Political Science Scope and Methods

Case Studies, Comparing Cases, and Statistical Analysis

Assignment: Example

Enid wants to investigate the effect of saliency of message on attitude change. From an old Ph.D. she finds a swell communication on the importance of physical sciences in a liberal education. Fortunately for her, Widget University conducts separately - English classes for engineers and liberal arts majors. Within this limitation, however, the university has matched the classes carefully on age, sex composition, socioeconomic background, and College Entrance **Board Scores (both verbal and mathematical ability as well as on scores in** specific subjects). Enid checks on the dean's records and is happy to find that the classes have indeed been matched to the best possible extent. Enid then delivers the message to the engineers (the salient group) and to the liberal arts students (the non-salient group). The engineers show much more attitude change. Enid concludes that message saliency increases attitude change.

Cases: From few to many

- Last week: Experiments
- This week: Everything else
- Overview
  - Case studies: what are they good for?
  - Comparative method
  - Large N analysis
    - Nested Analysis?

The logic of Degrees of Freedom

- Lijphart: small-N analysis a way-station on the road to large-N studies
- What does more cases buy us? Degrees of freedom
  - Need as much (if not more) information as inferences
  - Like equations and unknowns problem in algebra

Case Studies

- What are case studies good for?
  - Theory generation?
  - Theory testing:
    - Process Tracing
      - Break down causal links; look for evidence
      - Multiple tests in a single case (?)
        - Baby books?
        - Shaming and voting?
    - Congruence Paradigm
      - Compare values of IV and DV to "normal" values

Getting comparative…

Comparative Method

- Controlled comparison of cases
- How do you pick cases to make the strongest inferences?
  - How do you design a "strong test"?
  - Case selection (more next week)

Strategies of Controlled Comparison

- Most different vs. most similar
- "Method of difference"
  - Select cases that are as similar as possible except in their value on the IV of interest
- "Method of agreement"
  - Select cases that similar on IV, but different in other ways

Case Study Example: Assuming the Costs of War

- Examine effect of elite discourse on structure of public opinion concerning war
- Case studies: 4 cases (and 2-5 observations within each case)
  - World War II: 1939-1941
  - World War II: 1940 Election
  - World War II: 1942-1945
  - Iraq War: July-August 2004
- Comparisons:
  - "Method of difference"
    - 1939-1941 vs. 1940 Election
  - "Method of agreement."
    - 1942-1945 vs. 2004

Large N (Statistical) Analysis

- Internal vs. External validity tradeoff
  - Be mindful of C&S's threats to Quasi-Experiments
- Questions of robustness
  - In random data 5% of relationships appear significant
  - Account for competing theories
  - Look at independent data sets

Large N (Statistical) Analysis (Cont.)

- Be honest about results
  - Report uncertainty
- Art and science
- Understanding your analysis
  - Examining outliers
  - Liberman's Nested Strategy

Example: Iraq War

- Please give your best guess to this next question, even if you are not sure of the correct answer. As you know, the United States is currently involved in a war in Iraq. Do you happen to know how many soldiers of the U.S. military have been killed in Iraq since the fighting began in March 2003?

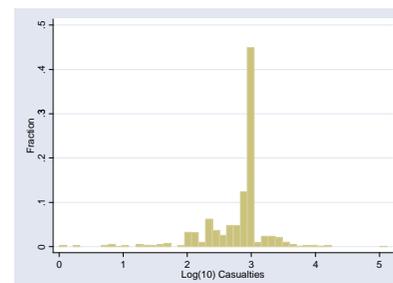**Log (Base 10) of Estimates of U.S. Troop Deaths in Iraq, 2004**

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