

# ps389/cics301: Globalization & the Modern Political Economy

## Miscellaneous Notes re: *Positive Social Science*

### I. Standards for Theory (from Olson, *The Rise & Decline of Nations*)

- A. No *Ad Hocery*  $\Rightarrow$  must insist that any explanation fits some data or observations beyond that/those from which it derived.
  - 1. Case-by-case identification of some unique characteristic of nation or nation-time is insufficient explanation because...
    - a. ...cannot test against broad enough array evidence or experience to evaluate the theory;
    - b. ...almost always possible to construct an ‘irrefutable explanation’ if one completely free to draw from any of an infinite number of unique characteristics of any given country-time.
  - 2. Sum: “unless the differences invoked also apply to other cases, we are making inferences from a sample of 1” (p. 11) [& can draw  $\infty$  lines relating XtoY thru 1 pt]
- B. High Power/Parsimony Ratio: the goal of any theory is to explain as much as possible with as little as possible.

1. Given some amount of explanatory power, more parsimony preferred.
  2. Given some amount of parsimony, more explanatory power preferred.
  3. Given that optimal on both dimensions, becomes largely a matter of taste, or of how theory to be used, how much explan. pow. willing cede for greater parsimony or *v.v.*
- C. Consilience: theory explains quite diverse facts (e.g., Darwin's *Evolution*).
1. [A *desideratum* of good positive theory, not a requirement]
  2. [Bolsters confidence in general validity of theory.]
- D. Theory must explain some cases beyond that/those from which derived.
- E. Theory must specify what sorts of observations would decrease confidence and what sorts of observations would increase confidence that it is correct [useful].
1.  $\exists$  no expectation that any one theory should explain everything.
    - a. In fact, highly doubtful any one or even any combination of theories could.
    - b. Not necessary claim that theory stresses only, the most important, or even a particularly important aspect of systematic relations. Just that a systematic.
  2. Our predictive statements are ***probabilistic***: we state conditions that make some outcome more or less likely to occur, *ceteris paribus*.
    - a.  $\Rightarrow$  there is no such thing as a “critical case”.

b. ⇒ all predictive statements include *ceteris paribus* (all-else =) proviso.

## II. ***A Positive Epistemology: Building & Empirically Evaluating Positive Theory***

### A. Viewing the Socio-Political-Economic World Positively:

1. *Systematic & Stochastic Features*: We think of world as characterized by more-or-less systematic features & more or less random (or *stochastic*) features.

a. We must think there is something systematic, else:

(1) Why lament bad policies? If simply random, nothing to be done about them. Unless something systematic about whatever *causes* policies, we would have no blame to lay. *E.g.*, Why hate or love congress as ‘always the same’ if policies strictly random? Must be something systematic.

(2) Socio-political-economic reality generally, & political economy more specifically, not entirely random (see figures below & above).

(a) If right-wing govt succeeds left-wing, would taxes, pub-spend, infl., UE, ineq. rise or fall, *ceteris paribus*?

(b) Comparing dev'd ctry with under-dev'd, which faces greater threat of violent social unrest (*cet. par.*)?

(c) Comparing dev'd ctry with under-dev'd, which more likely to have dem gov't or greater civ lib's (*cet. par.*)?

b. No Proper Nouns: One trick to beginning to see systematic aspects of social reality is to rid exposition of arguments of proper nouns.

- (1) Not Jesse Helms caters to social conservatives & tobacco industry, but...Senators (representatives, politicians) respond to interests of constituencies that (elect, support) them.
  - (2) Former may seem to explain, but notice that it's no help to say what happens when Helms died/replaced. Latter helps...
  - (3) ...and incidentally opens new lines for inquiry: why does one constituency win over its opponents? Shear numbers? How does Helms ever get his way if other Sen's do not have similar constituencies? If he doesn't get his way, how re-elected?
- c. Another trick is to posit some claim, some prediction:
- (1) A positive claim: If more/less of this moving part of some contexts, then we will have more/less of such-and-such outcome. Often helpful to think in degrees not in dichotomies like this.
  - (2) Then, of course, must ask why you think it so—what is it about the moving parts that make it happen that way?
  - (3) **In social science, the only motive forces are people**, so ultimately you must here be asking why does more or less of this condition induce certain important actors to make certain decisions and not others or to do more of something or less of something else.  
In other words:

## 2. Steps of building a positive social-scientific theory:

- a. Identify the important actors in some context of interest.
  - (1) E.g., Tufte: economic policymaking in democracies ⇒ incumbent (elected) policymakers & voters.
- b. Determine those actors' interests and options.
  - (1) E.g., Tufte: voters—support the incumbent or do not; value recent economic

performance. Incumbents—seek reelection, have various policy tools that could be used to shape voters' recent economic performance (or perceptions thereof).

- c. Determine the relation between the actors' actions, their chosen options, and outcomes. Have actors choose actions according to some logical decision rule.
  - (1) E.g., Tufte explains how various policies affect voters' (perceptions) of recent economic performance and how those perceptions shape their votes.
  - (2) E.g., Tufte's actors apply rational choice (i.e., cost-benefit analysis of options, choose one with highest (lowest) perceived net benefit (cost)). Here: Incumbents choose policies that maximize their probabilities of reelection and voters reward / punish the delivery of benefits / costs.
- d. Derive the conclusions:
  - (1) E.g., Tufte: there is an electoral-calendar periodicity and timing to economic policymaking in democracies (because incumbent politicians *electioneer* &/because voters reward that).

### 3. Systematic Features of Social World amount to a *set of (probabilistic) relationships between variables*:

- a. That is, we think of some feature(s) X that make Y more or less *likely* to occur or *tend to*  $\uparrow$  or  $\downarrow$  amount of Y that occurs.
  - (1) Examples of hypothesized such relationships
    - (a) Comparative-Politics Examples:
      - i) Huntington: Rapid socio-econ change produces political instability, coups, riots, & rebellions in under-dev'd ctrys  $\Rightarrow$  Probability of Social Strife = an increasing function of rate of change in society & economy + other stuff
      - ii) Right-of-center govts run lower deficits than left-of-cntr govts do  $\Rightarrow$  Budget Deficit =  $f(\text{partisanship}, \epsilon)$

(b) American-Politics Examples:

- i) Divided government responds slowly if at all to shocks  $\Rightarrow$  Policy Response-Rate =  $f(\text{Divided government}, \cdot)$
- ii) Voters “rally around the flag”, supporting president when s/he’s involved in international events  $\Rightarrow$  Presidential Approval Rating = some function of how involved is president in international events + noise & other stuff

(c) International-Relations Examples:

- i) Ken Waltz: number of great powers affects likelihood or amount of systemic war  $\Rightarrow$  Amount of War = some function of number of great powers + some other stuff (stochastic &/or other factors not considered at moment)
- ii) Paul Huth: number of nuclear weapons and latent threat of nuclear use by defender will not increase probability of extended deterrence success when potential attacker is not a nuclear power  $\Rightarrow$  Likelihood Extended Deterrence Success  $\neq$  function nuclear power of defender if potential attacker also nuclear

b. Some Important Notes:

c. Statements are Probabilistic: speak of likelihoods of events, tendencies, fertile ground for Y to happen being created, *etc.*

- (1) *E.g.*, generally less interested in the particular event that triggered some specific riot, more interested in environmental features which make riots more or less likely (systematic)
- (2) *E.g.*, not generally interested in whether some aspect of Kennedy’s personality determined his choices during Cuban missile crisis (specific, deterministic), though may be interested in particular characteristics of pres’s personalities may make them more/less likely to enact certain sorts policies (general, probabilistic)

d. Statements about Relationships: theories not so much about predicting *per se*, though that certainly part of their product, but rather more commonly about how

some X (set of X's) *relates* to Y (or not): “X increases” tends to make “Y up/down...”: i.e., statements of  $dY/dX$

e. Positive Theories are Simplifications:

- (1) **No** implicit claim that the X's highlighted = everything (or even necessarily most or very important thing) relevant to phenomenon, Y, being predicted. In other words, an implicit *ceteris paribus* (other things equal) statement accompanies any positive-theoretical statement.
- (2) **No** intention explain everything about Y. World partly random--unless believe *all* systematic--we not aiming to explain all of Y, but rather to grasp some systematic feature(s) of the social world.
- (3) **Not** looking for photographic completeness & detail; in fact, would not be particularly useful as *theory* if were. Theory summarizes.
  - (a) Indeed, if world partly random, then can explain too much: i.e., can seem explain, render systematic, what is actually random. Theory that does this generally very bad at “out-of-sample” explication.

## B. Conceptualization and Hypothesizing

1. Some simple strategies, or schematics, for constructing a positive argument:
  - a. Write  $Y = f(X_1, X_2, X_3, \dots, X_k, \epsilon)$  where  $X_1$  to  $X_k$  representing the systematic parts and  $\epsilon$  the random parts and any parts we are leaving out omitting.
    - (1) Then reason/logic or construct (formal) model to derive theoretically expected relations X to Y.
    - (2) E.g.,  $Y = \text{probability}(\text{deterrence success})$ . X defender relative military might. Arg:  $\uparrow X \Rightarrow \uparrow Y$ .

- b. Draw (causal) Arrow Diagrams:  $X \rightarrow Z \rightarrow Y$
- c. Tables and Games:

Explanator 1 ↓ \ Factor 2 →	$X_2 = \text{Ctrl Bank Indep} = \text{low}$	$X_2 = \text{Ctrl Bank Indep} = \text{high}$
$X_1 = \text{Coord Wage Barg} = \text{low}$	$(\text{low}, \text{low}) \Rightarrow ?$ [Moderate Unemp?]	$(\text{low}, \text{high}) \Rightarrow ?$ [High Unemp?]
$X_1 = \text{Coord Wage Barg} = \text{high}$	$(\text{high}, \text{low}) \Rightarrow ?$ [Moderate Unemp?]	$(\text{high}, \text{high}) \Rightarrow ?$ [Low Unemp?]
Actor 1 ↓ \ Actor 2 →	$X_2 = \text{Capital Levy} = 0$	$X_2 = \text{Capital Levy} = 1$
$X_1 = \text{Invest} = 0$	$(0, 0) \Rightarrow ?$	$(0, 1) \Rightarrow ?$
$X_1 = \text{Disinvest} = 1$	$(1, 0) \Rightarrow ?$	$(1, 1) \Rightarrow ?$

2. Identify alternative hypotheses: Easiest & always relevant: predict Y positively related to X  $\Rightarrow$  counter hypothesis negatively or not related. More powerful to i.d. specific theoretical counter-predictions if can: predict military spending responds to econ conditions, Waltz predicts responds to systemic threat, Walt to perceived local threat. Determine what you would expect to see differently if each were true.

### C. Operationalization and Measurement

#### 1. Operationalization:

- a. Theories usually constructed at fairly abstract level. Relating abstract theoretical concepts (e.g., Walt's 'perceived threat') to empirically observable counterparts = *operationalization*.
- b. Must be every bit as careful and theoretically minded here as in building theory.



When it comes time to evaluate evidence, “findings” will only inform about the theory to the degree measures match these theoretical abstractions.

2. Measurement: data collection stage. May involve primary sources, secondary sources, or pre-processed data-bases like CoW, NES, PWT, OECD, IMF, etc.
  - a. Everything that exists in the observable world can be measured and measurement implies quantitative measurement:
    - (1) At bare minimum on present/absent basis, or possibly informal index or ranking; either way...
    - (2) Inability to measure perfectly does *not* imply immeasurable; it’s a mistake to think that by not explicitly  ~~talking about~~  discussing measurement you have not measured because:
  - b. You cannot make any positive statements about the world without having made, explicitly or implicitly some measurement. (Given that logical truth, I find little persuasive arguments saying that we ought to leave it implicit.)
3. ~~This stage should not be slighted~~ Researchers should not slight this stage because: “Operationalization, measurement, and specification must be theoretically informed for empirical evaluation to be theoretically informing.”

#### D. Empirical Evaluation

1. Broad intuition of most empirical evaluation is to examine whether the comparative-historical evidence (only database we have) aligns more with

your theoretical expectations than was likely just by chance (or under some other alternative).

2. The two-by-two table:

	Y=0	Y=1
X=0	# of (0,0) cases	# of (0,1) cases
X=1	# of (1,0) cases	# of (1,1) cases

3. Regression analysis (see figures to come, and (much) more on this later)

E. Reconsidering Theory in Light of Evidence:

1. Once the “data have spoken,” in practice, scholars ~~go back~~ return to the beginning and reconsider: revise, amend, augment, delete & start anew.
2. Again: “Operationalization, measurement, and specification must be theoretically informed for empirical evaluation to be theoretically informing.”