



The original description in French accompanying the map translated to English:[3]

*Drawn by Mr. Minard, Inspector General of Bridges and Roads in retirement. Paris, 20 November 1869.*

*The numbers of men present are represented by the widths of the colored zones in a rate of one millimeter for ten thousand men; these are also written beside the zones. Red designates men moving into Russia, black those on retreat. — The informations used for drawing the map were taken from the works of Messrs. Thiers, de Ségur, de Fezensac, de Chambray and the unpublished diary of Jacob, pharmacist of the Army since 28 October.*

## Recognition

Modern information scientists say the illustration may be the best statistical graphic ever drawn.<sup>[2]</sup> French scientist, physiologist and chronophotographer [Étienne-Jules Marey](#) first called notice to Minard's dramatic depiction of the fate of Napoleon's army in the Russian campaign, saying it "defies the pen of the historian in its brutal eloquence".<sup>[4]</sup>



Noted information designer [Edward Tufte](#) says it "may well be the best statistical graphic ever drawn"<sup>[5]</sup> and uses it as a prime example in *The Visual Display of Quantitative Information*.<sup>[6]</sup> [Howard Wainer](#) identified Minard's map as a "gem" of information graphics, nominating it as the "World's Champion Graph".<sup>[7]</sup>

[Arthur H. Robinson](#) wrote that Minard was 'a cartographic pioneer in many respects' and pointed out that his famous map (of Napoleon's march) was only one of 51 [thematic maps](#) he created during his lifetime.<sup>[8]</sup>

# References

1. ^ **a b c d** Chevallier, V. (1871). "[The Life of Charles Joseph Minard \(1781-1870\)](#)". Finley, Dawn (translator). From "Notice nécrologique sur M. Minard, inspecteur général des ponts et chaussées, en retraite". *Annales des ponts et chaussées (in French)*. **2**: 1–22. 1871. Posted by Edward Tufte.
2. ^ **a b c** Corbett, John. "[Charles Joseph Minard: Mapping Napoleon's March, 1861](#)". Center for Spatially Integrated Social Science. Retrieved 21 September 2014.
3. ^ "[Charles Joseph Minard: Napoleon's Retreat From Moscow \(The Russian Campaign 1812-1813\) An Interactive Chart](#)". Retrieved 21 September 2014.
4. ^ International Statistical Congress. Emploi de la cartographie et de la méthode graphique en général pour les besoins spéciaux de la statistique. In Proceedings, pages 192–197, Vienna, 1858. 3rd Session, August 31-September 5, 1857. Cited in: [MINARD, CHARLES JOSEPH](#) by [Michael Friendly](#) at datavis.ca. Accessed 09.2014
5. ^ [Edward R. Tufte](#) (2001). *The Visual Display of Quantitative Information*. p. 40
6. ^ "[Poster: Napoleon's March](#)". Edward Tufte. Retrieved 21 September 2014.
7. ^ [Howard Wainer](#) (1984). "How to Display Data Badly". In: *American Statistician* 38 (2): p 146 (pg 136 – 147).
8. ^ Arthur H. Robinson (1967), 'The Thematic Maps of Charles Joseph Minard', *Imago Mundi*, Vol. 21, (1967), pp. 95-108