BSSn4495: Qualitative research methods

Causality and causal logic

March 7, 2024 Miriam Matejova, PhD





Agenda

- Types of causal claims
- Causal logics/mechanisms

Recap: causal questions and claims

- Why something happens or doesn't happen
- The **conditions** under which something happens
- The **effect** of something on something else
- The **process** through which one thing affects another

Why causal theories?

- Prediction requires causal knowledge
- Prescription requires causal knowledge
- Understanding
 - To make sense of the world is to ask "why"
- Causal puzzles
 - Why do political actors often fail to make prescriptively ideal choices?
 - Why do political choices and outcomes vary so widely?

What is a cause?

- The US invasion of Irag caused the rise of ISIS.
- Inequality is growing because of tax cuts for the rich.
- Colonialism is responsible for the poverty of many sub-Saharan African nations.

The cause of WWI?



Structural causes of WWI

- Ethno-national tensions within Austria--Hungary
- Imperialism: competition for resources
- German militarism and aggressive aims
- Structure of alliances

Structural causes vs triggers

- In December 2010, Mohamed Bouazizi, a Tunisian vegetable peddler sets himself ablaze after his cart is confiscated by a policewoman.
- Oppressive rule → Bouazizi self-immolation →
 Collapse of Tunisian regime
- Individual actions as part of the causal pathway
 - Cause → very specific detail of the pathway through which cause operated → outcome

Structural causes vs triggers

- Triggers are details of how or when exactly an outcome happened.
- But triggers mostly fail to meet the <u>counterfactual definition</u> of a cause.
 - Triggers are substitutable (i.e., when structural cause is present, lots of things could trigger the outcome)

Which is a triggering event?

- Causes of Global Financial Crisis of 2008
 - A. Inequality
 - B. Weak regulatory structures

C. Collapse of Lehman Brothers investment bank

Causes of England riots of 2011

A. Police shooting of an Afro-Caribbean man

- B. Racial animosity in Britain
- C. High youth unemployment

A puzzle

 How can war happen between two states that know each other's capabilities?

– E.g., USA and USSR during the Cold War

- For war to happen, there needs to be some strategic miscalculation
 - Strategic miscalculation is a "necessary condition" for war

Necessary condition

- "Condition C must happen for outcome E to emerge."
- A cause without which an effect cannot occur.
 - A large middle class is a necessary condition for the emergence of democracy.

Conjunctural causation

- When an effect depends on a combination of causes.
 - War requires BOTH miscalculation and strong offensive capabilities.
 - Revolutions require BOTH deprivation and arbitrary rule.
 - Conditional effect: the effect of C on E depends on D (e.g., poverty causes short civil war when ethnic diversity is low)

Sufficient conditions

- A cause that always produces an effect
 - A fire is sufficient to cause heat.
 - Rare in social sciences, because so much causation is conjunctural

Multiple causation

- When there is more than one set of causes that can produce an effect.
 - A can cause E OR C can cause E
 - What can cause military leaders to lose power?
 Military defeat or economic decline.

Multiple and conjunctural causation

- A combination of A+B can cause E OR a combination of C+D can cause E
- Why do civil wars happen?
 - A combination of ethnic diversity and political inequality between groups OR a combination of meddling by foreign powers and deep ideological polarization

Democracy and Economic Development



Causal logic

- Democracy appears to be good for economic development.
 - More democracy → Higher economy growth, more income and wealth per capita, more stability in economic outcomes
- C causes E: Democracy leads to economic development.
- But this is not enough to explain how or why E happens as a result of C.
- WHY or HOW does democracy lead to economic development?

Why Democracy leads to economic development

• More democracy \rightarrow Peaceful alternations of power and respect for rule of law generate stability \rightarrow Stability fosters a climate in which people are willing to invest in the economy \rightarrow Politicians refrain from reneging on democratic commitments that would disrupt investment and the economy to secure reelection \rightarrow Economic development

Causal logic

- A causal logic is a set of statements about how or why a cause produces an effect.
- A causal logic usually involves a causal chain that logically connects the cause C to the effect E

$\mathsf{C} \rightarrow \mathsf{S1} \rightarrow \mathsf{S2} \rightarrow \mathsf{S3} \rightarrow \mathsf{E}$

How to produce causal logic

- 1) Make sure the causal logic starts with the cause, ends with the effect.
- 2) Make sure each step is something that logically causes the step after it.
- A causal logic is not a chronological list of events that happened in a specific place; it's a general logic of how one thing causes another in the world.
- 4) Background assumptions should be treated separately.

Causal logic: wealth and civil war

• <u>Causal claim</u>: Greater national wealth (C) reduces likelihood of civil war (E).

• But why? How does wealth affect the likelihood of civil war?

Causal logic: wealth and civil war

- Richer states can spend more on counterinsurgency operations → quick suppression of rebellion
- 2) Wealth reduces discontent \rightarrow less rebellion
- In richer countries, young men will have better economic alternatives to fighting → rebel groups can't recruit

Causal logic: wealth and civil war

Logic 1: counter-insurgency capacity



Logic 3: Recruitment problems

Causal logics: why they matter

- If we know the cause of an effect, why do we care about the causal logic?
- More complete understanding:
 - Tells us about "side effects" of a cause in addition to the main effects we are interested in
 - More evidence we can gather about a possible causal relationship
 - Helps us address issues, make **policy choices**

Causal logics: why they matter

1) Clarifies side effects, unintended consequences:
 ○ C → s1 → s2 → s3 →E

- 2) Helps with prescription
 - Sometimes we can't manipulate C, but we can manipulate s1, s2, etc.
 - E.g., arm governments or fund education

Causal logics: side effects

Raise taxes on carbon (C)

 \rightarrow Reduced emissions of greenhouse gases (E)

Raise taxes on carbon (C) \rightarrow Companies invest in improved energy efficiency \rightarrow Less energy consumption per unit of output \rightarrow Reduced emissions of greenhouse gases (E)

Desirable Side-Effect

Raise taxes on carbon (C) \rightarrow Companies reduce employment \rightarrow Economic output contracts \rightarrow Reduced emissions of greenhouse gases (E)

Undesirable Side-Effect

Questions?

