

# **Process tracing for evaluating Policy Advocacy**

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# Process tracing for evaluating Policy Advocacy

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With changing complexities in the real-world intervention settings like policy advocacy, exploring causality is also becoming increasingly difficult, requiring alternatives to traditional counterfactual approaches. These complexities involve policy targeting to the entire population, absence of random assignments, and limited baseline information for evaluation, making counterfactual design impractical. <sup>[1]</sup> In this context, Process Tracing along with other approaches like Contribution Analysis could help to assess the contribution of advocacy activities in achieving the desired outcome in a non-counterfactual manner, using similar tools: causal mechanism and Theory of Change(ToC).

Building on the 'Causal Process Observations (CPOs), Process Tracing entails observing advocacy processes occurred over time(can be non-linear) and evaluating evidence in a context-sensitive manner for informing causal mechanism. <sup>[2]</sup> Process Tracing has been referred to as a method but also as a tool and technique for data collection and analysis. Befani and Bryce <sup>[3]</sup> elaborate the use of Process Tracing in combination with Contribution Analysis and provide strong methodological guidance to undertake such studies including relevant suggestions on collecting data and assessing the strengths and weaknesses of contribution claims made by interventions.

In Process Tracing, a causal mechanism that is believed to explain the outcome is theorised in the form of a number of interlocked components that are all necessary for the causal mechanism to exist. <sup>[4]</sup> Based on the 'pathways of change' of advocacy intervention, these "Causal Chains" elaborates how different advocacy initiatives will lead to immediate and intermediate outcomes. This also includes listing of key assumptions that are necessary for the "Causal Chain" to materialize and associated risks that might prevent it from taking place. Further, Process Tracing examines claims of causality (e.g. those made through Causal Chains above) based on events of the past and attempts at drawing causal inferences about them.

A combination of Process Tracing with Contribution Analysis approaches first involves formulation of a 'contribution claim' about the role of advocacy in the achievement of an outcome. This is followed by a 'contribution trial' where evidence is gathered to prove or disprove the contribution claim. Further method of developing contribution claims and testing those claims is given below:

## **Formulating Contribution Claims**

The process starts with formulating a 'contribution claim' about the role of advocacy in the achievement of the outcomes. This should include different component i.e. Actors and Institutions engaging in certain activities or behavior, linked with each other and to the outcome. It is important to note here that the process of formulating contribution claims for the evaluating advocacy, would be highly iterative in nature, necessitating close collaboration between the advocating agency, evaluators and the funding agency to refine contribution statements that capture the causal mechanisms accurately. It is also worth mentioning that the contribution claims can be developed at different levels of outcomes i.e. immediate, intermediary, and long-term outcomes.

Process Tracing exploits the backward perspective and takes advantage of the fact that during the course of implementation, the processes had enough time to leave



However, with a longer and more complex contribution claim, the strength of evidence for confirming or rejecting contribution claim reduce.

### **Testing the Contribution**

Subsequent to the formulation of the 'contribution claims', comes the part where they get tested. This part of the approach uses principles of Process Tracing and

*".....involves the examination of "diagnostic" pieces of evidence within a case that contribute to supporting or overturning alternative explanatory hypotheses..."* [5]

Process Tracing uses four well-known metaphors as tests to confirm or reject a hypothesis. The tests were postulated by Van Evera [6] as – the Hoop Test, The Smoking Gun test, The Doubly-Decisive Test, and the Straw in the Wind Test. Befani describes their properties with an analogy of a jury trial convicting person A for the murder of person B:

- **Hoop Tests (disconfirmatory test):**

If the evidence is not observed, the hypothesis is rejected. If the evidence is observed, the hypothesis is not rejected (it 'goes through the hoop', passes the test); but it is not confirmed, either.

This can be thought of in the murder-trial analogy, where the 'claim' is that person A killed person B. If A really did kill B, we expect, for example, the suspect not to have a solid alibi which places them far from the physical vicinity of the victim near the time of the crime. If suspect A does not have a robust alibi, this might strengthen our confidence in the contribution claim, but not to the point where we declare them guilty and close the case. On the other hand, if evidence is found that suspect A was on another continent during the exact time of the murder, the assumption that they are guilty is ruled out and our claim rejected. Thus, this test has disconfirmatory, but no confirmatory power.

- **Smoking Gun Test (confirmatory):**

If the evidence is observed, the hypothesis is confirmed. If the evidence is not observed, the hypothesis is not confirmed; but it is not rejected, either.

*This is analogous to finding suspect A with a smoking gun in his hand, in the vicinity of victim B. Such evidence - especially A standing over a dead body – is extremely difficult to explain unless that person has killed the victim. While alternative explanations are possible, such as the person holding the gun claiming they had only picked it up and fired it to chase away the real killer; this scenario is usually far less credible, unless very special (rare) evidence is found to substantiate the suspect's remarks. In addition, if we fail to observe the suspect with a smoking gun in their hand in the vicinity of the victim, it does not mean that they are not guilty; it might simply mean that they have been quick to escape from the crime scene. Thus, smoking gun tests are sufficient, but not necessary, to prove a contribution claim.*

- **Doubly Decisive (both confirmatory and disconfirmatory):**

If the evidence is observed, the hypothesis is confirmed. If the evidence is not observed, the hypothesis is rejected.

*This is analogous to the watching the murder taking place in a piece of CCTV footage, where the killer can be clearly recognized, can both condemn suspect A, if we see them in the footage, and exonerate suspect A, if we see someone else in there.*

- **Straw-in-the-Wind (neither confirmatory nor disconfirmatory):** If the evidence is observed, this is not sufficient to confirm the hypothesis. If the evidence is not observed, this is not sufficient



Befani and Bryce argue that if a contribution claim passes the Hoop test and the Smoking Gun test, our confidence on the claim would be strengthened substantially.

These indicative tests give us a sense of the line of enquiry that would be developed to test the contribution claim. While these are indicative tests for one contribution claim, similar tests will need to be formulated for each of the contribution claims that we intend to test. It is important to note that like the process of developing ‘contribution claims’, the process of formulating the tests for the claims would also be collaborative and iterative. The evaluation partners need to work closely with all the key stakeholders to finalize the tests for each of the contribution claims. At the same time, the teams will constantly be on the look-out for doubly decisive tests that can further increase the confidence in the contribution claims.

Finally, it is worth noting that this approach will not be limited to making qualitative statements about the contribution claims. Befani et. Al <sup>[3]</sup> proposes the use of Bayesian updating techniques to quantify the strength of the evidence found in support of or against the contribution claims. While we do not elaborate on the entire approach, we illustrate the adopted version of Bayes formula that Befani proposes to use to estimate the probability of a claim given that the evidence has been observed:

$$P(CC|E) = P(CC) * P(E|CC) / [P(CC) * P(E|CC) + P(\sim CC) * P(E|\sim CC)]$$

Where, P(CC|E) is the conditional probability of observing the contribution claim, given that the evidence E has been observed. The use of Bayesian updating can thus, help us empirically assessing our confidence in the contribution claim. As Befani notes:

*“...the principles of Process Tracing can be fruitfully combined with Bayesian probability to quantify the probative value of specific pieces of evidence, or their power to change our pre-observation confidence that a specific contribution claim holds...”*

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