PUBH6299: Visual Exploration of Public Health Data

Fall 2018

Playing with Messy Data in Tableau

Entity collection data: The National UFO Reporting Center http://www.nuforc.org/

Data set: Complete UFO sightings, including time standardization and geocoding Download **complete** dataset¹ from Blackboard Session 3

- 1) Identify at least 10 different instances of messy data in this dataset. Explore each variable.
- 2) Review the event reporting form: http://www.ufocenter.com/reportformsubmit.html What are your observations? What do you see in the form that will lead to poor data quality?

Data Exploration & Quality Review

- 1) How many total sightings are captured in this dataset? How many have a complete information for location?
- 2) How complete is the dataset? (for each variable/total)
- 3) How accurate/reliable is the data?
- 4) What year was the first recording sighting? Where was it? How long was it?
- 5) Where in the world are the most frequently reported sightings?
- 6) Are there any trends or patterns in the sightings?
- 7) What is the most common shape reported?

¹ This dataset was scraped, geolocated, and time standardized from NUFORC data by Sigmond Axel. https://www.kaggle.com/NUFORC/ufo-sightings

Correcting Messy Data in Tableau

There are several options for correcting messy data in Tableau.

- Check the nulls
- Correct location data
- Split the variable (based on string calculations)
- Edit the alias of values
- Use filters

Using Tableau Prep to clean your data → upcoming class https://www.tableau.com/learn/training#prep

 $\frac{https://interworks.com/blog/sparker/2018/05/09/tableau-prep-how-to-cleanse-your-data-and-prepare-it-for-world-domination-analysis/$