#### Scope

"You should have stayed with the soup question. The object of a question is to obtain information that matters only to us"

-- Sean Connery in Finding Forrester (movie)



#### Scope

- Making plots is effectively providing an answer to an implicit question
- You get to pick the way to express the answer
- Ensure the answer doesn't leave the viewer with uncertainty as to what it's answering or the completeness of the answer
- A good plot should invoke and inspire new questions



## Agenda

- EDA Refresher
- Effective Visualization
  - Graphical Integrity
  - Scope
  - Displays
  - Sensible Design

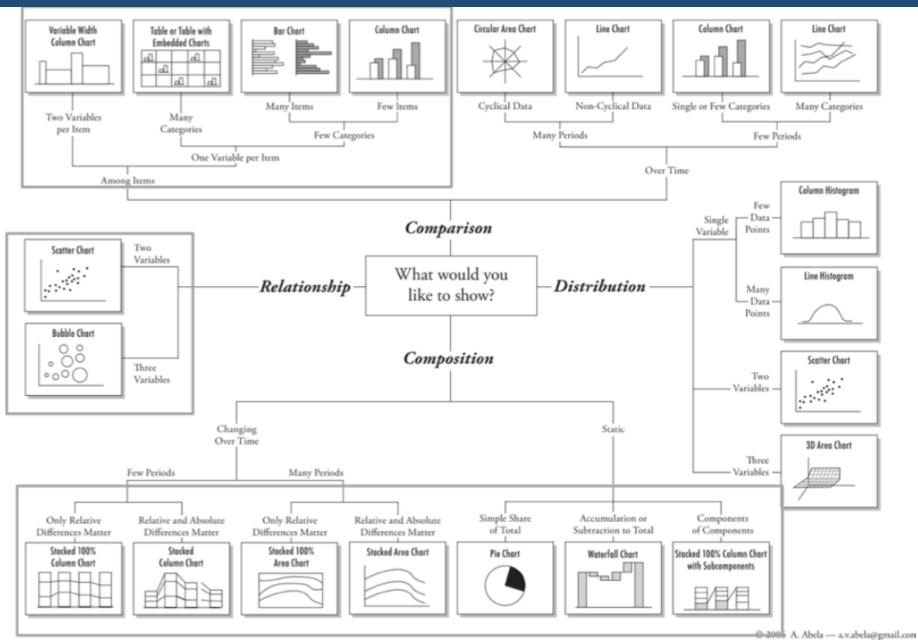
- Communication
  - Motivation
  - Key Considerations

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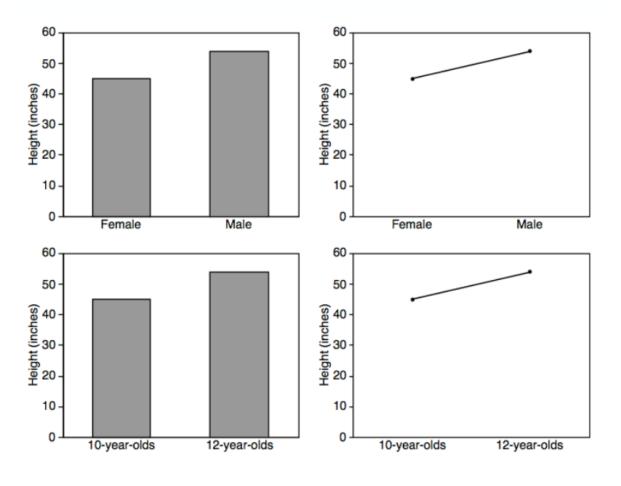
## Displays



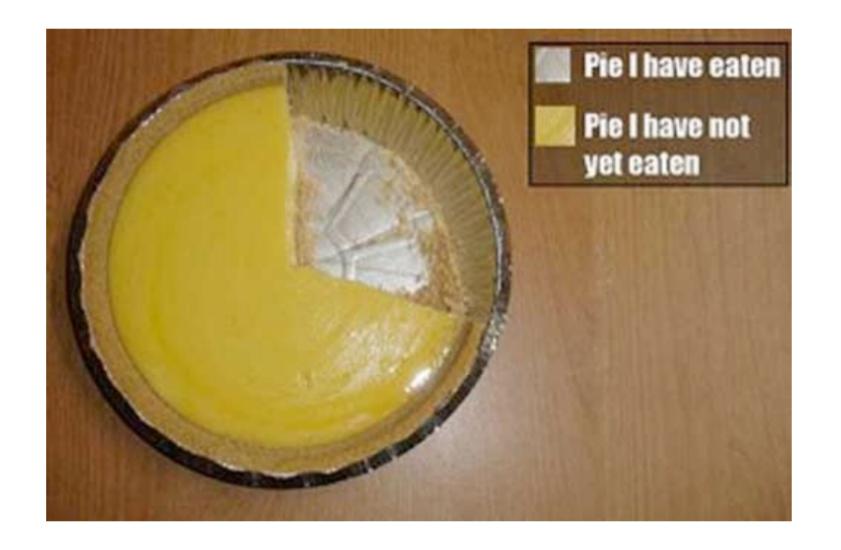


## Displays: comparisons

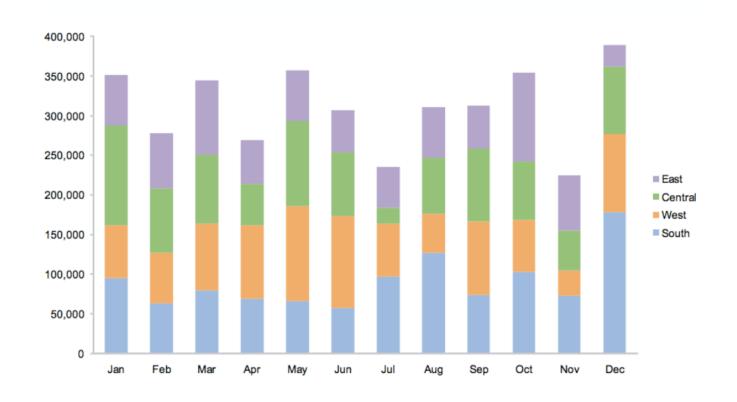
# Bars vs. Lines



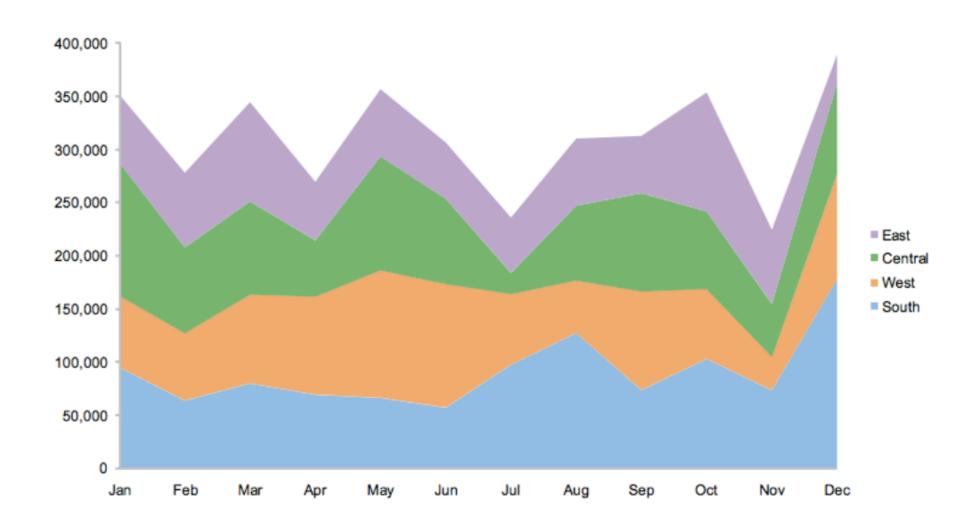




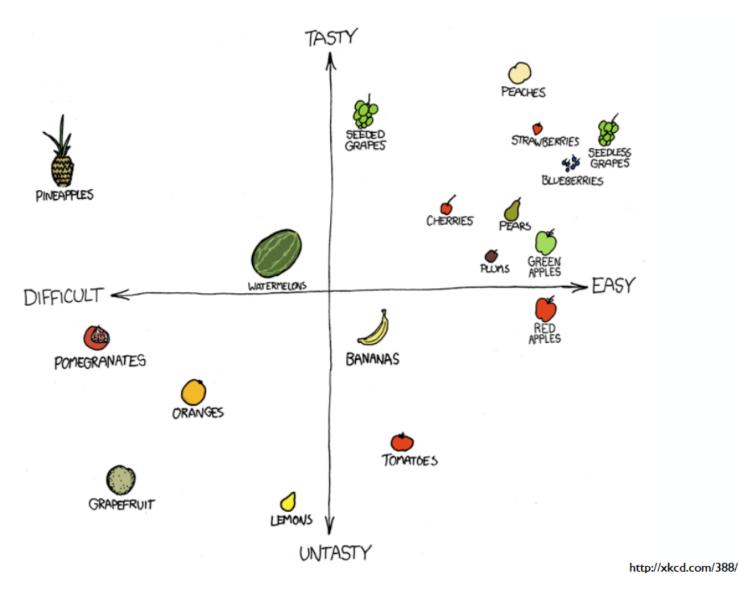




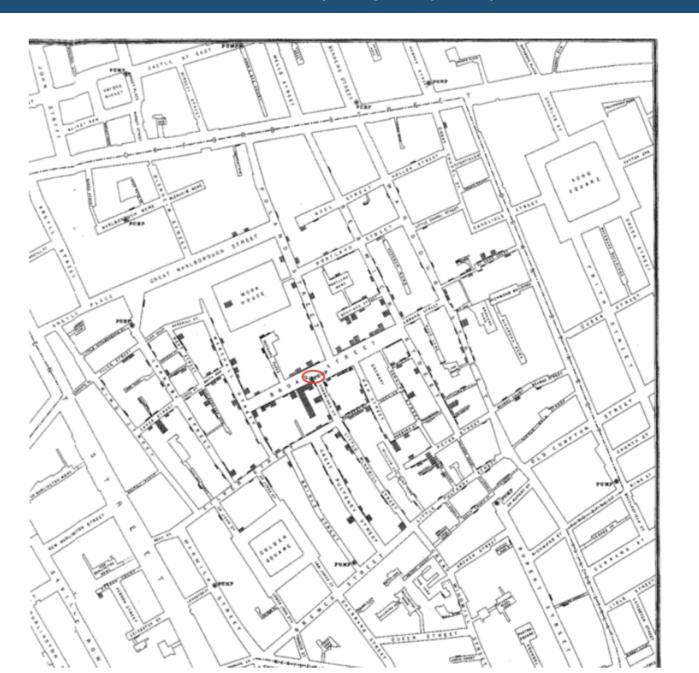








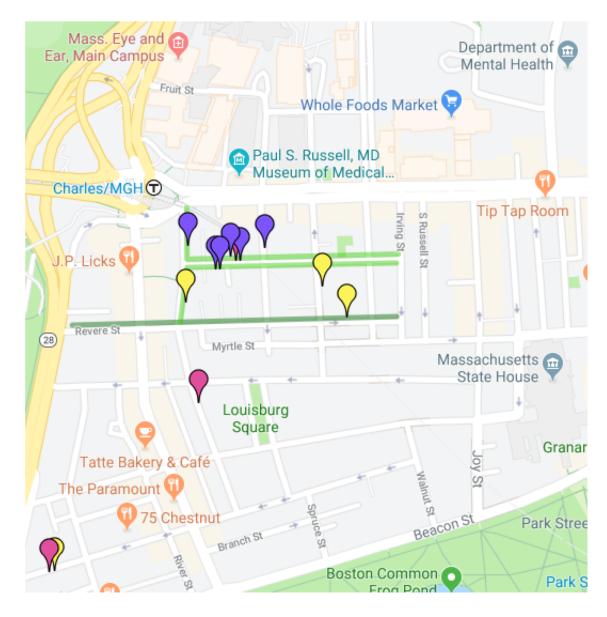




#### **London Cholera Epidemic**

-- Edward Tufte, Visual and Statistical Thinking





- riday @ 10:30am
- sunday @ 5pm
- saturday @ 2pm
- sunday @ 2pm
- riday @ 11:30am
- 1st and 3rd wed
- 2nd and 4th wed
- 2nd and 4th wed
- saturday @ 3pm
- sunday @ 4:30pm
- riday @ 7:30pm
- saturday @ 8pm
- friday @ 8pm
- saturday @ 6pm
- saturday @ 7
- 💡 saturday @ 6



#### Displays: trends

Apple Inc. (AAPL) - NasdaqGS Add to Portfolio Like < 6k 601.10 ↑ 15.53(2.65%) 4:00PM EDT | After Hours: 604.60 ↑3.50 (0.58%) 7:15PM EDT - Nasdaq Real Time Price Enter name(s) or symbol(s) GET CHART COMPARE EVENTS -TECHNICAL INDICATORS -RESET CHART SETTINGS -Feb 10, 2012: **AAPL 493.42** 500 450 400 350 © 2012 Yahoo! Inc. 2011 Jun Jul Aug Sep Oct Nov Dec 2012 Feb Mar × ■ Volume 22,523,900 1D 5D 1M YTD 3M 6M 1Y 2Y 5Y Max FROM: Mar 18 2011 TO: Mar 16 2012 1989 1999 1984 1994 2004 2009 Basic Chart | Full Screen | Print | Share | Send Feedback

