

# Survey research in the digital age

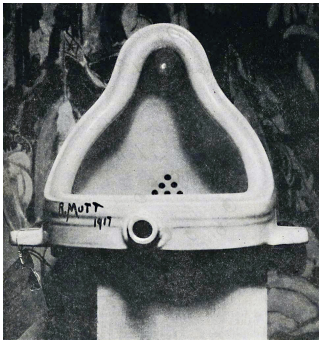
Matthew J. Salganik  
Department of Sociology  
Princeton University

Summer Institutes in Computational Social Science  
2020

The Summer Institutes in Computational Social Science is supported by grants from the Russell Sage Foundation and the Alfred P. Sloan Foundation.









readymades



custommades

Schedule for today

A few notes on my teaching:

- ▶ Anti-status quo bias

A few notes on my teaching:

- ▶ Anti-status quo bias
- ▶ Anti-formality bias (formality is important, but just not right now)

A few notes on my teaching:

- ▶ Anti-status quo bias
- ▶ Anti-formality bias (formality is important, but just not right now)
- ▶ Very brief to leave time for the activity



A few notes on my teaching:

- ▶ Anti-status quo bias
- ▶ Anti-formality bias (formality is important, but just not right now)
- ▶ Very brief to leave time for the activity
- ▶ More information in Chapter 3 of *Bit by Bit: Social Research in the Digital Age*:  
<https://www.bitbybitbook.com/en/1st-ed/asking-questions/>

Why should I care about surveys?

Why should I care about surveys  
in the age of big data?

We will always need to ask

- ▶ limitations of big data (fubu vs. nufu-nubu)

We will always need to ask

- ▶ limitations of big data (fubu vs. nufu-nubu)
- ▶ internal states vs. external states

We will always need to ask

- ▶ limitations of big data (fubu vs. nufu-nubu)
- ▶ internal states vs. external states
- ▶ inaccessibility of big data

We will always need to ask

- ▶ limitations of big data (fubu vs. nufu-nubu)
- ▶ internal states vs. external states
- ▶ inaccessibility of big data

But how we are going to ask is going to change

	Sampling	Interviews
1st era	Area probability	Face-to-face



	Sampling	Interviews
1st era	Area probability	Face-to-face
2nd era	Random digital dial probability	Telephone

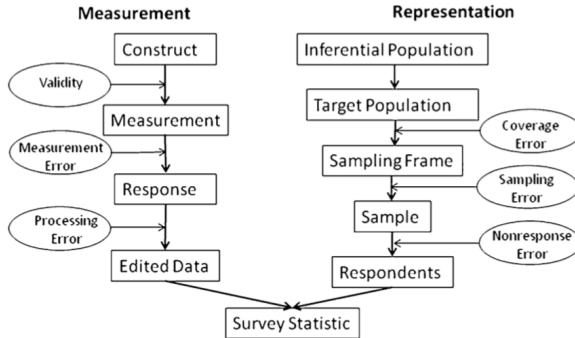
	Sampling	Interviews
1st era	Area probability	Face-to-face
2nd era	Random digital dial probability	Telephone
3rd era		

	Sampling	Interviews
1st era	Area probability	Face-to-face
2nd era	Random digital dial probability	Telephone
3rd era	Non-probability	Computer-administered

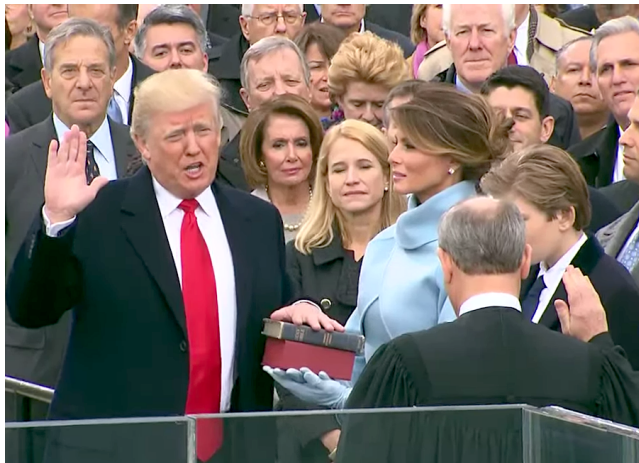
	Sampling	Interviews	Data environment
1st era	Area probability	Face-to-face	Stand-alone
2nd era	Random digital dial probability	Telephone	Stand-alone
3rd era	Non-probability	Computer-administered	Linked

	Sampling	Interviews	Data environment
1st era	Area probability	Face-to-face	Stand-alone
2nd era	Random digital dial probability	Telephone	Stand-alone
3rd era	Non-probability	Computer-administered	Linked

## Total survey error framework



Groves and Lyberg 2010, Fig 3



[https://commons.wikimedia.org/wiki/File:Donald\\_Trump\\_taking\\_his\\_Oath\\_of\\_Office.png](https://commons.wikimedia.org/wiki/File:Donald_Trump_taking_his_Oath_of_Office.png)

# An Evaluation of 2016 Election Polls in the U.S.

## Ad Hoc Committee on 2016 Election Polling

Courtney Kennedy, Pew Research Center

Mark Blumenthal, SurveyMonkey

Scott Clement, Washington Post

JoshUA d. Clinton, Vanderbilt University

Claire Durand, University of Montreal

Charles Franklin, Marquette University

Kyley McGeeney, Pew Research Center[1]

Lee Miringoff, Marist College

Kristen Olson, University of Nebraska-Lincoln

Doug Rivers, Stanford University, YouGov

Lydia Saad, Gallup

Evans Witt, Princeton Survey Research Associates

Chris Wlezien, University of Texas at Austin

<http://www.aapor.org/Education-Resources/Reports/An-Evaluation-of-2016-Election-Polls-in-the-U-S.aspx>



- ▶ National polls were generally correct and accurate by historical standards.

- ▶ National polls were generally correct and accurate by historical standards.
- ▶ State-level polls showed a competitive, uncertain contest . . .

- ▶ National polls were generally correct and accurate by historical standards.
- ▶ State-level polls showed a competitive, uncertain contest . . .
- ▶ . . . but clearly under-estimated Trump's support in the Upper Midwest.

“There are a number of reasons as to why polls under-estimated support for Trump. The explanations for which we found the most evidence are:”

- ▶ “Real change in vote preference during the final week or so of the campaign”

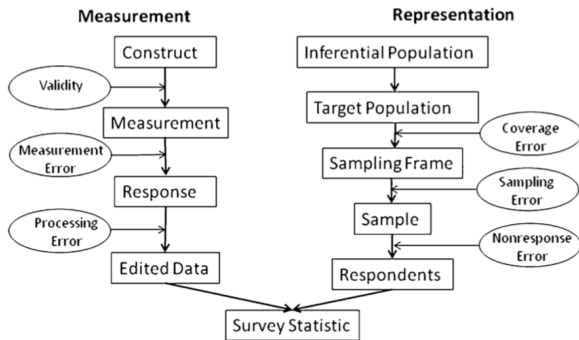
“There are a number of reasons as to why polls under-estimated support for Trump. The explanations for which we found the most evidence are:”

- ▶ “Real change in vote preference during the final week or so of the campaign”
- ▶ “Adjusting for over-representation of college graduates was critical, but many polls did not do it”

“There are a number of reasons as to why polls under-estimated support for Trump. The explanations for which we found the most evidence are:”

- ▶ “Real change in vote preference during the final week or so of the campaign”
- ▶ “Adjusting for over-representation of college graduates was critical, but many polls did not do it”
- ▶ “Some Trump voters who participated in pre-election polls did not reveal themselves as Trump voters until after the election, and they outnumbered late-revealing Clinton voters”

Full report: <http://www.aapor.org/Education-Resources/Reports/An-Evaluation-of-2016-Election-Polls-in-the-U-S.aspx>



Groves and Lyberg 2010, Fig 3

Wrapping up:



Wrapping up:

- ▶ Total survey error framework helps us organize all the things that can go wrong

Wrapping up:

- ▶ Total survey error framework helps us organize all the things that can go wrong
- ▶ Total survey error framework also helps us think about how digital age can create new opportunities (who to ask and how to ask)

## Wrapping up:

- ▶ Total survey error framework helps us organize all the things that can go wrong
- ▶ Total survey error framework also helps us think about how digital age can create new opportunities (who to ask and how to ask)
- ▶ To learn more: Groves et al (2009)

Questions?