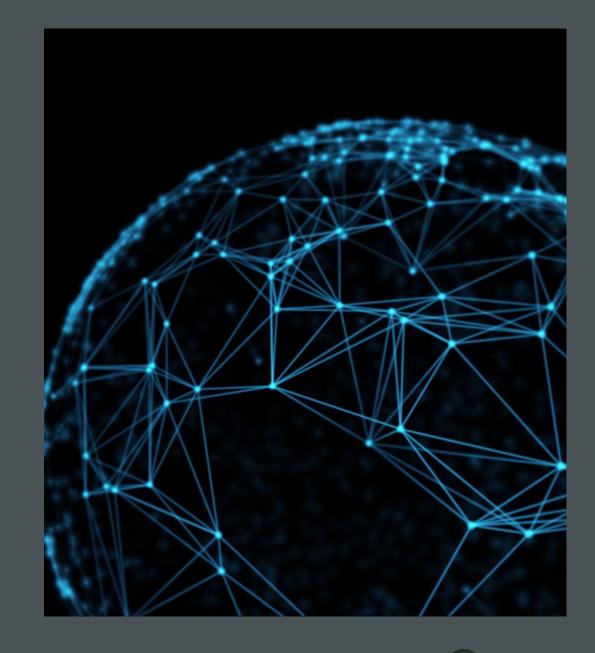
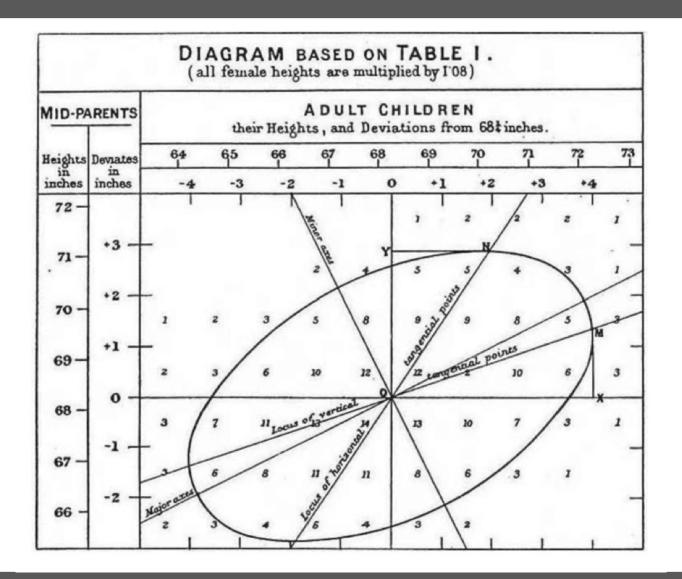
# DATA VISUALIZATION: SCATTERPLOTS

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Scatter diagram, scatter graph, scatter charts are all names for scatterplots.



## COMMON USES

- Observing data
- Displaying relationships between at least two variables
- Correlation

### CORRELATION

- Positive
- Negative
- No relationship
- Remember: correlation does not equal causation!!



# WATCH OUT FOR

- Overplotting!
- Remedies:
  - Carefully subsetting the data
  - Utilizing transparency
  - Changing the size of the points

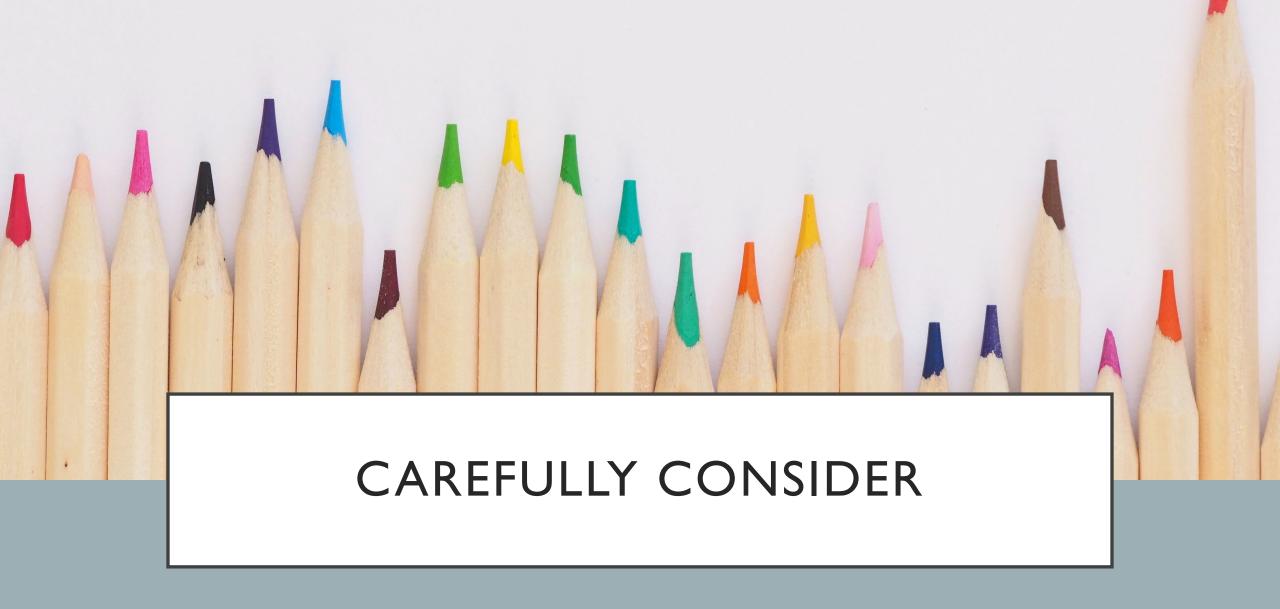
#### MAKE SURE YOU HAVE

- Excel
- <u>Tableau public</u>
- <u>R</u>
- R Studio

#### THE DATA!



- Today we will use two different datasets!
- The first one is a subset of data from the National Center for Education Statistics:
- Average US undergraduate tuition rates by decade



Color, contrast, clutter, and scale

#### ADDITIONAL RESOURCES

- Kaggle.com for other datasets.
- Tableau also has freely available tutorials.
- Tutorials from the <u>Digilab here at UGA</u>: excel, R, and Tableau!
- R Ladies Athens!!
- Ggplot2 cheatsheet and ggplot2: Elegant Graphics for Data Analysis by Wickam

#### COMING UP NEXT...



## 18 Nov. Area Graphs

in Excel, Tableau, and R

#### THANKS FOR LISTENING!

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#### **WORKS CITED**

Spiske, Markus, 2020, Unsplash