Research on Design Method of Interior Wall Painting Based on Computer Technology

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Abstract. In recent years, interior wall painting has become a trend and can be seen everywhere. With the pursuit of people's spirit and culture, the art of interior wall painting also puts forward high requirements for the artistic literacy of designers. The application of computer technology in interior wall painting design can quickly realize the effect display, save a lot of time and provide more thinking time for designers. At the same time, it also connects designers, owners and construction parties, and creates infinite possibilities for interior wall painting design methods.

Keywords: computer technology, interior wall painting, design method

1. Introduction
Science and technology are the leading force for social progress. The rapid development of computer technology has brought about earth-shaking changes in various industries, people's material and spiritual living standards have been greatly improved, and at the same time, a higher pursuit has been generated. Under the higher requirements of interior space decoration design, modern interior wall painting emerges as the times require. With the help of computer technology, the development of interior wall painting is even more like a tiger with a couple of wings, which improves people's feelings of indoor space environment, expands people's imagination of indoor space layout, ensures the safety and environmental protection of indoor space environment, and meets people's yearning for a better life. The computer technology brings an infinite possibility to people's life [1]. With the emergence of variety of new software, the function is becoming more and more perfect, and it will change the artistic way of the indoor wall painting, subvert the traditional interior design, let the designer pour more time into the design, and be as immersive as possible. The effect can be seen at any time and can be modified at any time. With the help of computer technology, the content and form of indoor wall painting will be richer, more incredible and easier to achieve in the future [2].

2. The Art of Interior Wall-drawing and Its Significance
Wall painting art has a long history, from the earliest prehistoric murals to modern wall painting art, although it is particularly popular at present, it may appear on any object, but wall painting has never
been separated from the scope of its art, it is people's expression of aesthetic emotion and art. Interior decoration wall painting art pays more attention to the harmonious coexistence of indoor activities, interior decoration and cultural environment. The trend of globalization is irresistible, and the cultures of all countries are permeated and impacted by foreign cultures, especially in developing countries, which are more vulnerable to cultural shocks, and China is no exception [3]. The indoor wall painting, which matches the traditional way of life and living environment, brings us the opportunity to dialogue with the traditional culture at any time, provides the atmosphere of introspect of culture and art, and helps us to inherit and develop the traditional culture.

3. Design Method of Computer Aided Interior Wall Painting

3.1 Advantages of CAD based on computer Technology
The design of the wall drawing is an art from designer’s philosophy. It is the result of the cooperation of the humanities, the emotion, the imagination, the expression force, the essence or the designer's idea, and the computer technology can only be used as an auxiliary means and can't be replaced. In the design phase of the presentation and means of implementation of the use of computer technology can bring great benefits [4]. Between computer drawing and hand drawing, the selection of computer drawing is faster, more efficient and more accurate. In the process of composition, computer technology can provide convenient modification and effect preview. In color processing, computer technology can provide more and richer color matching and change. In the aspect of effect monitoring, the computer has mature evaluation software, which is more realistic and intuitionistic. In the ecological environment, computer technology saves a large number of paper, pen, pigment, more in line with the sustainable development, high-quality development of the times. The application of computer technology is deeply rooted in the hearts of the people and brings unprecedented changes. In the interior wall painting design, computer technology is also indispensable, and plays an important role in the design together with the human brain and hand [5].

3.2 People-oriented Design Concept
The design service object of the wall drawing is the "a man", and the designer realizes its own aesthetic value, and the customer realizes its own desire for the environment of the indoor space. Generally speaking, the interior wall painting design and construction are separated and carried out in stages, that is, the designer design is completed and then handed over to the construction unit. After understanding the needs of customers, designers design with their own aesthetic concepts and the pursuit of art, and have little opportunity to pay attention to the problems that may occur in the construction process, technical difficulties, and whether the design effect can be expressed correctly. This will lead to the following situation: customers agree with the design given by the designer, but are dissatisfied with the actual effect of the wall painting after the construction is completed, because the gap between the two is too large. After the application of computer technology to this field, the situation is very different. The design results of designers can be simulated in the compute. After the design is completed, the designers have a comprehensive and dynamic understanding of their design results. This requires the designer to have a good grasp of the basic information and spiritual character of the owner before the design. According to the analysis that computer technology can provide (figure 1), innovate the design concept, maintain close contact with customers and construction units in the design process, and show the design effect to them through computer technology, so that their own design can better achieve the unity of artistry and reality.
3.3 Pay Attention to The Overall Consciousness of Space
As a part of interior design, the space consciousness is a part of the interior design, and it is more important to pay attention to the space consciousness because of the decoration of the atmosphere. In order to see the design effect of interior wall painting, we should not just look at it itself, but put it into the indoor space, and then observe its influence on the spatial layout, feel whether the space atmosphere it creates is suitable, and whether it is in harmony with the surrounding space color light (as shown in figure 2 and 3). In traditional design, none of this can be experienced before construction is completed, and the successful application of computer technology makes it possible. Before the design, it is easy to simulate the space environment in the computer by investigating the environmental data and material information of the interior design space in detail.
Figure 2. Reconciling With Hue of the Surrounding Space

Figure 3. Spatial Light Array Model
4 Conclusions
The development of computer technology makes computer software such as AutoCAD, Photoshop, CORELDraw can provide more and more functions for interior wall painting design. The application of these computer technologies has opened up a new era of interior wall painting design, which makes the interior wall painting design methods more diverse, the realization means more flexible, and the research scope broader. The application of computer technology to assist indoor wall painting design provides a shortcut for designers, so that they do not have to repeat a lot of work, and can show the real effect of design, so that art and reality no longer run counter to each other, make the construction content more specific, and make the owner more satisfied. With the progress of society, computer technology will have great potential in the design method of indoor wall painting.

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References
[1] Ye Mei. A brief talk on the art of wall painting in interior design [J]. Art Education Research (6): 125.
[2] Zhu Dafa. The application of wall painting art in modern interior decoration design [J]. Journal of Jiujiang University (Social Science Edition) (2): 114 ≤ 116.
[3] Wang Xiangyu. Computer graphs and interior design [J]. Yihai (12): 119 / 120.
[4] Zhang Longxiang. Discussion on Digital Interior Decoration Design based on computer Image [J]. Journal of Jingdezhen University, 2019, 34 (3).
[5] Chen Yingkui. Computer aided analysis of light and shadow effect in interior design [J]. Rural Economy and Science-Technology, v.29 No. 436 (8): 247.