Imaginary Ambigram Effect in Poster Design

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Abstract
Posters are one of the most important communication tools developed in the twentieth century. Over time, various styles, techniques, and technologies have been incorporated in the preparation and presentation processes of posters, where the search for innovation for impressive designs is continuous. Imaginative illustrations appear as the first evidence of the existence of art and even of life in history. Today, images on posters are used quite widely. In this study, the use and effect of images designed as ambigrams in poster designs were examined. Imaginary ambigrams emerge when images gain new meanings when viewed from different angles or as a result of various rotations or reflections. Although the first examples of ambigrams date back centuries, the use of imaginary ambigrams on posters will provide an innovative image and a different perspective in poster designs.
Keywords: Ambigram, Poster, Image, Imaginary Ambigram.

1. METHOD
In this study, a qualitative research method was used with a literature review. Existing sources on the historical development, types, and theoretical foundations of ambigrams were examined. At this stage, academic articles, books, art magazines, and online resources were used.
For the sample studies, original works were produced using digital software tools and traditional drawing techniques. The study was enriched by performing aesthetic and functional analys es of the designs.

1.1. Aim
This article aims to develop an understanding of the use of imaginary ambigrams in poster designs. There are many types of ambigrams, which are known as designs, that can be read in the same way or with a different meaning when a typographic design is viewed from various angles, mostly when rotated 180 degrees.

In this study, it will be emphasized that ambigrams are not limited to typographic designs, contrary to the general understanding, and that the meanings of images can be diversified with rotations. By examining the aesthetic and functional values of imaginary ambigrams, their history, and modern applications for poster designs, the importance of this study is to bring a fresh look to poster designs, which have a large slice of the graphic design cake with imaginary ambigram designs.

1.2. Scope
The scope of the study includes the use of imaginary ambigrams, of which there are many types in the literature, in poster designs. Contribution will be made to visual research on poster design with imaginary ambigram.

The imaginary approach, one of the oldest communication tools in human history, has always been used to convey feelings and thoughts, from pictures drawn on cave walls to today's digital age. Images are often included in posters, which are one of the most important communication tools of graphic design. The ambigrams evaluated in the study will bring an innovative interpretation to poster design, not as a mere image but as imaginary ambigrams that convey more than one message as a result of various rotations.

2. POSTER AND IMAGE
With the invention of writing, which is the most important building block in the development of culture and civilization, people had the opportunity to record their knowledge and transfer it to the next generations. The pictures engraved on cave walls and clay tablets are called pictograms; pictographs inspired hieroglyphs, cuneiform, and eventually phonetic writing, in which symbols began to represent sounds rather than events or objects.

As a result of this process of writing from images to symbols, it is understood that writing is influenced by pictography but turns into symbols to make verbal communication permanent (Gombrich, 2015; 151). In short, the basis of letters evolving into symbols is based on illustrations that can be called images.

Image can be defined as "the visual representation of anything" (Chandler & Munday, 2011; 201). Ambrose and Harris define image as "the most comprehensive and general concept, as the likeness of an object perceived externally by the sense organs, reflected in consciousness" (Ambrose & Harris Harris, 2013; 164).

Posters are one of the most important visual tools of communication that transform into a modern structure with text. Posters are created to announce various cultural events from past to present, promote products and increase social awareness.

The turning point that enabled posters to become widespread was Gutenberg's invention of the printing press, which allowed texts to be reproduced quickly through type. For centuries after this invention, posters consisted of texts adorned with decorative ornaments. One of the most important reasons for this situation is that there were centuries between the successive developments of lithographic printing, photography, printing techniques, and computer technologies and the invention of Gutenberg. At the end of the 19th century, under the influence of artists in France, posters broke away from text and vignettes and gained a modern appearance. Colorful paintings created by traditional methods by names such as Toulouse-Lautrec, Alphonse Mucha and Jules Chéret began to appear on posters (Lehimler, 2018; 2386). Especially photography and computer technologies have accelerated the process of preparing images and made their use in designs widespread.

The first posters in the form of decorated announcements were gradually replaced by posters with images and text. After the awareness that images alone could convey the message emerged, the number of words gradually decreased, and images gained great importance in posters (Becer, 2018; 203).

Generally speaking, the evolutionary process of writing, which transformed from a picture to an alphabet, has paradoxically evolved from pure text to image plus text and finally to pure image when viewed from the perspective of poster designs.

Visual design products emerge as a result of the processes of discovery, design, development, and implementation (Nottingham & Stout, 2021; 23). Discovery, the first stage of this process, involves an idea or thought. After the idea is transformed into a draft, it is put into practice with the use of appropriate tools, developed, and conveyed to the audience.

The main purpose of poster design is to convey the message. The way this message is conveyed shows the diversity, difference and impact of the design. The designer determines which elements and style can better express the message to be conveyed on the poster (Becer, 2018; 13). From a universal perspective, it can be argued that literary elements appeal to a relatively smaller segment and that it would be profitable to choose an imaginative approach to appeal to larger audiences. In this case, the subjective structure of visual perception can be shown as an antithesis. Variables such as socio-cultural status, intelligence, education and cultural level will definitely affect the way images are perceived (Uçar, 2018; 133). However, an image that appeals to only one nation or a geography where a language is valid will be able to be interpreted by more people compared to a mere text.

Ambigram brings an innovative look to the form of imaginary transmission. Especially when the images frequently preferred in posters gain a different meaning with various rotations, it will add a new perspective, and an innovative interpretation to the universal poster appearance.

Image 1. Refik Yalur, aile (family) logotype, Grafik Tasarımda Ambigram, 2024.

The design in Image 1. can be considered a typographic and imaginary ambigram. The text, which reads as family in the first view of the logo, continues to read as family after a 180-degree turn, and thanks to the dots positioned on the letters, it represents a nuclear family consisting of a mother, father and child. With simple additions to the letters, it is easier and faster to understand than a logo that will use typography. The power of the image was utilized by creating a catchy and impressive logotype.

3. AMBIGRAM IN POSTER DESIGN
Ambigram is when a design remains in the same appearance or gains a new meaning as a result of various rotations.

The first ambigram book written and published in 1981 by Scott Kim, who contributed to the development of ambigram, was "Inversions." Douglas Hofstadter contributed to the popularization and recognition of ambigram with his book "Ambigrammi" in 1987, John Langdon with his book "Wordplay" in 1992, Burkard Polster with his book "Eye Twisters" in 2007, and Nikita Prokhorov with his book "Ambigrams Revealed" in 2013. Ambigrams used in Dan Brown's book "Angels and Demons" and in the movie of the same name are one of the most important factors that made ambigram widespread (Yalur, 2024; 27). In 2024, Refik Yalur made various contributions to the literature with his book "Ambigram in Graphic Design", the first Turkish source.

Scott Kim first used the term Inversion, but since it did not fully express the concept, a new search was initiated. The term ambigram began to be used by combining the Latin suffix "ambi" meaning double face, with the Greek word "gram" meaning line, writing or letter (Hofstadter, 1987; 31). Reported by Refik Yalur.
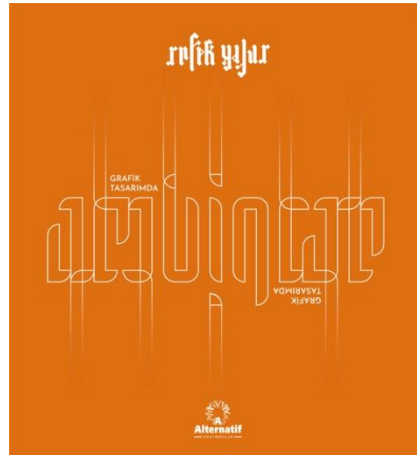
Image 2. Refik Yalur, "Grafik Tasarımda Ambigram" book cover, 2024.

In related books, the book "Topsys and Turvys" published by Peter Newell is mentioned as the first ambigram in history.
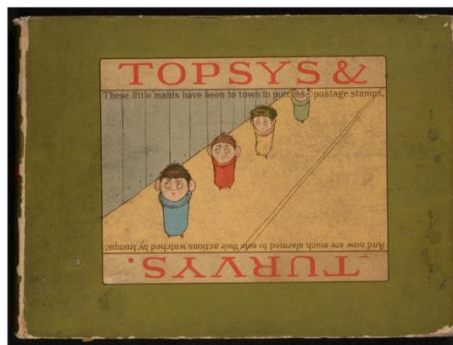

Image 3. Peter Newell, "Topsys and Turvys" book cover.

In Verbeek's cartoons, which appeared in the Sunday supplement of the New York Herald newspaper in 1903 and 1904, she used double-person half-turn illustrations (Polster, 2007; 219).

Image 4. Gustave Verbeek, New York Herald, 1903.

When this example illustration of a bird of prey and a hyena is rotated 180 degrees, the prey and the hunter switch places. Although in the image on the left the hunter is seen as a hyena, with a half turn the hunter is now seen as a giant bird.

Yalur (2024) argues that Guiseppe Arcimboldo's work "The Cook," completed in 1570, is the first ambigram whose concept emerged centuries later. The work contains a silver

serving pot with an open lid containing various meats, and with a half turn it turns into an elderly portrait.

Although the reversible table is a reference first documented by Arcimboldo in 1570, it also approximately documents the date when Arcimboldo assimilated this idea (Cheney, 2013; 147 and Kaufman, 2009; 177).

Image 5. Guiseppe Arcimboldo, "The Cook", 1570.

It seems that the first examples of ambigrams in history consisted of pictures or illustrations. But today, when ambigram is mentioned, typographic translations come to mind. It can be said that there are many more types of ambigrams to be discovered, such as rotation, reflection, bilingual, oscillation, closure, limitation, increase, figure/ground, numbers, and chain (Yalur, 2024; 30). All ambigram types can have one or more meanings. In his book Ambigram in Graphic Design, which is the first Turkish source, Yalur used the term "single personality" for ambigrams with a single meaning, which were previously named homogram and rotational, and the term "double personality" for ambigrams with two meanings such as heterogram and symbiotogram (Yalur, 2024; 30). As the meaning in design increases, personalities increase.

In this study, the use of imaginary ambigrams in poster design, specifically the ambigrams that can be created by rotation, will be discussed. Rotation is changing the direction of the element used by any angle. Reflection is the reflection of the design from the right, left, above or below at an angle or with a mirror (Yalur, 2024; 31, 42). Reflection is divided into two types: lake reflection and wall reflection. Wall reflection involves horizontal mirror reflection, while lake reflection involves vertical reflection. Rotation and reflection fall into the category of geometric ambigrams. Apart from this, ambigrams such as oscillation, figure-ground, and limitation are included in the category of perceptual ambigram.

When we look at the history of poster designs, it is seen that the appearance of posters has changed and new perspectives have been gained with the influence of many art movements. Different images have been accepted periodically in posters as well as in all design areas. Lifelike painting and illustration in the Arts and Crafts period, decorative ornaments and excessive occupancy in the Art Nouveau period, stylized figures with Cubism, typographic games with Futurism, collage with Dadaism, simplicity with Constructivism, and order with Bauhaus are some of the changes seen in posters. Art movements such as Art-Deco, Swiss Design, Pop-Art, Minimalism, and Postmodernism also have various influences on the appearance of posters.

Today, poster designs can incorporate all or several of these views. Images with metaphorical meanings, typographic designs representing images, photo-manipulations and mixed media illustrations are techniques that can be encountered more frequently in today's posters. Nevertheless, the search for innovation in designs continues today, as in every period.

Although a new idea in design provides originality, a surprising image will greatly increase the impact of the poster. Poster design using an imaginary ambigram, taking into account the readability of the message, will ensure fast and effective message transfer, which is one of the important requirements of the poster.

Imaginary ambigram attributes more than one meaning to a single image from two different perspectives. The meaning can be reinforced by conveying the same message to the audience in two different views, or the poster can be turned into a versatile communication tool by conveying more than one message in two views. Thus, the design moves away from the traditional appearance and offers an innovative experience to the viewer with a creative approach.
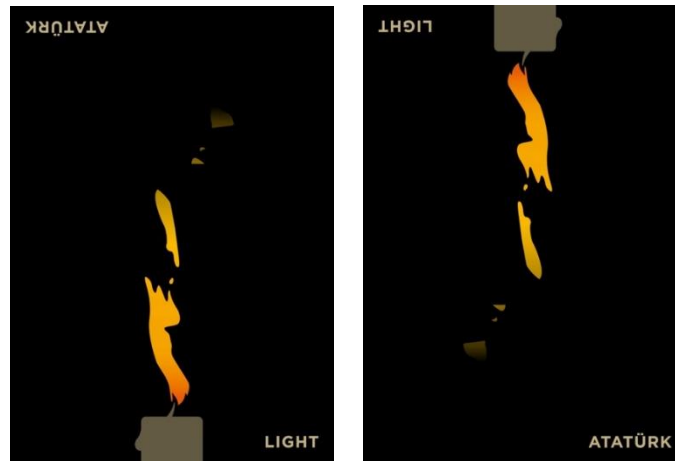
Image 6. Refik Yalur, Atatürk/Light, 2024.

The imaginary poster design, which at first glance shows a burning candle and its light, turns into an Ataturk portrait by turning it 180 degrees. Two different images were obtained with a single image, and at the same time, the message that Atatürk established a bright future and illuminated the darkness was conveyed. While this metaphorical approach can be given with two different images, a multifaceted interaction between the viewer and the poster is achieved with the half-turn imaginary ambigram.
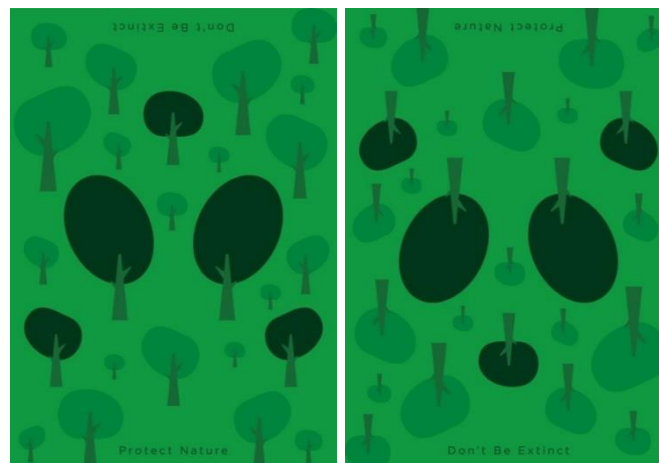
Image 7. Refik Yalur, Protect Nature, 2024.

The text added to the poster design, which resembles a forest at first glance, gives a hint that it will be viewed from a different angle. With a 180-degree rotation, the dark trees created a portrait of a panda, and the importance of protecting nature for the survival of all living things was effectively conveyed by stating the reason on the other side of the ambigram.

The reverse typography on the page gave a clue to the audience who saw the forest in the poster, thus arousing curiosity in the audience. Thus, this method, which will enable the viewer to concentrate on the poster and even look more closely, will succeed in attracting attention and standing out among many posters.
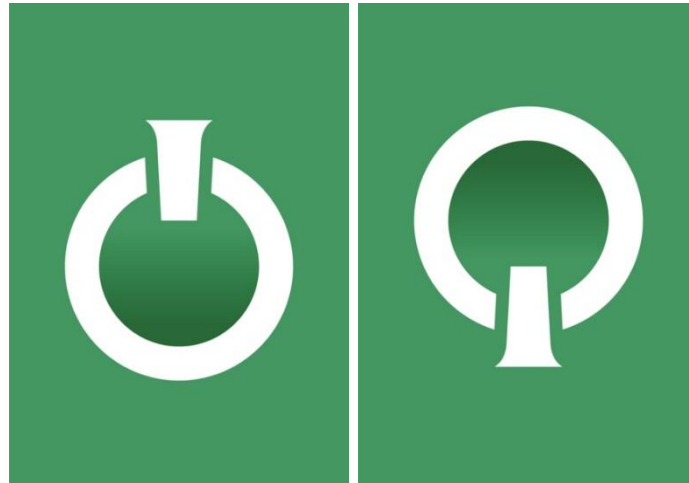

Image 8. Refik Yalur, Technology/Nature, 2024.

In the poster design in Image 8., the power off/on symbol can be seen at first glance. The deformations made on the symbol make the viewer feel that the image alone will not be just an open/close symbol. When the poster is rotated 180 degrees, the image turns into a tree. It is explained that energy saving, as one of the methods of protecting nature, can be achieved by turning off electrical appliances, which are not considered very important today but have at least one in all homes, with just a button unless they are needed.

Posters that do not contain typographic texts, such as energy-saving, will be able to read the second meaning as a result of the reflection of the lake with a half turn.

The imaginary ambigram creates an emotional and mental connection between the poster and the viewer. In this way, the catchy quality that a poster should have is effectively achieved.
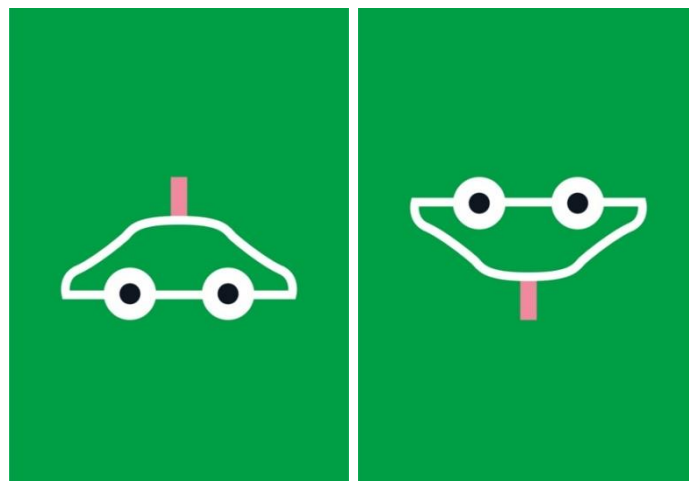

Image 9. Refik Yalur, City/Nature, 2024.

A light red antenna placed on the car image created with basic lines suggests that different perspectives are needed for the poster. The image language rotated 180 degrees and turned into a frog on the outside, adding fun to the image and increasing the impact of the message.

The imaginary ambigram, which has two images conveyed by one image, gave the poster an artistic value. Thus, ambigram expands the boundaries of poster design and opens new horizons. At the same time, imaginary ambigrams, which offer an aesthetic appearance, transform the poster into a work of art beyond its sole function of conveying information.
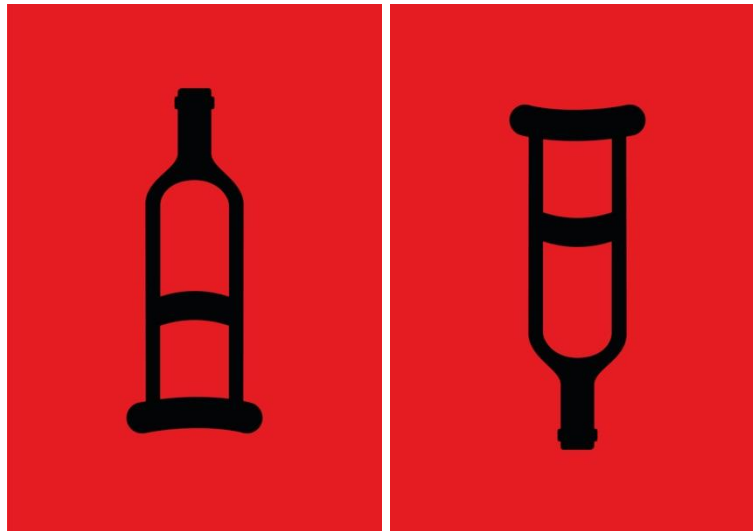

Image 10. Refik Yalur, Cause/Effect, 2024.

The ambigram, which at first glance represents an alcohol bottle, turns into a crutch when the banner is rotated 180 degrees or with a lake reflection. By discussing the concrete harm of alcohol that can be observed in a short time, the message is given that one should not drive drunk and that it may lead to irreversible negative situations.

Imaginative ambigrams, which enable multiple meanings to be presented in a single image, have the power to convey a simple, and practical message in poster design.
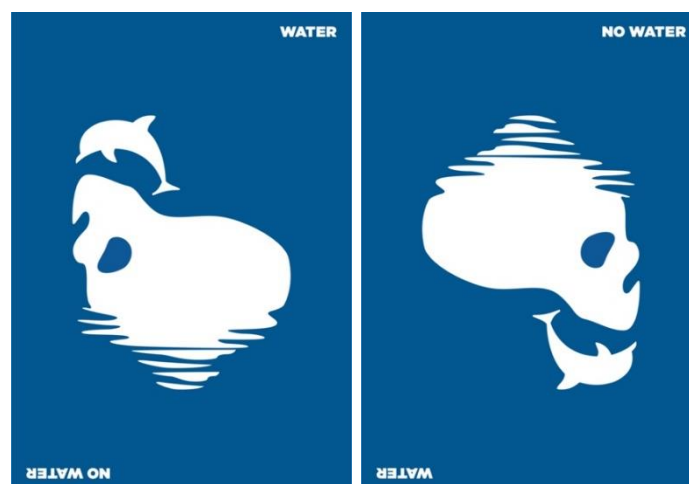

Image 11. Refik Yalur, Water/No Water, 2024.

A dolphin jumping over the wave symbolizes life and vitality. On the poster that was rotated 180 degrees, the dolphin disappeared and the skull symbol clearly appeared. A simple

image is captured with a single image on the poster, which explains that life will continue to exist by consuming water and protecting the oceans.

In addition to ensuring the integrity of the elements used in the poster design, it is very important that they are readable and understandable in terms of their impact on the audience. In a poster design that uses imaginary ambigrams, readability becomes an issue that needs to be taken into consideration twice. It is not enough for the initial version of the image presented to the viewer to be readable and meaningful. The image must also be able to clearly express its new appearance gained through rotation and reflection.

In short, the primary aim of a correct and functional design is to be readable. It is not enough for this readability to be strong from both perspectives; the equality of the strength of both readability is equally important.
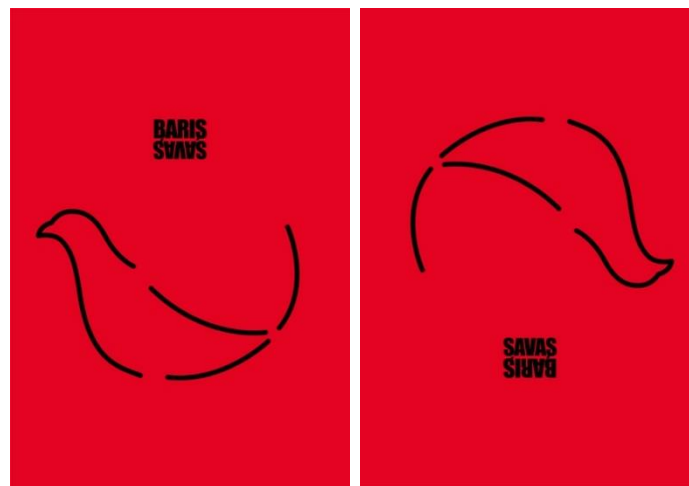

Image 12. Refik Yalur, War/Peace, 2024.

The poster design, which includes the dove symbol, contains a clear expression supported by the slogan Peace. When the design was rotated 180 degrees, the pigeon turned into a hairstyle, and the text read became war. The poster gains meaning by reading the text. In addition, the text was positioned where the mustache image would be, symbolizing the Hitler mustache and nourishing the meaning.

The fact that the image has a different meaning as it rotates adds depth to the design. At the same time, it offers a visual show that will attract the attention of the audience by increasing interaction, instead of a poster that can be viewed from one side.
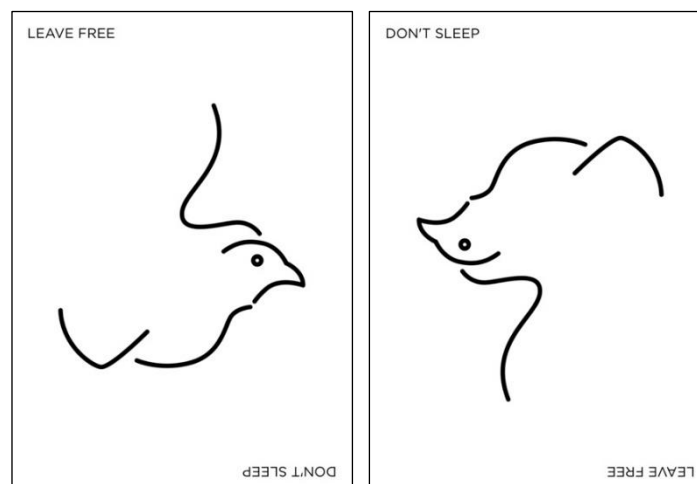

Image 13. Refik Yalur, Leave Free, 2024.

Another poster design that appears as a pigeon symbol turns into a dog as a result of 180 degree rotation. While the dove metaphorically symbolizes freedom, the dog directly illustrates the narrative. It is clearly stated that stray animals that are put to sleep must remain free.

The dove with one wing in the air will make the viewer feel that the image needs to be viewed from a different angle. It stimulates the audience and encourages them to think, thus reinforcing memorability.
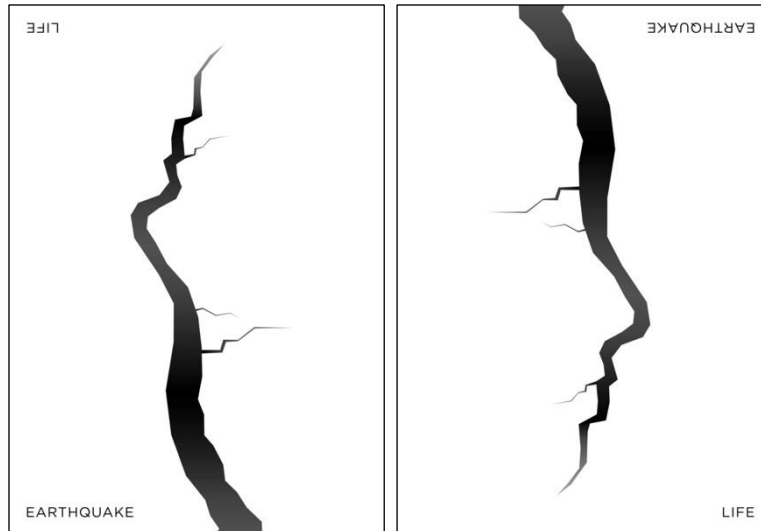

Image 14. Refik Yalur, Life/Earthquake, 2024.

It is understood that the poster design, which symbolizes a broken fault line, was produced for earthquake awareness. When the poster is rotated 180 degrees, the fault line turns into a portrait.

The universality that the use of imagery brings to the poster can be doubled with an imaginary ambigram. Especially when addressing a global problem or preparing a product promotion advertising campaign, the use of imaginary ambigrams will facilitate meaning by preserving the simplicity of the poster.
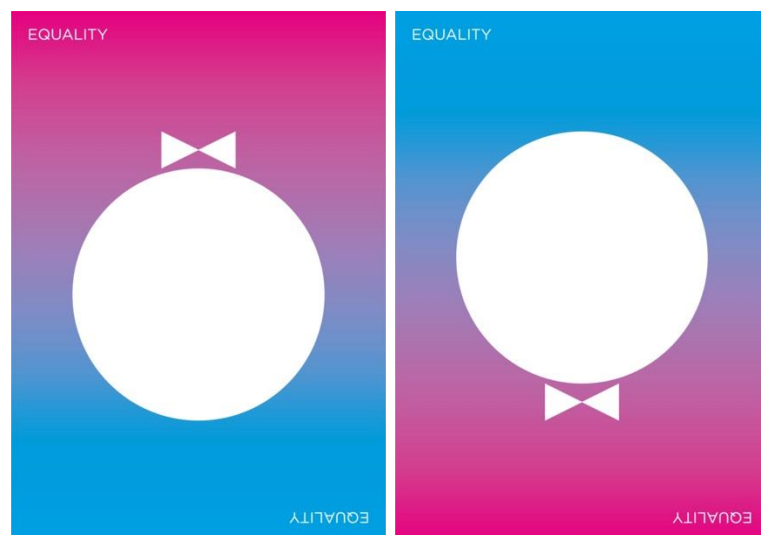

Image 15. Refik Yalur, Equality, 2024.

The idea of being able to look at images from both sides gave rise to the natural ambigram. This poster clearly shows the difference between looking and seeing. It can be thought of as mental gymnastics. It can be said that the design of the equality poster was born from

an idea. At first glance, the image that is thought of as a hairpin without deformation is perceived as a bow tie with a half-turn.

4. CONCLUSION

As a result of research, ambigram emerges as a technique that was first used centuries ago. However, since it is not used extensively, it offers an effective solution to an innovative search, especially in poster designs. With their creative, innovative, and versatile communication qualities, ambigrams multiply the impact of poster design.

In order to increase the power and impact of visual communication, imaginary ambigrams are integrated into the poster design, making the interaction mutual. Such designs combine aesthetics and functionality, making the viewer think about the design and creating a mental and emotional bond between the design and the viewer.

Since posters using imaginary ambigrams have more than one message and meaning with a single image, they facilitate the emergence of a plain and simple visual design in form. As a result, imaginary ambigrams have the potential to produce practical and artistic solutions in poster design. Designs in which imaginary ambigrams will be used will form an important basis for works that are visually and functionally universal today and in the future. In addition to the digital technology used in design production, new technologies to be used in presentation will make poster designs using imaginary ambigrams look more innovative and turn them into more effective solutions.

SOURCE

Ambrose, G., & Harris, P. (2013). Grafik Tasarımda İmge. İstanbul: Literatür Yayınları.
Becer, E. (2018). İletişim ve Grafik Tasarım. Ankara: Dost Yayınevi.
Chandler D. & Munday, R. (2011) Medya ve İletişim Sözlüğü. İstanbul: İletişim Yayınları.
Cheney, L. D. (2013). Arcimboldo. New York: Parkstone Press International.
Gombrich, E. H. (2015). İmge ve Göz / Görsel Temsil Psikolojisi Üzerine Yeni İncelemeler. İstanbul: Yapı Kredi Yayınları.
Hofstadter, D. R. (1987). Ambigrammi. Florence: Hopefulmonster.
Kaufmann , T. D. (2009). Arcimboldo: Visual Jokes, Natural History, and Still-Life Painting. Chicago: University of Chicago Press
Lehimler, Z. (2018). Afiş Tasarımında İki Dil Kullanımı. Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 22(4), 2381-2405.
Nottingham A. & Stout J. (2021). Grafik Tasarım Süreci. İstanbul: Literatür Yayınları.
Polster, B. (2007). Eye Twisters . New York: Sterling.
Uçar, T. F. (2018). Görsel İletişim ve Grafik Tasarım. İstanbul: İnkılap.
Yalur, R. (2024). Grafik Tasarımda Ambigram. İstanbul: Alternatif Yayınları.

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Source: https://www.loc.gov/resource/rbc0001.2015juv05309/?st=gallery (Access Date: 21.10.2023).
Image 4. Gustave Verbeek, New York Herald, 1903. Kaynak: Polster, B. (2007). Eye Twisters. New York: Sterling, sf. 7.
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