M&E Thursday Talks on DME for Peace

“Process Tracing and Detailed Theories of Change”

with

Dr. Bruce Hemmer, Lead Evaluation Officer in the Office of Learning and Training of the Bureau for Conflict and Stabilization Operations (CSO) at the US Department of State.

Part I: Overview

On June 18, 2015 DME for Peace had the opportunity to host Dr. Bruce Hemmer, Lead Evaluation Officer in the Office of Learning and Training in the Bureau of Conflict Stabilization Operations in the US State Department, who discussed process tracing and detailed theories of change.

Evaluating conflict interventions, or other types of programming in conflict environments, is difficult due to the fluidity, danger, urgency, scale of desired strategic impact and murky multi-causality in these complex situations. Each of these qualities can interfere with using experimental or quasi-experimental designs, though they are sometimes still feasible. An alternative method of assessing causal influence is process tracing, which is more flexible. This presentation will discuss this approach, and its reliance on detailed elaboration of theories of change. This is a method that has most commonly been used so far at the U.S. State Department Bureau of Conflict and Stabilization Operations, though increased use of quasi-experimental designs is anticipated where feasible.

About the Speaker:

Dr. Bruce Hemmer is a Lead Evaluation Officer in the Office of Learning and Training of the Bureau for Conflict and Stabilization Operations (CSO) at the US Department of State. He has worked for this bureau or its predecessor, the Office of the Coordinator for Reconstruction and Stabilization, since May 2010. He advises CSO engagement teams and other U.S. government entities on methods for conflict assessment and program monitoring, theories of change development, and applying insights from academic and best practices research. He also plans and manages or conducts independent evaluations of conflict interventions. His work for the State Department has addressed conflict prevention, mitigation and transformation in places as varied as Ukraine, Syria, Nigeria, Burma, Bangladesh, Kenya, Uzbekistan, Honduras, Belize,
Nepal, Sri Lanka, Uganda, Ecuador, Pakistan, Zimbabwe and Central African Republic. Bruce completed his PhD in Political Science at the University of California, Irvine in 2009, specializing in the civic and cultural aspects of democratization and peacebuilding and conducting field research in Bosnia and Northern Ireland. He previously earned a MA in International Relations at Syracuse University and a Certificate of Achievement in Conflict Resolution at its Program on the Analysis and Resolution of Conflicts (PARC). Bruce has several years of prior practical experience in peacebuilding and democratization, principally in Bosnia and Herzegovina, where he worked with the Organization for Security and Cooperation in Europe (OSCE). He has also worked with several peacebuilding NGOs in Bosnia, Kosovo and Ethiopia, including the Carter Center, and is a trained mediator.

Part II: Presenter Remarks:

Bruce’s presentation was structured to include:

1. Challenges to M&E in Conflict Environments
2. What is Process Tracing (PT)?
3. Theories of Change (ToC)
4. What Elaborating Theories of Change Does for You
5. Belize Case Study
6. Questions, Discussion

Challenges of M&E in Conflict Environments

❖ **Danger:** Conflict situations are a little bit more challenging because setting up experimental controls requires access to several areas affected by the conflict.
❖ **Urgency:** Often we need to get in quickly and get things started. There is often not time for careful setup of experiment or even baselines.
❖ **Fluidity:** Dynamics can change quickly and can be difficult to understand. There is often better understanding after having been in the context for a while as you’re constantly changing the intervention to match new conditions and improved understanding. If you have done a careful setup of control treatment groups, they may be no longer relevant to the adapted design later.
❖ **No Easy Solutions:** This means we’re still studying how to best intervene in the conflict as its highly contextual. Therefore there is not as strong theory-based understanding as to how conflict interventions work or not as we do for more steady interventions like building roads. This makes it harder for quasi-experimental designs (QED) to set control and treatment groups for causal factors because we are not sure what they are. We are often trying to achieve things at a higher level, so that there are many players contributing to that, and an intervention is one small slice of the causal landscape. This makes it hard to isolate causal factors and complicates the analysis.
❖ **Local Participation:** We want to build local capacity for sustainability and for greater insight in the complicated settings as locals can go places nationals can't go. That means that local participation is helpful, because there is a capacity gap, to have a fairly simple design for M&E. QEDs are less simple than the process tracing approach.

Process Tracing is a little more flexible in dealing with these challenges than quasi-experimental designs which have become more common.

**What is Process Tracing?**

❖ Evaluates plausible causal contribution;
❖ Measures implications of theorized causal path at work;
❖ Chains of outcomes;
❖ Causal mechanisms;
❖ Can also measure implications of alternative causal paths;
❖ Aids with diagnosis problems.

**Crime Drama Metaphor**

Process tracing is something we are all very familiar with. For example, take your average crime drama on television: If there is body found on the edge of a lake and prosecutor is trying to say person x murdered the victim, the defense argues the person just drowned and washed up. If the evidence is that there are bruises present and the suspect can be placed at the scene, and there is a motive and history of violence, there is a lot of evidence that is consistent with prosecutor theory of how this happened. If, on the other hand, the victim was a champion swimmer and there was no water in lungs, there is evidence it is inconsistent with the theory of the cause of events.

With PT, we are looking at the ToC and the chains of outcomes and seeing if we can find evidence for a chain of effects in your activity to the ultimate impact you are trying to achieve that is consistent with that story unfolding.

When we are looking for evidence that is consistent with theorized causal path we are trying to establish, we find there are often alternative causal paths. We then may also look at other mechanisms that are consistent with causal mechanisms.

**Advantages of Process Tracing:**

❖ It’s easy to understand;
❖ Relatively easy to implement;
❖ Can be adjusted midstream adjust theory of change, kinds of things measuring;
❖ Can be applied retrospectively at the end of an intervention.

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Because you are looking not just at effects at end of program, but all along the way, it aids you in identifying where there are problems in implementation, diagnosing what those problems are and where in ToC you might see the breakdown.

**Theories of Change**

You often see ToC as a single “If...then…” statement. At this level it is useful for communicating to outside actors in a nutshell what you are doing, but less useful for detailed program design and less useful design M&E and process tracing.

When i’m talking about PT, im talking about a much more detailed theory of change. It’s not a generalized theory of change found in academic literature, it is a applied theory of change in your particular intervention and context

**What Elaborating ToC Does For You**

It allows people to talk through ToC, which is helpful in coordinating a team effort. It also provides a rich supply of things you could potentially measure.

**Example:**

Imagine you're trying to help a government negotiate a peace agreement with rebels; you have done negotiation training for government and a peace agreement appears and therefore you helped cause the peace agreement. If this was all there was with the ToC you might not be convinced your intervention played a role. There might be a lot of other causal factors, maybe the training was unnecessary.

If you had a more elaborated ToC, it might look like this:

Negotiation training designed for certain skills→ skills learned→ in negotiation room evidence skills applied→ desired affect of those skills→ peace agreement

If one of those skills was for strategy for negotiation, then you can look back and ask the following, “Did they produce a strategy? Did they negotiate according to that strategy? Did that produce the kinds of effect, better compromise, able to move from positions, interests, to needs?

If you can find evidence of all this happening, than you have a much stronger case your intervention contributed to this agreement, then you know you had a contribution to this outcome.
An example of another kind of indicator is when negotiators credit the training. This credit to the training is a secondary effect, but its something that add credibility to the story. Circumstances might be more complicated than this, but you might have done the same thing on the rebel side by doing the same sort of process tracing.

You might find the story stronger on the government side than on the rebel side. For example, if they did not reach an agreement, then you might consider doing something different on the side that wasn’t as strong. That is the diagnostic component of this using PT.

You can also trace alternative causes with third country (party) activities. For example, if there is third party involved and they communicate their desires and offer money, we could see if the rebels accepted by observing rebel positions match the third party. You might also look for signs of rebel affluence.
All of this would be consistent with this causal logic. If they did reach a peace agreement, after tracing the process, you might actually decide it was the third party’s influence that got the rebels to a peace agreement rather than a training.

**CSO Belize Case**

In Belize, we were doing a mediation and community dialogue project to help inoculate the city against transnational gang activity that was already present, but we wanted to keep it from getting worse. There were a number of effects we were trying to produce at a high level (refer to process map in slides).

We were developing change of outcomes that connected to our objectives, and as we did this we realized that we needed strategic communications to help make early success visible which would help with the narrative change aspect of this. We were looking for different levels of effect there. This was our original elaborated theory of change going in and this really helped in program design because we were able to revise as we went along.

These maps can be useful tools, but can be cryptic, so there always needs to be a narrative version of this.

**Part III: Questions and Discussion**

**Melanie K:** *What sort of response do you get from people who want RCTs and or, more quantitative evidence? Have you had conversations about the rigor of the evidence when people are looking for more quantitative data?*
 Bruce: This is a bit of a misunderstanding, a lot of people thing of PT as a qualitative, it is often qualitative, no reason why it cannot incorporate quantitative information. I certainly used quantitative indicators in any of those little boxes, from a survey questions or a count of some kind can be included in the evidence you were using to show that this process was important.

As far as making it more rigorous, the same way you would make any evidence more rigorous use multiple independent sources to triangulate amongst different methods, you can have multiple indicators. You don't have to measure in one way.

Melanie K: As you are designing the M&E processes, if you have the luxury of being that far ahead of the game, that's when you want to be thinking about the types of evidence you are gathering, is that right?

Bruce: Sometimes you can do it retroactively; you can do it at the end, but it’s not ideal. You can figure out what the ToC was and spin off the indicators you can measure after the fact. For instance, you can do media analysis or social media analysis to measure events. You can find someone who was doing surveys at the time with appropriate indicators. You can use interviews now about people's experience were (Post/Pre). However, you would have to recognize a recall bias as any retroactive method would encounter those biases.

Melanie K: You mentioned this information and ongoing monitoring can help you adjust your program midstream can you explain that a little bit more for what that may look like?

Bruce: You can use this midstream to diagnose what's going on or going wrong. If you are seeing midstream government side applying trainings, but it’s not advancing because the rebels aren't doing their part. That might tell you something has gone wrong with our training of the rebels. Either they are not getting it, or there is a political will type of problem. If you find in the output measures that their understanding was low, than that may indicate they didn't get it. If those scores were high, then it might be a more of a political will problem or trouble contextualizing the problems, which might mean they might need a little more mentoring to get there.”

Isha Wedasinghe Miranda (Freelance Independent Consultant): If the Peace Agreement does not go according to plan, how do you redesign the ToC?

Bruce: If it got to the point where there is a Peace Agreement that is unsatisfactory, maybe it isn't being implemented, then you might go back and look at the training provided and ask “why did we get this unintended result?” It might be you weren't training on topics you needed, or weren't doing in the right way, or left out some important element of the intervention to get the results you were wanting. That's how you can generate those lessons so next time you can try and address those missing elements.

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Nell Bolton (Independent Consultant): How see PT related to more traditional, linear, and less detailed log frames? And, what software use for maps?

Bruce: First part, we often have several different levels of ToC mapped and these messy ones like I showed at the end, might help at the beginning when you are brainstorming out how all this stuff is going to work. Then you could simplify it and channel it into a more traditional framework to have something simpler that is easier to grasp to communicate to outsiders. The more complicated than the single “if, then” statement would help you focus on the thing you are actually measuring. However, when you're getting to interpretation of your data, you might still might pull out more detailed map to help you understand what your data actually means.

As for mapping, I usually just use excel. If you do it right, you can make the arrows connect in the boxes the arrows stay connected, or you can select a whole area of it and move it. It’s okay for it, I did participate in a an effort with army corps engineers to develop software that would do this. They intended it for interagency use and for it to be connected to a library of indicators that you can hover over boxes and indicators. It lost funding and never got finished. You can also do these things in powerpoint. The example I shared, I entered this morning in PowerPoint.

William Kaplan: I do most of my work outside of philadelphia, very domestic, when you were working in Belize some of the same issues, wondering, do you have case studies posted somewhere I can look to see the work you did in Belize in more of a detailed way?

Bruce: We have an evaluation that I went down and did, it’s posted on our public website, which is www.state.gov/j/cso click on M&E and you will find the evaluation. I don't think any of the other program materials are posted, but it will give you a good overview. That by the way was intended to be a final evaluation, but inspired follow up engagement to plug some gaps that were identified. Things were a lot better after that second follow up engagement.

Ann Kovacs Morisseau (Independent Consultant): How widely is process tracing applied? Is this something that CSO is applying regularly?

Bruce: How widely is process tracing applied--not widely as it ought to be. We have had issues with external evaluation firms that claimed to understand, then didn't do good job. I often encounter social scientists and evaluators that don't seem to be aware of it as a technique. It’s more common in my field, Political Science, than in other fields. It is something that CSO has been trying to apply regularly; going forward, we may be making more use of quasi-experimental designs (QEDs) where we can. One issue with using QED is that if you're trying to affect an peace process it's hard to find something else that's just like that. Peace processes are fairly rare events that are highly contextual and they are influenced by many factors. It is hard to find other contemporaneous cases that are good comparisons. At such a level of affect (country
level), it's hard to do comparative research. Therefore, there is a real plus to having something that doesn't rely on that kind of factual. If you are doing things that are at the individual level, or community level it's easier to find those point of comparison. That may be something we will be doing more of, things that are scoped down more to take this QED, to produce evidence of that nature which has its utility.

Produce some evidence of that nature, there is a professor, Chris Blattman, at Colombia that has done quite a bit in QED for conflict interventions. It's not impossible, it’s just this method (PT) is a little bit more flexible.

**Ann Kovacs Morisseau (Independent Consultant):** *How do you try and assess/measure the relative contribution of one set of activities vs. others (govt. training vs third party influencers for ex)?*

**Bruce:** It’s not very good at telling you the size of the effect. It may tell you that causal path A has more robust evidence that this is happening. Whereas with causal B, yes, there were effects, but they seem weak. It isn't going to tell you exact percentage of causal factors or causal size. If you could eliminate other causal factors, than you can know the exact causal size would be 100%.

**Ann Kovacs Morisseau (Independent Consultant):** *Are you getting pushback from actors that see evaluations to demonstrate the added value of their activities (and justify their budgets) and may contest a diagnosis showing the influence of other factors?*

**Bruce:** Yeah sometimes you do get pushback, particularly measuring higher level effect beyond direct control of one intervention. Implementers are interested in showing their effects and get nervous about a higher level affect that they can't control. Tough cookies. We are interested in those strategic level impacts, we need to be measuring at that level it does make it more complicated, but that's life.

Please continue the discussion on the Thursday Talk page [here](#).
Questions? Contact [dme@dmeforpeace.org](mailto:dme@dmeforpeace.org)

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