

Literature Review on Chinese Character Design

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i1/19672>

DOI:10.6007/IJARBSS/v14-i1/19672

Published Date: 21 January 2024

Abstract

With the advent of the information age, typeface design as an important element of visual communication by People's attention. Good typeface design can accurately express and convey information in daily life, at the same time, it can enhance the artistic sense and aesthetic value of typeface design, and promote the inheritance and development of traditional culture. At present, there are some problems in Chinese character design, such as the lack of visual aesthetics and how to achieve the innovation and development of Chinese character design while inheriting Chinese culture. By means of literature research, the development trend, background, existing research achievements and shortcomings of Chinese character design in different periods are discussed. The study found that with the rapid development of technology, the impact of globalization, new technology and the cultural value of Chinese characters, how to pass on the culture while continuing to do a good job of innovation and development has become a need to solve the task of the times. In the future research, we need to further explore how to promote the development of font design and improve the functional application of typography through scientific and technological means and innovative methods.

Keywords: Typeface Design, Cultural Heritage, Artistic Sense, Aesthetic Value, Functional

Introduction

German thinker Spengler mentioned: Language is the proof of mankind, the text is the proof of civilization (Wilm, 1839). Character is closely related to people's life, and is an important symbol of human being's entering the civilized age. Typeface design enables the effective dissemination of character and determines whether the character can be recorded and communicated more accurately and accurately. "The character must have some connection with the language in order to play the role of carrier. Therefore, the character of the character first depends on how the form of the character is connected with the language" (p.2). The characters in the world are divided into two systems, one is phonetic characters, the other is semantic characters, they have their own characteristics and laws of development. A word that records the sounds of a language by syllables or letters. Their modeling is mainly abstract geometry. Chinese characters belong to semantic characters, which are characterized by the use of a prominent feature of the symbol to express meaning. Thousands of Chinese

characters have rich morphological features and configuration basis. With the development of the times, the carrier of Chinese characters is also changing, Chinese character design in the development of continuous change. From the original oracle-bone inscription, the evolution of the gold printing technology after the emergence of song, black and other different fonts. The application field of Chinese character design has gradually changed from logo design, book design, Practical Chinese character design to screen display field in the multimedia era. With the emergence of new media, digital technology, design software, and printing tools, more and more expressive methods have appeared in Chinese character design, especially with the widespread use of the internet and the emergence of various mobile devices (cell phones, laptops, ipads), the need for screen recognition, the designers have designed 421 common base fonts for people to choose from. Later, according to the different needs and preferences of the people, the designer designed hundreds of Chinese character libraries based on the basic font.

Text, graphics and color are the three elements of graphic design Wang (2009), so the typeface design in graphic design has an important position. Typeface design allows design works to express their own meaning more accurately. People can make an impression on a product more quickly by having a distinctive typeface, and businesses can convey the characteristics of the product more accurately through the typeface design. At the same time, typeface design allows the user and the product to create a visual interaction between the user and thus easy to attract the attention of users. In addition, typeface design can also convey aesthetic ideas. For a country, the font represents the image of a country and cultural ideas (Liu, 2001). Many countries look back at their own history in their own cultural movements and try to find fonts that fit the national and ethnic ethos. Font has become an intuitive and effective tool to display the image of the country, and has become a complementary and national image of the cultural characteristics. Designers use typography in books, newspapers, magazines, advertisements and various screens. The typography is designed to make the typography more vivid and aesthetic, it also makes the information in the text more attractive, while the design also makes the text more readable and artistic. A good typeface design can give users a pleasant visual experience (Lv, 2009). A proper typography allows users to better understand and trust a product and business. For the enterprise, the typeface design can let the enterprise brand image in-depth. National Geographic and Microsoft logos, for example, use typography to promote and reinforce their brands. For children, good typography can bring them a feeling of joy and pleasure. Disney's logo typography, for example, has a natural appeal for children.

Under the influence of the Internet, users pay more and more attention to Chinese character design. In e-commerce platform, all kinds of sales brands and products need the right personalized font to show their own characteristics. Major brands hope their products in sales through font design to strengthen the image of publicity, the previous single typeface design has been unable to meet the demand. Therefore, the market appears a large number of personalized font custom-made services, so that the Chinese character design with the market demand increases significantly. Chinese characters in China are different from those in the west. China's font base is the largest in the world. A complete font base requires nearly 10,000 basic characters. This large base of fonts makes it more difficult to shape, modify, and innovate fonts in design. With the improvement of aesthetic awareness of the public, a large number of typeface design in the end is often used by users or some of the classic fonts. Some

innovative typography needs to be improved in terms of structure, detail and aesthetics. A good typeface design in the whole process of Chinese character structure theory and the combination of aesthetic design, but also need to test the user experience to modify and improve. In the designer's ability and level of the situation, the emergence of the market font design there is a big gap (Jiang & Liu, 2016). Some typeface designs that emphasize innovation don't think much about the context in which they are used, and very few are designed for that context. From the perspective of font application, the typeface design and application research in our country is not detailed enough. Some users are more casual in their choice of fonts, and don't make the right choices based on the type of content, which can lead to poor typography.

Related Research Fields of Typeface Design

There are many areas in our lives have participated in typeface design, mainly reflected in advertising design, packaging design, book binding, logo design, poster design and font design for the screen typeface design. Advertising is the most frequent in people's living environment. Advertising has also become the most common medium for conveying information in people's daily lives. typeface design is the core component of advertising design. A good ad can reach an audience in seconds. The quality of packaging design is also inseparable from the participation of typeface design. Excellent packaging design can not only express the product information clearly, but also bring consumers the enjoyment of beauty. Only the perfect combination of typeface design and product characteristics of packaging design, to enhance the market competitiveness of products (Soli, 2014). The application of typeface in book binding is also one of the main application ways of typeface design. A book's cover, content, and typeface size and typography can directly affect the quality of a book and reading experience. Typography is also often used in logo design. With the continuous development of modern industry, logo has become a symbol, also represents a corporate cultural symbol, it has a certain symbolic significance and social value. Logo design in general will choose to use typeface or combined with graphics to do the basic elements of the design. In the age of screen-based media, typography has taken a new turn. In order to adapt to the brightness of the screen and provide a good reading experience for users, typeface design needs to be adjusted and redesigned according to the pixels and brightness of the screen display.

Typography is changing with the help of technology. In the 21st century, with the emergence of digital technology, the traditional media is no longer the only carrier of the typeface. The emergence of notebook computer, mobile phone, tablet computer, television, need typographic design with anti-aliasing and sub-pixel display technology form to appear. This requires new design changes in the typefaces required for LCD recognition. Typography needs to satisfy clarity while reducing the visual fatigue caused by light in reading (Zhang, 2013). In the new century, the medium of use of fonts, digital technology, design software and printing technology have changed, and in the combination of artificial intelligence technology to allow the public to participate in the design. The development of science and technology makes design popular, and users can directly participate in the whole process of design. However, the current artificial intelligence technology is still in its infancy, users only realized the typeface design process. The resulting typography still falls short of professional typography in detail. From the perspective of long-term development, artificial intelligence technology

will bring changes to font design, but the future typeface design needs more mature technical support and more professional design perspective and design software integration process.

The typeface design of Chinese characters has changed a lot in recent years. The first is the further development and design of traditional fonts (bold and song), so that more traditional fonts can be used and selected in formal occasions and work, expanded the type and the quantity of the printing font bank product. Secondly, designers for some calligraphers typeface development and design, so that users more direct experience of Chinese history and culture in the typeface application. Finally, the designer carries on the decoration change and the design to the typeface, lets the typeface image more rich. In the logo design as well as the different slogan design has promoted the creativity typeface and the decoration font design positively the development. However, Chinese typeface design in the different reading environment for the corresponding design of the typeface is rarely. This is due to the lack of clarity and detail in the classification of Chinese typography in terms of applied research, as well as to the fact that the randomness of user selection in the use of typography makes typography imprecise, this also affects the visual effects of characters in the dissemination, so that some typefaces do not meet the functional requirements of some specific environments and occasions.

A Review of Chinese Character Design

The development of Chinese characters has a history of more than 5,000 years. Oracle bone inscription is the earliest type found in China (Chen, 2021). These words were engraved on tortoise shells or animal bones. Some words are for communication, some words are for decoration. With the development of productivity and the change of writing tools, the shape of typefaces has changed a lot. People's communication became more and more complicated, and the materials of tortoise shells and animal bones were limited, and it was difficult to change them once they were written on them, so the forms of the letters became more regular lines, which varied in length according to the shape of the writing carrier, the different density forms the initial stroke structure of Chinese characters. The Qin dynasty required the unity of the written word. At this time the basic formation of the characters oblong, the typeface becomes regular symmetry, forming a seal script. The form structure of seal script is still relatively complex, strokes, so the character evolved from seal script into official script. The lines of official script changed from complex to simple, and the shape changed from oblong to square. Since then, the shape of Chinese characters square form. Lishu became the dividing line between ancient Chinese characters and modern Chinese characters (Chen, 2020). Official script became a very common writing method at that time, so that the lines of the typeface from the curve into a straight line. With the development of the times, official script evolved into regular script. Regular script shape more neat, so often used in official documents in formal occasions, become a practical function of the font. With the emergence of printing in China and the exchange of Chinese and Western culture, China has emerged a new typeface evolution, from regular script derived from the song and black-type characters. The arrival of the new media era, so that the Chinese characters through the combination of new technology appeared in the screen age.

Chinese typeface design mainly involves the following four areas. The first area is packaging design. A good or bad product packaging determines the image of the product in the minds of consumers, also related to whether consumers will choose this product (Lv, 2009). Typography is a key element of packaging design, such as the name and performance of a

product and the characteristics of the product need to use words to explain and explain, this is also an important way for consumers to understand the product. According to the characteristics of products, the typefaces in packaging design present the corresponding style, which can attract consumers to achieve the goal of sales. The second area is the poster area. Typography is often used in posters in China. The purpose of posters is to promote a product or culture, which can not be separated from the description and analysis of the typeface. The combination of typography and graphics can bring the characteristics of the product or cultural content back into the picture. The third area is advertising design. In the Internet age, the demand for advertising is increasing, and enterprises are paying more attention to the production and promotion of advertising. In the advertisement design, the Propaganda Way also transforms by the paper medium to the multimedia promotion. Font design can play a role of visual guidance in advertising, and enhance the promotion of advertising content and advertising significance. The fourth area is book binding. In the book binding design, the typeface occupies a great deal of weight. Users can see whether the book's content is their favorite type through the book cover, but also according to different styles of typography to reflect the type of book, thus quickly to attract users.

From the point of view of design, the first point of attention in Chinese character design is the design of typeface symbols. Compared with thousands of typefaces in western languages, the quantity and quality of Chinese character design need to be improved. Secondly, the typeface design mainly focuses on the application of life. As a symbol and cultural symbol, Chinese characters have been widely used in society since ancient times Liu (2010), mainly in architecture, clothing, furniture, weapons and so on. typeface design meets the need of visual recognition, the need of cultural symbols and the use of functional applications. Then, the typeface design and logo design to achieve a perfect combination. Whether ancient or modern, Chinese characters are all important design elements in logo symbols. It has an important position in the design field of brand logo, propaganda title and so on. Furthermore, typography is rapidly integrating with technology in its development. Influenced by the development of production technology, font design plays a better role in information dissemination with the assistance of digital technology and artificial intelligence. Finally, typography focuses on the spread of culture. The basis of typeface design is Chinese traditional culture and aesthetic angle of view Jiang & Liu (2016), through learning the previous forms of font design experience can better play a role in the promotion and publicity of Chinese characters and Chinese culture. There are some deficiencies in Chinese typeface design, mainly reflected in two aspects: first, excessive imitation. The similarity in many cases of typography is a common problem in Chinese typography. While we have a lot of great typography, a lot of typography is less creative and relies on imitation. Second, pay attention to practice, lack of theoretical research. Another outstanding problem of Chinese character design is that it focuses on practical design but lacks theoretical research. From the literature research can be found on the academic results of font design is not much. Many designers lack the guidance of design theory, resulting in the design of typefaces can only be generated from imitation.

In Chinese typeface design, the main design elements are the shape and size of the typeface, the color and contrast of the font, typography, graphic elements and dynamic and spatial sense. The shape and size of a typeface is one of the most important elements of typeface design. Different shapes and sizes can convey different emotions and information, and affect

the audience's reading experience. Color and contrast are also factors that can not be ignored. They can affect the readability and visual quality of typefaces. Color can enhance the visual impact of the typeface, improve recognition, so that the text is more easily noticed by the audience (Zhou, 2014). Typography involves the arrangement of typefaces and the distribution of space, good typography can improve the readability of typefaces and the overall aesthetic (Zhou, 2014). In the design, the designer will often use some graphics as a font decoration, increase the overall effect of the font. The selection and application of graphic elements need to take into account the style and content and typeface matching. In the typography design, the dynamic and the spatial sense are also important design elements. Dynamic strokes and space make the font dynamic and dynamic, but also enhance the visual impact of the typeface. There are also some deficiencies in the elements of typeface design, mainly in some typeface design excessive pursuit of novel design elements and ignore the readability and overall effect. The theme of the text is ignored in the choice of typeface size and style, which leads to the inaccuracy and clarity of the intention of the text. There are also some typeface designs that are not tested in a timely and effective manner after completion, which affects the design of subsequent improvements (Chen, 2021).

External Elements that affect Chinese Typeface Design

The art source of Chinese typeface design comes from Chinese traditional culture (Zhou, 2014). Such as Chinese calligraphy, seal cutting, painting and so on. By combining traditional elements with modern design concepts, we can create a typeface design with cultural characteristics. Secondly, modern art provides inspiration for typeface design. Such as modern painting, Cubism, surrealism, etc. . The elements and ideas in these art genres provide inspiration for typography. Furthermore, typography can be inspired by the evolution of typography. Through the research and analysis of the history of the typeface, to explore the font changes and development, to create a sense of history of the typeface design. In addition, some typeface design art source from the visual aesthetic theory. Such as contrast, symmetry, balance, proportion, etc. . Use these theories to make typefaces aesthetically pleasing and easy to read. Finally, the typeface design also draws inspiration from China's social and cultural background, such as regional culture, national culture and so on. Through the excavation and application of these cultural elements can create a regional characteristics or a sense of the times of the typeface.

The evolution and technical development of Chinese typeface design can be divided into three stages: the first stage is the creation and standardization of Chinese characters. This period created a variety of font forms. Inscriptions on tortoise shells or animal bones emphasize graphical symbolization, object features, and simulations of nature (Chen, 2021). Bronze casting period appeared in the inscription, pay attention to the rhythm of the font lines, mostly decorative effects. With the national unity and development of the need to appear seal script, official script. Gradually transformed into neat square, straight lines. The second stage was the invention and spread of printing. In modern times, the emergence of China's engraving and printing technology to promote the development of typeface design, lettering craftsmen in order to make more suitable for carving on the board of the typeface, Song style and imitation of the song style and other typeface forms. The third stage is the digital typeface design period. With the popularization of computer technology and the use of design software appeared in bold, Microsoft Yahei and other typeface forms, but also a professional typeface design agencies engaged in font research and development. In the

future, with the development of science and technology and the improvement of People's aesthetic, font design will have more development and change, some old font forms are eliminated, more new typefaces in a variety of forms in people's lives.

Chinese typeface design styles and genres are rich and diverse, representative of the main have the following five. The first, calligraphy typeface design. This style is based on calligraphic modeling, pay attention to the handwriting and artistic typeface. Through the changes of brush strokes and the flowing sense of lines, it shows the cultural atmosphere and artistic sense with Chinese characteristics. The common calligraphy styles are seal script, official script, running script and regular script. Calligraphy font design is often used in logo design and packaging design. The second, decorative typeface design. Decorative font design is a kind of aesthetic and decorative typeface design style. It emphasizes the beauty and decoration of the text by adding decorative elements. Generally used in romantic occasions or literature and cosmetics packaging. The third, modern typeface design. Modern typeface is a style concise, generous, easy-to-read font design genre. It pays more attention to the clarity and readability of the text. Common typefaces are song, black and imitation song and so on. It is suitable for situations where the text needs to be concise, clear and easy to read, such as commercials, newspapers and magazines. Fourth, handwriting design. Handwriting is a style of design with a personalized style. It features and forms by hand to make the text shows a natural feeling of intimacy, often used to express personal style occasions, such as books, magazines, handwritten signatures, etc. The fifth, creative typography. Creative typeface design is an experimental and innovative typeface design style. It often breaks the rules to explore new forms of expression, creating eye-catching and attractive typography. This style and other typefaces often need to highlight the personality and innovation of the occasion, such as for advertising, poster design and brand image design.

With the process of globalization, Chinese typeface design has gradually integrated into the trend of world art, constantly in line with the world art. Chinese characters absorb the design elements and styles of the world art, learn the design concepts and techniques of western modernism, and combine the traditional Chinese elements to create modern and fashionable design works (Yue, 2020). For example, Chinese characters in bold are based on song characters and borrowed from the Gothic style of Japanese characters. Secondly, Chinese typeface design in the study of the formation of Chinese characteristics of the art style, the traditional cultural elements and modern design concepts combined. Some excellent typographic design works in the international cultural exchange has been concerned. In addition, Chinese typeface design has promoted the exchange and cooperation between Chinese and Western cultures in connection with world art, let Chinese designers in the understanding of western design concepts and styles, but also to show the Chinese culture. In a word, it is a process that needs to learn from each other constantly. In the development of science and technology and the integration of culture, Chinese typeface design will move towards the trend of diversification and modernization, at the same time create a typeface with Chinese characteristics.

Internal Elements that affect Chinese Typeface Design

Calligraphy is one of China's traditional arts, through the use of brush, paper, ink combined with writing skills to express the shape and emotion of the characters. Calligraphy with aesthetic value is also a kind of cultural inheritance (Chen, 2021). Chinese typeface design is

based on calligraphy, combining the calligraphy, structure and aesthetic use in typeface design. Chinese typeface design emphasizes the unity of the font, but also pay attention to the details of the font, through the strokes of the length and length of the changes in curvature to express the rhythm of the text and sense of rhythm (Li, 2020). This design concept and calligraphy aesthetic is consistent. In addition, the Chinese typeface design combined with the intention of the expression of calligraphy. In the design, through the use of exaggeration, deformation and simplification to express the meaning of the text, so that the text with artistic and cultural. This design concept comes from calligraphy, but also let the Chinese typeface design shows a unique style. Chinese typeface design is produced under the combination of calligraphy aesthetics, which also requires designers to understand the aesthetics and expression of calligraphy, will be integrated into the typeface design, create more cultural characteristics and visual aesthetic works.

Chinese inscription is used to record important events or large-scale celebrations, craftsmen in calligrapher's handwriting on the content of the cliff or stone tablet. Therefore, the inscription has multiple artistic features. It combines the artistic forms of writing, calligraphy and carving, and forms the inscription by rubbing and binding into a booklet. "Tablet" refers to the stone rubbings, "Tie" refers to the rubbings bound into a book. Inscription for the typeface design provides a wealth of material. Designers learn the text layout, typography and overall layout of stele posts and apply them to typography. Chinese font design in the modern field also needs according to the text content, font shape, size and arrangement to design ideas. The inscription has reference value and cultural value for Chinese typeface design and also has protective significance (Chen, 2021). Many historical sites need people to protect and pass on. In the digital age, we can use digital technology will be written in the typeface of digital conversion and preservation. This not only protects the historical and cultural value of the inscription, but also applies the typeface style and characteristics of the inscription to the design software, providing more font choices and creative inspiration for the typeface design.

The initial appearance of Chinese typefaces was in the form of graphical symbols (Chen, 2021). It can be seen from the inscriptions on oracle bones and inscriptions on bronze that the ancient writing retained a large number of graphic elements. Chinese characters not only record language and convey information, but also have the function of spreading culture and art. From ancient times to now, Chinese characters are often used in a variety of buildings, artifacts, clothing and other supplies as a means of decorative beautification. The combination of decorative patterns and Chinese characters makes the typeface an ancient form. The combination of Chinese characters and decorative patterns makes typefaces more artistic expression, more close to life, and also provides more materials and inspiration for typeface design. The combination of Chinese characters and decorative patterns has been widely used in people's daily life. In the development of history, the combination of Chinese characters and decorative patterns has formed some special auspicious pattern system (Chen, 2021). For example, the clothing unearthed in Xinjiang, China and the Tiger, Dragon, Phoenix, deer combination of auspicious Chinese characters. In modern Chinese font design can still see the text and decorative patterns of the combination of design typefaces. The characteristic decoration pattern can bring different artistic style to the typeface, and make the text have the sense of the times and the bright artistic style.

Chinese typeface design is an important factor affecting the user's visual experience, which directly determines the user's perception of the typeface (Lin, 2011). Chinese typeface design is the first consideration of the user's reading experience. Therefore, the shape, size, weight, and arrangement of the fonts need to be taken into account in the design to create a clear, readable, and comfortable visual experience. In real life, too small font will bring users visual fatigue, too large font will destroy the form of text aesthetic. The shape and weight of the font also need to be based on the specific use of the occasion to design. Secondly, typeface design also needs to consider the emotional experience of users. The style of typeface design needs to have the emotional atmosphere that accords with the text content (Lv, 2009). This can guide users to the content of the text to create emotional resonance and deepen the understanding of the text. For example, in the expression of serious and formal feelings usually use some form of regular, linear font design. In the expression of joy and tears of emotion will choose some mellow, curvilinear font design. In addition, with the development of technology, Chinese typeface design also needs to meet the personalized needs of users. Designers need to deeply understand the needs and preferences of users to create user-friendly typography to provide a better, comfortable, personalized visual experience.

Conclusion

The current research on Chinese font design focuses on the following five aspects. Firstly, the development trend of diversification and individualization. With the development of society and the progress of Science and technology, People's needs for typeface design are more and more diverse. Designers need to customize the design according to the different needs of users, which also urges the typeface design needs constant innovation to adapt to the contemporary context and aesthetic needs. Secondly, combination of font and image. The combination of typeface and image is one of the important development directions of font design. The combination of typography and images can create more vivid visual effects and enhance the attractiveness and expressiveness of typography. With the help of design software, this combination can realize the multi-form fusion of image and typeface. Thirdly, The combination of typefaces and Chinese culture. Typography is a form of cultural expression. In the design needs to take into account different regions, different ethnic groups, different cultural backgrounds of user needs and awareness. Therefore, designers need to understand the different cultural background of the typeface design style, in order to create a local culture in line with the typeface design. Fourthly, dynamic font design. Dynamic typeface design is a new type of typeface design in recent years. It uses software technology to combine typefaces with dynamic elements such as animation and video to create more vivid and interesting visual effects. This font design is used in advertising, film and television, games and other fields. Fifthly, Cross-domain application of typeface design. With the development of design discipline, typeface design is not limited to the traditional graphic design field, but gradually to the environment design, interaction design and other fields. This requires designers to understand the characteristics of different areas to draw more elements and inspiration, in order to create a more diverse typeface design. In short, with the development of Chinese typeface design research perspective and extensive and in-depth, designers need to continue to improve the design level and innovative ability to design more in line with the needs of the times typeface design works.

There are also some deficiencies in the current Chinese typeface design. The first is the lack of innovation and personalized design. Although the styles and forms of typography have

been diversified, some designers lack innovation and multi-dimensional exploration due to the influence of traditional design thinking mode, as a result, some typography designs lack unique styles and are difficult to attract the interest and attention of users. The second is the lack of readability in typography. Some of the current typographic designs focus too much on the form and beauty of the typeface and neglect the readability and recognition of the typeface, which weakens the role of the typeface information dissemination, but also affects the user's reading experience. In addition, Chinese typeface design lacks the research on the function of the typeface design, the design process does not take into account the impact of the typeface application environment and the acceptability of the audience. There is a lack of perfect testing and feedback mechanism in the application, which makes it impossible to find and correct the problems in the font design in time. All these affect the function of the typeface design and application. The main research directions of Chinese typeface design in the future can be carried out from three aspects. Firstly, strengthen the consideration of the user's needs. Design personalized typefaces with in-depth knowledge of customer needs and preferences. We should pay more attention to the legibility, recognition and feedback of the typeface, so as to ensure that the typeface design can provide a better reading experience for the users. Secondly, explore new design tools and technical software. With the development of science and technology, designers need to explore new fields of design tools and technology to improve the efficiency and quality of font design. For example, the use of AI technology for intelligent font design, the use of VR and AR technology to improve three-dimensional design. These new technologies can provide more design ideas for typography. Thirdly, develop functional typography. China is using four main typefaces, song, Black, Kai, and imitation, all of which are standardized fonts designed to national standards. These four typefaces can not adapt to the functional requirements of different environments, also not easy to create a unique visual aesthetic. So in addition to standardized font design, we should refine the typeface design and typeface application environment, do a good job of classification design ideas, according to different functional needs of the environment to design the corresponding typeface. In summary, the future research direction of Chinese typeface design needs to pay more attention to user needs, new design tools and technology exploration and typeface functional application development and research. In this way, we can ensure that Chinese font design in the development of innovation and design more in line with the needs of the times typeface.

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