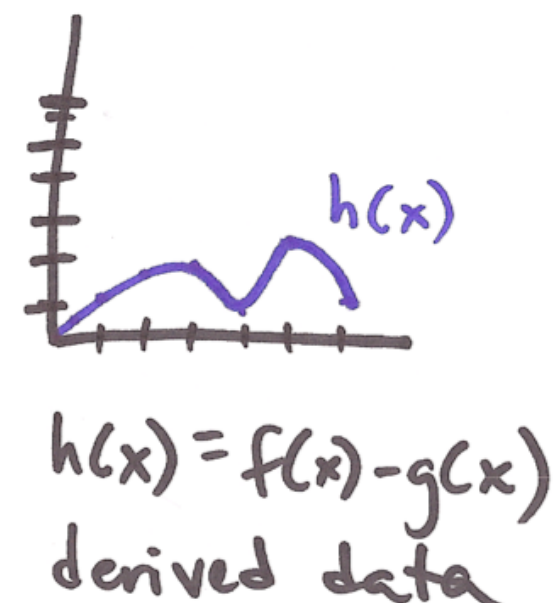
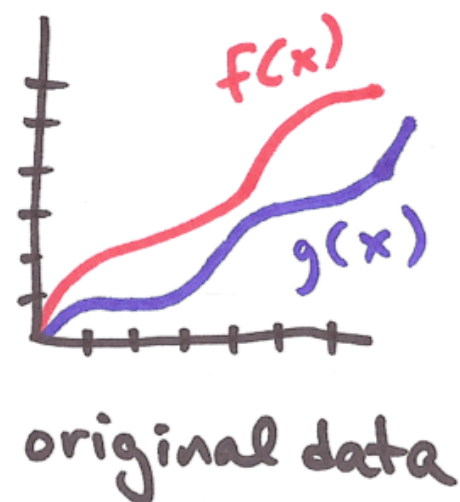


Chapter 5:

Derived Attributes

Derived attributes

- the norm, not the exception
- necessary for some tasks
- simple transformations
- statistical summaries of (lots of) data



Why Visualization for Statistics?

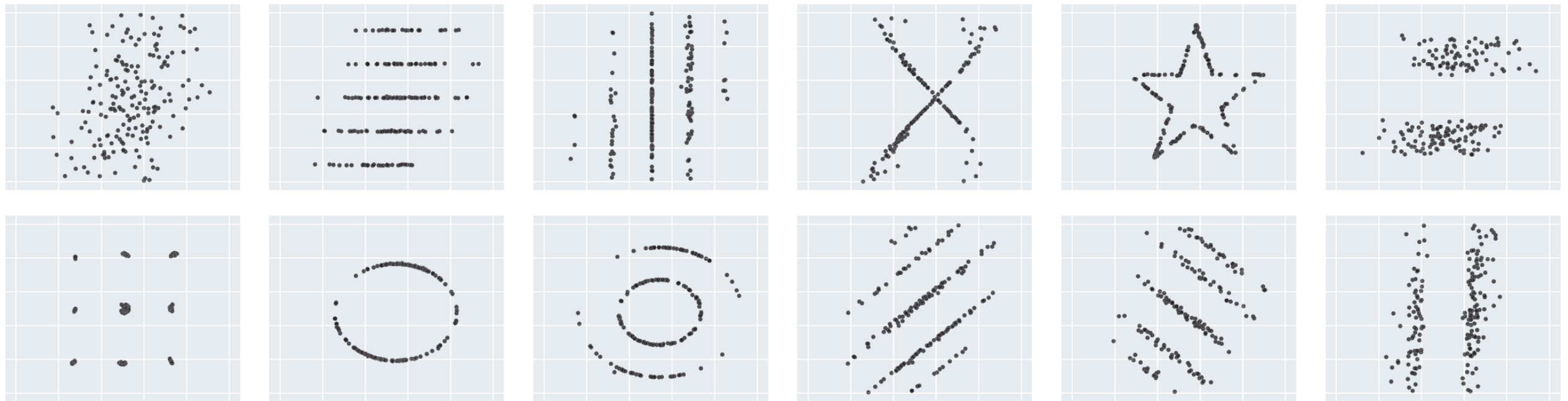


Figure 1. A collection of data sets produced by our technique. While different in appearance, each has the same summary statistics (mean, std. deviation, and Pearson's corr.) to 2 decimal places. ($\bar{x}=54.02$, $\bar{y}=48.09$, $sd_x=14.52$, $sd_y=24.79$, Pearson's $r=+0.32$)

Matejka, Justin, and George Fitzmaurice. "Same stats, different graphs: generating datasets with varied appearance and identical statistics through simulated annealing." *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. 2017.