Okay so a little background:

* my advisor suggested this class by an up and coming expert on political control of the economy
  + Despite the name of the class the Prof. clearly not interested in political control of the economy
  + Interested in graphs
  + He had odd, mystical things to say about them: the Buddhist monk version of data design .
* Some years after I graduated he published his first book on data presentation
  + is now the “guru” of graphics
  + r is very influenced by him
  + and there are packages that make it even easier to introduce his principles
  + so I’ve written in r markdown which incorporates them
* Style is substance –
  + Not superflouos
  + “**graphical elegance is often found in simplicity of design and complexity of data. The most visually attractive graphics are about the useful and important, about life and death, about the universe. Beautiful graphics do not traffic with the trivial.”**
* Form is function
  + Placement, color, width, everything about the form of elements expresses some function and vice versa. For example, if it’s really a side comment, but it on the side.
* Less is more
  + Tufte maximizes the data/Ink ratio - the ink necessary to convey the meaning over the ink overall.
  + This usually means eliminating boxes - the boxes in the grid, the box of the grid, even the box in the box plot.
* Pictures are words
  + spark lines are popular ways to depict in a little snippet a trajectory over time. They are everywhere but Tufte invented them.
  + Tufte considers them graphical words - they can be used in sentences.
* Get off the grid
  + the vast majority of what we graph we do so on an X and Y grid with axes and gridlines and little tick marks and so on.
  + Tufte has nothing against that but sometimes there are better ways.
  + This graph is similar to a line graph of the y-axis has been obliterated in favor of airline names, and the numbers occupy different points on the lines.