

Prägnanz^[edit]

Main article: Principles of grouping

The fundamental principle of gestalt **perception** is the law of *prägnanz*^[de] (in the German language, *pithiness*), which says that we tend to order our experience in a manner that is regular, orderly, symmetrical, and simple. Gestalt **psychologists** attempt to discover refinements of the law of *prägnanz*, and this involves writing down **laws** that, hypothetically, allow us to predict the interpretation of sensation, what are often called "gestalt laws".^[16]

A major aspect of Gestalt **psychology** is that it implies that the **mind** understands external stimuli as whole rather than the sum of their parts. The wholes are structured and organized using grouping laws. The various laws are called *laws* or *principles*, depending on the paper where they appear—but for simplicity's sake, this article uses the term *laws*. These laws deal with the sensory modality of vision. However, there are analogous laws for other sensory modalities including auditory, tactile, gustatory and olfactory (Bregman – GP). The visual Gestalt principles of grouping were introduced in Wertheimer (1923). Through the 1930s and '40s Wertheimer, Kohler and Koffka formulated many of the laws of grouping through the study of visual **perception**.

- 1. Law of Proximity**—The law of proximity states that when an individual perceives an assortment of objects they perceive objects that are close to each other as forming a group. For example, in the figure that illustrates the Law of proximity, there are 72 circles, but we perceive the collection of circles in groups. Specifically, we perceive that there is a group of 36 circles on the left side of the image, and three groups of 12 circles on the right side of the image. This law is often used in advertising logos to emphasize which aspects of events are associated.^{[17][18]}
- 2. Law of Similarity**—The law of similarity states that elements within an assortment of objects are perceptually grouped together if they are similar to each other. This similarity can occur in the form of shape, colour, shading or other qualities. For example, the figure illustrating the law of similarity portrays 36 circles all equal distance apart from one another forming a square. In this depiction, 18 of the circles are

shaded dark and 18 of the circles are shaded light. We perceive the dark circles as grouped together, and the light circles as grouped together forming six horizontal lines within the square of circles. This perception of lines is due to the law of similarity.^[18]

3. **Law of Closure**—The law of closure states that individuals perceive objects such as shapes, letters, pictures, etc., as being whole when they are not complete. Specifically, when parts of a whole picture are missing, our perception fills in the visual gap. Research shows that the reason the mind completes a regular figure that is not perceived through sensation is to increase the regularity of surrounding stimuli. For example, the figure that depicts the law of closure portrays what we perceive as a circle on the left side of the image and a rectangle on the right side of the image. However, gaps are present in the shapes. If the law of closure did not exist, the image would depict an assortment of different lines with different lengths, rotations, and curvatures—but with the law of closure, we perceptually combine the lines into whole shapes.^{[17][18][19]}
4. **Law of Symmetry**—The law of symmetry states that the mind perceives objects as being symmetrical and forming around a center point. It is perceptually pleasing to divide objects into an even number of symmetrical parts. Therefore, when two symmetrical elements are unconnected the mind perceptually connects them to form a coherent shape. Similarities between symmetrical objects increase the likelihood that objects are grouped to form a combined symmetrical object. For example, the figure depicting the law of symmetry shows a configuration of square and curled brackets. When the image is perceived, we tend to observe three pairs of symmetrical brackets rather than six individual brackets.^{[17][18]}
5. **Law of Common Fate**—The law of common fate states that objects are perceived as lines that move along the smoothest path. Experiments using the visual sensory modality found that movement of elements of an object produce paths that individuals perceive that the objects are on. We perceive elements of objects to have trends of motion, which indicate the path that the object is on. The law of continuity implies the grouping together of objects that have the same trend of motion and are therefore on the same path. For example, if there are an array of dots and half the dots are moving upward while the other half are moving downward, we would perceive the upward

moving dots and the downward moving dots as two distinct units.^[20]

6. **Law of Continuity**—The law of continuity states that elements of objects tend to be grouped together, and therefore integrated into perceptual wholes if they are aligned within an object. In cases where there is an intersection between objects, individuals tend to perceive the two objects as two single uninterrupted entities. Stimuli remain distinct even with overlap. We are less likely to group elements with sharp abrupt directional changes as being one object.^[17]
7. **Law of Good Gestalt**—The law of good gestalt explains that elements of objects tend to be perceptually grouped together if they form a pattern that is regular, simple, and orderly. This law implies that as individuals perceive the world, they eliminate complexity and unfamiliarity so they can observe a reality in its most simplistic form. Eliminating extraneous stimuli helps the mind create meaning. This meaning created by perception implies a global regularity, which is often mentally prioritized over spatial relations. The law of good gestalt focuses on the idea of conciseness, which is what all of gestalt theory is based on. This law has also been called the **law of Prägnanz**.^[17] Prägnanz is a German word that directly translates to mean "pithiness" and implies the ideas of salience, conciseness and orderliness.^[20]
8. **Law of Past Experience**—The law of past experience implies that under some circumstances visual stimuli are categorized according to past experience. If two objects tend to be observed within close proximity, or small temporal intervals, the objects are more likely to be perceived together. For example, the English language contains 26 letters that are grouped to form words using a set of rules. If an individual reads an English word they have never seen, they use the law of past experience to interpret the letters "L" and "I" as two letters beside each other, rather than using the law of closure to combine the letters and interpret the object as an uppercase U.^[20]