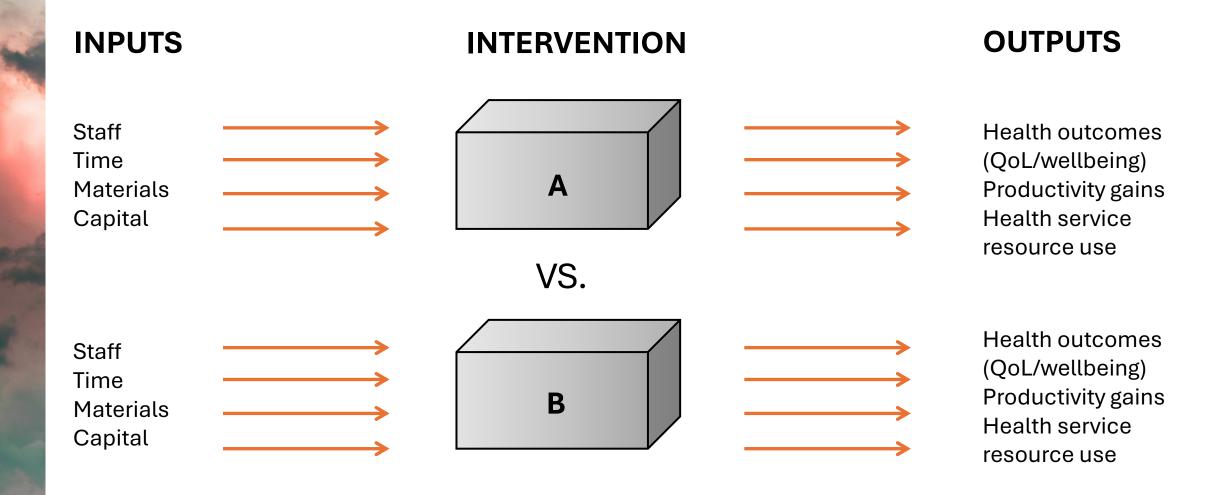
Let's get REAL:

the utility of realist economic evaluation in health and social care decision-making

Dr. Angela Bate

Economic evaluation and HTA



 Δ Costs/ Δ Benefits = ICER

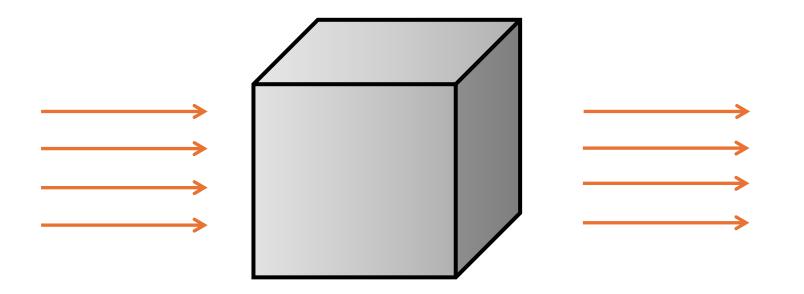
we implemented the same program in two locations. For some reason, we had very different results.





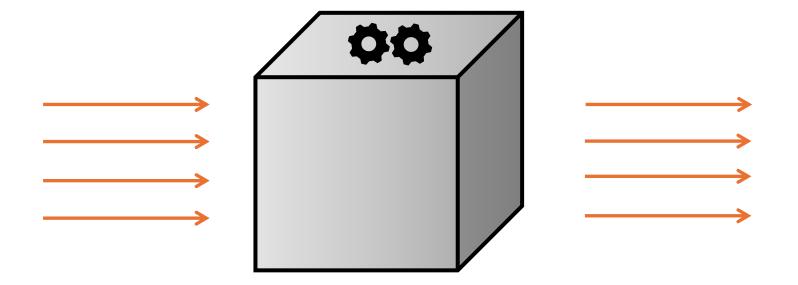
The REAL world = complex

INPUTS INTERVENTION OUTPUTS

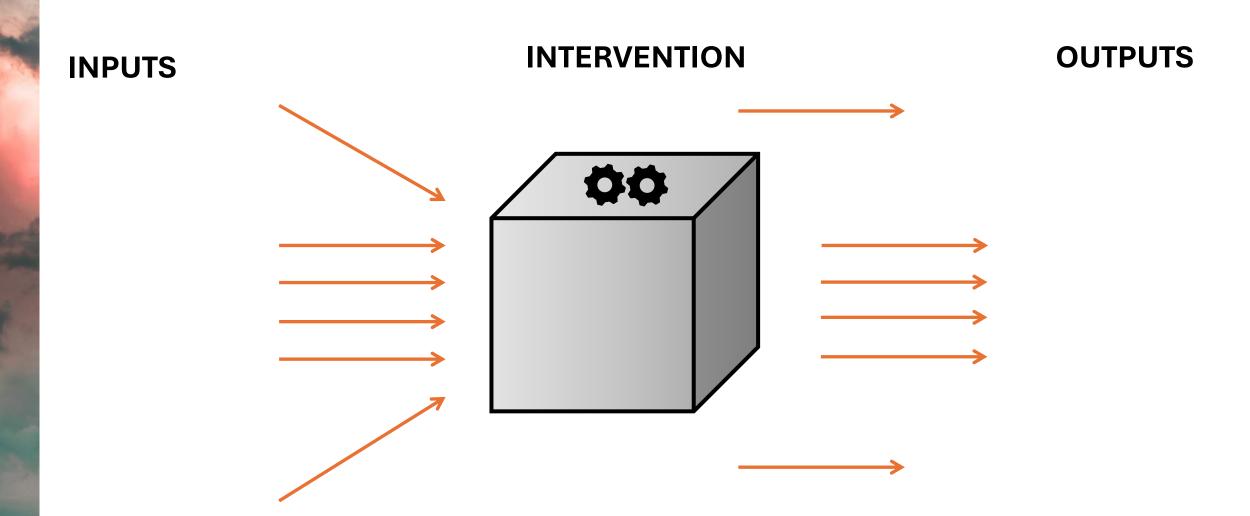


The REAL world = complex

INPUTS INTERVENTION OUTPUTS



The REAL word = complex



The REAL word = complex

INTERVENTION OUTPUTS INPUTS

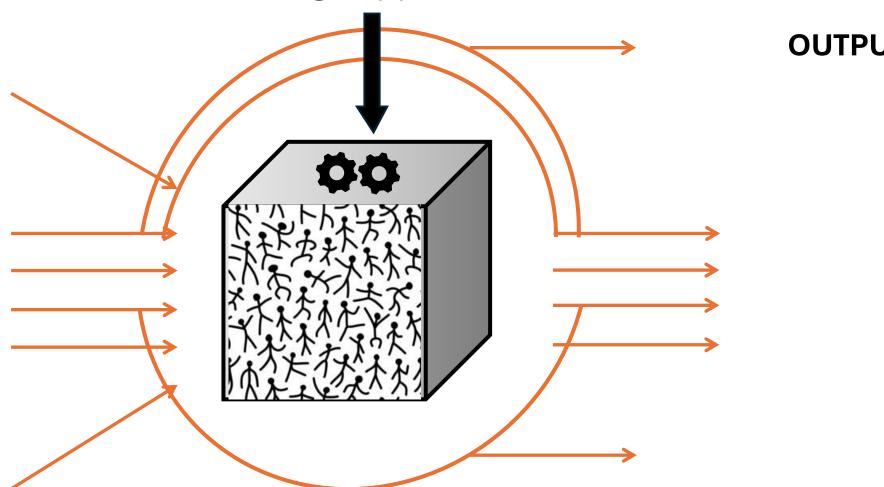
The REAL world = complex

INTERVENTION **OUTPUTS INPUTS**

The REAL world = complex

Something happens here!

INPUTS

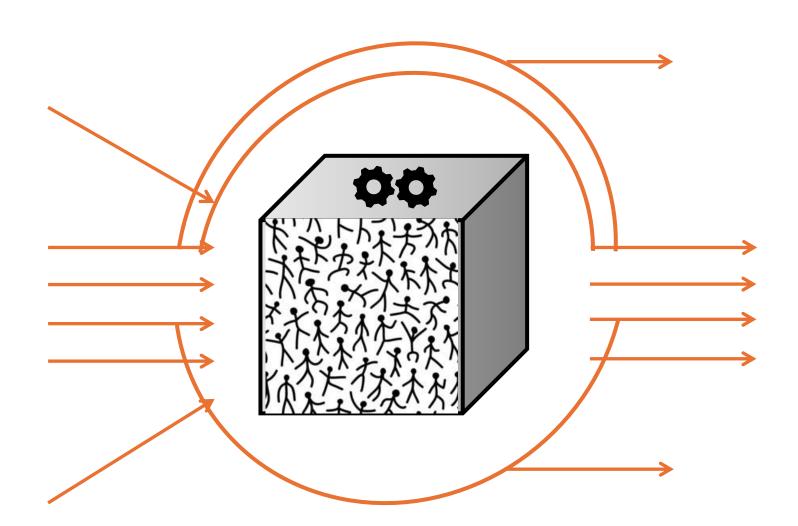


OUTPUTS

Economic evaluation and complexity

INPUTS

- Societal perspective
- Activity
 based/time driven AB
 costing
- Resource mapping
- Volunteer and carer time

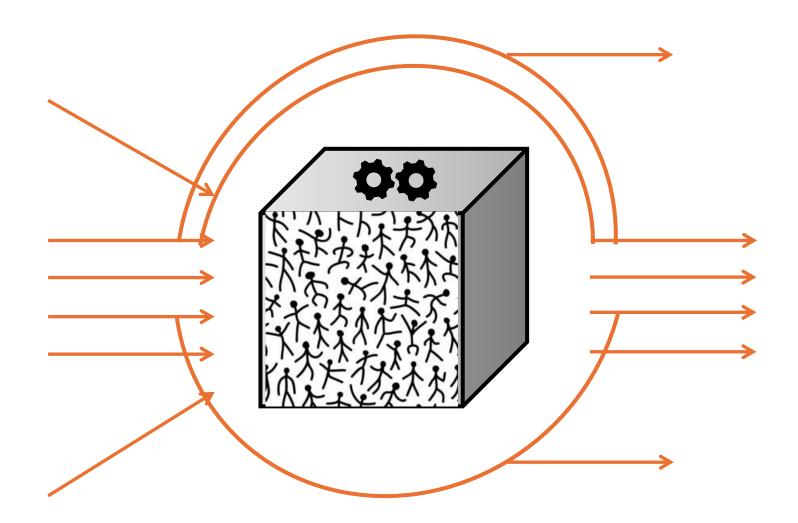


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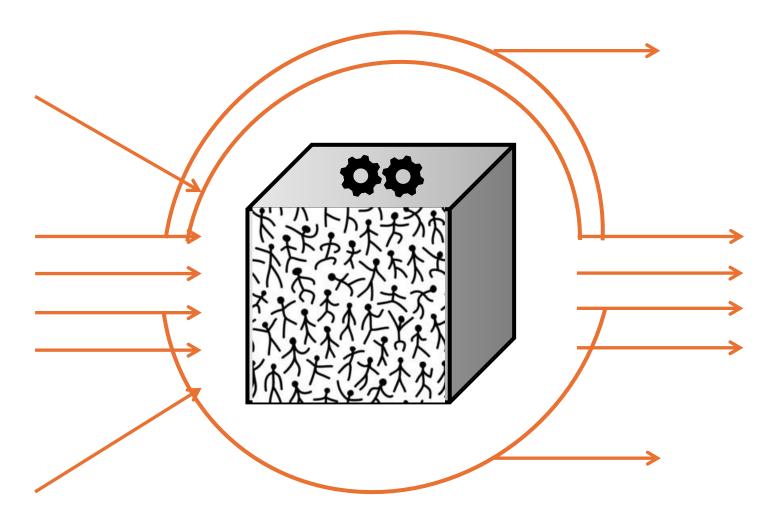
OUTPUTS

- Sub-group analysis, stratification
- Broader
 measures of
 benefit
 (capabilities,
 WELBY)
- Spill-overs (extended impact inventories)
- Weighting outcomes

Economic evaluation and complexity

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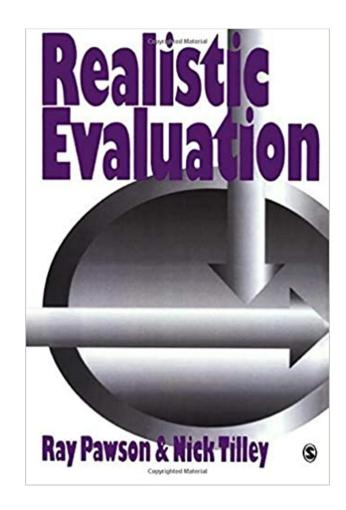
Complex system modelling (e.g. agent based modelling, structural equation modelling)

Economic evaluation and the black box



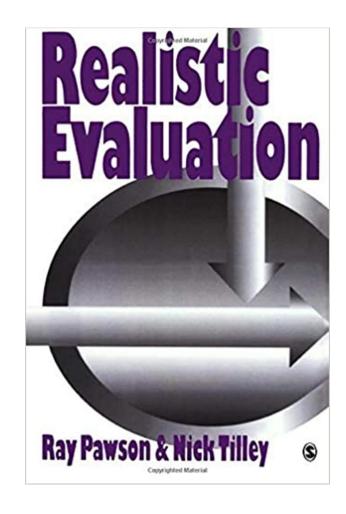
The REAL world requires REALISTIC Evaluation

• Theory driven form of evaluation which focuses on understanding complex social interventions or initiatives (programmes).



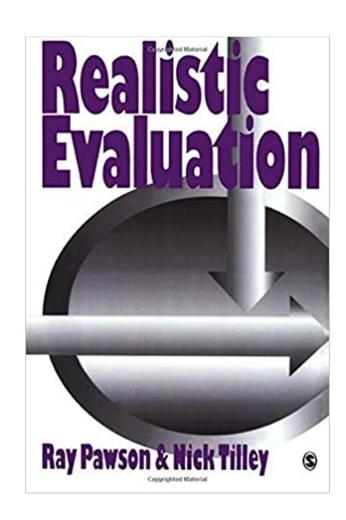
The REAL world requires REALISTIC Evaluation

- Theory driven form of evaluation which focuses on understanding complex social interventions or initiatives (programmes).
- A realist approach recognises that programmes are not universally successful and work better in some circumstances than in others.

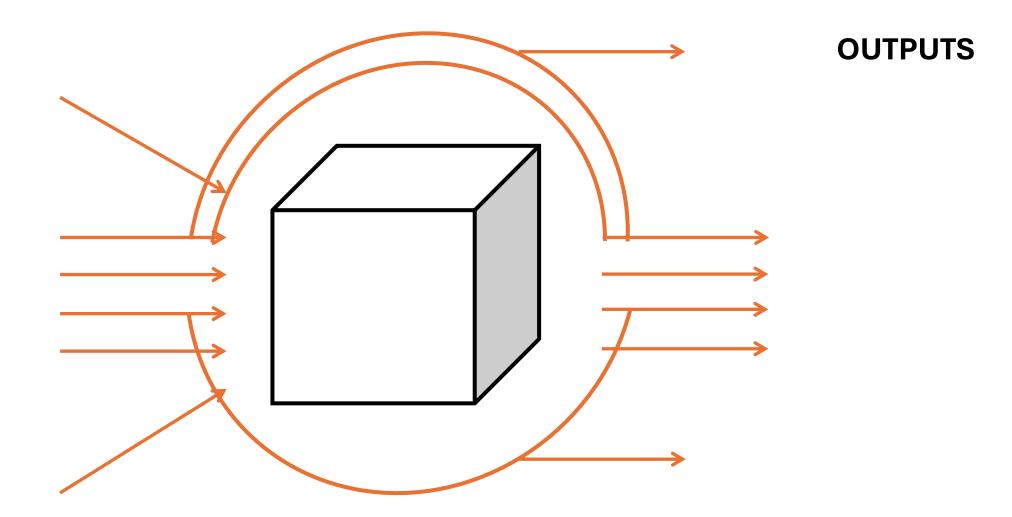


The REAL world requires REALISTIC Evaluation

- Theory driven form of evaluation which focuses on understanding complex social interventions or initiatives (programmes).
- A realist approach recognises that programmes are not universally successful and work better in some circumstances than in others.
- The aim is to answer 'in what respects, for whom, in what cirucmstances and why a programme or policy works' (RAMESES II Project, 2017)



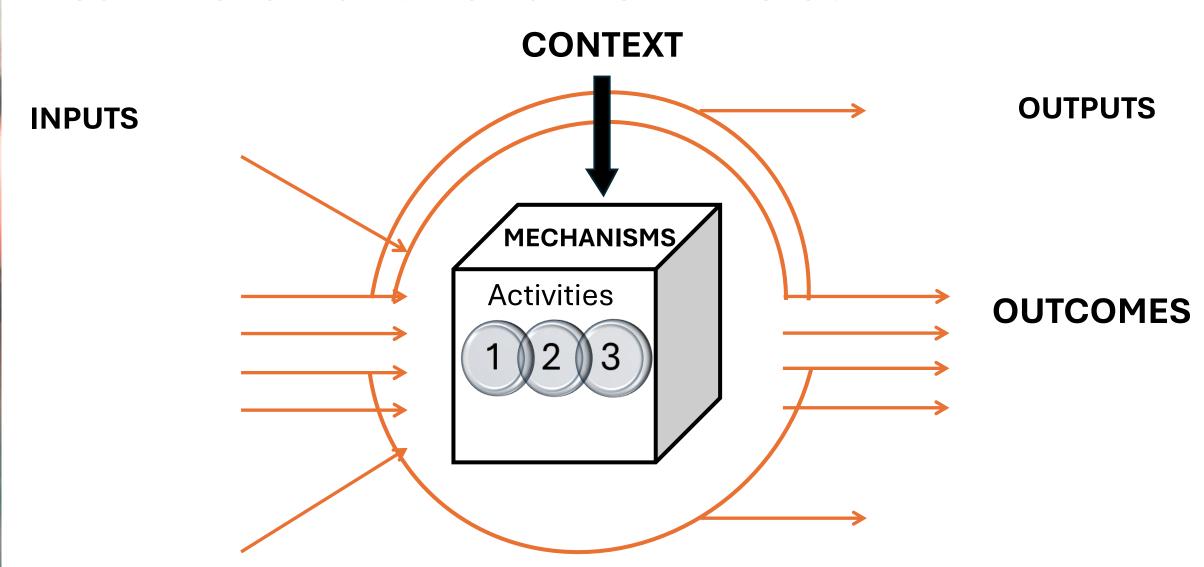
INPUTS



OUTPUTS INPUTS Activities OUTCOMES

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OUTPUTS INPUTS MECHANISMS **Activities OUTCOMES**

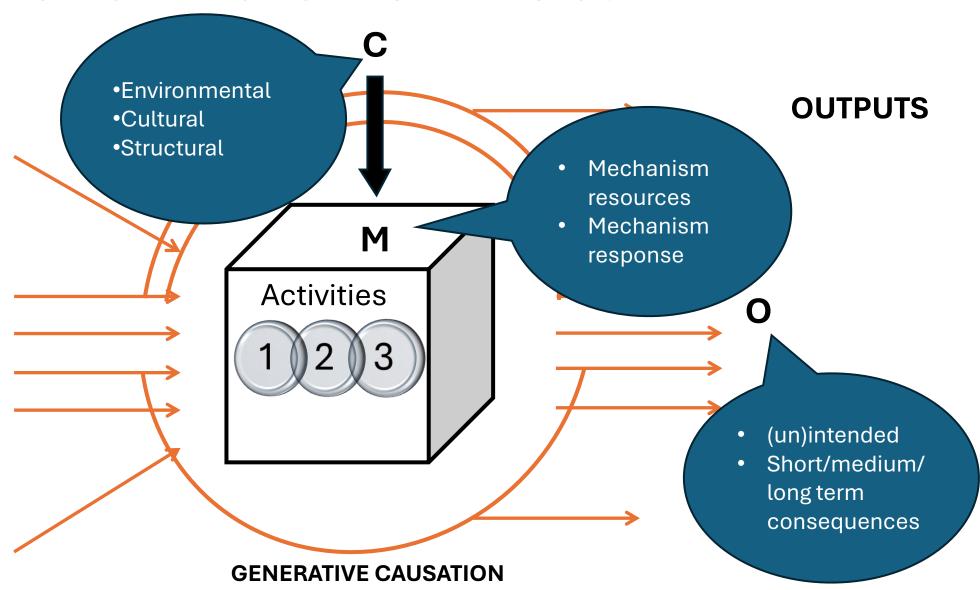


OUTPUTS INPUTS M **Activities GENERATIVE CAUSATION**

OUTPUTS INPUTS M **Activities** (un)intended Short/medium/ long term consequences **GENERATIVE CAUSATION**

OUTPUTS INPUTS Mechanism resources Mechanism M response **Activities** (un)intended Short/medium/ long term consequences **GENERATIVE CAUSATION**

INPUTS



Decision-Evaluation Gap

- Realist evaluation establishes what works, for who, in which circumstances and why, but does not examine the marginal costs and benefits.
- Economic evaluation establishes clinical cost-effectiveness but does not examine for who, in what circumstances, and why.
- Decisions are less concerned with the simple yes or no wholesale implementation of interventions but in how much, for who and where.
- Decision-makers need practical but contingent economic evaluations.
- Requires a range and combination of research perspective and methods.



Developing realist economic evaluation methods (REEM) and guidance to evaluate the impact, costs, and consequences of complex interventions

Co-Principal Investigators: Angela Bate and Sonia Dalkin Project Team: Rob Anderson, Rachel Baker, Cam Donaldson, Andy Fletcher, Vivienne Hibberd, Meghan Kumar, Felicity Shenton, Gill Westhorp, Geoff Wong, Judy Wright

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This project is funded by the NIHR <u>Health and Social Care</u>
<u>Delivery Research</u> programme (Award ID: NIHR135102). The
views expressed are those of the author(s) and not necessarily
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The Research

- Phase 1: To understand and develop REEm, principles, and applications
 - What are the theoretical, methodological and practical similarities and differences between realist and economic evaluations?
- **Phase 2:** To apply and evaluate REEm, and underlying principles in practice
 - What lessons can we learn from using REEm in practice to improve it?
- Phase 3: To refine REEm and principles, and develop guidance for wider application and further development
 - How can we use empirical and expert knowledge to produce consensus REEm guidance?

What?

- Comprehensive approach to evaluation that draws on principles and methods from Realist Evaluation and Economic Evaluation
- Grounded in realist philosophy of science and generative causation
- Comparative assessment of resource impacts and outcomes alongside realist programme theories of how those outcomes are generated (through what contexts and mechanisms).
- Promotes the identification, measurement and valuation of the resources (costs) and (dis)benefits (outcomes) to explain what works, in what circumstances and how, and the relationships between resources, contexts, mechanisms and outcomes.

How?

- Stage 1: Scope and set-up
 - deciphering the best way to investigate the decision problem, focusing on identifying and understanding the evaluative question, and bringing together a team with appropriate expertise.
- Stage 2: Identify (theory development)
 - identify programme theories about how the intervention works (compared an alternative/counterfactual) theorising the context, outcomes and generative causal links (mechanisms), and resource inputs and outputs aligned to these; and generate realist comparative pathway maps.
- Stage 3: Measure (theory testing)
 - select a study design and methods to allow the measurement and testing of causal links in the realist comparative pathway maps, iteratively refining understanding and gathering further evidence.
- Stage 4: Valuing (theory valuation)
 - Refine the realist causal pathway maps and value and compare the costs and outcomes aligned to the refined realist comparative pathway maps. Report and present the causal conditions.
- Stage 5: Report





Thank you.



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REEM

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