



# Being Scientist First!

Design Political Research: Week 2

Yue Hu

# Social Scientific Inquiry

# In a world there's no science

- Is this guy eatable? [GT\\_s: how to find out](#)



## What's the most direct way?

We observe



## Indirect way: knowledge

How about this one?



# Direct and Indirect Inquiries

1/3

- Inquiry
  - Observation
  - Agreement reality Tradition, authority, and ? ---reliable sources
    - Those things we "know" as part and parcel of the culture we share with those around us (Babbie 2016, 7)
- What's the relation between the two? GT\_s: insist + hinder

# Let's try another question:

- Is our president smart or not?
  - Observation



## Agreement Reality

Science:

Don't look directly at the Sun during the eclipse.  
You could do permanent damage.

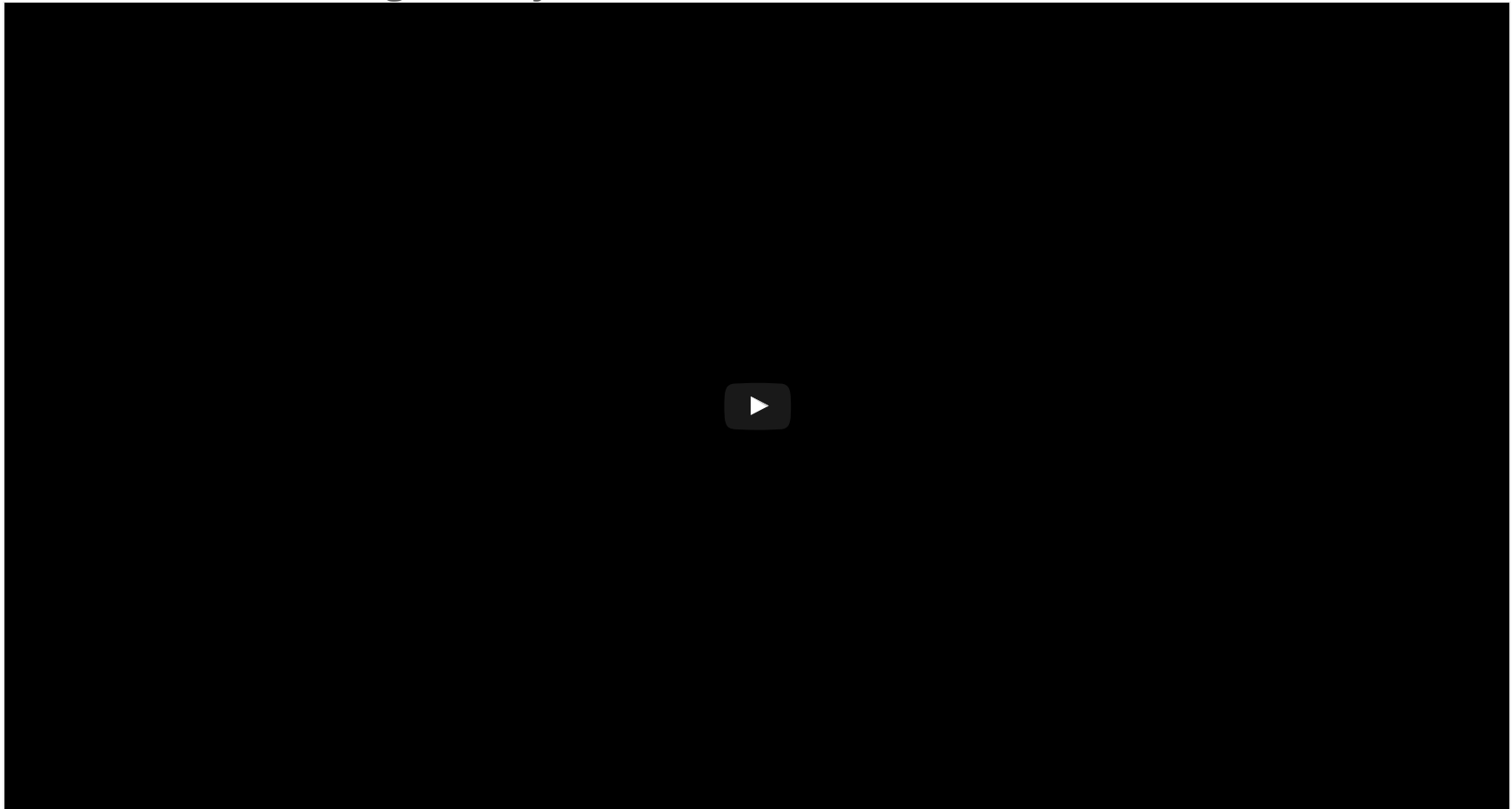
Trump:





# Enough for a conclusion?

- But if we trace a longer story:

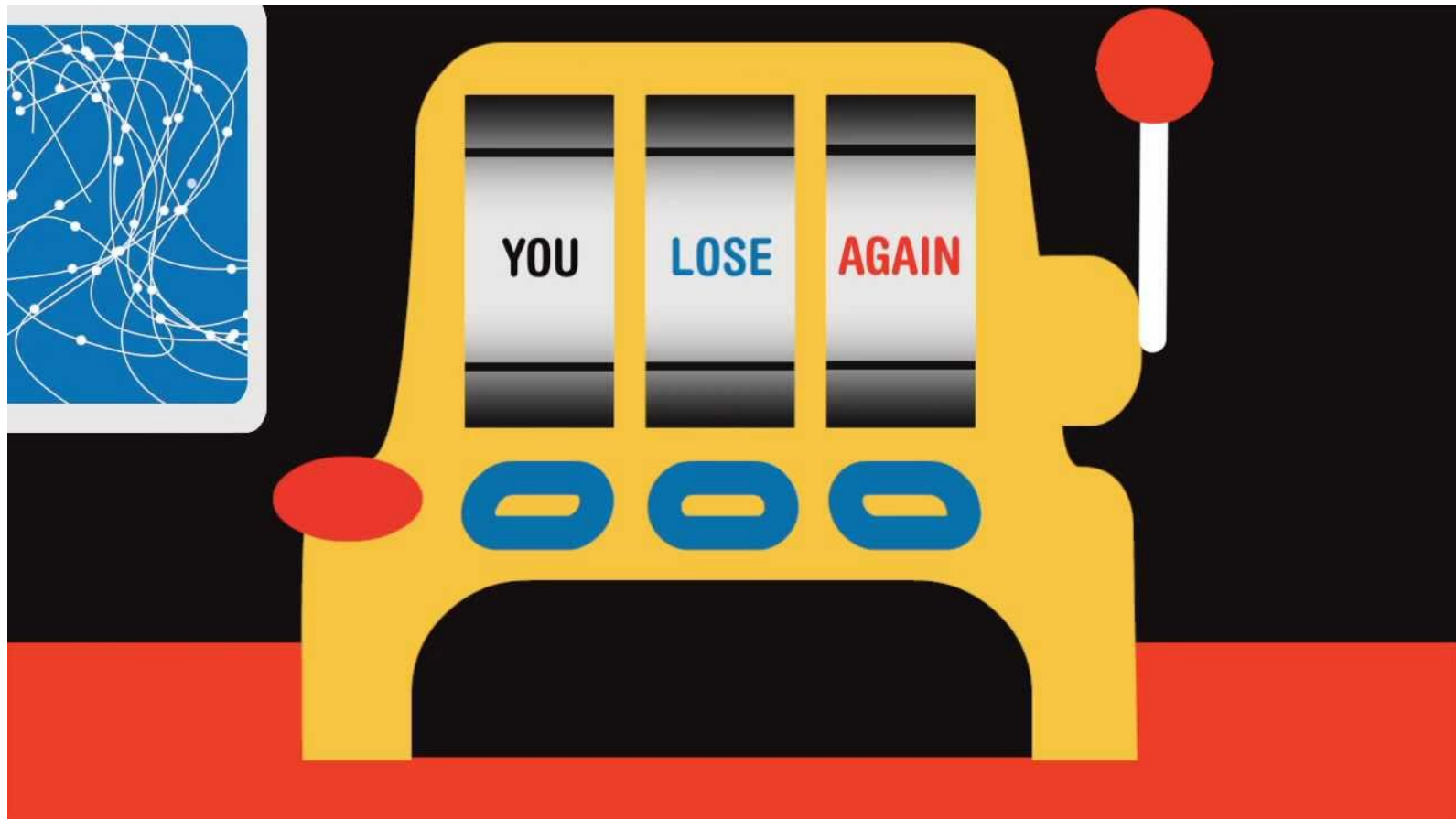


# Potential Problems of Human Inquiry

## GT\_1: 举例

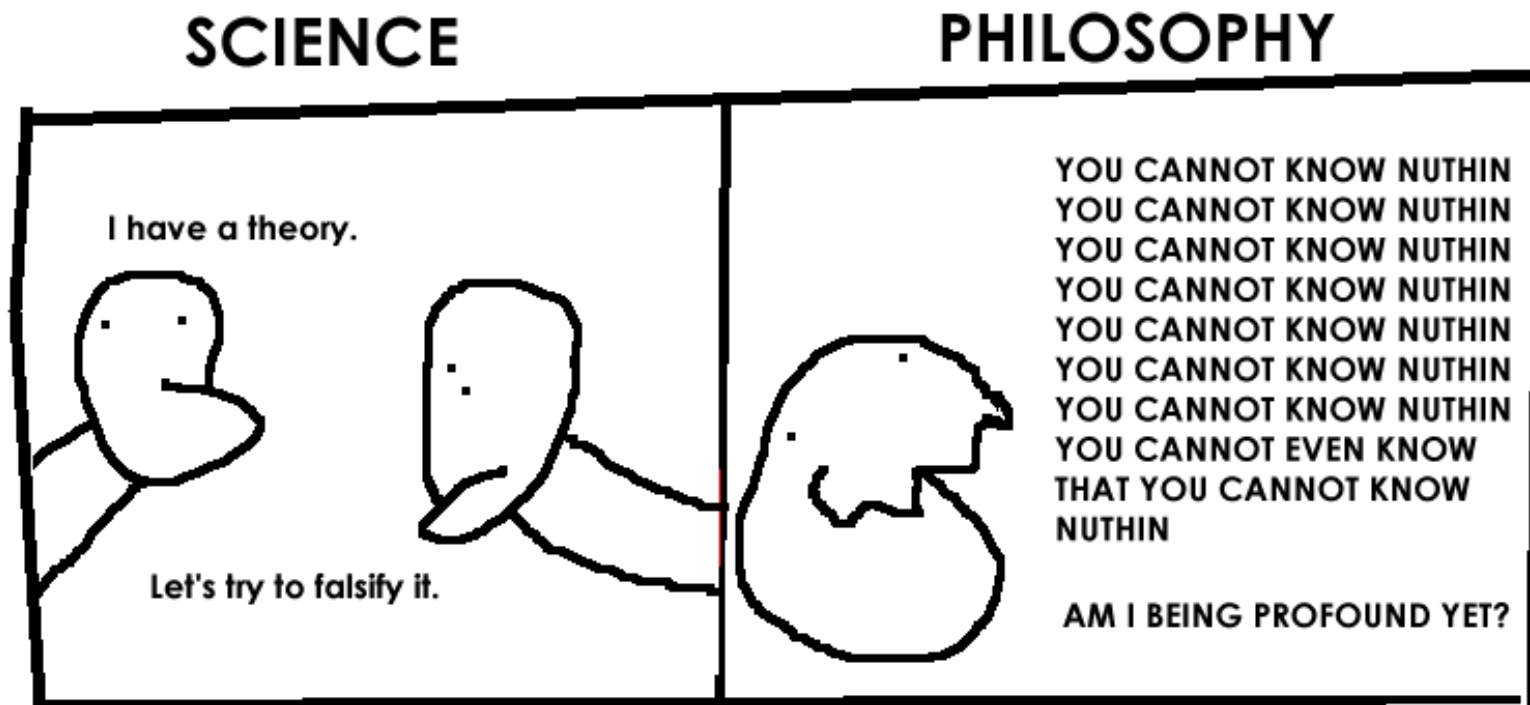
- Selection observation
- Inaccurate observation Last election
- Overgeneralization Racialism; 部分被强奸的女性衣着性感

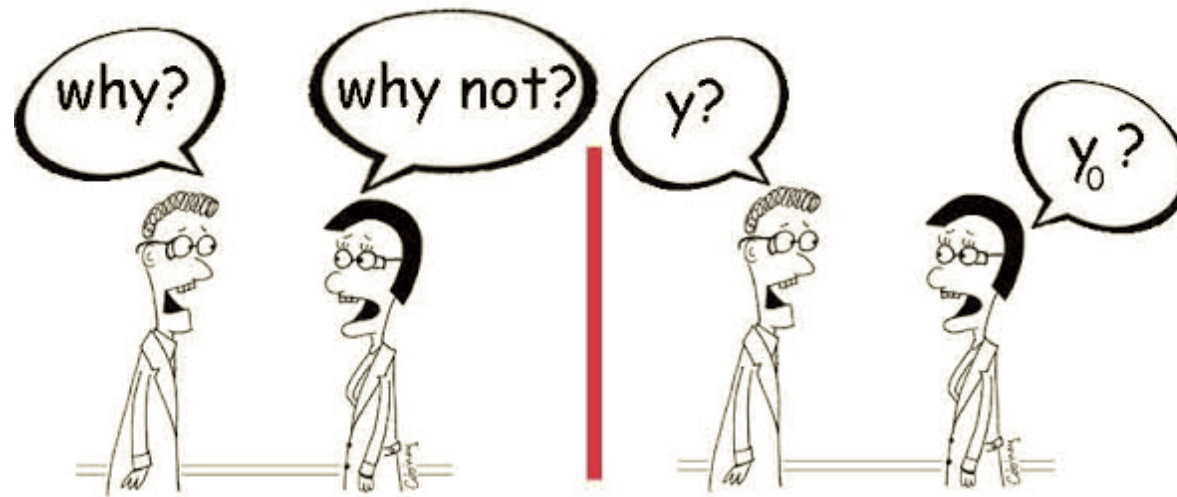
- Illogical Reasoning [印度官员：被强奸妇女怪自己](#) [1/2](#)



# How does social science avoid these issues? [GT\\_s:方法](#)

- What question can be answered? Science vs. Philosophy





**The Difference is subtle**

**Humor Gags**  
.blogspot.com

Just a reminder, though.

爱因斯坦: physics  
周三例子

# Target for social science

2/3

- What is?
- Why?
  - But why not "what should be"?

GT\_s: 道德、美丽、宗教

# Prerequisite

- Social regularities.
  - Patterns in social life
    - How can we sure about this?
      - Objections: Triviality, exception, human interfere
  - Who do social scientists focus? V: logical sets of attributes; attributes: chara
    - Variable (independent? dependent?)

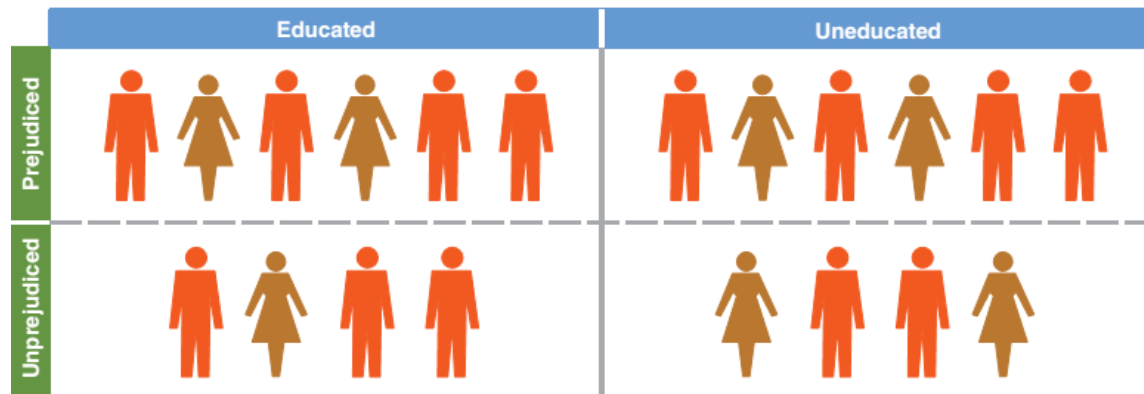
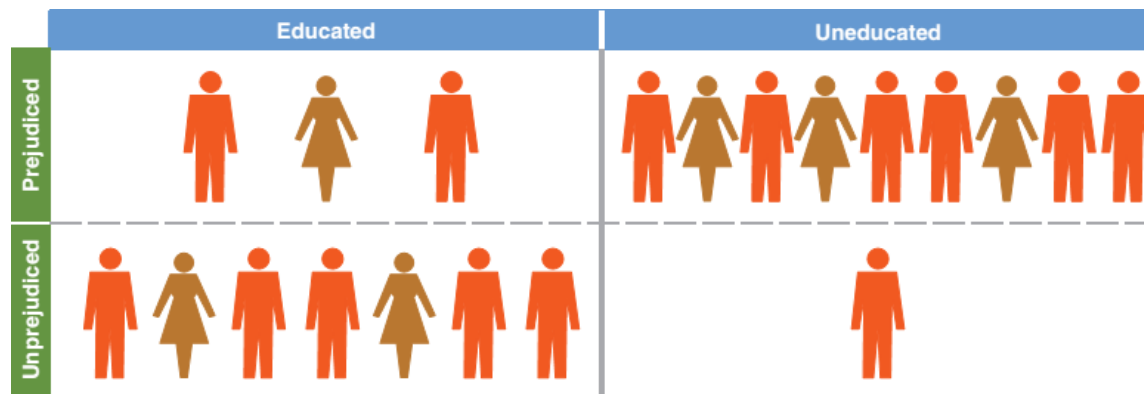
GT\_l:

Triviality: replication;

Exception: Lakatos (Sophisticated falsification)

Interfere: recursive quality of science

# How does it work? [prejudiced vs. education](#)

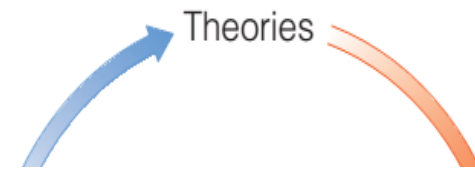




# What do social science want to gain ultimately?

- Three purpose
  - Exploration
  - Description
  - Explanation
- Two approaches
  - Inductive
  - Deductive

•



# Other choices

- Determinism vs. agency
- Qualitative vs. quantitative

GT\_s: 定性 vs. 定量

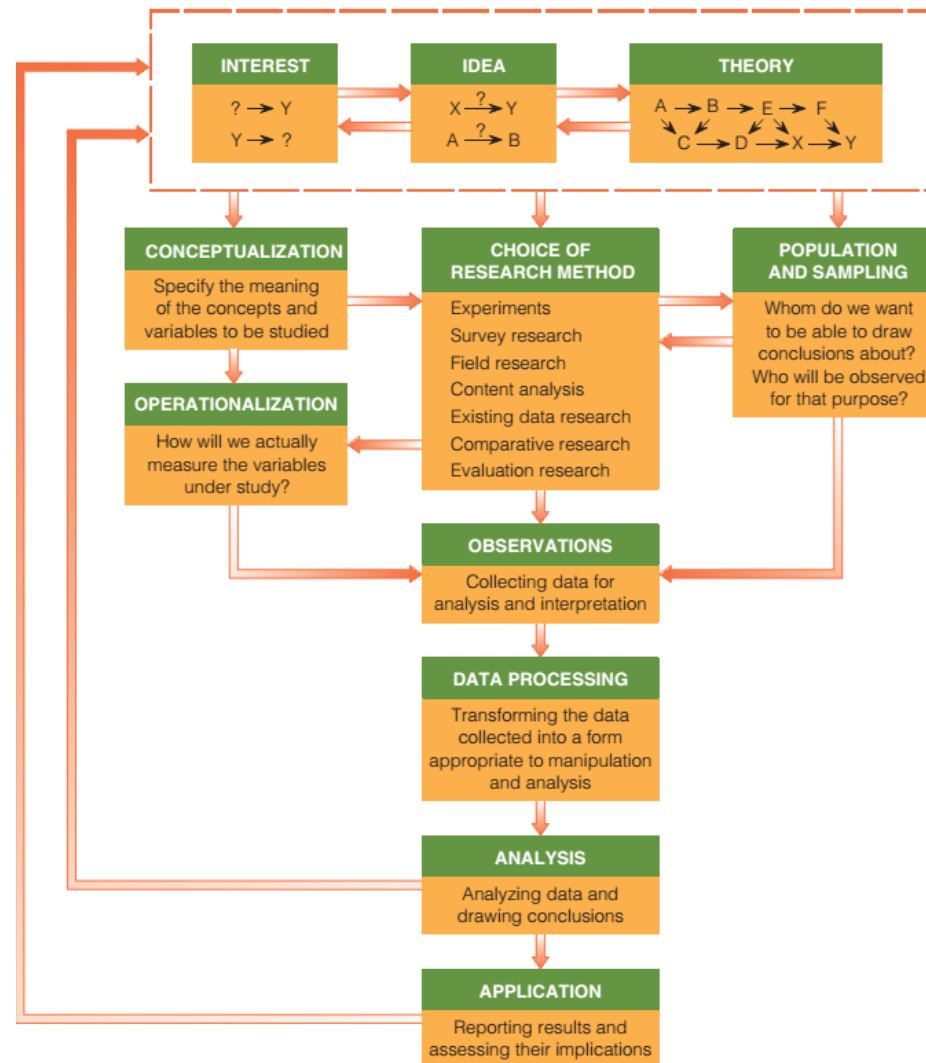
# Roadmap and Shortcut

# Roadmap for social research

Babbie has a list, but I generalize in 3 steps

Three general steps:

1. Tell a story.
2. Characterize the roles in the story.
3. Match the story with the real life.



1/3

# Replication, replication

- Why should a project be reproducible? [GT\\_s: remind 科学定义](#)
  - Transparency (?)
  - Future research (?)

# Exception

- Qualitative research (?)
  - Not an exception

例子 • Average score of this course?

- A survey on two people?
- A proprietary data?
-

# A qualified replication

- Replication dataset
- Publicly accessible
- Ways to do:
  - replication vs. reproduction (duplication vs. replication)



# So, what next?

- Why are we worrying ourselves with what might be called "duplication" of misting research? Isn't the more important question actual replication where the same measurements are applied to new substantive areas, countries, or time periods?

[GT\\_s](#)

# Let's try the shortcut

2/3

Newman BJ, Johnston CD and Lown PL, False consciousness or class awareness? Local income inequality, personal economic position, and belief in American meritocracy. 59(2), 2015: 326–340.

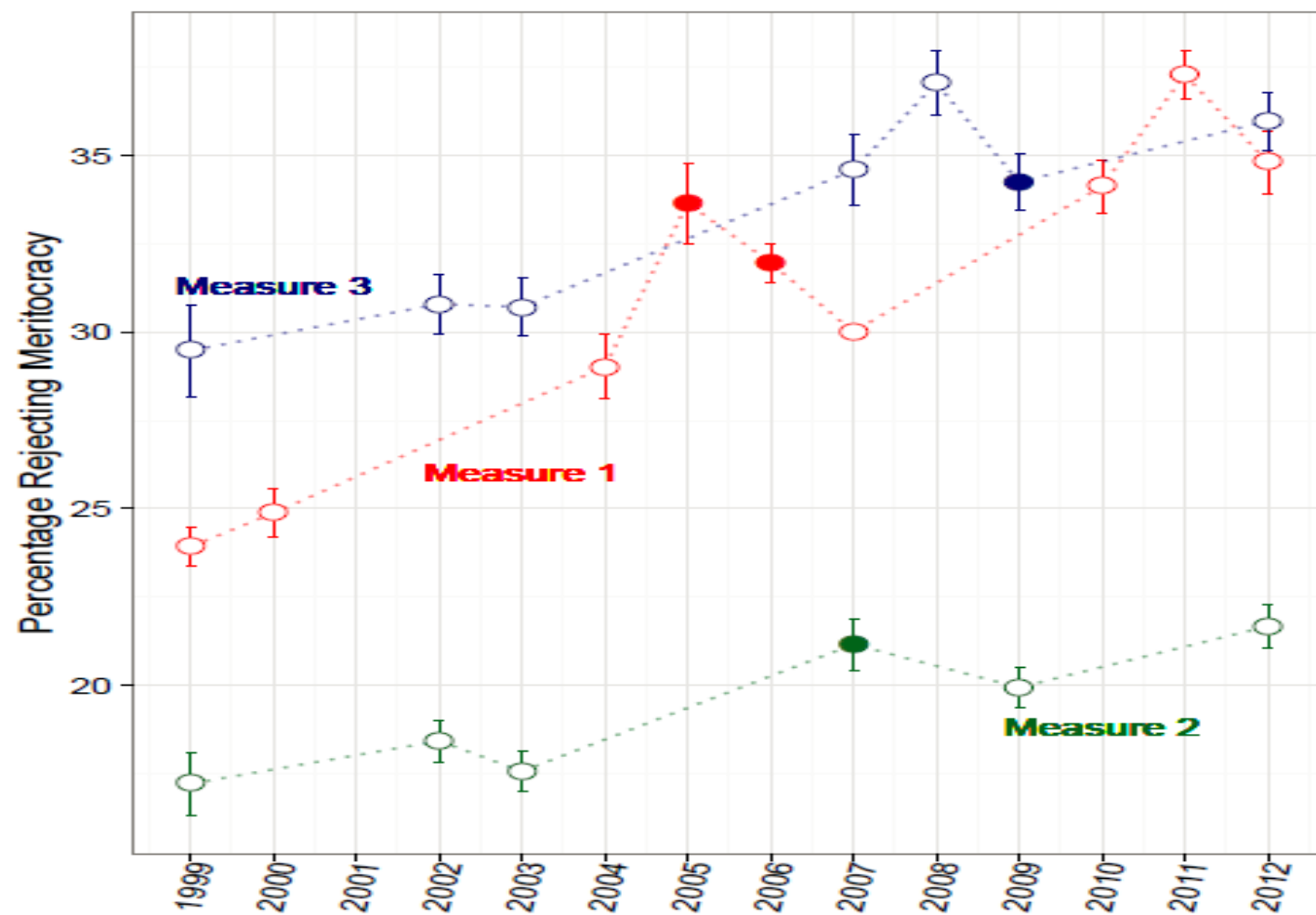
- Argument: Economic inequality reduces low-income people's belief in meritocracy.
- Dependent variable:                      in meritocracy
  - Survey questions.
- Independent variable: economic inequality
  - Gini Coefficients.
- Data source: 2005, 2007, 2009 Pew surveys.

GT\_1: 如何reproduce这个

分组讨论: 1) what steps 2) what's the goal 3) how to do better

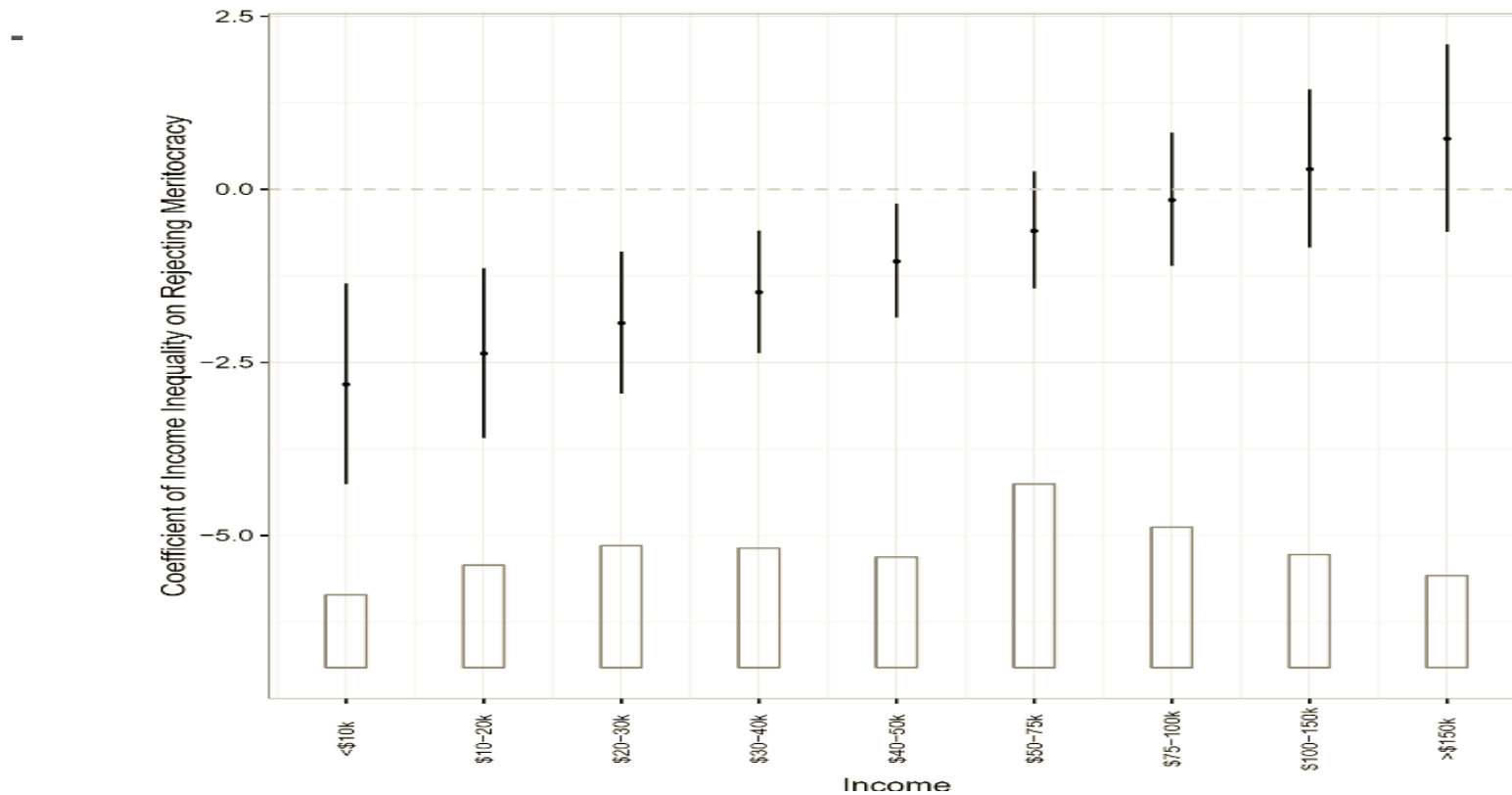
# A Real Reproduction

1. **Replication:** Use the replication dataset offered by the authors to replicate the results
  - Partially failed.
2. **Reproduction:**
  - Check all available datasets: 1999-2012 (hint: 2005, 2007, 2009 in the original paper)



# Reproduction continued

- Inequality on American dream: poor vs. rich



# Reproduction: conclusion

- Newman, Johnston, and Lown: Economic inequality **reduces** low-income people's belief in meritocracy.
- Reproduction results: Economic inequality **reinforces** low-income people's belief in meritocracy.