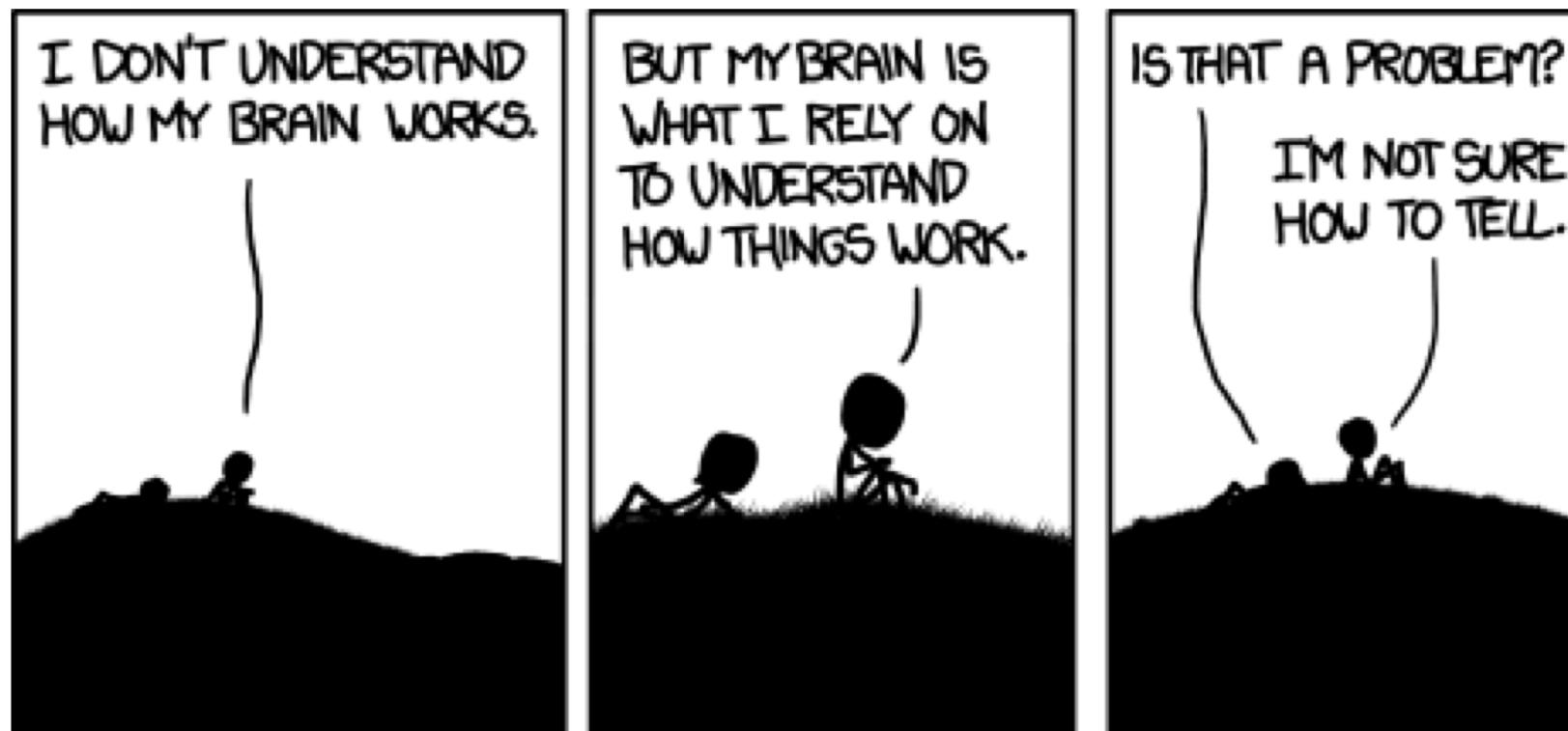


# POLS 352: RESEARCH METHODS & QUANTITATIVE ANALYSIS

## COMPARATIVE METHOD



# WHEN LAST WE MET...

What are good theories and why do we need them?

- The world is complicated; theories help us make sense of reality and facilitate interactions
- Fundamentally, they are assertions about expected relationships between variables and the mechanism(s) linking them
- They make certain assumptions about the world that are not true/false, but rather more/less useful

# TYPES OF STUDIES (ENDS)

## Descriptive

- e.g., percentage of regular exercisers

## Relational

- e.g., link between age and exercise

## Causal

- e.g., effect of behavior change intervention on exercise participation

# AGENDA

- The comparative method
  - Types of studies (means): Qualitative vs. Quantitative

# THE COMPARATIVE METHOD

The comparative method: analyzing a set (or sets) of cases in order to draw general conclusions

- What exactly does it mean to compare?
  - What are we comparing?
- Why do we want to compare?
  - We don't want to describe the world, we want to *understand* it

# THE COMPARATIVE METHOD

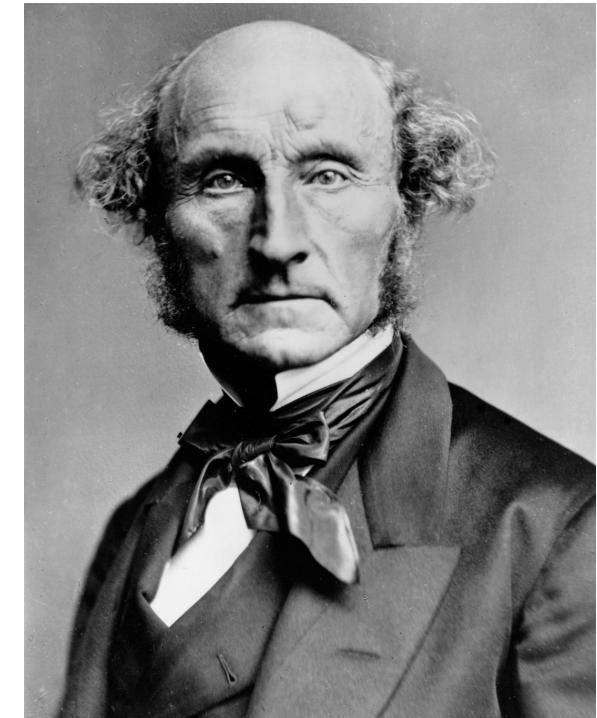
## **Qualitative method:**

- The use of data where the variables are in non-numeric form (e.g., text, photographs, sound bytes, etc.)
- Common types: interviews; historical analysis; ethnographies
- Often uses in-depth investigation of a limited number of cases
  - Associated with the inductive reasoning (although can be used to deductive ends, as well)

# THE COMPARATIVE METHOD

John Stuart Mill (19<sup>th</sup> cen British philosopher)

- Method for discerning actual causes among some possible causes
- Start with variables assumed to include possible causes
  - Simply eye-balled correlations at this point
  - If a possible cause doesn't correlate with the effect in the right way, then you can conclude a lack of causation



# THE COMPARATIVE METHOD

## Mill's method of agreement

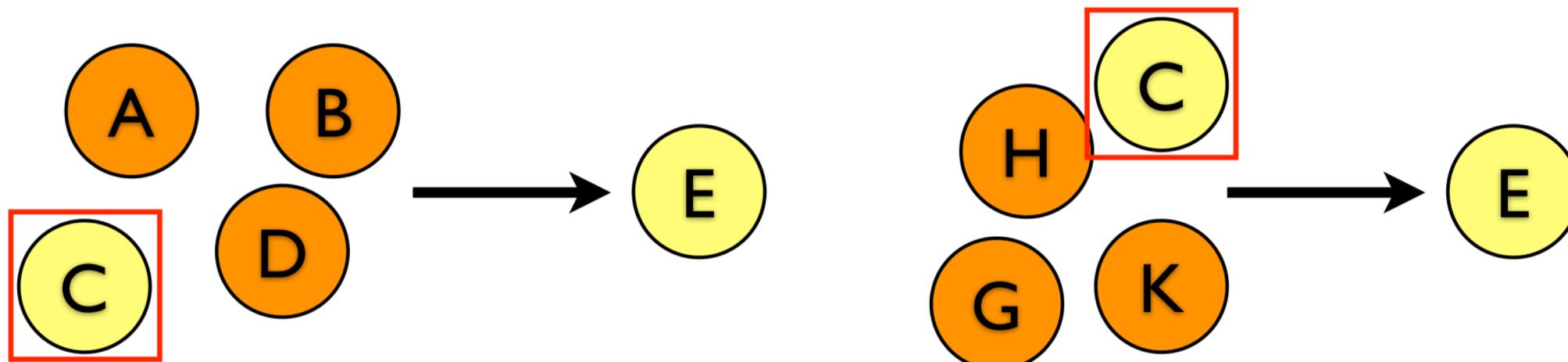
- “If two or more instances of the phenomenon under investigation have only one circumstance in common, the circumstance in which alone all the instances agree, is the cause (or effect) of the given phenomenon.”

~ *A System of Logic* (Vol. 1)

- Find cases in which the effect has occurred
  - Determine if there is only one thing that they all share
  - If there is, that is (the likely) cause

# THE COMPARATIVE METHOD

- Mill's method of agreement



# THE COMPARATIVE METHOD

## Mill's method of agreement

- Example: some cities have markedly lower rates of tooth decay
  - Is there anything these cities share in common?
  - If so, that is the likely cause of lower rates of tooth decay

# Table for Method of Agreement

|                     | <b>Dental Education Program</b> | <b>Free Dental Clinics</b> | <b>Fluoride in Water</b> | <b>High salaries for dentists</b> | <b>Low rates of tooth decay</b> |
|---------------------|---------------------------------|----------------------------|--------------------------|-----------------------------------|---------------------------------|
| <b>Dullsville</b>   | Yes                             | No                         | Yes                      | No                                | Yes                             |
| <b>Bedroom Town</b> | No                              | Yes                        | Yes                      | Yes                               | Yes                             |
| <b>Golfville</b>    | No                              | No                         | Yes                      | No                                | Yes                             |
| <b>Megacity</b>     | Yes                             | Yes                        | Yes                      | No                                | Yes                             |

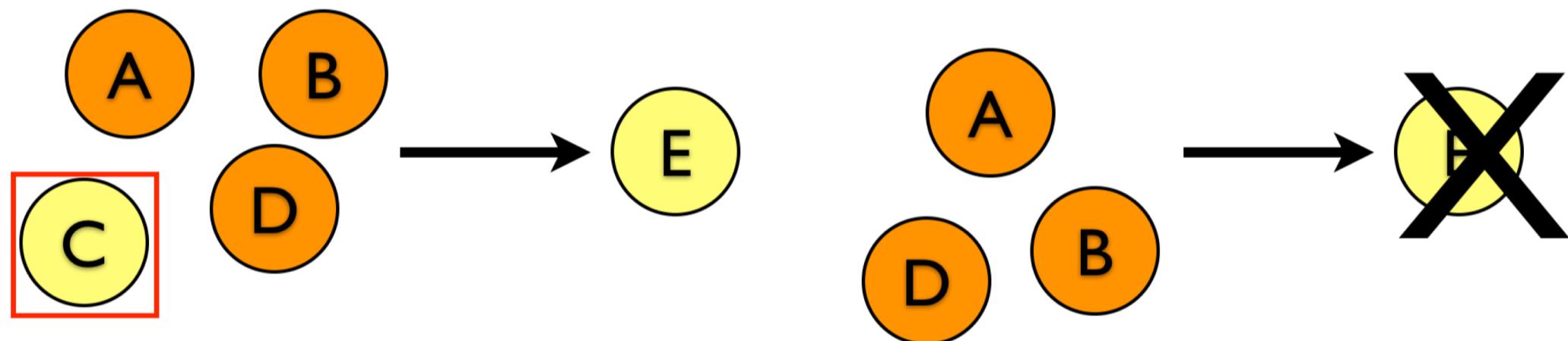
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| <b>Megacity</b>     | Yes                             | Yes                        | Yes                      | No                                | Yes                             |

# THE COMPARATIVE METHOD

## Mill's method of difference

- Find cases in which the effect has occurred in one, but not the other



Why do these contiguous countries in Africa have different *Regime Types*?



| Variables           | Case 1: Togo       | Case 2: Ghana      |
|---------------------|--------------------|--------------------|
| <b>Similarities</b> |                    |                    |
| Climate             | Hot / tropical     | Hot / tropical     |
| Income              | Low                | Low                |
| Ethnic demography   | Heterogeneous      | Heterogeneous      |
| Largest religion    | Christianity       | Christianity       |
| Other religions     | Islam, traditional | Islam, traditional |
| <b>Outcomes</b>     |                    |                    |
| Regime Type         | Authoritarian      | Democracy          |
| <b>Cause</b>        |                    |                    |
|                     |                    |                    |

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| Hypothesis: Colonizer | France             | United Kingdom     |