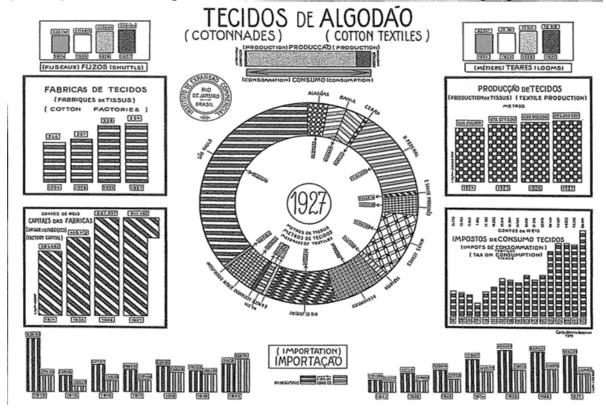
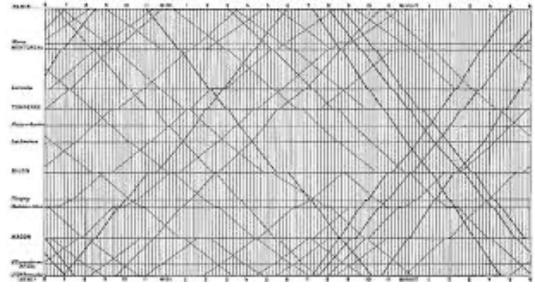
## Chapter 5 Chartjunk: Vibrations, Grids, and Ducks

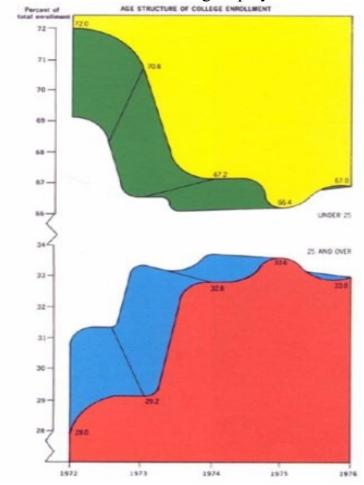
(Moiré)Vibrations: optical art that distracts from the data being represented



**Grids**: mostly for initial plotting and should be muted or all together omitted when presenting data



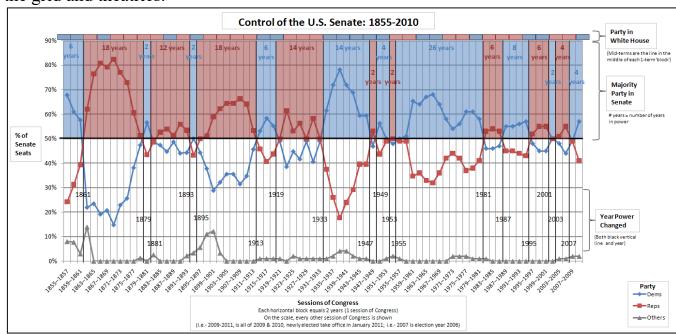
**Ducks**: the data takes on a performative and/or decorative form to self-promote but distracts from the data being displayed



(All graphics from Tufte textbook)

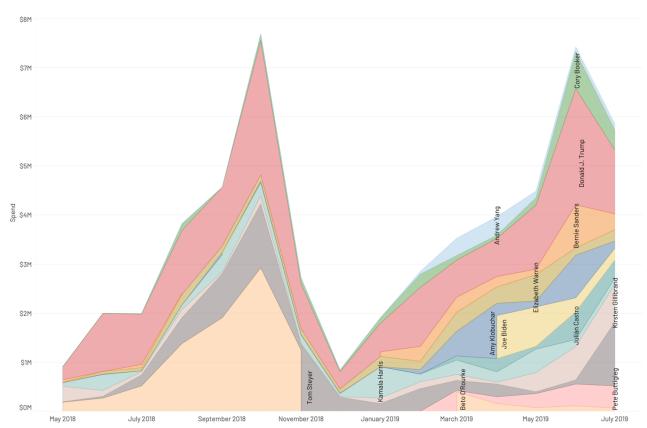
## Graph 1

This graph has a grid problem. The alternating blue and red does a good job of muting the grid at the top but the colors are not continued at the bottom of the graph. If the top mirrored the bottom, I think we would have a duck problem because the graph would seem more decorative then it kind of already is at the moment. This definitely could have benefited by being a simple line graph minus the grid and theatrics.



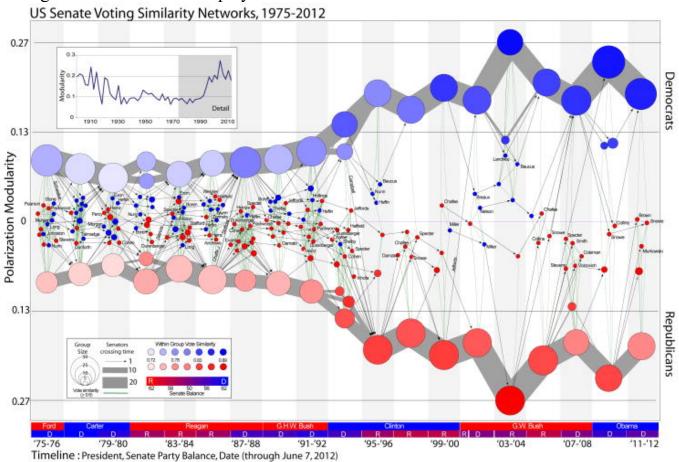
Control of the U.S. Senate 1855 - 2010

Graph 2
This graph looks like a complete duck. The colors, the filled in areas, and the candidates' names thrown in looks kind of jumbled. The graph does look simple and straight to the point though.



Overall Spend between May 2018 and July 2019 of Democratic Presidential Candidates

Graph 3
This seems like another duck with grid issues. There is no need for the shaded background bars in the graph. Notice how there is a graph within the graph just adding more clutter to the display.



Ranking (worst to best)
Graph 3, Graph 1, Graph 2

Out of all of them the simplest looking graph is graph 2. The other 2 just have too much junk in them to be considered as nice displays.