

Our World Data Visualization Recreation

Why

For this assignment, I recreated a visualization based on **Our World in Data's Freedom of Expression Index** for 2023. I chose this topic because I wanted to understand the extent to which people can voice their views, specifically how much the media can voice their opinions freely(ish). This has been something I am too familiar with in regards to India and Kashmir but I have never had objective data as my lens and I also wanted to understand the level of expression freedom globally.

Details, links and reflections about the three methods

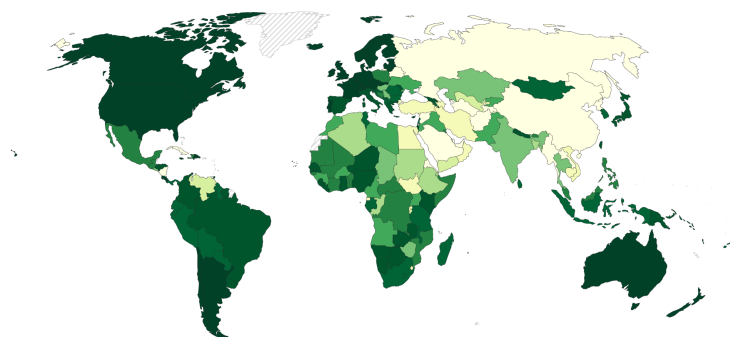
1. [Python - Matplotlib and geopandas](#)

Using Python(code linked above), specifically **matplotlib** and **geopandas** was the most familiar option to me, however it required a bit of thinking. I really liked to control colors and use different sources of data. While this wasn't the easiest way, it was the most customisable. I think this was the best for analysis because I could interact with specific parts of data, filter data, visualise it and work with it.

The original visualisation from [our world](#) about the freedom of expression is ss below

Freedom of expression index, 2023

Based on the expert estimates and index by V-Dem¹. It captures the extent to which people can voice their views and the media can present different political perspectives. It ranges from 0 to 1 (most free).



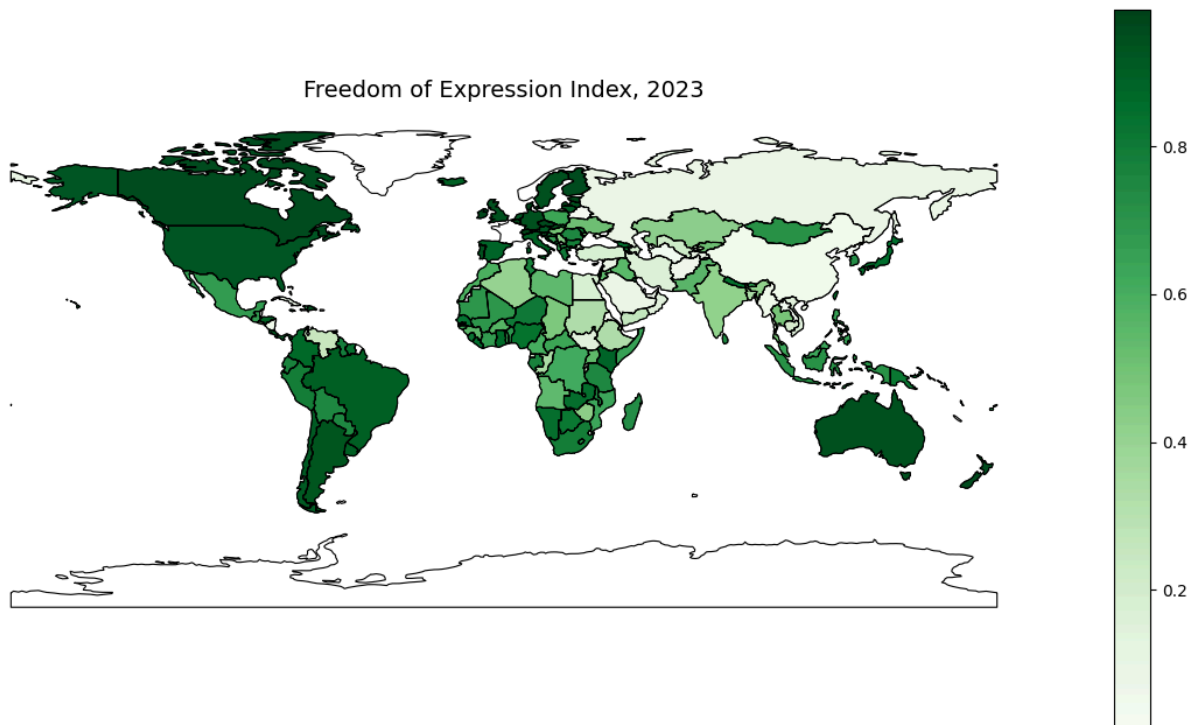
Data source: V-Dem (2024)

OurWorldInData.org/democracy | CC BY

1. V-Dem: The Varieties of Democracy (V-Dem) project publishes data and research on democracy and human rights. It relies on evaluations by around 3,500 country experts and supplementary work by its own researchers to assess political institutions and the protection of rights. The project is managed by the V-Dem Institute, based at the University of Gothenburg in Sweden. Learn more: Democracy data: how do researchers measure democracy? The 'Varieties of Democracy' data: how do researchers measure democracy? The 'Varieties of Democracy' data: how do researchers measure human rights?

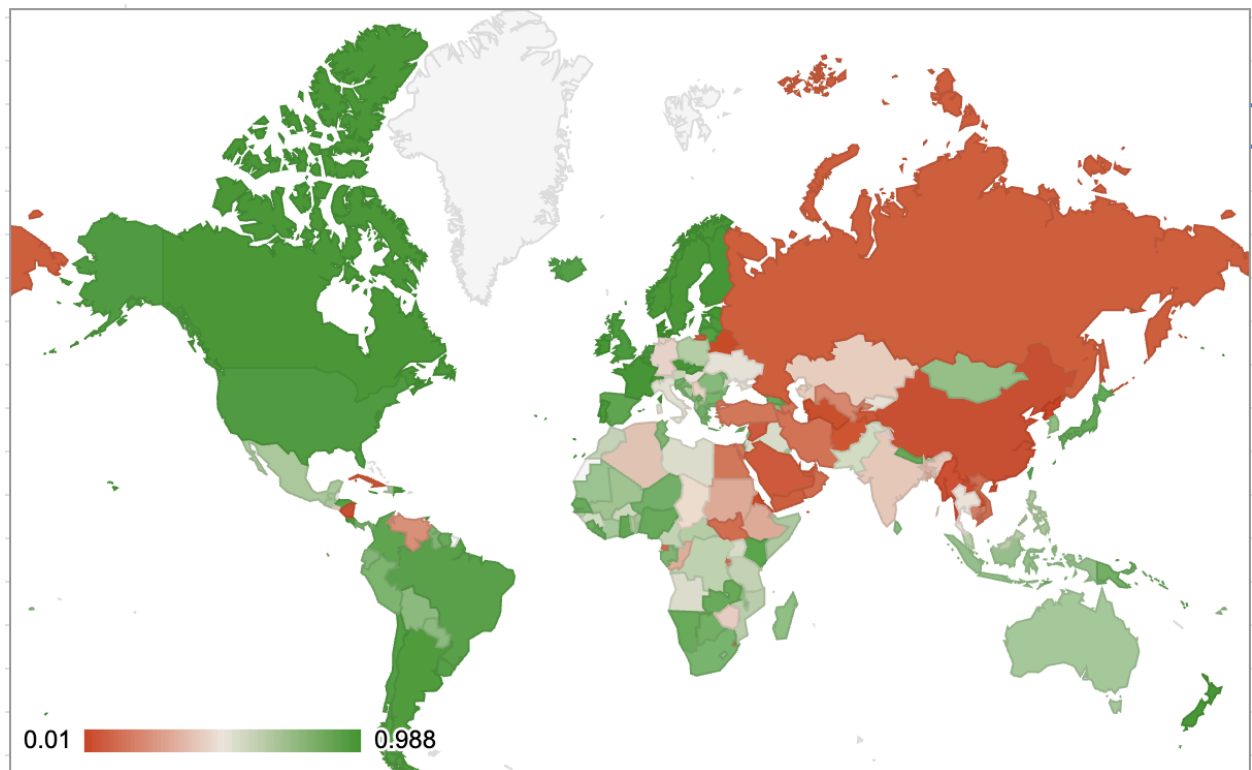
To recreate the [our world visualisation](#), I created a similar choropleth map (shown below) showing the Freedom of Expression Index for 2023 using a color gradient from light green (low freedom) to dark green (high freedom).

My visualisation using matplotlib, pandas and geopandas



2. [Google Sheets](#)

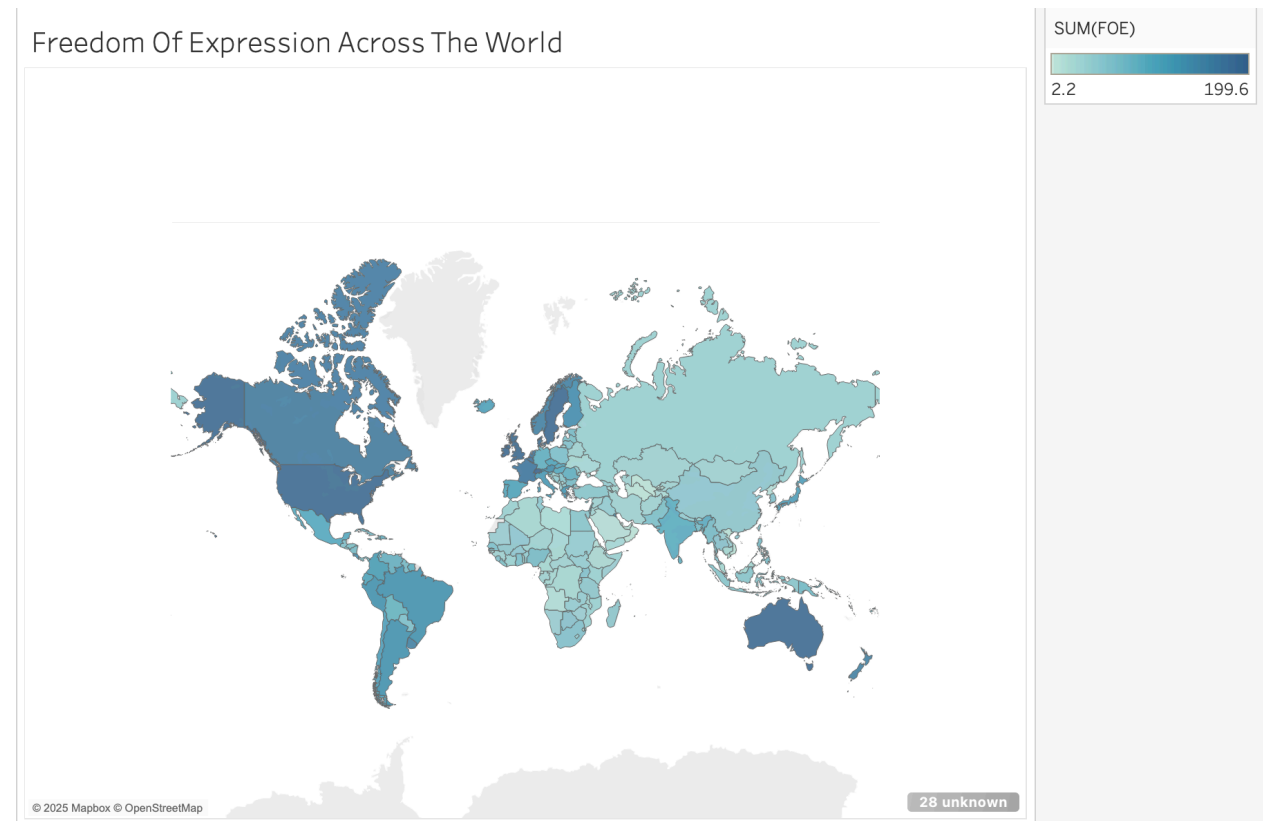
My visualisation using google sheets:



Google Sheets was the easiest in terms of finding it but it was very clunky to use. The geochart kept getting the color wrong and I wasn't sure why that was happening, but after I figured out that it was just the wrong column. I think it's useful for quickly rendering a visualisation but there is little control in labelling, changing colors as compared to python. And the communication possible through sheets severely lacks depth.

3. Tableau Public

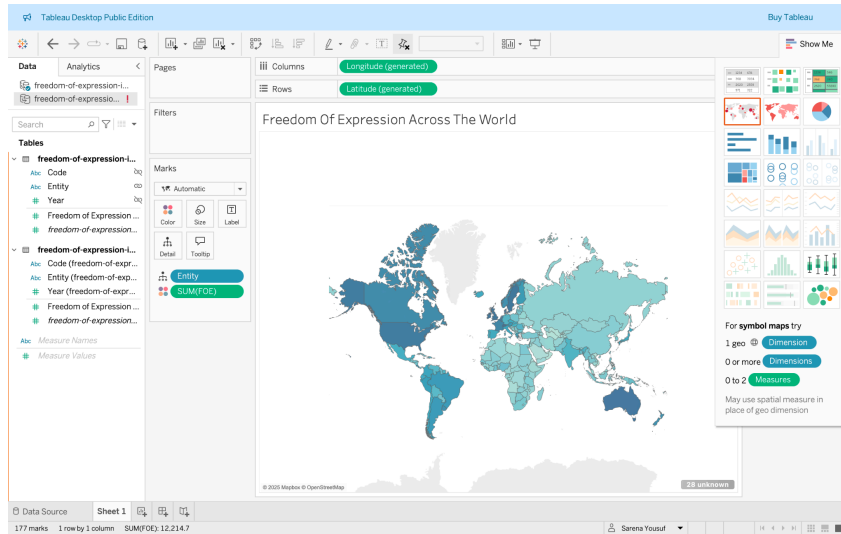
My visualisation using the tool:



I used Tableau Public and this was the most fun and interactive for me. I used [this tutorial](#) to learn the tool but I wasn't familiar with it. By this point I also cut down on the codes of the data because I figured that was unnecessary for the scope of this project.

There was more control in terms of customizability, analysis and communication as compared to google sheets but at my level not as much as python libraries.

There was so much that I want to properly explore, I want to try the other types of data representation here and see how that changes the communication/interpretation of this data.



In a nutshell

- Easiest To Make - Google sheets
- Easiest To Read - Python (matplotlib and geopandas)
- Most Customisable - Python
- Most Analyzability - Python
- Best for communication - Depending on your skill level. For me, it was python but I could see Tableau taking that spot

Final Thoughts

I do not agree with some of the data here, because often the data collection is funded by the government in some areas and generalised to the rest of the country and I have lived my entire life scared of standing up for anything due to the extreme media censorship in Kashmir. I would love for there to be a forum in our world in data website which allows people to voice these inequalities and maybe let the world know the stories behind the data.

However, I learned a lot from this assignment and look forward to using data alongside the stories behind it in my future projects.