not only satisfy the primary function of design and also give top priority to emotional expression, that is, to achieve the "ego" and the "self." Moreover, we should constantly seek the design expression of the "superego," and artistic design can be adapted to reflect people's concerns. At the same time, with the advent of the new century and the loss of individuals caused by large-scale industrial production, more and more people have begun to attach importance to the performance of individuals and expect to have a unique product to convey their ideas. Therefore, the feelings of users are also increasingly important.

2.2. Diversity

With the development of big data and the emergence of new technologies and materials, designers' creativity has been dramatically improved. Constant changes in their design ideas constantly stimulate their creative thinking. They are looking for more suitable technologies and materials rather than just simple graphic design. Therefore, in the digital era, the form of visual communication design is gradually becoming diversified, and the carrier is also more and more diversified.
"Dimensional diversification" refers to traditional plane forms of expression, such as paper and newspaper. Still, with the development of science and technology, three-dimensional space can provide better appreciation, and at the same time, it will bring more sense of reality and interest [3]. For example, the Imperial Palace Museum Exhibition software, launched by the Imperial Palace Museum, shows the exhibition's contents through the online display. At the same time, it also provides virtual reality (VR) so that users can feel as if they are physically present.

2.3. Popularization

At the threshold of big data, digital media has become an important way for people to obtain information. With the help of digital media for visual communication design, its visual effects gradually show popular expression and expression methods. Among them, "popularization" refers to the rapid development of people receiving information based on the original traditional media. In order to achieve specific visual delivery goals based on the design concept of "people orientation," designers often start from the perspective of the public when designing so that the design is more user-friendly, with discernible design effect, to form a specific social impact in society with particular social value.

At the same time, with the rapid spread of information in the era of big data, the application of science and technology is becoming more extensive and widespread, especially in design, which is closer to the public, making visual communication art design popular. Through the comparison, it is easy to see that the design in the past was subject to only targeting a small group of people with difficulty in popularity. However, nowadays, with digital technology and tools, one can easily and quickly make a piece of their design, from the recipient of information to the maker and disseminator of information, so visual communication art design expression techniques are more and more popular.

2.4. Innovation

Innovation is an eternal theme and the driving force for the continuous development of human society. With the coming big data era, digital technology has brought more forms of expression. Designers' thinking is no longer subject to the two-dimensional plane. Instead, it presents three-dimensional and multi-dimensional visual effects through digital technology. Furthermore, the impact of the pandemic has brought more possibilities for "online exhibitions." For example, there were two kinds of graduation exhibitions in different art schools across the globe, one is the "online graduation exhibition," and the other is the 3D virtual graduation exhibition, where students can view graduation works of various majors in different virtual exhibition halls according to their requirements. Offline 3D simulation, with another way of opening, has a more vital communication ability with a strong sense of ceremony.

3. Opportunities and Challenges

3.1. Opportunities of visual communication art design in the era of big data

Driven by big data, visual communication design has injected new vitality. However, the traditional visual communication art design is only confined to the popular graphic expression field. Based on the current development of information technology, various convenient and efficient technological means enrich the connotation of visual communication design so that other design elements can be effectively used in visual communication design, thus enhancing the expression of visual communication design. So that designers can express their design ideas and emotions in various ways. When displaying design works, 2D text and images can be integrated with virtual sound through data to produce a very appealing sense to achieve a good communication effect.

In the era of big data, the rapid development of multi-touch technology makes communication between people and multimedia devices more convenient and efficient. As a result, all forms of media are optimized to the best of their ability, thus driving the improvement of the design environment for visual communication. Furthermore, because of the authenticity, objectivity, and quick transmission of data, we can use massive data to accurately analyze the user's preferences to accurately grasp the audience's needs so that designers can effectively improve the communication efficiency of visual communication art design.
3.2. Challenges of visual communication art design in the era of big data

The data of big data is very complex, and its value density is very low. In every link of visual communication design, all kinds of data have their unique functions. After sorting out the non-valuable information, it is redistributed to other departments to maximize the information's value. Due to the vast amount of data, the process becomes very complicated, and completing the process proves difficult. Therefore, in collecting and organizing information, we should not only fully consider the market environment of the visual communication art design and the preferences of different audiences but also comprehensively and carefully analyze all kinds of data and influencing factors to achieve the maximum benefit of data.

In the era of big data, many valid and invalid data can be easily obtained, so a variety of visual communication works can be accessible to people. At the same time, the era of big data presents a high degree of openness. In this environment, plagiarism and imitation will inevitably emerge, resulting in homogenization. Such monotonous works lose the essence of design, and the lack of personalization makes the audience feel aesthetic fatigue. If this situation is not improved, it will adversely impact the development of visual communication design and even the whole of society.

4. Innovative development path of visual communication art design in the era of big data

4.1. Reasonable introduction and application of high technology

Big data plays an increasingly important role in today's social development. In the era of big data, visual communication art design can be achieved with full compliance with the development law of big data, reasonable use of big data, and breakthrough in the limitations of time and space for innovative results. Based on information technology, visual communication design must be combined with technology to achieve the purpose of interaction and communication. For example, people can use smartphones and apps to make visual communication art design more convenient and efficient. Based on current information technology, visual communication design and high technology are interlinked. Therefore, the relevant designers should not only fully grasp the characteristics of big data but also adapt to the development requirements of the times, push their design concepts to a higher field, strengthen the grasp of digital technology, reasonably and effectively use various technologies, and fully reflect the advantages and characteristics of the era of big data.

4.2. Top priority to diversified visual thinking

Visual thinking can effectively promote the development of creativity. Its exploratory nature can be intuitive perception to promote the cultivation and promotion of human imagination ability of images. In the traditional visual communication design, the plane is mainly used. Nowadays, with the rapid development of information technology, the spatial dimension of visual communication design is developing from singularity to diversification. In the era of big data, group image is an essential feature of visual communication design, which produces solid visual effects and brings people good and novel feelings and experiences. Therefore, in the era of big data, visual communication design should take four dimensions and three dimensions as the main content. In the future, designers will diversify the development trend of visual communication art design. Therefore, all industries and enterprises should attach importance to multi-dimensional design and promote the development and progress of the design.

4.3. Integration of visual communication art design and media

In the era of big data, multimedia technology has exerted significant influence and influence in all walks of life, and visual communication art design work is also inseparable from the support of multimedia. Furthermore, with the rapid development of science and technology, the way to realize information from a single, open, operational, public, and multimedia devices interaction enhanced, jointly promoting effective information exchange. In visual communication art design, the key to information transmission lies in the timely and effective transmission of information. As the carrier of information, social media has played a significant role.

Under the circumstances, information transmission can be made more efficient by linking the components of the information transmission chain. As the pace of people's life is getting faster and
faster, life pressure is getting bigger and bigger, people's requirements for information accuracy and efficiency are also getting higher and higher, and the interaction design in multimedia applications can also better meet the needs of users. In visual communication design, relevant staff use a variety of media for information integration and then use internet technology for secondary fusion to form a comprehensive information network containing a large amount of information so that people can more conveniently receive information. To achieve practical communication effects, the organic combination of visual communication design and media can increase the activity and interest in news and facilitate the public to obtain information. The information after media fusion is different from the traditional visual communication design, which can give people a strong visual impact to promote the development of visual communication. At the same time, the staff of relevant departments also have a deeper understanding of digital technology and multimedia equipment when carrying out visual communication design integration work.

4.4. Deep integration of humanization, interaction and localization

In the era of big data, visual communication design presents many characteristics, among which humanization, interaction, localization, and other features are the most prominent. There is a close relationship between the three, which can achieve deep integration. From the human aspect, the visual communication art design is a human-centered design idea that provides the best service for users to the greatest extent and satisfies the psychological needs of users to the greatest extent. Based on the prominence of information technology and the continuous development of information technology, visual communication art design has remained strong. On the contrary, it should be more prominent to reflect its humanistic care. In the era of big data, only the people-oriented design concept can provide better user service. In light of interactivity, modern information communication focuses on two-way interaction. Designers should convey information to the audience and receive feedback to ensure the accurate transmission of data. In visual communication design, designers should pay full attention to and value the interaction so that it permeates into every level of the design so that the audience and design works have more interaction. From the perspective of localization, under the role of big data, the development of visual communication art design is no longer limited to expressing specific styles and elements, and the local traditional culture can be well integrated into the design.

Generally speaking, "humanization," "interaction," and "localization" are three different development directions of visual communication art design in the era of "big data" there is no conflict between them, but they are highly coordinated and unified. This lies in the fact that they are at different levels without competition. Instead, the diversity of design works can be promoted through good cooperation at all levels. Designers should adhere to the principle of humanism and pay full attention to the expression of interactivity and the integration of local culture to make a better design.

5. Conclusion

In conclusion, visual communication art design plays a vital role in modern design. With the coming era of big data, artists and designers must constantly adjust visual communication art design in the development direction. The exploration and application of new technologies and materials will bring new vitality to graphic communication art design and gradually combine domestic visual communication art design with many fields to promote the development and progress of visual communication art design.

References