

# COR 142 C: Section 2.3

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# Visualizing Variations in Categorical Data

We can visualize categorical data by displaying the frequencies and/or the relative frequencies.

# Barplot/Bar Graph

- Similar to histogram, except for **categorical data**.
- The bars **do not touch**.
- The order of the bars **does not matter** (most of the time).

# Pareto Chart

A Pareto chart is a barplot in which the the bars are ordered from **tallest to shortest**.

# Histograms vs. Barplots

	Histogram	Barplot
Data Type	Numerical	Categorical
Bars	Touch	Do not touch
Bar Width	Same width	Not Necessarily the same width
Horizontal Labels	Numerical order	No inherent order

# Pie Charts

- A **circle** divided into wedges.
- The area of each wedge is **proportional** to the **relative frequency**, or percentage, of the categorical value in the data set.