Homework 1b: Visual Displays - Graphical Integrity; Theory (Part 1)

- 1. Explain how each of the first three graphics on pp. 54-55 "fail to tell the truth."
- 2. Estimate the "lie factor" for the change in US fuel economy standards between 1980 and 1984 using the graphic on p.57. Show your work.
- 3. Both the graphic at the bottom of p.66 and the one in the middle of p.68 depict changes in the New York state budget over time.
 - a. Comment on the message conveyed by each.
 - b. Explain why you would choose one of these over the other if you were reporting on the New York state budget over time.
- 4. The graphic on the bottom of p.102 and the one on the top of p.105 are based on the same data. Discuss why one is more effective.
- 5. Consider the graphics below. For each figure, comment on how the graphic adheres (or not) to Tufte's six principles of graphical integrity.

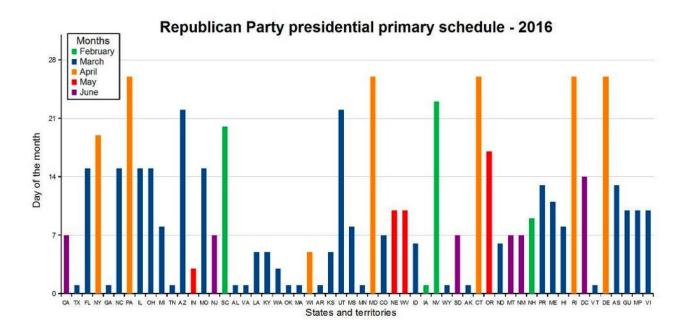


Figure 4a

Homework 1b: Visual Displays - Graphical Integrity; Theory (Part 1)

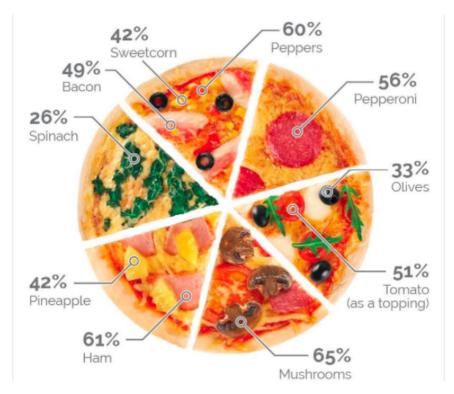


Figure 4b

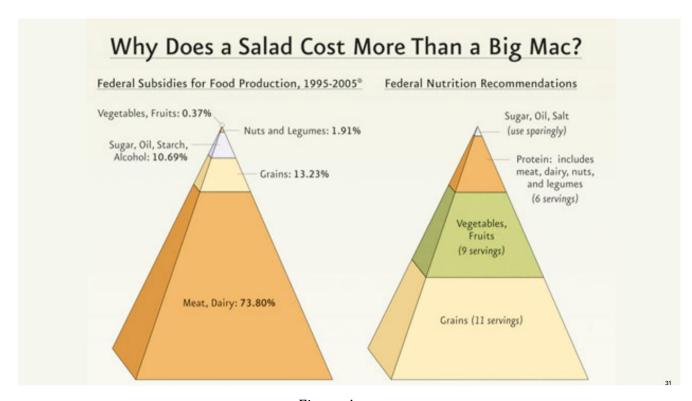


Figure 4c