

Making Causal Critiques

Day 5 - Constructive Critiques

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Being Constructive

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 - ▶ We have a scholarly obligation to point out errors in reasoning
 - ▶ We learn collectively by collaborating
 - ▶ We learn individually by thinking critically about others' work
- ▶ There is no research project that cannot be improved

Being Constructive

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 - ▶ To discourage colleagues
 - ▶ To assert status/hierarchy/superiority
 - ▶ To destroy valuable research
 - ▶ To release our own frustrations

Being Constructive

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 - ▶ Not take it as a personal attack/become defensive
 - ▶ Have options for how to respond

Styles of Critique

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 - ▶ Recognize the inherent challenges and constraints of implementing the research
- ▶ So phrase your comment in terms of 'as I understand your argument'
- ▶ Or 'Could it be that something else is also happening?'

Styles of Critique

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- ▶ **Be concrete!** Use an example/counterexample to communicate the risk
- ▶ **Be objective!** We care about the research quality, not your personal opinion
- ▶ **Suggest an alternative**

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 - ▶ Instead of "you did it wrong...", refer to "in this type of research there is a risk..."
 - ▶ "I feel like there might be some readers who did not understand..."
- ▶ If in doubt, use the feedback sandwich:
 1. Something positive/encouraging
 2. Critique
 3. Something positive/encouraging

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 - ▶ If you have not fully understood, take time to invest in understanding it before commenting

Strengthening Causal Arguments

1. Multiple tests of theory

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2. Multiple methods

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2. Multiple methods
3. Uncovering 'hidden' units

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4. Heterogeneity tests

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6. Investigating Mechanisms

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- ▶ **Critical tests:** Ideally we want to focus on those tests that 'separate' theories, telling us which one is true

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 3. Whether the relationship holds even for diseases which could easily be cured with more income

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- ▶ These are all "Causal Process Observations" (Collier et al 2010)

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 - ▶ Is a regression discontinuity threshold enforced neutrally? Or was the threshold chosen to make sure a particular unit passed?
 - ▶ Can people sort/migrate across a discontinuity? We can use administrative data on migration rates to assess if these differences might be large enough to explain our results

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 - ▶ To argue in support of the exclusion restriction for the instrumental variable: that plantations were set up in the Caribbean because of the climate, not because they were near the supply of slaves in West Africa

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 - ▶ For example, John Londregan's seminar 'uncovered' non-trading product-country pairs to provide another source of variation to explain

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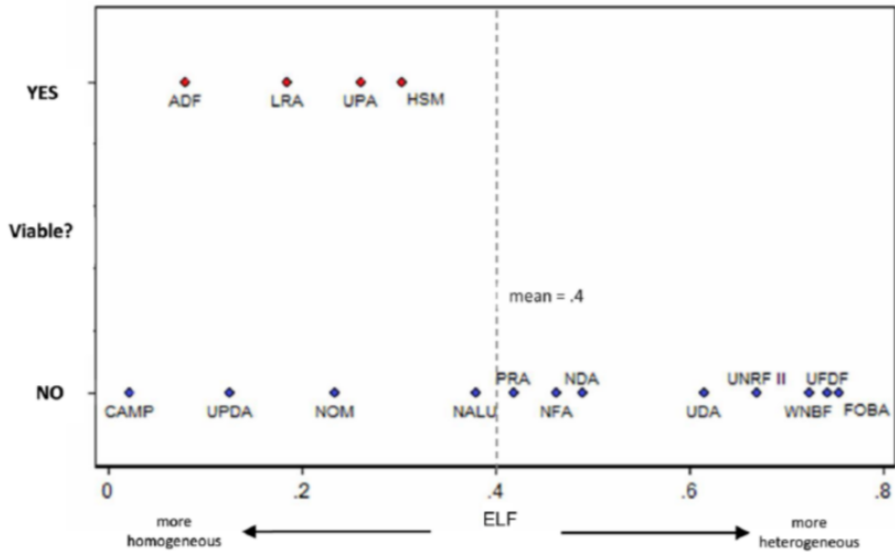
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 - ▶ Showing that ethnicity does *not* affect rebel group formation, but may affect their success



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- ▶ We can use heterogeneity tests to disaggregate the effect to each subgroup and compare

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- ▶ What other theory would be consistent with *all* of this evidence?

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- ▶ But we can also test the 'non-predictions' of our theory, when there should *not* be an effect
- ▶ If we found an effect where there should *not* be one, we might think something is weird in our data/methodology and have less confidence in our main result

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- ▶ We expect there *not* to be a 'jump' effect when winning margin=10%
- ▶ So we can apply our regression discontinuity again and measure the effect at winning margin=10%
- ▶ If we still find an effect, there might be something wrong with our data/method

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 - ▶ Or on 4th August 2012
 - ▶ Or on 6th August 2012

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- ▶ If we were estimating the effect of a treatment that applied to some units on 5th August 2012, we expect no effect on 3rd July 2009
 - ▶ Or on 4th August 2012
 - ▶ Or on 6th August 2012
- ▶ The more tightly the data are consistent *only* with your theory, the more credible is your theory

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- ▶ Placebo tests also work for small-N studies (Glynn and Ichino 2012)
- ▶ We want to assess the effect of presidentialism on reducing party cohesion
- ▶ A good comparison is between the USA (presidential) and Canada (parliamentary)
- ▶ But we also gain confidence if we can show that other similar parliamentary systems have cohesive parties (Britain, Australia, etc.)

6. Mechanisms

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- ▶ Really we want to test **theories**, which include a clear mechanism connecting the treatment and the outcome
- ▶ To show that a specific theory is operating, we want to trace every step of the mechanism

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- ▶ Eg. To test if there is an ethnic 'technology' that helps co-ethnics, they asked Ugandans to find a specific person in a neighbourhood, and paid them a reward if they did
 - ▶ Co-ethnics found their target 43% of the time, non-co-ethnics only 28% of the time

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- ▶ But what happened to counterfactuals here?
- ▶ We're substituting assumptions/theory for a counterfactual
- ▶ Provides evidence for our specific case; generalization is hard

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- ▶ Brady (2004) provides an example of a type of process tracing to evaluate the plausibility of a difference-in-differences research design
- ▶ Difference-in-differences analysis suggested media announcements that Al Gore won Florida in 2000 caused 10,000 Gore voters to stay at home, allowing Bush to win.

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