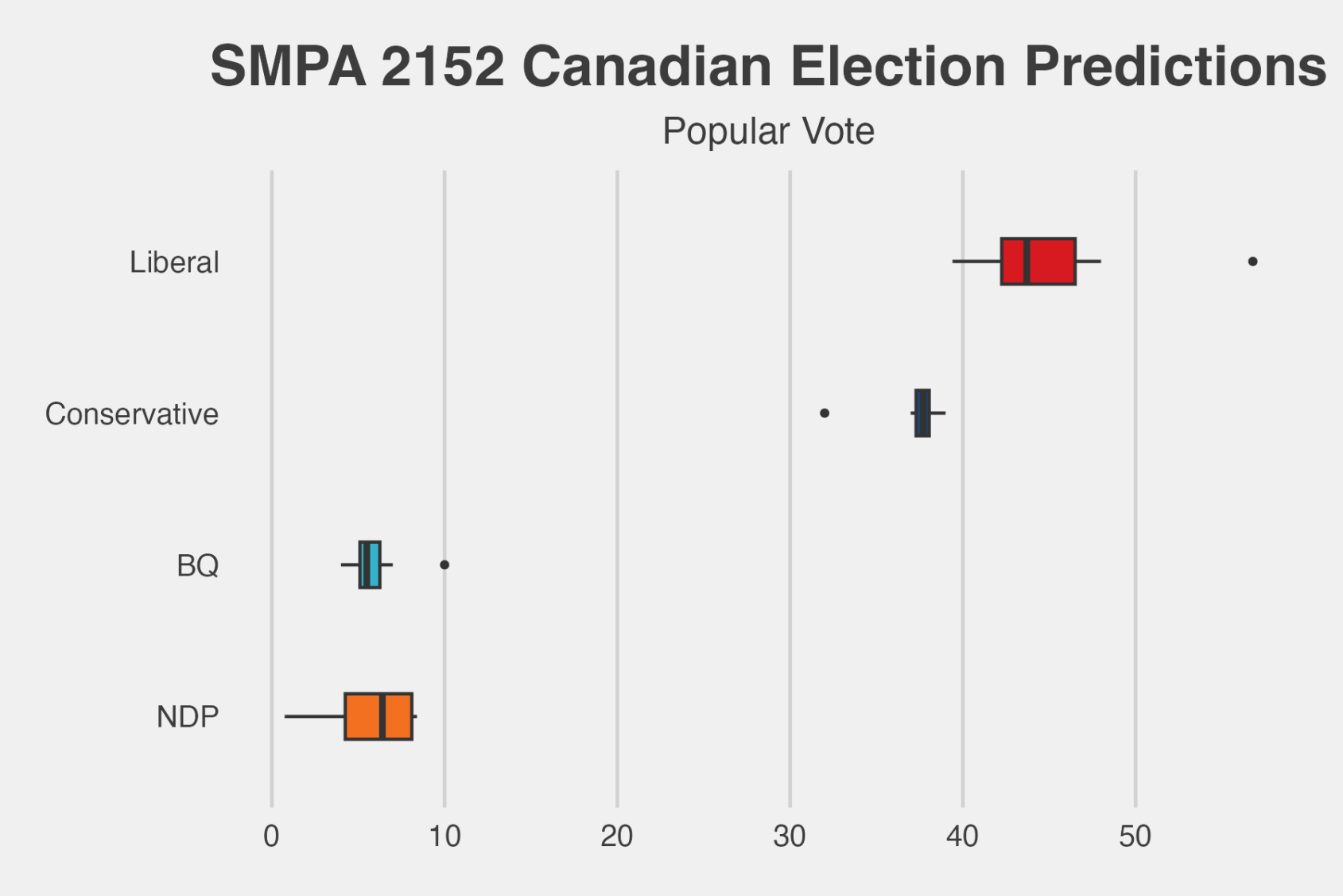
Wrapping Up

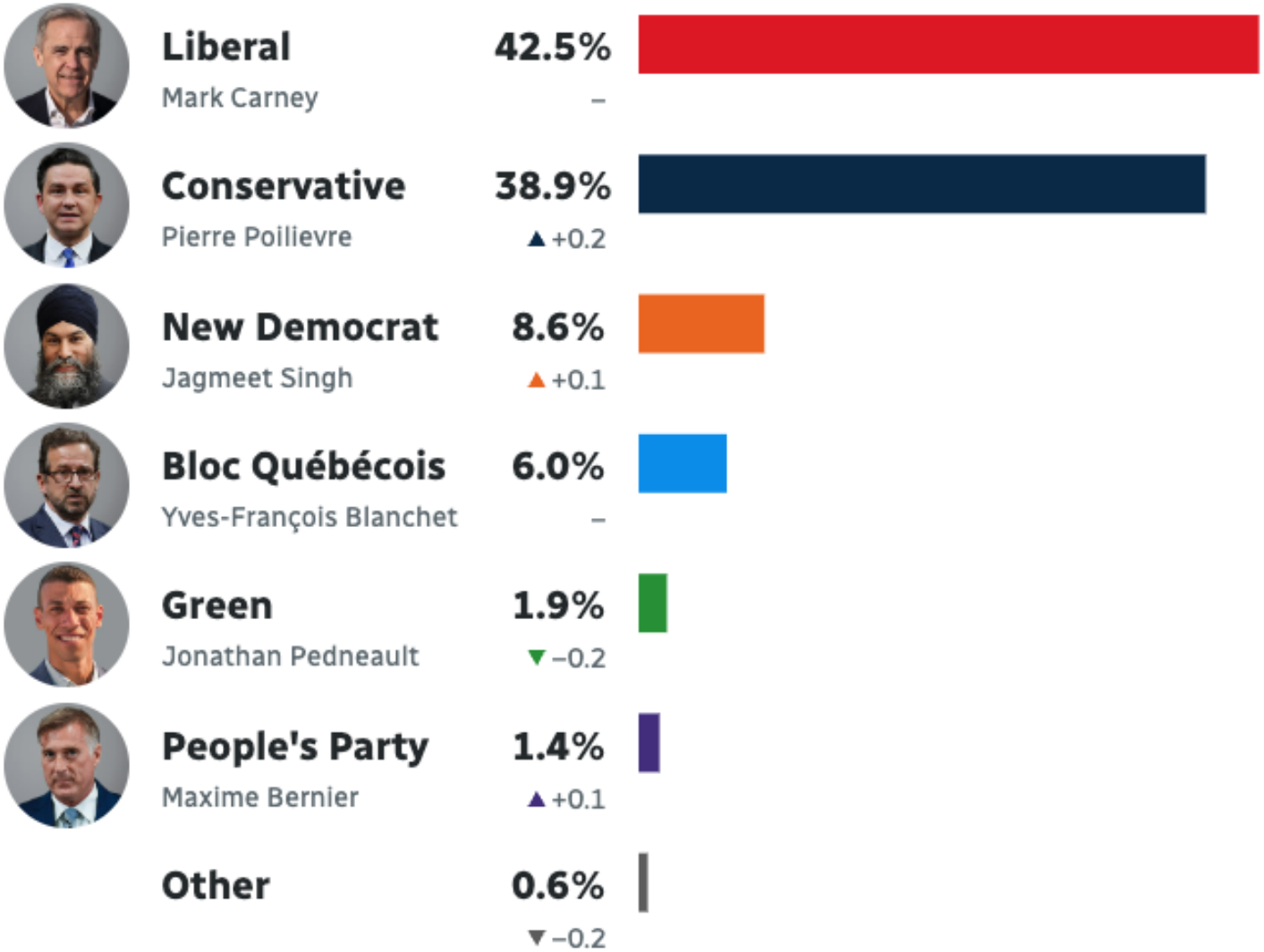
Data Analysis for Journalism and Political Communication (Spring 2025)

Prof. Bell

Canadian Election Predictions



Canadian Election Predictions



Think-Pair-Share

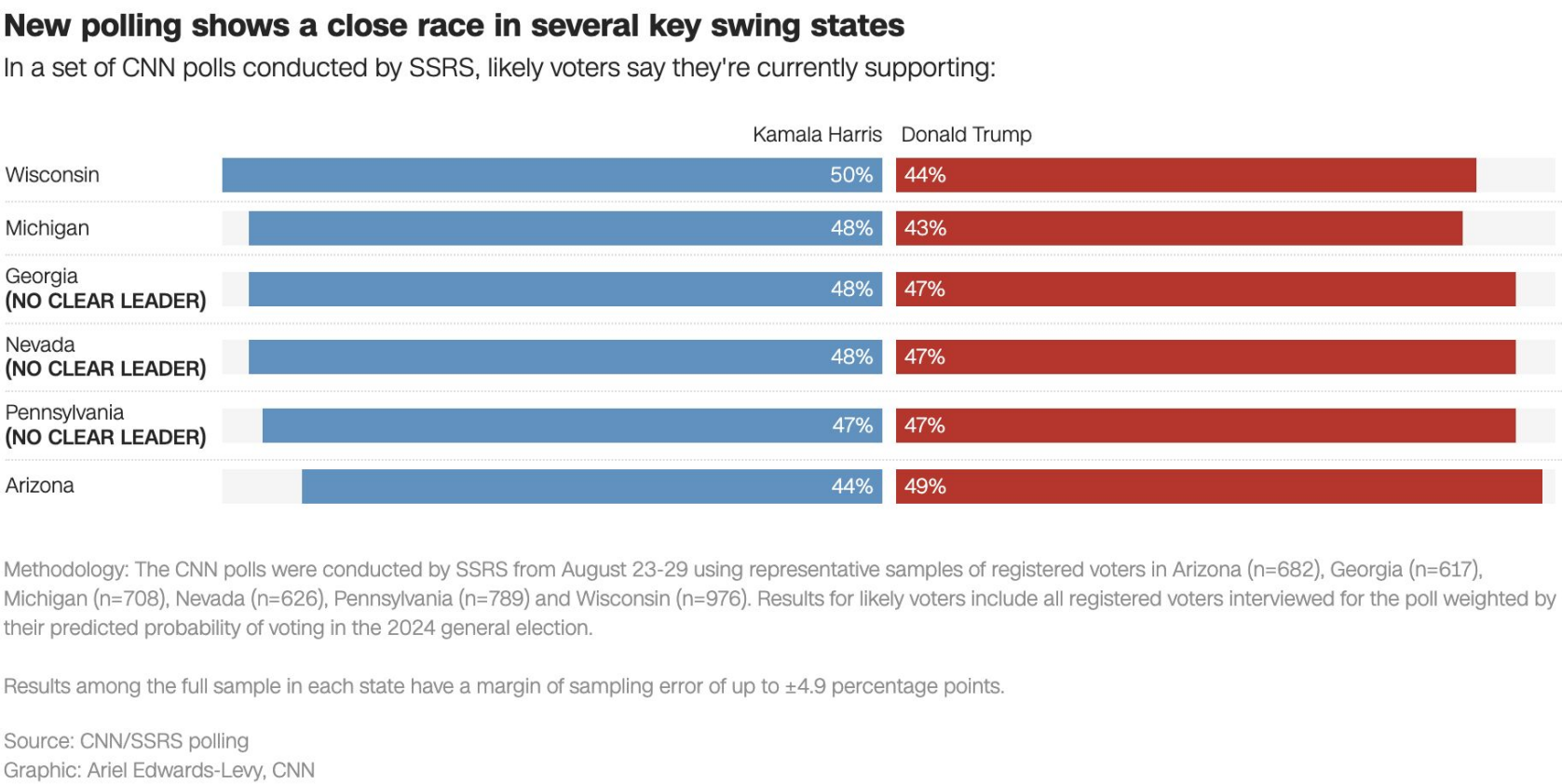
1. What are the most important ideas that you will take away from this class?
2. What burning questions do you still have about data analysis?

Chalabi: 3 Ways to Spot a Bad Statistic

1. Can you see uncertainty?
2. Can we look beyond the averages?
3. How was the data collected?

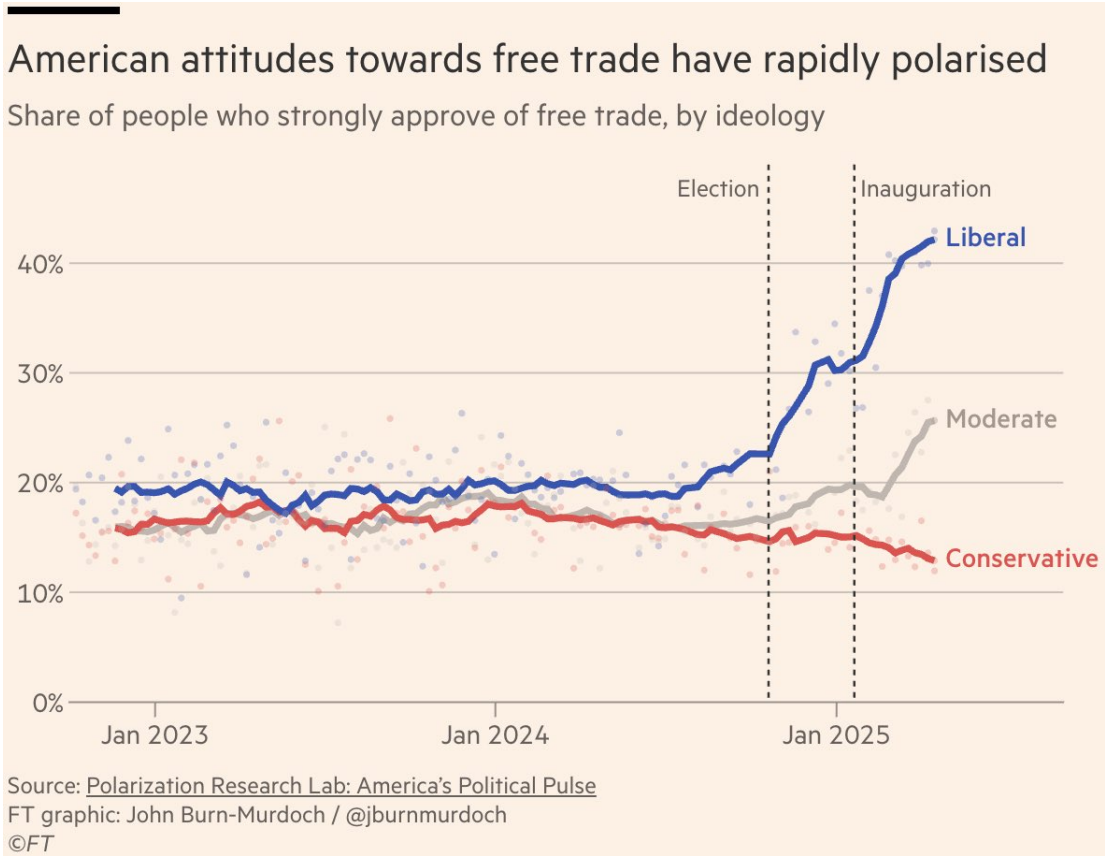
Can you see the uncertainty?

- Whenever we take a sample and try to make inferences about a population, there is uncertainty



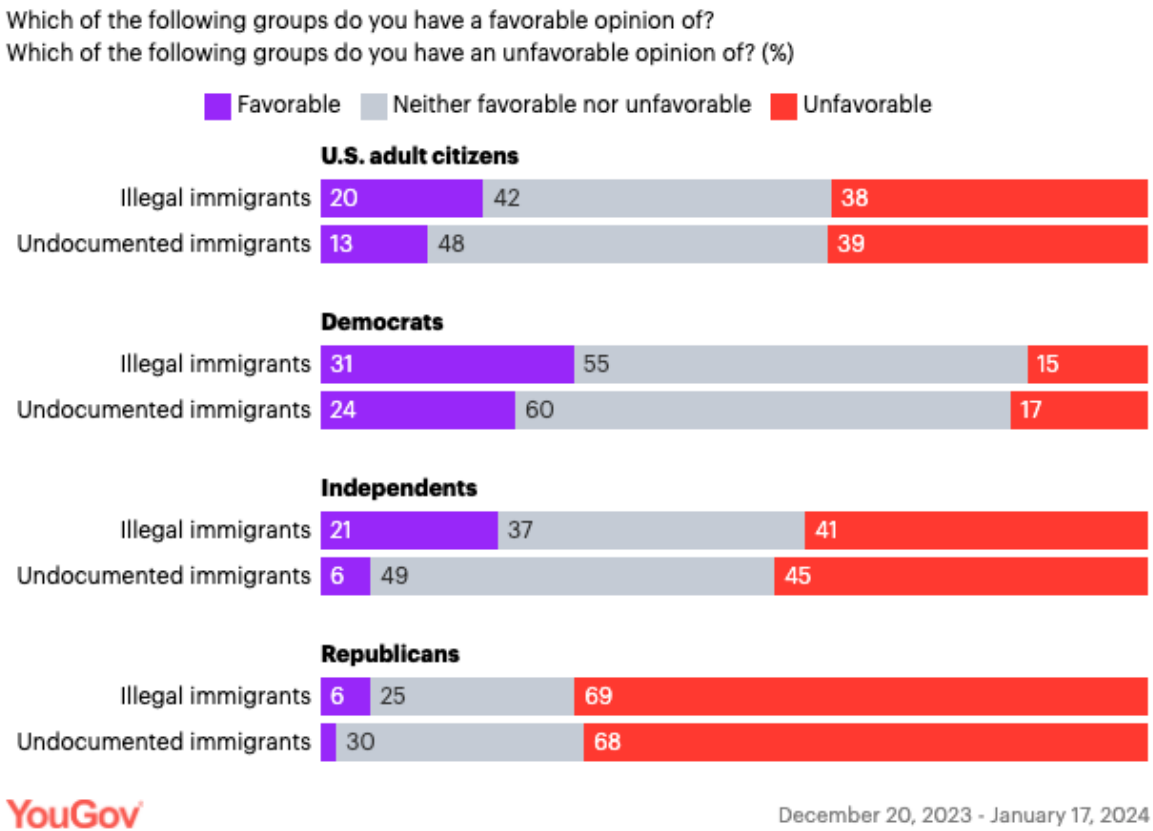
Can you see the uncertainty?

- Whenever we take a sample and try to make inferences about a population, there is uncertainty
- There is also uncertainty when making causal claims due to confounding and reverse causation



Can we look beyond the averages?

- We need to carefully communicate the context of the data



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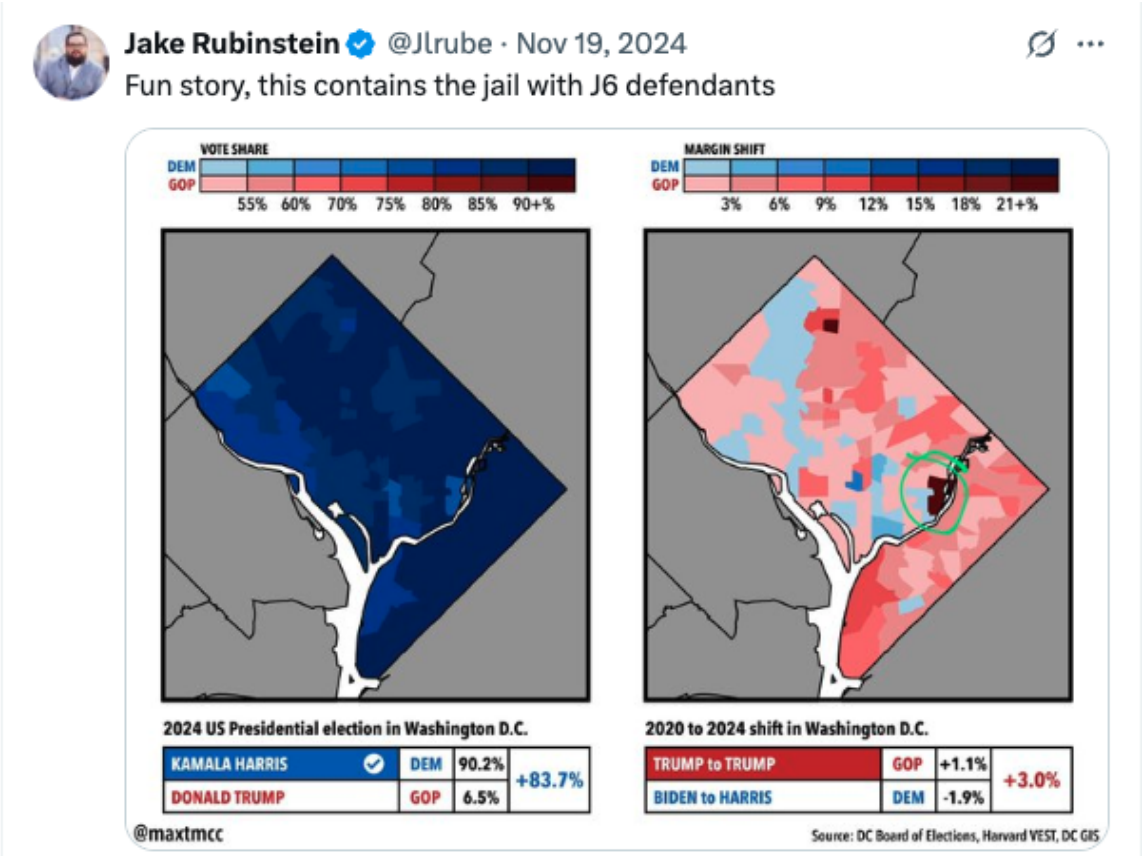
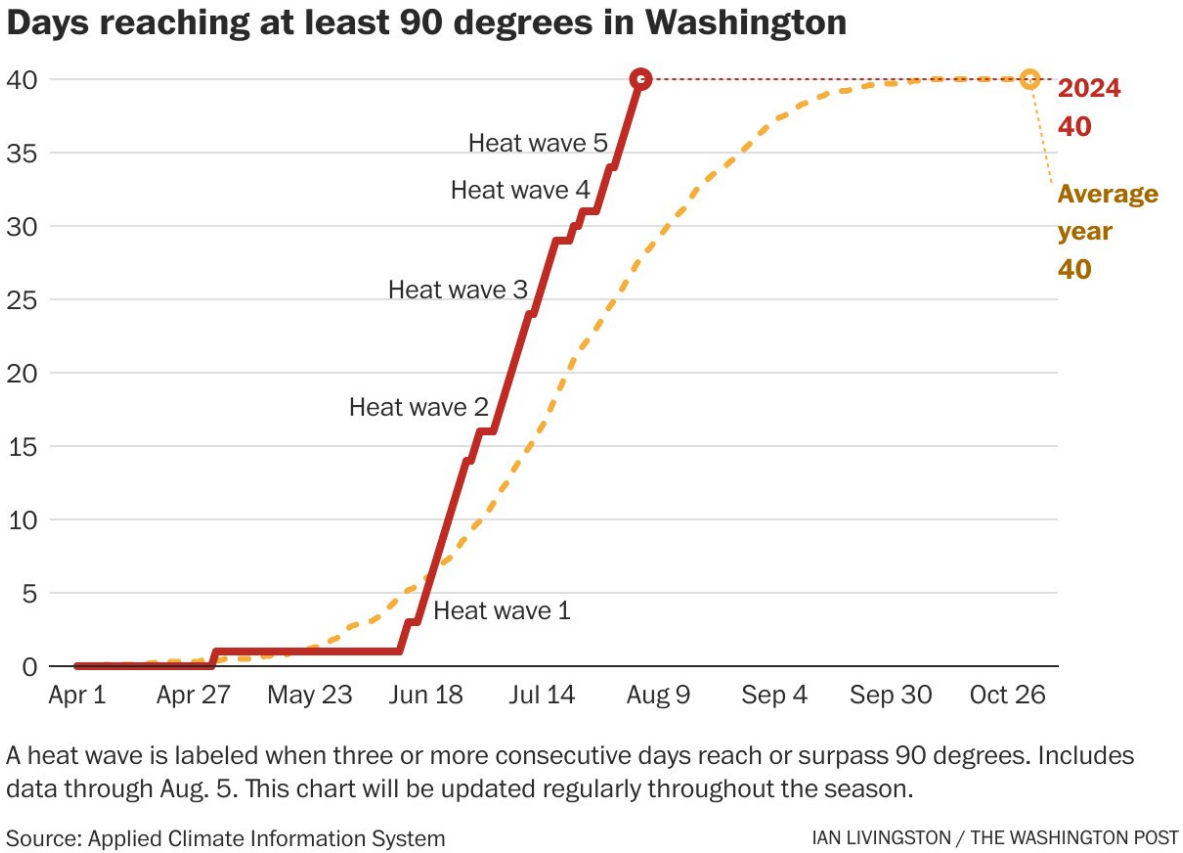


Can we look beyond the averages?

- We need to carefully communicate the context of the data
- There is both a science and an art to accurately communicating about data using data visualizations



How was the data collected?

Elon Musk @elonmusk · May 13, 2022

To find out, my team will do a random sample of 100 followers of @twitter.

I invite others to repeat the same process and see what they discover ...

10K 11K 111K

Tesla Owners Silicon... @teslaow... · May 13, 2022

How are defining random ? How will you select them

33 58 1.2K

Elon Musk @elonmusk · May 13, 2022

Ignore first 1000 followers, then pick every 10th. I'm open to better ideas.

1.3K 984 9.9K

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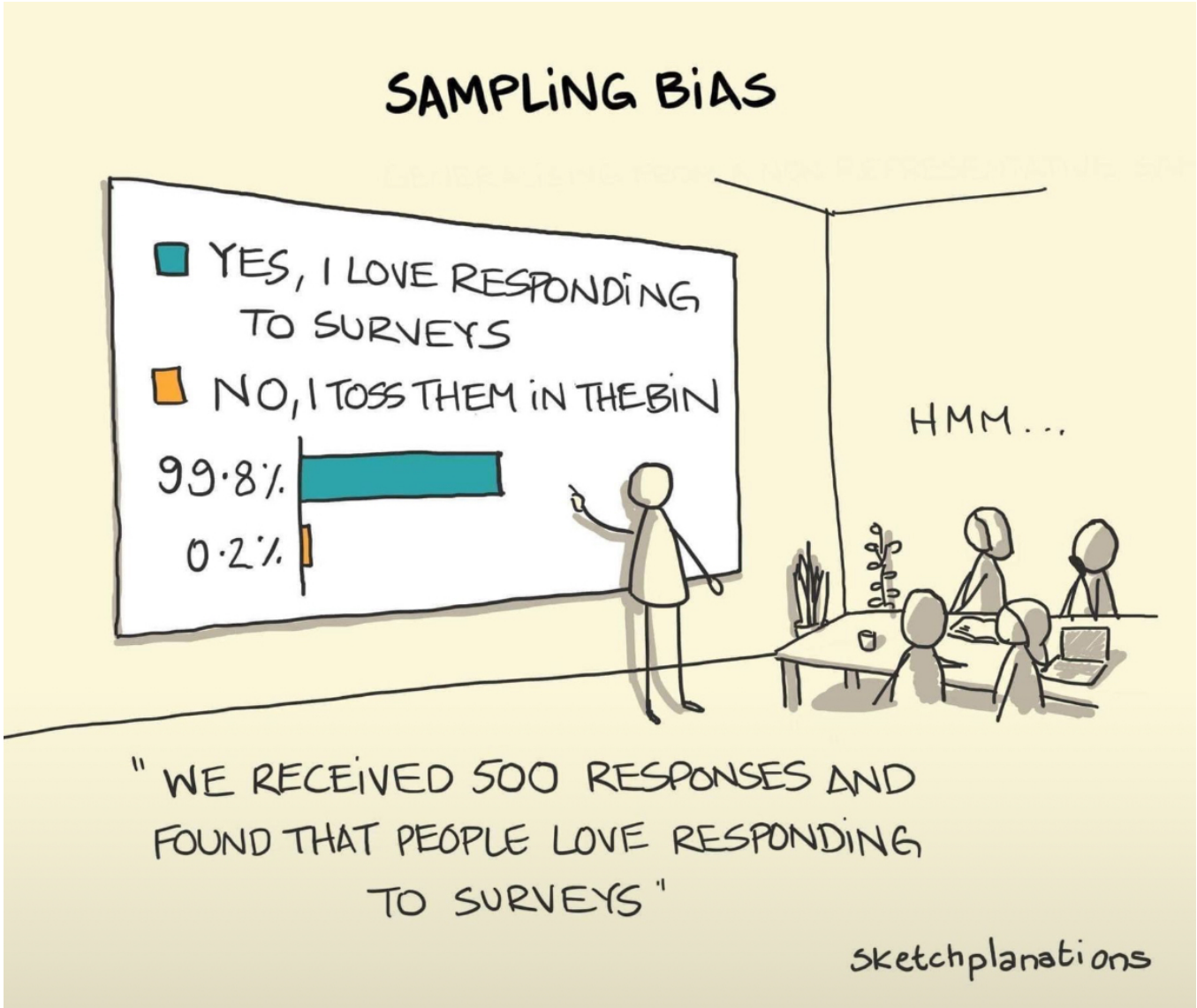

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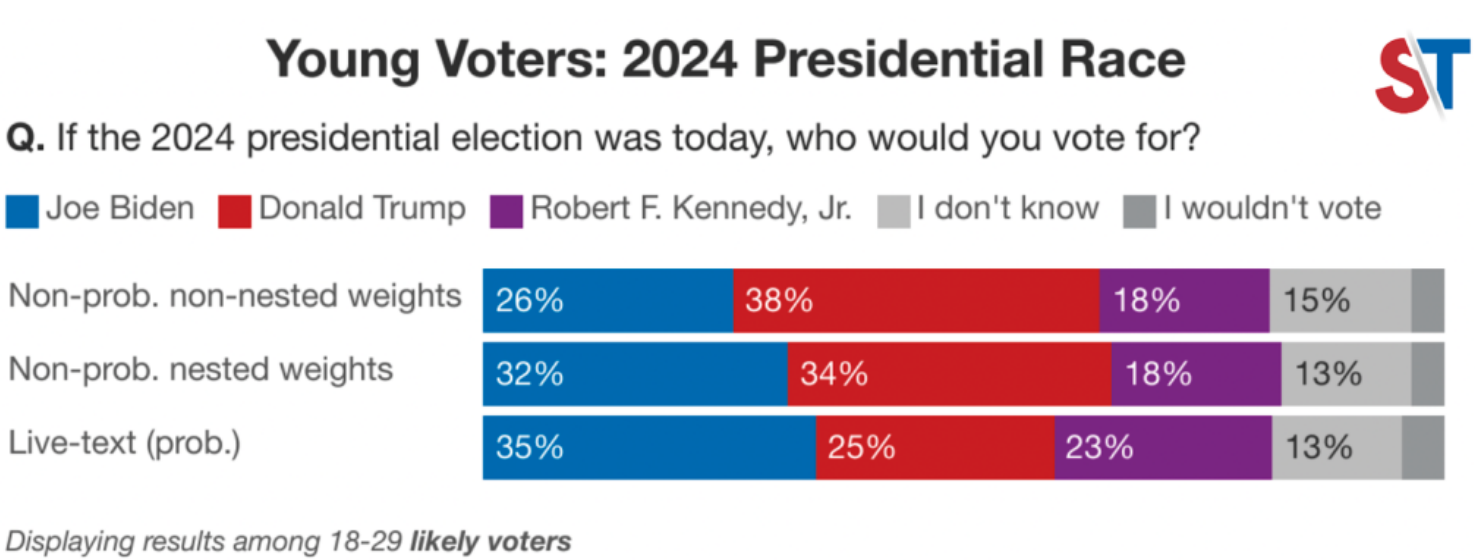

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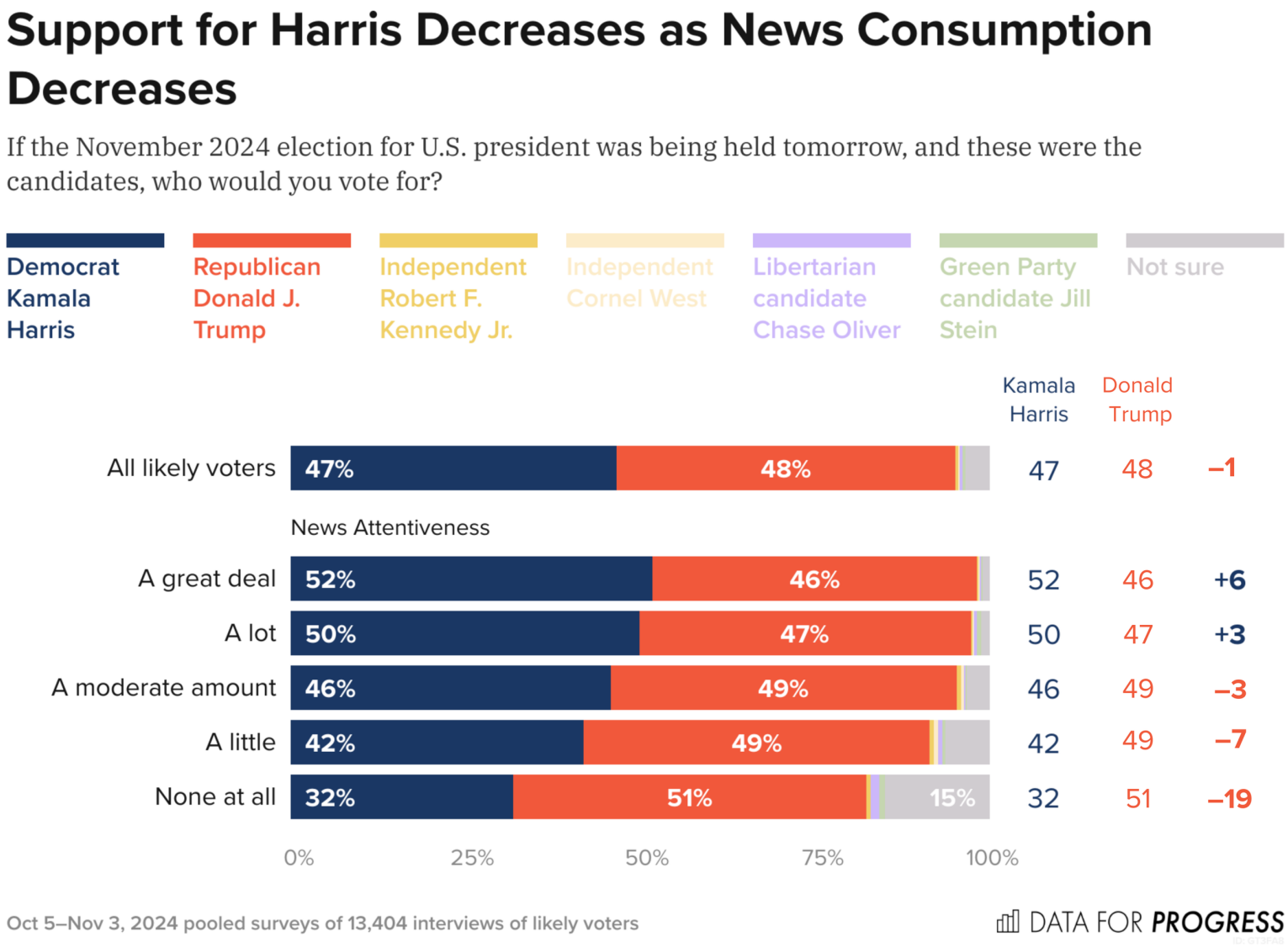

You Learned R!

- Base R functions
- Make charts for 3+ variables
- Load data
- Filter data
- Create and change data
- Summarize data
- Pivot data (tidy data)
- Join data
- Weight poll data
- Calculate margins of error
- Conduct t-tests of means
- Conduct t-tests of proportions
- Run regressions
- Create reports