THE DIGITAL REVOLUTION AND IDEOLOGIES OF THOUGHT AND CREATIVITY IN GRAPHIC ARTS

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ABSTRACT

What the scientific tide and digital revolution presented of methods and ideas for the structural and aesthetic construction of the workspace is what we will notice in this research by standing on one of the contemporary arts, which I borrowed from the digitization, which is the digital art that means the set of means that a person uses to reach a dramatic result using the computer Automated, The researcher has developed an equation to elicit the aesthetic concept of graphic artwork through the digital media used (digital art x digital environment) =the resulting digital product=new visual values, digitization has become as a technique in graphic arts based on digital materials, as the French philosopher "Pierre Levy" explains. the researcher here represents "Art project",'' Augmented reality'' interactive application, shown at Venice biennale 56th, Egyptian pavilion as a practical Methods of the research in those digital experiments.

KEYWORDS

Graphic Art, Digital Art, Augmented reality.

PREAMBLE

The artistic effect, with its various manifestations and formal and substantive data, is an essential component of the subjectivity of interaction, as it is a product in which the language of thought and matter is firmly established, translating the artist's position and vision towards the sensory and emotional contexts. Art as a sensory and material fabric that the creative artist yearns for as a way through which he imposes a formative dictionary through which he can build the act of creation and creativity that is surrounded by harmony within the dialectical relationship between the contexts of thought and matter.

But the question here is about what art is and to develop it (epistemologically) and (materially), according to the stakes of the times, where many changes and transformations occurred in the level of the conceptual and idiomatic framework (cultural and political terminology), and it is not possible to risk or overlook these details and the branches that went with and accompany contemporary art and digital art in particular with regard to It is a field that drew its dimensions and significance from the system (postmodernism), which in itself represents a goal in the artistic area based on intellectual and visual communication. Where science and art were finally able to reach the highest levels of mixing to achieve the most beautiful image, embrace the products of reason, and the fruits of conscience to advance civilized human values, and deliver a better life for man on this earth.

STATEMENT OF THE PROBLEM:

The research problem is looking for answers in this following question:

- What is the role of technology in contemporary graphic arts? And how did some arts rely on it, such as building a virtual environment with particular aesthetic values?

Objectives:
- Learn about graphic arts in the digital environment.
- Find interactive content between the digital environment and graphic arts.
- Learn about the aesthetic values of digital graphic arts.

METHODOLOGY:

The research follows the descriptive method and analyzing the content of the models presented objectively and a practical experiment.
- **First:** Defining the digital environment.
- **Second:** Visual graphic arts in the twenty-first century.
- **Third:** Virtual reality and graphics programs used in the artwork.
- **Fourth:** The practical framework of the research (the subjective experience of the researcher "Venice Biennale 56th 2015" installation project.

ANALYSIS:

The author found (8) main ideas about (The Digital Revolution and Ideologies of Thought and Creativity in Graphic Arts).

List the main idea: One of the ideas is based on "studies done by researches, they analysis the history of graphic art, the digital revolution in the 21st, and reflect of technology in the visual arts"

LITERATURE REVIEW:

1. **According to (author/ Steven baker), (Date/2008): the main idea about this subject is:** (the sign of the self in the metropolis), the journal of design history vol.3, No.4, Oxford University Press
   academic-oup-com.eres.qnl.qa/jdh/issue/3/4(1/2/2020).
   List of facts support this idea: this is very significant because it helped to start a new era, where images could be used for more than just religious texts, or a description of an ancient legend, but a way to capture what a graphic identity in the graphic art, whether it is online or print or in tv, graphic considered the principal art form that affects our ideas and the way we view the world.

2. **According to (author/Anne-Marie Duguet), (Date/1995): the main idea about this subject is: (**La collaboration entre artistes venant de champs**)**
   https://esse.ca/fr/la-question-de-lart-video(14/2/2020).
   List of facts support this idea: Anne-Marie Duguet can prove to be more enlightening to understand the concept in the context of artistic creation. Through these different approaches, it will be a question of seeing how the term renews the approach to the installation by increasing it by an operational dimension. In addition, of how put the artwork in interactive vision and the visitor be part of it, Is it possible to find methods that allow us to work here and now? How do the devices operate?

3. **According to (author/** Donnie O'Quinn**), (Date/**1998**): the main idea about this subject is: (**Digital Prepress complete**)**
https://www.abebooks.com/9781568303284/Digital-Prepress-Complete-Donnie-OQuinn-1568303289/plp(22/2/2020).
List of facts support this idea: The authors start off with advice on setting up a digital environment with the right hardware and software and move on to managing arts, using it, scanning, working with color, laying out pages, trapping, and preparing files for output.

4. **According to (author/** Reid Anderson**), (Date/**2007**): the main idea about this subject is: (**Digital Prepress complete**)**
in his book, taking readers step-by-step through simple, straightforward methods for producing the highest-quality digital artwork once an image is created on screen. Coverage explores the best type of software to use for optimal results at each stage of the prepress process, the advantages and disadvantages of different proofing methods, steps designers can take to ensure that their artwork prints correctly, and much more.
https://scholar.google.ca/citations?user=S0jJyVUAAAAJ&hl=en#d=gs_md_cita-d&u=%2Fcitations%3Fview_op% (1/3/2020).

5. **According to (author/** Mike-Rossner, Kenneth-M. Yamada**), (Date/**2004**): the main idea about this subject is: (**What's in a picture? The temptation of image manipulation**)**
Here we present some general guidelines for the proper handling of digital image data, and the effect of technology at graphic art.
https://rupress.org/jcb/article/166/1/11/34064/Whats-in-a-picture-The-temptation-of-image(13/2/2020).

6. **According to (author/**Wayne Carlson**), (Date/**2003**): the main idea about this subject is: (**Critical History of Computer Graphics and Animation**)**
This book was developed in an attempt to maintain in one location the information and references that point to the many important historical developments of the short life of the computer graphics world as we know it.
https://ohiostate.pressbooks.pub/graphicshistory/(4/1/2020).

7. **According to (author/**Muhammad Balasim**), (Date/**2015**): the main idea about this subject is: (**Contemporary Art - His Methods and Directions**)**
It included many philosophical axes including (contemporary art, art, and digital media, programmatic art, interactive art, the art of repetitive engineering style), the book aims to shed light on the transformations of contemporary art, whether on the conceptual or technical level, the book contains a simplification of the most important movements Contemporary art can be used for students, researchers and interested parties to form a kind of civilizational and aesthetic communication in the field of trends and modern methods in the arts.
http://cofarts.uobaghdad.edu.iq/?p=1422(6/3/2020).

8. **According to (author/**Najm al-Din al-Dirii**), (Date/**2018**): the main idea about this subject is: (**Digitization in contemporary art**)**
These artistic research practices have demonstrated the extent to which digitization is able to focus as a modernizing technical medium that requires several concepts that have their own plastic reading, these innovative concepts formed most of the contents of digital artifacts, as they are closely related to tools and techniques that transform the image in its form from simplicity to complexity and technological composition and to interlocking and influential systems In technical practices. "Until the limits of the emergence of digital art, the artist's used materials and techniques belonging to the real world, meaning physical, physical, and energy materials. As for digital materials, in general, are different, the painter

or photographer, does not work by pens, feathers, plate, iron, and lighting but rather by Symbols that are digital software. https://www.digitalmeetsculture.net/article/dca-digitising-contemporary-art/(6/12/2019)

1. INTRODUCTION

The graphic artist is no longer immune to contemporary developments and transformations, but instead, he strived to join the knees and volunteer these technologies to serve his ideas, to address the creativity of the people of his time in a language that is synonymous with the prevailing culture, so that the plastic creator engages with the scientific innovator in order to present artistic works that are read in the language of their time, and sometimes he exploits this and what is reached To him to complete the journey of production, the artistic truth, then, may not be complete for those without resorting to such technical tools that help in researching and developing the language of discourse in it, which includes passing his thoughts about the world and things, and in this voluntary digital strategies to bear the idea Its practice is a medium of expression and carries a system of an intelligent and coherent system, mixing between the technical material and the technical-scientific method. What this scientific tide presented of techniques and ideas for the structural and aesthetic construction of the workspace is what we will notice by standing on one of the contemporary arts, which I borrowed from the digitization, which is the digital art that means the group of means that a person uses to reach an artistic result using the computer with the help of several programs Digital or from an external source, such as photographs or drawings, during which we use the machine to pass it on the computer screen.

What distinguishes this (digital) art is the resort to the specialized treatment of the artistic impact through a set of concepts that relate to the basis of the technical topic, these concepts are combined in six practical sections (intermediate, understandable, generation, standard results, experience, work for memory).

Digitization has become as a technique in the plastic arts based on intangible digital materials and represents in itself an artificial event of absent element, as described by French philosopher and critic Pierre Levy (1956 AD) "latent digital accumulations of sensory and news that does not happen unless they enter into An interactive relationship with a human", How can digital art depict the material by its immaterial nature, or in other words how can the digital effect express the idea without resorting to the use of the content?.

The British Encyclopedia defined the concept of graphics Arts as "the production of many clones of a single original of artwork, such as drawing or photographing or making a reproduction of a written piece by using one of the graphic techniques, which is template printing, letter printing, lithography, and flat printing by stencil, offset "The various variations and nomenclature led the researcher to develop several concepts for not confusing procedural definitions, especially since the word graphic artist has become more rubbery in the late twentieth century, so it is difficult to claim knowledge of the origin of the term" contemporary graphic artist ", it has been attributed to the Department of loan In the British, the term was developed by the British academic and scientist Richard Guyatt (1917-2007), who defined the term "graphic artist" as the art or profession of visual communication that combines images and text, ideas for conveying information to the recipient most likely by using Computer

graphic programs , These elements include: images, illustrations, font. Texture, colors, shapes, meaning that a number of artistic and professional expressive areas that focus on visual communication can refer to, and there are various methods used by combining symbols and images to create a visual representation of visual ideas and messages.

So, these technological transformations in human history have opened the way to provide countless opportunities in the visual arts, including digital art, and it was an inevitable result that accompanied the emergence of the Internet in the 1990s. This art is based on processing shapes, pictures, and drawings using computer software. A result emerged from the observation and strengthening of the interaction between graphic art and the accelerating developments of information technology, and to stimulate the growth of patterns of thinking.

Digital technology has added more than one method and transformation in the past two decades, that is caused by a fundamental change in the tasks and knowledge of artists with these digital aspects, and the graphic artist's work includes directly on the computer screen through the proposed artistic project presented in that deep space without the need to be exposed in The traditional framework of those arts.

Graphic art has been affected by contemporary artistic trends, especially in the post-modern period, through the diversity of visual techniques and thinking style, and the use of computers in producing artwork as well as available modern design programs that have become widespread and accessible to all, and the ease of their potential, which depends mainly on The artist's ingenuity in performance, implementation, idea building, and the use of modern printing machines in execution, because the character and individuality of any artwork originate from the feelings of the artist who created the work and expresses these feelings by color and its value, surface values, areas, shapes, and legitimate art. Pure) this requires the selection of materials and performing aids that assist in the expression and development of it, as well as a visual vision of art, as well as the skill of the artist. The artistic process, especially in the arts of printed designs, depends on several factors, the most important of which are:

- The artist's ability to innovate and design a new idea based on originality and contemporary approaches.
- The artist enjoys high culture with all that is new, keeping pace with the development in global culture, the extent of influence among the world's religions, their contact and the dialogue of civilizations.
- The artist's skill in using advanced modern executive techniques, such as the use of computer technologies in directing contemporary graphic work.

2. PROCEDURAL DEFINITIONS:
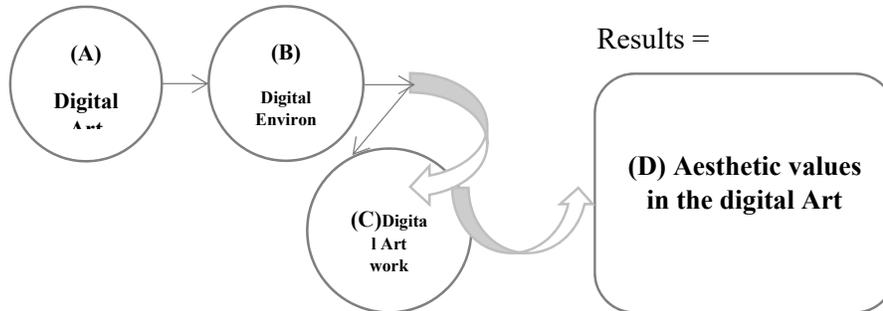
Equation: ((A) digital art x (B) digital environment) = (C) Digital Art.
Output: (C) digital Art = (D) New visual values.

2.1 (A) DIGITAL ART:

Digital art is a relatively new art. It started in the 1970s. It is sometimes called (Computer Art) or (Multimedia Art), and digital art is considered one of the contemporary art tools in the new digital media, and it is an art that is continuously evolving, and it mainly uses digital technology during the creative process or presentation. Whether it is using drawing or design software by a desktop or tablet computer, or it is with a mouse or an optical pen. It does not have specific rules that guide it; instead, each artist creates his own method according to the program options he uses. There is no obstacle in front of the artist except the extent of his enjoyment of fertile imagination or not, and the creative ability to add new digital art.

Art historians often classify digital art as a mixture of objective artwork and practical visuals. Digital techniques in the first scenario are considered a means to achieve a specific goal, and they work as a tool for creating traditional objects such as paintings, pictures, prints, and sculptures. While technology in the second case embodies the desired goal, as artists discover the potential inherent in this technology. The last category refers to accountable art that is created, stored and distributed digitally. In other words, we can say that some works rely on digital tools to amplify the work of a previously existing medium, while others use digital technologies as an intrinsic component.

2.2 (B) DIGITAL ENVIRONMENT:

Digital environment started with the beginning of the late seventies of the last century and the start of the emergence of digital art has begun to appear and spread with the development and spread of electronic devices that allow many uses that are not found in another art and which is specialized in graphic arts in a big way.

The global digital revolution brought with it the heralds of the transition to a new civilized era, as it expressed a tremendous shift in communications technology, in the curricula of cultures and information systems, and unleashed broad trends in the use of communication and information technology in digital, media and other arts programs, and this new trend does not It establishes its applications and programs to open a future for digital arts without possessing

a set of data that begins to shape the phenomena of developing graphic and graphic software technology, and ending with the creation of a communication network that defines new functions for the visual language and image and sound files, e It's digital arts reflect, in fact, the essence of the era of technology and thus became the digital arts closer to science, which employs many of the results of other sciences in the development of digital photo and production that reflect the essence of the physical and cognitive civilization.

"The term digital environment," states American artist Valerie Maynard (1937), entered for the first time the field of new visual arts in 1960 AD, in the middle of December, and the artistic groups at that time did not absorb contemporary visual arts, but the rapid development may already be the people of an inclusive and participatory environment. From the recipients of art in which the perceptual and critical experience of the viewer may powerfully summon those technological capabilities in the artwork presented.

The first Digital art was created by American artist and photographer Andy Warhol (1928-1987 AD), using Commodore Amiga devices, a group of personal computers produced by Commodore to produce the first digital art, and this computer was publicly displayed at the Lincoln Center In New York City in 1985, where Warhol took a picture of American singer Debbie Harry in monochrome with a video camera and modified it on a graphic program called "Propaint", and Warhol added color to the image using the flood fills feature (Figure 1-2).

(Figure 1) Andy Warhol working on the first digital artwork - 1985.
(Source):www.warhol.org/exhibition/warhol-and-the-amiga/(5/4/2020).

(Figure 2) Andy Warhol - Debbie Harry - first digital artwork - 1985.
(Source: www.warhol.org/exhibition/warhol-and-the-amiga/(5/4/2020).

Most computers currently have many technical and programmatic capabilities that secure the provision of sound and motor effects that simulate reality, and those who work with them feel fully integrated with them. These capabilities have been the central act of developing graphics and gaming software in addition to dealing with computers a lot of fun and excitement and computer drawing is the art of creating images and graphics with the help of machines. The computer ability of the equipment and the development of electronic interfaces allowed the reciprocal relationship between the human component and the computer, which enabled the interaction between the human subject and the program and the result of this approach. Glossy,

the digital environment has developed significantly by lowering the already well-defined technical categories. Indeed, specific subcategories such as "virtual reality", "augmented reality", "audiovisual art", "generated art" or "interactive art" complement the technical designations of digital photography or digital art.

2.3 (C) DIGITAL PRODUCT:

Contemporary artistic practices tend to search for renewal, by generating creative forms and strategies that use modern technologies such as video, computers, etc., which are established in the midst of advanced industrial societies, which have generated renewable concepts such as the interactive digital image, for new worlds resulting from virtual art, had created a new language that has fused In art, it mirrored an unfamiliar new world that formed from imaginary worlds one at a time and very similar to reality at other times even though it was a descendant of abstract numbers and graphic symbols, allowing the recipient to penetrate his physical existence to roam and dive into In these hypothetical features, they interact dynamically with them, as a result of the deception of the senses first, and the artificial imagery secondly generated by contrived deception, illusion, and simulation.

Perhaps one of the most prominent activists who contributed to the enrichment and origination of this art, we also find the Australian artist Jeffrey Shaw (1944 AD), one of the most prominent pioneers of this art, his works revealed the primacy of the temporal scale, and perhaps his most famous work (The legible city) The year 1988 AD, (Figure 3), where roads are formed from the engineering of letters, but words and sentences. Moreover, the situation (the readable city) necessitates the necessity of physical intervention and activity in order to enter that allegorical and allegorical space. But what happens is subject and in turn depends categorically on the user's responses and decisions, as he can drive quickly or lead slowly to turn and turn around with the right and the left or take shortcuts (Figure 4).
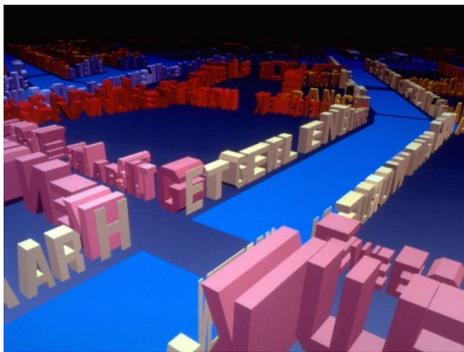
(Figure 3) Jeffrey Shaw - (The legible city) the written paths within the work of that city. (Source:www.jeffreyshawcompendium.com/ portfolio (legible-city/l(1/3/2020)

(Figure 4) Jeffrey Shaw - (The legible city) installation view. (Source:www.jeffreyshawcompendium.com/ portfolio (legible-city/l(1/3/2020)

This is in addition to its known effect, "The Virtual Museum" of the year 1990, where the recipient ascends a rotating chair that has the freedom to control its speed in the middle of a room that transmits its walls to a museum room. The vowels and vowel characters sometimes stand out and disappear.

It approaches leads to us to find the most prominent actors in hypothetical art, namely, the French artist and professor Edmond Couchot (1932) and Tanya Tofat (1971), who is specialized in studying these practices and works to see her technical methods and its dimensions and exploring the extent of its effectiveness and area She interacted interactively with those involved in their collective work, such as her published book to monitor those experiences (Digital Dynamics in Nordic Contemporary Art) in 1999, which is the most critical source of interactive arts, where she oversaw the recipient's coexistence in new interactions of the environment Digital from All small device that is linked to a computer screen to run the creative experience that makes the recipient an actor and contributor to forming this effect.

These artistic practices have demonstrated the extent to which digitization can rest as a modernizing technical medium that requires several concepts that have their plastic reading. These innovative concepts formed most of the contents of digital artifacts, as they are closely related to tools and techniques that transform the image in its form from simplicity to complexity and technological composition and interconnected systems Influential in artistic practices. Until the advent of digital art, artists were using materials and techniques belonging to the real world, meaning that they were physical and physical. As for digital documents, in general, are different, the graphic artist does not work through traditional pens but rather through the symbols that make up digital software.

Which transformed not related to the essence of the image, but rather exceeded it to include the artistic effect, where new media merged to flip the rules of production and establish a speech Fine art cuts with tradition, reveals the artist's eagerness to invest that technological potential in an aesthetic and cosmetic context that is different from the norms of act and creativity recognized, thus allowing the artist and artistic work alike to open up to broader fields capable of offering deep formative stakes and connotations Thus in the language of plastic arts throughout the extensive meanings and implications of thought and implicit form cut seam lines and points of communication with the prevailing traditions, as the techniques and new content with data affected which led to the emergence of norms and standards in the precise field of art.

2.4 (D) RESULTS "AESTHETIC VALUES DERIVED FROM THE DIGITAL ART":

Digital art has become one of the recent trends in the presentation of artists' works. The plastic art movement that uses computer technology and advanced electronic effects is called or altered by design programs, which is the mechanism of interaction between the artist's mental visions and digital "vision" on the computer screen in an attempt to find a fourth dimension of the image can To be called "the digital dimension" and although this art has many aspects that are related to the creations of the artistic product of the artist as indicated in the definition, which mainly belongs to the personal skills.

Where major world museums celebrate this art and even organize many international events, and organize ongoing exhibitions of digital art or what is sometimes called online art, as is the

case of the San Francisco Museum of Modern Art SFMOMA and Walker Center and the Whitney Museum, that To name a few. To shed more light on the product's mechanism for digital art, American artist Robert Borger (1961), professor of visual art at the University of Pennsylvania, mentions the definition of digital art: "It is simply art that uses computers as a tool. ", As for the history of this artistic movement, he says: "Digital art is not related to a specific date, meaning that any artist with talent and knowledge of computer uses can develop endless combinations of artistic paintings in which the imaginative artistic vision unites with the high technical capabilities of the computer to achieve together artistic skins in The visual work could not be achieved without the availability of this technology. To create paintings and visual formation that stimulates the human mind and stimulates images and projections." Thus, the computer used a machine to help the artist in creativity and innovation, and his advanced capabilities represented in the existence of programs that achieve everything. See the artist's realization.

The computer is nothing but a tool, and behind this tool, there is always no human being and the artist who takes advantage of its capabilities to provide a homogeneous collection of data and rigid mathematical operations - which are the basis of digital activities inside the computer - and between the artist's sense and his thought and the warmth of his passion.

The French artist and critic JD Jarvis (1968) says on that in his article With the title "What is digital art" in which he spoke about digital art in general and digital graphic art in particular, we can say the same thing to what is called digital art in general, given that rheumatism is only a medium for the production of the art of any kind rather than considered art in the subjective limit.

Jarvis emphasizes that: "Perhaps it is better to present the problem to ask about what art that does not belong to digital now? The computer has occupied a great place in our lives today, and included almost every art form, from the process of digital creativity represented in processing and distributing music, through graphic arts. And image processing, to the theater and many of the arts that digital media has entered into our modern era to help artists in their various artistic creations".

And here the conceptual metaphor appeared in digital art, whose theory relied on the fact that the existing digital, conceptual systems are based on sensory, and motor perceptions as a means of human communication, and here the psychological dimensions are represented in the production of artwork. The conceptual theory believes that the mind is the one who thinks, understands, accepts, derives and imagines, So it is easy to apply to computers.

(Through this theory, the researcher presents an applied project for this equation, which he opposes in the research, as it is considered one of the results frameworks of that equation).

3. RESEARCH FRAMEWORK RESULTS

3.1 INTERACTIVE ART AT "VENICE BIENNIAL 2015":

The researcher's experience in the artistic experience depends heavily on the use of technological media in many of his artistic productions. Here he specializes in offering to present his background again, which he performed in the 56th session at the Venice International Biennale in 2015, where the researcher presented a group project with artists

sculptor artists Ahmed Abdel-Fattah. Painter Maher Dawoud, the Researcher Gamal Elkheshen, who specialized here on the project-related aspect of the graphic presented through that experiment where he gave the "augmented reality application" By this meaning, the term applies to computer simulations of environments that can be simulated physically in some places in the real world, in imaginary worlds, where the latest virtual reality environments are primarily visual experiences, either displayed on a computer screen or through a unique stereoscopic display. Still, some of the simulations include additional sensory information such as voice through loudspeakers or headphones, so there are some advanced tactile systems, including data by touch, commonly known as the Inter-Act, such as applications in electronic games. Moreover, virtual reality covers remote communication environments which provide users with a virtual presence with the concepts of slight presence.

The researcher invented it to a digital company that produces electronic games to develop the application on (Google and Apple) stores.

Here, the researcher reinforced the presence of different environments about the nature of the place found through the application used inside the hall (Figure 5), Where the built-in stereotype was reinforced inside the pavilion with each of the tracking code through which the receiver can be connected to any of the devices inside the pavilion, which is known as (AR Code) (Figure 7).

(Figure 5) Installation view inside the pavilion - "collective work"
(Source: The researcher)

(Figure 6) AR Code in the installation- the Venice Biennale - "collective work"
(Source: The researcher)

The third dimension or embodiment created a significant role in virtual reality technology, where the outputs refer to reality-like models and make the user with them merge precisely as if it is dipped in the real environment itself inside the hall (Figure 7), In this technique, all human senses participate in it to experience an actual reality much like it (Figure 8).

(Figure 7) The interact view inside the
pavilion - "collective work"
(Source: The researcher)

(Figure 8) The interact view inside the pavilion
- "collective work"
(Source: The researcher)

Virtual reality provides endless possibilities for light, extension, sound, sensation,
Perception, vision, and emotional disturbance, all of which are elements of contemporary art.
The secret behind the success of virtual reality arts is the concept, and technology exists.
The researcher and colleagues tried very hard to link the project presented that digital
experiment, which produced a new optical product that has a shape and dimensions added to
contemporary visual arts, where it is considered the first time that a work that adopts modern
technology arts within the Egyptian pavilion in Venice Biennale 56 (Figure 9).

(Figure 9) The interact view inside the pavilion - "collective work"
(Source: The researcher)

3.2 SUMMARY OF MAJOR FINDINGS:

The overall results showed the high positive effect of the digital environment in graphic arts on the implementation of visual Arts. They right now showed deficiencies in specific skills of in graphic design department, which should work on this equation to develop the output of graphic student graduate in the 21st century "((A) digital art x (B) digital environment) = (C) Digital Art" and the Output of it "(C) digital Art = (D) New visual values."

3.3 DISCUSSION OF RESULTS:

The study aimed to find out the effect of The Digital Revolution and Ideologies of Thought and Creativity in Graphic Arts, An analysis of the questionnaire showed that through the fourth ways of the digital environment and the results of it in graphic artwork with a given example of the in interactive work through the augmented reality application, achieve the objectives of the Visual graphic Arts program.

4. CONCLUSIONS:

The outcome of this study shows that the implementation of graphic design Visual Arts program through these points:
- The digital environment brings the contemporary artist to a digital artwork that significantly contributes to developing the potential of creativity.
- The artist is the primary driver for interactive tools in contemporary artwork.
- Should integrating the graphic artist in the digital environment.
- The digital revolution is nothing but tools used by the artist to produce a subjective artwork.
- Thought and creativity, whatever is an intellectual approach, the artist seeks to achieve through digital media.
- The graphic artist has become the artist who deals with contemporary technological media to produce artwork, which is no longer limited to traditional arts.
- Reality art is the most important digital art tool.
- There is a difference in the aesthetic values derived from the digital revolution in the twenty-first century.

5. RECOMMENDATIONS:

- Offering broader perspectives in theorizing and criticism in reading interactive artwork through technological media.
- The analysis of artwork that relies on technical arts needs to be familiar with those arts
- Create a visual arts division in the graphic department.
- The decisions of the Department of Graphics contain contemporary graphic techniques, to advance between modern trends in the artwork.
- Art universities should be holding artistic workshops for contemporary graphic arts.

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الثورة الرقمية وإيديولوجيات الفكر والإبداع في فنون الجرافيك
The Digital Revolution and Ideologies of Thought and Creativity in Graphic Arts

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الملخص

ما قدمه المد العلمي والثورة الرقمية من الأساليب والأفكار للبناء الهيكلي والجمالي للعمل الفني هو ما سنلاحظه في هذا البحث من خلال الوقوف على أحد الفنون المعاصرة ، التي استعرتها من الرقمنة ، وهو الفن الرقمي وهذا يعني مجموعة الوسائل التي يستخدمها الشخص للوصول إلى نتيجة دراماتيكية وقيم جمالية باستخدام الحاسب الآلي والذي فرضها التطور التكنولوجي الهائل في نهايات القرن العشرون وفي القرن الحالي والتي ادت بطبيعة الحال الي ان يسعي الفنان الي الارتباط بها بشكل كبير حيث ان الارث الفني الكبير منذ حركة النهضة الي الثورة الصناعية هنالك ارتباط وثيق بهذا الركب المتقدم والحديث ، لذلك طور الباحث معادلة لاستنباط المفهوم الجمالي للأعمال الفنية الجرافيكية من خلال الوسائط الرقمية المستخدمة في العمل الفني المعاصر وهي ان (الفن الرقمي x البيئة الرقمية) = منتج فني = قيم بصرية جديدة ،حيث أصبحت الرقمنة كتقنية هامة في فنون الجرافيك المعاصرة لارتباط الجرافيك بالتطور التكنولوجي الهائل وتلك الثورة الرقمية.

كما يوضح الفيلسوف الفرنسي "بيير ليفي" في وصفة لها بأنها "التكنولوجيا هي تراكمات رقمية كامنة حسية وإخبارية التي لا تظهر اي فعل جمالي إلا إذا قام الفنان بتطويعها بصريا لإضافة القالب الجمالي لها الي ان تصل الي المتلقي، حيث ان المتلقي اصبح في القرن العشرون عضواً فعالاً في تلك التجارب الفنية" سعي الباحث هنا الي الاشارة الي ان سعى الفنان جاهدًا ليلتحق بركب التكنولوجيا ويطوع هذه التقنيات لخدمة أفكاره، ليخاطب إبداعهُ إنسـان عصـره بلغة مرادفة للثقافة السائدة في القرن الواحد والعشرون، لينخرط المبدع التشكيلي مع المبتكر العلمي لأجل تقديم أعمال فنيّة تقرأ بلغة عصرها، لذلك قدم الباحث اعادة التعريف الاكاديمي لفنون الجرافيك المعاصرة تبعا لدائرة المعارف البريطانية والتي شملت ارتباط الفنان الجرافيكي بالفنان البصري، ايضـاً قدم الباحث التعريفات الاجرائية من خلال البحث للمعادلة التي يعتمد عليها البحث حيث اشـار الي الفن الرقمي ومنهجيته والبيئة الرقمية التي انتجت اوائل الاعمال الرقمية وتجارب اشـهر الفنانين في ذلك المجال ثم ينتقل الباحث الي الناتج من تلك البيئة و عرض القيم الجمالية له وخصـوصـاً المتعلقة بالفن الافتراضـي حيث عرضت دراسة للفنان والبروفيسور الفرنسي إدموند كوشوت والكاتبة المتخصصة في الفنون المعاصرة تانيا توفت لمحاولة فهم الاسـتنباط الجمالي لتلك الفنون حيث بينت هذه الدراسـات الفنّية علي مدى قدرة الرقمنة على الارتكاز كوسـيط فنّي معاصر يستدعي عدة مفاهيم لها قراءة تشكيلية خاصة، هذه المفاهيم المعاصرة شكلت معظم محتويات الأعمال الجرافيكية المعاصـرة، بوصـفها مرتبطة ارتباطًا وثيقًا بأدوات وتقنيّات تحول الصـورة في شـكلها من التبسـيط إلى التعقيد والتركيب الـتـكـنـولـوجـي وعـلـى مـنـظـومـات مـتـداخـلـة ومـؤثـرة فـي تـلـك الـمـمـارسـات الـفـنـيّـة.

وقدم الباحث أطار عملي للبحث كنموذج لذلك "مشروع فني"، يعتمد على "تطبيق الواقع المعزز" التفاعلي، الذي قدم في بيينالي البندقية الدورة ٥٦، بالجناح المصري كتطبيق يعرض الباحث كيفية ودور الفن الجرافيكي في البيئة الرقمية المعاصرة.

الكلمات المفتاحية

فن الجرافيك؛ الفن الرقمي؛ الواقع المعزز