# PS0700 Nuts and Bolts of Political 'Science': Political Science as a 'Science'

Political Science Research Methods
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Week 1b



## Session Goals

- Discuss the major substantive and methodological divisions in the discipline of political science
- Discuss the nature and uses of "scientific" political science
- Discuss and evaluate the main criticisms of the scientific method as applied to politics

## The Discipline of Political Science

#### • What is political science?

"The study of the way in which decisions for a society are made and considered binding most of the time by most of the people."

David Easton, "Political Science in the United States" (1991)

#### • Substantive Questions:

- How are authoritative decisions made?
- Who makes them?
- How should they be made and who should make them?
- How are authoritative decisions put into effect?
- What are their consequences, domestically and internationally?
- Distinguished from other social sciences

- These questions regarding *content* or *substantive focus* lead to the four main fields in the discipline, and within the fields, the major sub-fields
- Fields and Examples of Subfields:
  - American Politics
    - Institutions (e.g. Congress or Presidency)
    - Political Behavior (e.g., Voting Behavior, Public Opinion)
    - Public Policy (e.g. Economic Policy, Environmental Policy, Urban Policy)
  - Comparative Politics
    - European, African, Latin American, Asian Politics
    - Democratization and Political Development
    - Comparative Public Policy
    - Comparative Political Behavior
  - International Politics
    - War and International Conflict
    - International Political Economy
    - International Organizations
  - Political Theory
    - Ancient, Modern, and Postmodern Political Philosophy

# Methodology

- Another important way of looking at the discipline is through the different *methodological* approaches used by political scientists to study their substantive questions of interest
- How do political scientists go about answering the questions posed in the previous slides? What procedures, approaches are used to arrive at knowledge about politics and "authoritative political decisions"?
- Core Question: Can we study politics using the methods and procedures of "scientific" inquiry?
- Answers --- and controversies about the answers --- have shaped the history and development of the discipline, and still not settled today

#### The "Behavioral Revolution" in Political Science

- The "Behavioral Revolution" took place after World War II as a group of political scientists (David Easton, David Truman, Heinz Eulau, Gabriel Almond, Robert Dahl) became disenchanted with the (perceived) short-comings of the discipline and with earlier approaches:
  - "formal-legal" political science focused only on countries' legal frameworks, legislation, and constitutions, ignored much of "real politics," power, decision making
  - "traditional" political science focused on these informal practices, but did so in an unsystematic way, one that was unreflective about the methods that were used, how conclusions were reached, and how verifiable the conclusions may have been
  - little or no over-arching theories or approaches that linked disparate research programs, or explained processes in ways that generalized beyond particular countries, laws, or institutions at particular points in time

## Principles of Behavioralism

• "The ultimate goal...is the development of a science of the political process" (Dahl, 1960)

#### • Tenets:

- There are discoverable *regularities* in political behavior
- These regularities can be *verified* or *falsified* through *empirical testing*, i.e. through *observation* of political phenomena (as opposed to conjectures, hunches, subjective feelings, arguments of the researcher)
- Greater rigor and precision needed in *methods* for collecting and interpreting data
- Precision in recording and analysis of data requires quantification
- Values of the researcher should be excluded from the process
- Goal is to generate behavioral *theories* that "explain, understand, and predict the way people behave politically and the way political institutions operate" (Easton 1991)

#### Behavioralism and "Positivism"

- Behavioralism in political science was strongly influenced by a late 19<sup>th</sup>- early 20<sup>th</sup> century epistemology (a philosophy or theory of knowledge) known as "positivism"
  - Argues for the *unity of scientific method*: we can generate, test, and verify empirical statements about the social and political world in the same way we can about the natural world, i.e. there is no fundamental difference between the natural and social sciences
  - Science is concerned only with "empirical" statements, because they are the only ones that can be tested and verified against observation. Empirical statements concern what "is", versus normative statements, which concern what "should be"
  - Normative philosophy is concerned with statements that positivists would call "meaningless." (Of course this is extremely important (and the positivists wrongly labeled it) but it is still not "science")
  - The aim of social science is to develop causal explanations that account for
    observed regularities in social behavior, and to organize those explanations
    into broader empirical theories of behavior that can generate new predictions
    and lead to the investigation of new regularities

8

#### An Example of Scientific Explanation

- Observable Phenomena
  - John Smith voted for Donald Trump in 2020 John Smith's income increased in 2019-2020
    - Proposed Empirical Regularity: People whose financial situation improved (declined) over the past year vote for (against) the incumbent party in presidential elections
    - Why did John Smith vote for Trump? Because his financial situation increased over the past year (assuming the empirical regularity is valid)
    - General causal explanation: If X (improving or declining finances), then Y (incumbent or non-incumbent vote)
    - Empirical theory: The "Economic" Theory of Voting Behavior
      - People reward office-holders in elections during periods of good economic performance and punish office-holders during times of poor economic performance
    - New proposed regularities:
      - Congressional candidates from the incumbent party will be re-elected when national economic conditions are good, and voted out of office when national conditions are bad
      - Presidents will adopt macro-economic policies that attempt to increase household finances, such as tax cuts and increases in social spending, in the year before an election

## The Scientific Method and Scientific Knowledge

- The rules and procedures for discovering, testing and verifying proposed empirical regularities, and for organizing them into broader theories constitute "the scientific method"
- Scientific methods:
  - are based on the principles of *verification* or *falsification* from observation. This is crucial!! If a theory/regularity/explanation cannot in principle be falsified, it is not scientific (as asserted by the philosopher Karl Popper)
    - Falsifiability is the possibility of overthrowing the hypothesis/explanation with observable data
  - are *systematic* and *public* procedures regarding measurement, data collection, analysis and interpretation. They allow one scientist to use these same methods to *replicate* a study and show that the conclusions reached by another scientist are incorrect. Example: collect observations *randomly* from populations whenever possible, so that the analysis is not based on a *biased* or limited sample
  - produce *provisional*, *uncertain*, not absolute, knowledge that may (will) be modified with more observations and more testing

#### How is the Scientific Method Used in Political Science?

- "Pure" or "Basic" Political Science Research
  - Developing and testing alternative empirical theories
     Example: Why are some countries stable democracies and some are not?
     Alternative empirical theories:
    - Modernization and economic development
    - Diffusion of international norms
    - Legitimacy attitudes and democratic values held in public opinion and/or among elites
- "Applied" Policy and Evaluation Research
  - Assesses the impacts or effectiveness of policies or policy innovations
    - Does smaller class size lead to greater education gains in primary schools?
    - Does US democracy assistance lead to greater democracy in recipient countries?
- Both kinds of research use the *same* social scientific methods, though they have somewhat different goals
- Research within each approach can have implications for the other

# Criticisms and Limits of Behavioralism and the Scientific Approach to Politics

- The use of the scientific method is the dominant approach for conducting contemporary political science research. It is the basic approach we will follow as we progress through the course. Nevertheless:
  - it is not the case that the tenets of positivism and behavioralism are accepted by all political scientists
  - it is not the case that the scientific method is the *only method* that is used in contemporary political science
  - It is not the case that all scientific research is quantitative
- It may be said that we are now in a "post-behavioral" or "post-positivist" stage in political science -- the scientific approach is still dominant, but is practiced alongside other approaches rooted in alternative epistemologies, alternative assumptions about political life, and alternative assumptions about the role of the political scientist

# Criticisms I: Complexity and Practical Difficulties in Scientific Political Research

- Human behavior may be too complex, too changeable, to explain with causal generalizations
- Measurement and recording of human behavior is difficult because of this complexity, and because of the lack of a controlled environment
- Important data for understanding political phenomena may not exist (e.g., the attitudes of North Koreans about their current regime)
- Sometimes we have too few cases to work with to conduct meaningful statistical or quantitative analysis (e.g. U.S. Presidential impeachments)
- Sometimes we may even be interested in single cases that \*may\* not be generalizable (e.g., 9/11?)

#### • Counterarguments:

- These problems do not necessarily make a scientific approach *impossible*, only more difficult and with more provisional, more conditional and more "probabilistic" conclusions than in the natural sciences.
- "Small N" research can still be scientific, even if not statistical
- We need to strive for better explanations, not reject the idea of arriving at scientific explanations!

14

#### Criticisms II: "Interpretivism" and "Social Constructivism"

- More fundamental critiques are based on *philosophical critiques* of positivism, the foundational epistemology of the scientific approach
- One alternative approach is called *Interpretivism*, which says:
  - The subject matter of political science ---people and their institutions --- is fundamentally different from that of the natural sciences. While the world of nature does not "mean" anything to molecules, atoms and electrons, social and political reality has a specific *meaning and relevance structure* for the beings living, acting, and thinking within it
  - Meaning is deeply embedded in culture, norms, organization of social structures at particular historical moments
  - Therefore, the goal of the political scientist is to "understand" these meaning structures. Social science should attempt to arrive at the "interpretive understanding of social action" (the "Verstehen" approach outlined by the German sociologist Max Weber), and not attempt ultimately futile causal explanations with categories defined by the researcher

• A related philosophical challenge to positivism leads to the *social constructivist* school of political research

#### • Tenets:

- Rejects the positivist notion that the world exists independently of our knowledge of it (the so-called "objectivist" position). It is based on a false initial premise – there is no "objective" social reality out there for us to observe.
- Rather, the world is socially or "discursively" constructed. Social phenomena and categories are produced through social interaction and are in a constant state of revision. They do not have an existence independent or separate from the actors themselves, therefore they cannot be studied as "objective" or timeless phenomena.
- Example: "Gender Differences" are they real, biologically determined and cross-culturally valid? Or are they constructed in a given time and a given place by given sets of actors in social interaction?

- Implications for research from both perspectives:
  - Emphasis on uniqueness of cases, not their generalizability
  - Rejection of behavioral approaches in favor of hermeneutic approaches and methodologies that attempt "thick description" of individual phenomena
  - Attempt to discover the discursive constructs used in political life and their effects
  - The "area studies" and "critical studies" approaches in political science are especially sympathetic to this point of view
  - Focus on in-depth interviews, historical, ethnographic research and other qualitative methodologies that we will discuss later

• Counter-argument from behavioralists: How will you know if your assertions are wrong? These schools of thought may lead to the potential for non-systematic, non-verifiable, subjective analyses

- Possible Areas of Compromise
  - Qualitative political research need not fully reject the scientific paradigm (though some qualitative scholars do)
  - Qualitative political research can complement and inspire better quantitative work in many ways, as we will discuss later

# Criticisms III: Lack of "Relevance" of Much Scientific Research

- Final critique: scientific research is thought by some to lead to "mindless empiricism," collection of sometimes obvious statistical relationships that are not that interesting, and don't add up to much theoretically speaking
- The mathematical models and statistically-oriented research in the *American Political Science Review* and other top journals in the discipline sometimes has little to say about contemporary political problems, disputes, moral conflicts
- The problem began with the "science is value-free" assumption of positivism
- Implications for research:
  - recognize that all inquiry is influenced by the values of the researcher, at minimum in affecting what to study in the first place
  - Recognize that political science ought to be engaged in solving "real world"
     problems and addressing issues of importance in the contemporary world

#### "Perestroika" in Political Science

• A movement within political science to break the "hegemony" of the scientific approach

#### • Advocates:

- "Problem-driven" as opposed to "theory-driven" research
- Methodological pluralism: positivism, interpretivism, constructivism, critical theory, all kinds of approaches needed for "truth" in political science to emerge
- Restoration of normative philosophy to "central place" in discipline
- Interdisciplinary inquiry need to better integrate with other social sciences, anthropology, history
- Counterarguments: see Bennett (2002, assigned reading)
- We will not resolve all these issues here, but you should be thinking about them for recitation section this week, as the course progresses, and as you progress in the political science major!

20