

# Making Causal Critiques

## Day 5 - Constructive Critiques

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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 release our own frustrations

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  - ▶ Have options for how to respond

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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?'



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- ▶ **Suggest an alternative**

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  - ▶ "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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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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  4. When the poor care less about the future

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

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- Are there spillovers (violations of SUTVA)? We can conduct a survey and find out how people interacted
- 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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  - ▶ We can expand our dataset and adjust our research question

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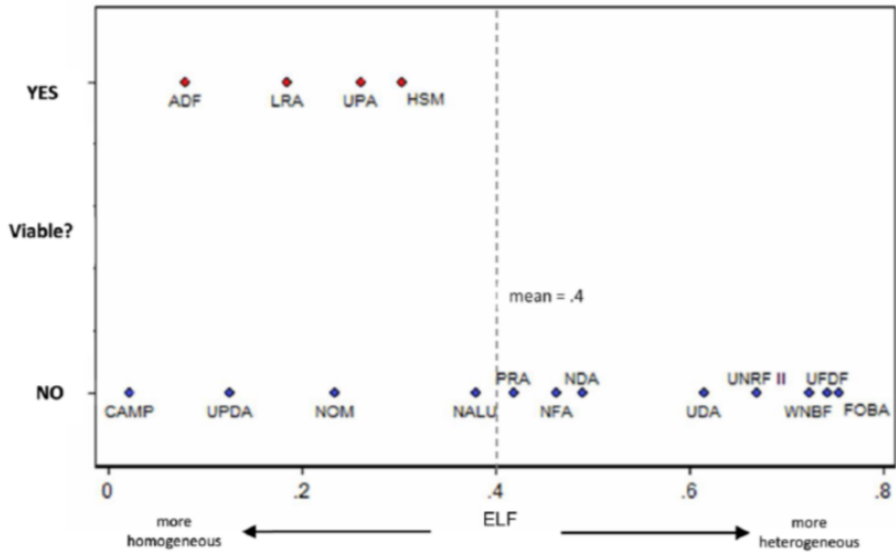
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  - ▶ Expanding the sample from 1-4 (in most datasets) to 15
  - ▶ Showing that ethnicity does *not* affect rebel group formation, but may affect their success





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

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  - ▶ Subsetting the data to only those municipalities with mayors in their first-term who face re-election incentives, showing corruption is *lower*
- ▶ 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
- ▶ 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.)

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- ▶ To show that a specific theory is operating, we want to trace every step of the mechanism

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  - ▶ Strategy selection

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  - ▶ Strategy selection
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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

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- ▶ For example, multiple studies show a clear treatment effect: high ethnic diversity reduces public goods provision
  - ▶ But these studies had *no theory*
- ▶ Habyarimana et al (2007) asked "why?"
  - ▶ Preferences
  - ▶ Technology
  - ▶ Strategy selection
- ▶ They designed laboratory games to test exactly each mechanism
- ▶ 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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- ▶ Provides evidence for our specific case; generalization is hard

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- ▶ Brady estimates that at most 224 people did not vote due to the media announcements