

Chapter 17

The principle of proportional ink

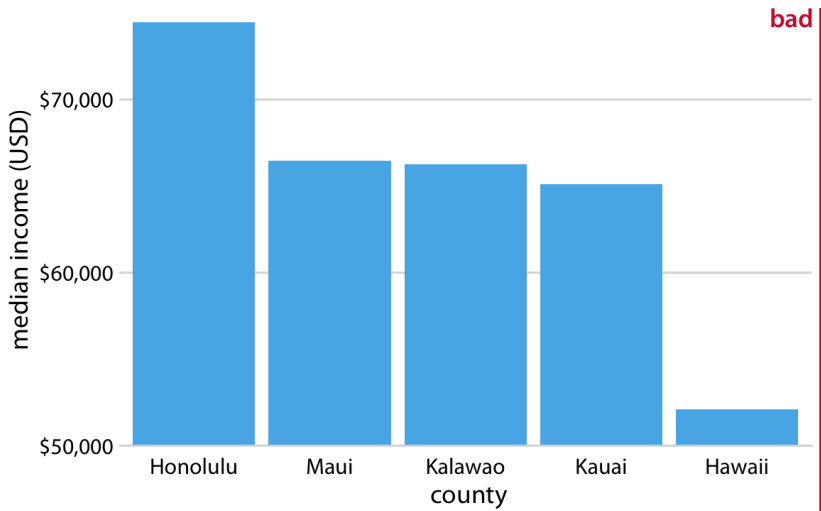
Fundamentals of Data Visualization

May 6, 2023

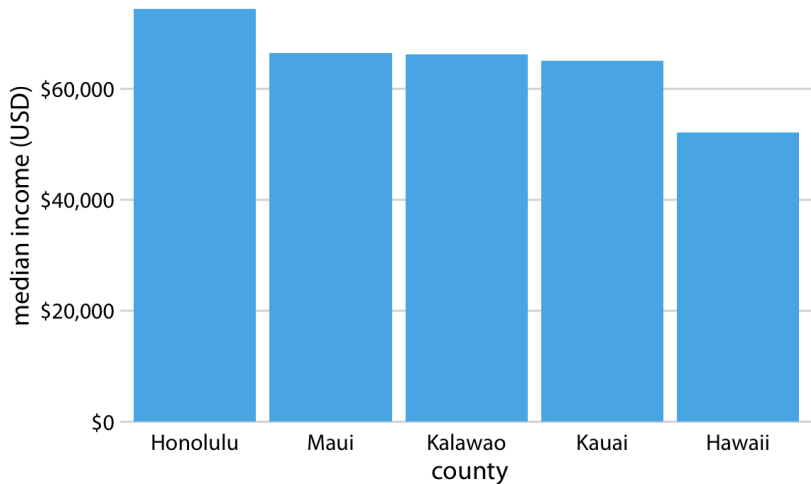
The principle of proportional ink

The sizes of shaded areas in a visualization need to be proportional to the data values they represent.

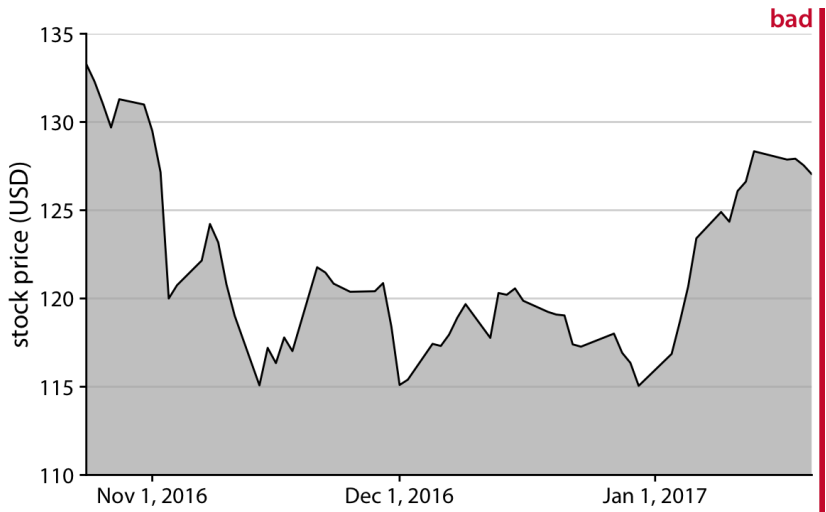
Bad boxplot



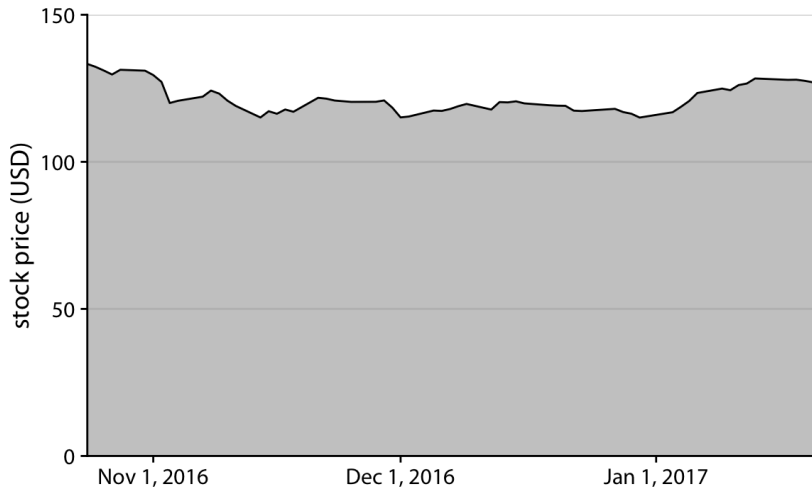
Good boxplot



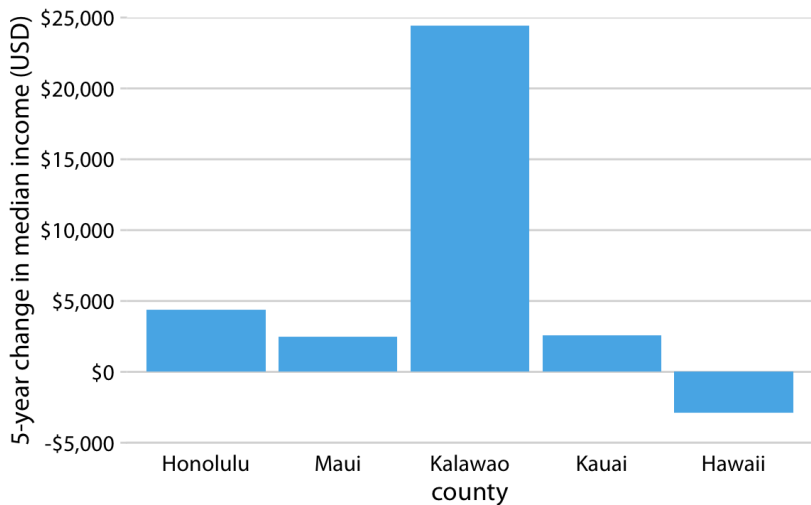
Bad lineplot



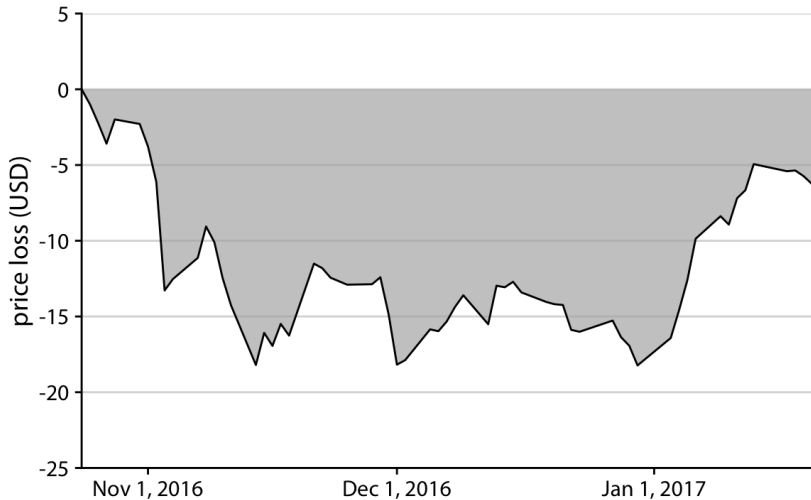
Good lineplot



Bars for change

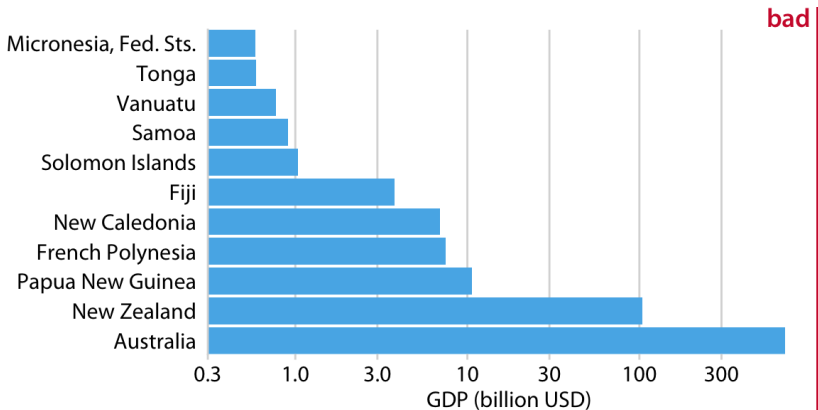


Bars for change



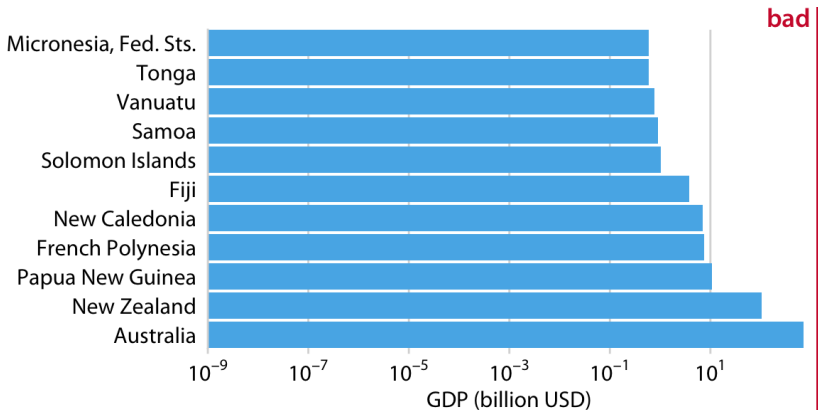
Loss of Facebook stock price

Log plots of amounts



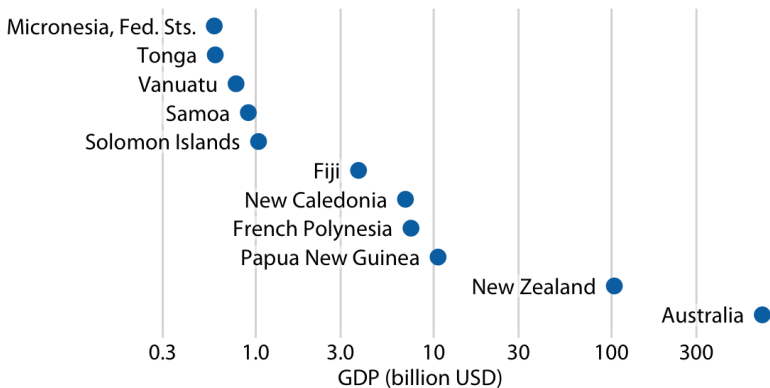
- No natural zero.

Log plots of amounts

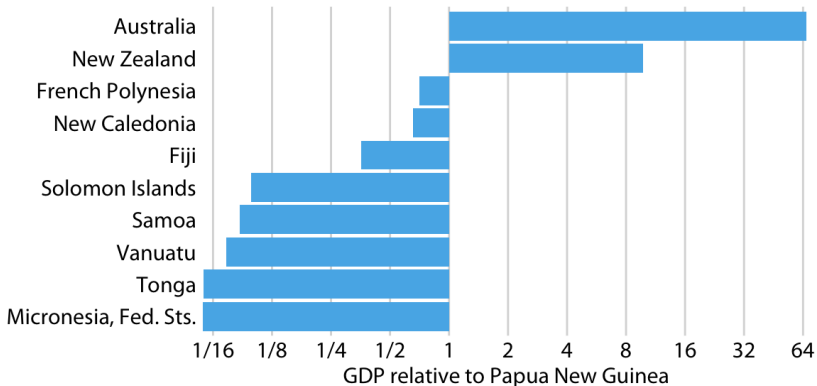


- No natural zero.

Log plots of amounts: use dots

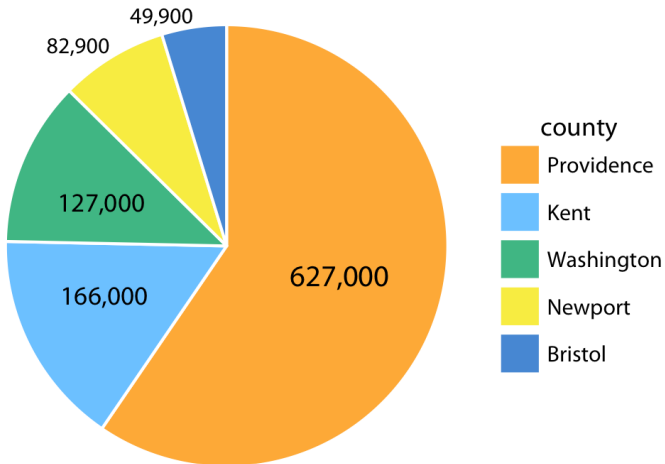


Log plots of ratios



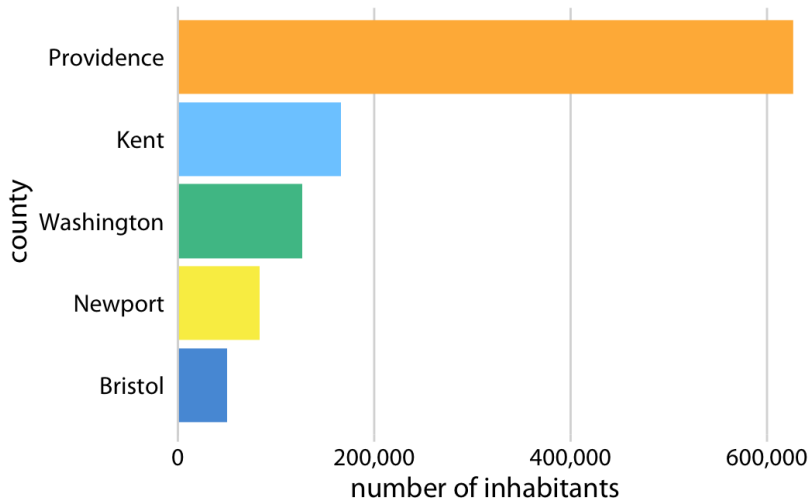
- Start at 1, not zero.

Direct area visualizations



Number of inhabitants in Rhode Island counties

Direct area visualizations



Number of inhabitants in Rhode Island counties

Direct area visualizations

