Teaching the Metatheoretics of Qualitative Methodology

David Waldner
Department of Politics
University of Virginia

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Logic, Bertrand Russell once wrote, teaches us “caution in inference.” Russell believed that we avoided inferential errors by studying philosophy, or what he called the “art of rational conjecture.”¹ Few contemporary social scientists would readily assent with Lord Russell’s position. Today, we learn to avoid inferential errors by learning methodology. Methodology is a lineal descendant of philosophy, especially work on inductive logic. But as various techniques became codified, they acquired intellectual autonomy and could thus be further developed and taught without explicit reference to the philosophical understandings they embodied. Just as one can study and gainfully employ the central limit theorem without any familiarity with the philosophy of probability, one can master regression models without appreciating the bold epistemic shifts that permitted their development.

Yet I wish to argue that flavoring our methodological curricula with a dash or two of metatheoretical material can advance the goal of training our students to be methodological adept; indeed, insofar as pedagogy has an ineradicably reflexive component, we teachers might profit as well. This is not the proper venue for an elaborate defense of a more philosophically inflected approach to methodology. But we have all heard the rising chorus of voices claiming that methodologies rest on prior presuppositions which must be elaborated and scrutinized before they can support often heavy inferential burdens; philosophy surely has a role to play in that procedure. And many of us have also heard or voiced concerns of creeping methodological dogmatism or expressions of alarm that the current generation of students who enter political science doctoral programs to produce policy-relevant understandings of politics approach

methodological training not as an intellectually challenging and essential component of the generation and accumulation of knowledge, but rather as a disciplinary rite of passage to be endured or a rational response to job market signals. In my experience, teaching the philosophical foundations of methodology kindles greater enthusiasm for methodology as well as greater appreciation of its importance: it helps students to distinguish between discipline as punishment and discipline as a set of rules that sharpen mental faculties. This alone justifies including philosophy in our curricula.

Consider first the core methodological precept of falsification. Our students often come to us endowed with enthusiastic but naïve empiricism, a wish to acquire expert knowledge about the world. Yet one of the first demands upon them is to seek falsification. I have found that assigning David Hume’s relentless assault on inductive knowledge profoundly unsettles students and leaves them wondering what an empirical social science has to offer; reading Popper’s response to Hume is an intellectual tonic, one that fortifies students to grapple with Popper’s elucidation of what we today call the “confirmationist bias,” the understandable human predilection to seek confirming evidence while avoiding discomforting disconfirming evidence. Rising to Popper’s challenge to hypothesize boldly but criticize ruthlessly is no less daunting a task, but counterposed to Hume’s skepticism, it becomes less a trap to avoid at job talks and more an intellectually indispensable and fascinating challenge.

Turn next to the question of explanation. Many of us working with qualitative methods self-identify as seekers of knowledge about “big questions,” usually understood as the origins and dynamics of the core elements of modernity. We are thus oriented towards providing specific explanations of structures and events; this quest for specific
explanations need not—and typically does not—come at the expense of engagement with grander theoretical projects, but it does force an engagement with an issue that methodology itself cannot resolve: what constitutes an adequate explanation? Methodology, after all, is what I would call the disciplined deployment of data: it helps us to sort through data to make valid descriptive and causal inferences. But valid inferences do not automatically make powerful explanations. If, for example, a fellow political scientist were to strike me at next year’s annual conference, I might reasonably infer that she was incensed at something I had said or done, but that inference alone would not suffice to explain the physical attack: I, at least, would want to know what had caused the anger and why the anger motivated assault. In at least some instances, in other words, a number of inferences must be made before explanatory adequacy is achieved. This topic is a properly philosophical one, for no methodology—no recipe for inferential validity—can also govern explanatory adequacy. Indeed, it is striking how many methodological textbooks contain almost no reference to explanations and the criteria of explanatory goodness.²

Leaving aside the debate between naturalist and interpretivist ontologies, we can identify a range of explanatory criteria. By some accounts, explanations of particulars consist of point predictions and error terms derived from the statistical analysis of samples and populations. In this view, the method—regression analysis—is also the criterion of explanatory goodness. But rival accounts exist. Perhaps most influential in the second half of the twentieth century was Carl Hempel’s deductive-nomological

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² Excellent on this, and many other topics, is John Gerring, Social Science Methodology: A Criterial Framework (Cambridge University Press, 2001).
model, in which particulars were explained by subsuming them under general laws.\(^3\) An explanation thus consisted of one or more general laws along with one or more statements of initial conditions. While perfectly consistent with a statistical worldview, this statement of explanatory goodness also departs from it in meaningful ways. Hempel’s model, however, has been thoroughly criticized, not simply because of the absence of general laws to do much explaining in the social sciences, but also on the philosophical grounds that general laws are neither necessary nor sufficient for explanations. One crucial implication of the rejection of Hempel’s model that all students must learn is that most philosophers no longer view explanation and prediction as equivalent forms of reasoning: we can explain without predicting and predict without explaining. A third account, one that is widely defended in the philosophical literature, grounds explanations in causal mechanisms. In the most demanding form of this approach, explanations require the identification of the cause or causes that, under particular conditions, are sufficient to produce the outcome.\(^4\) I have claimed elsewhere that only this last formulation of explanatory adequacy is defensible. Students grappling with this issue need not agree, but grapple with it they should. Thinking about explanations, as opposed to inferences, can help students select the appropriate method, and it can also help them use those methods—or perhaps a combination of methods—more wisely.

But note how turning attention to questions of explanatory adequacy opens up a host of new concerns. We are all accustomed to gravely intoning “correlation is not


causation,” and qualitatively inclined scholars have built a large part of their methodological edifice on the distinction, particularly by emphasizing causal mechanisms and the related methodology of process tracing. For that project to work, it is necessary to go beyond current efforts to operationalize causation (in terms of non-spurious correlations or causal effects) and open up discussion of what precisely causation is and how it is to be distinguished from correlation.

Consider prevailing definitions of process tracing. Process tracing is all about identifying causal mechanisms; causal mechanisms distinguish causal from non-causal associations; and causal mechanisms are conventionally understood to be both processes and intervening variables linking cause and effect. This seemingly simple formulation is in fact quite problematic. Processes and intervening variables are not equivalent. Take, for example, the purported relationship between the degree of socioeconomic modernity and democracy. If we understand causal mechanisms as intervening variables, we might make reference to Seymour Martin Lipset’s identification of changing values as the key causal linkage. In this case, however, statistical methods are perfectly appropriate. We might, on the other hand, define causal mechanisms as processes, understood as tethered historical events composed of bundles of actions that change the values of key variables. Qualitative methods fare much better under this interpretation of causal mechanisms.

Because methodological decisions hinge on often-tacit presuppositions, it is necessary to go beyond methods into the realm of metatheoretics.

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Consider finally the issue of determinism. If explanatory goodness requires causal sufficiency, then we must ask whether determinism is ontologically and epistemologically defensible. Adding adverbial modifiers to the terms necessary and sufficient, as Charles Ragin\(^6\) recommends, does not relieve us of this responsibility: if the concept of determinism is incoherent, as many philosophers argue, then labeling a set of causes “almost always sufficient” would seem to be almost always incoherent. It might prove to be possible to ground small-n methods in probabilistic assumptions, but that case has not yet been made and most qualitative work either explicitly or implicitly assumes determinism. Fortunately for those of us who defend qualitative methods, it turns out that many of the ontological critiques of determinism—those rooted in chaos theory and quantum mechanics—do not have direct relevance to the social sciences and that a defensible case for deterministic explanations can be made.\(^7\) It seems to me that work of this sort is absolutely essential to placing qualitative methods on secure ground.

To be sure, I have omitted discussion of a host of other crucial philosophical questions that lurk just under the surface of empirical research. And it might be the case that “bringing philosophy in” only invites irresolvable debate, that thinking philosophically really is fruitless “navel gazing.” But that has not been my experience in the classroom. Introducing students to the fundaments of intellectual inquiry elicits enthusiasm, not fatalism. It creates grounds for genuine methodological pluralism. Perhaps most importantly, it obliges students to make arguments in defense of their positions, rather than assuming certain explanatory criteria or ontological

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presuppositions. For a discipline that took too long to respond to Giovanni Sartori’s call for methodological self-consciousness, this can only be a welcome development.

Let me end by noting that teaching these and other philosophical debates to students who, in a one-semester course, already must tackle material on research design and the mechanics of qualitative methods presents somewhat intractable challenges. I have tried to turn those challenges to my pedagogical advantage. I design my course readings so that the themes of research design and qualitative methods become the logical culmination of the antecedent philosophical readings. I present the texts we read as partial solutions to problems left unsolved by prior authors. I emphasize that these are partial solutions: much work remains to be done, and there are no guarantees that future efforts will yield consensual philosophical closure. I have found that rather than lowering expectations, this modest approach raises them. I have found that when students understand why current thinking places great emphasis on the explanatory virtues of causal mechanisms, they are better able to appreciate why and how quantitative methods and qualitative methods must be co-conspirators, not competitors. But they are also able to appreciate some of the limits of contemporary approaches to qualitative methods, and many of them are eager to be future contributors to the field, to be consumers and producers of philosophically sophisticated qualitative methods.