Data Visualization for Social Sciences
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Measles cases before and after vaccination; http://graphics.wsj.com/infectious-diseases-and-vaccines/
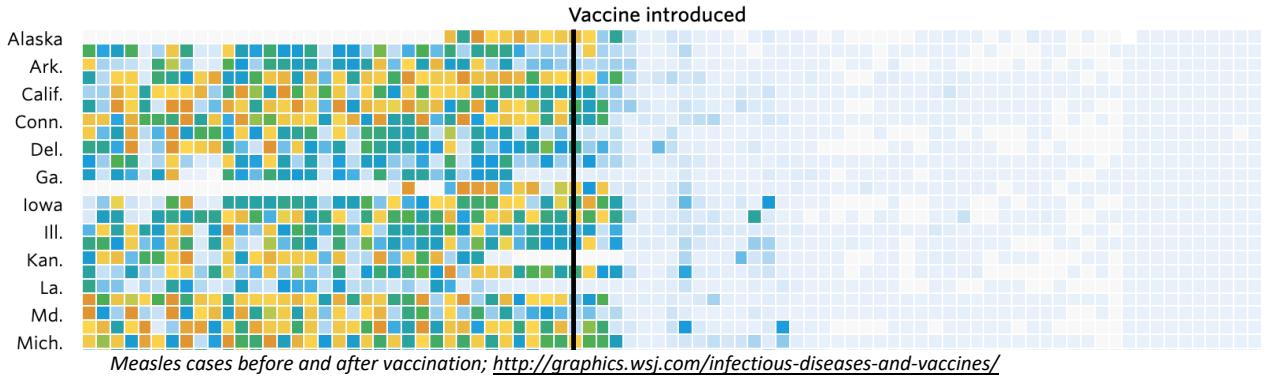
Appealing visualizations are increasingly used in media outlets, such as The Economist and The New York Times. How do we decide how to visualize information in the most effective way? What makes these visualizations so powerful or, sometimes, misleading? This workshop introduces participants to the key principles and practices of data visualization. Participants will learn how to use visual tools to present and support an argument using R (more specifically, the ggplot2 library). In doing so, participants will learn not only how to produce visualizations but also how to read them and spot flaws (whether intentional or not) that distort information in the data.

The main aim is to introduce students to newly available data to investigate various social science issues and understand spatial patterns and temporal trends. The workshop will involve the use of data for descriptive and explorative purposes, with emphasis on data visualization. The workshop will cover both technical skills for data visualization and critical reflections on the data we use to draw conclusions. In terms of skills, we will focus on:

1. Identifying the best visualization for the data at hand
2. Producing cognitively easy-to-read visualizations
   a. Selecting the right plot type and data format
3. Producing aesthetically appealing visualizations
   a. Selecting colours, shapes, symbols
4. Producing interactive visualizations and dashboards

In addition to these practical skills, by the end of the workshop, students will be able to:
1. Understand currently available data in Social Sciences
2. Use data and descriptive statistics to support or introduce an argument
3. Identify and select the most effective ways to illustrate and visualize data
4. Familiarize themselves with software used for data analysis (R software) and notions of descriptive statistics