

The Gestalt of Book Design

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Abstract

A book is more than the sum of its parts. The main ingredients of a book —the text, image and paper, or other materials— are combined by designers in various ways. The book as an end product, provides a further experience than the sum of these raw ingredients.

The Gestalt Theory was introduced by Wertheimer, and further investigated by Kurt Koffka and Wolfgang Köhler in 1920's. The word "gestalt" means "shape", "form" or "whole" in German. The principles of Gestalt Theory, such as figure-ground, similarity, continuation, closure and proximity aim to formulate the visual perception of images, objects and groups, and it is used in graphic design to describe the organisation of design elements. The Gestalt principles, when applied to a book design, can provide a formulation and system that help graphic designers solve problems and create new solutions on a complex object that has many details and variations.

The figure-ground principle in Gestalt Theory can be translated to book design as the physical material and the informational ingredients of a book. In the complex arrangement of the ingredients of a book, the user tends to seek a pattern, this behaviour is explained as "closure" in Gestalt Theory. This paper aims to combine such Gestalt principles with the anatomy of the book and provide a systematic investigation of the book via the rules for organization and perception.

Keywords: Gestalt Theory, Graphic Design, Book Design

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Introduction

Gestalt is a German term, coined at the Staatliches Bauhaus in Weimar in the early 1920's, that describes a design's wholeness: A design's unity is more than the simple addition of its parts. In other words, each part of a design is affected by what surrounds it (White, 2002: 59).

The Gestalt Theory was introduced by Wertheimer, and further investigated by Kurt Koffka and Wolfgang Köhler in 1920's. "The publication of Czech-born psychologist Max Wertheimer's "Experimentelle Studien über das Sehen von Bewegung" ("Experimental Studies of the Perception of Movement") in 1912 marks the founding of the Gestalt school. In it Wertheimer reported the result of a study on apparent movement conducted in Frankfurt, Germany, with psychologists Wolfgang Köhler and Kurt Koffka. Together, these three formed the core of the Gestalt school for the next few decades." (Gestalt Psychology, 2016).

Being a school of psychology, Gestalt principles deals with perception. This is also the main concern for graphic design. Graphic design is a means of organizing messages to communicate a story visually. The Gestalt principles are widely used in graphic design works, and they are a great way to comprehend how messages and visuals are designed. There are many different ways to organize a message, and the Gestalt principles give ideas and clues on how it can be different as well as how the ways to manipulate the eye are usually the same.

"People seek order and clarity in environments and communication. ... The audience's need for order must be addressed and satisfied by the graphic designer through his or her approach to spatial organization" (Meggs, 1992: 70). The Gestalt principles such as figure-ground, proximity, continuity, closure and similarity help the designer organize the visual communication and communicate the message more accurately.

Exploring Gestalt Principles through Book Design

Gestalt psychology proposes that the brain is holistic with self-organizing tendencies. Due to these supposed innate abilities, the brain is capable of organising and structuring individual elements, shapes or forms into a coherent, organised whole. ... This satisfies the human brain's need to find, or impose, meaning of situations. As such, there are links between the perceptual qualities of gestalt and the aesthetics and compositional concerns of art and design. (Jackson, 2008: 66)

Publication design is one of the most important areas in graphic design. A book is an object that consists of many parts, and graphic designers organize information in a book to be able to transfer it in better and more effective ways. Book designers organize the information that is in the form of text and image, combine it with materials such as paper and ink, and use the production techniques such as offset print and binding.

The word "gestalt" means "shape", "form" or "whole" in German. When it is appropriately translated, the accent is on the concept of 'organization' and of a 'whole' that is orderly, rule-governed, non-random. This concept is opposed to that of a merely arbitrary, random, and unstructured grouping (Kanizsa, 1979: 56) In book design, the designer always have to organize the structure, make a choreography of the design elements to form a meaningful whole. Defining and putting all the cluster of information in order is the beginning of designing a book.

However, there are many more intricate levels of a book. The page as the material is part of the book as well as the typography on that page. The levels and combinations of these choices make the book a very complex object to design: The page is a piece of paper. It is also a visible and tangible proportion, silently sounding the thoroughbass of the book. On it lies the textblock, which must answer to the page. The two together –page and the textblock– produce an antiphonal geometry. That geometry alone can bond the reader to the book (Bringhurst, 2001: 145).

Gestalt is an attempt to describe the organisation of design elements into a holistic, unified and singular entity (Ambrose and Wilson, 2011: 56). The following principles can be applied to book design to further investigate the qualities of a book and examine how the elements of a book can be used in order to communicate in different levels.

Figure-Ground:

Figure ground principles explain the relationship of the subject to its surrounding space. Confusing the foreground is a visually stimulating technique. (White, 2002: 61). In books that use the codex form, the background is usually perceived as the page, while the foreground is the text. This can be altered in many different levels in books. In the example shown in figure 1, the background can have visual simulation and can add more meaning and detail to the page. Instead of using two layers, one being the background, and the other being the foreground, various levels in both background and foreground, together with the relationships between are open to various design interpretations.

The pages flex and turn; their proportions ebb and flow against the underlying form. But the harmony of that underlying form is no less important, and no less easy to perceive, than the harmony of the letterforms themselves (Bringhurst, 2001: 145). The pages also carry many other possibilities.



Shown in Figure 2, just with a simple die-cut, another dimension in figure-ground idea opens, and the possibilities to communicate an idea or a story increase with this simple trick of figure-ground.

The figure has an object like character, whereas the ground has less perceptual saliency and appears as 'mere' background. (Todorovic, 2008). This is true in most cases, though there can be more complex organizations considering figure ground principle. In Figure 3, for example, the book cover design of Stefan Sagmeister is shown. Here, the figure and ground is intermingled. In this example, where the background alters to form various portraits in the foreground, it is possible to see the complexity between figure and ground. Here, just like Escher's examples, the figure becomes ground and ground becomes the figure.

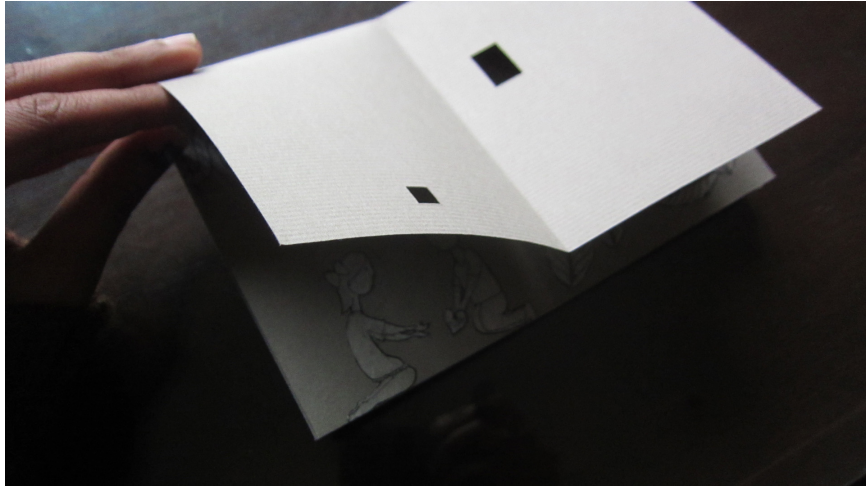


Figure 2: "Glimpses" book by Radha Pandey (taken from coroflot.com) shows tiny diecut windows can open many possibilities in figure-ground.



Figure 3: The intermingled relationship between foreground and background can be seen in this example "Things That I Learned So Far" book by Stefan Sagmeister.

Proximity:

Also called grouping, is the simplest way to achieve unity. Elements that are physically close together are seen as related. The further apart they are separated, the less they appear to be related. (White, 2002: 61).

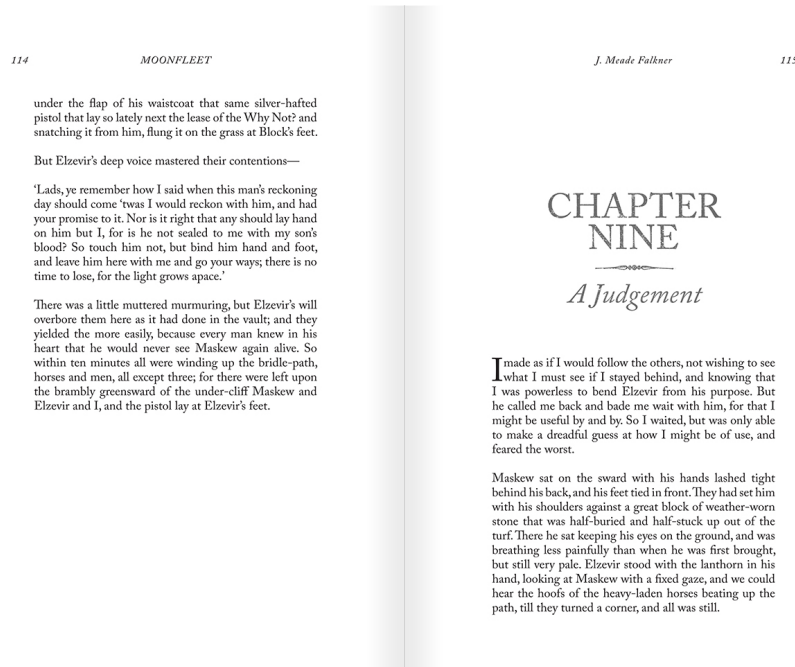


Figure 4: The paragraphs on a page use the law of proximity.

Forms that are located close to each other in graphic space form a relationship to each other. A designer has successfully employed the principle of proximity when the reader instinctively reads the correct caption for each illustration on a page. If the reader becomes confused about which caption goes with which illustration, the designer has failed to take this principle into account. (Meggs, 1992: 71) Sometimes designers use this principle to play with readability, such as David Carson. In figure 5, the letters used in unconventional spacing lead the reader's eyes to confusion and suggest a new way of reading.



Figure 5: The famous Ray Gun cover design by David Carson uses proximity principle to play with ways of reading.

Proximity also becomes a significant rule to aid reading. Bringhurst suggests that "Horizontal motion predominates in alphabetic writing, and for beginners, it predominates in reading. But vertical motion predominates in reading for those who have really acquired the skill. If the text is means to invite continuous reading, set it in columns that are clearly taller than wide" (2001: 163).

Similarity:

Elements that have the same basic characteristics tend to be integrated into groups. Elements that are similar of size, color, shape, position, or texture are seen as alike. The reverse of similarity is intentional contrast: type or imagery that is bigger is seen as more important. (White, 2002: 61).

Sizing and spacing type, like composing and performing music or applying paint to canvas, is largely concerned with intervals and differences (Bringhurst, 2001: 145). Just like in figure 6, the different textures give different information, and if the type character and size is similar, we understand that the information type is also similar. The red and black text separate the two different types of information and gives the text hierarchy.

Meggs names this principle as correspondence. "When forms have corresponding visual properties, such as similar size, shape, color, tone, texture, or direction, they develop a relationship or correspondence. Like properties attract and unify forms in graphic space, and different properties conflict and repel". (1992: 71)



Figure 6: Similar typography groups similar information. (Taken from johnpauldowling.com)

Continuity:

Objects arranged in either a straight line or a smooth curve, tend to be seen as a unit. On a page, it is possible to lead the eye from one point to another, and this can be done by a simple line or typography. To catch attention and to create a hierarchy to tell a story in a sequence, continuity plays an important role.

Continuation is valid in many different levels in book design. From the many sequential pages to type, continuity is a valid Gestalt principle in book design. Here, Zakia explains how serif letters use continuity: "One possible reason for dominance of serif letters in text type styling might be that they provide a "good" gestalt. Serif letters group together more naturally than sans serif letters, The serif on letters provide better visual continuity (2007: 52).

Forms generate eye movement on a page. Linear elements, such as a line of type generate an eye movement that continues beyond the end of the line-just as a boat continues slowly forward in the water after the motor is cut off unless it is deflected by another focal point. Continuance can create alignments and relationships. (Meggs, 1992: 70)

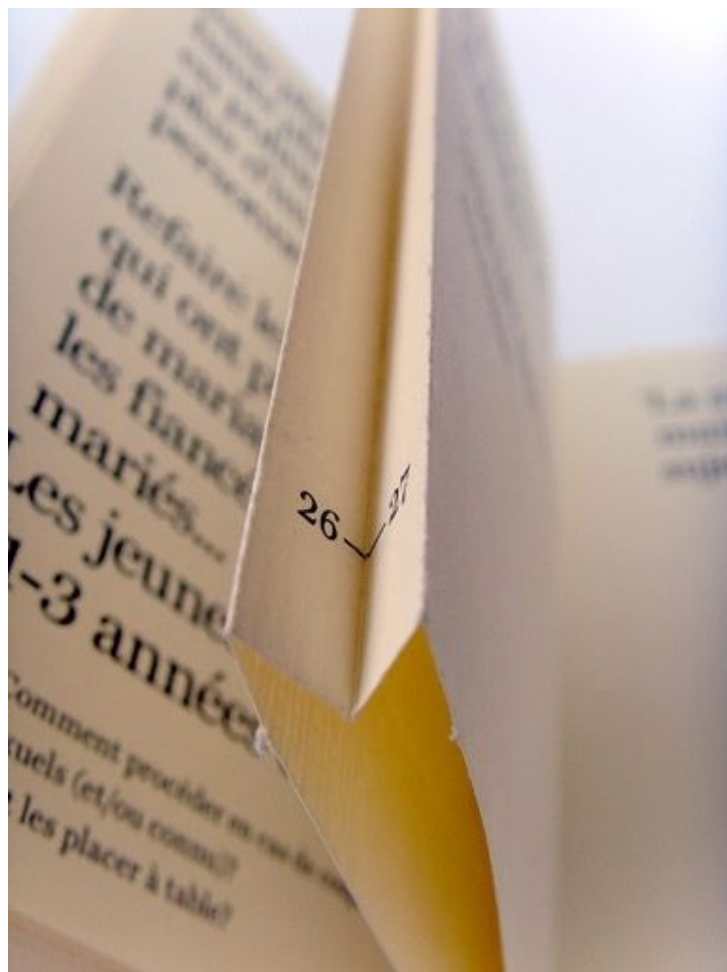


Figure 7: Continuation can also lead from one page to another.
(Taken from designinspiration.net)

"Continuation also can lead from one page to another." (White, 2002: 61). In figure 7, with an unconventional fold and pagination, one can see the direct link between two consequent pages. Page numbers are also an element of continuity.

Continuation is device for directing the viewer's eye around a composition. It is based on the idea that once you start looking along an edge, you will continue to look in that direction until you see something significant. This is a kind of closure, involving grouping disconnected shapes by movement and momentum (Pipes, 2008: 188) Turning pages after one another also gives an idea of continuation.



Figure 8: With continuation, it is also possible to connect different books and create a series design. (Taken from designinspiration.net)

Closure:

The book begins with the cover and ends with the back cover. The closure is usually the packaging of a book. The back cover symbolises the closed and finished book. The bellyband acts as a package that covers and completes the book from. It is also possible to give the idea of completeness on a book cover, such as in Figure 9.

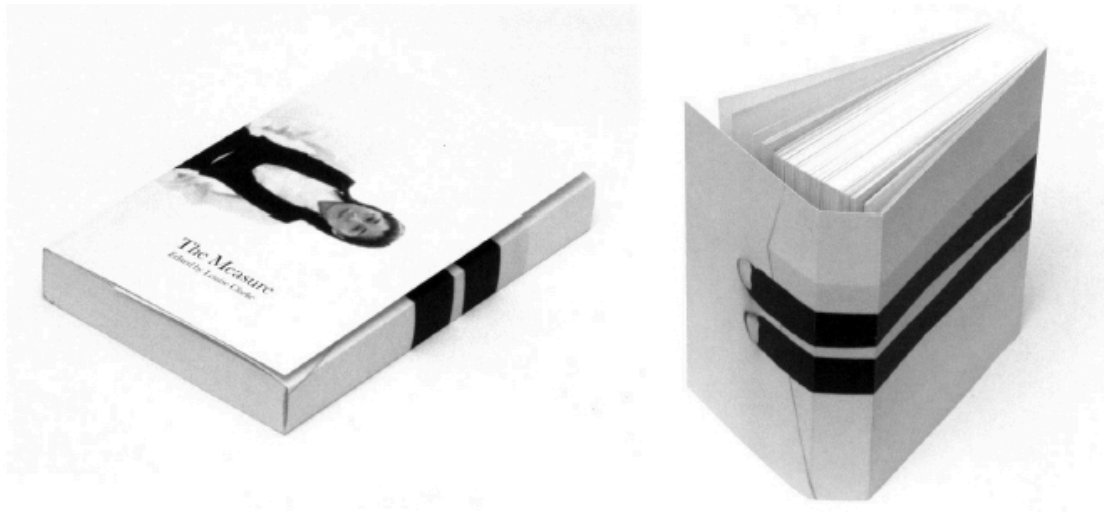


Figure 9: In this book "The Measure" it is possible to connect the figure that extends from the front cover to the back.

The closure principle "takes advantage of the observer's desire to perceive incomplete forms as complete. The artist provides minimum visual clues, and the observer brings them to final recognition" (Pipes, 2008: 255) When elements have sufficient relationships through alignment, continuation, proximity, and/or correspondence, a person sees them as a complete form or unified whole (Meggs, 1992: 73).

Conclusion: A Book is More Than The Sum of its Pages

The famous quote of Gestalt "a whole is more than the sum of its parts" is also true for the book. The main ingredients of a book —the text, image and paper, or other materials— are combined by designers in various ways. The book as an end product, provides a further experience than the sum of these raw ingredients. The many versions of foreground and background, the combinations of elements, the page and typography provide a playground for designers. Investigation of Gestalt principles play an important role in observing what deeper levels of these elements are capable of. The book is more than the sum of its pages, its type and image, its sequence and materials. It is a special combination of these elements, and in each book, these elements are composed by a book designer to tell another story in a new creative way.

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