# DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL RELATIONS Research Methods Posc 302

# **OVERVIEW BY MEANS OF AN EXAMPLE**

### I. TODAY'S SESSION:

- A. Reprise
- B. An overview of the research design
  - 1. Problem
  - 2. Translation to research hypothesis and terms
  - 3. Appropriate procedures
  - 4. Measurement
  - 5. Data collection and management
  - 6. Statistical analysis
  - 7. Interpretation
  - 8. Presentation
- C. A substantive example: the decline of partisanship and American electoral politics

#### II. SUMMARY FOR FOCUS STUDENTS:

- A. This course involves "practical" and academic knowledge.
  - 1. Realize from the outset it includes statistics, computing, and abstract theorizing.

#### III. TWO TASKS:

- A. We have two jobs.
  - 1. Identify an interesting and important research topic.
  - 2. Think about how to do the research.
- B. Together they constitute research design.
- IV. IDENTIFY A PROBLEM:
  - A. The first step in the research process: ask a **meaningful** question
    - 1. Empirical versus normative claims
      - i. Empirical (can be more or less verified, at least in principle)
        - 1) Example: American political parties are in decline.
          - a) See, for example, Wattenberg, *The Decline of American Political Parties*, 19502-1996
        - 2) Normative: cannot be answered by reference to observation
          - a) Example: "one ought to vote for the person not the party."
      - ii. Key question: can one find evidence that others will accept as probative, relevant, acceptable that will support or falsify they claim



or statement or proposition?

- 2. There is considerable discussion these days–in the press as well as in scholarly literature–about the health of American political parties.
  - i. Many journalists and academicians believe that American political parties are weak and getting weaker.
    - Columnist David Broder: "The government is not working because the parties are not working." (Quoted in Wattenberg, *Decline*, page 2.)
  - ii. An empirical claim:" the public increasingly distrust, dislikes, or refuses to identify with one of the major parties."
  - iii. A normative claim: "people should vote their consciences, not a party line, so party strength is not an issue."
- B. Next, narrow the problem to manageable dimensions.
  - 1. Pick an **aspect** or part of the problem that is important, that throws light on the issue, but that can be investigated with available resources and knowledge.
  - 2. Examples:
    - i. Let's "document" the alleged decline in party affiliation.
    - ii. Let's also investigate the consequences of political independence versus partisanship.
- C. Tips for finding and narrowing problems:
  - 1. Use existing literature.
    - i. Example: Wattenberg quotes writes (in *Decline*, page 173) Hedrick Smith, a well-respect author and report for the New York *Times*:
      "The most important phenomenon of American politics in the past quarter century has been the rise of independent voters who have at times outnumbered Republicans."
      - 1) This is a pretty specific empirical statement that we could document with poll or survey data.
  - 2. Examine journalist assertions, conventional wisdom, quotes by famous people.
  - 3. Look at the parts of general claims or theories.
  - 4. Think about "implications." That is, if statement X is true, then logically statement Y must be true as well. Then, check to see if statement Y is in fact true.
  - 5. Keep time and other resources in mind.
  - 6. Keep available data in mind.
    - i. Secondary analysis: the interpretation of information (e.g., poll data) already collected.
      - 1) One has to work with what has been gathered.
      - 2) The question becomes: can a data set answer the questions I have? If not, look elsewhere; if so, use it.

- 7. Think about the meaning of terms and whether they can be stated in a way that lends to empirical analysis.
- 8. DON'T BE AFRAID TO NARROW THE TOPIC.
  - i. See the figures below.

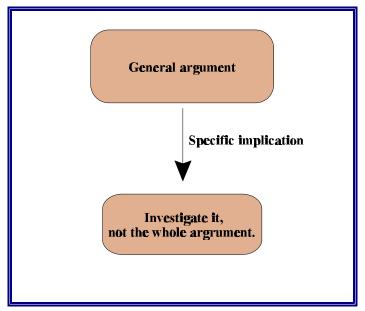


Figure 1: Example

9. Example

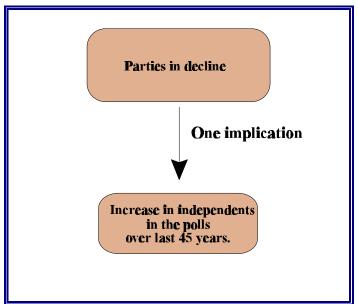


Figure 2: Example

- i. Refer back to the quote by Hedrick Smith cited above.
  - 1) The argument about the decline in parties makes reference among many things to the growth of party identification.
- 10. We'll spend lots of time working on deriving propositions from verbal theories or statements.

# V. TRANSLATION TO RESEARCH TERMS:

- A. Some vocabulary
  - 1. Units of analysis: the things that are being studied such as people or groups of people or nations or organizations or states or ...
    - i. Example: in a public opinion poll **people** or **individuals** are the units of analysis.
    - ii. Example: in public administration, state governments are frequently the unit of analysis.
  - 2. Variables: attributes or characteristics or properties of "units of analysis.
    - i. Example: age, gender, height, party identification, intention to vote, hair color, income, years of formal schooling are all variables because they are traits that people have.
    - ii. Example: number of employees, revenues, expenditures, and number of laws administered are some variables of state governments.
  - 3. Values of variables: the specific quantity or type of a variable a unit of analysis might have.
    - i. Example: some individuals are male, some female. "Male" is a value of the variable gender.
    - ii. Example: people have different ages, some are less than 21, some are between 21 and 31, and so forth. "Less than 21" is a value of the variable age; so is "21 to 31."
    - iii. Example: some people have 10 years of formal education, some 11 years, some 12, some 13 and so on. Again, the numbers (e.g., 10) are values of the variable, in this case education.
    - iv. Example: one state government might have 10,000 employees while another has only 1,000. "10,000" and "1,000" are values of the variable "number of employees.
  - 4. DON'T CONFUSE VALUES OF VARIABLES WITH THE VARIABLES THEMSELVES.
    - i. Female is not a variable, it's a value of gender.
- B. Quantitative versus quality variables.
  - 1. The values of quantitative variables are numbers such as 10 years of formal education.
  - 2. The values of qualitative variables, also called nominal variables, are names or labels such as female or "Democrat."



- 3. More on this latter.
- C. Survey research requires one to identify variables embedded in statements or propositions.
  - 1. Sometimes the identification is straightforward as in "Young people vote less faithfully than older people do."
    - i. A key variable in this statement is age.
  - 2. Most of the time the identification of variables requires considerable work and is in fact part of the process of formulating empirical research projects.
    - i. So, for instance, buried within claims about declining party strength in the United States is the idea that people no longer identify with political parties as much as they used to.
    - ii. Here party identification is a variable with possible values of "Democrat," "Republican," "independent or no party," and "apolitical or not interested in politics."
  - 3. Consider another example, one which shows the difficulty (but also promise) of translating substantive claims into research propositions.
    - i. Wattenberg writes of the 1996 presidential campaign: "The historic confrontation of early 1996 thus ended up unresolved by the fall elections. Although this confrontation could have led to a revitalization of the party system, the disappointing result further confirmed the era of divided government [and weak parties.]" (page 221.)
      - 1) How does Wattenberg establish his point.
      - 2) He among other things looks at the content of the candidates' nomination speeches and literally counts the references to political parties.
        - a) He notes, for example, that Dole, the Republican candidate, "mentioned the name of his party only twice and never mentioned the Democrats by name." (Page 221.)
        - b) Likewise, Clinton "spoke even longer to the Democratic Convention...and similarly managed to avoid partisan appeals." (Page 221)
      - 3) In this case one can think of nomination speeches as the "unit of analysis" and "number of party references" as a variable.
        - a) This terminology is not obvious so we'll come back to it again and again.
- D. Summary: we need to recast terms found in general statement, arguments, and so forth into "measurable" or "operational" concepts that we can in effect touch and see so as to test for validity.
- VI. RESEARCH PROCEDURES:

## **Class 1 - Overview**



- A. A research design includes what the name suggests, namely a plan for collecting and analyzing data in order to test empirical propositions.
- B. A first decision that one has to make is how to collect the data or information necessary to explore the hypotheses will be collected.
  - 1. Summary of common types:
    - i. **Secondary analysis** of existing data is the method we're going to use in the course.
      - 1) It involves data (e.g., poll results) collected by some organization that can be analyzed or re-analyzed.
    - ii. **Sample attitude and behavior surveys** (of which public opinion polls are a common type): information is elicited from individuals, the units of analysis.
      - 1) If you want to go into consulting, market research, or policy analysis, you have to be familiar with survey techniques.
    - iii. Aggregate data analysis: analysis of data collected on "aggregates," usually geographical areas such as counties, census or voting tracts, states, or nations.
    - iv. Experiments in which the investigator literally manipulates variables to see what effects they have on other variables.
    - v. Quasi-experiments or naturalist experiments that involve the **statistical** analysis of (usually) aggregate data collected in different time periods.
    - vi. Observation of individuals by the investigator.
      - 1) Quite common in anthropology.
    - vii. Document analysis entails the systematic study of printed or taped or video taped material.
- C. A second decision is, of course, what information or data will be included in the study.
  - 1. This choice depends on what one wants to demonstrate.
  - 2. For a secondary analysis of survey data one would select questions (variables) that are pertinent to the propositions and ignore those that are not.
  - 3. A poll or sample survey requires the investigator to write questions and other indicators of the phenomenon of interest.
  - 4. The lesson then is obvious: the research questions determine what information is needed.
    - i. So, always frame your purposes first, then look for information that can give you the answers.
    - ii. Do not work in reverse: don't obtain a poll and then ask "What does it say?"
    - iii. This is an iterative process in that a specific research question may be modified in light of data availability.



- D. Third one must think about what analysis techniques will be used once the data have been collected.
- E. We'll discuss these topics in more detail later, but for now note that many of the choices in this course have already been determined.

### VII. NEXT TIME:

- A. Additional steps in the research process.
- B. Explanation and practice in identifying empirical research topics and propositions.
- C. Reading:
  - 1. Start a subscription to the New York *Times*. You'll need it to obtain examples of research topics and propositions or hypotheses.
  - 2. Wattenberg, *The Decline of American Political Parties:* 
    - i. Introduction discusses the general topic of party decline.
    - ii. Chapter 1 defines and describes the concept of party identification or partisanship.
      - 1) **This is important material.**
  - 3. Johnson and Joslyn, *Research Methods*:
    - i. Chapter 2 describes what I mean by empirical research.
      - 1) Please note that there are other perfectly valid or acceptable ways to acquire knowledge.
      - 2) But if you want to be in the mainstream of political science and political consulting, you need to be familiar with empirical research methods.
    - ii. Chapter 3 discusses variables and hypotheses. Read it carefully if you have questions.
      - 1) Note: I will expect that you to become familiar with these terms and ideas and to be able to use them easily.