The effectiveness of using 3D programs to express the reality of the form in TV commercial advertising

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Introduction
Recently, there has been a tremendous development in the field of TV commercial advertising, forcing specialists to break out of the traditional style of implementation. The field of advertising has been influenced by some intellectual and technical changes. Digital programs, especially 3D programs, have become an integral part of the designer's tools to formulate a thought in the design process. And helped the Designer to find accomplishment methods that were difficult to express by traditional means. And the presentation of ideas in the form of simulation of reality and achieve the best results with less effort and less expensive in addition to the aesthetic values and technical of advertising, with the technological development of programs in the TV commercial advertising opened a new world showed the extent of technical possibilities made available to these programs to exploit the capacity to produce more dazzling works To the utmost realism to convince the recipient of the product.

Research Problem
The Great development has contributed in digital 3D programs In a manner influential in the field of television advertising has made it clear that the field has benefited greatly from this development. Here we ask how effective these programs are in the commercial TV advertising field and what has it added to the field as an alternative method of traditional style?
If the great development

The importance of research
- Highlight what 3D programs have added of exciting artistic values in this field and simulate the product into reality
- Identify the alternative accomplishment solutions for TV commercial advertising in traditional style.

Research hypotheses
Study the effectiveness of using three-dimensional programs to express the reality of form in TV commercial advertising.

The research methodology
- The researcher followed the analytical descriptive method for the announcement of the Mercedes E class car, and the description of the technical elements of the different stages, which were affected by the addition of the development for it In a scientific manner to serve the idea of research.

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Technology has the ability to reshape human consciousness and awareness. Through digital systems, technology has attracted attention and stimulated the movement of works of art, especially in the field of television advertising and has become a stage of digital technical competition, which requires keeping pace with technological developments in the speed of development. 3-D programs in TV commercials The designer's freedom to create and express the dramatic meaning of the idea to achieve realism, but it is not realistic in the traditional sense, but virtual reality is the embodiment of imagination, and if the process of design and application was adopted primarily in its evolution on technological progress, Found, confirms that the real changes in the course of art and industry of television advertising were caused by a change in techniques and tools. The three-dimensional programs came to solve all the problems faced by the advertising designer, which hinder his freedom of expression. The road helps save time and ensures the quality of the results.
The research shows how effective these programs are in the commercial TV advertising field and what has it added to the field as an alternative method of traditional style? Therefore, some of the axes related to the hypothesis of research were clarified.

Firstly: Commercial Advertising
Is a mix of movies or promotional videos. Serves the dual purpose of providing entertainment and advertising to the recipient. Commercial advertising is an important and influential tool in various business processes. Is a means of communication that depends on the impact on the recipient through the use of one of the promotional means available to build communication between consumers and products. Advertising is an expression of the way the buyer is influenced by the application of a variety of non-personal means and methods to convey ideas and promote products and services. The characteristics of a successful commercial ad are the ability to influence the consumer, improve market purchases and improve the mental image of the audience that increases the consumer's desire to obtain goods.

Second: Commercial TV Advertising Definition of television advertising
Television advertising is a collection of various artistic means used during the time that is sold from television to the public in order to identify a good or service in the form of content that affects information, tendencies, values, consumer behavior and other cultural means.
Digital factors are one of the most important factors affecting commercial advertising, and the factors are developments resulting from the emergence of modern tools and means of production. The most prominent of these techniques is the exploitation of three-dimensional programs such as the process of design and implementation of the product and display graphics in a realistic way.

Third: Realistic three-dimensional Computer fees
When we talk about 3D programs, we are talking about vivid images that require multiple steps of design processes to transform 3D drawings into animations in a real way. Digital
technology has changed many of our ideas about reality, knowledge and truth and eliminated the boundaries between visual and real.

Three-dimensional computer graphics have become one of the most important areas of privacy and excellence, including studies, techniques, methods and software that generate, construct, modify, manipulate and display 3D objects and objects through 2D media. Dimensions have location characteristics, color, and brightness, the pixel in the 3D graphic drawing need to add a depth property that points to the location of the point on the imaginary axis Z.

![Figure no(1)](image)

**The figure refers to the location of the point on the Z axis "depth"

The use of 3D programs in commercials and the development of their methods have created attempts for modern art based on creating a new world with an inner vision that lives and lives with a new world made by the artist. The three-dimensional method used in the implementation features important new features such as artwork, to achieve the fantasy reality and thus increased the value of the technical experience within the artwork.

**Fourthly: 3D Digital Software**

As previously stated, computer graphics three-dimensional one of the most important areas that enjoy privacy and excellence. This field includes studies, techniques, methods and software that are concerned with the generation, construction, modification, processing and display of objects. When many 3D pixels are assembled, the result is the appearance of a three-dimensional surface, and the resulting surface can also have many additional properties such as shade and texture. Designers have many 3D programs to use in the design and implementation of commercial advertising, such as:

- **Blender**: A studio for animation, design and 3D materials. It contains many advanced complex applications such as 3-D visualization of 3D painting, with the possibility of dynamic action of soft and solid objects and similar liquids.

- **Autodesk Maya**: One of the most widely used 3D programs, it has unique animation capabilities, key framing keys and tools for expressions.

- **Autodesk 3ds Max** is one of the most important programs for the design of 3D objects, whether they are figures, decorations, landscapes or superstitions. This program allows the design of any object that the designer imagines, as well as the ability to move and control the
lighting and add contact with different materials of any color or color design. The camera can be moved in all directions.

- **Vue**: a program that specializes in the work of backgrounds and through the construction and hardening of backgrounds with various materials after the design and use of programs, either by the Declaration of Life "" to complement the background of the picture before in the scene or to be a completely new background in addition to give the color and texture and visual reflections needed such as lighting And different ambience such as desert or ice ... etc. along with camera movement.

**Fifthly: The effectiveness of using a three-dimensional Computer Fees in the field of commercial Tv advertisement**

The three-dimensional ads have made great changes and developments in the world of advertising, which relied on a realistic imaging system only with limited camera movements to illustrate the possibilities or qualities of the product to the recipient.

The role of three-dimensional graphics in the commercial television industry has emerged, leading to a successful and creative work because modernity in the artistic aspect is the secret of creativity, and here is the beginning in the planning of the work and the story and the concept, where the designer in the processing of the product and the backgrounds according to the type of plan and objective Of the advertisement.

The designer then moves on to use the latest software programs that have developed a lot of 3D rendering.

The innovative process begins with the development of technical strategies and techniques that help achieve the objective of realism of the form provided that it has a global level of creativity and achieve the objectives of innovative marketing of the product. The ability to implement the most complex details of many scenes without limits.

The factors of visual, chromatic, optical, and optical excitability, movement with their different patterns and sound effects play a major role in shaping the shape in light of the large changes that have been made by technological developments in the field.

Technology creates new realities, interactive modernity is embodied only through technological possibilities, the relationship between them is strong and constantly changing and renewed.

The three-dimensional programs have added a new element that has become one of the most important tools of the artist of the image, which has given him a greater and greater role than the ability to achieve a great deal of visual eloquence that he seeks to achieve, which opened up his uncommon horizons of control of all its elements, Has the potential to reshape the content and digitally modified by different visions, which confirms that we are dealing with this art in a language more different and more controlled in its vocabulary. "We can say that the term means to achieve the goal prescribed through organized scientific steps subject to theoretical framework starts but the achievement of three Tasks are a:
The figure shows what achieved by digital technologies in the artwork
Digital 3D programs reduce the effort and difficulty of photography in the traditional way and allow the variety of movements and angles of the camera without problems, exciting and enjoyable and can not be controlled beyond the limits of imagination. It also has the ability to design different backgrounds and give different touches and materials to create, design and simulate the natural backgrounds of desert places or glaciers, etc., as well as give the lighting and control in proportion to the environment around the product more accurately and more dazzling. The process of conversion or processing is the calculation of lighting and shadows and patterns and colors used in the design as well as calculating the movement of the elements of the engine, but you get a series of two-dimensional graphics in a large and consecutive affect the realistic scene we want.

The researcher analyzed one of the most dazzling commercial ads implemented in a three-dimensional program is the Mercedes-Benz E-Class.

https://www.youtube.com/watch?v=6KcMN_ePqoM.

The various stages in which the ad was implemented were analyzed and described creatively.

Conceptual art: The drawing of paintings gives us clearer images of the shape of the work on the screen, we try to imagine a variety of screen shots before we start producing the same work.

Character design: Character or product profiles are defined from different modes and angles model sheet and in different expressions Expression sheet.
Figure shows the Character design style to draw and determine the shape of different situations.

**Background design:** Conceptual art is used at this stage to design the final shape of the background used in the work. The designer then adds the appropriate materials to the shapes, such as rough rocks or adding trees,). The background may be drawn on one layer or on several layers in the case of the most complex and visually rich scenes that require camera movement. The simplest example of multiple layers of backgrounds is the element layer near the front camera and the middle dimension layer layer of the middle center or away from the background.

![Figure no (4)](image)

The figure shows the design of the backgrounds and the addition of the appropriate touches to the scene.

- **Visual effects:** It means adding effects such as wind, gravity, fog, rain and other effects that we need for the scene.

- **Animate:** the most important stages and at this stage the engine to move parts of the structure - and here requires professional to simulate movements of the body realistically.

- **Lighting:** In which the scenes are illuminated to give realism by interacting lighting with the materials of each element of the, and through the program can control the location of the light and the size and strength depending on the scene required and what requires confirmation of the specifications of the product.
The figure shows adding visual effects "rains" as well as adding the required lighting. The car's characteristics are explained in greater detail: the speed of the car and the safety of children and animals. Two methods were used for the first method to add human characters whose shapes were simulated through the program. The other method used is chroma. The dog was filmed and explained the stability of the car without being affected by speed and safety.

The figure illustrates the use of the traditional method of digitally digitized characters, movement control from within the program, chroma use to allow transfer to the program, and the addition of the elements required to complete the scene format.

Results
- The dramatic evolution of television advertising, coupled with the novelty of 3D programs, has helped produce a new version based on true digital pleasure.
- A ability to express reality and keep it easily and quickly and achieve and save time from its predecessor.
- 3D software has added a new element that has become one of the most important tools of the image artist, giving it a bigger role than the ability to achieve a great deal of the visual pleasure.
**Recommendations**

- The need to develop curricula in specialized colleges, including the rapid and advanced technological development in digital media, especially three-dimensional programs and their impact on television advertising.
- Create a competitive competition specialized for the production of such advertising.

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