The Promise and Limitations of an Empirical Approach to Law

Two broad, related themes cut across Greg Mitchell’s scholarship. The first is that legal theory and policy should be informed by sound empirical research, but the limits of an empirical approach should be acknowledged and dealt with forthrightly. The second is that human thought and behavior, including reaction to legal rules, vary across individuals and are influenced by context, which makes generalizing about thought or behavior from one context to the next quite perilous. Both of these themes reflect Mitchell’s education as a social psychologist as well as a lawyer.

Mitchell became interested in social psychology as an undergraduate while working in the lab of David Schroeder, who studies public goods consumption. He came to realize, through this work and by conducting his own experiments, that social-psychological research could be used to analyze the causes of social and political disputes.
begun to gain a wide audience within the legal academy. Scholars within this movement were making considerable use of psychological research on judgment and decision-making that Mitchell knew well. To Mitchell’s dismay, however, much of the scholarship within behavioral law and economics portrayed this psychological research as if it provided general laws of thought and behavior rather than findings that were conditional on the setting, characteristics of the subjects, and the particulars of the task at hand. Hoping to help change the terms of the debate that was developing between the law and economics and behavioral law and economics camps, Mitchell’s first two major works as a law professor—“Why Law and Economics’ Perfect Rationality Should Not Be Traded for Behavioral Law and Economics’ Equal Incompetence,” 91 Geo. L. J. 67 (2002), and “Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law,” 43 Wm. & Mary L. Rev. 1907 (2002)—were companion pieces that examined in detail the psychological research and methodological and normative assumptions that underlay behavioral law and economics scholarship.

as Mitchell observed, scholars working within behavioral law and economics did not simply challenge the assumption, central to traditional law and economics, that individuals act rationally. They replaced this assumption with another: that individuals fall prey to systematic biases and errors in judgment and decision-making across many situations. in so doing, according to Mitchell, these scholars were misreading the empirical research from psychology and behavioral economics on rational behavior. as Mitchell explained, the new “equality of incompetence” view propounded in behavioral law and economics overlooked substantial empirical evidence that people are not equally irrational and that situational variables exert an important influence on the rationality of behavior.

Mitchell’s legal education turned out to provide more than he had bargained for. Not only did his legal studies convince him that the study and practice of law could be every bit as challenging and rewarding as academic research within psychology, but he became convinced that a psychologist could pursue an academic career within a law school setting given the growing acceptance of interdisciplinary research within legal theory. Accordingly, after clerking and practicing civil litigation for a number of years in Nashville, Tennessee, in 2000 Mitchell returned to academia in a law school rather than a psychology department.

Mitchell’s timing could not have been better, for the scholarly movement that has come to be known as behavioral law and economics had just begun to gain a wide audience within the legal academy. Scholars within this movement were making considerable use of psychological research on judgment and decision-making that Mitchell knew well. To Mitchell’s dismay, however, much of the scholarship within behavioral law and economics portrayed this psychological research as if it provided general laws of thought and behavior rather than findings that were conditional on the setting, characteristics of the subjects, and the particulars of the task at hand. Hoping to help change the terms of the debate that was developing between the law and economics and behavioral law and economics camps, Mitchell’s first two major works as a law professor—“Why Law and Economics’ Perfect Rationality Should Not Be Traded for Behavioral Law and Economics’ Equal Incompetence,” 91 Geo. L. J. 67 (2002), and “Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law,” 43 Wm. & Mary L. Rev. 1907 (2002)—were companion pieces that examined in detail the psychological research and methodological and normative assumptions that underlay behavioral law and economics scholarship.

As Mitchell observed, scholars working within behavioral law and economics did not simply challenge the assumption, central to traditional law and economics, that individuals act rationally. They replaced this assumption with another: that individuals fall prey to systematic biases and errors in judgment and decision-making across many situations. In so doing, according to Mitchell, these scholars were misreading the empirical research from psychology and behavioral economics on rational behavior. As Mitchell explained, the new “equality of incompetence” view propounded in behavioral law and economics overlooked substantial empirical evidence that people are not equally irrational and that situational variables exert an important influence on the rationality of behavior.

In the Georgetown Law Journal paper, Mitchell extensively reviewed the empirical evidence on individual and situational variability in rational behavior to demonstrate that the assumption of uniformly imperfect rationality found in behavioral law and economics was no more plausible...
than the assumption of uniformly perfect rationality found in law and economics. In the William and Mary Law Review paper, Mitchell examined the internal- and external-validity limitations on psychological research, which in turn counsel caution on the part of courts and legislators before they adopt the views advocated by behavioral law and economics scholars. In both papers, Mitchell argued that the most one can conclude from existing research is that the behavior of most individuals lies somewhere between the extreme poles of perfect rationality and equal incompetence, a location that makes general theory development difficult. Rather than seek a general model of legal judgment and decision-making, Mitchell advocated a contextualist approach that seeks to identify the conditions under which irrational behavior is most likely to occur and be remedied through education, incentives, reconfiguration of the judgment or decision task, or perhaps some more heavy-handed form of intervention. This contextualist approach illuminates specific ways that the legal system can foster rational behavior and counter irrational behavior.

In subsequent work, Mitchell has continued to develop the argument that behavioral law and economics should be focused on seeking solutions to specific problems rather than attempting to formulate a general model of behavior to compete with law and economics’ rational actor model. In “Tendencies Versus Boundaries: Levels of Generality in Behavioral Law and Economics,” 56 Vand. L. Rev. 1781 (2003), Mitchell debated Professor Robert Prentice over the proper lessons to draw from empirical research on irrationality. Mitchell, not surprisingly, argued for a modest approach to revising the law’s assumption of rationality, as compared to the bolder approach argued for by Professor Prentice. Mitchell contended that there has been too great an emphasis on finding and describing behavioral tendencies toward irrationality, without due regard for the boundary conditions on these supposed tendencies. As a result, much of the interesting and important information about the constraints on rational versus irrational behavior is consigned to ceteris paribus clauses and treated as “noise” that should be controlled and ignored rather than elucidated and understood.

In “Mapping Evidence Law,” 2003 Mich. St. L. Rev. 1065, prepared for a symposium on rationality in evidence law, Mitchell argued that empirical legal researchers should seek to map behavioral regularities in discrete legal contexts rather than develop a broad theory of legal judgment. Mitchell then proposed a set of key research questions for scholars interested specifically in evidence law, which emphasized the need to gather information, using a multi-method research strategy, about the practical significance and superability of psychological biases exhibited by judges and jurors.

In “Government Regulation of Irrationality: Moral and Cognitive Hazards,” 90 Minn. L. Rev. 1620 (2006), Jonathan Klick and Mitchell discussed the costs of using government policy to overcome irrational behavior. First, if preferences and biases are endogenous to institutional forces, then paternalistic government regulations are likely to perpetuate and even magnify some irrational behaviors. Second, they showed that it will sometimes be more efficient to invest resources in debiasing rather than to change legal regulations, and sometimes it will be most efficient to do nothing at all in light of the natural variation in irrational propensities. In a similar vein, in “Libertarian Paternalism is an Oxymoron,” 99 Nw. U. L. Rev. 1245 (2005), Mitchell showed that Professors Sunstein and Thaler’s “libertarian paternalism” approach to irrationality regulation suffers from the common problem of assuming too much permanence and pervasiveness in irrational tendencies and ignores less intrusive forms of intervention that may help individuals overcome their biases and errors.

Recently, Mitchell has turned his attention to the use of empirical research on stereotyping and prejudice to develop prescriptions for antidiscrimination law. Innovations in the measurement of unconscious intergroup bias, and evidence of possible widespread biases operating at the unconscious level, have invigorated attacks on the intentionality requirement within antidiscrimination law. Mitchell questions whether the science can support the weight of the new normative arguments. In “Antidiscrimination Law and the Perils of Mindreading,” 67 Ohio St. L. J. 1023(2006), and “Calibrating Prejudice in Milliseconds,” 71 Social
Psychology Quarterly 12 (2008), Mitchell and Philip Tetlock, who have continued to work together, argue that there are many open questions about the new measures of unconscious, or implicit, bias, including questions about the psychometric foundations and reliability of these measures and their ability to predict discriminatory behavior under realistic workplace conditions. As a result, Mitchell and Tetlock argue that it is premature to use this new research as legislative authority or litigation evidence. In a series of in-progress projects, Mitchell and colleagues from psychology are seeking to answer a number of the open empirical questions about unconscious bias using both modeling and re-analysis of data from prior psychological experiments.

In his most recent paper, based on a lecture at McGeorge School of Law (“Second Thoughts,” McGeorge L Rev. (forthcoming)), Mitchell considers how both behavioral law and economics scholarship and the new antidiscrimination law scholarship focus on biases in judgment and decision-making that often arise at the level of first-order thoughts. This scholarship tends to assume, moreover, that individuals are largely incapable of overcoming these first-order thoughts. Mitchell challenges this assumption and discusses how initial thoughts are often overridden by second-order thoughts, which breaks the assumed linkage between first-order biases and biased outputs. He also discusses how the law may be used to promote self-correction to prevent biased judgments, decisions, and behavior.

The critical aspects of Mitchell’s work have received considerable and justifiable attention because Mitchell’s has often been the first voice in dissent to prevailing trends. Equally important, however, are Mitchell’s positive contributions regarding strategies and methods for dealing with empirical uncertainties. In “Case Studies, Counterfactuals, and Causal Explanations,” 152 U. Pa. L. Rev. 1517 (2004), excerpted below, Mitchell considered the use of counterfactual thought experiments to develop causal explanations for significant legal events. Mitchell explained the limitations of this methodology, but he also argued for its usefulness and necessity in situations where policy formation cannot await the results of systematic empirical studies. Mitchell therefore developed a set of normative criteria to guide the use of counterfactual thought experiments and the information they provide.

In “Implicit Prejudice and Accountability Systems: What Must Organizations Do to Prevent Discrimination?,” 28 Research in Organizational Behavior (forthcoming), which also is excerpted below, Tetlock and Mitchell likewise begin with the recognition that pressing societal issues often cannot wait on the slow process of scientific research to sort out who is right from who is wrong. They accordingly propose a novel approach to the resolution of scientific disputes and illustrate its use in the context of the debate over whether laboratory findings of unconscious bias predict discrimination in organizational settings. In this “adversarial collaboration” approach, theorists from competing camps would engage in jointly-designed research and would publicly commit, ex ante, to standards for evaluating the products of the research. The hope is that this method could be used to avoid protracted stalemates among social scientists, which would enable employers and regulators to obtain important information on the possible causes of, and solutions to, inequalities in the workplace.

In a relatively short period of time, Mitchell has emerged as one of the most thoughtful, rigorous, and provocative participants in debates over the use of empirical studies in law and legal scholarship. It has taken him even less time to become one of the most valued members of the Virginia faculty, which he joined just two years ago. A popular teacher and terrifically engaged colleague, Mitchell exemplifies the sort of inquiring, skeptical mind shared by both successful lawyers and scholars alike.
EXCERPTS

Case Studies, Counterfactuals, and Causal Explanations


Many legal scholars mark the fall of Enron a momentous event in our legal and economic history ... [and] offer a wide range of explanations for Enron's demise.... These Enron post-mortems necessarily involve inferences about the causes of Enron's collapse, for any diagnosis of the conditions leading to the corporate failure or any prescription to prevent future failures requires a set of beliefs about the causes of past failures. Even broad forecasts about the historical significance of Enron require a set of beliefs about how past events will alter future events, that is, a set of beliefs about causal relations in the world. ... Whichever causal story is chosen, the point of the storytelling is the same: to influence debate about whether and how the law should be changed in light of the causal factors allegedly giving rise to Enron and other recent corporate scandals.

Within these stories, an important but little discussed transformation occurs at the point where the Enron story is tied to the larger policy debate: the scholar's specific explanation for the isolated event is transformed into a general explanation for a class of potential events and becomes a prediction of future problems (undisclosed derivatives led to Enron's failure and will do so in other cases, technical accounting and disclosure rules permitted too much earnings management in Enron and are too permissive in general, too much deference by the board to management caused harm in Enron and is likely to do so elsewhere, and so on). In other words, the authors switch from singular to general causal accounts. In these assertions the specific explanation becomes endowed with law-like properties and the causal relation posited for the Enron matter is presumed to hold in other corporate settings as well, with little or no demonstration of the applicability of this explanation for other events occurring under different circumstances. Although many scholars widely apply the conclusions they draw from Enron, the reader is given little more than bald assertions or limited anecdotal evidence to support the generalizations.

For the scholar inclined to make policy recommendations, this inductive leap must occur because, while singular causal stories about specific events are of great interest to trial judges, juries, and the parties involved in a particular lawsuit, such specific explanations alone are likely to be of little interest to the positive lawmaker, who enacts laws with broad behavioral implications beyond the specific case. Unless the causal explanation extends beyond Enron to provide a more general explanation of how certain behaviors and corporate and regulatory failures are causally related, then specific explanations for Enron say nothing of importance to lawmakers. Stated differently, if Enron is an aberration or the product of unique forces unlikely to be seen again, then why bother with "sweeping legal reforms" and why not focus instead on criminal punishment, civil liability, and reparations for the players in the Enron case alone?

Serious problems exist with the evidence relied on by the Enron scholars and the inferences these scholars draw from this evidence. Because the evidence chosen consists of only one case involving a single outcome, it is not possible to use experimental, quantitative, or comparative case study approaches to discern causes of this outcome. Instead, the Enron scholars must rely on counterfactual thought experiments to develop their causal explanations for Enron's collapse. Counterfactual thought experiments, however, suffer from a serious methodological underdetermination problem and a variety of other inferential shortcomings. [Further], many of the Enron scholars do not assume the stance of skeptical consumers of historical data who question the accuracy and
completeness of their sources. Instead, news stories and the Powers Report are treated as authoritative factual sources, with little independent effort to confirm the sources’ accuracy or find converging evidence. These factors, together, raise serious doubts about the internal validity of the causal stories being told about Enron.

The quality of an argument dependent on a counterfactual thought experiment should be assessed along at least six dimensions: (1) the transparency with which the evidence-selection, causal inference, and generalization processes are described; (2) the “counterfactuality” of the proposed causal antecedent; (3) the degree to which the favored causal hypothesis has survived confrontation with competing hypothesis; (4) the theoretical and statistical reasonableness of the counterfactual propositions in light of known event probabilities and behavioral evidence; (5) the cotenability and counterfactual minimalism of the propositions in the thought experiment, with particular attention to the complexity of the system in which the counterfactual mutations occur; and (6) the projectibility of the results of the thought experiment.

Considering the Enron stories along these dimensions reveals important ways that the Enron scholars could improve their analyses. Perhaps most troubling is the lack of transparency and specificity in many of the causal stories, both because this requirement is relatively easy to satisfy and because failure to satisfy this requirement makes it difficult to engage in any serious evaluation of the story’s merit along the other dimensions. In counterfactual analysis, much of the necessary information is private and not capable of independent discovery by the reader, such as the precise rewrites of history undertaken in the thought experiment and the evidence selection procedures utilized in gathering information for the factual component in the causal story (e.g., were some news accounts of Enron rejected and, if so, why?; was any effort made to gather fact sources from diverse sources?; what fact-checking occurred, if any?). Moreover, it should first be the duty of the scholar producing the causal story, and not the reader, to find and produce evidence to support the statistical reasonableness of a proposed causal antecedent and any generalizations from Enron to other cases. The very act of writing down the details behind the creation of the causal story and disciplining oneself to make public one’s evidence in support of inferences contained in the causal story are likely to lead to improvements in the story.

Perhaps most problematic for the Enron scholars who use counterfactual reasoning from Enron to support their arguments for legal or market reform is the weakness of these arguments when measured on the cotenability/counterfactual minimalism dimension. Any Enron story used to justify a systemic reform, whether it be one as extensive as the broad move from legal rules to standards ... or a more meager reform such as the requirement that accounting firms not be allowed to provide both auditing and consulting services to a client ... suffers on this dimension because any systemic reform in a system as complex as the one in which Enron was embedded is likely to have so many unanticipated and unintended effects that it becomes difficult to follow the causal chain from the reform to the prevention of Enron and other business failures. %
Implicit Prejudice and Accountability Systems: What Must Organizations Do to Prevent Discrimination

28 Research in Organizational Behavior (forthcoming), with Philip E. Tetlock, University of California, Berkeley

Discussions of what employers must do to prevent discrimination have a ritualistic flavor. There are the textbook recitations of best practices that Human Resource managers must implement; the latest court decisions that the legal department must peruse for new prophylactics; the utilization and adverse-impact analyses that the Compliance branch of Human Resources must submit to regulatory agencies; the validation procedures that psychometricians must apply to all selection methods; and the diversity guidelines that trainers must follow to instill egalitarian values in the workforce.

The entire topic could be—but should not be—dismissed as hopelessly atheoretic. Lurking beneath the layers of bureaucratic posturing is a volatile mix of psychological and political disputes over the potency of prejudice and where society should set its thresholds for judging the adequacy of defenses against discrimination—and distinguishing sham from true compliance with civil-rights laws.

We unpack these disputes here. Our starting point is the long-running controversy over the extent to which the nation has overcome its painful history of racial prejudice. We draw on Festinger’s theory of cognitive dissonance and Lakatos’s philosophy-of-science analysis of research programs to capture the ideological rhythms of this epochal debate, which in its starkest form pits “statist interventionists” (who stress the lingering power of racism and the need for countervailing legal pressure to level the playing field) against “market purists” (who stress the power of competition to eliminate irrational biases). We show how each side has built up a seemingly inexhaustible reserve of auxiliary hypotheses that allow it to explain away the favorite facts of the other side.

This stalemate has been rattled by new entrants who have imported reaction-time techniques from cognitive psychology to measure implicit forms of prejudice and stereotyping that, they insist, self-report surveys fail to detect and that bias the judgments of most people most of the time. A subset of these researchers has forcefully argued—in law journals and in the national media—that work on implicit bias has now reached a level of maturity that justifies extrapolation to the real world. A further subset of scholars has aggressively applied implicit-prejudice doctrines to live legal disputes via expert-witness testimony. These arguments offer double-barreled indictments of American workplaces: a micro-cognitive critique that challenges the sincerity of the tolerant attitudes that many people in early 21st-century America claim to possess (creating the implication that managers are far more biased than they realize or are willing to admit) and a macro, neo-institutionalist critique that challenges the sincerity of organizational efforts to check prejudice (creating the implication that companies are far less effective in checking discrimination than they realize or are willing to admit).

We explore whether the new entrants have indeed tipped the debate decisively in favor of a strong interventionist position that challenges traditional notions of meritocracy and holds managers accountable for numerical quotas in personnel decisionmaking. We show that the new entrants have yet to make a compelling case. Specifically, we identify three persisting unknowns concerning the power of implicit bias to cause workplace discrimination: (a) construct-validity disputes over whether reaction-time differentials on measures such as the Implicit Association Test (IAT) tap into implicit bias as opposed to alternative, more benign constructs such as sympathy for, or unfamiliarity with, minority groups; (b) psychometric disputes over what it means to score as implicitly prejudiced and what must be shown to justify company-wide attributions of prejudice as explanations of disparate outcomes; (c) external validity disputes that revolve around the many differences between lab studies of
We conclude that the usual methods of scientific dispute resolution are unlikely to work as long as each side can: (a) dodge troublesome data by retreating into a protective shell of auxiliary hypotheses; (b) count on the backing of a community of co-believers dedicated to defending the hard-core tenets of its worldview. Moreover, one need not accept the strongest indeterminacy form of our argument to agree that reliance on the usual methods has proven a painfully slow process for courts, regulators, and legislatures that need clear scientific answers—now—to questions about the drivers of inequalities.

We propose an unusual approach to break the impasse—adversarial collaboration—that calls on the clashing camps to: (a) reflect on the dynamics of the debate; (b) identify pivotal empirical points on which they can either agree or agree to disagree; (c) specify research designs on which they can base Bayesian bets about the potency of implicit bias; (d) commit themselves to threshold-of-proof statements that specify how low or high implicit-prejudice effect sizes would have to fall or rise to induce them to change not just their psychological assessments but also their policy stands.

There is room for disagreement over how to achieve the epistemic goals of adversarial collaboration. but there is no room for compromise in our philosophy of science over the goals. Any research program that rejects the Socratic soul-searching prescribed by adversarial collaboration fails the classic litmus tests for science—and should be suspect from the legal system's perspective. This latter point is no fine point: social science experts have woven implicit-prejudice arguments into their testimony in dozens of class-action cases over the last decade, and some courts have accepted these arguments despite the many unresolved questions. For better or for worse, our science is literally, not just metaphorically, on trial.

Two obstacles impede resolution of disputes over implicit bias: (a) the absence of shared standards of evidence for gauging the probative value of facts; (b) the absence of shared standards of proof for balancing false-positive (holding a non-discriminator liable) and false-negative (not holding a discriminator liable) classification errors.

The absence of shared standards of evidence makes it easy for each side to neutralize dissonant findings. Even if implicit-prejudice researchers lost all the key arguments over the validity of implicit measures, they could invoke a litany of arguably legitimate escape clauses: abandoning the IAT for “better” measures of implicit bias, disparaging criterion variables that tests fail to predict as insensitive to subtle hostility, or criticizing independent variables that squelch prejudice as loaded with demand characteristics. And if critics of implicit bias lost the same arguments, they could invoke their own escape clauses: faulting lab experiments that find bias for failing to capture real-world variables that check bias, and faulting field studies that find bias for ignoring objective differences in group performance.

The absence of shared standards of proof further complicates hypothesis testing, making it easy for each side—when they do agree on the facts—to disagree over the policy significance of those facts. Statist interventionists see more prejudice because they rely on expansive definitions that treat a vast range of everyday behavior as evidence of prejudice, even eye-blinking. And market-purists see less prejudice because they rely on restrictive definitions that require clearly disparate treatment of almost identically-situated employees. Either way, each side is free to inflate or deflate its estimates of prejudice in response to the same facts.
BOOKS AND BOOK CHAPTERS


ARTICLES, REVIEWS, AND COMMENTS


Philip E. Tetlock & Gregory Mitchell, “Implicit Bias and Accountability Systems:

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