Outline and questions: Graphical Excellence

The goal of this lecture is to lay the foundations for defining excellence in information visualization, and to introduce the students to Tufte and Few.

Goals for the lecture

- Refine the definition of visualization
- Describe the different purposes visualization supports
- Describe what contributes to excellence in visualization
- Describe how visualization can be misleading
- Introduce Tufte's principles and how they are applied
- Introduce Few's approach and his relationship to Tufte

Reading Assignment

Few, *Show Me the Numbers,* Chapter 1, Introduction
Tufte, *The Visual Display of Quantitative Information*, Ch 1, Graphical Excellence
(http://courses.washington.edu/info424/readings/TufteVisualDisplay_ch1.pdf)

Watch the Gapminder Video, if you did not see it in Thursday's lecture
(http://www.gapminder.org/video/talks/ted-2006---debunking-myth-about-the-third-world.html)

Optional Reading: Tufte, *The Visual Display of Quantitative Information*, Ch.2, Graphical Integrity. (http://courses.washington.edu/info424/readings/TufteVisualDisplay_ch1.pdf)
This describes in detail the practices that can lead to misleading visualizations of quantitative data, which will be covered in the lecture. The reading is optional here to avoid student overload; it will be required later in the course.

Things to consider as you read

1. What are Tufte's principles of graphical excellence, and how are they illustrated in his examples? Can you find all the variables encoded in each?
2. Few poses his own questions as you read, asking you to pause and answer yourself before you go on. Doing this will greatly enhance your understanding.

Reflection questions

These questions are to help you think more broadly about what you've read and its relationship to the class. It is optional, but strongly encouraged, that you answer them and email your answers to info424@gmail.com to aid in discussion in class. Email must be received by 7 am on the day of the class.

1. Visualization can be used for many purposes. Few and Tufte each provide a list of key purposes, and your experience with the lab assignment may have suggested a few more. Make your own list, and describe which are most interesting to you.