

Research on Font Morphology Based on Digital Media

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ABSTRACT. *With the rapid development of society and the continuous progress of science and technology, China is gradually changing from the manual and mechanized era to the current information and digital era. At the same time, as a universal communication language in China, with the mutual support of digital media and information technology, it has gradually innovated and researched the font form of Chinese characters. The style of the font forms a perfect shape, making it more beautiful.*

KEYWORDS: *Font design, Digital media, Dynamic writing*

1. Introduction

In this era of diverse information, Chinese characters appear in our vision almost all the time. Newspapers, magazines, books, mobile phones, computers and other electronic devices have become indispensable tools for us to browse information. Chinese characters have evolved from pictograms to pictographs, and then evolved into vernacular texts, and now the electronic fonts displayed through information technology have never interrupted the shape of Chinese characters. Nowadays, in order to satisfy people's ability to reduce aesthetic fatigue when browsing Chinese characters, they can quickly find the information they want to browse. Therefore, the design of the font shape is extremely important.

3. The Significance and Value of the Research on Digital Media Font Shape Design

3.1 Inheritance and Development of Font Design

In the traditional font form design, because of the limited science and technology at that time, the woodblock printing technology was used to print Chinese characters in the book cover for people to read. With the development of society and the improvement of people's cultural level, the Chinese characters printed by woodblock printing could not meet people's needs for reading. The main reason is that the fault tolerance rate of printed Chinese characters is too low. Through manual operation, the printed Chinese characters will be blurry and wrong, and most of them have the problems of single color and simple typesetting. With the development of science and technology, the laser phototypesetting technology has replaced the traditional manual printing and manual operation. The laser technology is used to print out Chinese characters clearly and accurately, which greatly saves the time of labor and reduces waste of manpower. It provides people with a high-quality reading experience, especially for the education industry. The Chinese characters printed by textbooks through laser phototypesetting technology not only have specifications and sizes, but also can ensure a certain content accuracy rate and increase the quality of teaching. At the same time, computer technology has gradually entered thousands of households, and electronic equipment has become the main tool for people to read and obtain information, so that computer fonts have also emerged. In order to give people better reading comfort and highlight the key points of reading more quickly, certain Chinese characters will be artistic and visualized, using different typesetting methods, font sizes, font colors, etc. to make the original single font form. It is displayed through colorful styles to make it more aesthetic and highlight. Meanwhile, the multi-dimensional font form has also been applied to people's reading. It gets rid of the traditional two-dimensional plane display mode, makes the font have a spatial image, and can express the content more vividly and interestingly through the dynamic font, which attracts people's attention. In addition, the multi-dimensional font form can also play a more important role. For example, the use of multi-dimensional fonts in multimedia teaching can increase students' interest in learning and increase classroom atmosphere. It can be seen accurately in all directions.

In the traditional culture of our country, the history of the development of writing has a long history, and it is full of the wisdom of ancestors and the creativity of contemporary people. In the development era of informatization, the role played by writing is not trivial. Science and technology, transportation and daily life are

inseparable from writing everywhere. However, under the development trend of digitization, China's character digitization development is still in a relatively backward position. On the one hand, it is because China's digital development is late, and the relevant professional technology is not very perfect. On the other hand, it is because China's font art creativity has not reached the level of other countries. Therefore, the digitization of Chinese characters still needs further development and creation.

3.2 Contemporary Expression of Font Design

The root of font design comes from traditional culture, and the cultural art of traditional culture is the main inspiration for font design. The apparent form of traditional calligraphy is more in line with public aesthetics. Therefore, the design of the font cannot be separated from traditional calligraphy, but on the basis of it, plus the design concepts of contemporary designers, in order to design a variety of Chinese characters. The main function of Chinese characters is to express. Numerous experiments have shown that different font forms can express multiple meanings. Therefore, when designing fonts, designers must analyze the public psychology of today's society from many aspects, and use different font forms to express deeper meanings, so as to meet the wishes of the public. In today's information era, most people read Chinese characters through mobile phones, computers and other electronic products. For the perfect display of the designed Chinese characters on the screen of electronic products, this uses modern technology. On the one hand, the font design starts with a plane, and it needs to complete a series of processes such as hand-drawn line drafts, scan input, vector tracing, and restoration and improvement; on the other hand, the design process continues the aesthetic standards of calligraphy aesthetics. The development of modern technology has enabled text to be displayed on the screen, and each process in the middle link can change the specific expression of the font. This also makes the text gradually move toward a diversified path and can give people a different visual experience. In the final analysis, the nature of the text itself is unchanged. It is used as a carrier for information dissemination. What it changes is the form color and composition of the text. The ultimate goal is to facilitate people's reading and make the text play a more important role.

Now with the advent of the digital information age, text design is not only suitable for people to read on electronic devices, many commercial units and media units have used the role of text design. For example, in a clothing store, when preparing for a clothing event on a certain holiday, a poster designer will be arranged to design a promotional poster. How to highlight the content of the event in the poster is obvious, and at the same time it is obvious that it attracts the attention of consumers at once, which requires the designer to design the text. The key text should be appropriately enlarged and changed in color, and then a reasonable typesetting of other content, so that consumers can see the main content of the event at a glance, thereby increasing business opportunities for the store. The same is true of media units. Due to the advent of the digital age, text design has changed from traditional two-dimensional images to today's multi-dimensional imaging. A variety of different languages are combined to show a unique culture and art in the image of the image. In the composition of the screen, the designers not only used traditional and simplified Chinese characters, but also applied a large number of numbers and fonts in various languages, even variant characters, ethnic minority characters, etc., making it not only a language, but also a symbol, signs and emblems. In digital media, words not only have a superficial meaning, but also have a deeper meaning. It can express the customs and culture of different regions, and show the inner spirit of local customs through the image of the words. And the simple expression of words is easy to cause a certain amount of aesthetic fatigue. Therefore, the design of words should maintain the design concept of interesting images, which can bring visual enjoyment to readers while reading information.

3.3 Creativity of Font Design

Font design is not the same as creating text. Traditional text is the root of all cultures in China. Arbitrary design and creation of text can not only bring new feelings to people, but also will make the content of the design out of the scope of people's understanding and cause undesirable consequences. In the real sense, the text design is attached to the traditional text culture, and then the text is displayed in different forms under the action of digital technology. Adding the designer's design concept to the text makes the expression of the text conform to the trend of the times, conforms to the popular thought, and conforms to people's aesthetic concepts. With the rapid development of social science, font design has unlimited creativity and possibilities. Through the perfect combination of designer's design ideas and digital technology, the text shows a very rich and diversified posture. The hand-painted fonts of cultural and artistic characters can express the designer's design thinking more intuitively through digital technology, which truly reflects the expression of materials, colors, light treatment and atmosphere rendering. The development of modern science and technology has provided powerful support for designers' text design creation, allowing designers to open their minds and create excellent text works. At the

same time, digital technology means, such as digital photography, scanning, network, auxiliary production and special effects of various design software, have a role in promoting designers to complete diverse creative expressions, expand creative thinking space, and stimulate creativity.

3.4 Mutual Integration of Digital Technology and Artistry

The development of technology has provided powerful conditions for the creation and dissemination of art. With the advent of the information age, multimedia digital technology has entered thousands of households. The science and technology of multimedia display makes text design better play its role. The designer uses a variety of font design software to match the font with a variety of presentation methods and insert vivid images and sounds. The use of multimedia equipment to display, giving the original single text surface different visual and auditory feelings, has become more vivid and specific, and the multi-dimensional spatial display power can often achieve unexpected effects. However, due to the unique cultural factors of Chinese characters and the long-standing concept of the separation of technology and culture, the development of Chinese character font culture is very difficult. Usually, it can only be used as a text design for highlighting, striking, highlighting emotions, etc. There is still a long way to go to meet people's needs for cultural connotation and emotional expression.

4. Morphological Innovation of Font Design in Digital Media

4.1 Digital Creativity of Fonts

From a macro perspective, digital media refers to media that uses digital technology to connect people and things. Digital creative font design is based on the characteristics of digital media, in accordance with the law of information interaction, integrated, innovative text design. On the basis of digital technology, font creation has completed the transformation from two-dimensional plane to multi-dimensional space. At the same time, the fonts created by the designer can be more in line with the public's aesthetic concept through the perfect processing of digital media, and the expression form of the text is no longer limited to a single boring situation, which has deepened people's new understanding of Chinese characters.

4.2 Screen Display Font Optimization and Innovation

The way to display font design is mainly through the screen, and the effect of displaying fonts on the screen is also an important key to people's reading experience. With the development of technology, more and more screen monitors have been developed. The main purpose is to allow the designed fonts and pictures to be displayed completely and smoothly. Optimizing and innovating the screen display is the most important and critical step. Only the perfect display can make the designed fonts show the maximum effect.

5. Conclusion

The font is an important way for our country to exchange information. It is full of historical traditional culture. In the digital age, fonts are no longer just printed on paper, they are more displayed on the screen. The digital media has brought about a multi-dimensional transformation of font design, and the font form has also achieved innovation and development, bringing people a different visual experience and reading experience.

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