

# **BSSn4495: Qualitative research in security studies**

The logic of  
process tracing

April 11, 2024

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A black and white photograph of a stone wall. A black rectangular plaque with white text is mounted on the wall. The text on the plaque reads "LOGIC LANE". The wall is made of large, rough-hewn stone blocks. The image is partially obscured by a white curved shape on the left side of the slide.

**LOGIC LANE**



# Agenda

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- Process-tracing: logic and use

# Moving beyond correlation: process tracing

- **Process Tracing** is a method for assessing whether **C** is a cause of **E** that *moves beyond the logic of covariation*.
- Instead, it is based on **looking for clues** within a single case to determine whether the facts are consistent with the process through which C causes E

**C** → **S1** → **S2** → **S3** → **S4** ..... → **E**

# How to process trace?

Examining a single instance in which the outcome did or did not occur and trying to explain why.

1. We wonder: Does C cause E?
2. We see that E is present and that C is present in a case.
  - But this doesn't tell us that C *caused* E in that case. How could we figure that out?
3. Think about the causal logic through which C *would* have caused E *if* C did cause E.
4. Now investigate the case to see whether that causal logic in fact unfolded within the case.

# What causes civil war?

- Ethnic tensions?
- Poverty?
- Natural resources (diamonds, oil)?
- Weak state?

The problem: Often all 3 are present → correlations won't tell you which one is the cause.

# What caused DRC civil war?

- Precious natural resources?

Causal logic(s):

Presence of natural resources → rising tensions over disposition of profits and grievances against those who control the resources → motivates uprising by dispossessed groups who seek to take the resources → occurrence of civil war

Presence of natural resources → increased frequency of rebel groups taking over or looting resources to finance and arm themselves → stronger rebel groups → decreased ability of state to quickly crush them → occurrence of civil war

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# Process tracing tests

## Hoop test

- A test that a hypothesis *has* to pass for us to believe it (a “hoop” the theory has to jump through)
  - If hoop test failed: the hypothesis is greatly weakened
  - If hoop test passed: the hypothesis survives, but doesn’t mean it’s true

## Smoking gun test

- A test that can point strongly to the correctness of a hypothesis
  - If smoking gun test failed: the hypothesis survives
  - If smoking gun test passed: the hypothesis is very likely true

# What happens when tests are passed or failed?

Asymmetric outcomes

	H fails	H passes
Hoop test	H <u>greatly</u> weakened	H slightly strengthened
Smoking gun test	H slightly weakened	H <u>greatly</u> strengthened

# Process tracing tests (cont.)

- **Straw in the wind test**
  - Passing = hypothesis is relevant but not confirmed
  - Failing = hypothesis is not eliminated but slightly weakened
- **Doubly decisive test**
  - Passing = hypothesis is confirmed and others are eliminated
  - Failing = hypothesis is eliminated

# Why didn't Obama break up the big banks?

- A. Because he didn't want to alienate rich Wall Street donors
- B. Because Republican opposition made it impossible

What clues could we look for?

1. Did Obama get a lot of campaign money from Wall Street?

*Hoop test for A*

If no, A is probably wrong

If yes, A survives (but still could be wrong)



# Why didn't Obama break up the big banks?

- A. Because he didn't want to alienate rich Wall Street donors
- B. Because Republican opposition made it impossible

What clues could we look for?

2. Were Republicans against breaking up the banks?

*Hoop test for B*

If no, B is probably wrong

If yes, B survives (but still could be wrong)

# Why didn't Obama break up the big banks?

- A. Because he didn't want to alienate rich Wall Street donors
- B. Because Republican opposition made it impossible

What clues could we look for?

3. Did the White House propose breakup and lobby the Senate Finance committee to get it to happen?

*Smoking gun test for B*

If no, B could still be right (maybe he didn't bother proposing because he knew it wouldn't pass)

If yes, B is very likely right (hard to explain without B)

# Why didn't Obama break up the big banks?

- A. Because he didn't want to alienate rich Wall Street donors
- B. Because Republican opposition made it impossible

What clues could we look for?

4. Did the White House decide against proposing a breakup shortly after meeting with Wall Street donors?

*Smoking gun test for A*

If no, A could still be right.

If yes, A is very likely right (hard to explain without A).

# Process tracing: advantages

- Yields in-depth knowledge of context
- Opportunity for discovery
  - Immersion in a case often suggests causal claims we hadn't thought of before
  - Not just *testing* theories, but *developing* new theories
- Avoids troubles with correlation
  - Studying causal processes → less chance to be fooled by spuriousness, reverse causation, randomness

# Process-tracing: practice

- Choose a causal question
- Think of a **cause** that produces a somewhat lengthy causal chain to the effect
- Think of a **causal logic/causal story** that connects the cause to the effect
  - Causal logic:  $X \rightarrow p \rightarrow q \rightarrow r \rightarrow Y$
- What **evidence** would a researcher look for to support this causal logic in your case?

# Practice

- High degree of economic deprivation → fewer economic opportunities → higher unemployment → lower income → economic grievances by some groups → more influential role of extremist groups → high degree of radicalization