Harley Ungar
INFO 616
FInal Project Overview
Due Date: Dec. 12, 2025

Organ Donation in America: Who Donates - or Doesn't - and Why

Website: https://hungarpratt.github.io/Organ_Donation_Dataviz/
GitHub repo: https://github.com/hungarpratt/Organ_Donation_Dataviz
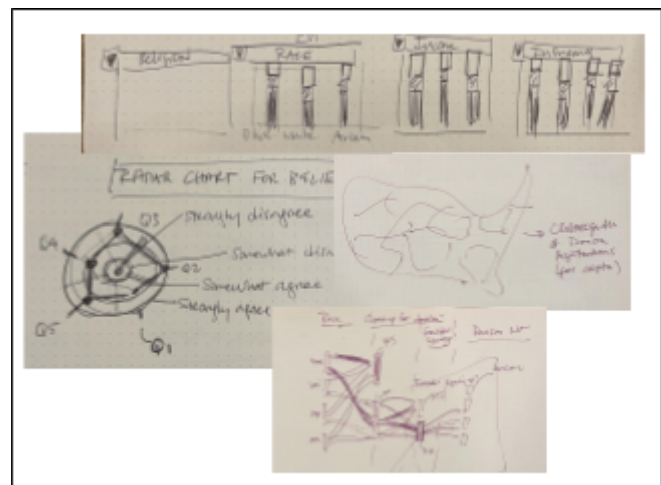
Background

For this project, I chose to analyze the demographic characteristics and beliefs of Americans who were registered, or potentially interested in registering, to become organ donors upon death. I obtained survey results from the *2019 National Survey of Organ Donation Attitudes and Practices*, composed of 10,000 respondents. After cleaning and analyzing the data, I developed a portfolio of charts in Observable Plot, then integrated them as interactive dashboards to live within a website about organ donation.

Process

Cleaning the Data. After obtaining the dataset from the U.S. Department of HHS' Health Resources and Services Administration (HRSA), I spent quite a bit of time getting familiar with how the survey was constructed, how data was organized, and how responses were coded. I removed data columns that were superfluous to my work and generally cleaned up the spreadsheet (hiding columns, moving things around, etc.) to make my work easier. I created a series of additional tabs within the spreadsheet to house specific charts, which were created using formulas to run specific analyses, and presenting the data in a format that would be easily read in Observable.

Race	Group	Percent
White	Registered	56.15
White	Not Registered But Willing	23.03
White	Not Willing	20.82
Black/African An	Registered	38.43
Black/African An	Not Registered But Willing	29.93
Black/African An	Not Willing	31.63
Hispanic	Registered	48.91
Hispanic	Not Registered But Willing	26.72
Hispanic	Not Willing	24.37
Asian Am.	Registered	39.52
Asian Am.	Not Registered But Willing	31.29
Asian Am.	Not Willing	29.19
Am. Indian/Alasl	Registered	57.77
Am. Indian/Alasl	Not Registered But Willing	19.05
Am. Indian/Alasl	Not Willing	23.18

Planning the Visualizations. Before doing any coding in Observable Plot, I had to think through what information I wanted to convey, and the most effective way to do it. I spent a lot of time brainstorming and sketching,

running into dead ends (e.g. the Sankey chart!), developing new ideas, and refining my thinking along the way.

Creating Visualizations in Observable Plot. I started with examples from the Observable Plot gallery and – with *a lot* of trial and error – customized them for my particular needs. I used ChatGPT to help me work out the kinks with my code, particularly when it came time to combine all of the charts into an interactive dashboard. I spent a lot of time tweaking the code to implement seemingly trivial things (e.g. the formatting of legends), and at several points I had to go back to my Google Sheets to reformat the data in a way that made it easier for Observable to work with. I was well into the process by the time I figured out that I could dynamically link the Google Sheets into Observable Plot, so that changes to my original spreadsheets would flow through to Observable without first having to download and import them.

Creating the Website. Once I completed my first draft of the charts, I developed a website to provide necessary context. Because I'm not particularly familiar with html, I spent a lot of time figuring out how to code the site to generate the layout I wanted. I created a graphic using ChatGPT, and designed another illustration using Adobe Illustrator to add some flavor to the page. Finally, after a significant amount of tweaking of the css file and the Observable Plot files, I was able embed the charts in the exact manner I wanted.

Soliciting User Feedback. After creating the website, I found three people to provide feedback (iterating between each of the users): a 23 year old male financial analyst, a 50 year old female business manager, and a mid-20's male School of Information grad student. My methodology for soliciting feedback was two-fold:

(1) I asked them to simply narrate their thinking as they played around with the website, periodically prompting them to explain themselves by asking questions like, "What do you mean when you say [...]?", or "You seemed surprised by that. What were you expecting?"

(2) I asked them to give me reactions to specific questions I posed about the visualizations, such as "Tell me what you think this chart means. Is that interesting or useful information for you to know, or not so much?"

Here are some examples of the feedback I received:

User	Comment/Suggestion	My Response
#1	Provide information about where the data is from.	I added a section in the website about the provenance of the data.
	Tooltip in bar chart awkward	Changed syntax of tooltip wording
	Curious if each of the beliefs in the radar chart were equally statistically significant in predicting willingness.	Did not address because I figured most users wouldn't care about statistical significance (they would see that some of the belief variances were really small).
	Incongruity between bar chart and radar chart legends. Bar chart shows 3 categories, radar charts showed 2.	Excellent point, and I concur with the feedback. However, I didn't have enough time to redo all the analyses to effectuate this change
#2	Didn't see the radio dial at the top of bar charts.	I played around with adding a white background to this, but found that rewording the labels (which also made the meaning clearer) stretched the section to two lines, which made it more visibly obvious
	Hard to see the "No Data" states in the map - blend in with background	I went back to Observable and found a way to make those states darker.
	Didn't see radar charts beneath them, or notice that they also changed when dropdown selected. (This also came up in the class discussion.)	I played around with making a static visual to live above the interactive charts, but it felt redundant and confusing. Instead of that, I added a text section and called out the interactive features.
#3	Confused about the population of donors in the chloropleth maps	The 3 maps had depicted related but disparate populations. They all had something to say about the #s of people involved in organ donation, but I reworded the labels for the radio dial so that (hopefully!) it's more clear.
	Confusing wording for labels on radar charts.	I changed "Doctor Trust" to "Doctor Mistrust," but the charts are still challenging to read because they mix positively and negatively framed beliefs. Correcting this would have required converting and relabeling all of the data, which would not be a valid analytical approach, so I left the charts as they are. So the problem remains :-(
	Off-putting that the bar chart for entire population is so big	This came up in the class conversation as well. The solution was to not have this be the default bar chart, so that if/when the user finally pulls it up after other charts, they intuitively accept why it works that way.

Final Reflections. This project gave me a lot of experience using Observable Plot, and an appreciation for how powerful it is. I also learned that while it's possible to customize aspects of Observable charts beyond the defaults, sometimes it is very time-consuming to do, and often requires reformatting the original data in a way that works for Observable.