Plan:

1. Review common types of plots
2. Determine which plot is appropriate given the data

Dataviz: The Basics

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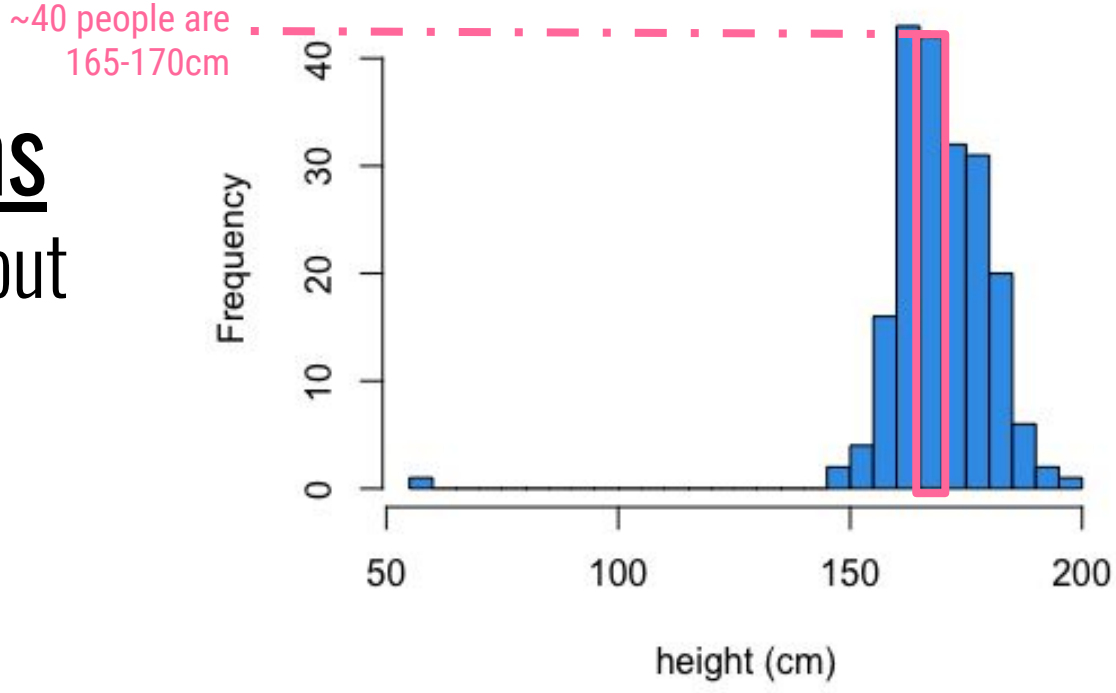
Histograms

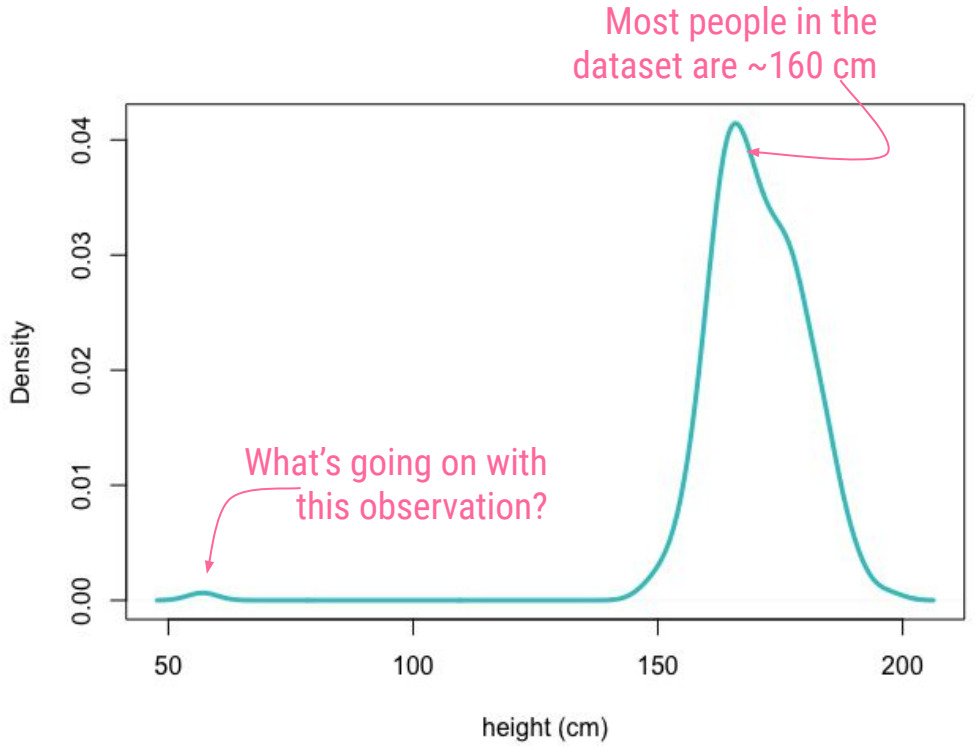
Information about a single quantitative variable



Range of possible height values is easily visualized

Densityplot

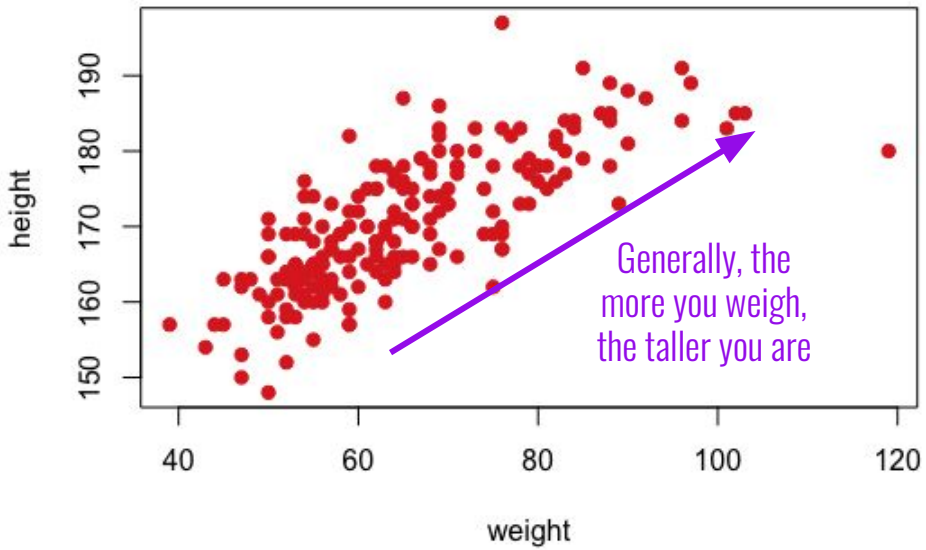
Information about a single quantitative variable



A smoothed version of a histogram - demonstrates the *distribution* of the data; helps to identify extreme values

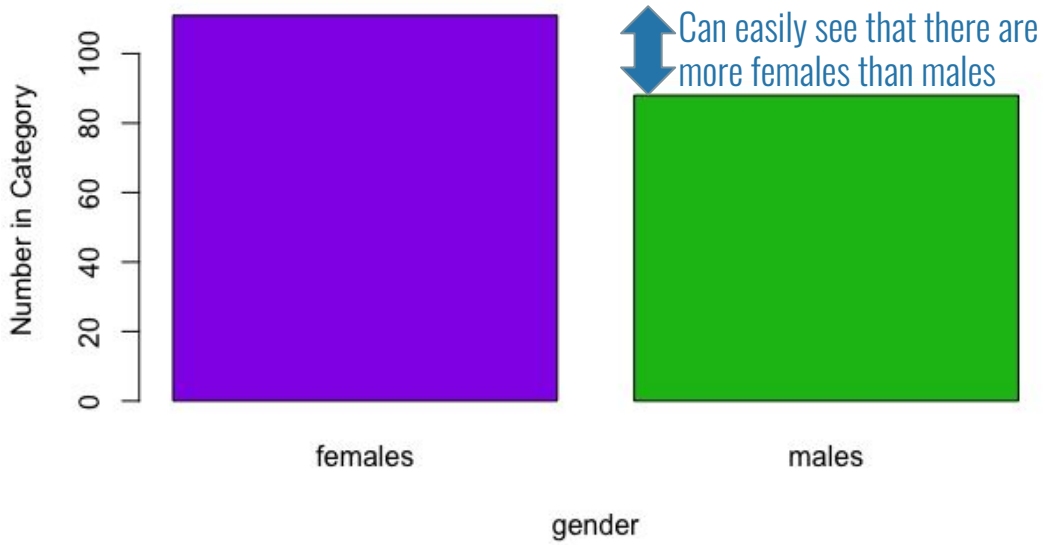
Scatterplot

Relationship between two quantitative variables



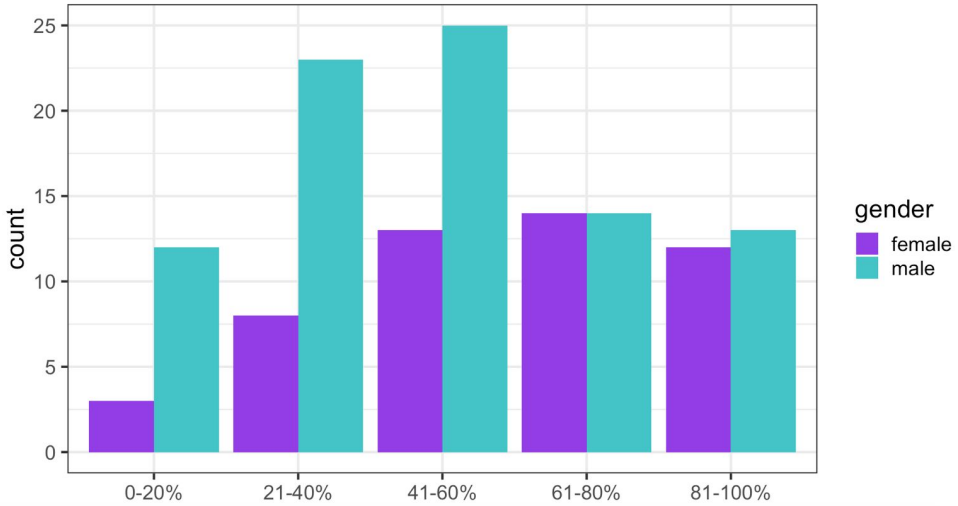
Barplot

Count of values within a single categorical variable



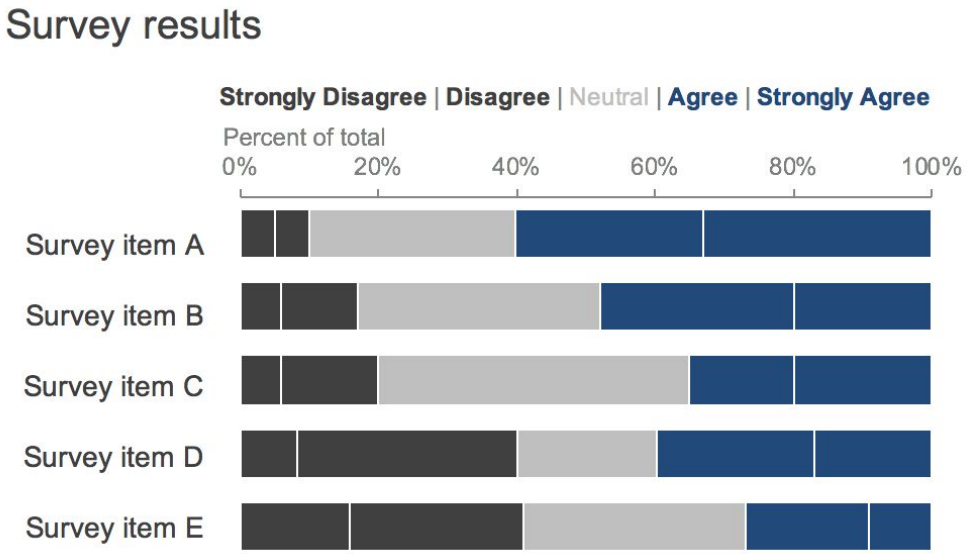
Grouped Barplot

Count of values broken down across two categorical variables



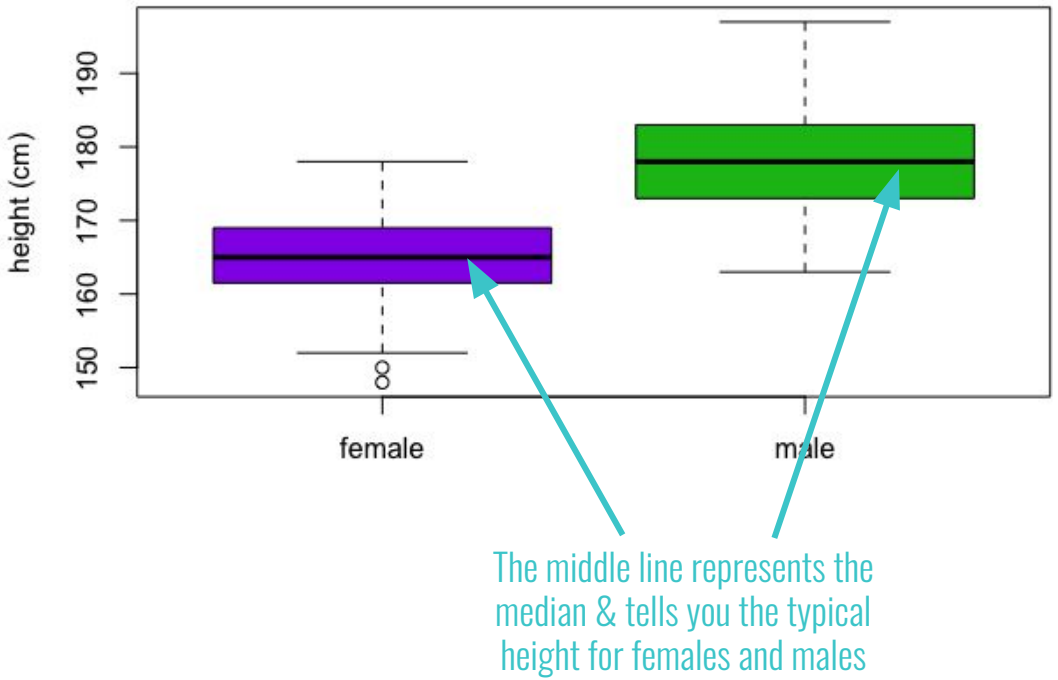
Stacked Barplot

Count/proportion of values broken down across two categorical variables



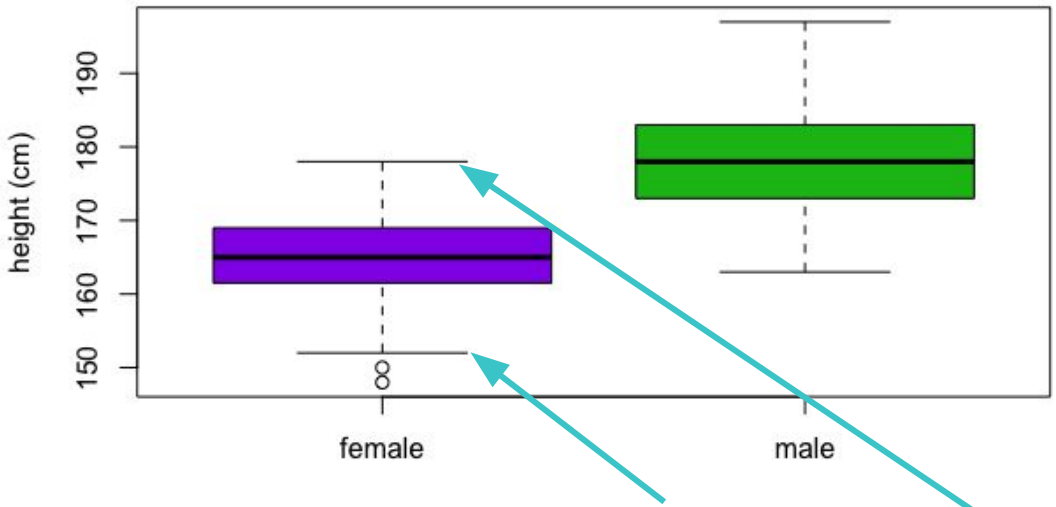
Boxplot

Summary of a quantitative variable broken down by a categorical variable



Boxplot

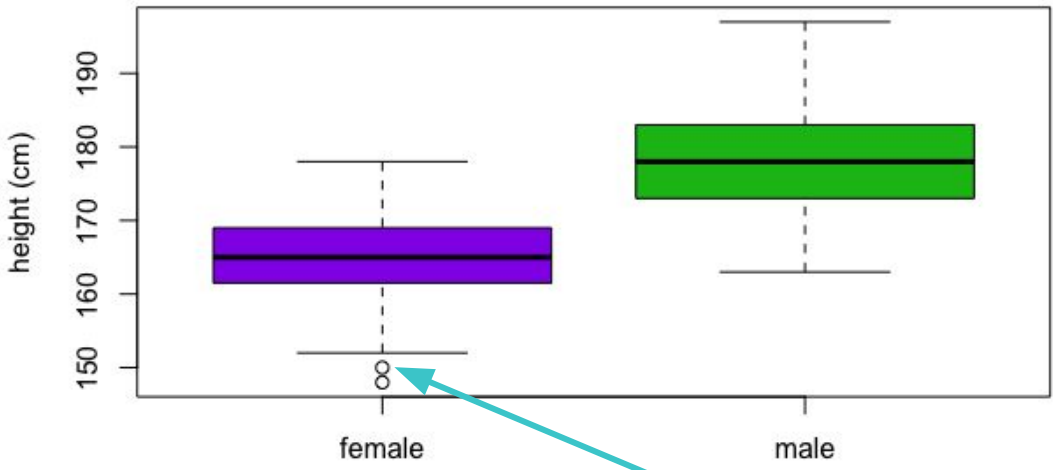
Summary of a quantitative variable broken down by a categorical variable



The lines give you an idea of the typical range of values for each category

Boxplot

Summary of a quantitative variable broken down by a categorical variable



Values outside the typical range are shown as circles. These are known as **outliers**.

Line plot

quantitative trend over time