Closure

A tendency to perceive a set of individual elements as a single, recognizable pattern, rather than multiple, individual elements.

The principle of closure is one of a number of principles referred to as Gestalt principles of perception. It states that whenever possible, people tend to perceive a set of individual elements as a single, recognizable pattern, rather than multiple, individual elements. The tendency to perceive a single pattern is so strong that people will close gaps and fill in missing information to complete the pattern if necessary. For example, when individual line segments are positioned along a circular path, they are first perceived holistically as a circle, and then as comprising multiple, independent elements. The tendency to perceive information in this way is automatic and subconscious; it is likely a function of an innate preference for simplicity over complexity, and pattern over randomness.1

Closure is strongest when elements approximate simple, recognizable patterns. such as geometric forms, and are located near one another. When simple, recognizable patterns are not easily perceived, designers can create closure through transitional elements (e.g., subtle visual cues that help direct the eye to find the pattern). Generally, if the energy required to find or form a pattern is greater than the energy required to perceive the elements individually, closure will not occur.

The principle of closure enables designers to reduce complexity by reducing the number of elements needed to organize and communicate information. For example, a logo design that is composed of recognizable elements does not need to complete many of its lines and contours to be clear and effective. Reducing the number of lines in the logo not only reduces its complexity, but it makes the logo more interesting to look at—viewers subconsciously participate in the completion of its design. Many forms of storytelling leverage closure in a similar way. For example, in comic books, discrete scenes in time are presented to readers, who then supply what happens in between. The storyline is a unique combination of information provided by the storyteller, and information provided by the reader.²

Use closure to reduce the complexity and increase the interestingness of designs. When designs involve simple and recognizable patterns, consider removing or minimizing the elements in the design that can be supplied by viewers. When designs involve more complex patterns, consider the use of transitional elements to assist viewers in finding or forming the pattern.

See also Good Continuation, Law of Prägnanz, and Proximity.

- 1 The seminal work on closure is "Untersuchungen zür Lehre von der Gestalt, II" [Laws of Organization in Perceptual Forms] by Max Wertheimer, Psychologische Forschung, 1923, vol. 4, p. 301-350, reprinted in A Source Book of Gestalt Psychology by Willis D. Ellis (ed.), Routledge & Kegan Paul, 1999, p. 71-88.
- ² See, for example, *Understanding Comics: The* Invisible Art by Scott McCloud, Kitchen Sink Press. 1993.



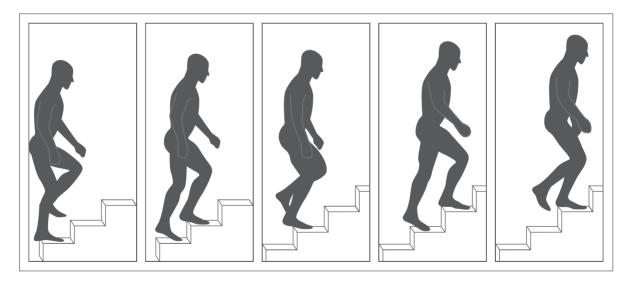
The elements are perceived holistically as a single pattern first (circle), and then as individual elements.



Elements in text and graphics can be minimized to allow viewers to participate in the completion of the pattern. The result is a more interesting design.







Series images are understood as representing motion because people supply the information in between the images.