



# Ass3

For this assignment, I used data from [The Correlates of War Project](#), specifically the National Material Capabilities database. Looking back, I think the data was a bit messy and I think I would have been better served if I spent time cleaning it and making merge operations.

For this assignment, I decided to look at Raw graphs because I was intrigued by the different visuals, its web-based interface and its perceived ease of use. At the conclusion of the assignment, I thought it was an interesting tool but it seemed to frequently freeze on my data repeatedly. In addition, my data was encoded to represent missing values by -9 and I struggled to find how/if RAW has NAN handling.

A PDF consisting of a data dictionary and legend had the following attributes.

image-20210310100149351

I first began attempting to visualize the Iron and Steel Production over time. I felt limited by what RAW was able to do with my dataset. I was not able to perform any merge operations to show just a single or few countries and for some reason it kept cutting off the y-axis, when exported to an image.

## Iron and Steel Production Over Time

yearVSirst

Next, I wanted a way to visualize the correlation between urban population and primary energy consumption. I played around with a few graphs to show this relationship and thought circle packing was the most interesting way to get a quick class at this information. I decided not to include a color or label dimension because I thought it was clouding the information.

## Urban Population Correlating with Energy Consumption

urbanPopVSPEC

Dealing with crashing raw graphs and wanting to try something a bit different, I decided to switch to a contour plot to see how the density of the total population has changed over time. Also, I felt limited by my RAW and could not find a way to write the axis without a comma.

## Total Population Over Years

tpop-contour

Truthfully after this assignment, I regret choosing RAW. I understand the appeal but as someone who has experience doing visualizations with python , I felt very limited by its options. In addition, the way it kept crashing continued to frustrate me and I was annoyed that I was not able to try some visualizations since they would not load. However, I am still glad that I was exposed to a new tool and that I was able to practice this process of visualization.