

Toward a Theistic Method of Science

Brent D. Slife, Brigham Young University

As Scott described, we are dividing our presentations at the traditional division of scientific method, the first phase being the context of discovery and the second being the context of justification. The problem is that the context of justification is traditionally forbidden territory for the theist. As Robert Evans (1989) correctly observes, the context of discovery has traditionally been liberal, allowing scientists to acquire their ideas from any source, including divine inspiration. However, the context of justification is another story all together. Here, as Evans (1989) rightly notes, the philosophy of reductive naturalism rules. Our formal methods are formulated to discern the natural laws of the world. Researchers, including researchers of religion, are allowed to have inspirations that are other-worldly, but their methods are already decided by an epistemology that regards God as superfluous.

This state of affairs makes my task profoundly problematic. I am supposed to describe a thoroughly theistic context of justification, yet our naturalistic notions of the logic of method are not just deeply ingrained but almost axiomatic. A scientific method implies, for most of us, rigid adherence to a logic that would never require an active God. God may have bestowed this logic, and God may have been active in the results that this logic yields, but God is never active or “variable” – as David Griffin (2000, p. x) would put it – in the logic itself. Therefore, I must not only overcome our traditional godless biases about method but also describe how an active divinity could be involved in our formal methods. The nice thing about a theistic possibility, as we shall see, is that our

current quantitative and qualitative procedures can still play a prominent role. However, a theistic philosophy of science will suggest several intriguing improvements in both.

To accomplish this task, I propose we begin at the beginning – the origin of modern methods. Indeed, a brief historical journey through the premodern, modern, and postmodern conceptions of method should permit us to see not only the historical impetus for our current views of method but also other possibilities. Our current understanding of the scientific method could be said to begin with the ancient realization of the problem of prejudice and knowledge. The problem, of course, is the “pre” of prejudice, because humans may assume they know something – the “judgment” of pre-*judice* – before they actually do. Many premodern scholars worried that if humans looked only through the lenses of their pre-investigatory biases, values, or assumptions, we would never achieve an undistorted knowledge of the world. We would selectively attend to what supported our values and biases, and even interpret whatever we “saw” as supportive of whatever we already assumed. Self-deception seemed almost inevitable, and “mere opinion” was all that seemed possible.

The likelihood of this self-deception inspired Aristotle and other ancient scholars to formulate an early forerunner of the scientific method – rationalism. One could escape mere opinion by following the principles of logic. If Socrates is a man, and all men are mortal, then Socrates is a mortal. The mortality of Socrates could be known with certainty and without particular biases, values, or assumptions distorting the knowledge. God was explicitly involved in most pre-modern rationalisms because He endowed us with these reasoning principles and even ensured the certainty of our rational results (Taylor, 19xx).

The beginning of modernism in method occurred when scholars questioned whether we could trust God to ensure the certainty of this rigorous reasoning. For instance, the principles of this reasoning can be applied without the premises of the reasoning being true. If Socrates is a table, and all tables are chickens, then Socrates is a chicken. Here, we correctly followed the syllogistic principles of logic but obviously derived the wrong conclusion. The modernist and naturalist question is: What if God wasn't active in the world and didn't guard the correctness of these premises?

Perhaps more importantly, the age-old problem of prejudice and knowledge was not solved because prejudice could find its nefarious way into the logical process through biased or incorrect premises. From the modernist and naturalist perspective, the process of logic had to be supplemented. Without trust in God, some *other* method was needed to ensure that the contents or premises of our reasoning were true. Empiricism historically galloped to the rescue in the early Enlightenment. The key, advised many Enlightenment scholars, was observation. We needed to couple systematic reasoning to systematic observation. Pure reasoning might begin incorrectly because its premises might be wrong, and pure observation could be fooled because our senses could be deceived. However, the two epistemologies together, rationalism *and* empiricism, seemed an unbeatable team. And the best part of this team for the modernist was that no dependence on anything mystical, such as a God, was needed. The scientific method was born and, as Nietzsche correctly proclaimed, God was dead (or didn't matter) to the reductive naturalist worldview.

Modernist methods also appeared to solve the age-old problem of prejudice and knowledge. This formidable pair of epistemologies seemed to shore up any holes in the

other and provide us knowledge that was without prejudice or values, and thus finally escaping the label of “mere opinion.” We were no longer captive to our own prejudices. The scientific method was our transparent window to the reality apart from our values, biases, and opinions. Or so we once thought.

Post-modern methods have been stimulated, in part, by the collective conclusion of many historians and philosophers of science that even this incredible conjunction of epistemologies does not overcome the original prejudice and knowledge problem. These scholars tell us that these epistemologies, and thus the scientific method itself, are themselves as flush with prejudices and values as any philosophy. Empiricism is prejudiced toward observable phenomena, whereas rationalism is prejudiced toward the rational aspects of the world. These epistemologies guide us to selectively attend to the phenomena that are observable and rational, de-emphasizing, if not excluding, the nonobservable and irrational. Moreover, these epistemologies guide us to interpret our data as if only the observable and rational matter, such as in behaviorism and cognitivism. In this sense, considering the scientific method to be objective is like considering a multiple choice test to be objective. Neither is value-free or prejudice-free; the values and prejudices of their authors are merely incorporated within tests themselves.

In fact, there is unusual agreement among the observers and commentators of science that we will *never* escape prejudices and values – that *all* methods, *all* approaches to studying any phenomena will *always* require pre-investigatory assumptions and prejudices. Indeed, even to *approach* a phenomenon for the purpose of study is already

to have decided or assumed: 1) that it *is* a phenomena, 2) that it *deserves* study, and 3) that it *can* be studied.

Some might claim that the empirical method has been shown, through its success, to be the best set of prejudices. However, this claim is truly “mere opinion” because its prejudices are never tested through empirical research; they are part of the test itself. For example, the traditional method prejudice of dealing only with observables is not itself tested through empirical studies. There is no way to falsify this prejudice. No scientific comparison to other epistemologies has been conducted, and if it were, what epistemology could be used to conduct the comparison when epistemology is the very issue in dispute? The upshot is that there is no empirical evidence for empiricism.

Debatable, pre-investigatory assumptions and values are inescapable for all methods, and they will always govern to some degree what we see and how we interpret what we see.

Are we doomed, then, to “mere opinion”? Are we doomed to confirm our own prejudices and never see the world for what it truly is? Answering these questions has divided post-modern scholars into two distinct branches – those who answer these questions affirmatively and those who answer them negatively. Affirmative responders inevitably move to some variety of relativism, because for them there is no way to distinguish among prejudices, except by way of someone else’s prejudice. Needless to say, this relativistic framework for method is not appealing to the theist because theism, by definition, assumes the existence of an ultimate truth, and thereby the notion that certain values and prejudices are bad and others are good.

For this reason, we believe the theist should be more interested in the negative responders. Scholars, such as Alasdair MacIntyre, Hans-Georg Gadamer, Charles

Taylor, and Paul Ricoeur, describe an approach to knowledge advancement that is more complicated than its pre-modern and modern cousins but equally interested in the truth. In this sense, they assume that prejudices are unavoidable but that they do not doom us to mere opinion and relativism. Indeed, Gadamer (19xx) is noted for his discussion of the modernist “prejudice against prejudice” (p. xx). His point is not only that the modernist cannot escape prejudice but also that prejudice is necessary to gather knowledge. Microscopes and telescopes prejudice their viewers by the particular way in which they illuminate the phenomena of interest, but this doesn’t mean the phenomena are not illuminated; it just means that there is no knowledge that escapes a particular slant. The obvious utility of traditional methods, from this perspective, stems not from their prejudice-free nature but from their application of a *useful* prejudice – reductive naturalism!

So far, however, this branch of post-modernism may seem like it does little to free us from our own subjective and prejudiced world. We still seem to be captive to our prejudices. How can we learn the truth of a phenomenon and not just our pre-conceptions of it? The answer, from this branch of postmodernism, is that somehow, some way, we intuit that the phenomenon we are studying is not sufficiently captured by our methods, and thus the prejudices about the phenomenon. This leads us to adjust our methods and prejudices to better study or illuminate the phenomenon and then engage it again in study. In this sense, we never escape our prejudices, but we can replace them with better prejudices.

This tacking back and forth between engaged study of the subject matter and clarifying reflection about the best prejudice for studying it is often called the

hermeneutic circle (Gadamer T & M, p. 269). Values and biases, in this hermeneutic sense, are not bad things – distortions of our value-free objective world. Values and biases illuminate the world in various ways. The key is that somehow we are not entirely caught in these values and biases. Somehow we are able to escape our subjectivity and sense when our pre-investigatory prejudices are wrong and try on others for size.

Our question about this approach to the problem of prejudice and knowledge is: How is this escape possible? How is this sensing of the wrongness of our prejudices for the phenomenon at hand possible? In fact, there is considerable theoretical, empirical, and historical evidence that, left to our own devices, we humans cling steadfastly to our biases and values as dogmatic, opinionated self-deceivers – what some theologies might call the natural state of humanity. Theoretically, virtually every personality theory has some mechanism whereby people become stuck in their behavior patterns and beliefs, from Carl Jung to George Kelly. Empirically, social science research is rife with studies indicating that we constantly and continually confirm our own biases, in our everyday lives *and* in our science. We attend first to what fits our assumptions and only elaborate what we already know.

Historian Thomas Kuhn called confirmation bias in science “normal science” because it is the normal manner in which science proceeds, solving the puzzles to which we already have answers. True paradigmatic change occurs only when the scientific community begins to sense the violation of their deepest prejudices and adjusts those prejudices accordingly. Although paradigmatic change has become a popular buzz word, Kuhn makes clear how truly rare this occurs in science. The recognition of research anomalies is continually and constantly resisted. Even when such anomalies have been

present for decades, they are not “seen.” It is almost as if, left to our own devices, science would never advance paradigmatically but stay in the normal science phase forever.

Again, I pose the question: Why would we ever, given these proclivities toward our own prejudices, notice their violation? Those who have spent their lives studying this violation have come to an intriguing consensus about its occurrence. It has various labels, which connote various philosophies. Gadamer labels it as a “surplus of meaning;” Ricoeur terms it as “otherness;” Levinas calls it “alterity;” Heidegger refers to it as “the unveiling;” and Faulconer considers it as “interruption” or “rupture.” All these varied scholars agree that somehow there is a rupture in our prejudiced world that originates from *beyond* that world. We are quite capable of ignoring these ruptures, especially given our wish to remain safely and securely in the constructions of our own making. Still, if we are properly open and humble, these *other*-worldly ruptures can be experienced and given credence, and when they are, they can lead to potentially major modifications in our fundamental assumptions and prejudices.

The question arises, again: How are we, as mere mortals, able to climb out of the safe, secure world of our prejudices and glimpse the forces that persuade us to radically alter these secure biases? The answer, we believe, is found in those who have studied our understanding most deeply – phenomenologists. Perhaps surprisingly, these secular scholars are increasingly pointing to various forms of divinity as the source of this other-worldly rupture. Some observers are calling this improbable development the “theological turn” of phenomenology (XXXX, 19xx). I say “improbable” because phenomenologists are traditionally a scrupulously secular bunch, with no room for

divinity of any kind. Still, they feel they cannot ignore their data, which seem to increasingly reveal a divine bursting of our pre-conceptual bubbles.

Emmanuel Levinas (19xx) may be one of the more famous of these scholars, pointing explicitly to divinity as the *other* of this prejudice correction (p. 78, 88, 92, 211, 226). However, all the stars of this line of study can be read as pointing to similar sources. In discussing the “dialogue” between researchers and their subject matter, for example, Mikhail Bakhtin (19xx) talks of the “invisibly present third party who stands above all participants in the dialogue” (p. 126). And when this improbable surprise or rupture prompts us to adjust our guiding prejudices, Gadamer calls this a “miracle of understanding” in which “religious concepts [are] thus appropriate” (p. 145). Jean-Luc Marion is perhaps the most explicit when he says that “revelation always exceeds or overflows any paradigm” (Faulconer, p. 9). I could go on and on with quotes from various scholars, most of them avowed secularists who are writing secular works. What if this “theological turn” for understanding our understanding is true? If God truly mattered for advancing our knowledge, what would this mean to our practice of method generally and our psychological study of religion specifically?

First, it would mean that all methods that employ this hermeneutic circle, which most scholars believe includes both quantitative and qualitative methods, are *already* taking advantage of this rupture, whether or not they acknowledge it. You would not have to be theistic for God to work through your research. Indeed, many historians of science, such as Paul Feyerabend (19xx), contend that all the major contributions of the natural sciences occurred not by following the rules of the scientific method, but by breaking them. For some reason, these scientists were “prompted” to give more credence

to the serendipitous and anarchic aspects of their findings. In fact, Feyerabend recommends that scientists should be ready, at any point, to violate the rules of method, especially if we wish to make a significant contribution to our discipline.

This need for readiness raises a second implication for method: researchers should maximize the possibility of ruptures in their studies. We believe this would require a twofold knowledge or skill. First, researchers would need to explicitly identify our most cherished assumptions so that they *can* be violated, and, second, they would need to become aware of viable alternative assumptions. The first, assumption identification, is distinctly missing from our current method practices.¹ We often proceed as if we have no assumptions and the data from our methods reflect an uninterpreted reality. This is mainly because we rarely know of alternative assumptions, making our current assumptions the only game in town. When we know about viable alternatives, however, our prejudices can truly become prejudices, rather than truisms, and we can examine and even reject them if our ruptured experience “tells” us we should. This skill or way of being is what many theistic systems call humility. As C.S. Lewis puts it, God is “the great iconoclast” – the breaker of our personal and almost reified images of the world. As such, a humility that allows this image breaking is imperative to science, as Scott’s data shows that many eminent scientists believe.

Third, once we have effected this radical openness to our data, we have to engage rather than disengage in the phenomenon of interest. Traditionally, we are taught that careful detachment or objectivity is the best approach. However, as Charles Taylor

¹ Actually, I hear statisticians routinely complain about psychologists not knowing their method assumptions and prejudices, so as to use the appropriate statistics.

(1989) has put it, this prevents us from taking advantage of the interruption that truly teaches us.

. . . when we see something surprising, or something which disconcerts us, or which we can't quite see, we normally react by setting ourselves to look more closely; we alter our stance, perhaps rub our eyes, concentrate, and the like.

Rather than disengaging, we throw ourselves more fully into the experience, as it were (p. 163).

Indeed, Scott and I would argue that the best engagement is an agape engagement, the kind of engagement and intimacy that we have when we truly respect the object of inquiry – respecting its differences but involving ourselves emotionally with it. In fact, this understanding of knowing fits nicely with Christian theism because “knowing” in the biblical sense is not a detached incorporation of facts; it is a relational intimacy with whatever we care about.

Fourth, we must revise our traditional reliance on predictability. We should not abandon predictability all together, because it is important for testing the correctness of our prejudices or hypotheses. However, we must also value the unpredictability of the ruptures and violations of our expectations and hypotheses. As Kuhn observes, it is the *un*predictability of research anomalies, not the predictability of confirmed hypotheses, that leads to paradigm shifts. Feyerabend also clarifies that it is the serendipitous and anarchic, not the intentional and systematic, that result in significant contributions to science.

Scott and I know, in conclusion, that this proposal is completely tentative. Indeed, our proposal probably raises as many questions as it answers at this point. Still,

we are committed to the project because we believe, as theists ourselves, that postulating that God truly matters, even in the methodological context of justification, is at least a valuable exercise. It can, at a minimum, point to the profoundly naturalistic origins of our traditional methods. It might also help us to understand the success of these methods, because they have engaged, however unknowingly, in the hermeneutic circle. In fact, our proposal would not require us to abandon any methods, quantitative or qualitative, because all work through this theistic circle. As I have said, we would advocate certain improvements, but we believe that a pluralism of these methods, with a theistic philosophy of science guiding this pluralism, is worthy of further discussion.