

The Integration of Gestalt Theory to The Graphic Design

Muhamad Hanapi Khamis, Zuliani Mohd Azni, Siti Hajar Abd Aziz, Azmi Aminordin

Universiti Teknologi MARA

Email: hanapikhamis@uitm.edu.my, shajar_aziz@uitm.edu.my, azmi1107@uitm.edu.my

Corresponding Author Email: zulianiazni@uitm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i6/15449> DOI:10.6007/IJARBSS/v13-i6/15449

Published Date: 30 June 2023

Abstract

Gestalt principles are one of the means by which the diverse elements of a design can be combined into a coherent visual documentation. The principles drive the graphic designer to deliver the visual document that guides the selective attention of human beings. To achieve superior results in their work, visual artists and designers began adopting as standard practice the application of gestalt perceptual aspects. This article takes a look at a few of the most important gestalt visual principles and discusses how those ideas might be applied in the field of visual documentation. The article also takes a look at some examples of visual documentation.

Keywords: Gestalt Theory, Graphic Design, Unify, Principles, Psychology.

Introduction

In the 1920s, Kurt Koffka and Wolfgang Köhler developed the Gestalt Theory, which was first proposed by Wertheimer. The Gestalt school was founded in 1912, with the publication of Czech-born psychologist Max Wertheimer's "Experimentelle Studien über das Sehen von Bewegung" ("Experimental Studies on Movement Perception"). Wertheimer reported on the findings of an apparent movement research done in Frankfurt, Germany, with psychologists Wolfgang Köhler and Kurt Koffka. For the following several decades, these three constituted the core of the Gestalt school (Gestalt Psychology, 2016).

Graham (2008) stated gestalt theory originated in psychology, but it has inspired academics in a wide range of fields, including linguistics, musicology, instructional design, human-computer interaction, architectural healthcare design, sustainable design, and art and visual communication. Gestalt rules of vision piqued the attention of visual artists and designers because they gave a scientific way for describing human perception and our inclination to "group" objects.

As a branch of psychology, Gestalt principles are concerned with perception. This is the primary focus of graphic design as well. Graphic design is a method for arranging messages to graphically tell a narrative. The Gestalt concepts are extensively used in graphic design, and

they are an excellent method to grasp how messages and images are constructed. There are several ways to structure a message, and the Gestalt principles provide ideas and hints on how it might be distinct as well as how eye manipulation techniques are often similar.

Changes in spacing, timing, and arrangement can have major implications on the interpretation of provided information, according to the Gestalt theory. Although gestalt visual concepts are simple to understand, they are incredibly effective (Graham, 2008). Ignoring Gestalt visual theory may lead to unexpected interpretations by the reader as shown in figure 1 (Zakia, 1997) and hinder clear communication as a consequence.

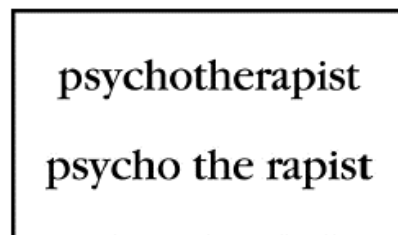


Figure 1 : Gestalt theory demonstrates how

The Rule of Gestalt

Graphic designers have adopted the term gestalt from the German school of psychology of the early 19th century to explain why a powerfully unified design appears bigger than the sum of its parts (Graham, 2005). The term gestalt can be used to describe a structure, configuration, or layout whose particular qualities are greater and more unified than the simple sum of its component elements. Gestalt principles are widely used in user interface design, graphic design, and data visualization (Koborov, 2015)

To assist unify the design, designers frequently apply visual ideas that are based on gestalt theory. The relationships between the figure/ground, proximity, closure, similarity, and continuity are among the most aesthetically important.

Figure/Ground

The term figure/ground refers to a situation in which the topic is more noticeable than the background, as shown in Figure 2. This draws attention to the primary subject for the spectator by highlighting it in terms of several possible characteristics, such as contrast, colour, size, etc. The term ground refers to everything in the scene that is not a figure. When humans adjust their concentration, the ground will shift as well, and the item will switch between being a figure and the ground and back again. The ground can also refer to the



Figure 2 : Ground contrast effect the legibility of text

background (Siti Hajar et. al., 2015).

Proximity

Proximity is also known as the law of closeness and the concept of nearness (Black, 2017)). The design benefits from a reduction in complexity as a result of the grouping that occurs as a consequence of closeness, which also serves to improve the link between the components. Additionally, spatial proximity is known as one of the essential organising principles in information design for the purpose of improving the perceptual organisation of data. This can be accomplished by grouping similar pieces of information together (Black, 2017). When designing, it is important to keep in mind that the proximity of elements in space and time increases the likelihood that those elements will be considered to be a member of an organised and cohesive group as is seen in figure 3. It is more difficult for the reader to determine which pieces of information belong together when the items being considered are separated by a gap (Graham, 2008).



Figure 3 : A combination by different design element been position in proper closeness to represent a magazine layout

Closure

According to the principle of closure, a viewer has a tendency to perceive a collection of distinct elements as a single, recognisably distinct pattern, rather than as individual elements (Lidwell et al., 2010). When there is a visual presentation that is lacking parts or gaps, whether it is a line, shape, pattern, or text, people have a tendency to pay attention only to what is present in front of them and complete or fill the gaps. This is true whether the missing part or gap is a line, shape, pattern, or text (Graham, 2008).

As demonstrated by this figure 4, even though the shape is not an entire square, it is nevertheless interpreted as being in the form of a square. In addition to that, the application of this idea makes the design simpler while elevating its level of interest. It is possible to lessen the complexity of the design by making use of instantly recognisable patterns and excluding parts that aren't necessary; this also makes it easier for the viewer to take part in the creation of the design. In logo design, the closure concept is applied since it calls for an emphasis on simplicity and minimalism in the overall design (Gad, 2018).



Figure 4: The elements that holistically perceived as single pattern square.

Similarity

In accordance with the principle of similarity, people have a tendency to group together elements that are similar based on characteristics such as colour or shape, even if the elements are physically separated from one another (Wertheimer, 2012). According to Siti Hajar (2015), the shape does not always take the same form. Even though there will be a great deal of variety within the repetition, it will still be possible to distinguish as shown in figure 5. The clustering of the design elements that emerges as a direct result of applying this principle simplifies things while also highlighting their interconnectedness (Gad, 2018). Moreover, variations in the shape and/or colour of the design elements could help in the perception of multiple separate chunks and reinforce differences among the elements. This would be an advantage for the overall design. The organisation of information can benefit from adhering to this principle. The designer can convince the viewer that the various elements, including texts, links, and/or animated elements, belong together by maintaining a consistent style across all of these components (Graham, 2008).



Figure 5 : The item that look similar seem to belong together.

Continuity

The human eye seeks associations between shapes: continuity happens when the eye follows a line, curve, or series of shapes, even when it crosses over negative and positive shapes (Graham, 2008). This principle also says that a pattern with good continuation may make the viewer think that the pattern goes on after the pattern ends. This means that the rest of the pattern is filled in by the viewer (Gad, 2018).

A strong continuation enables us to mentally trace the connection between two items even if the pattern is interrupted in a way that causes only minor disruption; the elements that are connected by the line will still be viewed as being related to one another. The angle of the disruption will be viewed as having less of a connection to the elements as it increases in magnitude (Lidwell et. al, 2010).

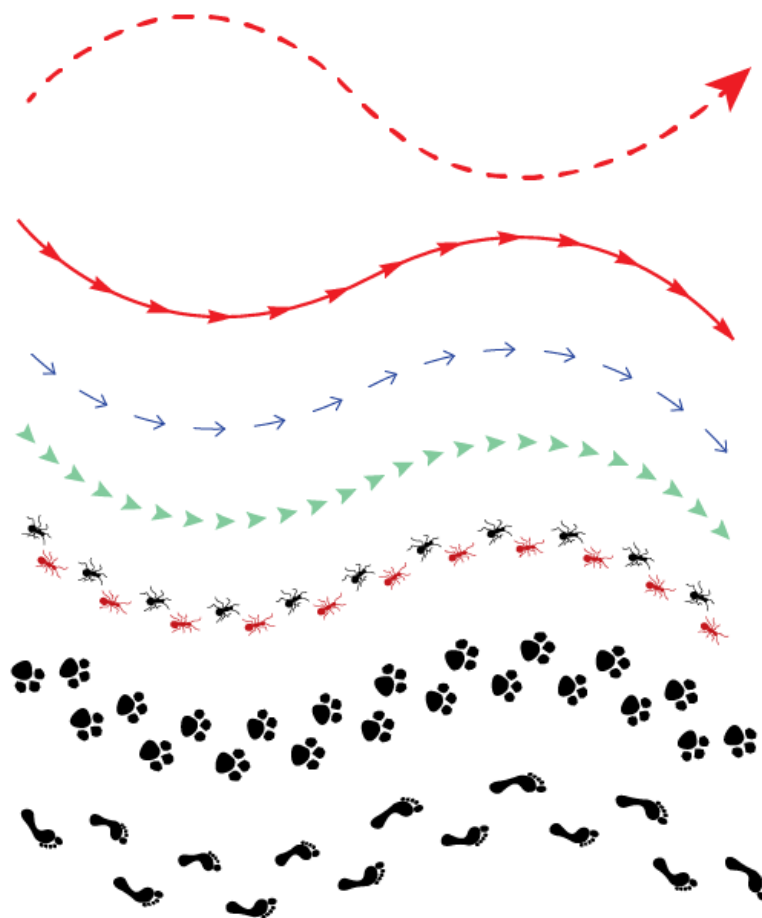


Figure 6 : The example of different pattern to represent the continuity

Conclusion

The Gestalt principles have been utilised as a primary theoretical framework in a variety of fields of study, including art, graphic design, and information design. Furthermore, ever since its inception in the 19th century, the Gestalt principles have been subjected to a variety of analyses and research projects in an effort to refine the visual perception process. Since the 1960s and 1970s, as a direct result of this work, stronger theoretical and experimental frameworks (such as cognitive science) have been developed, and ever since then, they have dominated this field of study (Wagemans et al., 2012).

The application of the Gestalt principles by visual artists and designers is due to the fact that these principles provide a scientific method and a logical explanation of human perception as well as human intentions and inclinations in grouping things. This is why these principles were applied.

References

- Black, A. L. (2017). *Information Design: Research and Practice* (1 edition). London: Routledge.
- Gad, D. (2018). *Information Design of Public Documents: Applying Gestalt Principles to Improve User Understanding*. Canada: Universite Laval.
- Graham, L. (2005). *Basic of Design*. New York: Thomson.

- Graham, L. (2008). Gestalt Theory in Interactive Media Design. *Journal of Humanities & Social Sciences*, 1-12.
- Koborov, S. G. (2015). Gestalt Principles in Graph Drawing. *International Symposium on Graph Drawing and Network Visualization*. ResearchGate.
- Lidwell, W., Holden, K., & Butler, J. (2010). *Universal Principles of Design, Revised and Updated: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design (Second Edition, Revised and Updated edition)*. Beverly: Rockport Publishers.
- Psychology, G. (2016). www.britannica.com. Retrieved from <https://www.britannica.com/science/Gestalt-psychology>
- Fakri, S. H. M., Yusoff, A., & Said, C. S. (2015). Applying Gestalt Variabkles in Learning Photography with Virtual Games. *Jurnal Teknologi*, 111-115.
- Wagemans, J., Elder, J. H., Kubovy, M., Palmer, S. E., Peterson, M. A., Singh, M., & von der. (2012). A century of Gestalt psychology in visual perception: I. Perceptual grouping and figure-ground organization. *Psychological Bulletin*, 1172–1217.
- Zakia, R. D. (1997). *Perception and Imaging*. Massachusetts: Focal Press.