

Plane Elements in the Design of Multimedia Advertising

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Abstract: Graphic elements play a decisive role in the design of multimedia advertising. With the improvement of social living standards, the development of multimedia advertising design is getting better and better. People are increasingly demanding the quality of multimedia advertising design. The use of graphic elements in display advertising design the approach is also increasingly diversified. Graphic elements, as an important part of multimedia advertisement expression, directly affect its quality and effect. The purpose of this article is to study the application of graphic elements in multimedia advertising design. This article combines multiple auxiliary research methods such as questionnaire surveys, interview surveys, statistical analysis, and graphic analysis. Multimedia advertising design companies are the main research objects. Experimental data display. Graphic elements Development can effectively help the application of multimedia advertising design. The experimental results show that the application space of graphic elements in multimedia advertising has increased by about 90%, but display ads also face some problems when using graphic elements. This article summarizes the prominent problems faced by multimedia advertising when using graphic elements, and proposes corresponding solutions.

1. Introduction

With the advancement of technology, people have more and more ways to obtain information, and consumers are more likely to obtain advertising information sharing and diffusion spontaneously, rather than simply one-way transmission by traditional media. Because this is passive acceptance of advertising, perhaps consumers do not care about this type of advertising, even the appearance of large quantities can only make consumers disgusted. In this case, more flexible and proactive new media are more attractive to consumers of all ages. Even more and more

people believe that advertising can abandon traditional print media and then transition to the development of new media and multimedia advertising has emerged. Multimedia advertising refers to advertisements that are manufactured or played in the application of multimedia devices. Multimedia advertising is a new type of advertising model. It relies on electronic information equipment to produce advertisements, including computer-generated advertisements and dynamic advertisements. The main forms are audiovisual and video advertisements.

Design ads with flat geometric elements, visual elements, images, colors, and text are all important elements of expression; especially colors can highlight the visual effects of works, and are the most important visual elements in multimedia advertising. In the context of the new information age, compared with the traditional print ads in the past, many new features have appeared in multimedia ads. Displaying the theme through creativity, pictures, etc., and using dynamic, flexible, changeable features and a variety of graphic elements to attract consumer attention are particularly important in multimedia advertising design. The most significant difference between multimedia advertising and print advertising is that all elements of multimedia advertising in the actual design process have certain changeability, and the dynamic characteristics of digitization are also the most prominent characteristics of multimedia advertising. Design ads with flat geometric elements, visual elements, images, colors, and text are all important elements of expression; especially colors can highlight the visual effects of works, and are the most important visual elements in multimedia advertising. These visual symbols can convey enough information to give people an impressive impression through vision.

Zantides E conducts a literature review of the definition of visual metaphors in Printa dizziness, and further studies intertextuality as a familiar concept--a metaphor that is popular in advertising and graphic communication--in purposeful printing Immigration analysis methods--including examples of Logotype--are used in advertising samples to categorize topics by text, Zantides E. Research finds that the meaning of advertising intertextuality mainly comes from the film industry, art, monuments and locations, literary texts, Graphics and advertisements themselves, and in the case of trademarks, their source of meaning is purely linguistic [1]. Nyerges also mentioned that the application space of flat elements in display ads is very large, but display ads also face some problems when using flat elements [2]. For example, in recent years, the popular WeChat public account, Weibo Marketing, just visited this article, and after a while, you will find that when you browse to open the link "because the content is not an illegal view" or "because someone reports that the content cannot be blocked" This shows that the reliability of new media information is a significant gap compared with print media. In addition, high-fidelity print media is characterized by one-way information dissemination and passive consumer acceptance. If, when a company does not advertise for a specific consumer group, a large number of print ads will cause dissatisfaction among other consumers, which is the fatal disadvantage of multimedia advertising [3].

Media advertisements refer to advertisements that are manufactured or played on multimedia device applications [4-5]. Multimedia advertising is a new type of advertising model. It relies on electronic information equipment to produce advertisements, including computer-generated advertisements and dynamic advertisements. The main forms are audiovisual and video advertisements. Display advertising is a visual-based advertising that requires the active participation of graphic elements. Therefore, the designers in the design of multimedia advertising, visual communication adhere to the flat elements, boldly adopt the law of plate-shaped elements, with rich content and multimedia design, to create a better advertising form, the effect is very good, with a high degree of artistic and visual effects. This article adopts set experiment as the main research method, combined with a variety of auxiliary research methods such as questionnaire surveys, interview surveys, statistical analysis, graphic analysis, etc., taking multimedia advertising design companies as the main research objects, and studying the application of graphic elements in

multimedia advertising design. I hope this experimental data can help the development of graphic elements and the application of multimedia advertising design. The experimental results show that the application space of graphic elements in multimedia advertising is very large, but display ads also face some problems when using graphic elements. This article summarizes the prominent problems faced by multimedia advertising when using graphic elements, and proposes corresponding solutions.

2. Proposed Method

2.1. Flat Elements

Multimedia advertising refers to advertisements that are manufactured or played in the application of multimedia devices. Multimedia advertising is a new type of advertising model. It relies on electronic information equipment to produce advertisements, including computer-generated advertisements and dynamic advertisements. The main forms are audiovisual and video advertisements. Display advertising is a visual-based advertising that requires the active participation of graphic elements. Therefore, the designers in the design of multimedia advertising, visual communication adhere to the flat elements, boldly adopt the rules of plate-shaped elements, with rich content and multimedia design, to create a better advertising form[6].

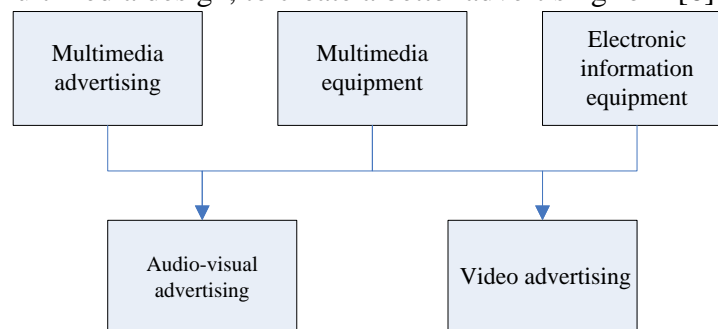


Figure 1. Advertising classification and characteristics

(1) Geometric plane element

The various combinations of the basic elements, dots, lines, areas, and graphics of print ads are not only the most basic features of print ads; they are one of the factors that exert their promotional effects. Simple geometric graphic elements can fully express the basic content, dots, lines, surface shapes and position changes of the advertisement, and can also reflect the beauty and creativity of the advertisement. The text in print ads can be the finishing touch. The arrangement of dots, lines, and areas of good text can add color to print ads and is also an indispensable part of successful print ads. Text in print ads mainly has instructions, guidelines, graphics, and codes.

(2) Visual effects of flat images

Design ads with flat geometric elements, visual elements, images, colors, and text are all important elements of expression; especially colors can highlight the visual effects of works, and are the most important visual elements in multimedia advertising. These visual symbols can convey enough information to give people an impressive impression through vision. Therefore, in advertising design, designers prefer visual elements as an important element of creative design. Increasing the use of visual elements can effectively improve users' understanding of advertising. Express the relationship between advertising and visual elements. The use of dynamic plane elements, in order to attract the attention of the audience, deepen the customer's understanding of multimedia advertising. In summary, visual elements are particularly important in the design of

multimedia advertising.

(3) Planar symbol elements

An important factor in print advertising is the expression of graphics or text, which is reflected in the design of the Group's trademark pattern. Most goods and enterprises have a very obvious symbolic meaning. A simple image often represents very far-reaching meanings that are sometimes not described in specific language, but it can be represented graphically.

Advertisements and products form the graphic interaction of multimedia devices through the audience to achieve creativity. For example, a separate advertising projection device is placed in front of the viewer's projector movement. The integration of human and robotic devices has led to new visual graphics through advertising performance. As a commercial product, a "humanized, diverse" promotional signboard In fact, it is a multimedia device that realizes the creative idea of instant printing. In this way, when the previous person or object in the main device, the screen will display a variety of visualizations such as abstract figures or dynamic character sketches of characters. Participants interact with the device to experience the "created" graphics. The person in power becomes the event The masters give strong psychological consciousness to the students' grades, and thus make the commercial product "meet the needs of customers [7-10]".

2.2. Application of Graphic Elements in Multimedia Advertising Design

(1) The trajectory of the plane element

The differences between display ads and print ads and ads are significantly static. The design elements of display ads have many digital functions that may be different and dynamic. In other words, many elements of displaying advertisements on the plane have been given life, and advertising designers can make a variety of changes to the plane elements in order to also show the artistic charm and display the characteristics of multimedia advertising. There are three main types of plane elements in multimedia advertising design, that is, changes in form that change the spatial position and speed of the movement. In addition, a single element design shows the plane of motion of growing two elements, changing, changing the composition of multiple elements. Among them, dots, morphological changes, plane component lines, and surfaces mainly refer to the growth of changes in these components, analysis and synthesis. For example, the most common screen for merging green ads is: the green streamline of the main line, which naturally grows on the line around its periphery Morphology, and gradually from small to large, ends up in a new and full of picture-textured image, which is the result of changes in the shape of the line. Changing the spatial position of a planar element mainly refers to the spatial position and trajectory of the result of an element changing to a moved position. Generally, the moving plane of an element is irregular, it can be a curve, it can be linear, or it can be a combination of rotational motion, and diffusion can change; the change in its spatial position at the same speed can give people a strong Visual experience; text in motion changes the rhythm, and changes in color movies can create a strong sense of layering [11-13].

(2) Form and expression of plane elements

Such as graphic design, multimedia advertising design language must also conform to the rules of formal beauty. It is based on human visual experience. Through symmetry and balance, rhythm and rhythm, contrast and harmony design technology to optimize your design form to convey information, convey feelings, and display. Formal beauty of design. Plane elements are constantly moving and changing. Designers must not only comply with the symmetrical and balanced advertising design of the law, but also make reasonable arrangements. Pay attention to the different elements of management positions to ensure that they are constantly changing or even give people a sense of stability. In addition, the display advertising graphic design elements are more flashy, its

trajectory is diverse, and the changes are very rich. It constructs the picture due to the extra time and rhythm of the property situation, there will be more rhythm and artistic expression [14-16].

In the design of multimedia advertisements, the use of visual language forms and beautiful forms of aesthetic language often coexist. Visual images and sounds are combined to increase the attractiveness of advertisements. It is currently the most commonly used method for multimedia advertisement design. For example, each time the advertisement is fixed with a blue logo color, the order of things is based on the chronological order of seafood, sky, and product. When the characters appear, the position of the product is different, but when there are products, the screen is very simple. Yes, when the first two products appeared, the picture simply set the product through the means of optical density, the actual situation changed, and the visual performance was simple and clever. In addition, the ocean picture is particularly different: the diagonal line splits the picture, like the entire ocean dancing ribbon, the bubbles rising from the sun's halo sea festival, life, dreamlike, that is, to highlight the connotation of the product of the culture: dark blue The colored sea and the blue heart of Yanghe are wide and vast. As the screen turns off, it is full of strong and emotional advertisements. Therefore, this advertisement not only creates a comfortable and harmonious visual effect, but also contains strong emotions, and it is easier to impress the audience.

(3) Application of advertising ideas

There are many ways to design and produce multimedia advertisements. In many cases, through creative expression, it may not only deepen the audience's aesthetic experience, but also give more meaning and richness through interactive stories. Therefore, interactive advertising uses interactive creative thinking and expression elements, and multimedia advertising design is the most commonly used innovative method. From the perspective of the audience, it is necessary to express the visual elements of creative thinking interactively in the display advertising design. It is necessary to open up the channels of thinking through the audience and advertisements and the visual aesthetic standards in order to achieve the content of the advertisement that is in harmony with the audience. On the commercial display platform, the merchant can set up a projection device that enables the audience to use human and machine interaction: When people touch the machine, the screen will display various graphics as a new human movement, which can greatly improve the psychological satisfaction of the participants. Get good advertising results. Graphic elements in multimedia interactive application advertising reflect significant advantages in advertising entertainment. Appeared in advertisements, designers can change the shape and transformation through elements, another form of elements and achieve image space, horizontal expansion, this painting is full of imagination and meaning to life, as many TV channel packaging ads are used Coming from point to line, from line to surface, from surface to space and in a dynamic way, the space and distance of plane-like elements are deduced and sculpted to form impact and dynamic visual images, which is the meaning of using multimedia advertising elements [17-20].

In the design of multimedia advertisements, graphic language and copywriting and graphics constitute the entire layout, and they are displayed in front of the audience in different ways. In advertisements, graphics are displayed by vivid illustrations, which is a visual language compared to standard documents. For an advertisement, graphics are often the center of vision and sensitive areas. Because color and shape are the things that the most primitive elements of humans touch, people pay more attention to diagrams, and the degree of recognition and understanding deals with abstract writing faster. In addition, due to the appearance of graphics, color vision is more attractive and visually striking. Easy and lasting memory.

In the design of multimedia advertisements, the portrayal of details is very important, because the whole and the parts are interdependent, and some of them will react to the whole. Suzhou Net Garden is a typical example. It covers a small area, but the points that can be viewed are step by step, which makes people overwhelmed. Every detail deals with delicate and rich changes. The

features of Suzhou gardens are vividly portrayed by means of borrowing scenery, showing scenery, and having unique holes.

Lines of motion are also important in the design of display advertising. Designers and color painting and image processing, visual trend guidance, so-called trend lines should pay attention. The designer's style trend line also hints at the design direction of the viewer's eyes towards the screen. For example, indicating arrow signs should be obvious. In complex advertising screen configuration, more use of black or color images combined with visual image

3. Experiments

3.1. Experimental Settings

(1) Overview of the experiment

Multimedia advertising design, print advertising design, sample observance rules, visual communication of graphic elements, graphic visual communication, main laws of motion, law, space and form. In addition, people can, according to their own life experience, some elements have specific meanings, such as people seeing Chinese knots will think of China, seeing green will think of environmental protection. In view of this, advertising designers no matter what kind of graphic elements are applied, and must pay attention to follow these rules. Only in this way can the irritation of advertising design be enhanced, and they can better stimulate the aesthetic experience. This article mainly studies the application of graphic elements in the design of multimedia advertising. By studying the application space of graphic elements in multimedia advertising, it is found that multimedia advertising faces some problems when using graphic elements. This article mainly uses the method of big data experimental analysis, combined with questionnaire surveys, interview surveys, statistical analysis, graphic analysis and other auxiliary research methods. The research object is to study the application of graphic elements in the design of media advertising. Conduct actual surveys on multimedia advertising design companies, collect relevant experimental data for the application of multimedia advertising design, analyze and count experimental data [21-23].

(2) Experimental steps

A questionnaire survey was conducted for media advertising design companies, and the situation of graphic elements in multimedia advertising design, the application space of graphic elements in multimedia advertising, and the problems faced by multimedia advertising when using graphic elements were put forward. The role of elements in multimedia advertising, the status of development, the factors restricting development, and the dilemmas facing development.

Collect, statistic and analyze the questionnaires, analyze the application space of flat elements in future multimedia advertisements, development prospects and other issues when using flat elements in multimedia ads; analyze the impact of the role of flat elements in multimedia ads. The status of the development of elements, the factors that restrict the development of plane elements in multimedia advertising, and the difficulties faced by element development in multimedia advertising. Strictly discuss and summarize the analysis of the data, discuss the authenticity, reliability and rigor of the results; discuss some issues when using multimedia elements in multimedia advertising, and then focus on the prominent issues that face when using multimedia elements in multimedia advertising Summarize and propose corresponding solutions.

(3) Matters needing attention

1) Make sufficient experimental preparations before the experiment, set up the problem order and logical relationship

2) Analyze and summarize any problems that may exist; review the content, order, and words of

the questionnaire for errors; delete issues that have no meaning with the application of graphic elements in multimedia advertising; the survey target must be an advertising company Professional advertising person.

3) Summarize the survey data and its analysis results, use statistical related algorithms to summarize, use data simulation, and generate mathematical text.

4) Do a good job of computer data processing software programming and programming test, analyze the obtained data results and require backup to keep files [24-25].

5) When using network big data for analysis, it is important to reasonably deduce and analyze based on real-time data, so as to summarize all the conclusions needed for this experiment.

4. Discussion

4.1. Discussing and Analyzing Specific Data

Regardless of whether it is in print advertising design or multimedia advertising design, the communication of graphic elements is consistent and is for product sales, promotion, promotion and service. Graphic vision conveys the main laws of motion, elements, space and form. In addition, people can, according to their own life experience, some elements have specific meanings, such as people seeing Chinese knots will think of China, seeing green will think of environmental protection. In view of this, advertising designers no matter what kind of graphic elements are applied, and must pay attention to follow these rules. Only in this way can the irritation of advertising design be enhanced, and they can better stimulate the aesthetic experience.

The main body of our survey is professional advertising designers among multimedia advertising companies. A total of more than 100 questionnaires were distributed to the 10 advertising companies surveyed, and 89 valid questionnaires were recovered. By analyzing the influence of the role of graphic elements in multimedia advertising, the status of the development of graphic elements, the factors restricting the development of graphic elements in multimedia advertising, and the dilemmas faced by graphic elements in the development of multimedia advertising. Strictly discuss and summarize the analysis of the data. After careful analysis of the authenticity, reliability and rigor of the results, we found that among professional advertising designers, 95% of the application of plane elements is recognized, but they understand 60% of simple graphic element operations, 25% of intermediate graphic technology synthesis, and only 10% of those who can operate with complex multimedia graphic elements.

Table 1. Results of display advertising in experimental group

Simple understanding of flat elements	95%
Simple operation	60%
Medium technical operation	25%
Complex technical operations	10%

In the design of multimedia advertisements, the use of visual language forms and beautiful forms of aesthetic language often coexist. Visual images and sounds are combined to increase the attractiveness of advertisements. It is currently the most commonly used method for multimedia advertisement design. For example, each time the advertisement is fixed with a blue logo color, the order of things is based on the chronological order of seafood, sky, and product. When the characters appear, the position of the product is different, but when there are products, the screen is very simple. Yes, when the first two products appeared, the picture simply set the product through the means of optical density, the actual situation changed, and the visual performance was simple and clever. Based on the results of the recalled questionnaire. We found that advertising designers generally believe that visual effects have a particularly large impact on multimedia advertising. Among the factors affecting visual effects, image elements are the main elements. 40% of designers

consider image effects to be the most important, and 45% of advertising designers are Advertising designers who consider color to be the most important and account for text are only 15%.

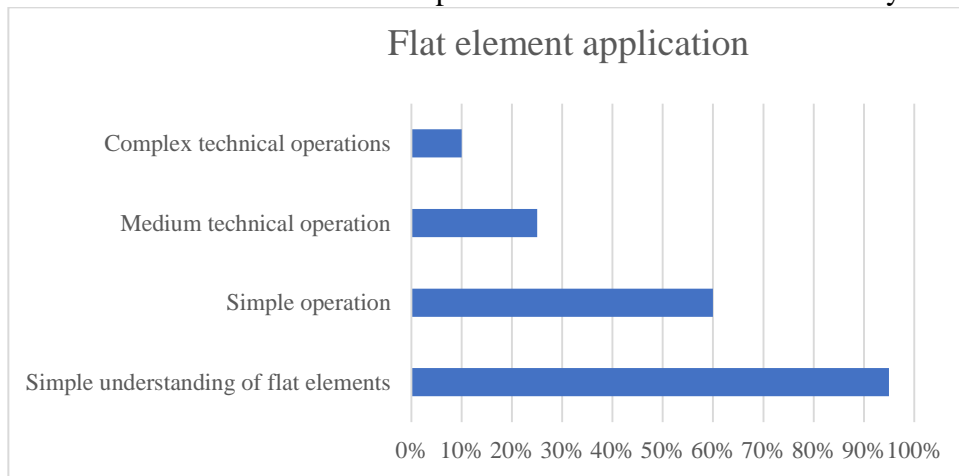


Figure 2. Flat element application

Table 2. Proportion of elements in visual effects

Image element	40%
Text element	45%
Color element	15%

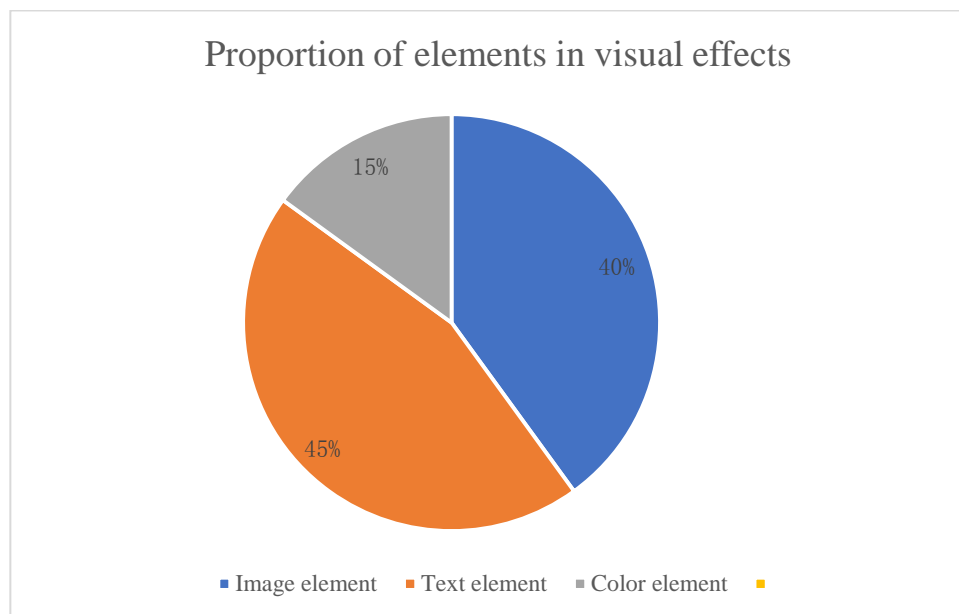


Figure 3. Proportion of elements in visual effects

The basic purpose of the application of graphic elements in multimedia advertising design is to improve the aesthetic value of media advertising and express the creative expression of multimedia advertising. Therefore, no matter what kind of graphic elements, the characteristics of multimedia advertising should be maintained. One-to-one-to-two-plane image transformation is not a successful multimedia advertising design. Graphical applications should be used as much as possible to show the advantages of multimedia advertising. The study found that ad designers who really understand

print advertising and media advertising have high-quality advertising works. Among them, 60 advertising designers from 10 advertising companies were interviewed. 35% were good at print advertising, 55% were good at media advertising, and only 10% were good at both print and multimedia advertising. The real situation is very grim.

Table 3. Proportion of elements in visual effects

advertisement making	advertisement making	People
Good at print advertising	35%	35
Excellent Long Media Advertising	55%	55
Good at both print and media advertising	10%	10

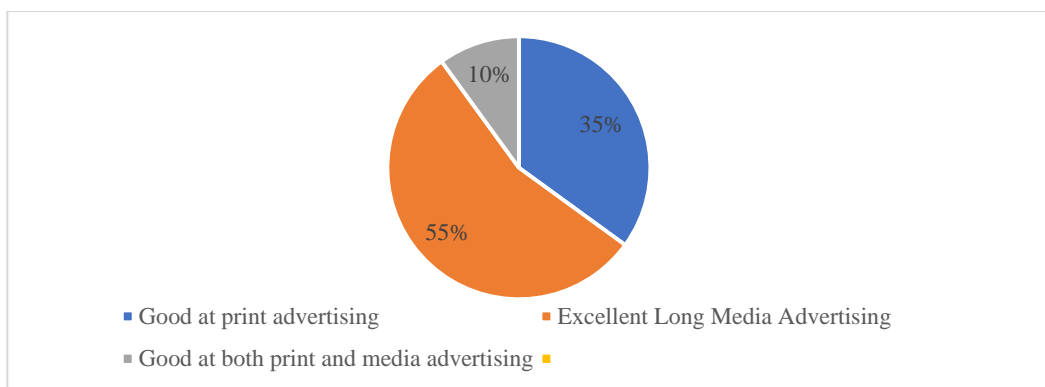


Figure 4. Proportion of elements in visual effects

Advertising creativity is the focus of design. Although the development of digital technology provides convenience for multimedia advertising design, artistic expression and creative design elements are still the most popular parts. Designers always want to follow the aesthetic rules of advertising art, and work hard to closely combine technology and art to create more excellent design products. For advertisers, multimedia advertising is definitely better than a simple print ad image or text ad to communicate information. The correct screen for color narrative deployment can better impress the audience than a monotonous static image. Therefore, when the designer considers the audience of aesthetic inertia and aesthetic psychology in advertising design in an all-round way, and strives to attract the audience through stream design, character design, and create a good visual effect expression. In this regard, we also launched a series of designers on the creation of outstanding advertising works, the proportion of graphic elements. After rigorous discussion and summary of the analysis of the data, and careful analysis of the authenticity, reliability and rigor of the results, we found that the more plane elements are applied, the higher the quality of the advertising work. From this we conclude that the future prospects of flat elements in multimedia advertising are very optimistic.

Table 4. The relationship between the application of graphic elements and the quality of advertising

application of graphic elements	the quality of advertising
0.5	2.5
1	3.7
5	10.5
7	15
10	20.3

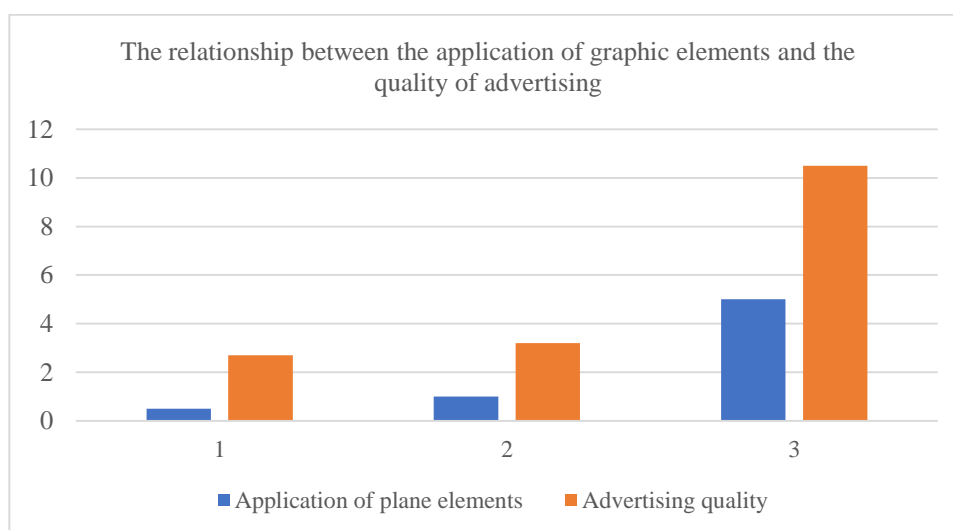


Figure 5. The relationship between the application of graphic elements and the quality of advertising

5. Conclusion

Design advertisements in the flat geometric elements are often expressed through visual elements, images, colors, and text. In particular, colors can highlight the visual effects of works, and are the most important visual elements in multimedia advertising. These visual symbols can convey enough information to create a deep visual effect. Therefore, in advertising design, designers prefer visual elements as important elements of creative design, and use visual elements to enhance users' understanding of advertising. Reasonably handling the relationship between visual elements, using dynamic interpretation of plane elements to attract the audience's attention, is particularly important in multimedia advertising design.

Einstein proposed in the theory of relativity: "It is not possible to explain the time, space and matter separately." Therefore, the application of dynamic plane elements cannot ignore the role of time and space. Space, that is, the form that exists in the target substance, is the substance of the process. The substance used as a flat element changes with time. The dynamic visual effect depends on the change of the two. Dynamic use of graphic design of graphic elements enables various life forces. The organization of various forms, the space between changes in body movements, and the elements of screen layout configuration elements will create a rich visual representation of the space between multimedia advertisements and improve the image of multimedia advertisements

Because of the development of multimedia technology, new power has been added to advertising design. From simple modification of the design, the visual and auditory images convey various sensory stimuli, such as the visual elements and processing expressed in multimedia advertising become an integral part of the entire advertising creative and design. The dynamic application of rich graphic elements in multimedia advertising and the richness of multimedia design content and expression language are particularly important. We should master the laws of design language in function and design, and modify the advertising design to adapt to new technology. Changes brought by the advertising industry. In short, the visual effects of display advertising and the performance of graphic elements are inseparable. The relationship between the visual elements of expression and reasonable treatment, using dynamic interpretation of plane elements to attract the attention of the audience, is particularly important in the design of multimedia advertising. Therefore, designers often follow graphic visual elements to communicate when designing display

advertisements, and boldly use rich multimedia content and advertisement design to create more outstanding multimedia advertising works.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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