EXERCISE 1: INFORMATION VISUALIZATION

Overview: This exercise consists of two parts. Part 1 contains 5 visualizations. For each visualization, assess the **strength and weaknesses** of each **individual** visualization. Part 2 consists of two pairs of visualizations. You will be asked to **compare and contrast** the visualizations in each pair, discussing the **strengths and weaknesses** of each visualization. Detailed explanation below.

Part I: Visualization Assessment

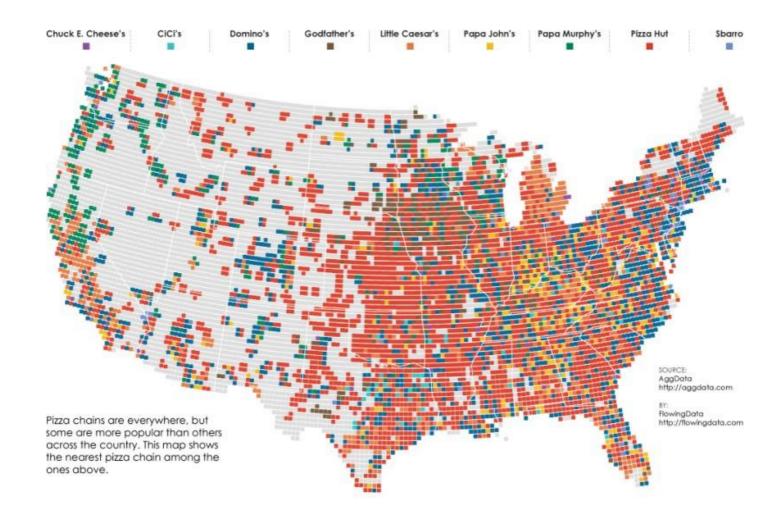
Provide an assessment for each of the following 5 visualizations. Analyze the visualizations for both strengths and weaknesses. In your assessment, you should **support your analysis by referring to the principles/concepts/terminology of good visualization** (as taught in the lecture) whenever possible.

Issues to consider when assessing the visualizations:

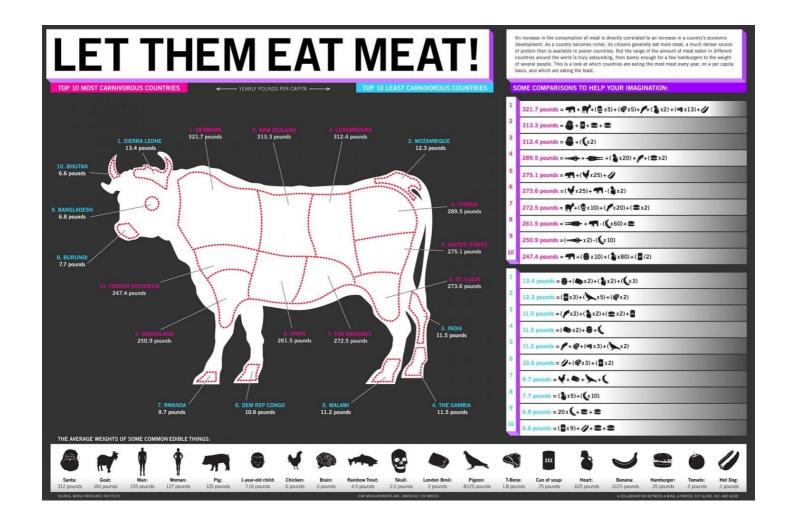
- Is the visualization and its data easy or difficult to interpret? Why or why not?
- Are the important information or trends successfully or unsuccessfully conveyed? Why or why not?
- Are there elements or aspects that are unnecessary or confounding? Why or why not?
- Do the choices of color, shape, graphics, or layout enhance or detract from the visualization? Why or why not?
- Is the visualization effective overall at conveying the data or patterns intended? Why or why not?
- What, if anything, can be improved?

^{*} Important! The questions above are only intended to **help you think** about the visualizations. These questions are not exhaustive – that is they are **NOT a template for your critique**. You should only address these issues if you feel they are appropriate for the visualizations. If you identify other aspects of the visualizations that you think are important, include those in your assessment as well.

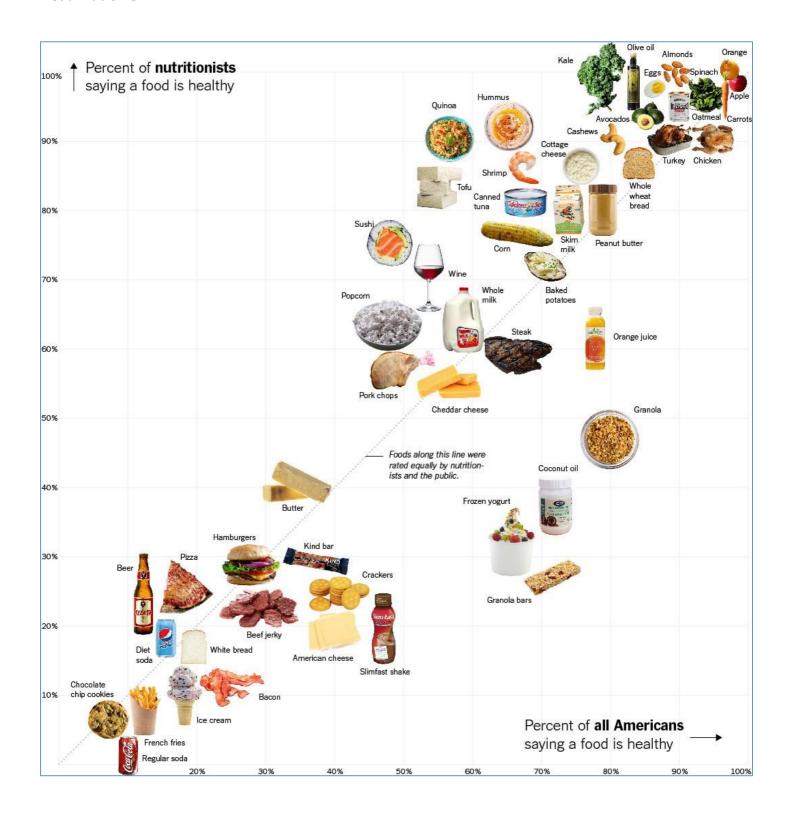
Visualization 1:



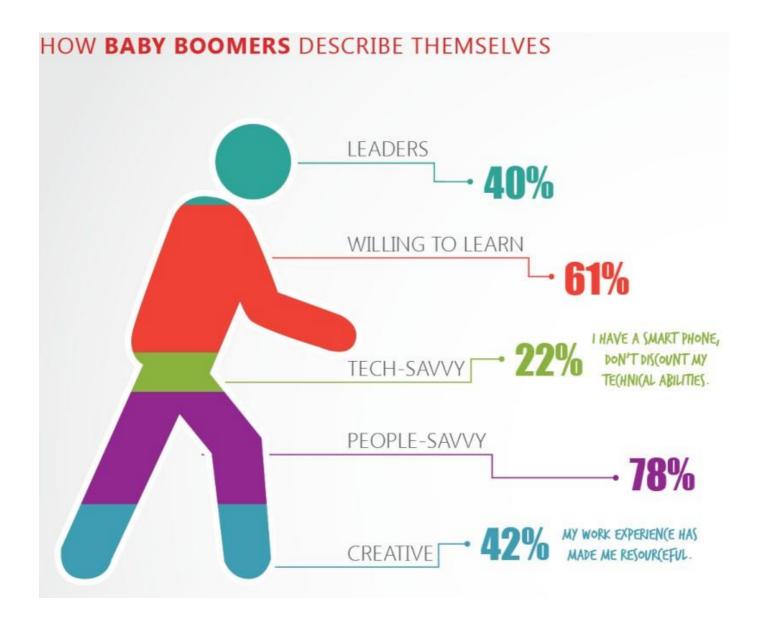
Visualization 2:



Visualization 3:



Visualization 4:



Visualization 5:

top 10 salaries at Goog RANGE FROM \$143,000 TO \$241,000 PER YEAR. \$241K \$143K Senior Managers Lead Software Engineer Contractor \$143k - \$192k two salaries \$221k - \$239k salary range Group \$216.5K \$172.5K Product Manager \$157k - \$172k Product _ @ Marketing Director Management \$165k - \$179k Director \$203k - \$218k Staff User \$192K Experience Designer Directors \$172k - \$231k \$167k - \$197k 6 two salaries salary range Senior Partner Technology Engineering 0 Manager Director Human \$180k - \$195k \$184k - \$198k Resources Director \$183k - \$199k

Part II: Comparative Assessment of Visualizations

Below are two pairs of visualizations. Each pair consists of two different visualizations of the *same* data set. Provide an assessment that compares and contrasts the two visualizations.

As in Part 1, you must **support your analysis by referring to the principles/concepts/terminology of good visualizations** (as taught in the lecture) whenever possible.

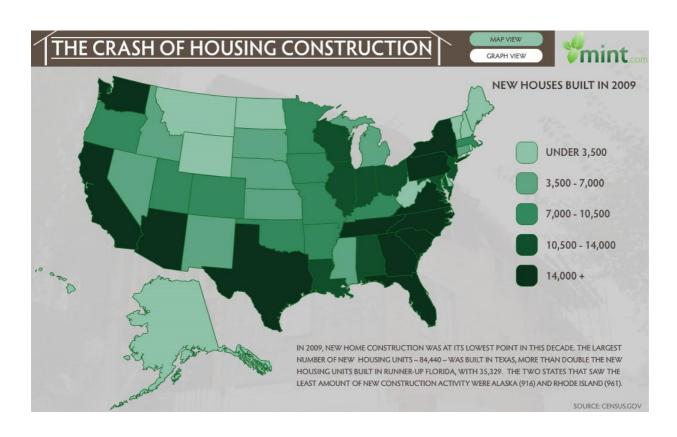
Issues to consider in your comparative assessment:

- What are the **strengths and weaknesses** of each visualization?
- Is one visualization **more effective** than the other?
- Do the visualizations **emphasize different aspects** of the data or different patterns in the data?
- What, if anything, can be improved?

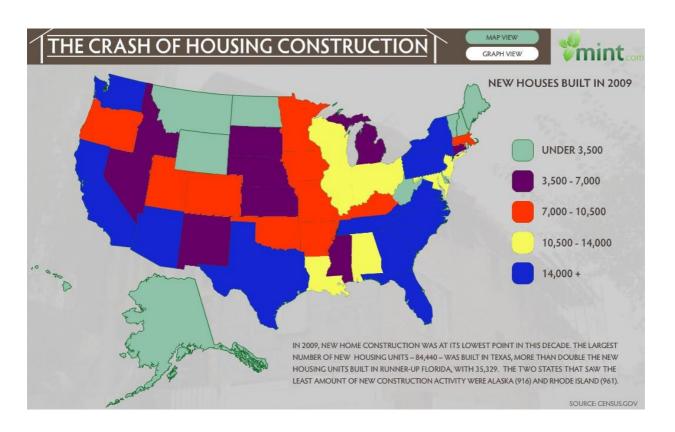
Again, the questions above are intended to help you get started thinking about the visualizations and the differences between them. They are **not intended as a template for your comparison.** Feel free to address other aspects that you feel are relevant for your assessment.

PAIR 1: Comparatively assess (a) and (b) in Pair 1.

(a)

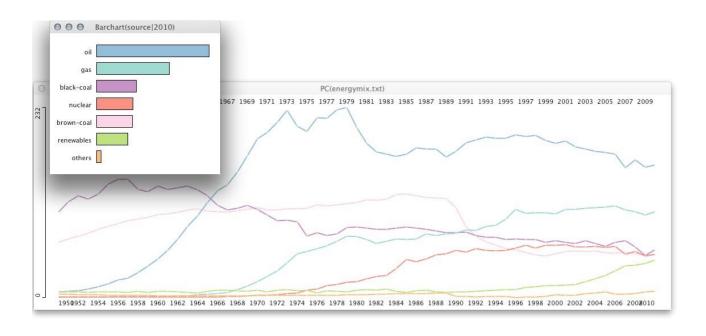


(b)



PAIR 2: Comparatively assess (a) and (b) in Pair 2.

(a)



(b)

