

Research on the Performance of Creative Thinking Based on Graphic Creativity in Dynamic Graphic Design

Wenqian Deng^{1,*}

¹ School of Art and Design, Wuhan Textile University, Wuhan, Hubei 430000, China

*Corresponding author. Email: 1048547080@qq.com

ABSTRACT

With the continuous improvement of the development level of science and technology in today's society, graphic design is also constantly creating new forms of expression. Graphics are no longer confined to two-dimensional visual expression of plane, but begin to explore the sensory experience of dynamic vision. In dynamic graphic design, the creative thinking of graphic creativity is more intuitive and interesting. In view of this performance status, this paper puts forward a case study on the performance status of creative thinking in graphic creativity in dynamic graphic design. At the same time, it also pondered the future development trend of creative thinking in graphic creativity in dynamic graphic design and proposed some existing application status problems.

Keywords: *Dynamic vision, Graphics, Creative thinking, Creativity, Intuition, Fun.*

1. INTRODUCTION

Graphic creativity itself is a unique graphic language, which can replace the clear expression of the meaning of the design work to express. Creative thinking is the unity of many kinds of thinking in creative thinking. It is a novel and unique thinking activity. The combination of creative thinking and graphic creativity can give more forms and possibilities to design works. Unique graphic language and novel thinking activities produced by the chemical reaction can express the unique design. Dynamic graphic design is a new form rising in recent years. It combines image art with graphic design and endows graphic design with new life. The creative thinking of graphic creativity is applied to dynamic graphic design, which combines clear graphic language with unique connotation, strong visual impact and rich multidimensional forms to present a unique design work.

2. CREATIVE THINKING IN GRAPHIC CREATIVITY

Thinking itself is a relatively abstract concept. From the perspective of learning, thinking is a kind of behavior to explore and expand experience

through memory accumulation. The definition of thinking from the perspective of cognition is a psychological behavior of human brain to explore the regularity of objective things and a process of exploring the essence of things. From a physiological point of view, thinking is a kind of interaction between neurons in the brain. From a functional point of view, thinking is a self-protective mechanism for proposing solutions to difficult situations. These views have their own reasons and starting points, but there is no comprehensive, complete definition of thinking.¹

Creative thinking in graphic creativity is a creative expression of the designer's own ideas and output concepts, and the creative conception is reflected through the changes and combinations of the appearance of graphics to produce unique forms of expression. This is also one of the most common ways of thinking used by designers in design. In constant thinking, various associations and creative points are generated. Creative thinking in design is a unique, divergent and free way of thinking, which allows designers to have unlimited imagination space and abnormal forms of expression. Creative

¹ Fang Xu. Research on creative thinking methods of graphic design [D]. Northeast normal university, 2014,05

thinking and associative thinking are the two methods used in graphic creativity. The change and re-creation of graphics require imagination thinking and free imagination space in creative thinking. Creative thinking can bring different visual effects and emotional information expression to graphic design. It's more about highlighting the word "unique."

3. DYNAMIC GRAPHIC DESIGN

3.1 Overview of Dynamic Graphic Design

Dynamic graphic design can be said to be a comprehensive art, which involves a wide range of design fields and comprehensive elements. (e.g. graphic design, animation, film, etc.), which is a perfect combination of 2D and 3D forms of expression.) Visually, it is graphic design. Technically, it uses the means of animation. In terms of user perception, it uses the principle of movie shot,² simply describing it as dynamic graphic design. It is also a kind of video art, with rich forms of expression, strong inclusiveness and integration, and can be combined with various forms and modes of expression. The traditional two-dimensional graphic is a kind of static visual representation. And dynamic graphics in the visual, technical realization of three-dimensional dynamic visual performance, creative expression is richer, clearer, and more vivid.

3.2 Status Quo and Development Trend of Dynamic Graphic Design

Dynamic graphic design is a kind of flat to three-dimensional design manifestation. The first to use motion graphics were the three major US cable networks, ABC, CBS and NBC. Famous American animator John Whitney and famous designer Saul Bass cleverly combined animation and graphics for the opening of the movie "Vertigo" in 1958. Dynamic graphic design comes slowly into our vision. The forms of dynamic graphic design are very rich and can be mixed with various artistic styles. With the rapid development of science and technology, the scope of application is also expanding, and has gradually infiltrated into our lives. Now the application scope mainly involves the network, mobile phone, advertising, interactive devices and other fields.

² Zhang Ye. On the expression of graphic symbols in dynamic graphic design [D]. Zhejiang University of Technology 2015, 0527.

Dynamic graphic design is a form that can make static visual elements dynamic, so that we in graphic design creative thinking range of new dimensions, so that everything can become dynamic. So far, the dynamic graphic design form is still constantly updated, giving more visual style presentation. Example: three-dimensional, mixed style, program vision, realistic style, etc. Rising technology has led to a burst of creativity. According to the 2020 Dynamic Visual Design Trend Report, this highly personalized, clear and interesting form of artistic expression will become a major trend in the field of design, more suitable for the public aesthetic.

4. THE CREATIVE THINKING OF GRAPHIC CREATIVITY IS WIDELY USED IN DYNAMIC GRAPHIC DESIGN

With the continuous progress of science and technology, the rapid improvement of human thinking and the pursuit of a better standard of living, love all beautiful, novel new things new scene. The change of graphic design highlights the transition from traditional two-dimensional graphics to three-dimensional or even four-dimensional conceptual graphics. In the traditional graphic creativity, creative thinking is one of the most commonly used thinking methods. It is the design source and inspiration source of graphic creativity. Graphic creativity changes the graphic vision through creative thinking and transmits information; the application of creative thinking in dynamic visual graphics gives full play to the characteristics of creative thinking and vividly shows the information and flexibility conveyed by graphic creativity. Today, everything around us is dynamic.

4.1 Taking the Dynamic Icon of Tokyo 2020 Olympic Games as an Example

As a design power in Japan, Japanese designers designed a group of dynamic ICONS for the Tokyo Olympic Games in 2020 to give full play to creative thinking in dynamic graphic design (see "Figure 1"). This group of ICONS was designed by the famous Japanese designer Masaaki Hiroura and the new generation of 80 generation dynamic design master Yuta Iguchi. It uses the simplest graphics to form a dynamic visual effect with excellent visual effects. The overall icon emerges from the white background in the form of fragmentation, and then disappears in the form of fragmentation after the

motion is completed, returning to the original blank frame. It's more than enough. Flexible and fun, the overall icon design is simple, lively, strong visual impact. It gives play to the advantages of dynamic visual graphics, with simple lines and blue and white as its main colors. Blue is the color of the emblem of the 2020 Olympic Games and also the representative color of the Japanese national team. Each icon conveys each movement with great subtlety. At the same time, the movement process and posture of the athletes are real and vivid; the 73 dynamic ICONS include 33 Olympic sports and 22 Paralympic sports. The dynamic creative graphic design can provide emotional comfort and visual pleasure to the audience psychologically compared with the monotonous crashing whiteboard page in the past.



Figure 1 Dynamic icon of Tokyo 2020 Olympic Games.

4.2 Taking the 59th Thessaloniki International Film Festival as an Example

The main body of the 59th Thessaloniki International Film Festival brand recognition dynamic graphics is a cinematic reel of intertwining graphics as a film festival logo graphics, arranged in a bewildering array of different colors and graphics. Finally, a dynamic visual effect is presented. The film is just like in a movie, to express the original purpose of the festival — to convey a variety of stories and emotions through the film (see "Figure 2"). It uses the way of creative thinking association in graphic creativity, expressed in the continuous rotation of projection film. It embodies the fun and intuitionistic of creative thinking of graphic creativity in dynamic graphic design.



Figure 2 Brand recognition graphics at the 59th Thessaloniki International Film Festival.

The progress of science and technology and the transformation of media provide dynamic graphics

with more display platforms and technical support, making static graphics more vivid and visualized.

This also opens up more possibilities for graphic design. Creative thinking of graphic design is more suitable for dynamic graphics. Creative thinking is mainly through association and imagination. Dynamic graphics can be well used and displayed. Creative thinking of graphic creativity is mainly reflected through the most basic graphic design. The main part is still graphic design and dynamic visual effect brings more visual impact and graphic aesthetic change, more attention to the transmission and expression of information. Dynamic graphics make the plastic scope of graphic creativity wider and create more possibilities for designers.

5. THE PRESENT SITUATION PROSPECT AND THINKING OF CREATIVE THINKING OF GRAPHIC CREATIVITY IN DYNAMIC GRAPHIC DESIGN

Creative thinking in graphic creativity is mostly expressed through association and imagination, and dynamic graphic design just makes full use of this. The main part of dynamic graphic design is still basic graphic design. However, compared with two-dimensional graphic design, three-dimensional graphic design can better show more imaginative space of creative thinking. It uses certain science and technology, spatial aesthetic feeling and visual effects to interpret imagination and creativity. In terms of creative thinking, dynamic graphic design has more logical thinking and jumping thinking conditions, and is flexible, fast and changeable. Traditional two-dimensional graphic is more linear thinking, the change is more simple, creative change is more limited; dynamic graphics is a kind of jumping thinking, creative changes and divergent strong, not only rely on a graphic change will form more possibilities. With the continuous development of science and technology and the continuous improvement of living standard, people's pursuit of beautiful things and the uniqueness of looking at everything are rising day by day. The future development trend of dynamic graphic design is bound to gradually replace 2d graphic design, and creative thinking in graphic creativity will also have more room to play.

In graphic creativity, creative thinking generally refers to divergent thinking and convergent thinking. Dynamic graphics can better reflect the sense of space and the possibility of free thinking. It can be either reasonable or unreasonable, or it can be more abstract. The scope that the designer develops is broader; sometimes it's too abstract and

loses the collective thinking, thus masking the creativity. Convergent thinking is to transform into effective creativity through an integrated and reasonable way of thinking and the combination of divergent thinking, which is the existence of dynamic graphic design. One must not magnify a part too much to drown its essence. In graphic creative activities, these two kinds of thinking are mutually cooperative and indispensable. Whether divergent thinking and convergent thinking can be integrated in a coordinated way is an important factor to determine the level of creativity.³

Dynamic graphic design is not strictly a specific design style, but it has quickly become a major trend in the design world.

6. CONCLUSION

In the future design industry, the development potential of dynamic graphic design cannot be ignored. It can more effectively convey information features and strong visual impact, which are beyond the reach of 2d graphic creativity. In dynamic graphic design, creative thinking conveys novel and unique dynamic graphic design through continuous searching and diffusion of divergent thinking, integration and transformation by means of convergent thinking, and selection of the most desirable expression mode. Creative thinking is more flexible, interesting and intuitive in dynamic graphic design, making full use of the advantages of graphic design.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Wenqian Deng.

REFERENCES

- [1] Fang Xu. Research on creative Thinking Methods of Graphic Design [D]. Northeast Normal University, May. 2014
- [2] Zhang Ye. On the expression of graphic symbols in dynamic graphic design [D]. Zhejiang university of technology, 2015,0527
- [3] Tian Li. Graphic dynamic creative presentation of brand visual information [D]. Nanchang university, 2015,0528

³ Fang Xu. Research on creative thinking methods of graphic design [D]. Northeast normal university, 2014,05

- [4] Yang Juan. Research on the evolution of visual graphics design for national games [D]. Guangxi normal university, 2017,0601
- [5] Tian Shiqi. Research on visual multi-dimensional graphic creativity [D]. Xi 'an academy of fine arts, 2017, 0603
- [6] Li Shujie. Improvement of dynamic graphic expression by collage [J]. Packaging engineering 2019,1220
- [7] Li Yun-qing. Analysis of visual communication value in dynamic graphic design [J]. Research on communication power 2019,1101
- [8] Ren Bungee. Dynamic Poster Feature Analysis and Innovative Design Research in the Context of new media [D]. Jiangnan university 2019,1001
- [9] Zhou Lijie. Application Principle of Blank Thinking in Graphic Creativity [J]. Design 2018/0615
- [10] Hu Yaling. A new Perspective of creative thinking in Graphic Design [D]. Wuhan University of Technology, 2016, 0602
- [11] Zhang Liying, Yue Yu. On thinking and methods of graphic creativity [D]. Northwestern university, 2005, 06
- [12] Tang Chunyan. Visual Information Presentation in Dynamic Graphic Design [D]. Shantou University, may, 2011
- [13] C Patrick. What is creative thinking? [J]. psycnet.apa.org 1955
- [14] Hwang, Min Sik. Dynamic 3D Motion Graphic [J]. ICCC International Digital Design Invitation Exhibition 2018
- [15] Shuqin Xue. Analysis on the Necessity and Thinking Path of Induction and Refinement of Graphic Creative Method [J]. The international conference on 2019
- [16] Helen Caldwell. The impact of visual posts on creative thinking and knowledge building in an online community of educators [J]. Thinking Skills and Creativity 2020
- [17] Mathias Benedek. Elements of creative thought: Investigating the cognitive and neural correlates of association and bi-association processes [J]. NeuroImage 2020
- [18] G Ambrose, P Harris, N Ball. The fundamentals of graphic design[M].books.google.com 2019