

Chartjunk

Chartjunk refers to all visual elements in charts and graphs that are not necessary to comprehend the information represented on the graph, or that distract the viewer from this information.^{[1][2][3]}

Markings and visual elements can be called chartjunk if they are not part of the minimum set of visuals necessary to communicate the information understandably. Examples of unnecessary elements that might be called chartjunk include heavy or dark grid lines, unnecessary text, inappropriately complex or gimmicky font faces, ornamented chart axes, and display frames, pictures, backgrounds or icons within data graphs, ornamental shading and unnecessary dimensions.

Another kind of chartjunk skews the depiction and makes it difficult to understand the real data being displayed. Examples of this type include items depicted out of scale to one another, noisy backgrounds making comparison between elements difficult in a chart or graph, and 3-D simulations in line and bar charts.

The term *chartjunk* was coined by Edward Tufte in his 1983 book *The Visual Display of Quantitative Information*.^[1] Tufte wrote:

The interior decoration of graphics generates a lot of ink that does not tell the viewer anything new. The purpose of decoration varies — to make the graphic appear more scientific and precise, to enliven the display, to give the designer an opportunity to exercise artistic skills. Regardless of its cause, it is all non-data-ink or redundant data-ink, and it is often chartjunk.

The term being relatively recent, it is still often associated with Tufte's name.^{[2][4]}

The concept is analogous to Adolf Loos's idea that ornament is a crime.

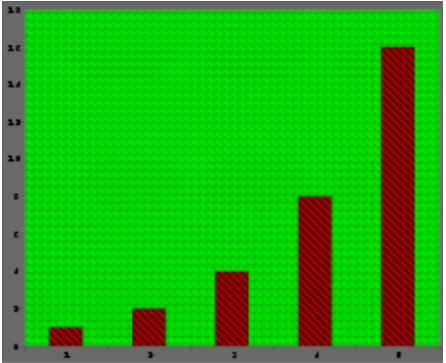
See also

- Misleading graph
- Lexicographic information cost, in lexicography

References

- Tufte, Edward R. (1983). *The Visual Display of Quantitative Information* (https://archive.org/details/visualdisplayofq0000tuft). Cheshire, CT: Graphics Press.
- Harris, Robert L. (1999). *Information Graphics: A Comprehensive Illustrated Reference*. USA: Oxford University Press. p. 72. ISBN 0-19-513532-6.

- Tufte, Edward R. (2006). *Beautiful Evidence*. Cheshire, CT: Graphics Press. pp. 152–53. ISBN 978-0961392178.
- Cleveland, William S. (1985). *The Elements of Graphing Data*. Pacific Grove, CA: Wadsworth & Advanced Book Program. p. 25. ISBN 0-534-03730-5.



An example of a chart containing gratuitous chartjunk. This chart uses a large area and a lot of "ink" (many symbols and lines) to show only five hard-to-read numbers, 1, 2, 4, 8, and 16.



A map with chartjunk: the gradients inside each province