

# *The Application of Motion Graphics in Visual Design*

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**Abstract:** With the development of technology and the progress of the times, the concept of design has undergone tremendous changes, and our era has given birth to many new design concepts and methods. Among them, Motion graphics, with its unique visual beauty and artistic appeal, has become one of the most potential visual communication methods. In order to play the role of Motion graphics, this paper will carry out relevant research, and introduce the application of Motion graphics in visual design from five aspects of application scope, purpose, process, principle and characteristics, hoping to provide reference and help.

## 1. Introduction

Motion graphics is a kind of information transmission mode that is based on images, time as a clue, and expressed in the form of animation. It combines information content with dynamic actions to make information vivid and interesting. Motion graphics increase the audience's interest in information content through reasonable picture rhythm, rhythm, visual focus and visual level. At the same time, Motion graphics also bring us a new experience. With the development of technology and the popularization of the Internet, more and more people are starting to use mobile phones for various information exchanges. Therefore, Motion graphics has attracted much attention in the The Internet Age, and its application prospects are very broad, but how to apply it is still a problem that needs to be considered urgently, so relevant research needs to be carried out.

## 2. Overview of Motion graphics

### 2.1. Pragmatic errors in vocabulary

The concept of Motion graphics was first proposed by Carl Rogers, a famous German psychologist and one of the founders of behaviorism psychology. Motion graphics is to transform a thing in the real world into a thing in another visual world through the form of visual art, so as to achieve a dynamic display effect. Motion graphics have strong expressiveness and appeal, can quickly catch the audience's eye, make people interested in information content, and effectively improve the efficiency of information dissemination.

Motion graphics are expressed with time as a clue, and show things through the transformation and interlacing between the time axis and the space axis. At the same time, Motion graphics can also present the picture effect by adjusting the transformation speed and spatial relationship between different things, so that people can have a sense of novelty and uniqueness in vision[1-2].

Motion graphics can be expressed in two ways, as shown in Table 1.

Table 1: Two methods of expression of Motion graphics

Expressive techniques	Characteristic
Semi static expression techniques	Overall static, but there may be dynamic expressions on individual elements, such as color changes and brightness changes
Dynamic expression techniques	Multi element dynamic, commonly manifested as screen and action switching

According to Table 1, semi static expression refers to using static language to express things, such as using static text or images to express information. Dynamic expression techniques refer to the use of motion to express information content, such as using animation and sound to present information content. Motion graphics have strong expressiveness and appeal in visual design, which can bring people a sense of novelty, freshness and excitement, and make people have a need for more in-depth understanding, more comprehensive grasp and more effective communication of information content[3].

### 3. Visual Design Application of Motion graphics

#### 3.1. Application scope

Motion graphics are widely used in visual design, and can be used in various types of visual design, such as poster design, book binding design, graphic advertising design, packaging design, logo design, etc. For example, in poster design, Motion graphics can be used to make posters have stronger visual impact and artistic appeal and attract people's attention. In book binding design, Motion graphics can be perfectly combined with text to present different book contents through different time and space axes. In logo design, Motion graphics can be used to show the information content, making the logo more expressive and attractive. In packaging design, Motion graphics can be used to highlight product features to attract consumers[4-5].

#### 3.2. Application purpose

Motion graphics can express things through the transformation between the time axis and the space axis. It is a spatio-temporal expression that can present the shape of things in different times and spaces. Therefore, Motion graphics have three characteristics: time, space and space. Temporality refers to the changes in the timeline of things, which can manifest as clockwise or counterclockwise changes. For example, when representing a moving object, the motion state can be expressed through changes in the object's motion trajectory; When representing static objects, the characteristics of the object can be expressed through factors such as shape and color. Spatiality refers to the changes of things on the spatial axis. For example, when representing colors, the relationship between different colors can be changed to represent colors; When representing shapes, they can be expressed by their changes on different spatial axes. For example, when representing objects, the state of the object can be presented through factors such as object size and material; When representing time, the state of time can be presented through factors such as object movement speed and distance. For example, when representing time, the time state can be presented by the positional relationship between different time points on the timeline and the changes in positional relationship between different time periods on the timeline; When representing space, the spatial state can be presented by changing the positional relationship and the distance relationship between positions[6-7].

### 3.3. Application process

In visual design, the main application process of Motion graphics is shown in Table 2.

Table 2: Main application process of Motion graphics in visual design

Phase 1	Theme research
Phase 2	Creative Conception
Phase 3	Information Analysis
Phase 4	Screen production

In combination with Table 2, first, in the theme research stage, designers should conduct in-depth research and investigation on the theme, understand the characteristics of information content, and determine the content to be conveyed through Motion graphics; Secondly, in the creative conception stage, designers need to study and analyze the theme to determine what expression techniques, forms, and screen structures to use. On this basis, designers need to determine the style, color, etc. of the screen according to the requirements of the theme, and design corresponding visual effects; Third, in the information analysis stage, designers should conduct in-depth analysis and research on the information, fully understand the audience groups, and determine whether the audience groups will accept Motion graphics. On this basis, designers should clarify the information content conveyed by Motion graphics; Fourth, in the picture production stage, designers should create corresponding Motion graphics according to their own creative inspiration. In the production process, attention should be paid to the difference and relationship between Motion graphics and static graphics, the relationship between various elements in the screen, as well as their conversion speed and spatial relationship[8].

In addition, after the production of Motion graphics is completed, the designer should post produce them. The post production process mainly includes editing, processing, adjusting and improving the Motion graphics. On this basis, designers need to adjust and optimize Motion graphics according to actual needs.

### 3.4. Application Principles

The application principles of Motion graphics include: First, different ways of expression should be selected according to different visual communication needs. In the design of Motion graphics, in order to better spread and promote the information content, we can show things through the semi static expression method, so that they can be perfectly integrated with the visual screen to achieve better information transmission effect; Second, the expression form of Motion graphics should be determined according to the information content. In visual design, Motion graphics can adopt semi static expression, dynamic expression and animation to express information content. For example, when displaying a car model, static images can easily cause visual and aesthetic fatigue for the audience, while using animation forms can stimulate interest and curiosity while appreciating the car model. For example, when displaying literary works, in order to make people better understand the content of literary works, Motion graphics can be used to display the characters in the works. In order to better present the story of animated films, Motion graphics can be used to present the story[9].

### 3.5. Key points of application

Motion graphics can not be blindly applied in visual design, and some mistakes must be avoided, such as random selection of Motion graphics, that is, visual design has two main goals: first, to enable people to better understand and accept information content; The second is to stimulate people's interest in information content. If these two goals can be fully met in the design process, the best

communication effect will be achieved. However, when the designer mistakenly selects the Motion graphics type, the design results will not meet the goals.

Therefore, designers should fully consider the visual habits and psychological needs of the audience in visual design to choose different forms of expression. If the audience prefers static visuals, they can use semi static techniques to showcase things; If the audience prefers dynamic visuals, they can use dynamic expression techniques to showcase things; If the audience prefers animated forms, they can use them to showcase things; If the audience prefers music, they can use musical forms to showcase things; If the audience prefers color, they can use color forms to showcase things[10].

### 3.6. Application characteristics

Motion graphics is a very common form of expression in visual design, which has seven main characteristics: first, it can make the information content more intuitive to show, so that the audience can understand more easily, and can intuitively feel the visual effect; Secondly, it can improve the audience's acceptance and efficiency of information content, enabling them to quickly grasp information content in a short period of time; Thirdly, it can break the limitations of time and space, make the information content more vivid, vivid, and specific, and effectively improve the efficiency of information transmission; Fourthly, abstract information content can be transformed into concrete forms for presentation, making it easier for the audience to accept; Fifthly, it can create a sense of novelty and excitement in people's vision, achieving the goal of attracting attention; Sixthly, Motion graphics have a wide range of applications in visual design, such as posters, packaging, advertising, websites, etc., with strong applicability; Seventh, Motion graphics can display information content not only through static graphics, but also through Motion graphics.

## 4. Conclusion

To sum up, Motion graphics have high application value in visual design, which can significantly improve the information intuition of visual design, and make design works more vivid and rich, so it can better attract attention. However, it should be noted that Motion graphics are different from traditional static graphics, so designers should make certain adjustments in design concepts, and deepen their understanding of Motion graphics in order to better use dynamic graphics for visual design.

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