



data journalism  
semester 1, block 2  
2021-2022

week 2: basic stats & numerical  
data analysis

# Picking up from last week...

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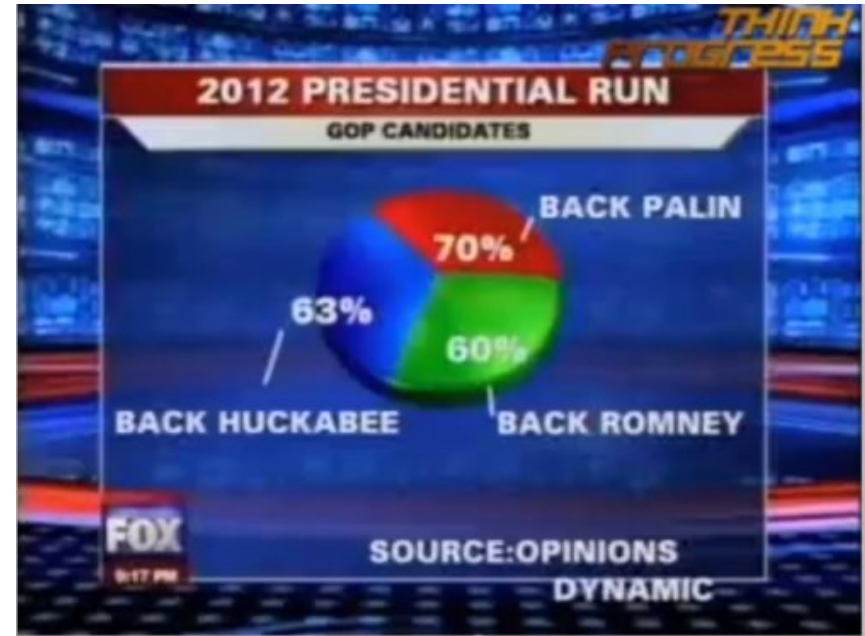
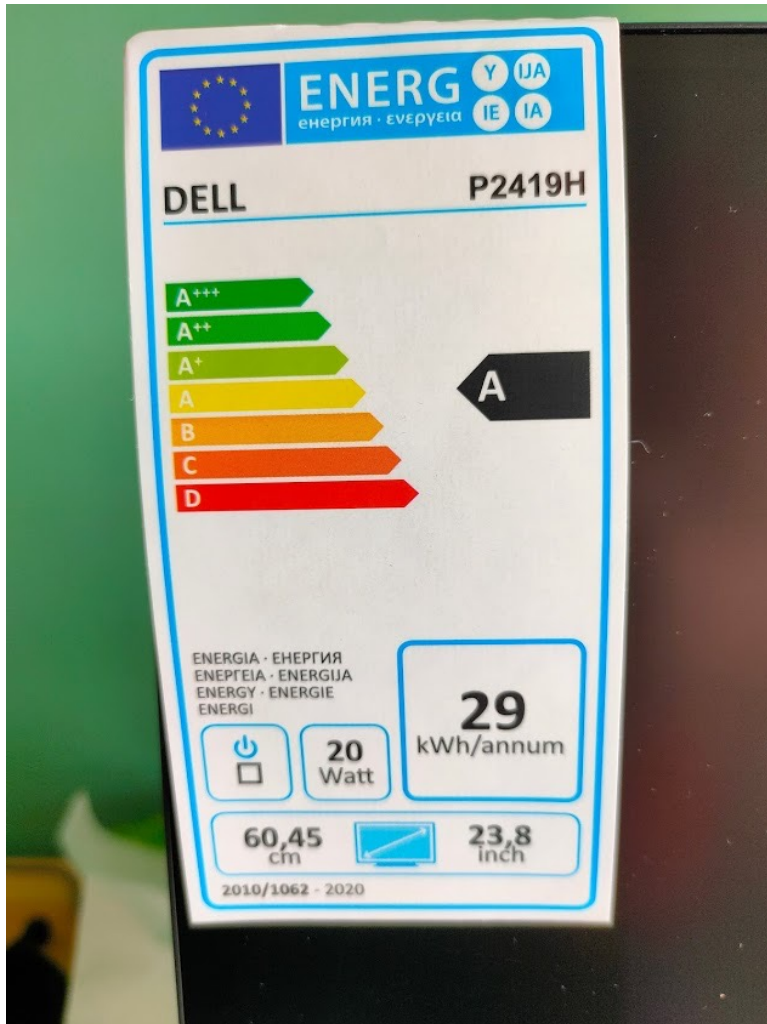
- A lot of actual data journalism is (still) poorly done (Cushion et al., 2017)
- And: numbers are used misleadingly, ALL THE TIME.
- But if priorities of DJ include:
  - Transparency, (new, big) data, *interpretation* of info, (sometimes) interactivity for the reader
- ... then accurate (statistical) analysis is essential

# ‘Calling bullshit’



- Carl Bergstrom & Jevin West
- ... did the calculations, and...
- strong coffee is also 99.9% caffeine free
- [callingbullshit.org](http://callingbullshit.org)

# Plenty of examples...



<http://livingqlikview.com/the-9-worst-data-visualizations-ever-created/>



# Some considerations

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- You: more training than average reader
- Consider:
  - Literacy of **audience** (DJ vs thesis)
  - Complexity of analyses
  - Your goals
- Bottom line: it doesn't have to be complex to tell a valuable story
- The more complex, the more explanation needed

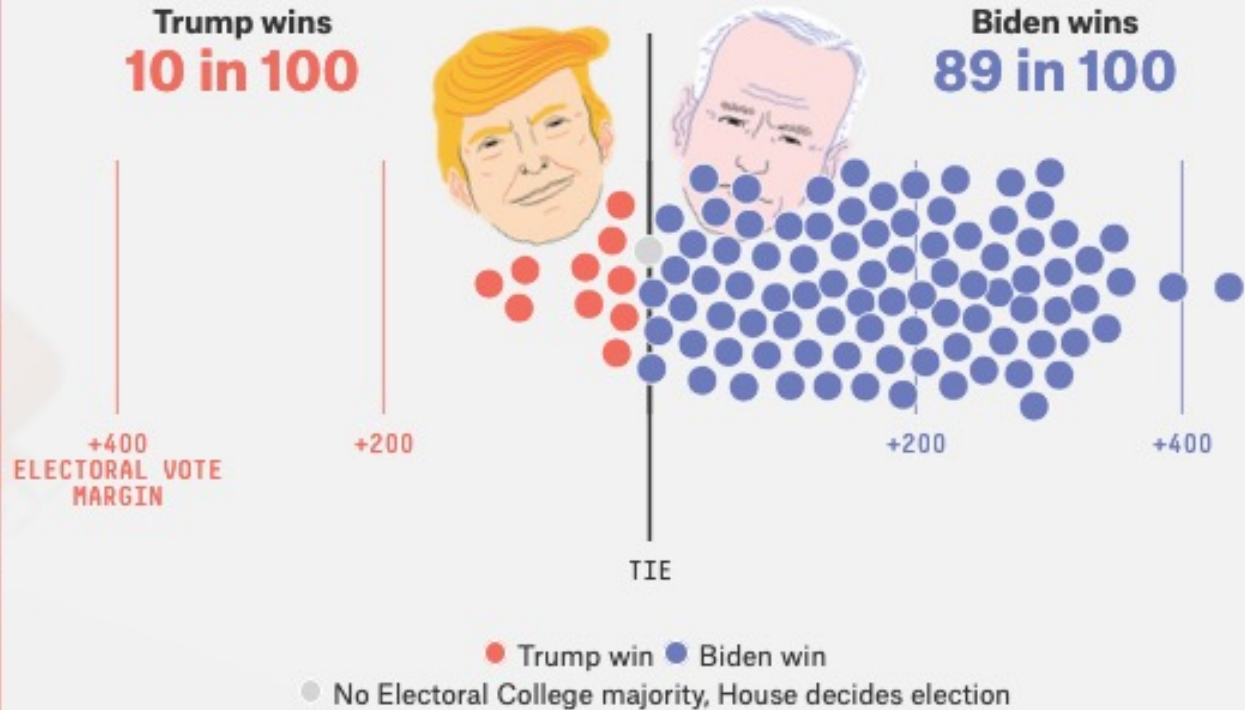
# Lessons learned since 2016...

## Biden is *favored* to win the election

We simulate the election 40,000 times to see who wins most often. The sample of 100 outcomes below gives you a good idea of the range of scenarios our model thinks is possible.

Trump wins  
**10 in 100**

Biden wins  
**89 in 100**



Don't count the  
underdog out!  
Upset wins are  
surprising but not  
impossible.

# Questions to ask of your data

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- 1. Where is it from?
- 2. Is there an agenda associated with it, that might skew it?
- 3. How were the data collected/could it be better?
  - Sampling & operationalization issues!
- 4. What are they said to mean, and what do they actually mean?
  - Statistical versus practical significance
  - How will your reader be affected?
  - Risks versus harms



LIES, DAMN LIES AND  
STATISTICS

## But perhaps first:

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- Where the heck do I get some data?



# Moving forward

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- Thursday : work on finding your datasets for “Step 1” of your project. (Due Friday at noon!)
- Read through the assignment on Canvas
- Today: notebook 3
  - Exploring datasets (continued)
  - Getting descriptives, doing basic statistical comparisons
- But, tailored groups
  - 1. All clear, no big questions, ready to move on
  - 2. Some parts of notebook 2 were confusing, I’d like to review before moving on
  - 3. For those of you feeling more lost than (2), please join group 2, and set up an appt with Vlad.
- But also: all of you can use Vlad! Also for help on your projects.

# For Thursday

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- Bring rough ideas of your interests (topics, data)
- Start looking for datasets
- Accessing/opening them is critical
  - Can you describe them?
  - Do you know where they originated?
- Remember that this will lead to a feedback moment – you can pose questions for us, too, in your assignment.