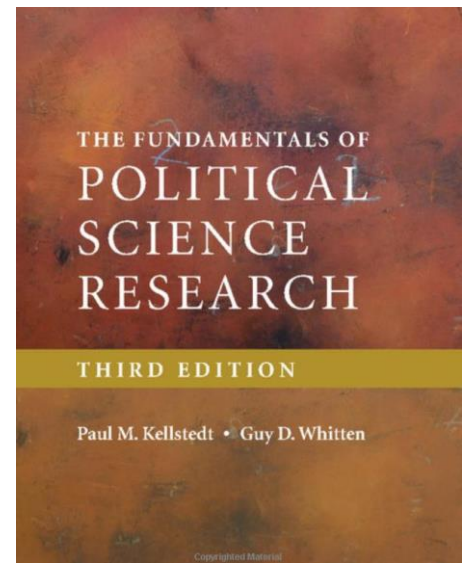


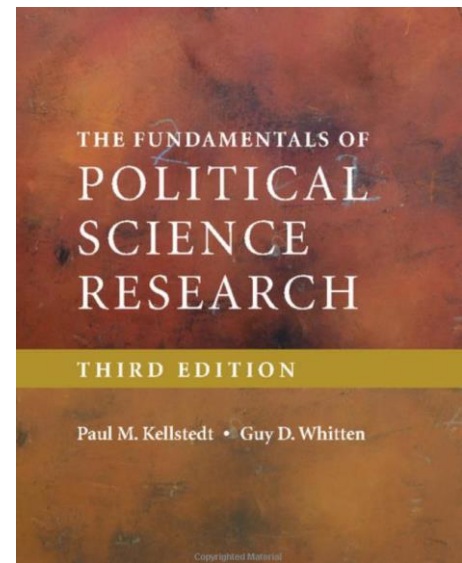
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Chapter 1: The Scientific Study of Politics

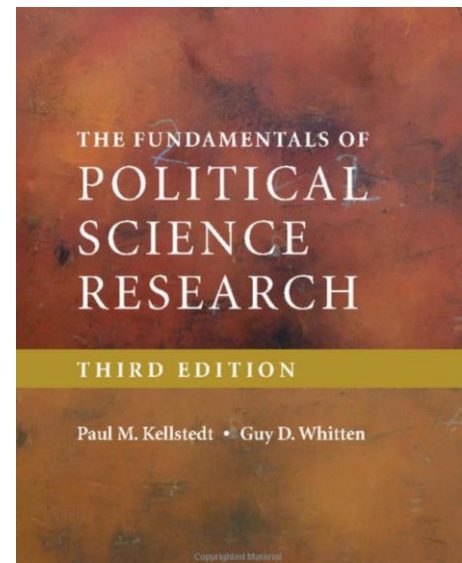


Chapter 1 Outline

- Political Science?
- Approaching Politics Scientifically: The Search for Causal Explanations
- Thinking about the World in Terms of Variables and Causal Explanations
- Models of Politics
- Rules of the Road to Scientific Knowledge about Politics



What is Political Science?



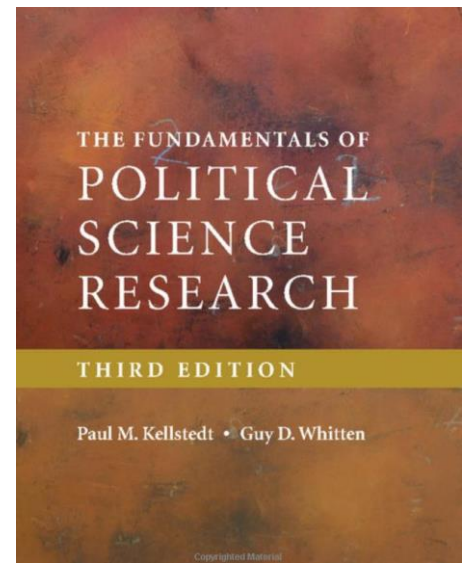
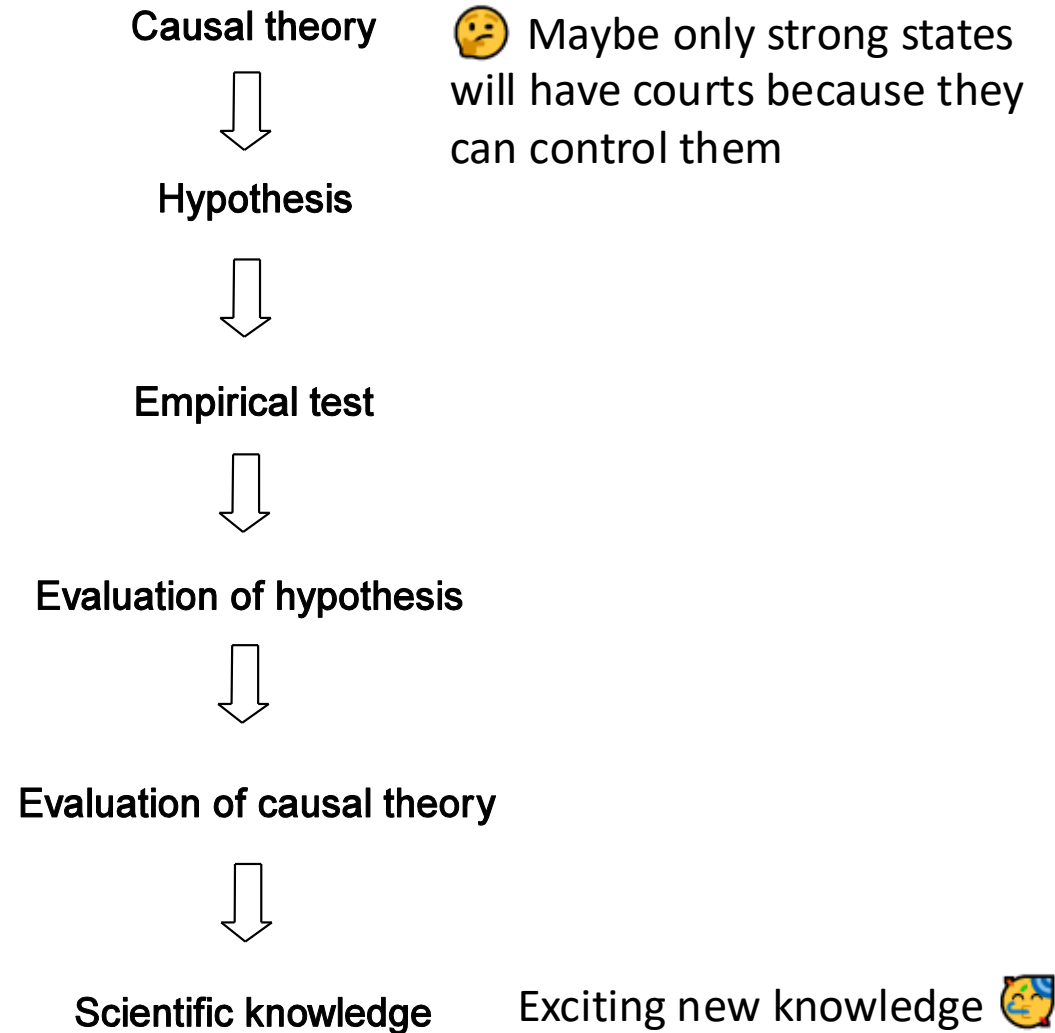
Political Science?

- Political science is about the scientific study of political phenomena
 - We are not news reporters: facts/data → causal story
 - Why vs. What should be
 - Learn how to analyze and interpret data (with a little math)
 - Tell people something new and change people's minds with scientific evidence
 - Podcast: Scope conditions

The road to scientific knowledge

? First: Think of an interesting question!

e.g., Why do dictators allow courts to exist? Won't they be afraid of independent courts disobeying/challenging the ruler's mandate?

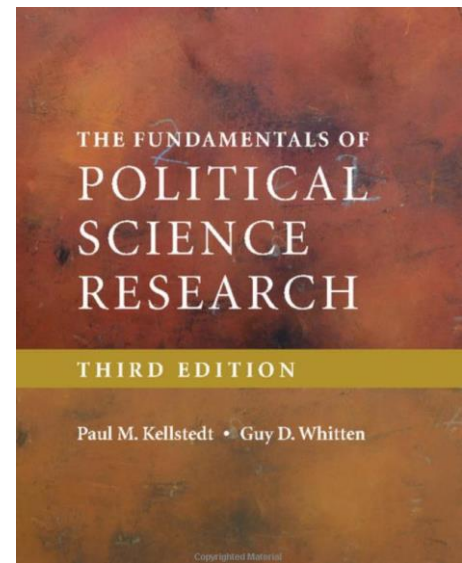
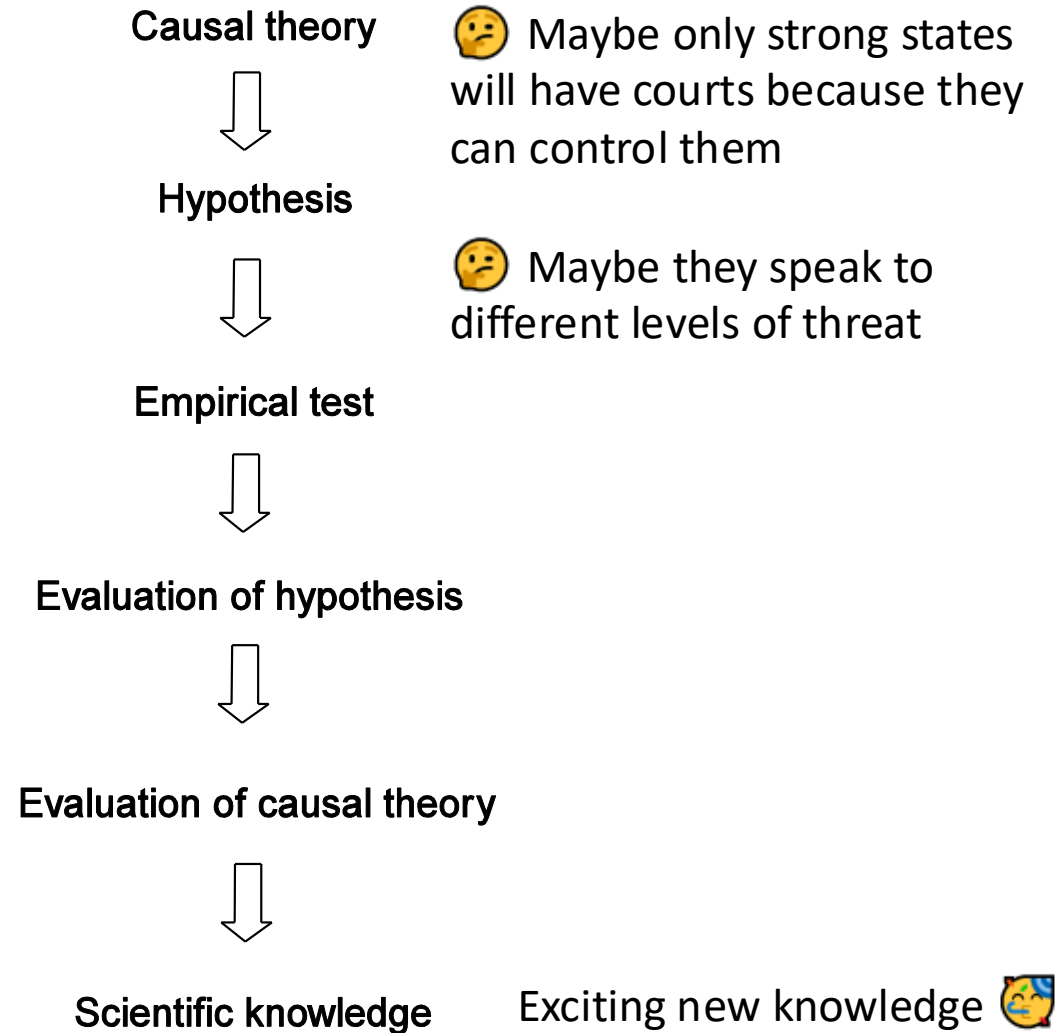


The road to scientific knowledge

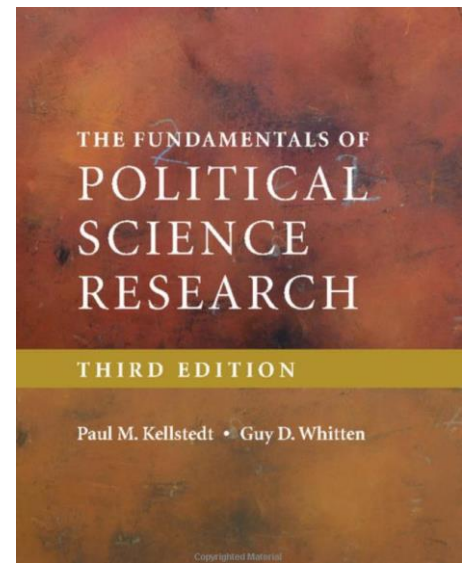
? First: Think of an interesting question!

e.g., Why do dictators allow courts to exist? Won't they be afraid of independent courts disobeying/challenging the ruler's mandate?

e.g., In controlling minorities, why do states sometimes choose mass killings while other times use assimilation?



Thinking about the World in Terms of Variables and Causal Explanations



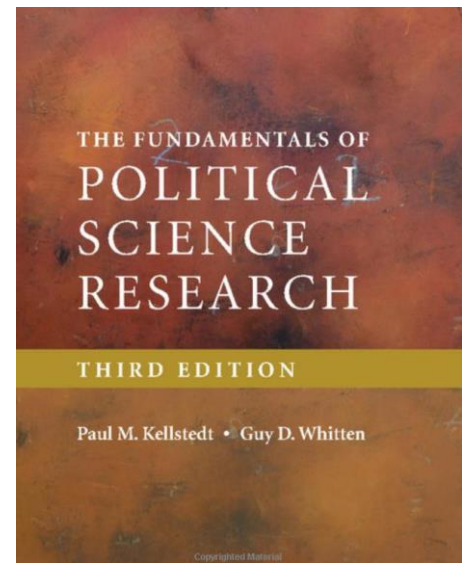
- From concepts to variables
- variable label and variable values
- independent variable → dependent variable
- Try to come up with your own causal statement in terms of an independent and dependent variable; try filling in the following blanks with some political variables. **Thoughts?**

_____ *causes* _____

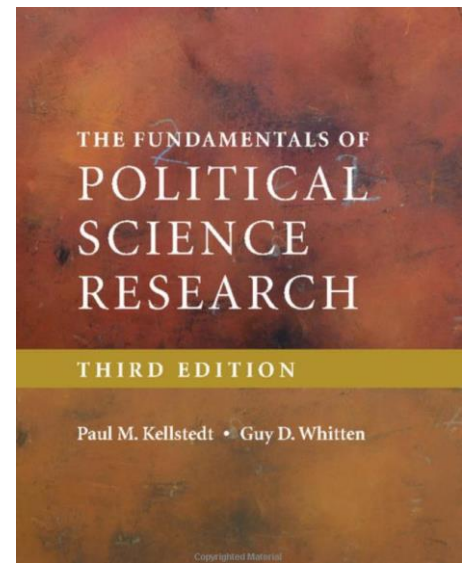
Thinking about the World in Terms of Variables and Causal Explanations

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Strong states *maintain* dependent judiciaries



Thinking about the World in Terms of Variables and Causal Explanations



- Sometimes it's easier to phrase causal propositions more specifically in terms of the values of the variables that you have in mind.

- For instance,

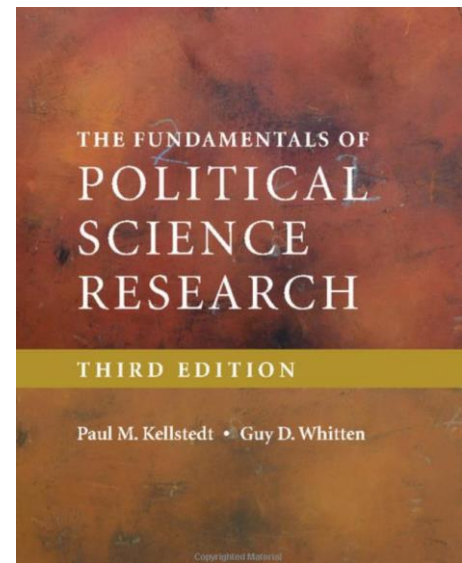
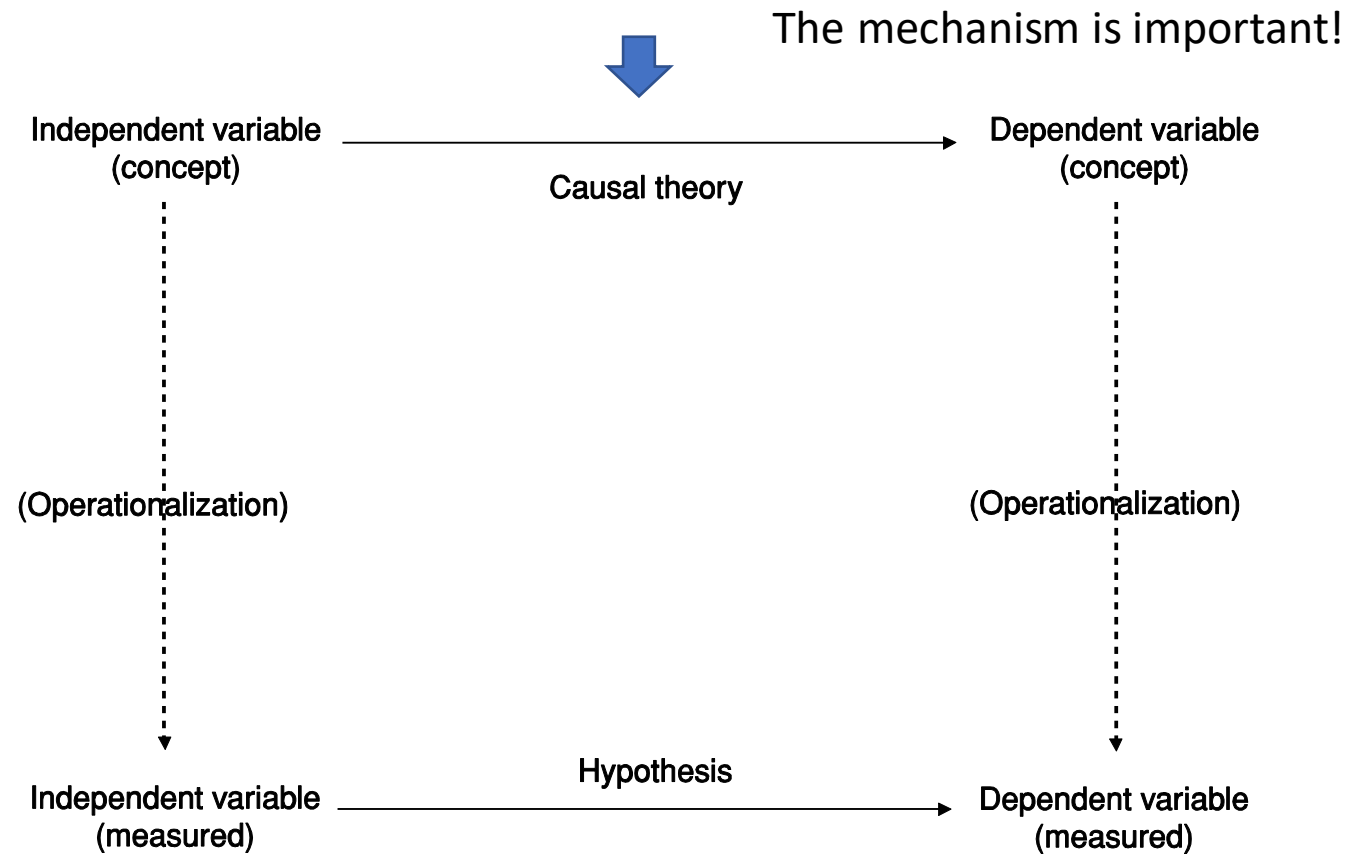
higher _____ causes lower _____

💡 A similar linear relationship

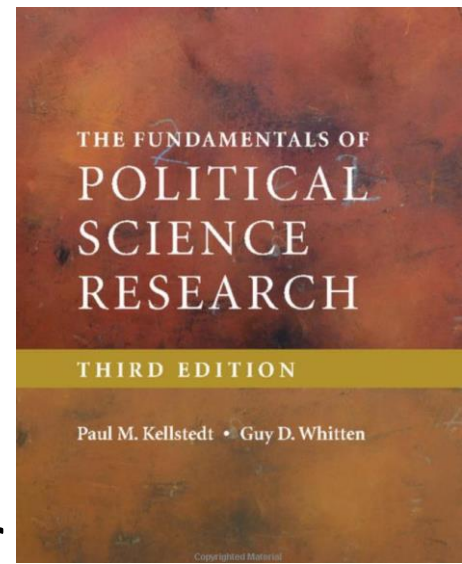
- or

higher _____ causes higher _____

From theory to hypothesis



Models of Politics



- When we think about the phenomena that we want to better understand as dependent variables and develop theories about the independent variables that causally influence them, we are constructing theoretical models.
- How do we know whether a model is useful?
 - The answer depends on what we are trying to do with the model
 - Useful simplification of our complex world

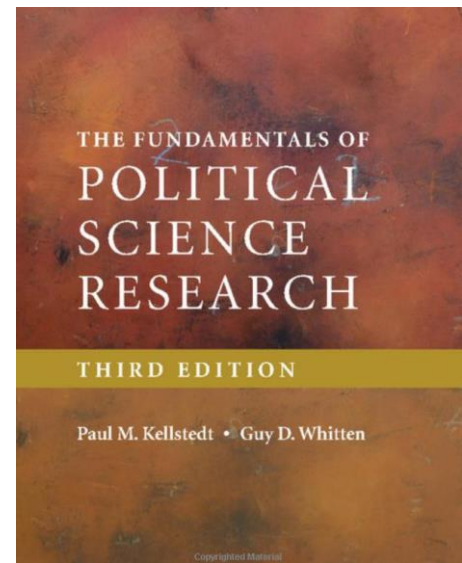
Rules of the Road to Scientific Knowledge about Politics

- Focus on Causality and Theory
- Don't Let Data Alone Drive Your Theories
 - E.g. ice cream and murder rate
- Consider Only Empirical Evidence
- Avoid Normative Statements
- Pursue Both Generality and Parsimony
 - Find causal relationship but also locate generalizable implications

Types of Political Science Research Methods (U.S.)

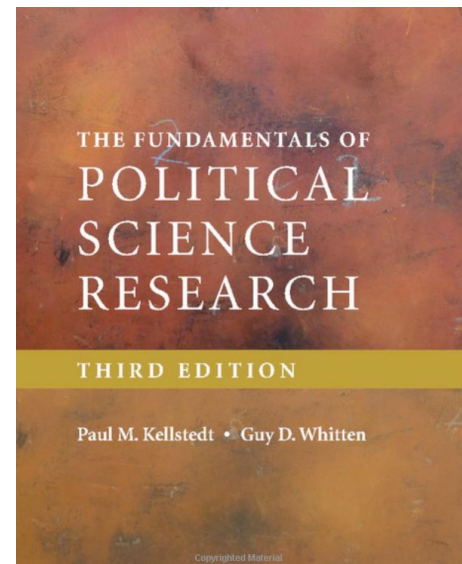
 : Things I have explored. Ideally, you'll do at least more than one.

- 1. Hypothesis testing (70%): Explain/test a relationship
 - Observational , experimental studies  
- 2. Game theory (10%): [Formal models](#), [computational formal theory](#)
- 3. Qualitative small-n theory-building analysis (5%): [Comparative case studies](#), interviews, ethnography etc.
- 4. Measurement in a substantive topic (5%): [Item-response theory](#),  
[ideal points](#), [latent-variable models](#)  etc.
- 5. Methods (5%): [Statistical methods innovation](#)  , tech transfer 
- 6. Descriptive, discovery, exploratory analysis (5%): [text-as-data](#), [image/audio-as data](#), network analysis , LLM , machine learning, [big data analysis](#) 



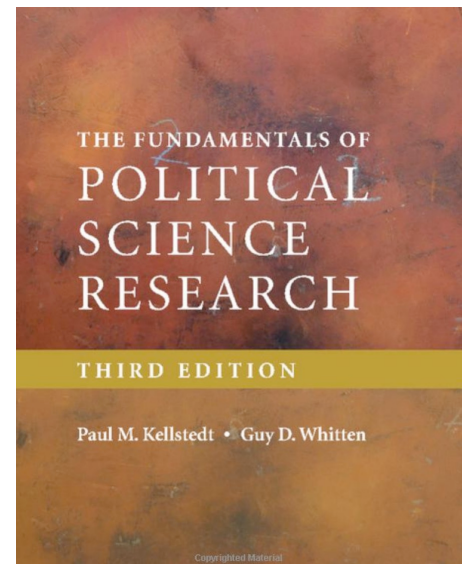
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Chapter 2: The Art of Theory Building



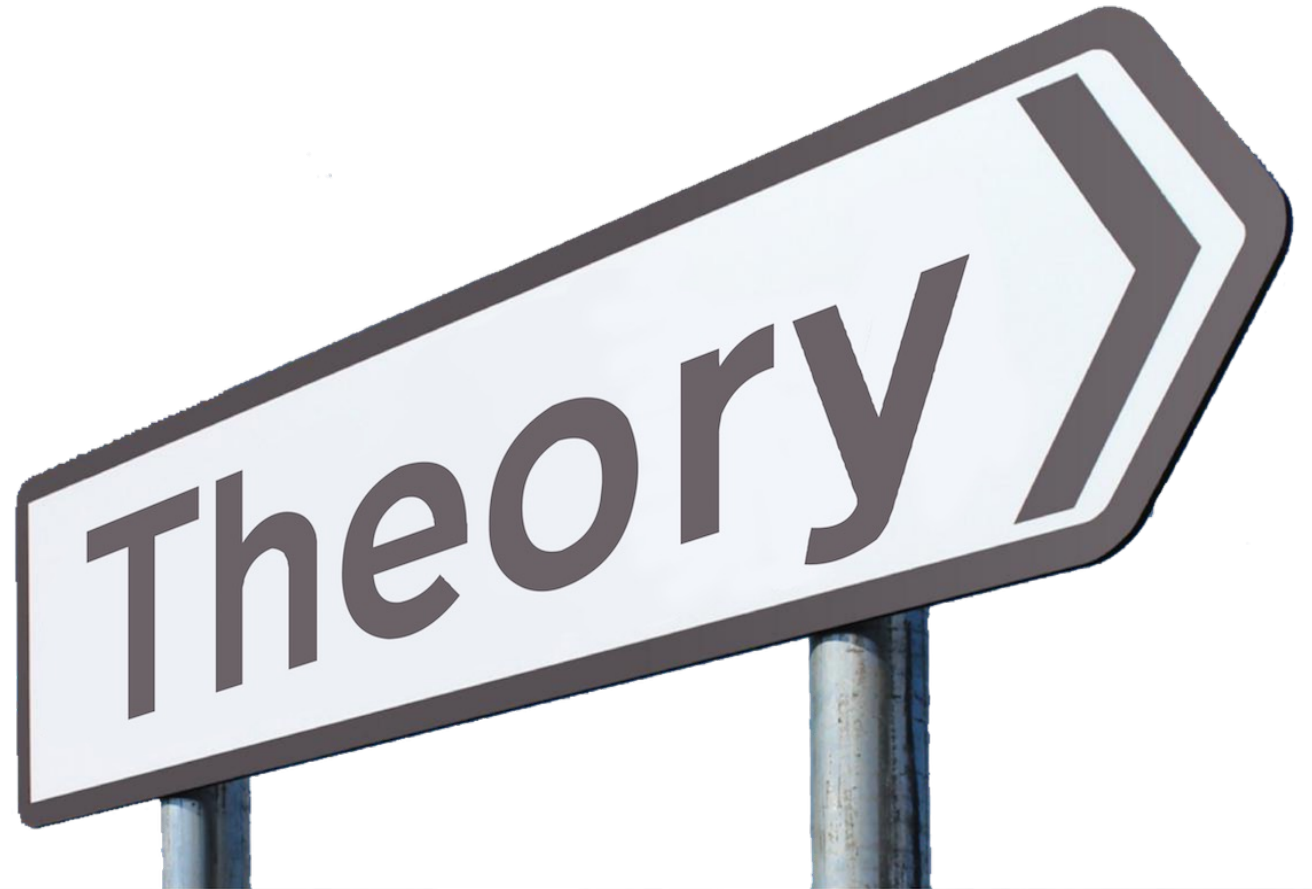
Chapter 2 Outline

- Theory-Building Strategies
- Interesting Research Questions
- Identifying Interesting Variation: Time and Space
- Using the Literature Without Getting Buried in It



Good Theory- Building Strategies

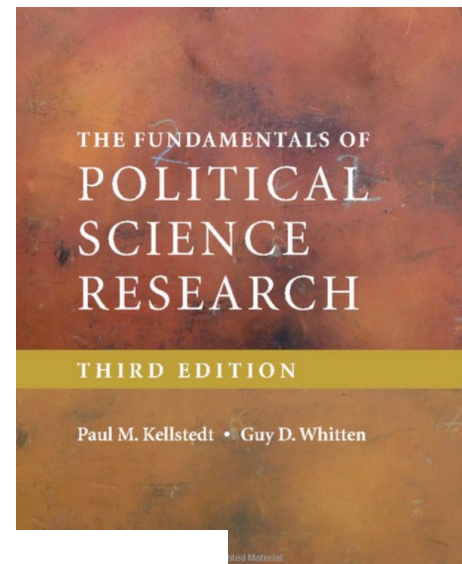
- A good theory is one that **changes** the way that we think
- This is a high bar, so a logical question to ask at this point is
 - “How do I come up with such a theory?”
- No easy answer, but there is a good set of strategies to follow



Promising Theories Offer Answers to Interesting Research Questions

- Good theory contains two key components:
 1. Research Question/Puzzle
 2. Answer/Solution
- They need to be *interesting*
 - Important: People want to understand
 - Innovative/novel: Has never been asked/answered properly (RQ, data, method, theory)
- Read, read, and read!

RQs of the 10 most cited papers in the *American Political Science Review*, 1945-2005

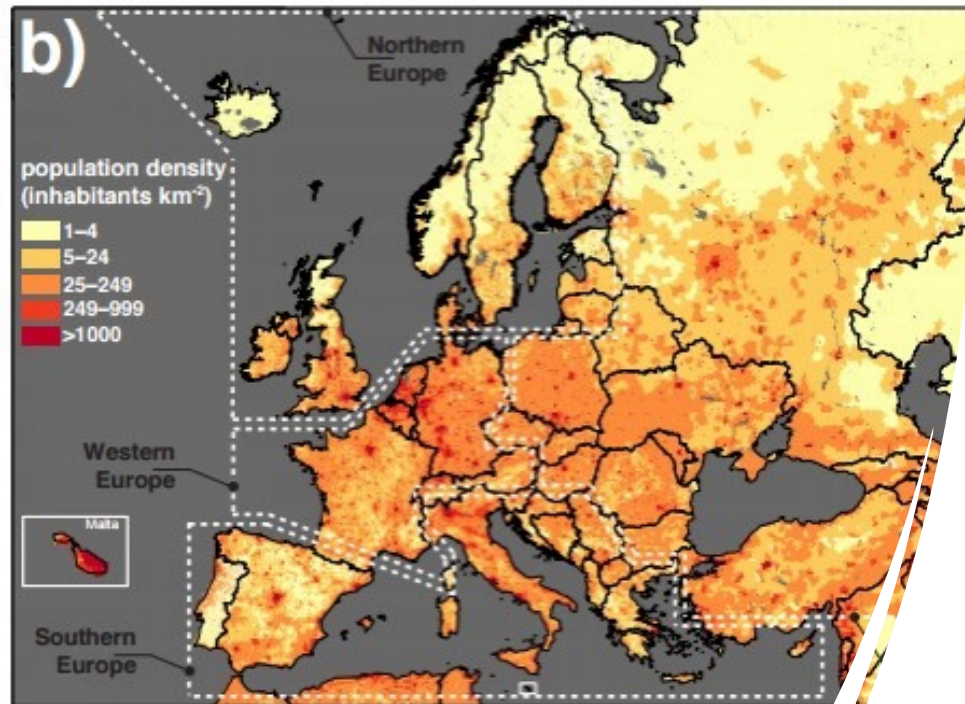
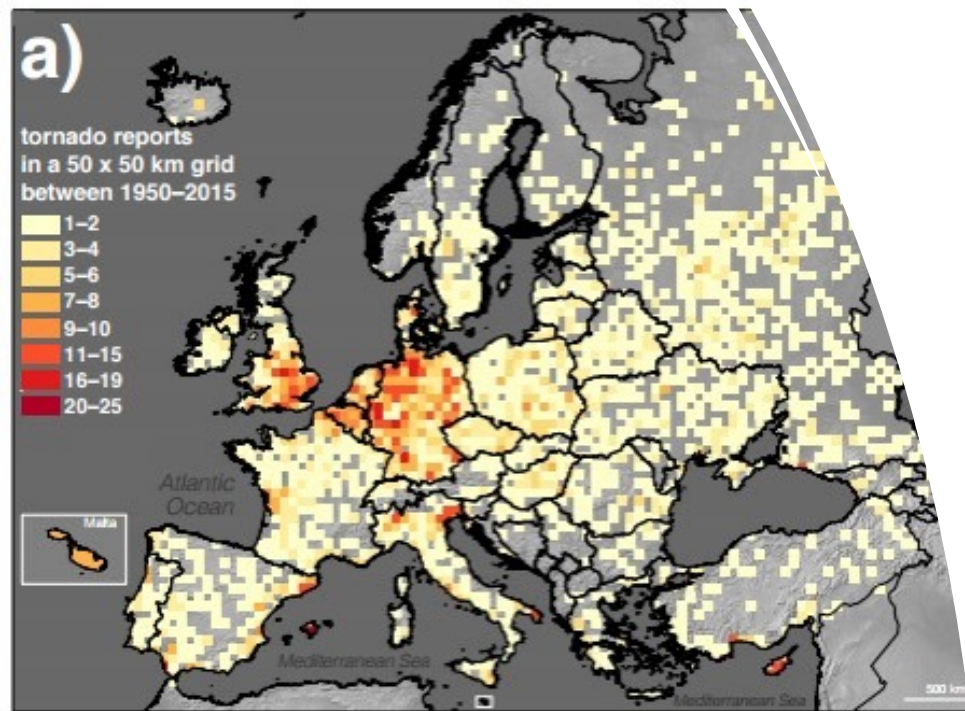


Article

- 1) Bachrach & Baratz 1962
- 2) Hibbs 1977
- 3) Walker 1969
- 4) Kramer 1971
- 5) Miller & Stokes 1963
- 6) March & Olsen 1984
- 7) Lipset 1959
- 8) Beck & Katz 1995
- 9) Cameron 1978
- 10) Deutsch 1961

Research Question

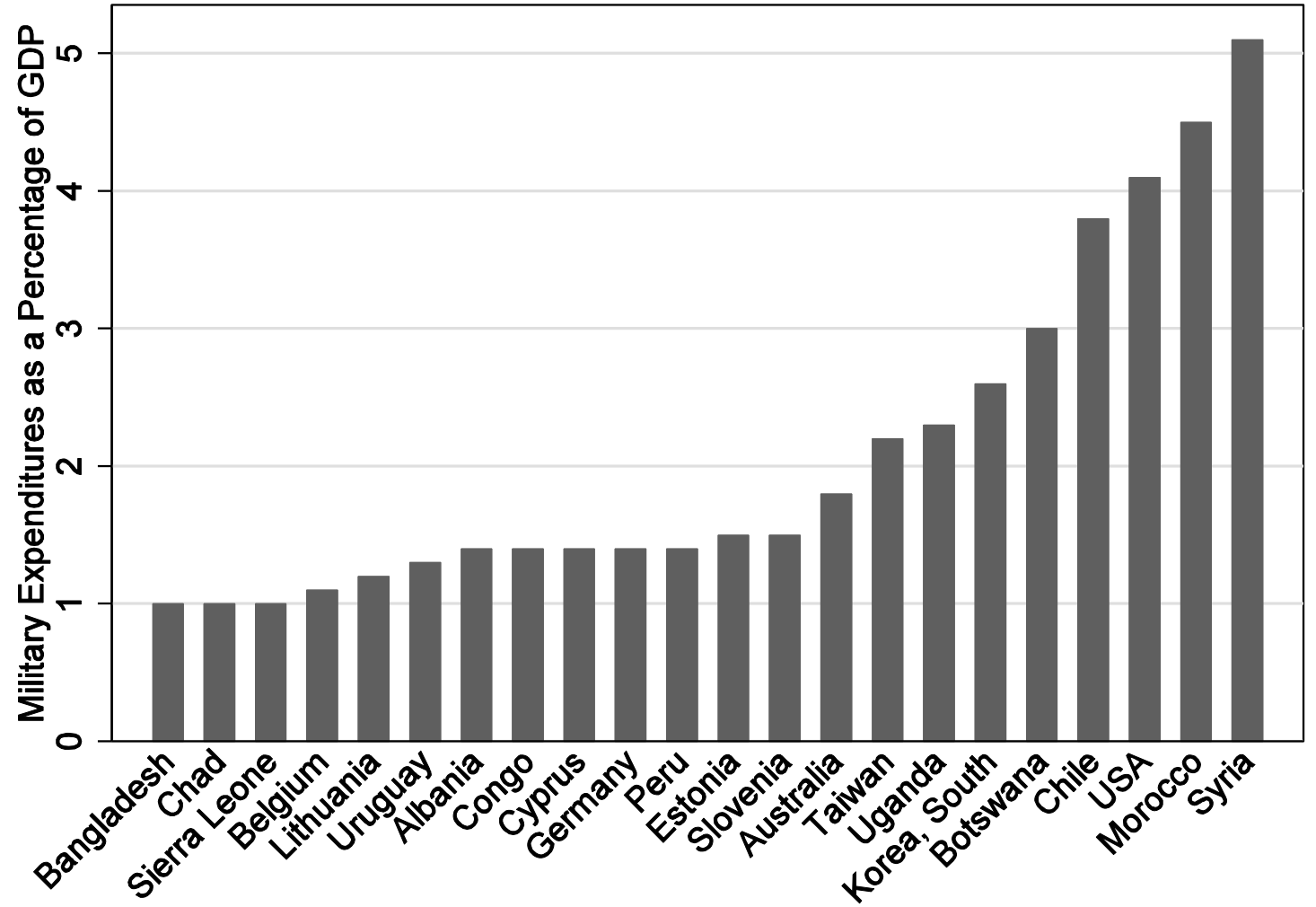
- How is political power created?
- How do the interests of their core supporters effect governments' economic policies?
- How do innovations in governance spread across US states?
- How do economic conditions impact US national elections?
- How do constituent attitudes influence the votes of US representatives?
- How do institutions shape politics?
- What are the necessary conditions for stable democratic politics?
- What models should researchers use when they have pooled time series data?
- Why has the government share of economic activity increased in some nations?
- How does social mobilization shape politics in developing nations?



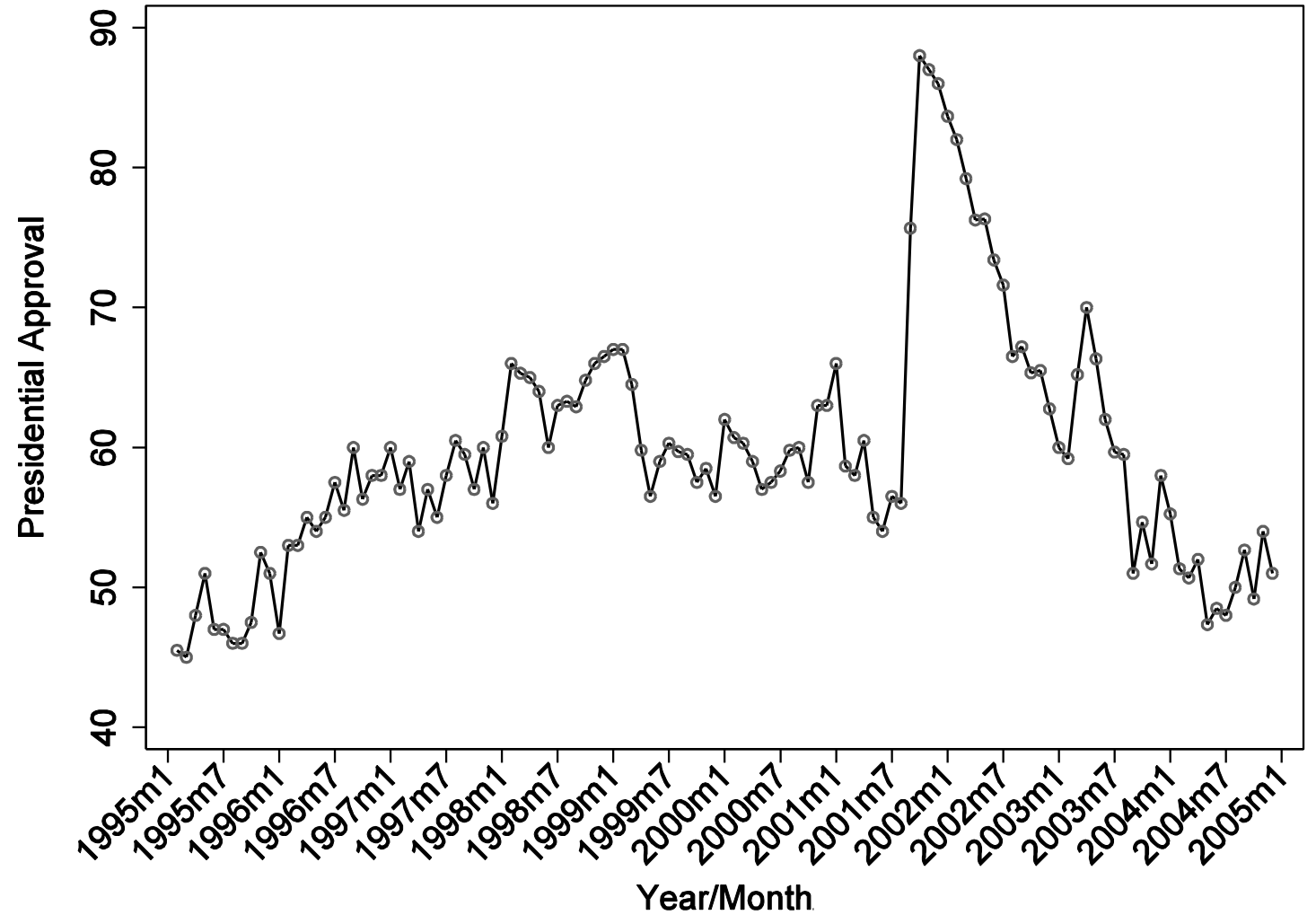
Identifying Interesting Variation

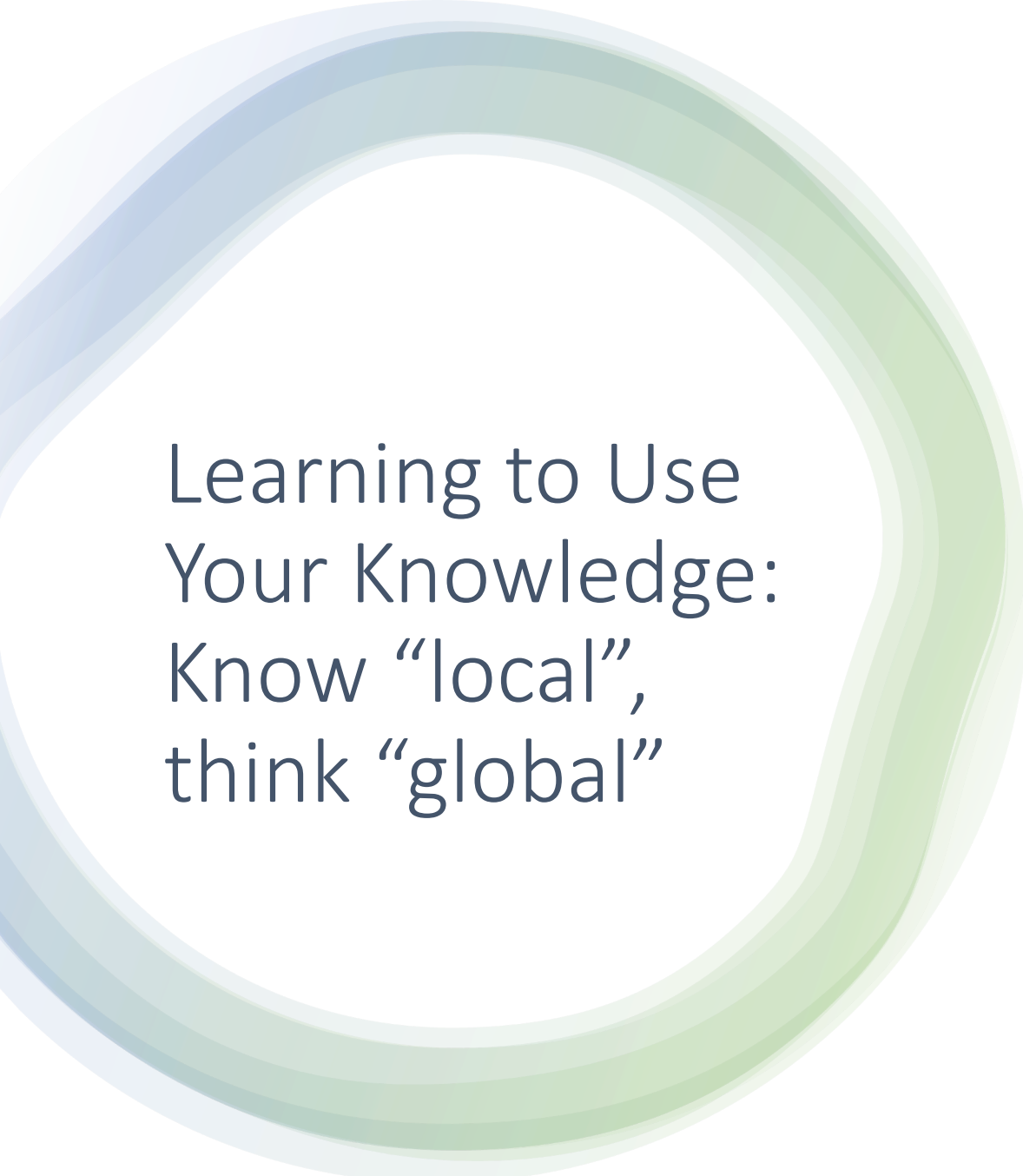
- Because theories are designed to explain variation in the dependent variable, where are some variation of interest?
- Time and space
 - The time dimension identifies the point or points in time at which we would like to measure our variable.
 - The spatial dimension identifies the physical units that we want to measure.
- Study one dimension while holding the other constant

Military spending in 2005



Presidential approval, 1995--2005





Learning to Use
Your Knowledge:
Know “local”,
think “global”

- Moving from a specific event to more general phenomena
 - Huh?

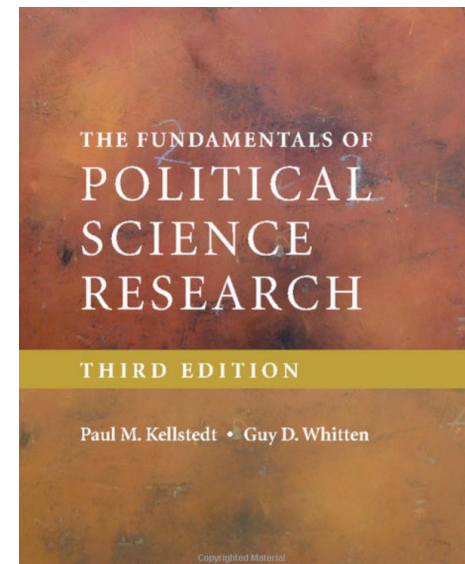
Learning to Use Your Knowledge: Know “local”, think “global”

- Moving from a specific event to more general theories
 - Nice to know cases and some specifics, but need to think more broadly
 - Can you drop the proper nouns?
 - E.g. Russia or China → Authoritarian regimes
 - E.g. ISIS or Al-Qaeda → Rebel groups or terrorist organizations



Three Strategies toward Developing an Original Theory

- Oh, I or others didn't know about it before
- 1. A new Y (and an existing X)
- 2. An existing Y and a new X
- 3. New research design: A new Z which modifies an established $X \rightarrow Y$



Literature Helps but don't get buried in it

- Identifying the important work on a subject (citation counts)
- Oh no! Someone else has already done what I was planning to do. What do I do now?
- Critically examine previous research
 - What (if any) *other causes* of the dependent variable did the previous researchers miss?
 - Can their theory be applied *elsewhere*? If not, your chance!
 - If we believe their findings, are there further implications?
 - How might this theory work at different levels of aggregation (micro $\leftrightarrow$ macro)?

