

A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences

Description

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Gary Goertz & James Mahoney, 2012
Princeton University Press. [Available on Amazon](#)

[Review of the book by Dan Hirschman](#)

Excerpts from his review:

Goertz, a political scientist, and Mahoney, a sociologist, attempt to make sense of the different cultures of research in these two camps without attempting to apply the criteria of one to the other. In other words, the goal is to illuminate difference and similarity rather than judge either approach (or, really, affiliated collection of approaches) as deficient by a universal standard.

G&M are interested in quantitative and qualitative approaches to causal explanation.

Onto the meat of the argument. G&M argue that the two cultures of quantitative and (causal) qualitative research differ in how they understand causality, how they use mathematics, how they privilege within-case vs. between-case variation, how they generate counterfactuals, and more. G&M argue, perhaps counter to our expectations, that both cultures have answers to each of these questions, and that the answers are reasonably coherent across cultures, but create tensions when researchers attempt to evaluate each others' research: we mean different things, we emphasize different sorts of variation, and so on. Each of these differences is captured in a succinct chapter that lays out in incredible clarity the basic choices made by each culture, and how these choices aggregate up to very different models of research.

Perhaps the most counterintuitive, but arguably most rhetorically important, is the assertion that both quant and qual research are tightly linked to mathematics. For quant research, the connection is obvious: quantitative research relies heavily on probability and statistics. Causal explanation consists of statistically identifying the average effect of a treatment. For qual research, the claim is much more controversial. Rather than relying on statistics, G&M assert that qualitative research relies on logic and set theory, even if this reliance is often implicit rather than formal. G&M argue that at the core of explanation in the qualitative culture are the set theoretic/logical criteria of necessary and sufficient causes. Combinations of necessary and sufficient explanations constitute causal explanations. This search for non-trivial necessary and sufficient conditions for the appearance of an outcome shape the choices made in the qualitative culture, just as the search for significant statistical variation shapes quantitative research. G&M include a brief review of basic logic, and a quick overview of the fuzzy-set analysis championed by Charles Ragin. I had little prior experience with fuzzy sets (although plenty with formal logic), and I found this chapter extremely compelling and provocative. Qualitative social science works much more often with the notion of *partial membership* — some countries are not quite democracies, while others are completely democracies, and others are completely not democracies. This fuzzy-set approach highlights the non-linearities inherent in partial membership, as contrasted with

quantitative approaches that would tend to treat 'degree of democracy' as a smooth variable.

Earlier paper by same authors available as pdf: [A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research](#)

by James Mahoney, Gary Goertz. Political Analysis (2006) 14:227-249 doi:10.1093/pan/mpj017

See also these recent reviews:

- [Duck-Rabbits in Social Analysis: A Tale of Two Cultures](#), by Colin Elman, Comparative Political Studies, XX(X) 1-12. published online 30 November 2012. A Tale of Two Cultures is the rare book that shows its readers something new, something they might be able to see only with a little help but which, once revealed, they wonder how they could not have noticed before. The book has the potential to make a profound contribution to how political scientists view social science methodology.
- [Do Two Research Cultures Imply Two Scientific Paradigms?](#) Henry E Brady, Comparative Political Studies February 2013 vol. 46 no. 2 252-265. Very detailed
- [Reader's view: Goertz/Mahoney \(2012\): A Tale of Two Cultures](#), Ingo Rohlfing, January 31, 2013. 7:33 pm

See also [The Logic of Process Tracing Tests in the Social Sciences](#) by James Mahoney, Sociological Methods & Research, XX(X), 1-28 Published online 2 March 2012

RD comment: This book is recommended reading!

PS 15 February 2013: See Howard White's new blog posting [Using the causal chain to make sense of the numbers](#) where he provides examples of the usefulness of simple set-theoretic analyses of the kind described by Mahoney and Goetz (e.g. in an analysis of arguments about why Gore lost to Bush in Florida)

Category

1. Books

Tags

1. causality
2. qualitative
3. quantitative

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