# **Evaluating Data**

paranoia is a <del>valuable</del> necessary trait

# poking holes is job one

- Do Not Trust Your Data.
  - o Even (especially?) if you made it.
- Data comes from people. People make mistakes.
- First law of data entry: the more you type, the more mistakes you make.

#### what to look for

- missing values
- inconsistencies between data points
- out of range values
- suspicious repeats / duplicates
- misspellings / typos
- truncations within cells
- entire rows truncated from your dataset



https://twitter.com/bendystraw/status/736270952670081026

# Start evaluating your data!

- First, basic question: what is this?
- Then, sort and filter to get familiar
- Next, pivot tables to see distinct values

All of the steps inform our judgment on whether this data is useful and can answer our questions.

#### **Pivot Tables**

- Great for when you need to look at distinct values
- Distinct means exactly that any difference means a different value
- Use one pivot table at a time to stay sane

## problems with names

- multiple versions of similar names (AT&T)
- suffixes, prefixes, titles
- marriages, divorces, births

## problems with addresses

- abbrevs.
- partial addresses, no street number
- intersections
- quadrants
- PO boxes

## When to walk away

Sometimes your data is simply not robust, detailed, accurate, or large enough to do what you want with it