

Research on Aesthetic Design of Book Binding based on Modern Digital Technology

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Abstract: The advent of digital technology has infused new vitality into the traditional design methods and broke the boundaries of the traditional book binding design categories, making the book binding design a carrier capable of freely blending a variety of disciplines. This paper studies the perfect combination of modern digital technology and aesthetics in the binding of books, the harmony of form and content, the perfect combination of technology and art, and the intrinsic cultural connotation of the book so that the book binding works accord with the reader's aesthetic psychology in line with reading psychology.

1. Introduction

Since the reform and opening up, with the increase of foreign exchange, we have seen many outstanding design works from abroad. In particular, the book binding works involved in digital technology, its novel and unique visual effects, rich and varied fonts and exquisite print quality, constitute a strong shock to our designers. The computer frees designers from complicated and repetitive hand-drawing, concentrating their energy and digging deeper into imagination and creativity, which not only improves work efficiency but also broaden their thinking space. With the progress of digital technology in our country and the popularization of digital equipment, the means of design are gradually diversified and the use of material language is more and more enriched. The form and content of books are well unified, and the perfect combination of art and technology, So that our book binding works showing a strong visual impact. Our country's technology and equipment are in sync with the world, but our design level is still far behind. Some designers use computer design to bring people fancy colors, texture effects, dazzling images, etc., while ignoring the solemn atmosphere of the book, solemn and subtle cultural qualities. Designers should recognize that books are not only a vehicle for disseminating cultural and intellectual information, but also a kind of beautiful artistic creation with cultural values.

2. The Historical Evolution of Modern Book Designing

Reform and opening up have brought new impetus to the development of the closed book binding art in our country. Exotic cultures such as the damming bank, raging, supernatural imagination, clever ideas, intense color contrast, impact our vision. Our designers began to pay attention to the design of book binding, but due to the long-term closure, lack of in-depth understanding of foreign culture and research, blindly copied the surface form of foreign works. From some works in our country, we can clearly see the hollow, shallow, and impetuous and lack of cultural connotation.

The external design of the framing pattern dissolves the characteristics of the Chinese framing art. Our designers should carefully study the creative background of excellent design works abroad. The environment, Experience, culture, etc., to deeply understand their design ideas and motivations. Otherwise, our designers only stay in the form of plagiarism. Obviously blunt, we should focus on the integration of a higher level of cultural spirit. The design software has a variety of pen-type above, it

can make hand-painted like a pen with ease. Performance pencils, brush, pen and other pen-type effects. The use of color can show watercolor, gouache, prints and special effects. Also eliminates the need for scanning, trimming, and coloring procedures. Make illustration illustrations easy and happy, zooming tool, you can make the picture more elaborate, and easier. Illustrators need only to concentrate on their own creativity all excavated.

3. Cover Design Editor

The cover design is the facade of the art of book binding design, which reflects the content of the book through the form of artistic image design. In today's dazzling book sea, the cover of the book plays a silent salesman role, and its quality will directly affect people's desire to buy.

Graphics, color and text are the three elements of the cover design. According to the different natures, uses and readers of the book, the designers combine these three organically to express the rich connotation of the book, and present it to the reader in the form of a kind of information transmission and a kind of aesthetic.

A good cover design should be complicated and not chaotic in the arrangement of the content. It means having a master and a time, the hierarchy is clear, simple but not empty, which means that there should be content in the simple graphic, and add some details to enrich it. For example, in the color, printing, graphic organic decorative design, do more articles, so that people have an atmosphere, mood or style after watching.

The cover design is an important part of the book binding design.

1) Children's books are livelier. In the design, children's illustrations are used as the main graphics, and they are accompanied by lively and childish words to form the book cover.

2) Album books the book is generally close to the square, commonly used 12 open, 24 open, etc., easy to arrange pictures. A common design approach is to use a representative picture in the album with text.

3) Cultural books are more solemn. In design, most of the important pictures in the text are used as the main graphics of the cover. The fonts of the characters are also more solemn. They are mostly black or black; the purity and brightness of the overall color are low, and the visual effect is calm. To reflect the profound cultural characteristics.

4) Books in the series the design of the whole series of books is the same. Each book is replaced with the title and main graphics according to the type of introduction. This is generally a common design technique for a book cover.

5) Tools books are generally thick and often used, so in the design, prevent wear and tear with hard book cover; cover graphic design is more rigorous, neat, and has a strong sense of order.

4. Development of Digital Technology and Book Binding

The traditional hand-drawn illustration production process is more complicated. When the illustrator receives the manuscript, he has the composition and the idea, starts to paint, repeatedly modifies the paper with eraser and pen, until he is satisfied, and then coloring, photographing and compositing with the manuscript, an illustration is completed. The process is very tedious. The simple computer to produce maps, computer traces too heavy, too many stylized language, hook line color, although convenient, but the lack of manual drawing vivid and random. The emergence of Wacom professional digital board, illustration illustrator to achieve a paperless operation, get rid of the complicated manual labor procedures. Illustration illustrator become easy. The design software has a variety of pen-type above, it can make hand-painted like a pen with ease. Performance pencils, brush, pen and other pen-type effects. The use of color can show watercolor, gouache, prints and special effects. Also eliminates the need for scanning, trimming, and coloring procedures. Make illustration illustrations easy and happy, zooming tool, you can make the picture more elaborate, and easier. Illustrators need only to concentrate on their own creativity all excavated.

Digital printing plays an important role in the field of color printing. Personalized printing is a part

of digital printing. The so-called personalized printing refers to traditional printing. Traditional printing can only print a number of the same time, the same content of the print, that is, whether you are printing 1,000 or 100,000, each printed on the picture is not bad, exactly the same; and personality Printing refers to the printing process, the printed image or text can be pre-set content and format changes, so that the first one to the last print has a different image or text, each print It can be designed and printed for its specific issue. At present, the growth of personalized printing in the field of on-demand printing abroad is very fast, partly because manufacturers have started to consciously target their target customers to develop target markets.

5. Title Page Design Editor

Books are not general goods, but a culture. Therefore, in the cover design, even a line, a line of words, an abstract symbol, one or two colors, must have a certain design idea. It must have both content and aesthetics. Reach the elegance and common taste.

The title page is the need for the continuous development of modern bookbinding design. A book with a good content, if it lacks a title page, is like a white jade, which weakens its collection value. Those who love books will cherish a good book, and often like to write some episodes such as feelings or rumors in the book. If the book lacks a title page at this time, it is a pity.

The title page in the book is like the screen in the facade. With the improvement of people's aesthetics, the quality of the title page is getting better and better, some use high-quality colored paper; some have texture, exude fragrance; some also have some decorative patterns or illustrations related to book content and representative illustrations. These are undoubtedly an unspeakable joy for those who love books, which also increases the added value of books and attracts more buyers. With the continuous advancement of human culture, the design of the title page has been paid more and more attention by people. The truly excellent books should carefully design the title page after the book to meet the reader's requirements. Illustration design is an important factor in the content of active books. With it, it can better exert the reader's imagination and understanding of the content, and gain an artistic enjoyment. This is especially true for children's books, because children's brain development is not sound enough, and there is no rational understanding of things. Only more illustrations can help them understand, which will stimulate their interest in reading. By 2013, the illustrations in the books were mainly composed of art designers, photography and computer design. Photographic illustrations are very realistic, undoubtedly very popular, but the printing cost is high, and some illustrations are limited by conditions and difficult to achieve through photography, such as science fiction, which must rely on art designer or computer design. In some respects, hand-painted works are more artistic, or less than photography.

6. Artistic Characteristics of Designing Books in Frameworks in the Digital Era

Traditional book binding, the limitations of manual painting, seriously hindered the designer's design thinking, designers consider various aspects of the request, but happens to print the expected effect cannot be done. There are many reasons for this. There are too few raw materials, as well as technology, equipment, etc., that fail to meet the design requirements. After the involvement of digital technology, raw materials are enriched and the technology improves the accuracy. The digitization of the device can more accurately meet the design requirements. An experienced designer, before printing will be on the characteristics of substrates, ink use and printing methods and so on all aspects of consideration, design as much as possible with the objective conditions. It is possible to reduce the extent of mistakes.

Some people think that the design is a framing of artistic behavior, printing technology is a technical issue should be managed by the printing house. This concept greatly hindered the improvement and development of the Chinese design and printing technology. Book binding designers should understand and master the printing process performance and mechanical processing capabilities based on the design. The concept of traditional printing process to restore the image copy,

pay attention to the tone of the image rich, ink saturation, hue accurate, network neat, do not lose level, pay attention to the image texture and sense of space. However, the digital printing process is an anti-traditional image reproduction of the absolute reduction concept, focusing on the technical effects of technology processing, for example, the tone of the image emphasis on artistic taste, ink emphasize moderate Yiyin, thin ink in thick, binding Focus on clean, beautiful, Seiko small do, the formation of tangible and so on. All this is determined by accurate figures, which fully demonstrates the art in the pursuit of perfection. Therefore, our pursuit is: the advanced technology of modernization makes the printing embody the artistic beauty of design perfectly, and the design art is reflected in the high among the art of technological craftsmanship. Only by perfectly integrating art and technology can we adapt ourselves to the rapid development of high-tech means and industrial processing technology and advance to the advanced world level.

7. The Concept and Significance of the Concept of Environmental Protection in Book Design

The emphasis on environmental protection in developed countries is worth learning, especially in the design of book packaging. For a long time, some foreign developed countries like to use light and environmentally friendly paper to print books. For example, our common imported foreign language dictionary is usually printed on light and environmentally-friendly paper. Although this book is very thick, it is not heavy in the palm of your hand. Open the book, a kind of book scented, the ink used is also a special environmentally friendly ink with a light fragrance, and the design of the text is simple and generous, and rarely use the full ink printing. In contrast, the domestic book market, regardless of the cover of paperback and hardcover books, is mostly covered. In short, this kind of process that has been used for decades without environmental protection should be effectively controlled. The environmental protection concept of book binding design is the embodiment of the high-grade publishing house. It is the respect for the book volume. The book volume is the embodiment of the book culture atmosphere. The book design is not in the form of artificiality, and the appearance is luxurious and magnificent. In today's book market, you can see the cover of the books that are dressed up in a variety of ways, and there are more shops that sacrifice the contents of the book, inlaid with gold and silver, and the makeup is just for the purpose of raising the book price and meeting the economic appeal. The book has been lost. Reflect the characteristics of the cultural meaning of books. Instead, it creates some dyslexia for books and loses the value of reading books.

Design is by no means a luxury waste, but the essence of the manuscript, the use of creativity to reflect, with more cost-effective and more environmentally friendly ideas. A well-designed book is not necessarily a book that receives a grand prize. It is often a book that gives people a sense of pleasure in terms of sight, touch, and taste. Environmentally-friendly paper can reflect this feature. Moreover, the price of environmentally-friendly paper is also at the lower-middle level, in line with economic requirements, and can better reflect an elegant cultural taste. Therefore, it is recommended that publishers should also pay attention to and guide in this regard.

8. Measures to be Taken for Environmentally Friendly Books

On the issue of whether or not to cover the film, the publishing house plays a decisive role, and the printing factory is only in the will of the publishing house. On the issue of environmental protection, publishers should show enthusiasm. Film-printed prints are contrary to the idea of environmental protection and sustainable development. We should abandon this non-environmental process and find other processes that can replace the film in time to reduce the environmental pollution of the film. Environmentally-friendly paper, known as "low-energy, light pollution" paper type, not only pays attention to environmental protection on paper materials, but also better recycles to save the earth's natural resources. The use of lightweight and environmentally-friendly paper can improve the quality of the publishing house, save printing costs, and better reflect the environmental awareness of the publishing house.

As environmental protection calls are growing, environmental requirements for inks are

increasing. In order to reduce the damage of the ink to the environment, it is necessary to use a new type of non-polluting ink. Environmentally friendly ink means that in the ink formulation, the oil component is a vegetable oil, for example, natural oil such as soybean oil or linseed oil. Because this ink uses natural vegetable oil in the solvent component, it avoids the harm caused by the former mineral oil solvent, and it is also worthy of promotion. The transformation of the environmental protection concept of book binding design must change the old concept, do not regard the fashionable and popular things as treasures, and ignore the traditional aesthetic consciousness. The concept of environmental protection is not a simple return, it is an update of ideas.

In an era when computers are flooding, it's not the kind of computer-generated composite design that makes people's eyes shine. Often, the unique design with strong personality makes the readers deep impression. Book designers should give full play to the advantages of digital tools, but they are not bound by them, dilute the traces of computerization, and pursue the charm and cultural temperament of returning to the original. Therefore, it is of great significance to reflect the original beauty of the book and let the book be in the hands of the real book, so that the book returns to natural simplicity. This requires a variety of efforts, including the change and support of the leadership and editors of the publishing house, the readers' recognition of the concept of environmental protection, publishers, and editors and binding designers in this link should fully play their role. With the development of the economy and the growing prosperity of the society, environmental protection has become a hot topic in recent years, and it is also closely related to people's lives and work. To protect the environment, everyone is responsible, and environmental issues in book design are becoming more and more important.

9. Summary

The involvement of digital technology in the design, production and printing of book binding has undergone great changes both in artistic style, creative expression and artistic individuality. In order to adapt to the changes of the new era, designers begin to explore new designs Language, seeking new ways of creation, new modes of thinking and new ways of representing subjects, which further broadens the new modes of expression and thinking tension in the creation. China's advanced design tools, equipment and the world are synchronized. However, the design work is lagging behind, because the design concept of our designers played an important role. Advanced technology can only help us to perfect the idea of creativity, our designers should keep a sober rational mind, and actively update the knowledge structure, with a broad cultural vision and creative spirit, with a variety of design forms and ever-changing means, Rich design language and paper materials to meet the increasingly complex consumers of consumer aesthetic and psychological requirements.

With the rapid development of digital technology, book binding and production printing tend to converge at a higher level, which makes it possible for the diversification of books and personalization and refinement. Digital printing to a considerable extent, expand the traditional means of book binding design, the design of the finished version of the ink manuscript, can be directly delivered to the printing of the "film", the design and the plate combined, greatly saving manpower, Material resources, shortening the publication cycle. Traditional printing is the "production and then sales" mode of production, and digital printing is "sales and reproduction" mode of production, to meet the needs of personalized publishing.

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