The Effect of Gestalt Theory on Emblem and Logo Design[*]

Dr. Hasan YAMAN
İstanbul University-Cerrahpaşa Vocational School of Technical Sciences
hasany@iuc.edu.tr
https://orcid.org/0000-0003-4193-8022

Şebnem YAMAN
Graduate Student, Arel University Graduate Education Institute
ssebnemcaylan@gmail.com
https://orcid.org/0000-0003-1586-8294

Abstract

Keywords:

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The effects of Gestalt Theory principles on emblem and logo design will be discussed in this study titled The Effect of Gestalt Theory on Emblem and Logo Design. In this context, the relationship between Gestalt Theory principles and the emblem and logo, which are graphic design products, will be discussed in terms of design principles and graphic design elements. The research employed the research methods of literature review and descriptive model.

The scope of the study is to determine the effects of Gestalt Theory on emblem and logo design, which are graphic design products. Emblems and logos selected as examples in the study will be examined within the scope of Gestalt Theory, and the presence of Gestalt Theory principles in these graphic design products and their effects on perception will be discussed.

Gestalt Kuramının Amblem ve Logo Tasarımındaki Etkisi

Özet

Anahtar Kelimeler:

Gestalt Kuramı, Grafik Tasarım, Logo, Amblem

Gestalt Kuramının Amblem ve Logo Tasarımındaki Etkisi başlıklı bu çalışmada amblem ve logo tasarımında Gestalt Kuramına dair prensiplerin etkilerini konu edilecektir. Bu kapsamda, Gestalt Kuramı ilkelerinin grafik tasarım ürünleri arasında yer alan amblem ve logo ile ilişkisi, tasarım ilkeleri ve grafik tasarım elemanları açısından ele alınacaktır. Araştırmada literatür taraması ve betimsel model araştırma yöntemleri kullanılmıştır.

Araştırmanın evreni, grafik tasarım ürünleri olan amblem ve logo tasarımında Gestalt Kuramının etkilerinin belirlenmesi oluşturmaktadır. Çalışmada örnek olarak seçilen amblem ve logolar Gestalt Kuramı kapsamında incelenecek olup, söz konusu grafik tasarım ürünlerinde Gestalt Kuramı ilkelerinin varlığı ve algılamaya yönelik etkileri konu edilecektir.

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INTRODUCTION

Graphic design is a creative method that includes designing text or images on a visible and perceptible plane, in two or three dimensions, to convey a message, visualize an idea, or develop a visual.

The emblem and logo, which are the essential elements of the graphic design process, are a person or company's first point of contact with the outside world. These elements are intended to provide information about issues such as the personality, vision, and value of the brand that is being created.

Design employs a variety of resources while keeping perception management in mind. Among these resources are numerous scientific items such as psychology, philosophy, sociology, economics, history, geography, mathematics, and physics.

Human beings are controlled by the brain and the brain is controlled by selective perception. A well-constructed design should take into account the entire faculty of perception. Gestalt principles and the psychological effect they produce are thus an effective theorem in the design process.

In the 1920s, Max Wertheimer, Kurt Koffa, and Wolfgang Kohler founded a school of psychology and studied "behavioral theory," or the "stimulus-response" relationship. The underlying thesis of this study is that the brain's response to external stimuli is determined by a cause-and-effect relationship. It is the cognitive process that is important, not the behavior. (Sezer Babalıoğlu, 2020: 513)

The fact that our brain perceives what it observes when it is in contact with the external world as a whole rather than separately, reveals the Gestalt principle of the "unified whole." The components that comprise the whole do not have to be the same as the components that comprise the whole. Because of the structure of the human brain, it attempts to find a meaningful plane in every chaos it faces. Every work done for this purpose, every object, design, and means that appeals to people also appeals to perception.

GESTALT THEORY AND ITS CHARACTERISTICS

Gestalt Psychology, also known as Gestaltism, emerged in Germany in the first half of the 20th century. Gestaltism (German for "form, configuration") is a psychology theory that emerged with the gestalt school under the title of perception and perceptual organization. Although the word 'Gestalt' does not have a literal English equivalent, the closest possible expressions are words such as "whole", "form", "figure", "model". This theory arose from an article written by Wertheimer and was later developed by Max Wertheimer, Wolfgang Köhler, and Kurt Koffka by expanding the principles of gestalt psychology. (Ceylan&Ceylan, 2018: 1083)

Gestalt Psychology is concerned with how the mind interprets forms and patterns. Gestalt psychology seeks to comprehend the laws that underpin our meaningful perceptions in a seemingly chaotic world. The central tenet of Gestalt psychology is that the mind organizes itself in order to see the whole in what it perceives. Accordingly, wholes are more easily learned and remembered than parts. (Tuck, 2014)

The Gestalt principle fosters the belief that the human perception system is distinct from the components of reality itself. "Parts of a visual image can be analyzed and evaluated as separate components. A visual image as a whole is different and more comprehensive than the sum of its parts."

For example, in a beautiful landscape photograph, elements such as earth, sky, sea, tree, bird can be enjoyed separately. When looking at the whole photograph, it is clear that the parts that make up the photograph complement each other and form a beautiful composition. The same is true for graphic design products. When examining a poster, for example, independent elements such as the title, illustration, typography, and sub-title may catch the eye. However, when all of these elements are combined within a specific concept and logic, an organically connected texture is created.

"The whole is other than the sum of the parts" writes Kurt Koffka in his description on the subject. He states that "This is not a principle of addition"", and he considered it as having an independent existence. (Heider, 2014)

Understanding Gestalt theory has several benefits for graphic designers. It reveals critical data in order to create designs that fit the perception of the target audience. The human eye has a structure that allows it to group and associate shapes and forms. When the design elements are brought together in diverse ways to form a whole, they can mean different things.

Features of Gestalt Theory

The four main lines of Gestalt theory are emergence, reification, multistability, and invariance.

Emergence

This principle is illustrated by a Dalmatian dog sniffing the ground under the shade of an overhanging tree. At first the dog cannot be identified with the parts of its body. Nevertheless, the dog is perceived as a whole. The whole image cannot be explained by looking at the picture and starting from the parts of the dog. But the dog appears as a whole. There is no explanation in Gestalt theory for how this perception occurs.

Figure 1: The emergence of Gestalt Psychology

Reification

Reification is the productive and complementary part of the perception process in the brain. This perception contains spatial information rather than sensory stimulation-dependent information.

If we look at the images of this feature in the pictures below, we can see that in Picture A, we see a triangle rather than three circles. In Pictures B and D, we see the different figures as a whole. In Picture C, we perceive the image in three dimensions.
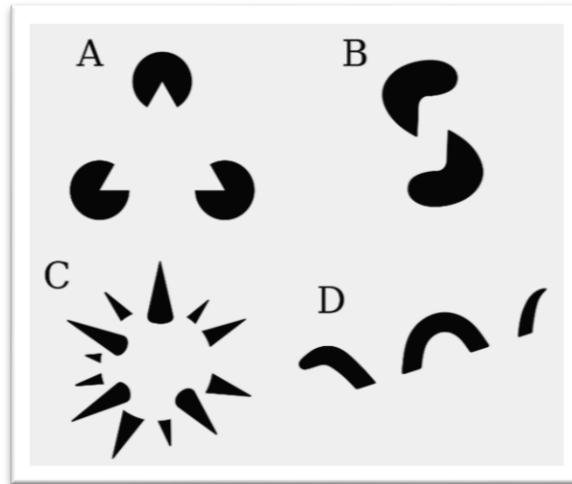

Figure 2: Reification in Gestalt psychology

Multiple Perception of Stability

The tendency of an object to have multiple perceptions and interpretations is referred to as multistability. It is a perception illusion, as shown in the Necker cube and Rubin figure/Vase images below. Gestalt, on the other hand, is unable to explain how multiple stability came to be.
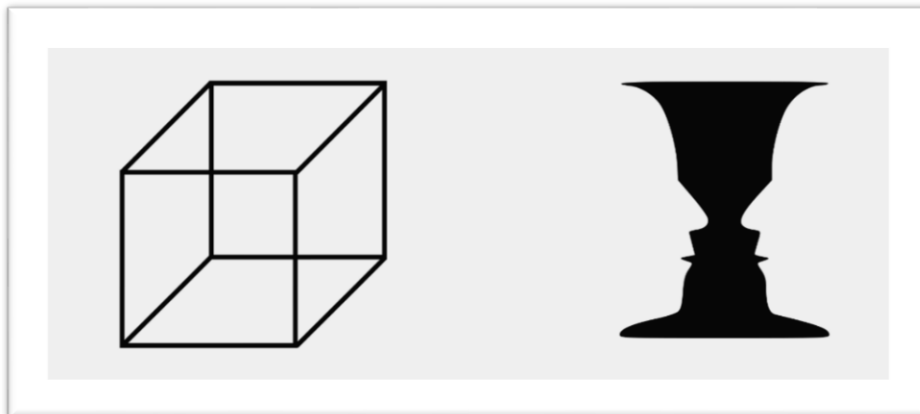

Figure 3: Multiple perceptions of stability in Gestalt psychology

Invariance

It is the perception of geometric figures due to variety independently of different light and object properties. Distortion, scale, and rotational motion of geometric figures are distinct from the object. Emergence, reification, multistability, and invariance are not necessarily separable modules to model individually, but they could be various aspects of a single unified dynamic mechanism.

Figure 4: Invarience principle in Gestalt psychology

Gestalt Approaches in Psychology

According to Max Wertheimer, there are two rational ways to think. The first is productive thinking, and the second is reproductive thinking.

The productive way of thinking is the use of instinct to solve an encountered event or situation. It is a spontaneous, quick, and responsive solution idea.

The Reproductive Thinking style, on the other hand, is a form that is carried out through past experience. It is used frequently and is an idea applied in the face of previously encountered and resolved events. Through analysis and experience, the brain achieves enlightenment, bringing thought to a conclusion. While instinct is active in productive thinking, it is called to consciousness at will in reproductive thinking.

PRINCIPLES OF GESTALT THEORY

The Gestalt school revealed the Gestalt principles by developing the main components in order to explain this understanding through a series of institutional and methodological psychological research.

Figure-Ground Relationship

The ground is the place where an object is located. As seen in the image below, the black background and white object relation, which creates a color contrast, has resulted in a contrasting form. People instinctively perceive whether an object is in the foreground or the background. An object protrudes in the foreground or hidden in the background.

Figure 5: Figure-ground relationship principle

The apple is the figure in the image above, and the silhouette is the ground. However, in the image below, the figure ground relationship is unclear.

Figure 6: Figure-ground relationship principle

The figure and ground are not clear, according to the concept of selective perception. The figure is where the perception is concentrated, while the other surfaces are in the ground. When they cannot be grasped clearly these two concepts are substitute for each other.

Principle of Proximity

This principle states that stimuli that are close to each other are perceived as a whole. When separate objects are scattered, they do not provide unity; however, when they are close to each other, they present a meaningful whole.
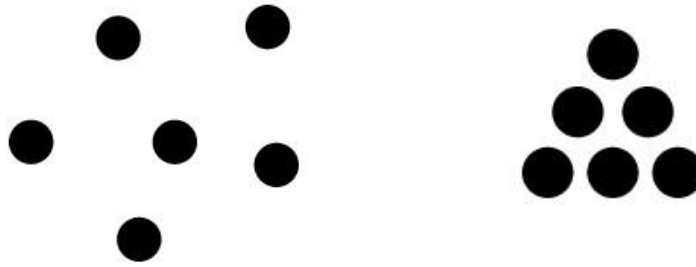
Figure 7: Principle of Proximity

Principle of Closure

It is the completion of an incomplete object or a form by our brain. Complementary factors are formed in our brain even when we do not see the image as a whole; for example, when we see a half circle, the brain completes it as a whole.

Figure 8: Principle of Closure

Principle of Similarity

Perceptually similar objects are clustered as a whole in the brain. For example, objects that are the same in terms of figure, color, texture, etc. are considered as such.
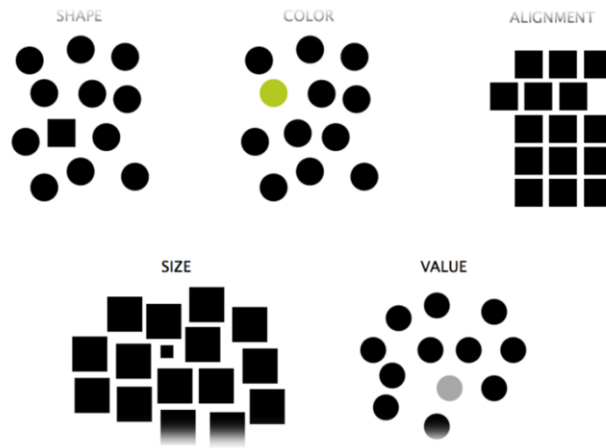
Figure 9: Principle of Similarity

Principle of Continuity

According to the principle of continuity, objects in a specific order and sequence create a perception of continuity. It is the principle of appearance of multiple distinct items as the same.
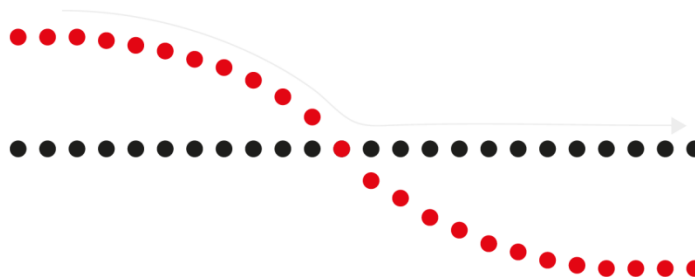

Figure 10: Principle of Similarity

Principle of Good Gestalt (Prägnanz)

"If the parts of an object form a regular, simple, and ordered pattern, they are perceived as forming a group. This law implies that: Individuals remove the complex and alien while perceiving the world so that they can observe reality in its most basic form." Prägnanz, which is defined as "conciseness" in German, means clarity.

The squares in the image below can be interpreted as a series of rectangles and figures forming the letter "L," but most people will recognize this as five interlocking squares.
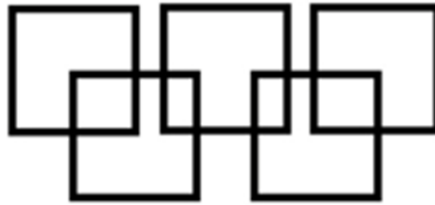
Figure 11: Principle of Good Gestalt

Principle of Common Fate

Using visual sensory modality, the researchers found the movement of elements of an object produces paths that individuals perceive that the objects are on. In this article, as in the Wertheimer 1912 article, he makes a determination about the grouping resulting from movement in stimuli in motion. He states that points that move together simultaneously will group and form a figure. This principle implies the grouping together of objects that have the same trend of motion and are therefore on the same path. (Mungan, 2020: 602)

Principle of Symmetry

According to this principle, the mind perceives objects as being symmetrical and forming around a center point. (Mungan, 2020: 602). Perception combines two images that are unrelated but share a similar element in terms of form. The following picture can be given as an example of the symmetry principle. The brackets in this image are square and curved. Viewers see the figure as three symmetrical pairs of brackets rather than six separate brackets.

Image 12: Principle of Symmetry

Principle of Past Experience

Two objects that were previously mentioned together in brief time intervals can be reconciled together, acting as complements, based on previous experiences. If the objects are observed within the same space and time intervals, these objects are referred to collectively.

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EFFECT OF GESTALT THEORY ON EMBLEM AND LOGO DESIGN

The dictionary meaning of the emblem is "signal". Emblems are images, symbols, or letters that are used to represent an institution, organization, or product. An emblem reflects the company's attitude, that is, its image.

A logo is a graphic mark, emblem, or symbol used to aid and promote public identification and recognition. It may be of an abstract or figurative design or include the text of the name it represents as in a wordmark.

Differences Between Emblem and Logo

Emblems and logos, which are regarded as the most crucial step in branding, work in tandem with corporate identity to ensure that products are easily remembered, distinguishable from others, and have a direct association.

It emerged during periods of low literacy, and brands were created in the form of symbols. Thus, it conveyed a reminder element to people more easily and quickly via visual perception. Today, these two elements are the most important aspects of corporate identity, both visually and verbally.

While the logo reflects the institution's name, the emblem is made up of meaningful figures and symbols. The logo is made up of letters and words.

Effects of Gestalt Principles in Emblem Design

The "G" figure is highlighted in navy blue in the above "NINTENDO GAMECUBE" emblem, while the letter "C" is highlighted in white. This emblem was designed in the form of nested cubes in accordance with the figure-ground principles.

In this example, which belongs to the "SPARTAN GOLF CLUB", we see an emblem design adhering to the Gestalt principle of closure. In this design, a man with a golf club transforms into a Spartan with the movement trace of the club on his head as he swings his club. Although they appear to be separate phenomena, the complementary phenomenon in our perception paints them in our brain as a whole.

We can see in this design of the "UNILEVER" brand that it was created using Gestalt principles of proximity and similarity. In this emblem, which is designed with different figures, the letter "U", which appears when we look at the whole, is conveyed to us by our perception through grouping the figures.

In this emblem, which was designed with the principles of proximity and continuity for "SUN MICROSYSTEMS", figures that are close to each other are reflected as a group and the letter "S" is perceived. However, the "SUN" text emerges with the successive figures adhering to the principle of continuity.

Effects of Gestalt Principles in Logo Design

When we look at the "IBM" logo, we see three letters made up of short horizontal lines. Due to the close proximity of the lines, the brain perceives the letters "I," "B," and "M" directly rather than 8 long horizontal lines with spaces between them. The close proximity of the objects causes the principle of similarity to be employed by the brain in this image.


"FedEx" has strongly used the principle of closure of the gestalt theory in its logo. At first glance, the color and text format used for the logo creates a trustworthy brand and image. When examined in detail, another figure can be seen hidden evenly.

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The letter E and the letter X are designed to form an arrow pointing to the right. The purpose of this is to create speed and progress in perception. This subtext, associated with the international shipping company, created a simple and rational logo.

The principle of continuity employed in "Coca Cola" is geared toward follow-up and brain perception. Continuity is in action when the brain starts to see letters as a whole rather than parts. One of the most important representatives of the principle of continuity is the Coca-Cola logotype, which is one of the best examples in the world. The chosen color, font and letters have a continuity that makes it easy to follow.
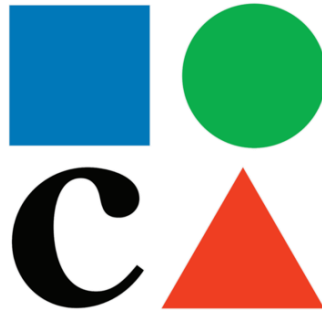
The logo of the Los Angeles Museum of Contemporary Art (MOCA) is an example of the principle of similarity. In the design, "C" is the only proper letter, the letters "M", "O" and "A" are represented by square, circle, and triangle, respectively. At first glance, the letter "C" will be the focus. The geometric forms used are colored and the letter "C" is written in black. As a result, the brain perceives similar ones as one group and the colorless "C" as a separate group.

CONCLUSION

The logo and emblem, which are graphic design elements, are the person's or company's first point of contact with the outside world. It provides information about the brand's personality, value, and point of view.

By directly appealing to human perceptions, graphic design elements aim to reach the subconscious. At the same time, it conveys messages to people by employing scientific disciplines such as psychology, philosophy, sociology, economics, history, geography, mathematics, and physics. It also heavily relies on the brain's perception systems to convey messages, as perception is what drives human behavior.

Given that Gestalt principles comprise the primary perception system, the designer can direct the audience as he sees fit by arranging the design principles he will employ in his work in accordance with the message he wishes to convey.

Working on the subconscious by directly targeting the human brain is within the scope of graphic design elements. These principles are critical for designers who want to create a brand with unique, creative, and always catchy emblem and logo designs.

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