

Week 5: Workshop & Proposal Feedback

m EMSE 4572/6572: Exploratory Data Analysis

2 John Paul Helveston

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Avoid causal language in Research Question

Causal

"How does weather affect / influence / impact metro ridership?

Exploratory

"What factors are associated / correlated with changes in metro ridership?

Data are not "Valid" or "Invalid"

- Don't say "we believe the data are valid because..."
- Instead, discuss possible sources of bias or other issues that could be present in the data.

Poor assessment

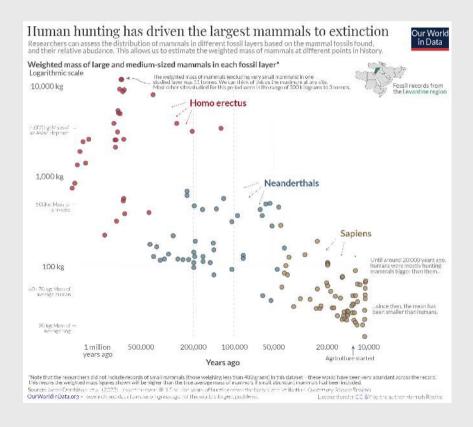
"Our data is valid because it comes from a government source"

Better assessment

"Although the data are from a government agency, we are skeptical that the data are unbiased or complete as the agency used self-reported numbers from a survey"

Look for inspiration in existing studies

- It is okay to replicate individual charts.
- You still have to find the data and write the code.



https://ourworldindata.org/large-mammals-extinction

Rest of today:

Individual meetings w/JP

- Data Analysis Explorers: Zeyu, Ji
- **Data WizRds**: Ayomide, Sahalae, Youssouf, Ben Yimaj
- I.C.E.: Marena, Federica, Sabina
- NS: Nishanth, Sai Kiran
- Renewable Revolutionaries: Pingfan, Abbey
- Systems Sigmas: Bogdan, Rayyan, Ian, Collin
- Team A: Abdullah, Jake, Arman, John
- Team B: Harshita & Dilrose
- Team C: Kejia & Jiaxin
- Tidy DC: Arsema, Kaitlyn, Amna, & Lola

While waiting, work w/Ben & Lydia on:

- Revising your writing.
- Looking for more data.
- Begin reading in / cleaning / exploring data.