

Good Continuation

Elements arranged in a straight line or a smooth curve are perceived as a group, and are interpreted as being more related than elements not on the line or curve.

Good continuation is one of several principles referred to as *Gestalt principles of perception*. It asserts that aligned elements are perceived as a single group or chunk, and are interpreted as being more related than unaligned elements. For example, speed markings on a speedometer are easily interpreted as a group because they are aligned along a linear or circular path.¹

The principle of good continuation also explains why lines will generally be perceived as maintaining their established directions, versus branching or bending abruptly. For example, two V-shaped lines side by side appear simply as two V-shaped lines. When one V-shaped line is inverted and the other is placed above it (forming an X), the shape is interpreted as two opposing diagonal lines instead of two V-shaped lines—the less abrupt interpretation of the lines is dominant. A bar graph in which the bars are arranged in increasing or decreasing order so that the tops of the bars form a continuous line are more easily processed than bar arrangements in which the tops of the bars form a discontinuous, abrupt line.²

The ability to accurately perceive objects depends largely on the perceptibility of the corners and sharp curves that make up their shape. When sections of a line or shape are hidden from view, good continuation leads the eye to continue along the visible segments. If extensions of these segments intersect with minimal disruption, the elements along the line will be perceived as related. As the angle of disruption becomes more acute, the elements will be perceived as less related.³

Use good continuation to indicate relatedness between elements in a design. Locate elements such that their alignment corresponds to their relatedness, and locate unrelated or ambiguously related items on different alignment paths. Ensure that line extensions of related objects intersect with minimum line disruption. Arrange elements in graphs and displays such that end points of elements form continuous, rather than abrupt lines.

See also [Alignment](#), [Area Alignment](#), [Chunking](#), [Five Hat Racks](#), and [Uniform Connectedness](#).

¹ The seminal work on good continuation is “Untersuchungen zur 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. See also *Principles of Gestalt Psychology* by Kurt Koffka, Harcourt Brace, 1935.

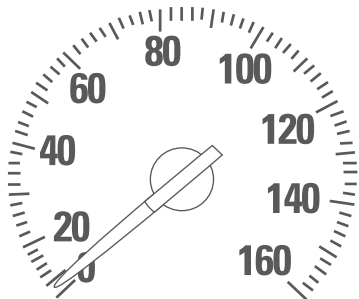
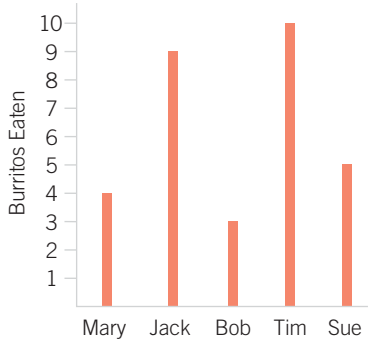
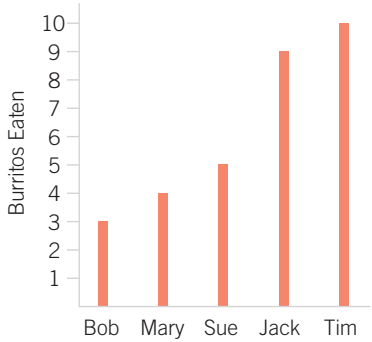
² See, for example, *Elements of Graph Design* by Stephen M. Kosslyn, W. H. Freeman and Company, 1994, p. 7.

³ See, for example, “Convexity in Perceptual Completion: Beyond Good Continuation” by Zili Liu, David W. Jacobs, and Ronen Basri, *Vision Research*, 1999, vol. 39, p. 4244–4257.

Despite the gaps, the jagged line is still seen as a single object because the occlusions can be bridged with minimal disruption.



The first graph is easier to read than the second because the end points of its bars form a line that is more continuous.



The circular alignment of the increments of this speedometer make it evident that the numbers and increments along the lines belong together.

Good continuation is commonly used in camouflage. For example, the lines on zebras continue across one another when in a herd, making it difficult for predators to target any one zebra.

