

## Science and Morality: Pragmatic Reflections on Rorty's "Pragmatism"

Brian Leiter†

"Pragmatism," says Richard Rorty, "puts natural science on all fours with politics and art. It is one more source of suggestions about what to do with our lives."<sup>1</sup> Some self-professed pragmatists, like the American philosopher W.V.O. Quine, would obviously deny this.<sup>2</sup> I shall not engage in a proprietary dispute here about the label "pragmatism,"<sup>3</sup> but I do want to present a kind of pragmatic challenge to the idea that we have reason to think "science [is] on all fours with politics and art."

Let us start with a familiar distinction between questions of "theoretical reason" (questions about what we ought to believe) and questions of "practical reason" (questions about what we ought to do). Ethics, politics, and, on some views, art address what we ought to do ("what to do with our lives," as Rorty puts it); science, insofar as we credit its deliverances, tells us what we ought to believe. When Mendelian genetics supplied the causal mechanism explaining the truth of Darwin's theory of evolution by natural selection, it did not tell us "what to do with our lives." But when Herbert Spencer and other social Darwinists interpreted Darwin's theory metaphorically as describing patterns of wealth distribution in society, it did entail a practical conclusion: the socioeconomically "weak" ought to be allowed to perish, as they are not "fit" enough to survive in the marketplace. Unfortunately for the Social Darwinist apologists, for man-made inequities there was no genetic mechanism to support their story. Like Rorty,

---

† Hines H. Baker and Thelma Kelley Baker Chair in Law, Professor of Philosophy, and Director of the Law & Philosophy Program, The University of Texas at Austin. Thanks to Eric Posner and Richard Posner for comments on an earlier draft.

<sup>1</sup> Richard Rorty, *Dewey and Posner on Pragmatism and Moral Progress*, 74 U Chi L Rev 915, 916 (2007).

<sup>2</sup> See generally Brian Leiter, *Why Quine is Not a Postmodernist*, in Brian Leiter, *Naturalizing Jurisprudence: Essays on American Legal Realism and Naturalism in Legal Philosophy* 137 (Oxford 2007) (arguing that for Quine, science can't be entirely justified by philosophy, but it nonetheless corresponds with more accurate and reliable predictions of future experience).

<sup>3</sup> As a point of personal privilege as a Nietzsche scholar, I do want to observe that Rorty's claims about Nietzsche's "vacillations" about truth and science at the start of his essay betray either an ignorance of or indifference to both Nietzsche's texts and Nietzsche scholarship. See Brian Leiter, *Nietzsche on Morality* 159–61 (Routledge 2002). See generally Maudemarie Clark, *Nietzsche on Truth and Philosophy* (Cambridge 1990).

however, they seemed to think that “science” was “on all fours with politics,” that is, with “suggestions about what to do with our lives.”

To be sure, scientists—from Albert Einstein to Noam Chomsky—have had views about “what to do with our [collective] lives,” but their practical claims are conceptually severable from their claims about what we ought to believe about *how things are*, whether it is the nature of time or the fundamental syntactic structure of all human languages. If science is “on all fours” with morals and politics, it can not possibly be because both involve “suggestions about what to do with our lives.”<sup>4</sup>

Let us consider, then, two other formulations of what appears to be Rorty’s central metaphor of morals and politics being “on all fours” with natural science. Rorty accepts that “reasoning in morals is no different than reasoning in science,”<sup>5</sup> and notes that moral propositions—for example, statements about the “cruelty” of certain punishments—“are true, on a pragmatist view, in just the same way that it is true that  $E = mc^2$ .”<sup>6</sup> These claims, at first blush, seem as incredible as the first version of Rorty’s thesis we examined. If reasoning in morals were no different than reasoning in science, how to explain then the fact that almost everyone partakes in the former, while the latter is the privilege of a highly trained elite? Surely there must be *some* differences in what kinds of reasons count as *reasons* that would explain this remarkable division of epistemic labor?

And we needn’t know much about science, or morals, to notice the differences. It is not simply that reasoning in science often turns on mathematical reasoning that is almost entirely foreign to moral argument—outside certain largely irrelevant academic research programs in deontic logic. It is, more centrally, that the justification of (most) scientific propositions turns on their predictive, empirical success<sup>7</sup> and that when they are in fact deemed successful they are thought to have illuminated some aspect of the causal structure of the world.<sup>8</sup> But the justification of moral claims turns neither on their empirical predictive

---

<sup>4</sup> One of the things we “do with our lives,” admittedly, is try to understand what the world is like, but that is not a “suggestion[]” that emerges from science.

<sup>5</sup> Rorty, 74 U Chi L Rev at 922 (cited in note 1).

<sup>6</sup> Id.

<sup>7</sup> What counts as empirical success is itself subject to various epistemic constraints having to do with replicability, controlling for extraneous factors, and the like.

<sup>8</sup> On the centrality of causation to understanding what it is scientific theories do in explaining phenomena, see Nancy Cartwright, *From Causation to Explanation and Back*, in Brian Leiter, ed, *The Future for Philosophy* 230, 232–37 (Oxford 2004).

success, nor their illuminating the causal structure of the world.<sup>9</sup> One justifies, for example, the claim that eating meat is morally wrong by appealing to a principle thought to be intuitively (not empirically!) plausible, like "unnecessary suffering is morally wrong," conjoined with empirical claims, like "animals are sentient creatures capable of suffering" and "the way animals are raised and killed in preparing meat causes them unnecessary suffering." This kind of argument licenses (and depends on) no empirical predictions and illuminates nothing about the causal structure of the world. By contrast, we now accept that a scientific proposition like  $E = mc^2$  is true, *contra* Rorty, not for the kinds of reasons offered against the morality of eating meat, but because the mass-energy equivalence Einstein proposed was experimentally confirmed (the first time was in 1932 by J.D. Cockcroft and E.T.S. Walton<sup>10</sup>).

Richard Rorty, a gifted and remarkably learned philosopher, surely knows all this, so what might he be thinking in claiming a methodological equivalence between morality and science? Curiously, it seems his contention must really depend on a distinctly unpragmatic philosophical thesis that abstracts away from the *actual practices* of justification in ethics and science that we have reviewed above. For, according to Rorty—purveyor, he says, of "the true pragmatist faith"<sup>11</sup>— "[p]ragmatists substitute the question 'which descriptions of the human situation are most useful for which human purposes?' for the question 'which descriptions tells us what that situation really is?'"<sup>12</sup>

But now we may frame the challenge to the Rortian pragmatist starkly: why think any "human purposes" are actually served by substituting the purported pragmatic criterion "useful for . . . human purposes" for the *actual* and quite different criteria that the genuine practitioners of morals *and* law *and* science employ in trying to figure out what the moral, legal, and scientific "situation really is"? Pragmatism,

<sup>9</sup> Recently, some moral philosophers have thought the objective reality of moral claims (if not their status qua *moral*) is vindicated by their explanatory and causal power, though none of them have made good on these claims. For a critical discussion of this proposal, see generally Brian Leiter, *Moral Facts and Best Explanations*, in Leiter, *Naturalizing Jurisprudence* 203 (cited in note 2).

<sup>10</sup> J.D. Cockcroft and E.T.S. Walton, *Experiments with High Velocity Positive Ions: II—The Disintegration of Elements by High Velocity Protons*, 137 Proceedings Royal Socy London Series B Papers Math & Phys Character 229, 236–37 (1932).

<sup>11</sup> Rorty, 74 U Chi L Rev at 918 (cited in note 1) (arguing that Posner's rejection of the idea that society has made moral progress represents a relapse from true pragmatism into "positivistic science worship").

<sup>12</sup> *Id.* at 916 (describing how pragmatists treat all metaphysical disputes as being "irrelevant to practice and thus not worth discussing").

qua philosophical thesis, seems to want to trump the *actual* practice of those whose intellectual inquiries it would interpret—and that seems an “unpragmatic” thing to do! Could it not be that trying to “figure out what the situation really is” is a better epistemic goal for inquiries that, in the end, serve human purposes?

Since the scientific revolution transformed the epistemological landscape of the world starting several hundred years ago, a loose set of epistemic norms (norms for what we ought to believe as true) has permeated all aspects of human culture. At its core it holds that we should believe in the existence only of that which figures in the best causal explanation of our sense experience, a norm that has taken hold in fields ranging from theoretical physics to evolutionary biology. What constitutes a relevant causal explanation or sensory experience is a matter of ongoing contention among scientists and philosophers.<sup>13</sup> The details do not matter for our purposes here. What matters is that we may take the human practice of science to be organized around a norm—a “social norm” as Rorty would say—to the effect, “We ought to deem actual only that which figures in the best causal explanation of what we can perceive.” Let us call it “the Scientific Norm.” That norm is vindicated, as it were, by its practical success: it works! Indeed, it works so well that it now dominates all the systematic inquiries of human beings, from physics to psychology. That is the truth in pragmatism—the epistemic norms that help us cope are the ones on which we now rely—but it is a truth obscured by Rorty’s promiscuous version of the doctrine, which confuses the criteria for relying on particular epistemic norms (namely, that they work for human purposes) with the *content* of the norms themselves (most of which make no reference to human purposes, but rather criteria like causal or explanatory power).

Consider this telling passage from Rorty:

In the sixteenth century it was only rational to test astrophysical or biological theories against holy scripture. We can rightly claim to be more rational than Copernicus’s contemporaries, if that means simply that our beliefs about what to test against what—and, more generally, for what is relevant to what—are true, whereas many of theirs were false. Our social norms are indeed better than their social norms. But there is no discipline called “epistemology” that can show this to be the case. Our judgments

---

<sup>13</sup> See generally Cartwright, *From Causation to Explanation and Back* (cited in note 8).

of progress and of rationality will remain as parochial as our judgments of everything else.<sup>14</sup>

What it is *reasonable* to do is, of course, relative to the existing norms of rationality, so Rorty is correct that it could have been rational five hundred years ago to test empirical hypotheses against scripture. And so, too, our judgment of what it is reasonable to believe now is a judgment made relative to our current norms of rationality, norms that triumphed, more or less, with the scientific revolution. But these norms triumphed for practical reasons; that is, they worked in a way that hypotheses based on scripture did not. Aeronautical engineers take seriously the Scientific Norm in designing airplanes, but they do not pay much heed to scripture, at least during their day job. Does a "discipline called 'epistemology' show this to be the case"? Not if what Rorty means is a discipline that stands outside history to tell us which epistemic norms deserve our allegiance. But if epistemology means, as pragmatists like Quine would have it,<sup>15</sup> the discipline that describes the norms that figure in successful inquiries, then epistemology does tell us something very important: it tells us that the Scientific Norm undergirds all those inquiries which have had the most dramatic results for human purposes by transforming our world over the last several centuries.

We may see how Rorty's "pragmatism," as he calls it, goes wrong by recalling the most evocative metaphor in the pragmatist genre, "Neurath's boat," an image due to the logical positivist Otto Neurath but made famous in post-WWII philosophy by the American pragmatist Quine.<sup>16</sup> Neurath (and Quine) analogized our epistemological situation to that of sailors at sea who must rebuild the boat in which they sail. Being afloat, they cannot abandon the ship and rebuild it from scratch, so they must choose to stand firm on certain planks of the ship while rebuilding others. They, of course, choose to "stand firm" on those planks that are the most sturdy and reliable—the ones that "work" the best—though there may come a point when the sailors will tear those up too and replace them with new ones.

Our epistemological situation, on this Quinean pragmatic view, is the same. In figuring out what we ought to believe, we necessarily "stand firm" on certain epistemic "planks" in our best-going theory of the world, the one that, to date, has worked the best. To be sure, we

---

<sup>14</sup> Rorty, 74 U Chi L Rev at 925 (cited in note 1).

<sup>15</sup> See Leiter, *Why Quine is Not a Postmodernist* at 145 (cited in note 2).

<sup>16</sup> See W.V.O. Quine, *Word and Object* 3, 123–24 (MIT 1960).

cannot rule out that we may one day want to replace those planks too—just as our predecessors replaced planks like “the truth is what the Good Book says” and “Newtonian mechanics describes the laws governing all matter”—but that is just to renounce absolute certainty and accept fallibilism as fundamental to our epistemological situation.

Where the Neurath/Quine picture agrees with Rorty is that all our epistemic judgments are “parochial,” but only in the fairly trivial sense that it is conceptually (hence practically) impossible for us to climb out of our ship (our best-going theory of the world) and rebuild the whole edifice from scratch by reference to nonparochial (nonhistorical) standards of truth and warrant. (On Quine’s view, “there is no Archimedean point of cosmic exile from which to leverage our theory of the world.”<sup>17</sup>) We must *necessarily* rely on certain epistemic criteria—criteria for what we *ought* to believe—any time we ask about the justification of any other belief (including beliefs about epistemic criteria). That is just to say that we must stand firm on certain “planks” in the boat while rebuilding (or figuring out whether we *ought* to rebuild) any other planks. The only question, then, is which planks we ought to “stand firm” on because they work so well.

One such plank seems rather clearly to be the Scientific Norm. Rorty, however, would have us get out of the “boat” we’re currently in, the one in which the Scientific Norm has been perhaps the firmest plank on which we stand, and board a different boat in which “most useful for human purposes” is the governing norm. But there is no pragmatic reason to do that, and Rorty gives us none, or at least none that is convincing.

Now Rorty does sometimes write as though, in terms of practical success, science and morals are on a par. He says, for example, “We have been equally successful in both morals and physics. To be sure, we have more difficulty convincing people of our moral views than of our scientific views, but this does not mean that the two differ in something called ‘epistemic status.’”<sup>18</sup> Yet what could count as the evidence of “equal success” in morals and physics that Rorty has in mind? It can’t be that those who try to violate the laws of physics end up frustrated, maimed, or dead, while those who violate the moral law (however it is understood) suffer no predictable set of consequences at all. It can’t be that Nazi scientists and Manhattan Project scientists were interested in

---

<sup>17</sup> Roger F. Gibson, *Willard Van Orman Quine*, in Jaegwon Kim and Ernest Sosa, eds, *A Companion to Metaphysics* 426, 427 (Blackwell 1995). See also Peter Hylton, *Quine’s Naturalism*, 19 *Midwest Stud in Phil* 261, 265 (1994).

<sup>18</sup> Rorty, 74 *U Chi L Rev* at 920 (cited in note 1).

the same physics, but had rather different morals and politics. It can't be that the academic community in physics is global, transcending culture and nationality, while most moral debate is parochial in the worst sense of that term, that is, tracking the interests and horizons of particular classes, cultural traditions, and experiences.

Rorty objects, however, that "brute facts about the presence or absence of consensus—whether about planetary orbits or about sodomy—are to be explained sociologically rather than epistemologically."<sup>19</sup> For this to be persuasive, however, we would need to hear the details about how the actual *sociological* explanation goes, and Rorty, alas, never offers any. About the only explanatorily relevant psychosocial factor in the offing is that humans everywhere share an interest in predicting the future course of their experience, but that simply explains why the Scientific Norm works for human purposes, and why Nazis and social democrats share the same physics, but not the same morals. But that is a "sociological" explanation that simply underlines the fundamental difference between morals and science.

Rorty's response to Judge Posner's moral skepticism, then, rings hollow: "When Posner argues that moral philosophy is 'epistemically feeble' on the ground that 'the criteria for pronouncing a moral claim valid are given by the culture in which the claim is advanced,' Kuhnians like myself reply that the same argument would show the epistemic feebleness of physics and biology."<sup>20</sup> But Kuhn never claimed anything of the kind about physics or biology, and Rorty never gives us the details of how the allegedly Kuhn-inspired cultural explanation for physics and biology would go. Rorty's conjecture as to Dewey's reply to Judge Posner's skepticism about moral progress is equally unconvincing: "*Of course* our judgment of our own rightness is provincial. So are all our judgments about anything. But why should the fact that we use the criteria of our time and place to judge that we have made progress cast doubt on that judgment? What other criteria are available?"<sup>21</sup> The "other criteria" available are precisely the criteria of "our time and place"—the criteria reflected in the planks on which we presently "stand firm"—which suggest that moral judgments are "epistemically feeble" (hostage to class interest and cultural bias) in

---

<sup>19</sup> Id at 921.

<sup>20</sup> Id at 921.

<sup>21</sup> Id at 920

a way that scientific judgments (generally) are not.<sup>22</sup> Rorty claims that Dewey thought “that the contingency of our moral outlook, its dependence on material conditions, no more impugns our moral superiority than Galileo’s dependence on expensive new optical technology impugned the Copernican theory of the heavens.”<sup>23</sup> Yet the Copernican theory of the heavens (meaning, just to be clear, that the sun, not the earth, is at the center of our solar system) has been so well confirmed, so many ways, that it is no longer hostage to the peculiarities of any particular scientific instrument, while the empirical evidence for the vulnerability of moral judgment to “material conditions” (among other factors) continues to multiply beyond even the obvious cases.<sup>24</sup>

The difficulties afflicting Rorty’s position are on helpful display in this passage from his Dewey Lecture:

Dewey and Kuhn tried to persuade us that criteria of relevance, and thus of rationality, are social norms. Such norms have changed, sometimes for the worse and sometimes for the better. They will keep right on changing. But we shall never be able to prove that any given change was a good or a bad one. To do so we would have to find an Archimedean standpoint from which to compare our sentences with the things that make them true or false.<sup>25</sup>

Norms of rationality and of justified belief—like the Scientific Norm—may be social norms in the banal sense of being norms that enjoy wide (or moderately) wide acceptance in society (or at least elite sectors of society), but they are not “social norms” in the sense of being norms whose prevalence is explicable solely in terms of sociological forces, as Rorty repeatedly (but without any evidence) suggests. Rorty may also be right that these norms “will keep right on changing”—that is just to acknowledge fallibilism as all pragmatists and empiricists do—but it is a non sequitur to conclude from fallibilism that we “shall never be able to prove that any given change was a good or a bad one.” Only if “prove” means “prove infallibly” would

---

<sup>22</sup> The exceptions are familiar enough—from Lysenkoism to the biology of race—though these cases stand discredited among scientists in a way in which racism, national chauvinism, and sexism, among many other moral “ills,” do not among educated elites in different countries.

<sup>23</sup> Rorty, 74 U Chi L Rev at 920 (cited in note 1).

<sup>24</sup> The classic contemporary study is Jonathan Haidt, Silvia Helena Koller, and Maria G. Dias, *Affect, Culture, and Morality, or Is It Wrong to Eat Your Dog?*, 65 J Personality & Soc Psych 613, 625 (Oct 1993) (finding that wealthier individuals in the United States and Brazil were more likely than poorer individuals to distinguish between harmful actions and harmless but “offensive” actions in making moral judgments), but examples could be multiplied.

<sup>25</sup> Rorty, 74 U Chi L Rev at 926 (cited in note 1).



this be true, but that is a standard of proof that plays no role, except rhetorical, in human inquiries. We need no Archimedean standpoint to conclude that moral inquiry is feeble in a way physics is not, we need only take seriously our best current understanding of the world, how it works, and the epistemic norms that have proven most effective in making sense of it. Judge Posner, standing on the current planks in Neurath's boat on which we all stand, observes that morality seems *far more* dependent on time and place than physics, a highly plausible causal/empirical hypothesis that could only be refuted by showing that moral discourse *really is* as successful *and really is* as epistemically credible by the standards those of us in the boat are employing.<sup>26</sup> Perhaps we shall one day radically revamp the current planks in the boat on which we currently stand as a matter of practice. Until that happens, talk of "pragmatism" does no work as a response to moral skepticism.

If I am right, then perhaps there is only *one* plausible pragmatic thesis that deserves notice in philosophy, and it is the one suggested by the powerful metaphor of Neurath's boat. This thesis is, *contra* Rorty, very much an epistemological thesis, that is, a thesis about the justification of what we ought to believe. And it says that justification can not run all the way down, that it is grounded, unavoidably, in propositions (and practices) that we accept because they work, and not for any other reason. But nothing in human experience or history gives us any reason to think that the criterion of "what works" extends all the way up the chain of justification. For it turns out that from human experience and human history, the practices "that work" are practices whose criteria of belief and action have *nothing* to do with practical considerations. And when we take those practices seriously, natural science and morality seem to be *very* different indeed.

---

<sup>26</sup> See Richard A. Posner, *The Problematics of Moral and Legal Theory* 59–63 (Belknap 1999) (distinguishing scientific from moral theory because science—in publicly dealing with "what can be perceived"—has made predictions that have proven accurate, and inspires faith and agreement on matters of practical, everyday reliance).

