

The impact of Gestalt theory on the photographic art image Composition

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Introduction

The German and French expressionist movement of oil painting is considered one of the most significant points in the emergence and development of art. Artists have demanded to resist the control of art in academic templates and obtain their freedom to express their feelings and what is inside the soul and reach these feelings instead of showing the outward appearance of topics or emotions only.

It appeared in the twentieth-century eyeliner d of technical schools that reflect p inside the artist. The modification and reformation of visual objects are characteristic of art in this century schools and accounted for photography to preserve the visible body of visuals and themes pictured. It was for natural photography of the impact here of significant change artistic form of academic and famous. Still, It changed in all forms of life ,and the mechanism of everything and even Making art.

Changes appeared cultural of the civilization of a global birth of the machine age ,And its degree was great because it merged between machine and art, which has been shown since the middle of the nineteenth century. We note that most of the new artistic forms at the beginning of the twentieth century were influenced by various folk arts. After the emergence of photography, artists were able to study cultural conditions in places far away from them, so they had visual experiences. Unknown and different by introducing them to the ancient Egyptian, Greek, Japanese, Coptic arts, African and Asian arts, and others.

Signs of a theory emerged Gestalt in the twentieth century, in research by Wertheimer M. Wertheimer ١٩١٢ AD, of things that move but do not move, such as a tape The cinematic is a static picture. Still, it moves, and then systematic articles began to appear. Of theory, and psychologists began to herald the importance of this new trend) .Arnheim 1974“ (Without the flourishing of visual expression, no culture can flourish creatively." Rudolph Arnheim (Arnhim 1969) .The early founders of Gestalt theory did not focus their efforts on the study of the arts) Abdul Hamid 2001(

The word Gestalt is a German word, meaning a form or form) Form (Or an image or a pattern, and this label is since this school emphasized that the wise must look at it through the overall formula of this discerning, and not to the parts or elements that make up this percept .Psychological considered revolution from a form of art appeared in century XVII and divided the mind into elementary particles of sensations and images,

They considered rebellion against Freudianism, or analytical psychology, submerged in search of elements And molecules and laws and their association and synthesis.

Keywords :

Gestalt theory, convergence, closure, similarity, continuity, Rudolf Arnheim ,visual system, perception.

Research objective: The research aims to know Gestalt theory's effect on the path of the photographic art movement and its role in the development of photographic concepts in light of modern art schools and trends in the world .And to prove that its principles still apply in contemporary photographic art.

Research Methodology: Exhibits a researcher descriptive approach for the analysis of the vocabulary of design theories Gestalt to determine the A are the outputs of those theories that led to the development of the concepts of photography of technical and qualitative of ingested photography through a workers ' pioneers of photography since the inception of the theory in the twenties century, the twentieth, and then link these designs with photographs T .a code on its importance, to get to know the impact of theories on artistic vision Gestalt contemporary photographic.

Research importance: A research is to clarify the application of mechanisms theories Gestalt to shap eits principles into perspective photography art and develop several design data through analysis.

Research problem: The research problem represented in the central question: What changes done on Gestalt theories ideas in contemporary photo?design And how it affects the Technical Photography vision?

The Research Questions:

Several questions and questions emanated from the central question of the research problem:

1. What are the distinguishing features of Gestalt theory?
٢. Who are the pioneers of the theory of Gestalt?
3. What are the innovative design methods provided by the principles of Gestalt theory?
٤. How a erupted ideas Gestalt school in the concepts of the image since its appearance?
٥. What is the form of the digital application of Gestalt principles in photography?

1.The visual system:

Perception is the first mental activity performed by the brain to process the data received from the senses. Topics around us make the human mind for information that I received from the sensors Hawwasna visual processor .It is the so-called visual perception , and his perception is not just a visual record of our environment .Topics, once we see in fact, is not always as we see A .small part of what we can say, "We see," is produced by our visual system. At the same time, what we consider to exist is being created in our minds .visual perception is the human ability to interpret what we have domain Visualization of the surrounding environment by processing the visible light data and outputting visual perception call vision .(Goldstien 2010)

1.1. The human eyeThe Eye

The human eye is the tool that receives light and creates the optical image on the grid .(Stone 2012)E is not a nn human eye lens reduces its size to become spherical (D. Dunning, E. Balcetis 2006) ,And the lens of the eye collects these light rays passing through the glass body on the fovea.

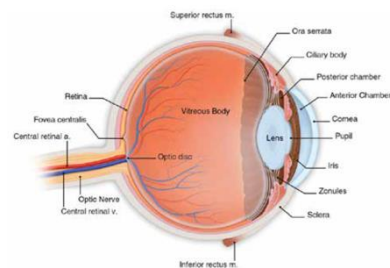


Figure 1 The eye construction

١.2. The retina of the eye the retina

The retina is made up of photoreceptor cells called photoreceptors opsins. There are two of them in the human eye: the sensors cells of the bacillary or Cordyceps Rod and the other cone of cones opsins. They absorb the photon T from the light and convert it into an electrochemical signal in a phase called Way of connecting signals signal transduction pathway, And cones constitute the majority in the center of fossula or Alfov me a the fovea) And Alfov me a is the dish of the retina scattered aspects of giving opportunities of light in a nn fall directly on the brain Arat, which in turn provides the picture withthe sharp of controlled Altbjar (RJ Sternberg, K. Sternberg, J. Mio 2012)

٢. Gestalt Theory founders and its principles:

2.1. Gestalt Founders:

2.1.1. Max Wertheimer:

Max was born In Prague, Germany. he finished studying gymnastics when he was eighteen years old. He studied law and then proceeded to study philosophy with psychology at the University of Berlin. he obtained his university degree from the University of Frisburg in 1904, then an academic degree from the University of Berlin. Frankfurt 1929AD was Wertheimer M. WertheimerAmong, the first to migrate to America in 1913 and spent the rest of his life there. (Arnhim 1969).

2.1.2. Kurt Kovka:

Born in Germany, he studied science and philosophy in Germany The University of Edinburgh ,١٩٠٤ ,and began his career with Fertimer and Kehler. In 1911, he worked at the University of Gichin until 1924 and worked .During that time in a psychiatric unit ,he focused on treating speech diseases and nervous breakdowns. After World War I ended, American psychology became familiar with the movement Gestalt. They asked Curt Koffka K.KoffkaTo to write about Gestalt. He produced his book (Perception - an introduction to a theory Gestalt (, in 1921 Curt Kovka published K.Koffka His book (Growth of the Mind) is a book on psychology Child or developmental psychology and met with great success in Germany and America. then worked as Curt Koffka as a visiting professor at Cornell University Smith in 1927. (Paxon 2002)

2.1.3. Wolfgang Kohler:

Born In the Baltic region, his family moved to northern Germany and received Wolfgang Koehler W. Kohler Educated at Tübingen Bonn and Berlin's universities and received his scientific license from the University of Berlin. In ١٩١٣AD, The Russian Academy invited him to Tenerife, one of the Canary Islands, to conduct a study on chimpanzees. Then World War I prevented him from leaving Tenerife after his six-month stay. His excellent work there (The Monkey Mindset), then Wolfgang Kohler is back W. Kohler To Germany in 1920 and succeeded Karl's placeSTMF at the University of Berlin and lectured at Clark University and Harvard. (Paxon 2002)

2.2. Gestalt principles for regulating sensory perception:

The code of human perception can maintain a constant perception of the surrounding environment (pressed w(. There shall be a change of the retina in terms of shape, size, and color image .As shown in Figure

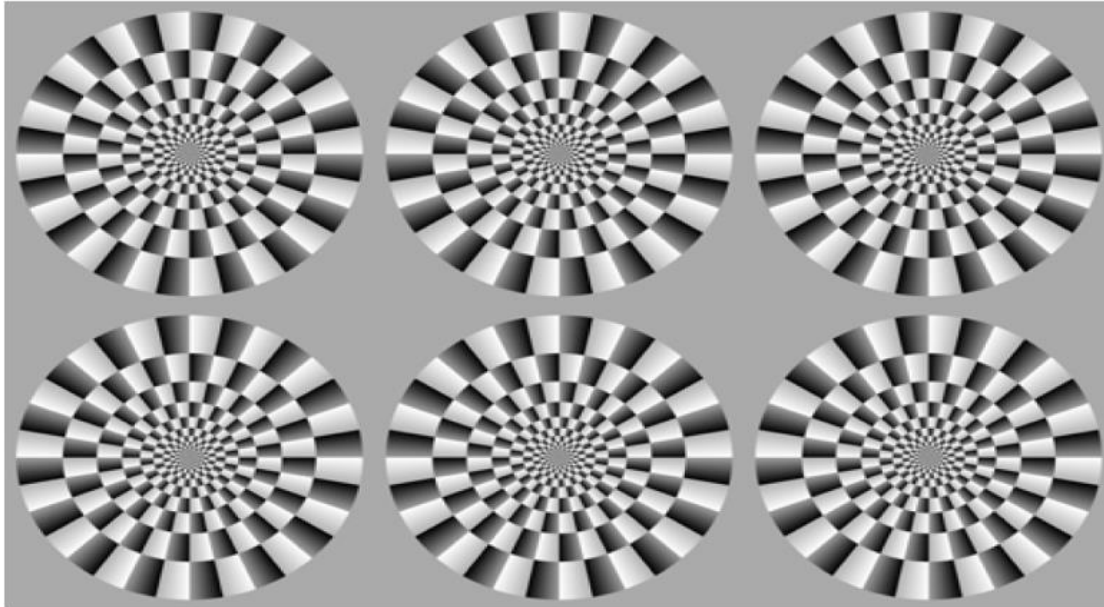


Figure 2

Gestalt is a German word meaning "good model".good form gestalt psychology was developed in the early twentieth century and originated on the principle that "the whole is greater than the sum of its parts ".The whole is greater than the sum of its parts deals with our visual system's tendency to perceive what we see as a whole and not as a single part. (Arnheim 1974)

Max Wertheimer Developed A set of visual perception theories, which describes how we receive and interact with visual information, so every element of the image has a meaning. This is what Kurt Coffa, one of the adherents of these principles, believed .Kurt KofaaHe was born in Berlin and worked with Vermeer Wertheimer. His ability to speak fluent English and was able to transfer the principles of Gestalt to the Americans. thus to the world as a whole, he says what he meant as Koffak: the whole exists separately from the separate parts".The whole independently exists from the parts.” ،

2.2. Principles Gestalt in visual cognition:

2.2.1. The principle of form and ground:

One of the Gestalt principles that explain and describe visual perception phenomena is called shape and land .The main subject that attracts human interest is the shape ,and what surrounds it is the earth, so the focus is on the part of the visual field.

The central theme in the scene, background, or surrounding areas is land and ground separated by

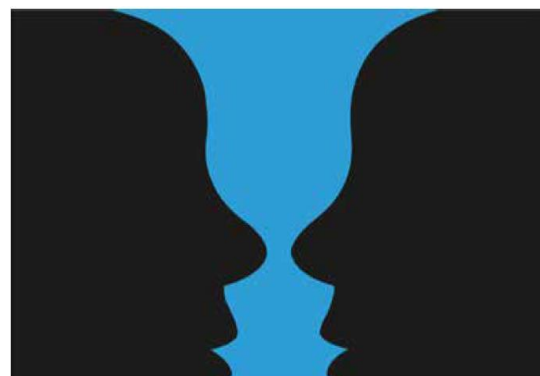


Figure 3

a black line as in children's drawings. This line has form-related properties, and the best-known application of this principle found in M. Robin's Vase, One of the most critical applications in the form-earth and figure. The image seems like a vase revetment, then black notes (land), (but if you realize double-sided black shall be a form and then blue will be the ground Yeh, and so (Stone, Vision, and Brain: How We Perceive the World 2012).

The camouflage used as a Relations between shapes and colors, and E. Dhaouat to create a recent appearance can hardly distinguish between the condition and the surrounding environment. In Gestalt, camouflage applies the principal form and land used to hide a subject with the background. Camouflage already exists in nature, as is the case in some animals, such as some fish species, and used by armies to protect their soldiers in the environments of different.

٢.2.2 The principle of closure

Closure in visual perception is a phenomenon that occurs when a person perceives the visuals as a whole. However, they are incomplete in shape and have clear spaces between their elements, so the eye completes completeness deficiency, such as open circles in the vision detection scale.



FIGURE 4

The closure has excellent logo design applications, as most logos use the pictogram, closure as the main design principle. (Rutledge, Design 2009)

٢,٢,٣ Principle of Similarity:

The similarity is one of the most straightforward principles of Gestalt, based on the fact that identical organisms received in an integrated manner as an inseparable whole. The principle of similarity in shape, color, and size results from the human visual perception of bringing them together as a whole.



FIGURE 5

Git Hubsite using the code of similarity in two ways. The first is by using it to distinguish between the different sections. You can immediately verify that the gray area at the top serves another purpose than the black on the same page, which separates and differs from the blue section. Second, they used the blue color to distinguish between the links from Regular fonts and convey that all blue lines serve the same theme. As shown in Figure

2.2.4. The principle of proximity:

The proximity principle happens when a person visually perceives various objects as one due to their proximity. In having multiple items in one environment, the human visual perception tends to group things in one unit rather than divergent objects.

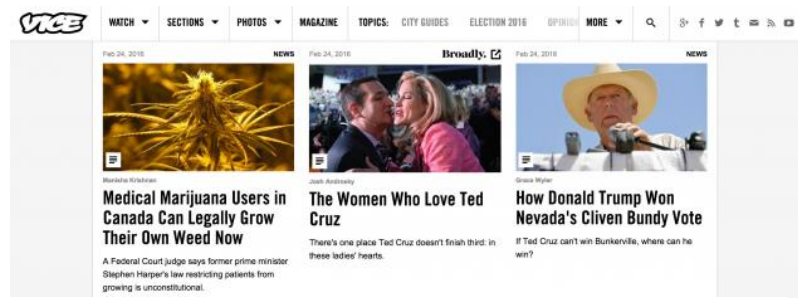


FIGURE 6

Visual perception usually attempts to create a perception of relationships between objects in its field. Like things familiar to him, there is a close group of items when there is an opportunity to visualize them visually as a single subject (Rutledge, Design 2009).

٢,٢,٥ The Continuity Principle:

The principle of continuity for the phenomenon seen Z lines continue to be the appearance of one of the ends. In humans, realize lines constantly, divide the objects as a path A and the entire one thing, in other words, tend to connect the cable to end the forms outside of these points are grouped objects as a whole.

Amazon One of the most famous sites that use the principle of continuity for communication. All products are the same, and each of them is related to the other, so when buying books, for example, do not put only books together, but somewhat similar ones in the subject, as in



THE FIGURE.

٢,٢,٦ The focal point principle

It provides a focal point in what we see visually; the viewer's attention will depend on the point focus first. Then the rest of the elements of the topics to be completed (Bardley 2014).

As in the figure, when we first look at the shape, we notice the red square instead of the black circles around it. It is the first center of interest that attracts attention and attention transferred to the rest of the shape in the picture. And we see in the following figure how a site. This principle is to get the

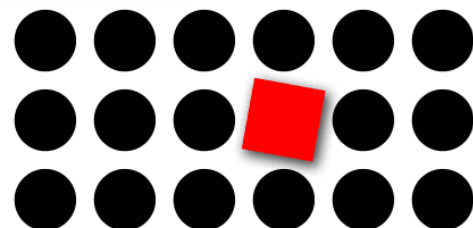


FIGURE 8

viewer's attention to focus on the interaction button, as shown in figure

3. Application of Gestalt theories and principles in photography:

3.1. Pioneer Photographers Applying Gestalt principles:

Gestalt theory began in the twenty centuries ,after the appearance of photography and the influence of the principle in Europe.

When using the camera to produce art, the effect was to integrate with social development and interact with it. Many photographers succeeded in that, such. as Judith Karasz, Minor White, Jerry Uelsamann, Edward Weston, Ansel Adams, And others.

3.1.1. Jerry Uelsamann

Uelsmann ensures that images of surrealistic photos inside the plant chemical processing and printing photos using the method of multiple printing to create images from the visual of our personnel with daily life, and included pictures of both stones ,trees ,and a form of a human ,natural landscapes ,But through various surreal combinations.



Apocalypse II - Jerry Uelsamann

3.1.2. Edward Weston

American Photographer died in 1958, in California ,a much of an impact in the photography of the twentieth century, the fact that the concepts of a particular of pictorial stories that dominated American photography, enthusiasm for photography since his young age ,and open a studio to shoot people ,began a worker photographic not to sloop fiction emulator to work impressionist in the appearance of the themes illustrated. In 1915 he held a gallery about modern art ,and this exhibition led him to reject the virtual effect through its imaging narrative, the emphasis on preferring the forms of abstract acute details of and violates it a former worker and even revolted them. 1922 ,Weston traveled to New York to meet Alfred Stiglitz And Paul Strand.

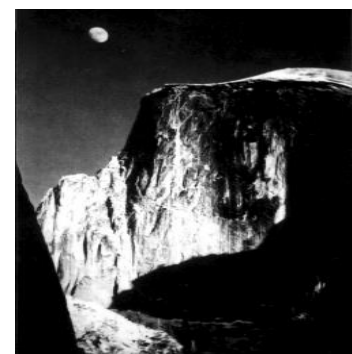
In the following image he influenced by the ideas of Gestalt ,a picture abstract pepper and the appearance of shadows in an iconic shape.



Green paper – Edward Weston

3.1.3. Ansel Adams

Ansel Adams, born in 1902 in San Francisco and died in 1984, a photographer known for using technology yand framed work oof dramatic landscapes. He studied music and practiced photography as a profession from 1927. he published an excellent photo group personal of him, influenced by the work stories. Adams is the founder of the aperture 64 groups. He spent most of his life in nature photography in California,



Ansel Adam

3.2. Digital photography and Gestalt theory Principles:

Using Gestalt theory principles in photography, interact with the configurations of parts that integrate to form all image elements. The photographic objective photographer is to present the features and topics pictured as with the visual in a controlled late pray erwhat carries his visual implications of what it brings thoughts and feelings to the recipients (Adorma learning center 2012).

The configuration photography is the spirit of the image. The mastery of these principles is what we can interact and move within the picture frame effectively. Everyone is essential more critical than the parts. These concepts are the rules of visual in which components are integrated with figure. Their implication is not necessarily the sum of the contents of the vocabulary.

٣,٢,١ The application of the principle of form and ground in digital photographs:

Figure ground/is the relationship between topics and around .Any of them represents a form as a significant positive side in the picture .other for the rest of the subjects in the negative spaces on the main topic, the message's delivery to the viewer quickly realized whenever the photographer modes of e product images decide where a form.



Figure 12 Form & Ground

٣,٢,٢ Applying closer in digital photographs :

In the figure, we can see the researcher who took a picture from inside a car, from which only the center mirror, the car windshield, some of the driving frame, and part of the driver's face appear. Still, the viewer will complete the scene and realize the picture is of a bus from the inside going on the street .



FIGURE 13 CLOSER

3.2.3 Application of the Continuity Principle in Digital Photographs :

In this principle, the photographer Ali depends on tendency instinctual I have the viewer complete the path A and the river ,beach, steps, rail, etc .These formative elements are essential to allow the viewer to roam inside the photo frame. Suppose the viewer went out of the picture frame and cant would complete the rest of the information to



FIGURE 14 CONTINUITY

back another, which gives the picture dynamic continuous scenes. In that case, he is more inclined to follow the unique tracks if there yields a visual of the end, for example, a river a and fence the exit and back another Z inside Configuration.

The researcher made a photograph showing the visual tension generated from the development of the main subject in the proximity of the image provider and then continue inside to reach out, bringing the viewer to a state of the questioning

3.2.4. The principle of the law of common fate in digital photographs:

It is a simple principle based on visual orientation visual Direction In the pictures of pictures, images of more than one person walking in the same direction, so that we may have a linear trend directional line .This line is called the law of common fate.



FIGURE 15 COMMON FATE

The researcher presented a figure to illustrate how to apply this principle photographically ,so we see two people walking in the same direction (a common destiny). The background is a building whose architectural design shows that it is a mosque. It is the source of light, and its shining path is the one in which people walk in it, traveling and women on the way of light. They have a common destiny towards the light.

٣,٣,٥ Similarity in digital Photographs

The similarity Principal application in photographs occurs when similar forms, colors, or topics receives as the sum of a and pattern within the receiver's mind. The researcher did a similarity in the repetitive circles. One person passes the interaction, which creates a receiver connecting the background of the man who walks ,and we see across circles .



FIGURE 16 SIMILARITY

Research Results:

After completing the research, the results can formulate in the following points:

1. At the beginning of the twentieth century Gestalt school applied on ,traditional photographs, featured vision based on the analysis of topics image and work of different designs formations.
2. Since the begging of Gestalt principles and the spread of it, pioneers diversifying in the mind'sphotos can be conceptual, this formation and diversity still exist to this day.

3. Calculates Gestalt credit principles in the development of the fundamental foundations for the design of staff photography to become mountings a much accuracy whether each element and homogeneous whole.

Research Recommendations:

The research recommends the following points:

1. Do more studies and research for scholars and researchers in artistic photography of the Gestalt principles.ideas '
2. The institutions for studying image sciences in Egypt, and the Department of Photography, Film, and Television, at the Faculty of Applied Arts, Helwan University, must teach Gestalt principles within their design curricula.
3. Photographers working in the field should study Gestalt principles to develop their creative, design, and professional capabilities.

Research Conclusion and discussion

The origin of the photographic image is in the photographer himself's inner world as it completes with the external world of actual physical features.

The Photography system is a complex reproduction issue in the outside world. This research aims to discover the complex relationship between the image-produced and visual of the recipient and the meaning of communication and qualitative.

The visual system is the language of understanding and perception apprehend ,decode ,And re-install restructure Two-dimensional images.

This is what begins with the composition and performance of the meaning of the picture.

It is a physical and psychological system of a complex nature, which has been the research field of scientists, philosophers, and artists for hundreds of years now. It will continue to carry with it many surprises.

And as a photographer can do additional dynamic images using shapes and show tension within the picture frame, which the photographer uses directly or indirectly, only focus on these principles and make use of them in the production of images exquisitely and dynamically.

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