Interdisciplinary research thinking, paths and methods of visual communication design

Chen Yanqing

Xiamen University of Technology, Xiamen, Fujian, China

Abstract: With the development and progress of society, it has also brought a new wave of visual communication design. However, the traditional single model cannot meet the needs of society and people, so we must change our concepts and actively explore, in-depth analysis of the inherent characteristics of its disciplines, explore the new development trend of interdisciplinary integration, and point out the necessity of visual communication design and interdisciplinary innovation research As well as the multi-dimensional mode of cooperation, interdisciplinary and innovative learning has become an inevitable trend to adapt to the development needs of the times, and it is also the general trend for individuals to improve their core competitiveness.

The continuous progress and innovation of society have brought unprecedented development to design, and it has also made visual communication design a comprehensive and diversified display, allowing designers to have more design carriers and practical development space for their works. In itself, it is characterized by complexity and comprehensiveness[1]. In order to meet the accurate analysis and interpretation of the audience, it is necessary to combine multiple factors to better provide convenience, speed and efficiency for the public, rather than simply designing to meet the needs of a certain aspect. All disciplines are equal, and the value concept of mutual respect and mutual learning should be established to meet the diversification of design. Next, we will conduct research on the interdisciplinary innovation of visual communication design, aiming to provide a theoretical reference for the similar.

1. Significance of the combination of visual communication design and interdisciplinary innovation

1.1 The borderless and super-national character of visual communication design

To a certain extent, visual communication design is known to all human beings. It has no national boundaries and national restrictions. Just like everyone knows that the dove is a symbol of peace, and green is the hope of life, so the visual communication design itself has a cross-cultural innovative significance.[2], the delineation of symbols that people have known also provides the basic needs for innovative research across disciplines. In visual communication design, a certain graphic pattern is often composed of one element, and its composition and performance can accurately convey different information to different audiences. Visual design is related to people's lives. The design symbols of visual design are easy to unify, and at the same time, it can reduce design costs and improve efficiency, convenience and efficiency. However, because people are affected by environmental and cultural differences, the degree of design is not easy to grasp. Excessive design often makes the design of symbols lose their meaning, and may also be difficult to pass in some areas.

1.2 Misreading phenomenon with low degree of fusion

In the process of visual communication design, some specific elements are often incorporated to strengthen or highlight the core concept of the design, but are subject to cognitive differences in different regions, different environments, and different living habits. The cultural differences of different languages, different races, different regions and different countries reflect the different

backgrounds and origins of social and human development[3]. But it is undeniable that it is precisely because of this complexity and diversity that it imperceptibly impedes their mutual communication, and even causes misunderstandings and grievances. This is a fixed mode of thinking in people's subconscious, and people happen to use this habit to measure and judge different cultures. Therefore, communication and integration between disciplines is even more necessary. If design does not communicate with each other, learn from each other, and learn from each other's strengths, there is no so-called true design, so design requires more innovative learning across disciplines. In this sense, a design without mutual integration and in-depth multidisciplinary research is not viable.

Design itself is a fusion of extraction, penetration, learning and understanding in the larger environment of society. In the visual communication design, the design concept should be formed as a unity of individuality and commonality as much as possible. Consciously absorb some elements of the desired object or social and psychological factors, so as to help obtain the affirmation and recognition of the desired object and better meet the needs of the audience. (See Figure 1) Due to various reasons such as interpretation standpoints, there is often a misunderstanding of design. This misunderstanding leads to the need for international design in the context of cultural differences. It is necessary to standardize and order it as much as possible to achieve the accuracy of communication. This difference in visual design is caused by differences in people's beliefs, living environments, family backgrounds and other aspects, so we need more cross-disciplinary and cross-cultural communication. Study, understand various problems that may arise in the design, conduct comprehensive analysis, discuss and study, so as to avoid unnecessary troubles.When the cultural background of the same thing is different, the information he conveys is also different[4]. The dragon is a totem worship recognized by the Chinese nation. The Chinese nation believes that the dragon is auspicious and auspicious, but in Western mythology, the dragon is a fierce thing. do we have to completely deny a certain party, and the performance of the closely related visual symbols, although extremely similar, but also convey different concepts, different cultures and different disciplines can be leapfrogged. After learning from each other and agreeing, this all reflects the inevitability and importance of interdisciplinary innovative learning (see Figure 2).
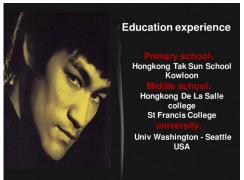

Figure 1. Differences of movie posters in different countries and regions

Figure 2. Dragon

2. Visual Communication Design and Interdisciplinary Innovation Combination Method

2.1 Digital integrated design

The 21st century is an era of digitization, informatization, and technology, and designers are increasingly required to have a diversified and comprehensive design perspective. Interdisciplinary learning not only affirms the design itself, but also recognizes the connection between different disciplines to make it a more complete whole, and the interaction and influence between different disciplines, resulting in the joint relationship between design and design, forming more design Performance and display space. In this way, interdisciplinary learning is also conducive to the interaction and mutual influence between the disciplinary systems. The integration and permeability of this process formed by the integration of different disciplines and majors can allow us to better appreciate the diversification of interdisciplinary knowledge and the improvement of our ability to solve problems, acquire knowledge, and broaden our eyesight[5].

2.2 Interdisciplinary innovative learning

Interdisciplinary innovative learning is more beneficial for us to have an absolute market advantage in the fierce social market competition in the future. Today's design is no longer simply designed for design, working to solve a design category of a certain meaning, but designed to improve the quality of society and people's lives, and cross-disciplinary learning happens to meet this demand.. The so-called interdisciplinary refers to transcending the cognitive boundaries of traditional concepts, viewing and breaking through the shackles and barriers of previous dogmas from a new perspective, and forming interdisciplinary integration and mutual penetration.In traditional learning, learning units are basically formed according to the majors studied, and each major studies a series of professional basic courses on time[6]. Based on these courses, the knowledge background and professional structure of the majors studied can be formed. Interdisciplinarity, on the other hand, breaks through the limitations, in a divergent and multi-dimensional way, and only a lot of new and interesting design ideas will be stirred up. The increasingly close connection between different disciplines has prompted the organic combination of research methods and research objects of different disciplines. In the face of increasingly complex design problems, it is not only expressed by the techniques and methods of the design itself, but by comprehensive and multi-faceted means and methods. Cross-penetration of multiple research methods. This is like the teamwork advocated in education now, instead of fighting alone, it turns to combination and everyone being a hero together.

2.3 Expanded application of vision system

Any field needs continuous innovation, and design is no exception. Visual communication design is also closely following the development of the times. With the help of research methods from other disciplines, it is applied to visual design, thereby opening up new methods and new concepts of visual communication design. For example, a series of illustrations can restore a set of game programs based on the illustrations, cross-integrate, penetrate and influence each other, but the final purpose is to better provide people with needs.

For visual communication design, interdisciplinary learning is actually a real embodiment of the integration of disciplines[7]. Now visual communication design covers a wide range. It evolved from graphic design, which is actually a potential cross-disciplinary. From the original paper media, the scope of the two-dimensional space extends to the visual changes of the uneven plane, and the three-dimensional and dynamic effects come up. It displays a plane work through video, short film, APP, web, etc. means, which can be more Showing design works well and giving full play to our personal advantages are the intuitive advantages brought by cross-disciplinary learning[8]. This kind of breaking the boundaries between disciplines, crossing the barriers between disciplines, integrating, infiltrating and interoperating between disciplines has created a new trend for the development of visual communication design, which will also mean creating new methods. with possible.

To expand the human visual system to new time and space fields, images develop along with

human image thinking, and the formation of visual symbols requires the combination of image and abstraction. So far, visual design has become an important part of social development to meet people's needs[9]. Factors, and even have to keep up with the pace of the times, only through cross-disciplinary comprehensive learning can better meet the needs of the visual senses on the basis of the requirements. This also involves many information carriers, and a single design carrier can no longer give the best interpretation of the design. The idea of signifier and signified proposed by Saussure, no matter how good the visual effect does not give it a meaningful signified, it will be meaningless at all. Visual design is not only limited to Pingxi space, it also needs to be expanded to two-dimensional and three-dimensional space. Interdisciplinary learning just makes up for this old drawback, mutual penetration, complementary advantages, and commonality.

3. Conclusion

The combined comprehensive learning model of interdisciplinary innovation has become inevitable. The dominant disciplines have more and more powerful technical levels, but they are also more and more dependent on the use of other disciplines. Although the proposal of interdisciplinary integration is still in the preliminary stage Formation and improvement stage, but always in the right direction of ideal development, and some valuable and meaningful theory and practice have begun to emerge. Interdisciplinary innovative learning of visual communication design can better convey design thinking and expression, generate more innovation and creation, allow designers to better practice, provide a broader platform for experience exchange, and form new cultural relationships, a new visual experience. More importantly, the learning, integration and commonality between different disciplines can cultivate more and better high-quality talents, become the core competitiveness of the market, and increase the potential reserve of cultural information. The continuous improvement of individuals also drives the development of society.

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