

POLS 103 A

Comparative Politics

Classes 3 and 4:
Comparative research

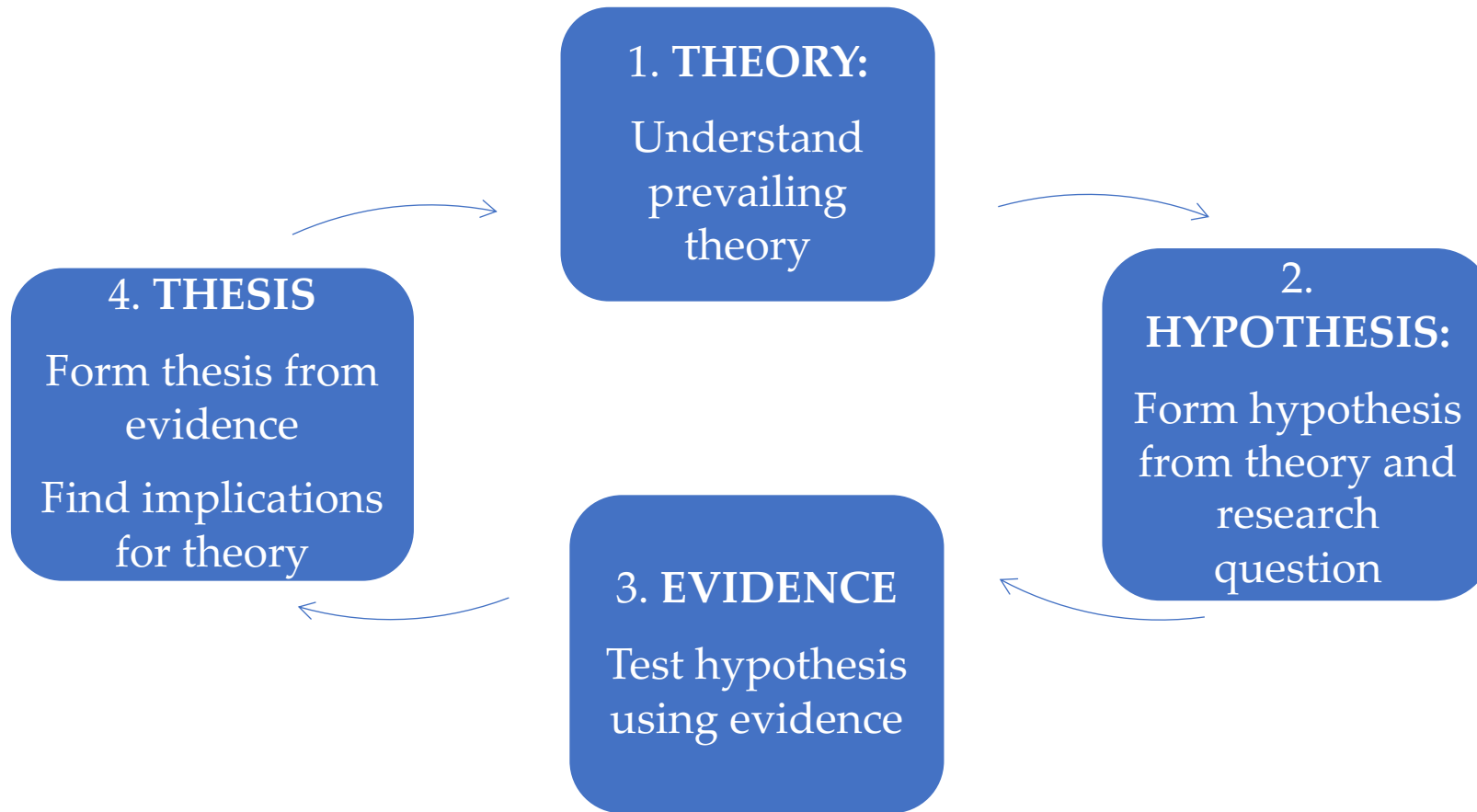
Welcome back!

Recap (mostly)

- Concepts, concept stretching, conceptualization, and Sartori's ladder of abstraction
- Empirical puzzles
- Theories, theses, and hypotheses

What's the difference between theories, theses, and hypotheses?

Theories, hypotheses, evidence, and theses



Recap (mostly)

- Theories and their scope conditions
- Inductive and deductive reasoning
- Levels of analysis
- Operationalization
- Variables
- Qualitative and quantitative evidence
- Case selection:
 - Units of analysis
 - MSS vs. MDS

Textbook-induced confusion

- Small- and large-N: cases vs. observations:
 - Example 1: comparative study of Ghana and Togo, based on 21 interviews
 - Example 2: comparative study of Ghana and Togo, based on a survey with 830 responses
 - Example 3: comparative study of democracies, based on 21 interviews
 - Example 4: comparative study of democracies, based on a survey with 830 responses
- Correlation vs. association

Association vs. causation

Number of people who drowned by
falling into a pool

correlates with

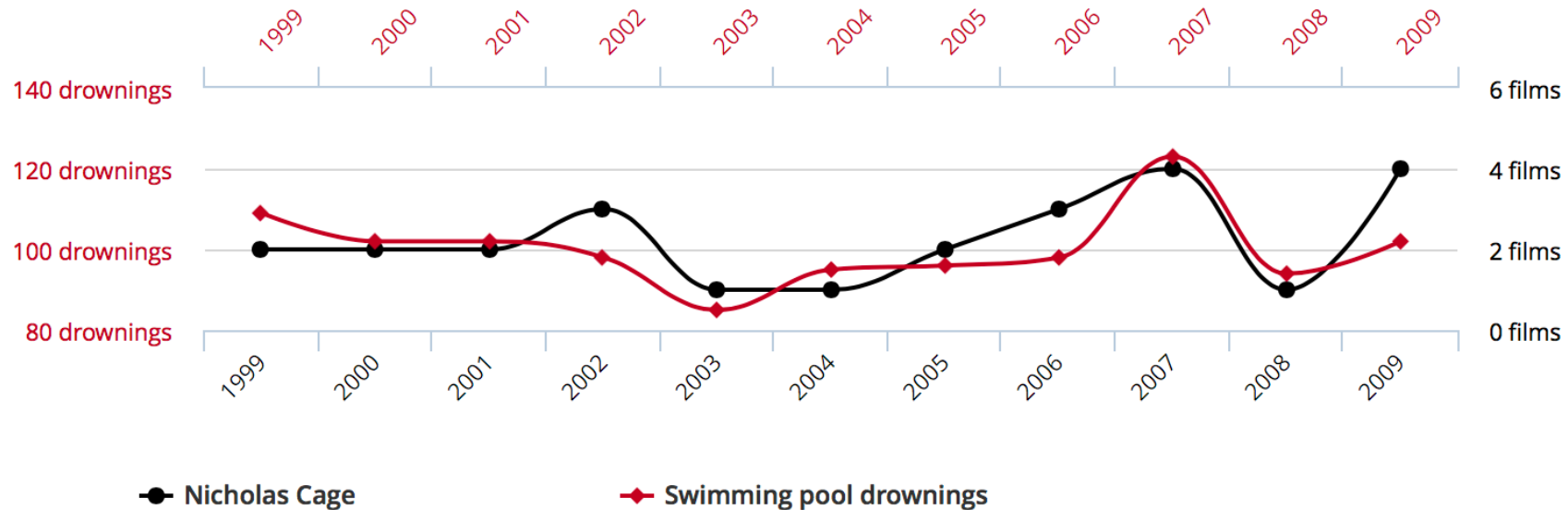
Films Nicolas Cage appeared in

Correlation: 66.6% ($r=0.666004$)



Nicholas Cage

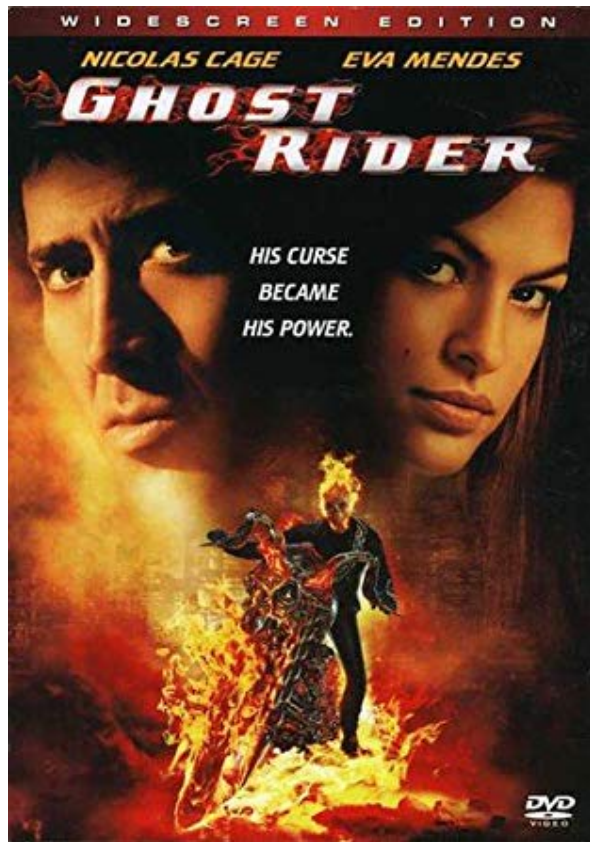
Swimming pool drownings



tylervigen.com

Data sources: Centers for Disease Control & Prevention and Internet Movie Database

Association vs. causation



Association vs. causation: modernization theory

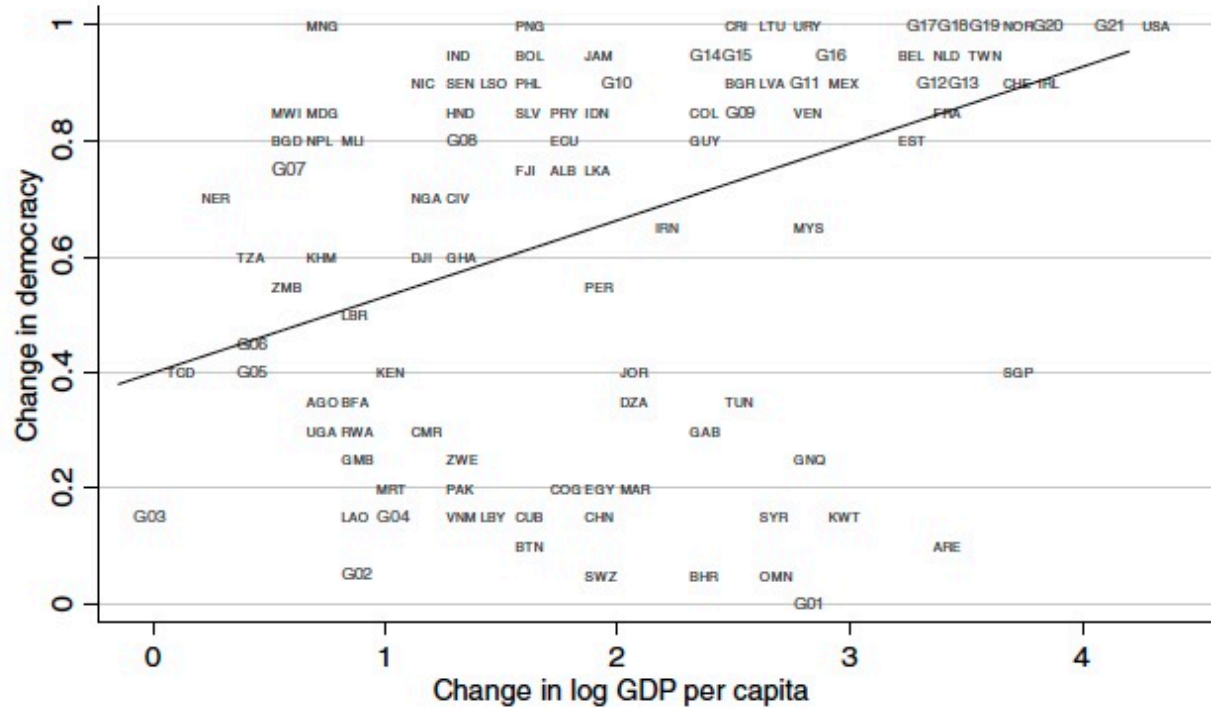


FIGURE 5. CHANGE IN DEMOCRACY AND CHANGE IN INCOME, 1500–2000



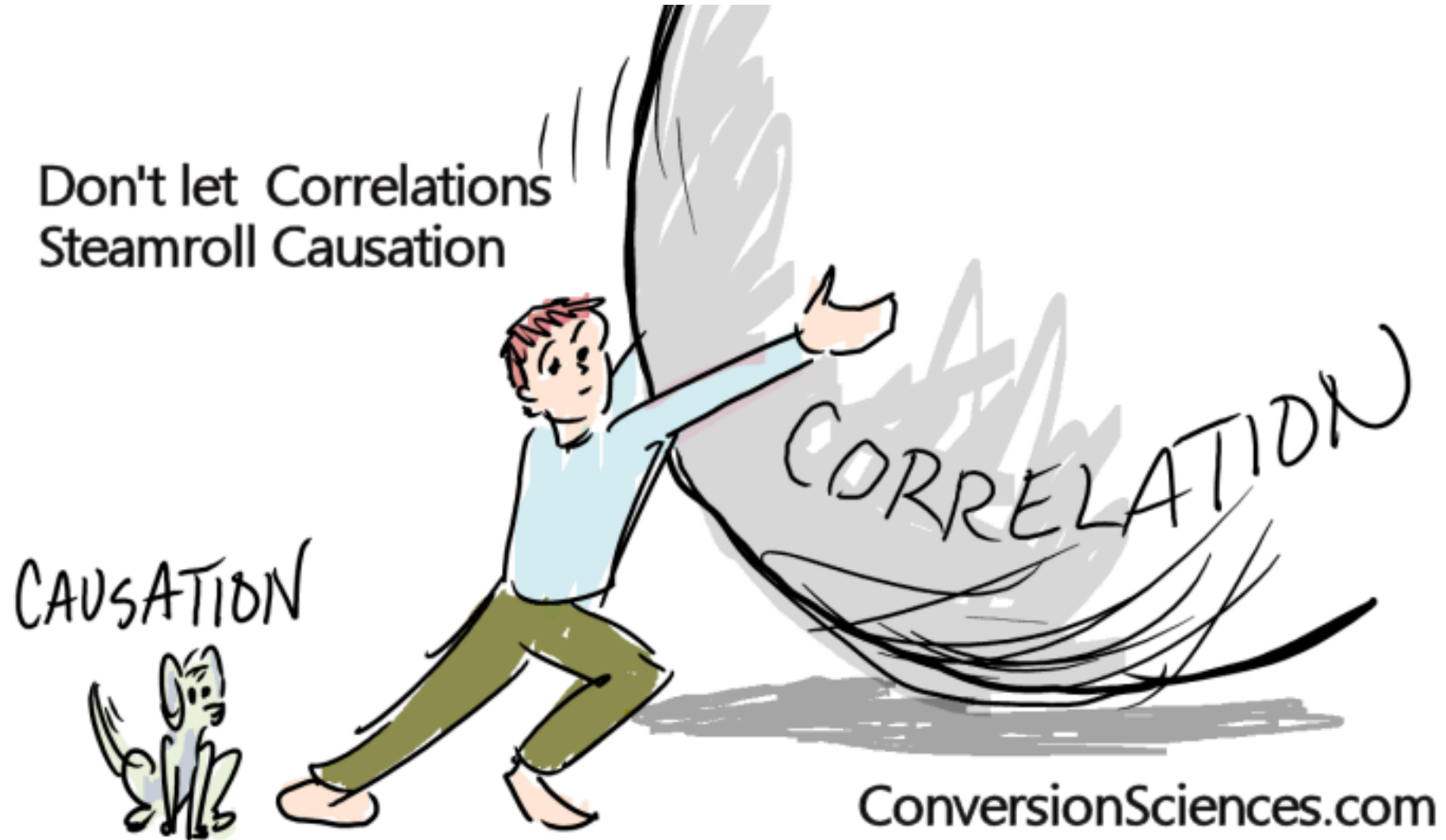
Association vs. causation



Kahoot!

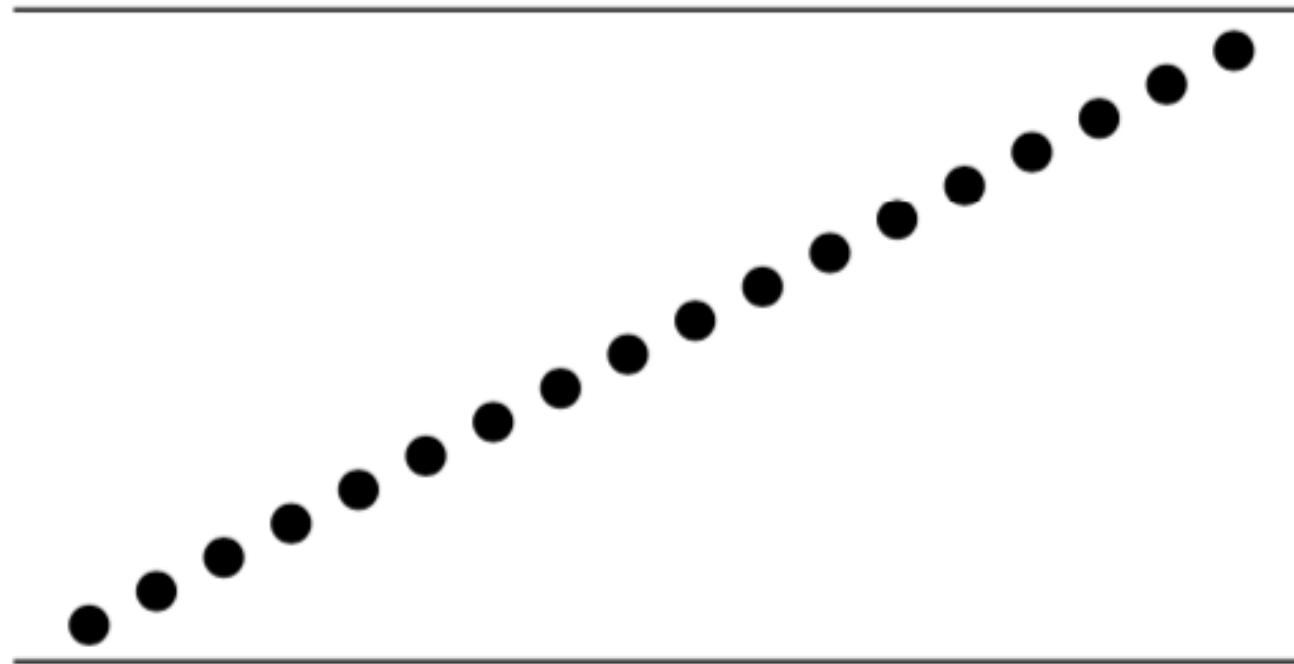
<https://kahoot.com/mobile-app/>

Causal inference and its challenges



Perfect correlation

- Perfect correlation \neq falsifiability



—
Perfect Correlation

Reverse causation

"The Usual"



Reverse Causality

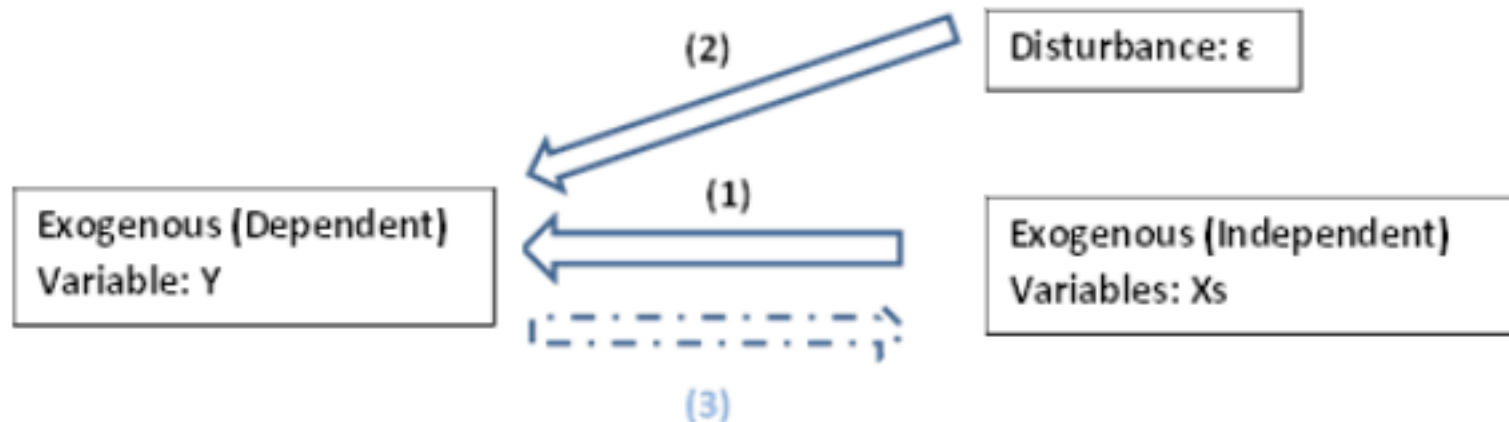


Simultaneity



Endogeneity

- Technically: correlation between independent variable and error term
- Common usage: multiple *endogenous* relationships
- (Textbook wrong)



Simultaneity

- Simultaneity \neq endogeneity

"The Usual"



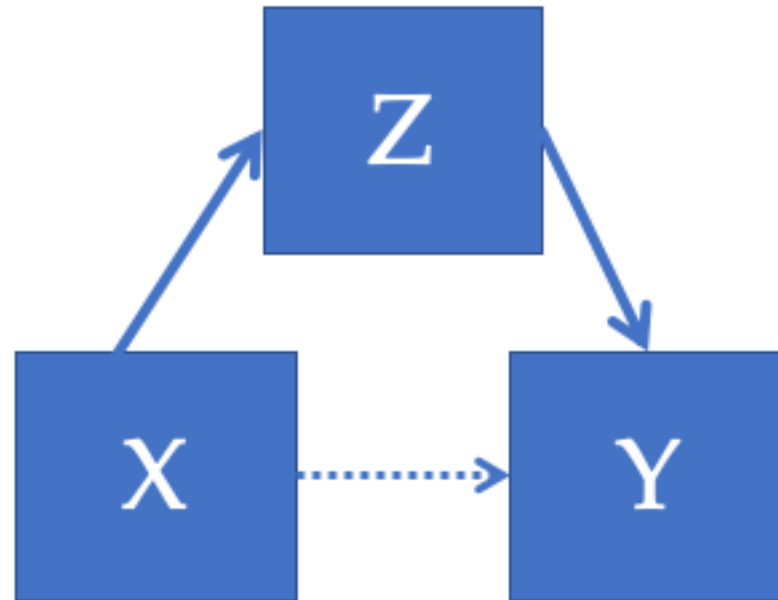
Reverse Causality



Simultaneity

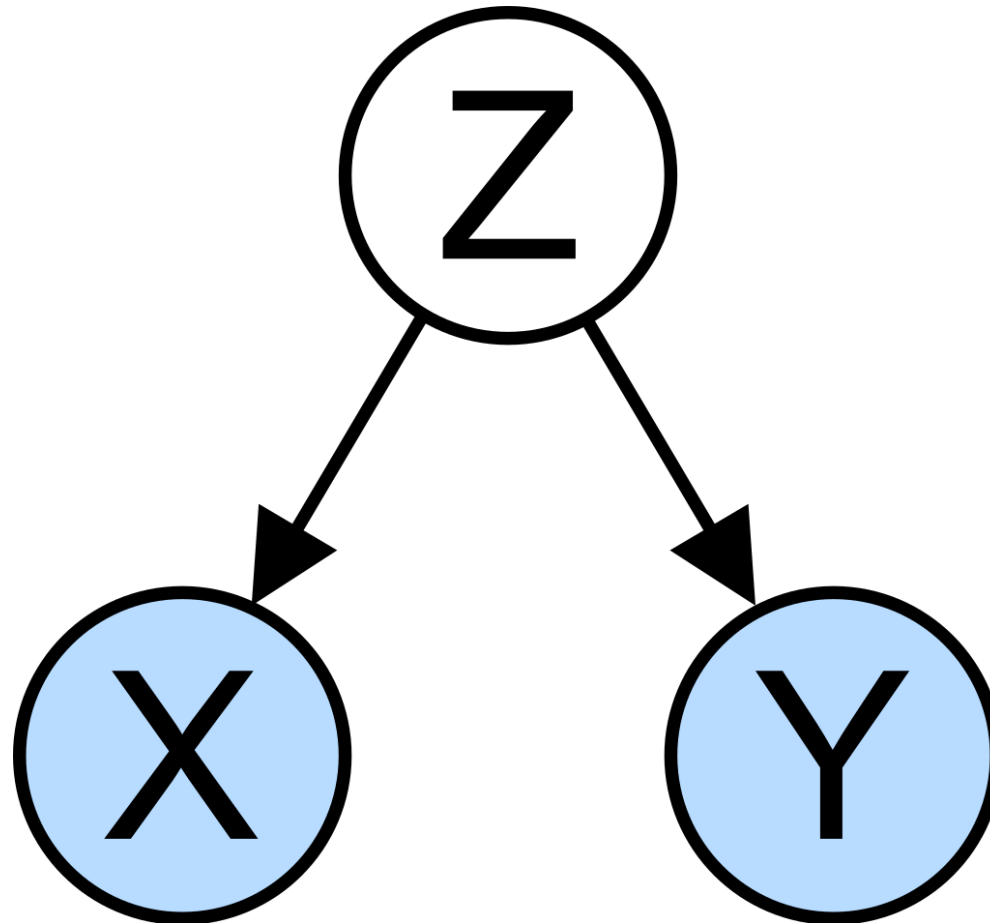


Intervening variables

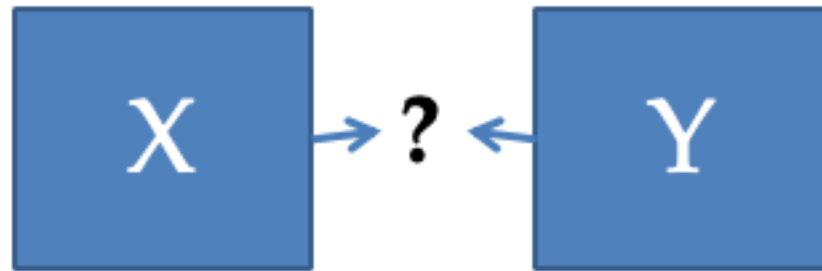


Confounders / lurking variables

- Confounder != omitted variable



Spuriousness



Measurement problems

- Measurement errors
- Measurement bias
- Measurement validity
→ operationalization

The Rogoff-Reinhart data scandal reminds us economists aren't gods

Heidi Moore

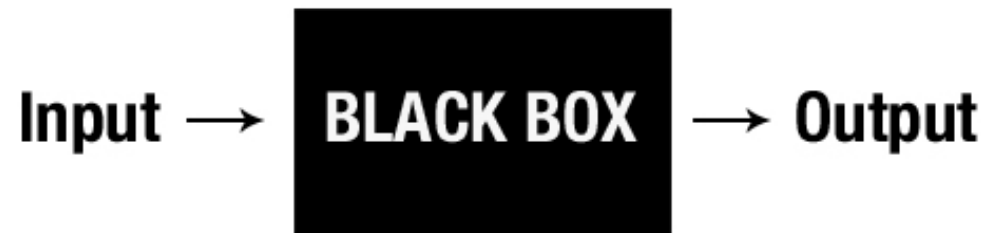


The fact that economics spits out cold, hard numbers doesn't mean it produces the cold, hard truth



Principles of causation

- Association
- Nonconfounding
- Direction (temporal precedence)
- Mechanism: pathway / channel through which an effect is produced



Takeaways

- Research design:
 - Empirical puzzle
 - Research question
 - Hypotheses, theses, and theory (with its scope conditions)
 - Operationalization and (independent and dependent) variables
 - Level and unit(s) of analysis
 - Case selection and design type (small- and large-N, MSS or MDS)
 - Empirical testing and data collection
- Important considerations:
 - Relationship between variables: association vs. causation
 - Causal inference challenges and measurement problems