

# POLS 318: Theories of IR

## Lecture 2 (08.25.2020): Basics of Theory Construction

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# Overview

- 1 Quick review
- 2 Introduction
- 3 Theory - the Basics
- 4 Judging Theories
- 5 Extra Material

# Review

WHAT WE COVERED LAST MEETING?

- Syllabus, course procedures.
- Task 1.

Questions?? Email me!

# Why Theory?

## The puzzle: why do we need theories?

- Understand past/current events:
  - ① Why did World war I began?
  - ② What led to the establishment of NATO?
  - ③ Why did the Soviets invade Afghanistan?
- Facts, historical events and their limitations.
- Theory vs. History.
- Theory → past, present and future.

# "Everybody uses Theory"



# Why Theory?

## IRAN NUCLEAR PROGRAM



# Iran Nuclear Program

## Main Question: Nuclear technology - Military or Civilian?

### FACTS

- Nuclear facilities (some secret).
- Thousands of centrifuges, enriching uranium.
- 'Fatwa' against nuclear weapons.

### EXPLANATIONS

- Power - regional deterrent.
- Religion - martyrs.
- Supplant energy shortages.
- Scientific rules for studying reality.

# Scientific Theories

## Definitions

- Simplified representation of reality.
- Explain empirical phenomenon.
- Conditions for preventive war? Encourage economic growth?

## Beyond the social context

- Theory in natural science.
- Objective - deductive theory (general).



# Scientific Theory

## COMPONENTS

- 1 Assumptions.
- 2 Logic.
- 3 Predictions.

## Assumptions

- The building blocks of theory.
- Simplifying conditions.
- Assumptions → Hypotheses.
- Selecting assumptions - why critical?

# Theories - a single explanation?

## *One event - multiple theories*

- **Neorealism:** unitary actor assumption.
- **Bureaucratic theory:** internal dynamics between actors and state actions.

## **Military Spending**

- Security agencies manipulate threats.
- 'Required' spending on security.
- The importance of selecting assumptions.

# Testing theories

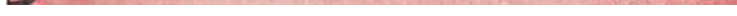
## Elements for testing

- Variables - multiple values.
- Constants - a single value.
- Dependent variable - what we explain.
- Independent variables - explain variation in DV.

## Linking Variables

- Causal relationships between DV and IVs.
- Hypotheses (propositions): IVs  $\rightarrow$  DV.
- Hypothesis - predict DV value (past and future).

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# Arms Races and War

## Main DV:

- Likelihood of a country enters a war

## Common IVs:

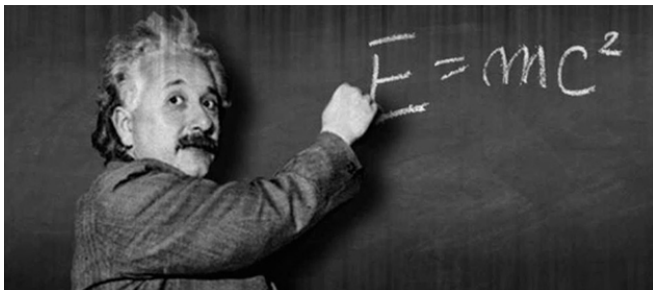
- Magnitude of Threat: extent of arms expenditures.
- Guns vs. Butter ratio.

## Research Proposition:

- Increase in threat & 'Guns' → War is more likely.
- Richardson (1949).

# Types of Theories

Also had a theory...



- *Middle range* theories - social science is hard!
- The principle of *Parsimony*.



# How to judge theories?

## EVALUATION CRITERIA

- ① Evidence: support or contradict our predictions.
- ② Logical consistency: theory and assumptions.
- ③ Outperform alternative explanations or not.

## **Evidence: Territory and War**

- Prediction: territorial disputes → war.
- Evidence: wars are more likely when issue is territory.
- Data → theory.



# How to judge theories?

## Logical Consistency

- Clear description: how factors lead to outcomes.
- Assumptions cannot contradict - harms prediction.
- Example: Realism
  - Power as main factor.
  - System has *Status-Quo* states?
- Challenge of logical consistency in social sciences.

## Falsifiability

- Conditions in which predictions are *Wrong*.
- Falsifiable theory → scientific.
- Religious beliefs.
- Terror groups lethality: cooperation or competition.

# How to judge theories?

## Competing explanations

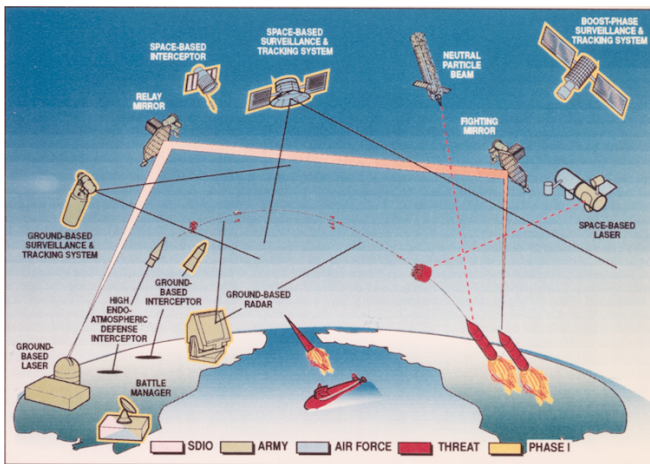
- *The first principle of wind walking.*
- Not so easy.
- Switching costs and likelihood of accepting change.
- IR → Predictable.

## Example: Counter-terrorism

- Prevent radicalization by persuasion.
- Less effective - requires change of belief.

# How to judge theories?

## Wing walking among Policymakers: Reagan SDI ('Star Wars')



# How to test theories?

- Empirical assessment: case studies.
- Vietnam war (proxy wars, cold war, insurgency, etc.)
- Inductive method: generalize a single case.
- More cases (evidence) → more confidence in theory.

## Challenges of case selection

- Arms race and wars: World war 1&2 as cases.
- Contradictory evidence.
- **Selection bias:**
  - Use only supportive evidence.
  - Ignore refuting data.
  - No variation in DV.

# Recommended readings

More studies on theory construction:

- ① Kellstedt, P. M., and Whitten, G. D. (2018). *The fundamentals of political science research*. Cambridge University Press.
- ② Pollock, Philip H. (2016). *The Essentials of Political Analysis (5th Edition)*. Washington DC: CQ Press.