

# Making Causal Critiques

## Day 1 - Deconstructing an Argument

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## Causal Critiques

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  - ▶ Does development lead to democracy?
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  - ▶ Did voters support President Trump because of jobs lost to immigration?

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Does development lead to democracy?	"No, democracy causes development"

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Do parliamentary systems last longer than presidential ones?	"No, Parliamentary systems last longer because they are in Europe, not because they are parliamentary"
Does development lead to democracy?	"No, democracy causes development"
Does democracy prevent war?	"Of course not, India and Pakistan were democracies and had a war in 1999"

## Causal Critiques

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Do parliamentary systems last longer than presidential ones?	"No, Parliamentary systems last longer because they are in Europe, not because they are parliamentary"
Does development lead to democracy?	"No, democracy causes development"
Does democracy prevent war?	"Of course not, India and Pakistan were democracies and had a war in 1999"
Did voters support President Trump because of jobs lost to immigration?	"Obviously not, jobs were lost to technological change"

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  - ▶ A critique of a policy
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  - ▶ Advice to a friend
  - ▶ A worry about your *own* research paper



# What makes an Argument Convincing?

- ▶ Explanation requires:
  1. Theory
  2. Evidence

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- ▶ No! We do not know if the laptop, the charger, the adapter or the socket is the problem. We do not have a *theory* to support our solution

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- ▶ No! We do not know if the laptop, the charger, the adapter or the socket is the problem. We do not have a *theory* to support our solution
- ▶ Next time the laptop fails to charge, our wiggling might not be enough and we won't know how to fix it

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  - ▶ Note we cannot *reject* the theory - it may be that both sockets are broken
- ▶ We can design other tests to check the laptop, charger, adapter etc.

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- ▶ We need to design tests that *distinguish between* specific theories

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  - ▶ The same evidence can be consistent with many possible mechanisms
  - ▶ We need a chain of 'local causality' (Elster 1983)
- ▶ Explanation requires evidence that supports a *specific* theory
  - ▶ And rejects other theories

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  4. **Doubly Decisive Test:** Can confirm a hypothesis and reject all other hypotheses

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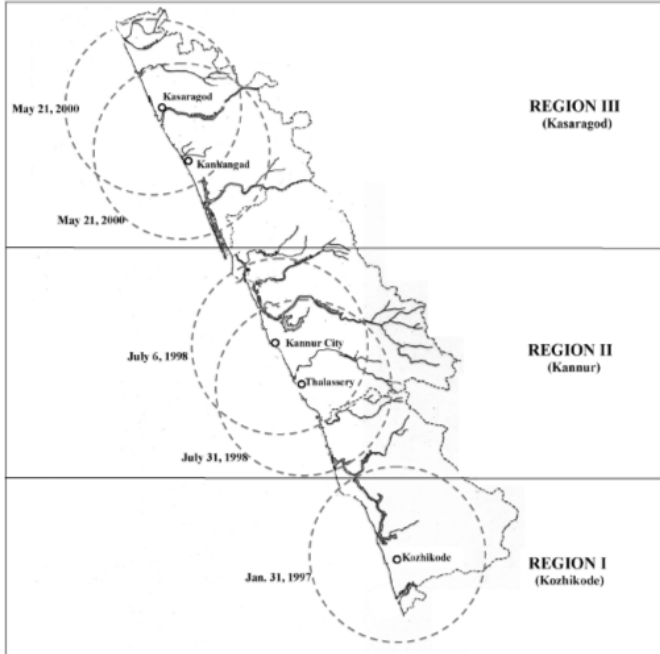
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  4. **Doubly Decisive Test:** If we test the charger with an entirely new socket and laptop that we have checked work

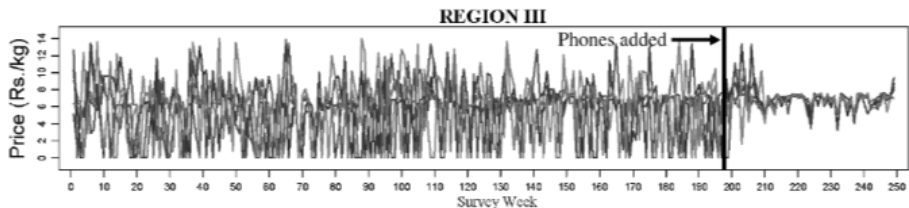
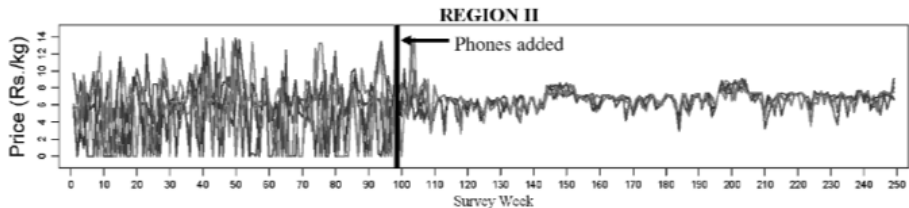
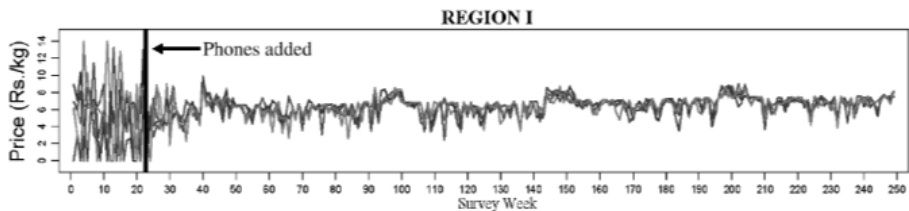
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- ▶ What caused the reduction in price variation in Kerala's fishing industry?
- ▶ **Hypothesis:** The introduction of mobile phone service
- ▶ **Theory:** Mobile phones allowed people to quickly share the price of fish in different villages, so fishermen got the best prices more consistently
  - ▶ Jensen et al (2007)
  - ▶ A 'smoking gun' test





**FIGURE II**  
 Spread of Mobile Phone Coverage in Kasaragod, Kannur,  
 and Kozhikode Districts



**FIGURE IV**  
Prices and Mobile Phone Service in Kerala

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  5. Political explanations in one place may not work in another



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- ▶ That means we need to treat causation as **probabilistic**
  - ▶ The presence of a cause does not guarantee an outcome
  - ▶ But raises the probability of an outcome
- ▶ For example, a left-wing party in government may not guarantee the passage of social welfare legislation
- ▶ But it can make it more likely

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2. **False dichotomy:** Restricting the possible options to only two
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3. **Circular reasoning:** The conclusions just restate the premises
  - Eg. "Abortion should be legal because women have the right to an abortion."



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  - ▶ Eg. "You moved into this apartment yesterday and now the cooker is broken. It must be your fault."
6. **Appeal to Authority:** Assuming the author is right because they are senior
  - ▶ Eg. Assuming that political science professors know what they are doing!

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7. **Fallacy of Composition:** Extending what is true of part to being true of the whole

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- 7. **Fallacy of Composition:** Extending what is true of part to being true of the whole

- ▶ Eg. "If someone stands up at a football match, they can see better. Therefore, if everyone stands up, they can all see better."

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- ▶ Some political science arguments are logically inconsistent:
  - ▶ Voters are rational - they choose the politician that is best for them. Therefore we always elect the best politicians.

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  - ▶ Summarize the paper in your own words

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  - ▶ What is the **scope** of the argument's application?

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  - ▶ **Answer/Causal argument** - "We argue that D increases Y"
  - ▶ **Scope of argument** - Does the argument apply only to democracies, Asian countries, since World War II, only to women?

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  - ▶ **Role of Variables** - Which is the outcome variable and which the explanatory? What controls are used?

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  - ▶ **Evidence** - What evidence does the methodology produce?

<b>Title:</b>			
<b>Authors:</b>		<b>Year:</b>	
<b>Research Question:</b>			
<b>Answer/Causal Argument:</b>			
<b>Scope of Argument</b> (in Time, Space, Demographics etc.):			
<b>Concept/Variable</b>	<b>Measure</b>	<b>Unit of Analysis</b>	<b>Role</b> (DV, XV, Control)
<b>Theory:</b>		<b>Methodology:</b>	
<b>Evidence:</b>		<input type="checkbox"/> Case Study, Process Tracing <input type="checkbox"/> Comparative Cases <input type="checkbox"/> Regression with Controls <input type="checkbox"/> Matching <input type="checkbox"/> Field Experiment <input type="checkbox"/> Lab/Survey Experiment <input type="checkbox"/> Natural Experiment <input type="checkbox"/> Instrumental Variable <input type="checkbox"/> Regression Discontinuity <input type="checkbox"/> Difference-in-Differences	

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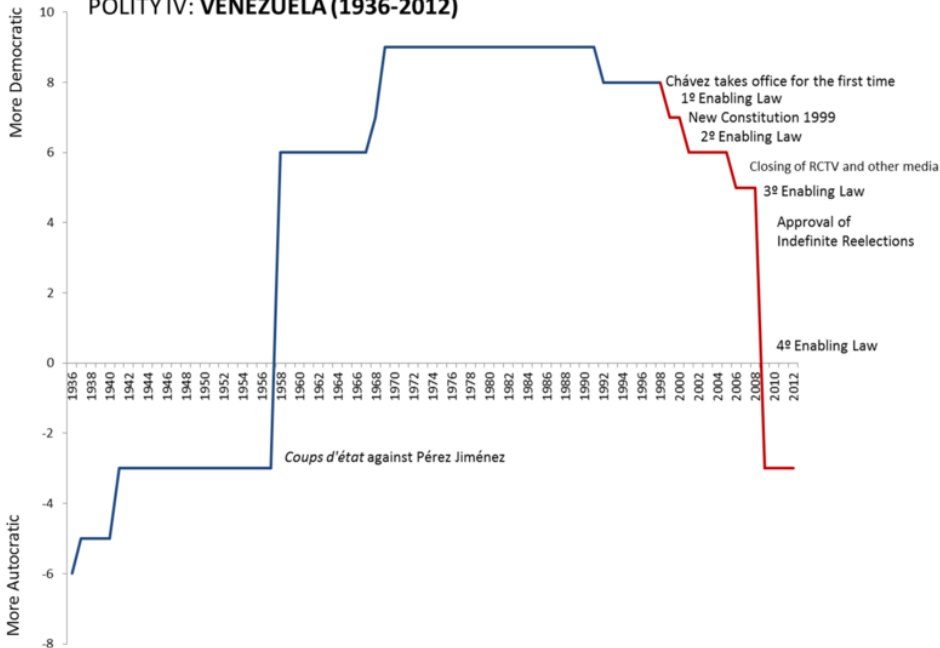
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# POLITY IV: VENEZUELA (1936-2012)



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- ▶ What was the "Data Generating Process"?
- ▶ How does this data help us answer the question?



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**Title:** Making Democracy Work

**Authors:** Robert Putnam

**Year:** 1993

**Research Question:** Why are some parts of Italy governed better than others?

**Answer/Causal Argument:** Places with more civic social interactions have better government

**Scope of Argument** (in Time, Space, Demographics etc.): Advanced Democracies

Concept/Variable	Measure	Unit of Analysis	Role (DV, XV, Control)
Civil Society	Density of sports clubs, newspapers, electoral turnout	Region	Explanatory Variable
Government Performance	12 Indicators, eg. Budget on time, number of day care centres per child	Region	Dependent Variable
Wealth	GDP per capita	Region	Control Variable

**Theory:** Civic interactions between people and groups create trust and more 'horizontal' relationships that prevent government from being predatory

**Evidence:** Regions of Italy with similar institutional rules and similar wealth but with more civil society have, on average, better performing government

**Methodology:**

- Case Study, Process Tracing
- Comparative Cases
- Regression with Controls
- Matching
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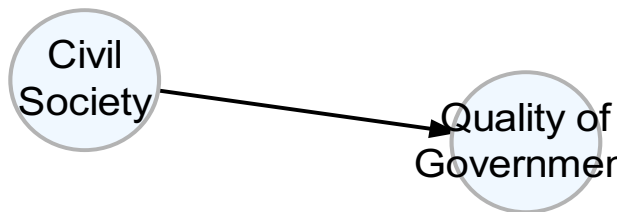
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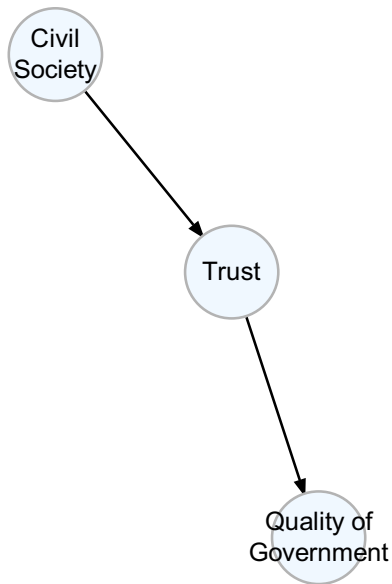
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# Causal Theory

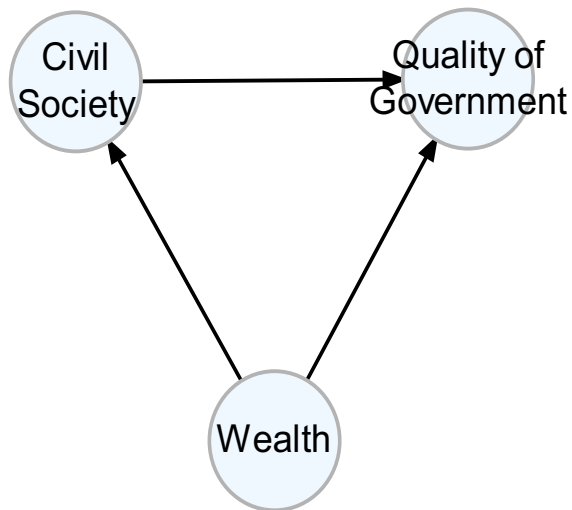


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