



Research Article

ISSN : 0975-7384
CODEN(USA) : JCPRC5

Computer Technology Applied in Art Design

Xiaoling Wang

School of Art and Design, Xinxiang University, Henan, China

ABSTRACT

Most designers have accepted the fact that computer aided design plays an important role in the success of their practices, not due to its value as an efficient drafting and modeling tool, but also because of clients' perception that it makes sound financial sense to utilize CAD. Computing technology has developed significantly in the past few decades. It affects almost everyone in the modern society, creating new ways of communication which affects both our work and leisure activities. Particularly, in today's world of design and technology, computer aided design is fast becoming a technologically and economically feasible reality. On the other hand, many people argue that computers are not fully autonomous, they are merely unconscious digital slaves or tools of production. In addition, the abusive use of software technology would turn creative art design into a purely industrial activity.

Keywords: art design; computing technology; software

INTRODUCTION

As the soul of art design, individuality is outstanding for its uniqueness and originality, it comes from life, is invented in human brain and tied with cultural development. Designers try to invent new styles by changing color and form, and design masters are remembered for their unique, perfect and irreplaceable individuality. We identify designers' works according to their individuality, experience inheritance and transformation of design works, and also tell their works from the others according to their artistic personality. Design individuality is not only a symbol showing differences of a designer, but also are mark of his/her design level. The process that a designer realizes his/her design individuality is the process that he/she digests nutrition offered by predecessors, and proves his/her own creative ability. Realization of individuality also signifies that the design has different expression techniques from the others, and masters the most suitable expression languages, ideal forms of expression, and profound spiritual implications, which remarks the successful exploration, and also the achievement of design. Landscape art design as a design art plays an increasingly important role in optimizing our living spaces, and has won increasing attention from designers. Individuality of landscape design is to express inborn culture, history, living customs accumulated on the basis of folk customs in different regions in landscape designs. Appropriate expression of individuality in landscape designs reflects local culture and history successfully, and if art design shows no individuality, the audience will lose interest and not enjoy the beauty.

ANALYSIS ON THE ADVANTAGES AND DISADVANTAGES

(1) Broaden horizon

As for the conventional mapping method, it relies mainly on pure handmade making, the traditional pure handmade in art design course cultivates the students' ability in their design work, but it is also a kind of restriction. On the one hand, due to in the concrete operation process, the traditional manual drawing needs many auxiliary tools, such as the most basic, knives, paint, paper, brush easel, etc., the use of these tools will waste too much time, too multifarious, not easy to change, the effect is not obvious which leads students in the practice course for no reason wasting too much time and energy. In other words, it is inefficient. Environment of the work of students, on the

other hand, the future is the world of computers, the traditional drawing technique in the real work is practical and decreases. Finally, student's imagination is very rich, when students have a more creative thinking, or a relatively new design ideas, due to the restrictions of handmade conditions cannot complete make their ideas into the tower of Babel, hit the enthusiasm of students learning to some extent. And the integration of computer aided design, to overcome the defects in traditional drawing technique in art design, it has strong shading, word processing, graphics editing can work, such as a series of instructions can be executed by the user to complete the drawing work, make the students from hand-painted multifarious work, and the effect is satisfactory, and can make the students imagination into reality, improve the students' learning enthusiasm.

(2) Convenient, easy to operate and control

It is said that, we integrate art design with computer aided design, no longer need a large number of drawing tools, computer take the place of all of these tools, and make drawing more accuracy and high speed. In addition, there are a large number of functions, processes, systems and tools in the computer system to provide graphics drawing, make it become intelligent, make students more interested in to learn and master, and open more convenient channel to the students' learning process, so that the students can follow one's inclinations. As students in the course of design in the process of operation, they can using the computer aided compiling album, shear, coloring, synthesis, and other special effects, in case of error or idea change to correct the original design scheme, could no longer hotspots to start all over again, can intend to modify or change at any time according to their own ideas which traditional drawing technique can't realized. At the same time, nowadays, students are addicted to the Internet age, the emergence of the computer aided in the course will cause students' interests, and go into a driving force to motivate them to design the outstanding works of art.

(3) more convenient to save and display

The traditional hand-painted design drawing is "one to one", that is, a copy of the original design drawing is the only, and there is only a paper, not easy to save, there are defects such as fading, aging reasons. And application of computer aided design can overcome these disadvantages, it can be design drawings stored in the disk, hard disk or a floppy disk, you can save more originals, it won't be damaged because the passage of time and it can be directly not only display on the computer, but also with the external output device (such as all kinds of printing machine) connection presenting in the paper, or directly into a magic lamp and even animations. Therefore, to avoid the students in the process of concrete operation save improper careless worsen or save the design effect will be the only designs loss caused by a series of problems, and these processes will students usually learn computer knowledge and art and design, more easy to learn to use effect.

THREE FACTORS IN ART DESIGN

Color

Color makes the nature beautiful and brings people wonderful visual enjoyment. It is closely related to our daily life, blue sky, white clouds, green mountains, flowers and trees show us materials, life and movement. Meadow in spring, rainbow in summer, maple leaves in autumn, and snowy winter, alternation of day and night are more beautiful under light and color. Color is an important landscape component, it carries significant historical, cultural and aesthetic messages, plays an important role in the protection and development of humanistic environment, and construction of quality human settlement. In design individuality, color is also a significant content, all design works need color as an expression means, it presents the audience certain visual effect, and influences the overall style of a design work. Among all elements of a design work, color conveys messages and expresses emotions fastest, and also influences emotions and triggers emotional association of people.

According to chromatics, color arouses mental impression of the audience about size, weight, cold and warmth, expansion, shrinkage, forward and backward, and also triggers emotion changes, and affective association such as exciting, happy, peaceful, graceful, plain and luxury. Color is a kind of physical phenomenon without emotion, personality or symbol, the audience can experience emotions and symbolic meanings of color because of their life experience. For example, red symbolizes revolution in China, such as national flag and red scarf. Affected by red, the audience will have strong desire and impulse for fighting. In addition, red also brings feelings such as positive, active, passionate and healthy. As a festive color, red is widely applied in traditional Chinese festivals and ceremonies, such as red lamps, couplets, sedans in wedding ceremony. Comparison, tempo and rhythm produced by color relations enable the audience to experience unique charm of colors, and arouse their strong visual and psychological feelings. For example, White Pergola as the commanding height of

Beihai Park forms a strong comparison with temple buildings in the park in color, and it also enhances the beauty of the magnificent Imperial Palace far away. As a landmark building, White Pergola has outstanding features[2].

Shape

Shape refers to the objective entity and its atmosphere with unified content and form, nature and phenomenon, and also temporal and spatial stability. Design art is a kind of graphic art supported by image, thus image is an important visual characteristic of design art. Shape in design art includes 3 forms, i.e. concrete shape, imaginary shape and abstract shape. Landscape offers a kind of visual message, and demonstrate visual image. Architects and planners design and create urban landscapes by motivating physical shapes of all landscape components, on the basis of which form their own landscape design characteristics. In addition to natural conditions of the landscapes, successful landscape planning or design also depends on design concepts, aesthetic views, artistic knowledge, design techniques of planners and architects. Design masters always value the individuality of shape, because they all believe that shape is the necessary tool to express the ambience. For natural scenery, and artificial elements such as buildings and bridges, designers have to recognize and remember them, experience and transfer them to “mental images” of designers. Such “mental images” are formed on the basis of images of natural scenery, but are different from the original ones. Shape of the original scenery and the one created by designers lies in that designers refine, summarize and synthesize the formers’ advantages to meet design themes and concepts. According to the needs of design themes and personal design individuality, some designers adopt decorative deformations of natural shapes to get rid of restrictions of time, space, perceptivity, and intrinsic color, make objective images and natural images subjective, natural images imaginary, abstract emotions visualized, complicated relations orderly, complex details simple. In addition, they have to accept the restriction of certain objects, usage, technology and materials, create vivid and impressive decorative images, and State and ambience is the soul of landscape design. Color application, shape processing, expression technique, and design conception are all to create state and ambience of landscapes. The individualized colors and images should be placed in “proper locations”, and combined into design works. Just as structure and planning in Chinese calligraphy, virtual and real, open and close, concentrated and scattered, dynamic and static are unified to compose the image, create the momentum, and enhance the atmosphere, and create the artistic ambience with spiritual connotations. For example, the Zen philosophy created by classical Chinese garden art is the core value and characteristic of its spiritual meaning. Classical Chinese garden art experienced a significant change in the middle Tang Dynasty, i.e. literati gardens changed the focus from realistic to impressionistic. The change mainly owed to the prosperity of Zen philosophy which greatly influenced spiritual needs, psychological structure and aesthetic consciousness of the literati and officialdom, as a result, artistic ambience and image of the literati gardens changed significantly.

Ambience

State and ambience is the soul of landscape design. Color application, shape processing, expression technique, and design conception are all to create state and ambience of landscapes. The individualized colors and images should be placed in “proper locations”, and combined into design works. Just as structure and planning in Chinese calligraphy, virtual and real, open and close, concentrated and scattered, dynamic and static are unified to compose the image, create the momentum, and enhance the atmosphere, and create the artistic ambience with spiritual connotations. For example, the Zen philosophy created by classical Chinese garden art is the core value and characteristic of its spiritual meaning. Classical Chinese garden art experienced a significant change in the middle Tang Dynasty, i.e. literati gardens changed the focus from realistic to impressionistic. The change mainly owed to the prosperity of Zen philosophy which greatly influenced spiritual needs, psychological structure and aesthetic consciousness of the literati and officialdom, as a result, artistic ambience and image of the literati gardens changed significantly.

CONCLUSION

Formation of landscape style is the pursuit of all designers in art designs. Georges Louis Leclere de Buffon once said, “style is human”, which defined human as the essential condition for establishing the style and realizing the individuality. In addition to experience, personality, education background and talent of designers, realization of their individuality is also related to the times, regional environment, humanistic environment, teachers and friends. These factors have invisible impact on their aesthetic preferences, feelings about state, preferences about image, color and texture, selection and application of tools and materials, and in general, influence their recognition of color, shape and ambience, and their individuality. Each designer has his own subjective and objective conditions, so designers have different breakthroughs for building their own artistic individuality and design styles.

Acknowledgments

This research reported in the paper is supported by the nature and science fund from Henan province ministry of education (Project No. JG [2013]13A520840)

REFERENCES

- [1] Zhang, P., & Wang, S. Y. (2005). *Journal of Nanjing ArtsInstitute* (Fine Arts & Design), (2), 115-116, 133.

- [2] Fang, Y. Z., & Chen, Y. (2011). *Garden Science*, (1), 25-28.
- [3] Tang, X. M., & Gan, X. H. (2005). *Decorative artdesign*. Chongqing: Chongqing University Press.
- [4] Li, L. (2007). Landscape individuality in environmental art design. *Art Panorama*, (7), 106-107.
- [5] Kirkwood, A. and Price, L., *J. of Educational Technol.*, 44, 4, 536-543 (2013).