**Let's Practice What We Preach: Turning Tables into Graphs**

Summary:

In the latest issue of the JASA, there were close to an equal number of figures as there were tables, despite most of the time, a plot being the better way to convey information. This paper discusses previous literature on graphs and plots and details when to use each. A table should be used when exact numerical values are important and should be used as a lookup table. However, any other situation will most likely benefit more from using a plot. They discuss things like, when to flip the horizontal and vertical axes, labels and their location, baselines and comparisons, as well as other semantics added to plots to make them more readable, such as jitter, thin lines, and unnecessary shading to name a few. These suggestions are based on literature as well as their own experience. They then take seven of the tables in the JASA issue and show how they should be transformed into graphs to give the reader examples. In their examples, common themes to remember are thinking about if both axes should be present and what scale they should be on, adding reference and baseline markers, and tables often show too much information (including decimals are not necessary to the reader in most cases).

Reaction:

I enjoyed this paper and how it servers as a reminder that simple and effective graphs convey a lot of important information, and to not, “take the easy way out”, and make a table of the data. I found interesting the lax language they used (e.g., using exclamation marks when getting excited), which made it feel like they were talking with the reader. I wonder if it was not common to use non-black and white colors at this time, and instead use shapes to identify discrete/categorical information the data contains. I thought there were a few graphs where color would have been preferred to distinct shapes. Overall, this is a good reminder to always consider if a table can be represented as a graph.

Questions for discussion:

Was it common to use shapes instead of colors at this time?

The graphs they constructed were based on tables. I wonder if it is easier to create a graph based on a table or if we should just go right into making the graph?