Unravelling causality in relation to complex social interventions in a complex world

David Byrne

dave.byrne@durham.ac.uk

Social Causality

'the social structure if for the most part created … Unlike the physical nexus [the social type of causal nexus] does not exist apart from the motives of social beings [and requires a methodological strategy that fits the distinctiveness of social events.]' (Cicourel *Method and Measurement in Sociology* 1964 1 quoting MacIver 1942)

' ... a practice of social and historical explanation, sensitive to structure but aware of contingency, is not yet at hand. We must build it as we go along, by reconstructing the available tools of social science and social theory. Its absence denies us a credible account of how transformation happens.' (Roberto Unger *Democracy Realized: The Progressive Alternative*, Verso, 1998).
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Who said this?

'More and more I have come to the conclusion that the core of the scientific method is not experimentation per se but rather the strategy connoted by the phrase 'plausible rival hypotheses'. This strategy may start its puzzle solving with evidence, or it may start with hypotheses. Rather than presenting this hypothesis or evidence in the context independent manner of positivist confirmation (or even of post-positivist corroboration), it is presented instead in extended networks of implications that (although never complete) are nonetheless crucial to its scientific evaluation. … in addition to the quantitative and quasi-experimental case study approach that Yin teaches, our social science methodological armamentarium also needs a humanistic validity-seeking case study methodology that, although making no use of quantification or test of significance, would still work on the same questions and share the same goals of knowledge.'

Donald Campbell

(Campbell 2003 ix-x) Foreword to:

Yin, R.K. (2003). *Case study research: Design and methods*, 3rd edition, Thousand Oaks, CA: Sage.

What is a wicked issue?

- 'Wicked issues are those that seem to defy solution, or where seemingly sound interventions turn out to have unexpected consequences and results. Solutions that worked in one place fail when imposed on others. Ideas that remedy one problem can create a new set of circumstances, often with unintended consequences that then need resolution.' (Hargadon, J. and P. Plsek. 2004. "Complexity and Health Workforce Issues". (Boston, MA): Joint Learning Initiative: Human Resources for Health and Development)

'The task of collecting evidence on [health] inequalities is especially difficult and has been described as a 'wicked issue'—a problem that is complex, difficult to define, with no immediate solution, and one where every wicked problem can be considered to be a symptom of another problem. Assembling evidence to reduce health inequalities through social determinants certainly seems to fit this definition. The causes and symptoms are highly interrelated, and the causal pathways complex, passing through many sectors, including housing, transport, crime, health, welfare and education, all of which fall within the purview of the Campbell and Cochrane Collaborations. Better evidence to address this wicked issue therefore will involve synthesizing complex sets of evidence across disciplines and methodological divides, and understanding the process and context of interventions, while using these syntheses to inform real-world decisions'. (Petticrew et al 'Better Evidence about wicked issues in tackling health inequalities' Journal of Public Health 2009 31(3):454)

'The most obvious conclusion drawn from this perspective is that there is no over-arching theory of complexity that allows us to ignore the contingent aspects of complex systems. If something is really complex, it cannot be adequately described by means of a simple theory. Engaging with complexity entails engagement with specific complex systems. Despite this we can, at least at a very basic level, make general remarks concerning the conditions for complex behaviour and the dynamics of complex systems. Furthermore, I suggest that complex systems can be modelled. (Cilliers, 1998 ix)

'Our starting point is the empirical observation that governance systems and networks are often in states of change which make them difficult to analyze, let alone manage. Stability of governance systems seems to be the exception rather than the rule. Further more, any changes that do take place are often capricious. Processes seem to unfold in unique and non-replicable ways, making it difficult to learn from successes and failures and to develop general theories …. This then begs the question of how to develop knowledge about such an elusive subject of research. An attempt is made here by starting from a complexity theory perspective, with the assumption that the interactions in governance networks are complex: the outcomes of interactions between parties do not only result from the intentions and actions of these two parties, but also from interferences from the context in which the interaction takes place and the emerging results of such interactions. This means that the output and outcomes of the same interaction can differ in different places and at different times. A governance approach or organizational arrangement applied in two different contexts can result in very different outcomes.' (Teismann et al 2009 2)

Process Tracing

'… process-tracing is a methodology well-suited to testing theories in a world marked by multiple interaction effects, where it is difficult to explain outcomes in terms or two or three independent variables – precisely the world that more and more social scientists believe we confront.' (Hall quoting George 2000 14 [Case studies and theory development in the social sciences / Alexander L. George and Andrew Bennett.](#) Cambridge, Mass. : MIT Press, c2005.
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A Rationale

Implicit in most social scientific notions of case analysis is the idea that the objects of investigation are similar enough and separate enough to permit treating them as comparable instances of the same general phenomenon. At a minimum, most social scientists believe that their methods are powerful enough to overwhelm the uniqueness inherent in objects and events in the social world. …. The audience for social science expect the results of social scientific investigation to be based on systematic appraisal of empirical evidence. Use of evidence that is repetitious and extensive in form, as when it is based on observations of many cases or of varied cases, has proved to be a dependable way for social scientists to substantiate their arguments. C.C. Ragin Introduction to *What is a case?* London: Sage 1992 1

Comparisons

a) The importance of ensembles

b) The usefulness of near neighbours

c) The necessity for qualitative examination of cases

d) The possibility of systematic comparison – Qualitative Comparative Analysis

e) The idea of 'configuration' as a description of complex cause**S**

f) Using QCA – one promising approach