

An Accurate Diagnosis, But Is There a Cure?: An Appreciation of *The Role of Science in Law* by Robin Feldman

by STEPHEN J. MORSE*

Professor Robin Feldman has written a splendid and wise book on a timely and important topic: The role of science in law.¹ The usual complaint about the relation of law and science is that the law insufficiently attends to and incorporates scientific discoveries, but Professor Feldman turns this criticism upside down. Instead, her central thesis is that the law defers to science far too much either by cloaking legal criteria in scientific terms, thus avoiding hard and indeed intractable problems, or by deferring to scientific experts essentially to decide difficult cases. She terms these the “internalization” and “externalization” strategies. These are serious problems, according to RSL, because the law has an inevitably independent domain that addresses normative questions that science cannot resolve. Moreover, most of the legal “action” will take place in the interstices between criteria, and science will not be helpful to legal evolution in those gaps. Science can surely help legal decision makers resolve legal problems, but science cannot resolve them for the law. In sum, legal abdication to science is fueled by a misguided hope of evading or solving difficult normative issues, but such false hopes cannot be realized and will interfere with sound legal judgment and policy.

To support her thesis, Professor Feldman offers both a descriptive and a normative account of the law/science relation and

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1. ROBIN FELDMAN, *THE ROLE OF SCIENCE IN LAW* (2009). Hereinafter, all references in the text and notes will be abbreviated to RSL.

complex, nuanced arguments. RSL gives telling examples of both the internalizing and externalizing strategies, such as asking science to tell us when abortion is or is not acceptable during the gestational period, or using experts to solve environmental or antitrust problems. She also shows that these tendencies in the law have existed for hundreds of years and have survived all the varying legal movements that have marked the march of jurisprudence, from before Langdell to Critical Legal Studies and into the current era. I think she is quite right about the history.

RSL argues for five theses, at least as I count them. The first is a thesis about law that says that science cannot independently solve legal problems because the law's problems involve questions about how we should live together. Another way of putting this point is that legal criteria are devised for the law's purposes and these are typically not the same as scientific goals. This thesis is, I believe, largely self-evidently true despite the fantasy of many that if we will only listen to the rational scientists, we will all be better off.² Whether such utopianism is driven by biological science, such as genetics, psychological science, such as psychodynamic psychology, or social science, such as economics, it seldom works as we expect. The ultimate questions are not scientific and the world is such a messy, complicated place that science is often not up to even the empirical tasks that law and social policy set for it. To take a current example, there is an immense debate about whether solving the financial crisis will best be achieved by increasing government spending or by adopting fiscal austerity. Equally prestigious economists diametrically disagree and there is simply no way to resolve the question because macroeconomics is not sufficiently understood.

Law's questions are matters of practical reason whereas science's questions are matters of theoretical reason. On the former issue, how to live together, science must generally fall silent. When it does not, it masks moral and political judgments with the white coat of the dispassionate investigator. For example, which people with mental disorder should be excused from criminal behavior is a normative social, moral, political, and, ultimately, legal question. It is decidedly not a scientific question, although valid information about the psychological functioning of a defendant who raised the insanity defense is surely helpful. Every time my colleagues in forensic

2. See, e.g., SAM HARRIS, *THE MORAL LANDSCAPE: HOW SCIENCE CAN DETERMINE HUMAN VALUES* (2010) (implicitly, and perhaps unwittingly, adopting a consequentialist morality that is hardly self-evidently true).

psychology and psychiatry opine as a matter of reasonable psychological or medical certainty that a defendant is or is not legally insane, they are insidiously doffing the white coat of the expert and donning the hat of the thirteenth juror.

My only reservation about the first thesis involves cases in which there might be complete normative agreement that some fact should make a legal difference. For example, suppose there was excellent, uncontested evidence that some pollutant increased the risk of cancer to some known degree and there was uniform normative agreement that at some level the risk was simply too high to permit that degree of pollutant in air or water. In this case, it is easy to imagine a regulation that sets a specific, factual pollution limit. This possibility does not undermine the general validity of RSL's first normative thesis, however, and such "pure" cases of factual and normative agreement are likely to be few.

Professor Feldman's second thesis is about science. RSL repeatedly argues that science is not nearly as objective as law and the ordinary person think. She adduces arguments from history and from deflationary philosophers of science, many of whom, I fear, are treated too deferentially. I believe that RSL's social constructivism and critique of objectivity go unnecessarily far. Indeed, RSL is ambivalent about the strong form of this relativist claim, as well it should be. Of course, we have to use a language to describe our scientific theories and facts and thus science is based on constructs. And of course perception is theory and instrument driven. And of course established science can be overturned by better theory and evidence or by seemingly irrelevant social or political considerations. But these truisms do not mean that there are not important facts about the world that we have sound warrant to believe. There is a real, physical world that is mind independent and this matters.

Professor Feldman appreciates this when she approvingly quotes David Faigman's correct assertion that "brute reality constrains the courts."³ I would add that it constrains all human life. We all depend upon the objective nature of our physical world. No one could possibly live as if all our justified beliefs were just "socially constructed." It would be paralyzing. Scientists successfully engage in research that contributes to understanding, predicting, and changing the physical (and non-physical) world. They do so unhindered and untroubled by misreadings and over-readings of the

3. RSL, *supra* note 1, at 171.

philosopher of science, Thomas Kuhn, by the writings of critical philosophers of science generally, and by fears about lack of objectivity. A gene may be just a segment on a DNA chain that we have identified for our purposes, as RSL claims, but “knock out” experiments, in which specific genes are disabled, show that they do incredibly precise work. For another example, the laws of aerodynamics may be “just” constructs, but when a professor on her way to the next critical theory conference starts the roll down the runway, she rightly expects those laws not to change.

All RSL needed to make its case was the completely unobjectionable claim that science is often not as certain as non-scientists and scientists think. I hope that RSL will not lose otherwise sympathetic and persuadable readers because it overclaims about the non-objectivity of science.⁴ These claims are “crit tics,” which are boilerplate-type observations arising from critical theory. I can hardly blame Professor Feldman for them, however. After all, she was educated at Stanford Law School in the 80s, which was a hotbed of the importation of critical theory into legal studies. Many were infected, but I trust this is a disorder from which she and others will ultimately recover. In any case, as mentioned, the strong form of the critique is an unnecessary premise in her overall argument.

Professor Feldman’s third normative thesis is about the fit between science and law and involves two related subparts. The first is that science is not well-adapted to law’s evolutionary and adaptive processes, and, second, as a result, science will consistently be misused. I agree with this thesis. It is certainly correct historically and conceptually. What is more, it is inevitable. Once again, law and science ask different types of questions for different purposes. Why would one ever expect a very good fit? I would only add that science is seldom performed for the purpose of answering legal questions, and, as Professor Feldman notes, law is always a moving target.

Professor Feldman properly characterizes the fit problem as one of “translation” and uses the current rage for importing neuroscience into law as an illustration.⁵ To broaden this apt example, comparison to the use of psychiatry and psychology in criminal law is instructive. Criminal law is thoroughly based on folk psychology, which explains

4. In passing, I might also mention that I think RSL overstates the importance of critical legal studies as a jurisprudential movement. It certainly produced intense activity for a short time, especially in the 1980s, but it had little of the permanent influence of movements as diverse as Langdellianism and legal realism.

5. RSL, *supra* note 1, at 142–145.

behavior in part by mental states. Mental states play a crucial role in culpability and competence evaluations and proof. Psychology and psychiatry translated uneasily because these fields straddle folk psychological and mechanistic modes of explanation. Sometimes they treat human beings as actors in a folk psychological narrative and sometimes as pieces of organic meat. The former type of explanation translated reasonably well and the latter did not, and, alas, practitioners often became confused by which type of analysis applied. Neuroscience, by contrast, is thoroughly mechanistic, and it is not at all clear how it would translate to concepts and doctrines of criminal responsibility.⁶ It might provide markers for legal criteria, but the validity of these markers would depend on their being reliably and validly associated with legal criteria. Identification of such accurate markers would then hinder legal evolution, an outcome that RSL decries. Most normative legal criteria shift over time, but the markers will have been validated at just one point in time. If they are relied on in place of normative judgment, the norm cannot easily evolve.

The fourth thesis attempts to explain why the law so often uselessly attempts to delegate the hard normative questions to science. This thesis is a descriptive and normative mix. Professor Feldman argues that the law is insecure about its own authoritative status and its ability to resolve our disputes. Consequently, we turn to science to solve those problems. I should add that scientists are frequently arrogant in their belief that they have the answers to non-scientific, social questions. For example, some neuroscientists have argued that the criminal law should jettison “unscientific” notions like desert and should move instead to a consequentially-based prediction/prevention scheme of social control.⁷ Indeed, they sometimes argue that neuroscientific understanding entails consequentialism, but the extreme reductivism that underlies such claims may destroy the possibility of normativity altogether. If we are “merely victims of neuronal circumstances,” which one influential article claimed,⁸ then what genuine reason do we have to prefer any

6. It is an open question whether neuroscience will be helpful in resolving other questions, such as the accuracy of memory and whether a person is genuinely in a persistent vegetative state. I am cautiously optimistic in some of these cases.

7. See, e.g., Joshua Greene & Jonathan Cohen, *For the Law, Neuroscience Changes Nothing and Everything*, 359 PHIL. TRANSACTIONS ROYAL SOC'Y LONDON 1775 (2004); R. Sapolsky, *The Frontal Cortex and the Criminal Justice system*, 359 PHIL. TRANSACTIONS ROYAL SOC'Y LONDON 1787 (2004).

8. Greene & Cohen, *supra* note 7, at 1781.

type of morals or politics? Finally, as further confirmation of Professor Feldman's historical thesis, this claim is not new to neuroscience. Dr. Karl Menninger, a famous American psychiatrist in the mid-twentieth century, made precisely the same claim based on what psychiatry had allegedly discovered about human behavior.⁹

I believe that this type of scientific arrogance is fueled by technical expertise that is so often beyond the ken of non-scientists and lawyers are frequently cowed by it. Consequently, turning to science for legal answers is not all law's fault. But RSL's claim about the law's insecurity and search for clarity just brings us back to the first three theses. Of course science is often unable fully to solve our problems because the law's questions are normative, science is often not as certain as we would wish, and the law/science fit is poor. Professor Feldman's diagnosis and malignant prognosis are inevitably and precisely right.

The fifth thesis is that science does have a proper supporting role to play as legal decision makers decide what reasons they have to act. The scientists must operate within law's parameters, however, and should not be permitted to complain when we cabin them because the law's purposes differ from those of science. I agree yet again. Let me offer one example from my own experience. I have argued consistently for decades that the use of psychiatric diagnoses in the courtroom is more prejudicial and confusing than probative. In one quite public forum, a prominent forensic psychiatrist admonished me by saying that doctors provide diagnoses and I had to let doctors be doctors. My response was that diagnoses might be useful in the clinic and in the literature, but they were a distraction in legal cases.

RSL offers general and specific recommendations for properly limiting the role of science in legal decision making. As examples of the former, RSL suggests that science can test the law's empirical assumptions, but we must protect the law's folk psychological and normative dialog by insuring that experts speak in a jargon-free language that clarifies rather than obfuscates. And the law must be confident enough to embrace imperfection. RSL also has specific recommendations for how to keep science in its proper supporting role. Some are more persuasive than others, but quibbles are not the point. The law will have to tinker, and whether any bit of tinkering seems successful will be decided by experience and not a priori.

9. KARL S. MENNINGER, *THE CRIME OF PUNISHMENT* (1968).

Professor Feldman is clearly on the right track for the right reasons, but I fear that RSL's primary diagnosis rooted in her first four theses will limit the efficacy of any attempt to constrain the law's misuse of science. Science will continue to be misused because, as RSL convincingly explains, the law's problems are normative and so difficult, science is not as certain as we would like and so beguiling, the fit is not good, and the law is insecure. We can do better using science, but I fear that the problems will increase because science will gain ever increasing authority as it improves our ability to understand, predict, and control the world around us and ourselves.

Let me conclude with a very recent example of precisely the problems Professor Feldman has identified and that suggest little will change. In *Graham v. Florida*,¹⁰ the Supreme Court held that the Eighth and Fourteenth Amendments prohibited imposing a sentence of life without the possibility of parole [LWOP] on juvenile offenders who had committed non-homicide crimes, thus overturning such laws in 37 states and the federal system. In *Roper v. Simmons*, the Supreme Court had already held that capital punishment was unconstitutional for juveniles who committed capital crimes when they were 16 or 17 years old.¹¹ The *Roper* majority reached this conclusion primarily because juveniles on average were not as rational as adults, a common sense observation that more rigorous behavioral investigation had confirmed.¹² Because adolescents are less rational, they are less responsible and do not deserve the death penalty. Although urged by amici to cite neuroscience evidence demonstrating that on average late adolescent brains are biologically less mature than adult brains, the Court did not do so, except, perhaps, indirectly, and it was unnecessary. The criteria for responsibility are mental and behavioral and it was already clear that adolescents are less rational on average. Even the behavioral science was unnecessary to reach that conclusion, but at least the behavioral science was directly relevant to the law's criteria, which the neuroscience largely was not.¹³

In *Graham*, the majority relied on *Roper*'s conclusion that adolescents are relevantly different, but cited amicus briefs for the

10. 130 S. Ct. 2011, 2034 (2010).

11. 543 U.S. 551, 578 (2005).

12. *Id.* at 569–71.

13. Stephen J. Morse, *Brain Overclaim Syndrome and Criminal Responsibility: A Diagnostic Note*, 3 OHIO ST. J. CRIM. L. 397, 406–410 (2006).

proposition that the adolescent brain was not yet fully mature.¹⁴ It did so to support its conclusion that nothing in the science of adolescent development in the intervening five years changed the *Roper* conclusion, but no one had argued to the contrary. Arguments in support of juvenile LWOP in non-homicide cases were based entirely on other normative and empirical arguments. Citing the neuroscience was not necessary and was unresponsive. This was a blatant attempt to do just what Professor Feldman criticizes: To use science in an extremely difficult moral and legal case to bolster a conclusion that the neuroscience was not necessary to reach.

Professor Feldman has provided an accurate and unsettling diagnosis of the law's misuse of science. Diagnosis is often a royal road to cure, but sometimes the patient is incurably ill with the disease the diagnosis accurately identifies. I fear that the legal patient in this case is incurably, but let us hope not terminally, ill.

Professor Feldman has written a compelling, illuminating book. I wish I had written it myself.

14. 130 S. Ct. at 2026.