



CAUSAL  
PATHWAYS

# VIRTUAL SYMPOSIUM 2023

DISCOVERING HOW, WHY, AND  
WHEN OUR STRATEGIES MATTER

# How do I pick and combine methods?

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Marina Apgar & Tom Aston

8:35 am PT/11:35 am ET (60 minutes)

Thursday, September 21, 2023

## Who are we?

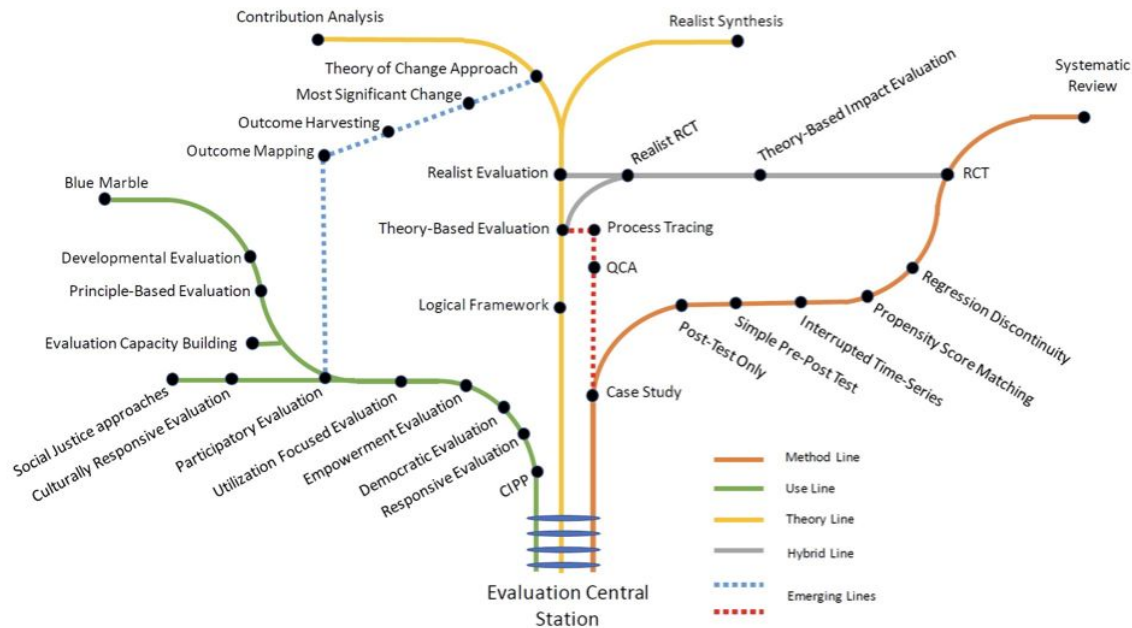
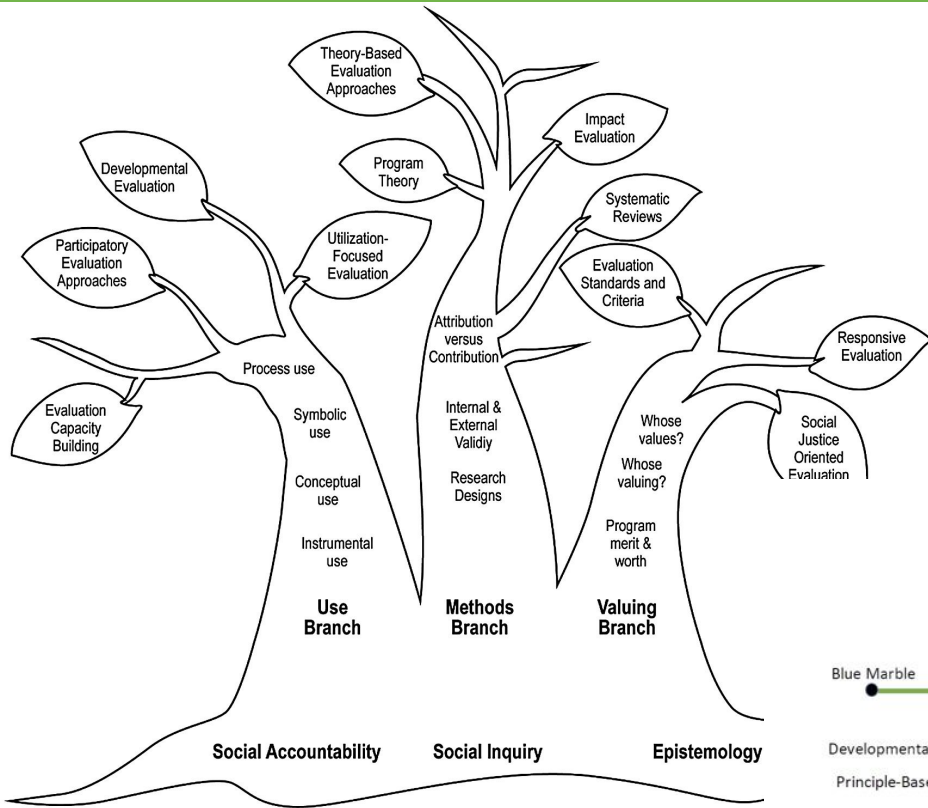


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Impact**



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# From trees to forests to metro lines

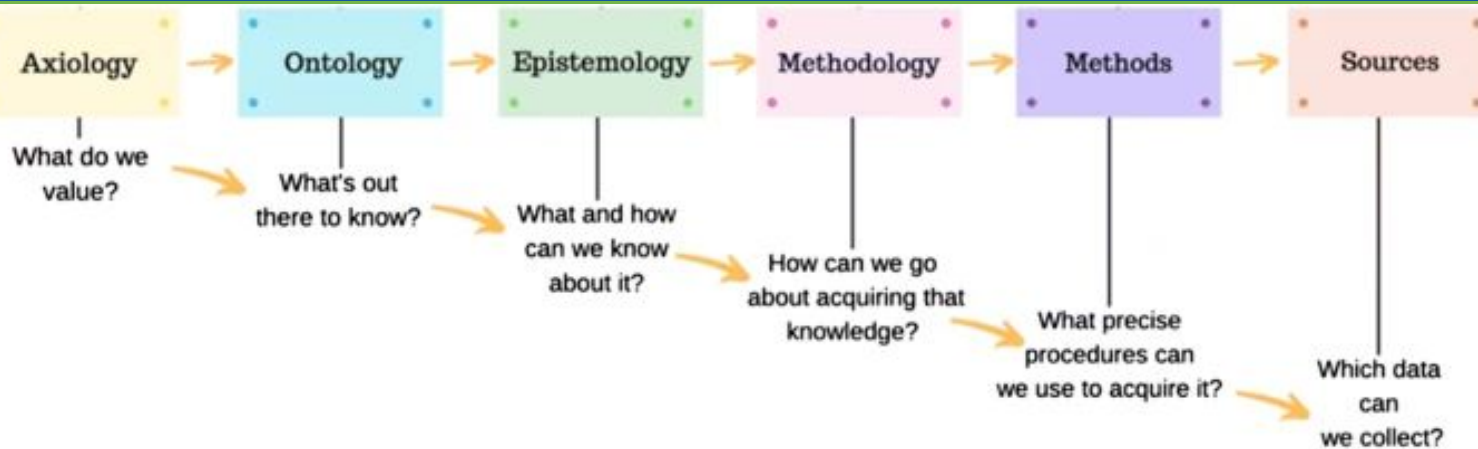




How do you choose appropriate methods?

- [Go to Menti.com](https://www.menti.com)
- **Enter Code: 2179 1630**

# What does 'good' look like?



- What do you **value**?
- What is your **strategy** and **context**?
- What **questions** do you want to answer?
- What are **appropriate methods**?



What criteria do you use to judge evidence?

- [Go to Menti.com](https://www.menti.com)
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# Redefined rigor

- Quality of the thinking
- Credibility and legitimacy of the claims
- Cultural responsiveness and context
- Quality and value of the learning process

(Preskill and Lynn, 2016)

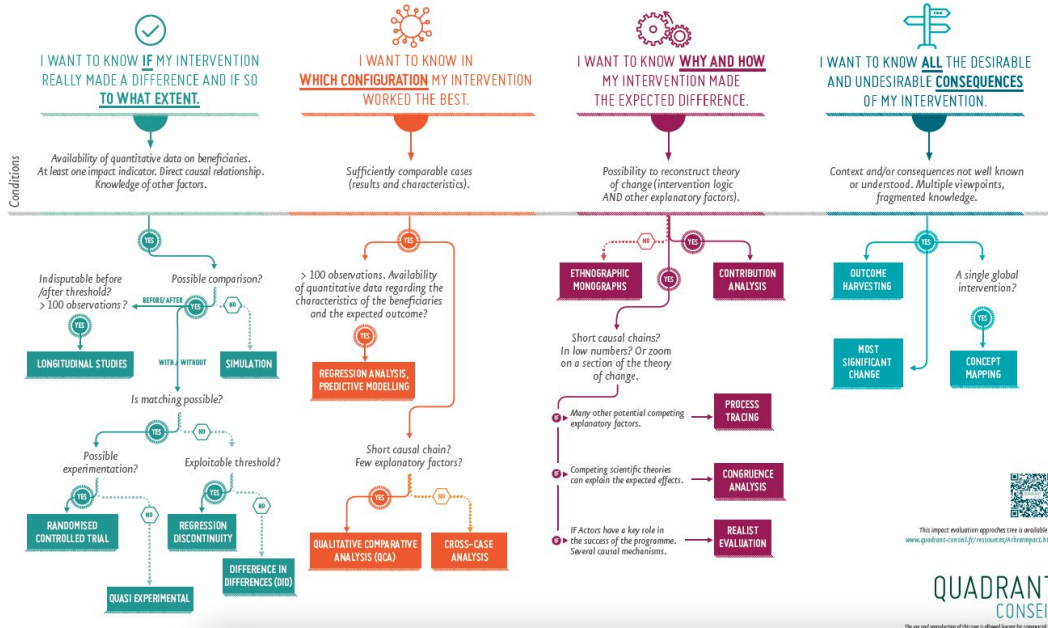
- Reasoning
  - Credibility
  - Responsiveness
  - Utilization
  - Transferability
- (Aston *et al.* 2021)



# Either/or impact evaluation guidance exists

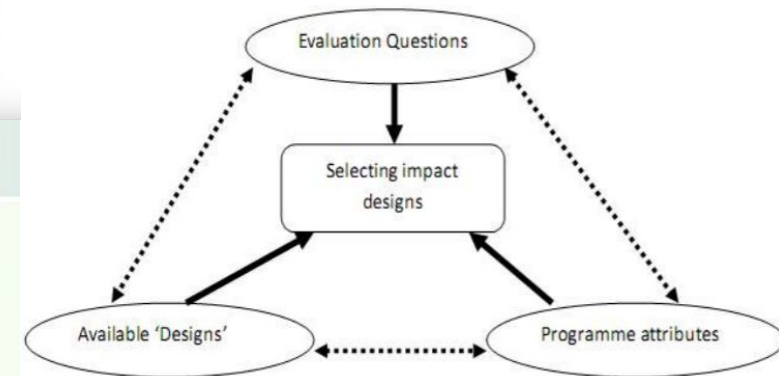
## HOW CAN IMPACT BE EVALUATED?

WHICH APPROACHES CAN YOU USE DEPENDING ON THE INTERVENTION'S CHARACTERISTICS AND THE AVAILABLE DATA? IN RESPONSE TO WHICH EXPECTATIONS?



## Choosing Appropriate Evaluation Methods Tool

- Which method are suited to which **questions**?
- What else do you want to **achieve**?
- What are the **features of the intervention** that drive methodological choice?



# An array of *causal* methods available

- While causal analyses in complex, systems-change examples do not seek to create replicable program models that can be implemented regardless of setting, they help to build a better body of knowledge about **what has worked, when, and why** than descriptive studies alone can achieve.

Lynn, J., Stachowiak, S., & Coffman, J. (2021). Lost Causal: Debunking Myths About Causal Analysis in Philanthropy. *The Foundation Review*, 13(3).  
<https://doi.org/10.9707/1944-5660.1576>



**TABLE 1** Nonexperimental Causal Designs and Methods

Approach	Methods	Basis for Making a Causal Claim	When and Why to Use It
<b>Theory-Based Approaches</b>	<ul style="list-style-type: none"> <li>• Contribution analysis</li> <li>• Process tracing</li> <li>• Realist evaluation</li> <li>• General elimination methodology</li> <li>• Qualitative impact assessment protocol</li> <li>• Multiple lines and levels of evidence</li> <li>• Innovation history</li> </ul>	In-depth theoretical analysis of causal processes or mechanisms in context	<ul style="list-style-type: none"> <li>• When there is a strong theory of change</li> <li>• When differences in context are likely to matter</li> <li>• When it is important to examine effects for specific groups</li> </ul>
<b>Participatory Approaches</b>	<ul style="list-style-type: none"> <li>• Most significant change</li> <li>• Outcome harvesting</li> <li>• Collaborative outcomes reporting</li> <li>• Collaborative yarning</li> <li>• Rapid outcome assessment</li> </ul>	Validation by participants that their actions and experienced effects are “caused” by the intervention	<ul style="list-style-type: none"> <li>• To capture multiple understandings of change and unintended consequences</li> <li>• More timely and affordable</li> <li>• Sample size is small</li> </ul>
<b>Case-Based Approaches</b>	<ul style="list-style-type: none"> <li>• Within-case</li> <li>• Across-case</li> </ul>	Analysis of causal processes within a case or across multiple cases	To identify causal factors across cases when effects are known
<b>Systems-Based Approaches</b>	<ul style="list-style-type: none"> <li>• Causal link monitoring</li> <li>• Causal loop diagramming</li> <li>• Statistically created counterfactual</li> </ul>	Building a conceptual model of the causal relationships at work, and verifying it with empirical data for each variable, mathematical formula, or computer simulation	To example multiple interdependent causal and nonlinear feedback processes

Source: Gates & Dyson, 2017

# Combining parts of methods

- Knowing what **criteria you value** can help you to combine the **best bits** of different methods to maximise quality and rigor.

Table 1 How functions support rigour criteria through methods

Function	Connection to rigour criteria
<b>Context analysis</b> of potentially contributing factors and conditions	Provides boundaries for causal mechanisms, enhances external validity of evaluative judgements, and supports transferability (e.g. context, mechanism, outcome configurations in Realist Evaluation).
<b>Developing outcome pathways</b> for causal processes	Helps to structure evaluative reasoning, enhances evaluability, and can bolster credibility of findings. If developed through a participatory process, this can contribute to responsiveness and utilisation (e.g. theory of change in Contribution Analysis, or developing causal chains in Process Tracing).
<b>Appreciative inquiry</b> of stakeholders to begin with an understanding of what matters to them, how they envision change, and what they want to learn about	Helps to ensure that evaluation is relevant and representative of stakeholders' experiences, and supports utilisation when orienting evaluation to learn from and about these experiences (e.g. collect significant change stories in Most Significant Change, or social inquiry in Collaborative Outcomes Reporting).
<b>Articulating outcome narratives</b> to explain outcomes and contributions	Enhances evaluative reasoning and the testability of effect patterns, which raises credibility, and can increase responsiveness if these are developed in a participatory way (e.g. draft outcome statements in Outcome Harvesting or progress markers in Outcome Mapping).
<b>Appraising significance of outcomes</b> to explain why a change is important	Enhances evaluative reasoning and improves responsiveness if appraisal is a participatory process (e.g. collecting significant change stories in Most Significant Change or collecting significance data for outcome statements in Outcome Harvesting).
<b>Iterative sensemaking</b> of hypotheses and contribution claims	Helps to strengthen reasoning and enhance credibility and can also be conducted in a participatory way to enhance responsiveness (e.g. assessing a contribution story and seeking additional evidence in Contribution Analysis or revising the conceptual model in Multiple Lines and Levels of Evidence).
<b>Testing strength of evidence</b> underpinning contribution claims	Appraising evidence strength stress-tests evaluative reasoning. It strengthens internal validity and thus increases the credibility of findings and evaluative judgements (e.g. evidence tests and rival hypothesis assessment in Process Tracing; ruling out possible alternative explanations in General Elimination Methodology).
<b>Validation of outcomes</b> with communities, peers and/or experts	Strengthens the credibility of evaluative judgements (internal validity). If conducted in a participatory way, it can contribute to responsiveness (e.g. outcome panel in Collaborative Outcomes Reporting; contribution trial in Process Tracing with Bayesian Updating).
<b>Causal pattern comparison</b> between outcomes	Can help identify trends and outliers, thereby contributing to evaluative reasoning and transferability of findings (e.g. data matrix and truth tables in Qualitative Comparative Analysis; SenseMaker's visualisation of patterns).
<b>Supporting utilisation</b> of evaluation findings to inform future programming	Enables use of evaluation findings and supports transferability through adapting programming and informing new programming (e.g. supports use in Outcome Harvesting).

# Example

Table 1: Overview of impact pathways, intervention modalities, evaluation questions and approaches/methods/tools

Pathway	Core intervention modality evaluated	Evaluation and learning questions	Key evaluation approaches/methods/tools	Section in paper
1 Evidence-and innovation-generation	Systemic Action Research	<ul style="list-style-type: none"><li>• What outcomes does participating in life story collection and analysis processes contribute for children?</li><li>• How, in what contexts and for whom does it generate these outcomes?</li><li>• How, in what contexts and for whom does Participatory Action Research generate effective innovations?</li></ul>	<ul style="list-style-type: none"><li>• Realist evaluation</li><li>• Process documentation</li><li>• Within-Action Research evaluation</li><li>• Outcome evidencing</li></ul>	Evaluating Systemic Action Research as participatory intervention

- ❖ Realist evaluation to include **context** in programme theory - and support refinement of theory that allows for **plausible** explanations of how AR works and for whom
- ❖ Within AR participatory exploration of outcomes **builds on lived experience**
- ❖ OH to pick up and substantiate **emergent change**

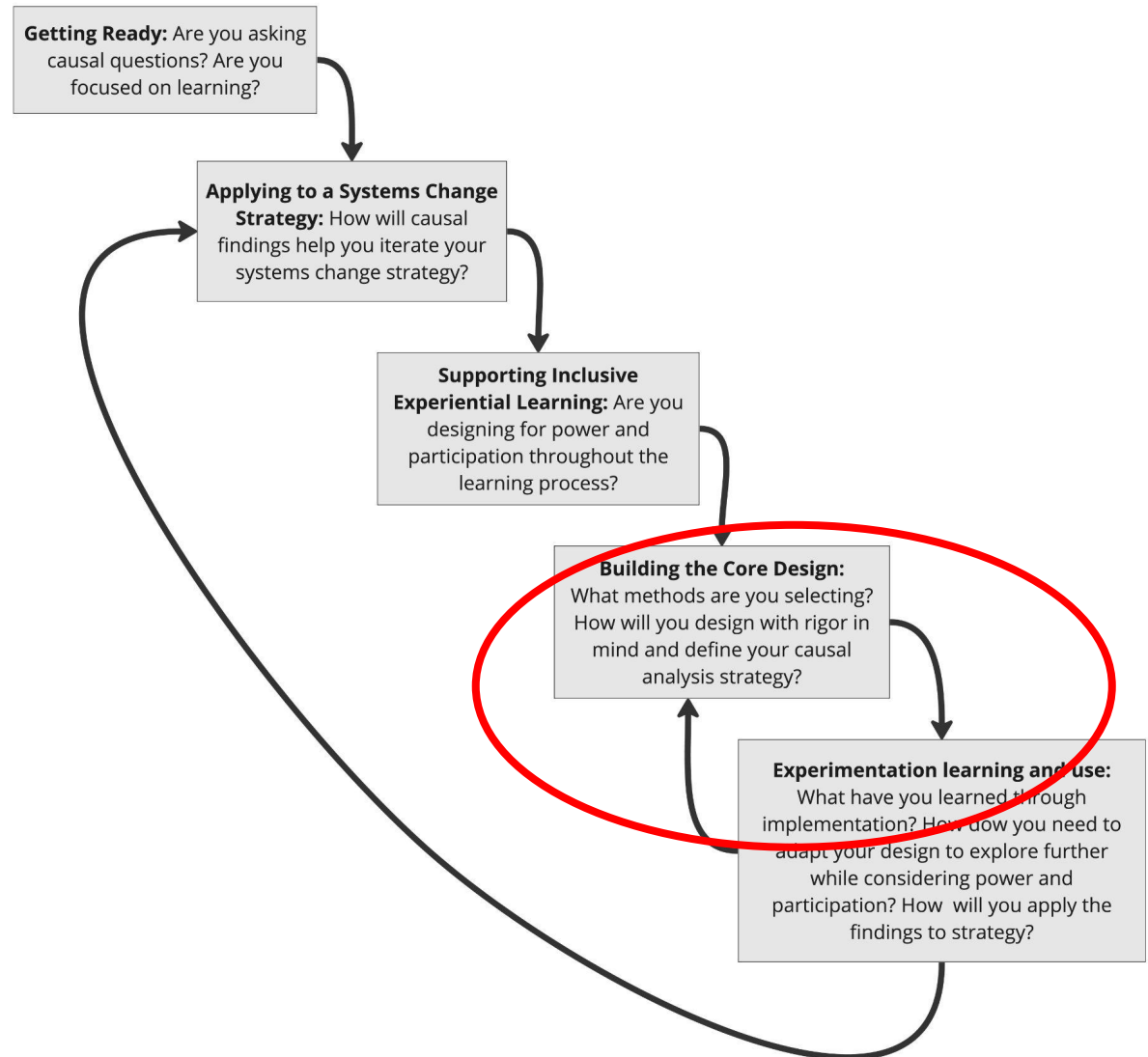


# Bricolage

- **Bricolage** is a way to combine (or triangulate) the best bits of methods
- Attempt to **reuse a heterogeneous repertoire** of available materials **to solve new problems** (Lévi-Strauss, [1968](#))
- A **patchwork** or **mosaic** combining appropriate materials
- **Not new**, but gaining prominence in recent years (Patton, [2011](#); Hargreaves, [2021](#); Aston *et al.* [2021](#); Aston & Apgar, [2022](#))



# Iterative co-design for causal analysis



# What does this look like in your practice?

- What do you **value**?
- What is your **strategy** and **context**?
- What **questions** do you want to answer?
- What are **appropriate methods**?
- How can you **combine them** to ensure rigor?

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# What do you think?

I was surprised  
to hear...

I'm still  
reflecting  
on...





# Useful resources

- Aston & Apgar, 2022. [The Art and Craft of Bricolage in Evaluation](#) CDI Practice Paper 24
- Aston et al. 2021. [Monitoring and Evaluation of Thinking and Working Politically](#). Evaluation 28(1).
- Befani, 2020. [Choosing Appropriate Evaluation Methods](#). CECAN
- Quadrant Conseil (2017), [How can impact be evaluated?](#) A tree of impact evaluation approaches.
- Lamire 2020. [Evaluation Theory Metro Map](#).
- Preskill and Lynn, 2016. [Redefining Rigor](#) blog.
- Stern et al. 2012. [Broadening the Range of Designs and Methods for Impact Evaluation](#). DFID Working Paper 28

