## The Role of Compositing as a visual effect in enhancing advertising

#### message

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#### Abstract:

Digital compositing is an essential part of visual effects, (the merging between imagination and reality) has emerged in television advertising based on optical illusions using visual effects techniques, where the importance of visual effects lies on the ability to create many ideas that were difficult to implement in the past, as modern technology has been introduced in programs. The different visual effects and Chroma separation are a breakthrough that allowed filmmakers and advertisers to delete, add, or modify live footage scenes, and put all their imaginative and innovative perceptions easily and smoothly, it is impossible to implement or photograph on the ground, which saved the time spent, and the high production cost in the manufacture of the moving image, which affects the advertising message and the behavior of the recipient.

The visual effects have gone through many stages of development in the programs and technologies that were used in their application, starting from compositing techniques in their early stages and reaching modern technologies such as digital compositing programs, camera tracking, integration of 3D elements in the video scenes and their use in the production of television advertising to achieve the excitement required by the public, and how the digital installation has played a role in the development of the modern advertising image and the maximum benefit from technological progress in the world of visual effects and the programs used in all different stages of production, whether pre-production, production, or post-production, which is the stage in which the digital compositing is present as the last stage of the production of visual effects, in which the three-dimensional elements are combined within the video scenes or two photographic scenes are combined into one scene using many modern techniques in separating Chroma and green and blue screens and separating the different elements or by Rotoscoping technique. All this made it easier to implement all perceptions and imaginations in the ideas of the advertisement without restrictions to achieve the visual excitement required to affect the recipient.

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#### **Keywords:**

Visual Effects, Digital Compositing, Chroma Keying, Recipient Behavior.

#### **Introduction:**

The visual effects in television advertisements and their impact on the public have received the attention of a number of scholars in various scientific fields, and there is still a need for more studies, as the advancement of science and technology in recent years has led to the abundance of production and its diversity and the use of different techniques and consequently the crowding of markets in various Advertisements that provide various goods and services, and this was accompanied by a significant increase in the level of consumer culture, awareness, and the diversity of his needs and desires, which led to an increase in competition between marketers to meet these needs and desires and raise the level of the consumer, and these developments imposed an increase in the use of promotional activities Including advertising in terms of quantity, type, techniques used and modern visual effects to influence and persuade the consumer in an innovative artistic and creative way using all available mass communication means.

#### **Research problem:**

The research problem is in the importance of studying the different techniques of digital composition and visual effects and their role in shaping the behavior of the recipient. The research problem can be summarized in answering the following questions:

1- To what extent do the stages of producing visual effects affect the quality of the digital installation?

2- How do modern technologies and digital installation programs affect the content of the advertising message and the recipient?

#### **Research aims:**

1-The research aims to study visual effects and digital composition techniques and their impact on the advertising message and the behavior of the recipient.

Research hypotheses: The research assumes that:

1-The use of visual effects with modern technologies has an important role in supporting the advertising message.

2- Attention to the stages of producing visual effects affects the quality of digital installation.

#### **Research objective:**

The research aims to shed light on visual effects and digital compositing techniques.

#### **Research Methodology:**

The research follows the descriptive approach to describe and analyze some local and international advertising models and to clarify the impact of visual effects and their modern techniques on advertising.

#### Visual Effects Concept:

Visual effects are the set of processes by which visual scenes outside the realm of live photography are created or manipulated. Visual effect processes include combining live footage with industrial scenes in order to create an environment that mimics the real environment. The importance of the visual effect is in producing scenes that are not feasible to produce with live photography due to risk, high cost, or inability to represent the scene. The visual effect using computer-generated scenes (computer-generated images) has become more available to advertising makers following the spread of installation and animation. Visual effects can also be defined as the processes that depend on the creation of virtual processors for digital images after the initial production stage, often known by the acronym VFX, and visual effects dominate the image using a digital camera or graphic digital programs. Also exploitation of the latest technology allowed the processing technology to overcome difficulties, risks and high costs that it cannot achieve in the real world by adding these effects to the digital image. The International Design Journal defines visual effects as (everything that surrounds a person and works to attract his attention through visual perception, "and these effects communicate the message of the recipient directly or indirectly, and here we mean the techniques that are used to produce a visual formation. It is unrealistic, that is, it affects the viewer through the sense of sight, as it works to deceive the viewer's visual system.

#### The concept of Digital Compositing:

It is the combination and merging of two or more pictures or a sequence of pictures in one image. Digital composition has a critical role in today's production of visual effects. In addition to being an art form, the art of creating the perfect illusion, it is still a very technical craft, which involves knowledge of the various digital programs and processes behind it. Although the need to integrate a group of different elements and images into one, was in demand even before the digital age, tools and programs intended for this purpose did not enter the post-production market before the mid-1990s. The increased use of digital compositing can be explained by the fact that the vast number of advertisements, recent films, games and television productions contain many elements of fictional characters, figures, imaginary environments, etc. The presence of these elements raises the need to develop the technologies needed by digital installation as a stage of visual effects.

#### Stages of producing visual effects:

There is a need to understand every step of applying or adding visual effects to the advertisement. What is the role of the designer in these stages? as the designer must be aware of each stage of production that precedes or after its own stage, its timing and its impact on it in order to create a better and more efficient work. Therefore, the work must be consecutive, and each artist takes the stages of applying pipeline VFX visual effects into account, and if the opposite happens, many problems may arise, which may cause to repeat the process and all the stages again, which is very expensive to produce.

Any work based on visual effects is generally divided into 3 stages:

• **First**: <u>The Pre-Production Stage</u>: At this stage, the idea of the advertisement is developed, scenes that contain visual effects are written, budgets and delivery schedules are determined, and financing for the cost of the advertisement is secured.

• Second: <u>Production</u>: At this stage, the advertisement scenes are filmed, including those that contain visual effects (where the photography can be on-site, or in a studio, whether on decor or green screens.

• Third: <u>Post-production</u>: At this stage, visual effects are applied to the footage, sound and scenes agreed upon with the director and give the viewer the appropriate colors, and the advertisement becomes ready for distribution to channels or any other display medium. Although the stages of visual effects production touch every stage of the advertising industry process, the majority of the visual effects business takes place in the post-production stage. The digital Compositing is the last step in the implementation of visual effects. A compositor takes all the elements of an ad and places them on top of one another. It uses various elements such as color correction, masking unimportant objects in scenes and other tricks to create the illusion that all elements naturally belong together. It is possible to put an animated character in a live action scene, to be installed with part of the destruction on a specific building, or even to install a simulated tsunami on a city street in an advertisement or movie



Figure No<sup>2</sup>. (1) Visual Effects Pipeline.

In every movie or large commercial VFX visual effects are being used, as the visual effects allow unwanted objects to be removed, or other elements to be intentionally placed for different purposes, and often the viewer does not even know that some of the work was done in postproduction. Precisely implemented VFX visual effects improve the scene, advertise, simulate reality or achieve imagination, making the image appear richer and clearer, but sometimes VFX visual effects are widely used, especially those that make the image appear more complex and full of details, it can overwhelm scenes and create an unwanted backlash, this is often the case with inexpensive VFX visuals if they are not implemented properly.

#### Advantages of using visual effects:

Visual illusions, from their inception to our time, have helped in dazzling viewers and increasing the quality of advertising in all its forms and aspects. In addition to achieving many goals and its power to support the advertising message, which is the following:

1 - Less expensive than photography.

2 - Sometimes it gives a better result than the real shot.

3-The advertiser can get more than one shape and angle for his product (Figure 3).

4-It gives an effect in marketing and advertising campaigns and competition between products (Figure 4).



Shot 1 shot 2 Figure No. (3) TV commercial (2019) United States of America - Teaser for McDonald's ice cream.



Figure No. (4) TV commercial (2020) Egypt - An advertising campaign for the new city of Mansoura.

#### The relationship of digital structure in advertising to consumer behavior:

The consumption pattern of the individual continues from an early age, and is affected by many psychological, social and economic factors such as: imitation, simulation, commercial advertising, cash income and various media, so the influence of television and advertisements on individuals' consumption patterns cannot be neglected, and it often affects Advertisements in consumption patterns, and increase the random purchase of many individuals. What is meant by the term "consumer behavior"? it is that behavior that summarizes the process of purchasing various goods and services that individuals consider to be satisfying for their needs and desires, so they decide to buy specific quantities of them at specific times. The commercial advertisement that contains the digital composition as one of the visual effects includes a persuasive communication process aimed

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at influencing the minds of members of the consumer audience to elicit behavioral responses in the desired direction by the advertiser. This influence process depends on a persuasive mechanism through which one or more cognitive effects occur. It begins with introducing consumers to the advertised goods or services.

#### Digital Compositing and advertising message support:

The mental effects that visual effects, especially the digital composition through television advertising, have on consumers' behavior are of a cumulative nature, which helps to enhance and deepen the consumer content and deliver the advertising message (willingness or tendencies to act) that these effects imply on what drives them. Consumers ultimately have to adopt and buy the advertised good or service. To make commercials effective and support the advertising message, production companies use all the tools available to them. Production companies use psychology, use symbolism to impose desired feelings and ideas, and use visual effects and digital structure to implement the idea. Simplifying reality may give many benefits by making the message clear and easy to understand.

# The role of digital Compositing as a visual influence in expressing the dramatic dimension of the message:

Visual effects in advertising, especially digital installation, are a group of digital technologies that are used to add image processing that gives it a dazzling and attractive quality and shape, and it may help to create an imaginary world that has no actual presence in reality as something real and exists to serve the advertising idea and support advertising message in form and subject. With the technological development, an unlimited amount of digital capabilities has been provided that provides endless solutions of visual effects and processors with high quality, time and little effort in one, and given that the advertisement depends on a major champion, which is the advertised product with a set of elements surrounding it, whether Backgrounds or formative elements and a set of influences that help support the idea of the product or the advertised topic (Figure 5), this is in addition to the surrounding environment that would highlight the topic and focus the vision on it or confirm its relationships with respect to other elements that may have a role within the interaction. The advertisement serves as a whole and increases the recipient's interaction with it.



Figure No. (5) TV commercial (2019) USA - Doritos and Mountain Dew advertising campaign.

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#### The effect of digital composition on ad credibility:

The use of merging as a visual effect emphasizes the importance and heroism of the product in design dramatically, by visually emphasizing the embodiment of the dramatic conflict within the advertising event. In the past in works of Islamic and Coptic heritage, for example, drawings that refer to the prophet's paint halos of light around shapes to hide them and giving a sense of spirituality, as well as other methods are used, such as giving the figure the hero of the painting the color of heroism to highlight it as an essential element. Here the eye is deceived to go beyond the limits of reality (the logical knowledge of the mind), which forms a method of visual deception. Since the visual effects have become one of the symbols that are used in a scientifically thoughtful way as an aid to convey the idea of design and serve the message that the advertisement aims to, that science and art use a set of signs and symbols in order to convey the meanings, and the visual or special effects have become to achieve the uniqueness and novelty within the idea. Design, especially after breaking into the field of computer graphics for this<sup>5</sup>field and its capabilities.

#### **Digital Compositing techniques:**

A- Separating blue and green screens Keying

- B- Rotoscoping separation process
- C- Rig and wire removal
- **D-** Get Clean Plates
- E- Tracking

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#### **Conclusion:**

The use of visual effects and digital composition led to a positive impact on the recipient, supported the idea of the advertisement, and gave a great deal of imagination in the implementation of the advertisement.

• The use of modern software for digital installation in facilitating the merging process between 3D elements and the live scene to obtain one high-quality scene.

• The great development in visual effects and digital installation contributed to the ease of implementing any innovative advertising idea and realizing the imagination, which led to the enrichment of ads with imaginative ideas that became easy to implement with high technology and credibility with the viewer.

• The use of visual effects in an exaggerated manner may affect the communication field and increase advertising costs, while it can be dispensed with and implement a better idea to deliver the advertising message.

#### **Suggestions:**

1. We recommend that the specialized colleges of art should add courses to study the visual effects of art students.

2. The necessity of conducting more researches and studies on the digital installation process, which may help in improving the production of dazzling advertising images with the least capabilities and ease of implementation, in order to present everything that is new to the public.

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