

## **The Importance Employing of the Digital Compositing Art for Visual Effects in Television Advertising Design**

**Assist. Prof. Dr. Mohamed Sherif Sabry**

Assistant Professor, Advertising Department, Faculty of Applied Arts, Helwan University

[smrsabry90@gmail.com](mailto:smrsabry90@gmail.com)

**Assist. Prof. Dr. Neveen Mohamed Ahmed El Refaie**

Assistant Professor, Department of Advertising Production, Media Sciences Division, International Academy of Engineering and Media Sciences.

[Neveenrefaie2@gmail.com](mailto:Neveenrefaie2@gmail.com)

**Lect. Lina Atef Abd- Elaziz**

lecturer, Advertising Department, Faculty of Applied Arts, Helwan University

[Lina\\_atif@yahoo.com](mailto:Lina_atif@yahoo.com)

**Researcher. Hamdy Ragheb Salem Al- Driney**

Head of Graphics Department - Media Production City

[Hamdchee@yahoo.com](mailto:Hamdchee@yahoo.com)

### **Introduction:**

Recently, the phenomenon of digital synthesis (merging between reality and fiction) has emerged in television advertising based on visual deception using visual effects programs. Visual tricks have relied on traditional and simple methods since the Pharaohs era, where all their perceptions and works were recorded through photography (sculpture - With the advent of photography, it was the beginning of the emergence of tricks when (Peter Mark Roget) \* announced the theory of the continuation of vision for moving objects in 1824, and (the brothers Lumiere) \* succeeded in the presentation of the first commercial cinema in the world was in December 1895, displaying 24 images in The second is just the human eye Al-Ahsa Bhetwasal movement in front of her.

Contemporary technology has made a big leap in the thought, and the art of advertising as a result of the technical, industrial and technological changes that have taken place in the world and electronic computers and others, emerged digital technologies that enabled the filmmakers and digital advertising to delete, add or modify in live scenes, and put all their imaginative and innovative visuals with ease It is pleased, it is impossible to implement or photographed on the ground, which saved the time taken, and the high productive cost in the motion picture industry.

Computer graphics and visual effects are an essential part of digital advertising and the film industry, and although they have allowed the designer new horizons and possibilities to deal with visual elements in a creative manner, the current artistic production does not reflect the optimal utilization of the different possibilities of these technologies in the field of advertising. TV.

The evolution of the design of the advertising industry in general and television advertising in particular, resulted in the development of modern methods and techniques with multiple artistic and aesthetic effects, including digital installation technology, which has a significant impact in the design of television advertising, by introducing 3D graphics into the realistic

picture to produce a masterpiece of advertising To convince the viewer to use this technique is considered a new method of combining reality and fiction, to enrich the innovative process and imaginative fascinating and exciting, as a result of the increasing popularity of viewers on ads of this kind, which have a psychological and cognitive impact Yen interacting with them.

### **Reasons for choosing a search:**

- 1.The need of the advertising scene to develop in line with modern development, and the ability of the art of digital Compositing to implement a technical development to see the advertising scene.
- 2.Lack of familiarity with some graphic designers with operational techniques related to digital Compositing, and its ability to implement the final declaration of the highest visual quality.
- 3.The need for continuous creativity in television advertising, and the ability of the art of digital Compositing to create unique creative ideas.

### **Statement of the problem: The problem of research can be formulated in the following questions:**

- 1.How can the digital Compositing be utilized in creative ideas for television advertising?
- 2.How can reality and fiction be integrated into the design of television advertising through the art of digital Compositing?
- 3.To what extent does digital Compositing achieve a unique visual image of a TV ad?

### **Significance:**

- 1.To study the technical development of TV advertising design through the capabilities and capabilities of the art of digital Compositing, in order to achieve the creativity and visual image of television advertising in the digital age.

### **Objectives: The research objectives are:**

1. Take advantage of the capabilities and capabilities of the art of digital installation to enrich the visual image of television advertising.

### **hypotheses:**

- 1.The art of digital Compositing achieves a great deal of creativity in the television advertising image because of its advantages and possibilities beyond the limits of reality.
- 2.Reality and imagination can be incorporated into the design of television advertising by making use of digital Compositing art.
- 3.A unique visual image of the TV ad is realized.

### **Methodology:**

Descriptive analytical.

### **Summary:**

Nowadays Digital Compositing is widely used in the production of visual effects (optical illusion), whether in television programs, video ads or movies, the aim of this process is to combine two or more images into one image, in other words it can be said that the idea The key behind the synthesis is the idea of portraying events that never and never will happen in the real world (falsification of reality).

Visual effects (VFX) are the driving force and economic aesthetic of the advertising industry, which are increasingly used as tools to influence audiences and television viewers and commercials on the Internet, and VFX was invented at the end of the nineteenth century by the French George Millia, who was very impressed with the effects. The visual tricks soon had a studio where they explored all sorts of ways to fool the viewer and thus create (VFX).

From the earliest days of filming, filmmakers have sought to capture scenes that combine the real environment with high-quality visual effects, so that the public cannot determine what is true and what is magic deception, this research gives an overview of the digital structure, which contributes significantly to the visual dazzling of television advertising, providing a basis for creating visual effects for the optical illusion of motion picture.

### **Key words:**

Digital Compositing – Visual Effects - Color Grading – Color Correction – Rig Wire Removal.

### **The beginning of Compositing art:**

Before the advent of feature films, artists' interest increased to show something to the public that never happened, for example the work of the Swedish photographer Oscar Gustave Rejlander, produced in 1857 and named *Two Ways of Life*, in which Regelandler collected several separate images and made them in one world, all of these characters look in one room and simultaneously interact with each other, and this process is called optical compositing.



**Figure (1) - Two Ways of Life, Regelandler 1857.**

Figure 1 depicts the figure of a father leading his children towards manhood asking them to choose between vice, gambling, wine, prostitution to the left, virtue, religion, industry and family to the right. One technician.

### **Digital Compositing:**

The process of merging visual elements from separate sources and unifying them into a new visual element, which appears to have been filmed at the same time under the same lighting and camera conditions. The purpose of the installation is to either improve the overall appearance of the visual element, or create the illusion that visual elements from multiple sources exist in the same scene. The digital installation of scenes is one of the most important

steps in the post-production process, combining many shots filmed at different times and places in one artwork, such as combining computer graphics with real shots using installation software, high-quality footage was provided for many movies And ads to an audience who can't detect that these footage is not real.

### Types of digital Compositing:

It is divided into two different types (two-dimensional and three-dimensional structure), but in this study we will focus on the three-dimensional structure, through which we will also implicitly review the two-dimensional structure as an integral and integral part of the digital structure.

### 2D Compositing (still image):

Combine two static images into a single image, or merge multiple layers of images, to print static images in ads, and other content for printed publications, websites, and applications. This type is used in many unlimited tasks such as: changing the scene, adding or duplicating elements, Replacing existing elements or parts of the image, etc., and is also used in animations, where elements and backgrounds are divided into parts to make it easier to move parts smoothly without reverting to repainting unchanged parts, and depth in backgrounds can be simulated by moving Layers at Brain Rates Roll and suitable in the distance, a technique known as parallax and is often implemented in the composition of animation, as in Figure 4 of the Etisalat Declaration, and to achieve high quality in the installation process, several characteristics should be taken into account such as: the direction of the intensity of lights and shadows, the reflected color spectrum Of the lights.



Figure (2) - Screen Shot for an Etisalat advertisement showing the installation and dual motion of flat still images.

### 3D Compositing:

Is the integration of 3D elements with 2D images or 2D images can be placed within 3D environments, often including live video or photographic images and computer-generated virtual images and combined together in a single image or scene, often this type of Composition To create still images that include various components in a single image, where they can also be used in the post-production process of movies or television programs to

mount different elements in a video sequence, three-dimensional composition is often different from two-dimensional composition in a way, which can make the process The composition of the different layers is more realistic, affecting each other.



Figure (3) - Composite 3D elements with 2D images and live footage into the Chips Tiger ad.

### **Digital Compositing capabilities:**

Compositing programs offer many tools and capabilities that enable designers to implement the difficulties they face during work, which are represented in several forms, such as:

#### **Rig and Wire Removal:**

A visual effect technology to remove wires used during live photography, originally used as a precautionary measure to provide actors' safety during a repetition of complex motion with scene elements such as flight simulation.

#### **Live Action Editing - Clean Plates:**

The process of removing some unwanted elements of the scene is similar to the process of removing wires, and the amendment to the most important parts of the live motion board, the presence of strange elements in the scene or replace and change these elements.

#### **Color correction:**

A technical process to adjust the lighting and color appearance of each shot to meet a uniform and consistent appearance, where it fixes the color problems and make the shots look as natural as possible, the idea is that the colors look clean and true as you see human eyes in the real world.

#### **Color Grading:**

A process that determines the creative appearance of a film after the completion of all visual effects. It is a major concern because it adds ambience and emotion to the footage by coloring the footage in new and often abnormal ways.

#### **Results:**

- 1 .The digital Compositing of the live advertising image allowed to add all the interesting and exciting mental imagery and imaginations that achieve the required excitement.
- 2 .The integration of visual effects and animation of television advertising, has become easier and faster than before, due to the existence of multiple installation techniques and programs
- 3 .Digital Compositing is an integral part of the production process of TV commercials, which are always needed and irreplaceable.
- 4 .The digital compositing of the TV ad added the possibility of controlling the image quality and characteristics of color correction, adjusting the intensity of illumination, removing impurities and so on, this gives a striking aesthetic dimension.

5 .The combination of graphic elements with live scenes through layers and channels, allowed designers to modify the image with ease, which saved at the time of the integration process significantly.

6. The direction of advertising design is generally digital, because of the presence of tools and capabilities, which allows designers to provide composite images of high quality, and in a very short time.

### **Recommendations:**

1 .Conducting more research and studies on digital compositing technology, which helps to improve the production of dazzling advertising image with the least potential and ease of implementation, to provide all that is new to the public.

2 .Take advantage of digital compositing technology, which is part of the production process, so as to increase the effectiveness of television advertising based on the integration of live image with fun visual effects.

3 .Designers should study in depth through the separate layers and channels of the image, which enable them to increase their skill in the installation of scenes and fake graphics with very high accuracy, without knowing what is real and what is false.

4. The need to increase the production of animation ads through the technique of two-dimensional Compositing, because it has a special character in the beauty of the design and movement of images in a funny way and the simplicity of the production cost, as in the advertising of Etisalat, which was mentioned earlier.

### **Arabic References:**

1. Sabry, Sherif. Mozakrat El Moaserat El Basariea, Mozakerat Gher manshora, Kolya El Fenon El Tatbiqiya, Gamet Helwan, 2017.

### **Foreign References:**

2. Ostashewa, Alexandra. DIGITAL COMPOSITING IN THE VFX PIPELINE, Bachelor's thesis, Tampere University of Applied Sciences, 2015.

3. A. Okun, Jeffrey & Zwerman, Susan. The VES handbook of visual effects, Focal Press.inc, 2010.

4. Gress, Jon. [digital] Visual Effects and Compositing, New Riders, US, 2015.

5. Robbins, David: Vfx Artistry: A Visual Tour of How the Studios Create Their Magic, Oxford: Elsevier, Inc, 2010.

6. Dinur, Eran. The Filmmaker's Guide to Visual Effects, The Art and Techniques of VFX for Directors, Producers, Editors and Cinematographers-Routledge,2017 .

7. Kala, Abhishek. creating a Workflow for Integrating Live-action and CG in Low-cost Stereoscopic Film Production, Master thesis, Auckland University of Technology,2010.

8. Birn, Jeremy. Digital Lighting and Rendering, New Riders, 2006.

9. Brinkmann, Ron. The Art and Science of Digital Compositing, Oxford: Elsevier, Inc, 2008.

10. LoBrutto, Vincent. THE Filmmaker's Guide TO Production Design, Allworth Press, New York, 2002.

**websites:**

11. [http://blogs.academyart.edu/ph692-resources/blog/2016/02/who\\_s\\_the\\_fatherof.html](http://blogs.academyart.edu/ph692-resources/blog/2016/02/who_s_the_fatherof.html), (accessed July 20, 2018).
12. [https://www.youtube.com/watch?v=6zFVPU8V-\\_Y](https://www.youtube.com/watch?v=6zFVPU8V-_Y), (accessed August 28, 2018).
13. <https://www.autodesk.com/solutions/Compositing-vfx-software>, (accessed August 29, 2019).
14. <https://www.theserverside.com/definition/compositing>, (accessed August 8, 2019)
15. <https://www.wisegeek.com/what-is-3d-Compositing.htm>, (accessed August 8, 2019)
16. <http://www.postproductioninstitute.com/blogs/differences-visual-effects-video-editing-motion-graphics-photo-editing-and-Compositing>. (accessed August 11, 2019)
17. <https://knowledge.autodesk.com/support/maya/downloads/caas/CloudHelp/cloudhelp/2015/ENU/Maya/files/GUID-9BF67900-7FD6-463C-A8C9-9D29B95FC535-hm.html>, (accessed June 25, 2019)
18. <http://members.iinet.net.au/~multispud22/lahl/tutorials/Multipass/Multipass-intro.htm>, (accessed June 30, 2019).
19. [https://www.fxguide.com/featured/the\\_art\\_of\\_wire\\_removal](https://www.fxguide.com/featured/the_art_of_wire_removal), (accessed August 29, 2019)
20. <https://wolfcrow.com/what-is-color-correction-or-color-grading/>, (accessed August 30, 2019).
21. <https://www.studiobinder.com/blog/color-grading-vs-color-correction-process/>, (accessed September 5, 2019).
22. <https://learning.linkedin.com/blog/design-tips/color-grading-vs--color-correction--what-s-the-difference->, (accessed September 5, 2019).
23. <https://www.studiobinder.com/blog/color-grading-vs-color-correction-process/>, (accessed September 6, 2019).
24. <https://www.pluralsight.com/courses/clean-plating-feature-films-nuke-mari-bridge-1591>, (accessed September 8, 2019).