PS 0700
Qualitative and Small-N Research in Political Science

Political Science Research Methods

Professor Steven Finkel

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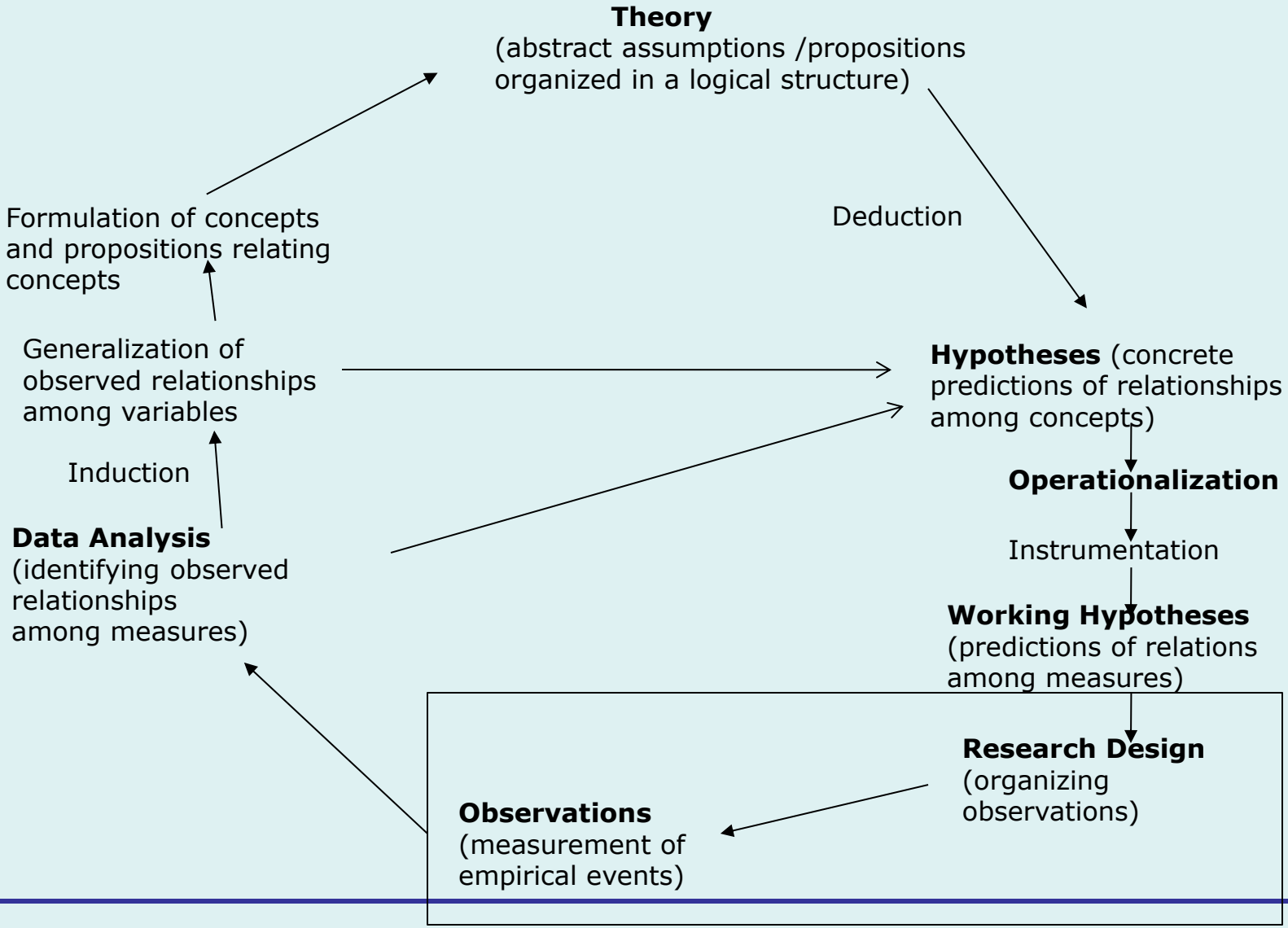
Week 7b

Goals for the Session

- Discuss the nature and uses of qualitative research in political science
- Describe how to design "small N" research in order to isolate causal relationships
- Discuss how, if at all, qualitative and "small-N" research can be considered scientific in the sense that we have discussed so far in the class

A Model of the Research Process



What is Qualitative Research?

- Defined by the *Methods* used: "Research Methods that capture naturally occurring data in their real-life context, and those that generate their own data through a reconstruction or retelling of views or behaviors" (Davies, p. 2.)

- Defined by the *Data* that are generated: "Qualitative data are [often] textual records…draw[ing] heavily on context, local perceptions, and a holistic understanding of the phenomenon under study"

  (Chung, "Issues and Approaches in the Use of Integrated Methods," Chapter 2 in Bamberger, Michael, editor, *Integrating Quantitative and Qualitative Research in Development Projects*. Washington, D.C.: The World Bank, 2000, p. 38)

- Defined as *Case-Oriented* versus *Variable-Oriented* Research: "Analysis that aims to understand a particular case or several cases by looking closely at the details of each" (Babbie, *The Practice of Social Research*, p. 371)

Kinds of Qualitative Methods

- "In-Depth" or "Semi-Structured" Interviews
  - "Key Informants"
  - Elites or Policy-Makers
  - Ordinary Individuals
- Focus Groups or Community Meetings
  - Organized Group Discussions
  - Deliberative Polls
- Observation or Participant-Observation
  - Site visits to observe institutions, meetings, processes, policy settings
  - "Ethnographic" studies
- Case Study or Comparative Case Study Methods
  - Archival/historical/document analysis
  - Use of multiple methods for understanding single case or small N

Why Do Qualitative Research? Three Big Arguments

- Argument 1: Quantitative research based on flawed positivist model of social science
  - the researcher should use qualitative methods for *interpretivist* "understanding" of political phenomena, for analyzing the *social construction* of political reality, and/or to seek change or improvement in social conditions of marginalized or oppressed groups in society
  - Think "Mr. Perestroika"!!!
- A quote from this school of thought: "Researchers who use qualitative methods seek a **deeper truth**. They aim to study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the **meanings people bring to them**. They use a holistic perspective which **preserves the complexities of human behavior**" (Greenhalgh and Taylor 1997)

Argument 2: Quantitative Research is Impractical or Impossible in Many Instances, due to "Small N"

- "Small *N*" refers to a small *N*umber of cases – that is, the number of instances of a unit or political phenomenon
- Quantitative Research requires a large number of cases, but in many research settings only a small N is available
  - What explains the nuclear weapons policies of Iran and North Korea?
  - Why do the regions of Northern Italy have a stronger tradition of "good governance" at the local level than those in the South?
  - Why do revolutions occur? (We have *relatively* few instances)
  - Why do Presidential impeachments occur? (We have three/four instances)
- In some instances, there is even intrinsic intellectual or policy interest in only ***one*** case (event, policy, process, country). How did 9/11 affect domestic and foreign policies of the United States?

- Argument 3: Quantitative research is incomplete, and its conclusions should be be validated, extended, qualified through "triangulation" via multiple methods and research perspectives
  - Qualitative research can help explain the "why" of results of quantitative research (i.e. the "mechanisms" that explain the quantitative findings)
  - Qualitative research can help explain anomalies in quantitative findings
  - Qualitative research can generate hypotheses that subsequent quantitative research can test with experiments and/or observational studies

Can Qualitative Methods Be "Scientific"?

- The most important distinction in qualitative research is between those who agree that the goals of research should be to advance political "science", and those who adopt the *interpretivist* or *constructivist* perspectives
  - Former camp is *scientific* but not quantitative
  - Latter camp (largely) rejects positivistic science *and* quantification
- Contrast the quote on slide 5 with the following:
  - Though the styles of quantitative and qualitative research are very different, these are "**methodologically and substantively unimportant**" because they share the **same objectives** (King, Keohane and Verba, 1994)
- We can now see distinctions *within* quantitative political science (statistical analysis versus formal models) and distinctions *within* qualitative political science as well ("small N science" versus interpretivism and social constructivist approaches)

Small-N Case Study Research

- Perhaps most prevalent kind of qualitative research currently practiced in political science is the *case study method*
- Researcher purposively selects small number of "cases" for intensive analysis, investigation, and comparison
- **Used extensively in comparative politics and international relations** subfields, and, to a somewhat lesser extent, American politics as well
- Evidence usually comprises archival material, public documents, diaries, etc., in addition to structured interviews and/or observation when feasible

Examples

- Comparative Politics
  - Why do states experience political revolutions? Skocpol (1979) conducts intensive case studies of French, Russian, Chinese Revolutions in order to understand causal factors (rooted in external threat, elite unity, and peasant autonomy)

- International Politics
  - Why do democracies not fight one another? Ray (1995) conducts case studies comparing the "Fashoda Crisis" between Britain and France (no war ensues) to the Spanish-American War (war ensues between a democracy and an autocracy) to evaluate whether features of the "democratic dyad" prevented war

Case Studies: The Basics

"And what should they know of England who only England know?" Rudyard Kipling (1865)

- From the small N "scientific perspective", we are always interested in some kind of comparison across cases, or within cases over time. We compare in order to: observe important variation in variables of interest across cases, to exert some kind of control over "extraneous" variance so that we can isolate the causal processes involved; to test whether theories "fit" in particular cases' and to explore inductively social and political processes
- **The most important question in comparative case study analyses, then: which "cases" are we going to select?**
- We want to select cases that plausibly represent different categories of variables relevant to theory, and set up comparisons that will enable us to make causal inferences, ideally, inferences that we can generalize as well

But Fundamental Difficulties to Overcome!

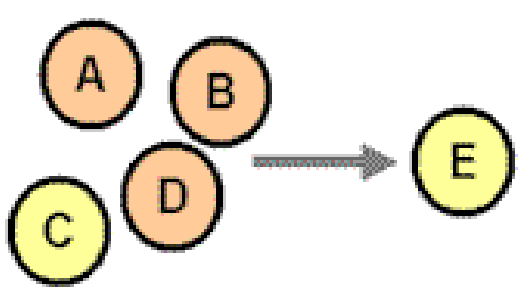
- We usually have more possible explanatory variables than we have cases to analyze; therefore, we may have an "overdetermined" causal system
- We cannot manipulate variables at will, so we have a kind of "passive observational" design with all of the potential problems of "spurious association", "reverse causality", etc. that we discussed earlier in the course. (And with small N it is more difficult to overcome them!)
- Random selection of cases is usually not possible (and often not appropriate), so we may end up with a very unrepresentative sample of cases. Our study may therefore have limited external validity
- Purposive selection of cases in order to overcome problems #1 and #2 above may lead to other kinds of "selection bias" and incorrect causal inferences

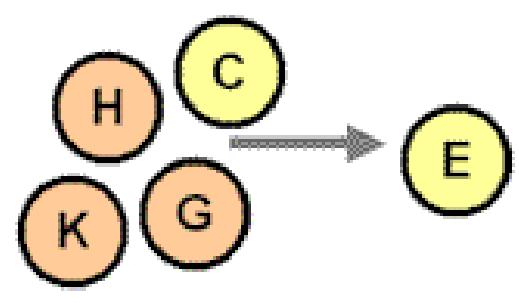
Causal Logic and Case Selection in Small N Comparative Studies

- Philosopher John Stuart Mill sets out some principles of "experimental reasoning" in his *System of Logic* (1843) which continue to serve as foundations for inquiry in the small-N world of political science
- Two main methods proposed:
  - "The Method of Agreement"
  - "The Method of Difference"
- Each associated with certain kind of research and case selection strategies, called (somewhat confusingly) the "most different systems" and "most similar systems" approach, respectively
- Both have something to offer, but both have some problems as well!!

Mills' "Method of Agreement"

- "If, within the systems we are comparing, the phenomena we are interested in explaining have only one of several possible circumstances in common, then the circumstance in which all the instances agree is the cause of the phenomenon"





Basic Idea: Find cases that share an outcome ("E"), and then find independent variables that all "E" outcomes have in common (in this case: "C"). If all E outcomes are associated with variable C, but not variables A, B, D, G, H, K, then we say that variable C "causes" outcome E

A Non-Political Science Example: What Caused A Family to Get Food Poisoning?

Member / Food taken	Oyster	Beef	Salad	Noodles	Fallen ill?
Mom	Yes	Yes	Yes	Yes	Yes
Dad	Yes	No	No	Yes	Yes
Sister	Yes	Yes	No	No	Yes
You	Yes	No	Yes	No	Yes

Everyone got sick. Following the Method of Agreement: Not everyone ate beef, not everyone ate salad, not everyone ate noodles. Everyone ate oysters; therefore **oysters "caused" the food poisoning**

Implications for Political Research

- Following this method leads the analyst to search for cases that share an outcome on a dependent variable, and then *maximize* as much variation as possible on a set of independent variables in order to find out the "key" causal mechanism that is associate with that outcome. This is known as the **"most different systems"** approach
- Example: Skocpol's *States and Social Revolutions*. Examining French, Russian, Chinese revolutions showed that they *only* had the following factor(s) in common: an elite split in response to an external threat, and a peasant class that was autonomous from daily landlord supervision

  Otherwise, there were differences in economic development, class antagonisms, ideology of the regime, etc., so by the Method of Agreement, none of those factors could be responsible for the outbreak of revolution

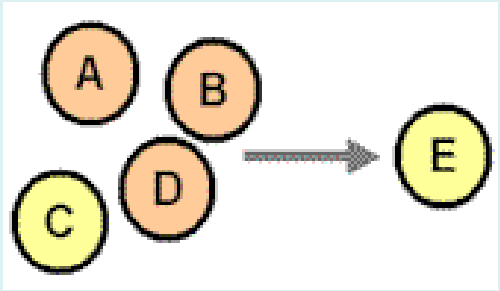
- Main advantage of the "method of agreement"
  - We can show --- even with a very small N ---that variables are **not** "necessary causes" of an outcome if they do not satisfy the causal logic of this method
    - It was not *necessary* to eat beef or salad to get sick
    - It was not *necessary* for a country to be poor to have a revolution
  - So we can use this method to *rule out* factors as (necessary) causal influences
- But the method seeks to show more – it wants to show that some factor **is** a "necessary cause" of an outcome. Can it do so? **NO!!!**
- Since we have a small and perhaps unrepresentative sample of revolutions (where are, e.g., the American, the Turkish, the Vietnamese, etc.?), we don't know if the causal process is truly general. If we had larger N, we might see that some "not X" cases also lead to "Y"

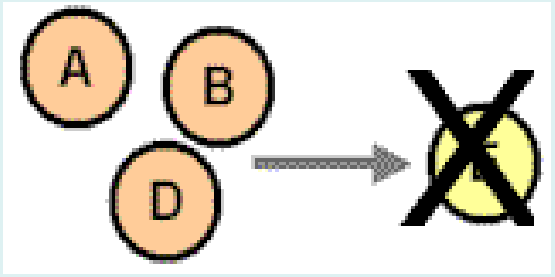
- Other Problems with the Method of Agreement
  - We are committing what "modern" social science says is a most serious sin: ***selecting on the dependent variable***
    - One cannot prove the causes of war by looking only at wars -- one needs "not-wars" as well!
    - One cannot prove the causes of revolution by looking only at countries that experienced them – one needs "not-revolutions"
    - One cannot prove the causes of democracy by looking only at democracies – one needs "not-democracies"
  - *Why????*

- Two reasons: 1) we don't know if the "causal" factor ***is*** truly causal, since there may be many cases where, for example, elite division/peasant autonomy existed but *no* revolution occurred. So we may have X, but "Not-Y" in lots of instances.
- 2) More generally: we don't know whether "not-X" leads to "not-Y", which is equally important to the causal story. If no elite division/peasant autonomy exists and *no* revolution occurs, this would strengthen our claim that the presence of this configuration of factors leads to Y, and its absence does not lead to Y
- **This means we should sample both X and not-X, and both Y and not-Y to give us a better handle on causality**

Mill's Method of Difference

- "If, within the systems we are comparing, there is an occurrence *and a non-occurrence* of the phenomenon, and the circumstances in which these are observed are the same in all factors save one, then that one is the cause of the occurrence."





Basic Idea: Find cases that vary on outcome ("E"), and then find the one independent variables that is not present in both "E" and "not E" outcomes (in this case: "C"). Variables A,B, and D are present in both "E" and "not-E" outcomes, they cannot "cause" E.

One could also say that variables A, B, D are "held constant"; we then see that variable C is present in the "E" outcomes and is not present in the "not E" outcomes; therefore it is "causal"

Member / Food taken	Oyster	Beef	Salad	Noodles	Fallen ill?
Mom	Yes	Yes	No	Yes	Yes
Dad	Yes	Yes	No	Yes	Yes
Sister	Yes	Yes	No	Yes	Yes
You	Yes	No	No	Yes	No

This time: you didn't get sick, but everyone else did. Following the Method of Difference: Everyone ate oysters and noodles, but not everyone got sick. No one ate salad, but some got sick and you didn't. But everyone who ate beef got sick, and everyone who did not eat beef did not get sick.

Therefore, beef "caused" the sickness.

Implications for Political Research

- Following this method leads the analyst to search for cases that *differ* on a dependent variable, and then control as much variation as possible on a set of independent variables in order to find out whether variation on one "key" variable leads to differences in the dependent variable outcome
- This logic is associated with the "**most similar system**" design – select cases that are as similar as possible on a host of IVs except for one, and then see what happens when that one IV varies.
- This is a much better design, and is the one most closely related to large-N logic
- This logic underpins small N analysis *within* a given region, continent, linguistic community, since many variables are "held constant"

Political Science Example

Hypothesis: States with high income inequality are more likely to experience a civil war than states with low income inequality. Do these results confirm or disconfirm the hypothesis?

Case	*Income Inequality*	*Poverty*	*Colonial Past*	*External Threat*	*Civil War?*
Costa Rica	Low	Yes	Yes	No	No
El Salvador	High	Yes	Yes	No	Yes
Cuba	High	Yes	Yes	No	Yes

Problems/Issues with Method of Difference

- External validity problem is ever-present when small number of cases are selected non-randomly
- Problems with estimating *multiple causes* and *interaction effects* between variables
  - A+B may both lead to outcome E, not only A alone
  - A may *only* leads to outcome E when it combines with *B*
- Assumes a *deterministic* relationship between variables, when we know that social science causality is better conceived as *probabilistic*

Other Methods of Case Selection

- "Most likely" or "Typical" case
  - If the theory holds anywhere, it should hold in this case
  - Failure to support theory, then, counts disproportionately against the theory being correct
  - Example: Lynd's Middletown: A Study in American Culture (1929)
- "Least Likely" or "Crucial" case
  - The "Sinatra" case: if the theory holds in this case, it should hold everywhere
  - Support for theory in this case counts disproportionately in favor of the theory being correct
  - Example: If "social capital" leads to good governance, find a case that has high social capital but none of the other factors that would predict good governance. If you get good governance, it is very strong support for the theory (see Lili Tsai, *Accountability without Democracy* (2007)
- "Deviant" case
  - Why does an existing theory not hold in a given case?
  - Example: Lijphart's theory of "consociationalism" comes from a "deviant case" analysis of the Netherlands. It had stability with high socio-linguistic cleavages when prior theory said it should not

General Take-Away Points Regarding Qualitative Research Methods

- Strong(er) on:
  - "Thick description" and understanding
  - Nuance
  - Research flexibility
  - Cost (sometimes)
- Weak(er) on:
  - External validity and generalizability of results
  - Causal inference
  - Inter-researcher reliability (replicability)
  - Control over research process
  - Analytic procedures

Mixing Qualitative and Quantitative Methods

- Formation of "mixed" research teams
- Multi-disciplinary conceptual frameworks
- "Triangulated" data collection methods
- "Mixed" exploratory analyses to inform the sample selection and other study details
- Comparison of results to validate findings from different methods or modes of analysis
- Developing coherent narrative to present results
- ALL OF THIS IS VERY DIFFICULT BUT WORTH PURSUING FOR THE POLITICAL SCIENTIST!!!!