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GRAND PERSPECTIVES ON EVIDENCE LAW

*Roger C. Park**

POSNER, "AN ECONOMIC APPROACH TO THE LAW OF EVIDENCE"¹

IN his evidence article, Judge Richard Posner uses a thick version of rational choice theory,² coupled with a relentless belief in the ex ante effects of evidence rules. This combination entails implicit assumptions about the pervasive knowledge of the rules among the general population, and about the friction-free willingness of actors to change customary ways of doing things in order to obtain an advantage, that are sometimes rather unrealistic.³ As might be expected, Judge Posner also brings to his study of evidence law a sensitivity to costs, trade-offs, and substitutions.

I question whether Posner's rational choice, ex ante perspective is the best starting point when drawing inferences about the issues

* James Edgar Hervey Professor of Law, University of California, Hastings College of Law. I wish to thank Ron Allen, David Faigman, Dan Farber, Richard O. Lempert, and Lee Ross for their helpful comments, while noting that they are not responsible for the positions taken in this paper. This paper critiques three papers presented at the "New Perspectives on Evidence" Conference at the University of Virginia School of Law on February 23–24, 2001, and it benefited from support from the Olin Foundation. The critique responds to the papers as presented at the Conference.

¹ Richard A. Posner, *An Economic Approach to the Law of Evidence*, 51 *Stan. L. Rev.* 1477 (1999).

² By this I mean that he assumes that actors rationally seek to serve their objective self-interest, avoiding penalties and seeking benefits. Cf. Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 *Cal. L. Rev.* 1051, 1060–66 (2000) (explaining the distinction between thick and thin versions of rational choice). In another recent article, Posner defined rationality more broadly, saying that it means choosing the best means to the chooser's ends. Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 *Stan. L. Rev.* 1551, 1551 (1998). This definition is not a very good one for predicting conduct because of the flexibility of the concept of "ends." For example, if a person acts in a way that brings upon him avoidable punishment, we can say that he was rational because his end was to be punished. Though Posner does not expressly state a definition of rational choice for his evidence article, it is apparent from his reasoning about particular examples that he is implicitly following a "thick" version that assumes actors will seek benefits and avoid penalties, with benefits and penalties defined in a non-idiosyncratic fashion. See, e.g., Posner, *supra* note 1, at 1529, 1531.

³ See *infra* text accompanying notes 21–23.

that are at the core of a traditional American evidence course. Many rules, such as the hearsay and character evidence bans, are tailored with cognitive biases in mind, and aim to control reasoning at trial rather than future primary conduct. They seek to protect against mistaken, unreasonable, or lawless interpretations of evidence. In assessing the value of these rules, the literature on attribution error, situationism, flaws in reasoning, and juror failure to follow instructions seems a more obvious starting point. Perhaps this is why Posner's tour of evidence law really does not have too much to say about such core topics as hearsay and character evidence.⁴

Since character evidence is an area of special interest to me, I will start with some comments on Posner's analysis of the rule against character evidence. He starts with a bow toward the traditional justification for the rule and then launches into an explanation of the exception for sex offenders. He states that sex offenses, at least where children are involved, show that the perpetrators have a desire for the crime, whereas crimes like theft are merely instrumental to a desire to get money, which can be accomplished in other ways.⁵ This is a plausible justification, though of course a lot more can be said than that, and a fuller explanation would require looking at empirical data. Intrafamilial pedophiles, for example, may not have a desire for the crime of child molestation sufficient to cause them to undertake the risk unless it can be committed against vulnerable persons in a dependent relationship,⁶

⁴ Character evidence, including impeachment with prior convictions, takes up less than three pages of his text, see Posner, *supra* note 1, at 1524–27; hearsay takes up less than one page, see *id.* at 1530.

⁵ *Id.* at 1525. In the summary, he adds: "In the case of certain sex crimes, however, as recent amendments to the Federal Rules of Evidence recognize, a history of prior crimes may demonstrate the defendant's inelastic demand for this type of conduct." *Id.* at 1545.

⁶ See Linda S. Eads et al., *Getting It Right: The Trial of Sexual Assault and Child Molestation Cases under Federal Rules of Evidence* 413–15, 18 *Behav. Sci. & L.* 169, 193–94 (2000); Lita Furby et al., *Sex Offender Recidivism: A Review*, 105 *Psychol. Bull.* 3, 5 (1989) (citing Vernon L. Quinsey, *Sexual Aggression: Studies of Offenders Against Women*, in 1 *Law and Mental Health: International Perspectives* 84, 100–01 (David N. Weisstub ed., 1984)) ("It is generally believed that the recidivism rate for incest offenders is low in relation to that of other child molesters. Quinsey suggests that incest is related to family dynamics and opportunism rather than to inappropriate sexual preferences; once an incest offender has been officially reported, it may be that family pressure is relatively effective in preventing recidivism." (citation omitted)).

so a prior intrafamilial crime might not be especially good evidence against one charged with committing an offense on a stranger. Also, the exception covers sex crimes, such as date rape, whose perpetrators are motivated by widely shared desires.⁷

Posner then turns to the problem of the effect of prior-crime evidence on deterrence, suggesting that if prior crime evidence were freely admissible, and jurors were prone to convict habitual offenders regardless of the other evidence, then deterrence would be undermined. "The expected cost of punishing habitual offenders [cost as seen by the offender] would fall, because that cost is a function not only of the probability of punishment per se, but also . . . of the difference between the probability of punishment given guilt and the probability of punishment given innocence."⁸ Professor Richard Lempert has done a fine job of pointing out possible flaws in this argument, asserting that even inaccurate punishment may deter, and, at any rate, punishment need only be thought to be reasonably accurate.⁹ Posner also adds that prior-crime evidence

is only weakly probative, because repeat offenders are punished more heavily than first-time offenders in part precisely to offset any greater propensity to commit crimes that their previous convictions have revealed. If recidivists are punished severely enough, the propensity to commit a subsequent offense may be reduced to the same level as the propensity to commit a first offense.¹⁰

This proposition—that previously convicted defendants, if punished severely enough, may not be any more likely to commit crime than persons with clean records—would seem to merit a look at the empirical evidence. It requires justification in view of data showing that previously convicted defendants are dozens or hundreds of times more likely to commit an offense than are persons

⁷ Cf. Katharine K. Baker, *Once a Rapist? Motivational Evidence and Relevancy in Rape Law*, 110 Harv. L. Rev. 563, 576–78, 582–83 (1997).

⁸ Posner, *supra* note 1, at 1526.

⁹ Richard Lempert, *The Economic Analysis of Evidence Law: Common Sense on Stilts*, 87 Va. L. Rev. 1619, 1643–47 (2001).

¹⁰ Posner, *supra* note 1, at 1525.

chosen at random.¹¹ It contradicts the empirically documented view that recidivism is not much affected by increases in punishment.¹² Just throwing out ideas based upon a rational choice model, under which potential offenders apparently make a reasonable assessment of the value of present gratification compared to future punishment,¹³ can be positively misleading to policymakers unless the scholar is willing to take a look at disconfirming data.

Posner's other point about character evidence—that Federal Rule of Evidence 609 is misconceived because “[t]here is no reason to suppose that previously convicted defendants are greater liars than current defendants *who are guilty in fact*”¹⁴—is sound, but there is nothing particularly economic about it. The point has been made before, either with no claim for interdisciplinary insight,¹⁵ or with reference to interdisciplinary learning not usually identified as uniquely economic.¹⁶

In short, Posner makes some interesting points on character evidence, but they have either been made before or they need empirical verification to be of much use.

For analysis of evidence rules such as the hearsay ban and the ban on character evidence—intrinsic policy rules aimed at counteracting cognitive biases—the economic perspective can offer some interesting hypotheses, but I question whether this perspective

¹¹ See Roger C. Park, *Character at the Crossroads*, 49 *Hastings L.J.* 717, 758–63 (1998); see also John Monahan, *The Clinical Prediction of Violent Behavior* 71–72 (1981) (“If there is one finding that overshadows all others in the area of prediction, it is that the probability of future crime increases with each prior criminal act.”); cf. Michael R. Gottfredson & Travis Hirschi, *A General Theory of Crime* 107 (1990) (“[R]esearch regularly shows that the best predictor of crime is prior criminal behavior [and that the] differences between people in the likelihood they will commit criminal acts persist over time.”).

¹² “The figures suggest that recidivism rates cannot be affected by varying the severity of the punishment, at least within acceptable limits.” Daniel Nagin, *General Deterrence: A Review of the Empirical Evidence*, in *Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates* (Alfred Blumstein et al. eds., 1978), cited in C.L. Ten, *Fantastic Counterexamples and the Utilitarian Theory*, in *Philosophy of Law* 618, 619 (Joel Feinberg & Hyman Gross eds., 5th ed. 1995).

¹³ For a view that persons with criminal propensity discount the cost of future punishment too greatly, see Gottfredson & Hirschi, *supra* note 11, at 95.

¹⁴ Posner, *supra* note 1, at 1544; see also *id.* at 1526–27 (discussing this more fully).

¹⁵ See Richard Uviller, *Evidence of Character to Prove Conduct: Illusion, Illogic, and Injustice in the Courtroom*, 130 *U. Pa. L. Rev.* 845 (1982).

¹⁶ See Richard Friedman, *Character Impeachment Evidence: Psycho-Bayesian [!]? Analysis and a Proposed Overhaul*, 38 *UCLA L. Rev.* 637 (1991).

should be favored over other ways of looking at evidence law. The intrinsic policy rules were originally developed by judges who were not subject to direct market discipline. These rules were aimed at irrational or mistaken thinking, and were generally created without thought of their *ex ante* effects. They seek to control lay decision-makers whose civic-minded motivations are themselves somewhat of an economic mystery.¹⁷

It is doubtful that a great deal of light can be thrown on these rules by use of a model that looks primarily at *ex ante* effects upon rational actors, and that looks only rarely and exceptionally at the literature about cognitive biases in lay reasoning. It is possible, of course, that the exclusionary rules grew and survived a process of natural selection that chose only the ones that fit Posner's model. This seems speculative, however, and it seems more likely that the rules that survived promoted accuracy by effectively countering cognitive biases (or, for the cynical, that seemed to promote accuracy in this way and hence put a good spin on court decisions).¹⁸

Posner has more to say when he moves to an examination of models of the justice system and judicial factfinding¹⁹ and rules intended to affect extrinsic conduct prospectively.²⁰ In the case of the latter set of rules, the law's objective is at least partly to influence primary conduct, so the focus on *ex ante* effects seems more fitting.

¹⁷ See Lempert, *supra* note 9, at 1680–88. Even when jurors do their jobs perfectly, their conduct is hard to explain using thick versions of rational choice hypotheses. Why would they work hard at the job? Why would there ever be a hung jury? Why don't all jurors try to get off by pleading hardship or claiming to be unable to shed prejudice? They are as mysterious as voters from the rational choice perspective. If the answer is that doing one's civic duty is a "good," and hence they are rationally pursuing goods, then rational choice analysis loses all predictive power and is unfalsifiable. Posner's answer is that jurors enjoy the theatrics. I don't know how many trial-level cases Posner has seen, but however many it was, they must have been much more dramatic than the run-of-the-mill ones in which I have been involved. Perhaps, however, they do look forward to telling the story afterwards, and wish to produce a verdict they can defend to their friends.

¹⁸ For an example of the cynical view, see Charles Nesson, *The Evidence or the Event? On Judicial Proof and the Acceptability of Verdicts*, 98 Harv. L. Rev. 1357, 1391 (1985).

¹⁹ For example, for his adversarial/inquisitorial discussion, see Posner, *supra* note 1, at 1488–1502, or for his naked statistical evidence discussion, see *id.* at 1508–10.

²⁰ These include the search and seizure rules, the privilege rules, and the rules governing admissibility of offers in compromise and subsequent remedial measures. *Id.* at 1527–33.

Even there, however, Posner's analysis sometimes seems to get out of control, requiring more human foresight, knowledge and flexibility than is plausible. I doubt that even law professors consult the rules about marital privilege before confiding in spouses or committing a crime, but Posner has ordinary people doing both.²¹ At two other places²² he adds an exclamation point to an implausible conclusion about the ex ante effects of rules, which Professor Lempert has decoded as meaning that Posner is joking.²³ This seems to me an odd convention for signaling humor, and I was left puzzled about how to treat other passages that lacked exclamation points but also seemed far-fetched. Though I generally like humor, this left me wishing for more seriousness.

Finally, I found Posner's use of equations annoying at times, especially where they required cross-references. It seemed to me that their substantive message was sometimes more obscured than clarified by the use of mathematically precise symbols. Take the equation on page 1524:

$$B(x) = p(b_1x - b_2x^2)S - c(x).^{24}$$

The equation tells us that the net benefit of evidence is equal to the net probability that evidence will help or hurt the search for truth times the stakes in the case minus the cost of the evidence. The help/hurt probability is derived by subtracting the probability (p) that the evidence will hurt (b_2x) from the probability that the evidence will help (b_1x). Note that in the equation the hurtful evidence is, quite speculatively, *squared* on the assumption that "the latter effect [confusing or overloading the jury] will increase at an increasing rate with increases in the amount of evidence."²⁵ My

²¹ Id. at 1530–31.

²² In these two places, Posner suggests (1) that abrogation of the lawyer-client privilege might increase the enrollment in law schools because clients would need to know more law in order to screen their disclosures, id. at 1532, and (2), in suggesting that admitting naked statistical evidence might lead to a bus monopoly, id. at 1510.

²³ Lempert, *supra* note 9, at 1671, 1690.

²⁴ In the equation: x represents "the amount of evidence," Posner, *supra* note 1, at 1481, 1524; $B(x)$ represents the net benefit of the evidence, id. at 1481; S represents the stakes in the case, id.; b "measures the effect of a unit of x in increasing the accuracy of the trial," id. at 1524; b_2 "measures . . . its effect in decreasing that accuracy by confusing or overloading the jury," id.; and $c(x)$ represents the cost of the evidence, id. at 1481.

²⁵ Id. at 1524.

own intuition is that the influence of overload evidence would increase at a *decreasing* rate, but at any rate this is something about which fact-starved generalizations are not very helpful. Evidence that feeds attribution error may be of increasing potency for a while, then become cumulative and of little effect, whereas evidence that merely causes boredom and confusion, such as abstruse expert testimony, may start being psychologically cumulative right away. At any rate, this is something about which nothing of value can be said without a more situation-specific analysis. That analysis would allow us to apply the findings of behavioral science, or at least give us a concrete situation in which to exercise our common-sense inductions. I would have preferred a discussion in spelled-out words, or at least a running translation of the symbols.

Despite my misgivings, there was something I liked about Posner's article. Posner's simple and graceful writing, the transparency of his ideas, his willingness to put controversial ideas on the table without surrounding them with defensive obscurity or heavy language, all made his article a relatively easy read, despite the occasional use of equations. Every reader will get an idea from it. Even where Posner works territory that is well-tilled, his vocabulary and perspective seem to put his topics in a new light, as a poet might put love in a new light without adding a new idea.

Seen as an article aimed not only at evidence scholars, but also at lawyers, judges, and non-evidence law professors, Posner's piece understandably provides background and covers familiar ground. His discussion of Blue Bus issues, for example, is part primer and part new ideas.²⁶ Since Posner has a gift for setting forth issues clearly without wasting space, that is a good thing. Some of the matters that seem to be old goods in new packages to evidence experts may be new goods entirely to others.

It is hard to write an article that is intelligible to non-experts without to some degree seeming to be just using common sense. And though much of Posner's article is common sense, I suspect that many common-sense lawyers and law professors will be struck by ideas in the article that they did not think of themselves. Sometimes a point that seems obvious in hindsight is not so obvious when one is unaided by it. To take a simple example: Posner ar-

²⁶ Id. at 1508–10.

gues that the use of sanctions other than the exclusion of evidence as a remedy for illegal searches, if the sanctions are effective, would not result in any evidentiary gain because the searches would not be made in the first place.²⁷ Therefore, those who oppose *Mapp v. Ohio*²⁸ ought to be arguing about the definition of illegal search rather than about the sanction.²⁹ I am not a criminal procedure scholar,³⁰ so I have no idea whether this idea is commonplace, but it was new to me. Scholars who read and produce law and economics articles seem to be able to come up with that sort of idea much more quickly than others.

I am grateful that Posner did what he did. I just hope that not too many lesser lights imitate it. I also hope that the economic perspective does not become privileged over others, and that inferences from its assumptions are not treated as if they were empirical proof.

LEMPERT, "COMMON SENSE ON STILTS"³¹

Professor Richard O. Lempert critiques Judge Posner's article, concluding that the law and economics perspective does not have much to offer to the study of evidence law, and that most of Posner's article is "common sense on stilts."³²

I agree with most of Lempert's critiques of Posner's conclusions on particular evidence issues. He is almost always right when he says Posner is wrong. Also, Lempert is fair in his comments on Posner's analysis of particular evidence issues, giving credit where credit is due and making only modest use of the academic convention of putting the burden of producing empirical evidence on the opponent.

By my count, in Lempert's section entitled "Judge Posner's Case," there are about ten instances in which the main thrust of

²⁷ Id. at 1533.

²⁸ 367 U.S. 643 (1961).

²⁹ Posner, *supra* note 1, at 1533.

³⁰ The American curriculum gives search and seizure and confession issues to the criminal procedure course, not the evidence course, even though the doctrines require exclusion of evidence in some situations. Of course, there is no absolute reason why my intellectual interests should be determined by the curriculum, but it is easier to keep up in fields in which one teaches the subject matter.

³¹ Lempert, *supra* note 9.

³² Id. at 1623.

Lempert's criticism is that Posner is just plain wrong (his conclusion is improbable, and there are better explanations),³³ an equal or larger number in which he deems Posner's conclusion questionable and unhelpful, at least in the absence of empirical investigation,³⁴ and two instances in which he says Posner must be joking.³⁵ Less often, Lempert specifically criticizes Posner for being unoriginal;³⁶ sometimes that criticism is implicit. Sprinkled through Lempert's text, in all the categories mentioned above, including instances in which Lempert thinks Posner is correct on a specific observation about the law, we see comments about how it was not necessary to use economic analysis to arrive at the same conclusion.³⁷ Nonetheless, there are also two or three instances in which Lempert thinks that Posner's analysis is sound and even seems somewhat willing to give Posner's economic orientation credit for arriving at it.³⁸ Since I agree with most of Lempert's particular criticisms of Posner's comments on specific rules and doctrines, it would be tedious to go through them one by one and simply second what he says.

The fact that many of Posner's specific observations about evidence and trial law can be shown to be improbable or wrong may not so much be a function of his economic method, as of his speed of production and fearlessness in throwing out unqualified ideas. If future members of his school share this characteristic when analyzing evidence law, then they should be advised to slow down and work on the details a bit more.

Sometimes, Lempert does not simply dismiss a Posner conclusion about evidence, but argues that it is unproven and speculative.³⁹ In support of these comments Lempert often shows that there is much more to the question being considered than

³³ For examples of such instances, see *id.* at 1641–43 (search for evidence); *id.* at 1644 (random deterrence); *id.* at 1677–80 (significance level and probative value).

³⁴ See *id.* at 1657–59 (more evidence in close cases); *id.* at 1675–77 (harmless error); *id.* at 1691 (*Mapp*); *id.* at 1694–98 (experts).

³⁵ *Id.* at 1671, 1690.

³⁶ *Id.* at 1667, 1706.

³⁷ See *id.* at 1652–55 (referring to jury reforms and evidence searches).

³⁸ See *id.* at 1668 (naked statistics); *id.* at 1684 (character evidence); *id.* at 1675–77 (harmless error). Lempert states that the argument regarding Federal Rules 413–15 “reflects an economist’s concern with the substitutability of goods [and] is a nice example of how one discipline’s thought patterns can yield new and potentially valid insights for another field.” *Id.* at 1681.

³⁹ *Id.* at 1684–88 (hearsay rule).

Posner has covered, saying that the answer depends on empirical information that is not available. The same objection can be made to almost any fireside policy analysis of evidence law, and I am inclined to be a bit more permissive than Lempert. It is true, however, that the economic approach could be dangerous if it obscures the absence of empirical data or if it draws attention away from relevant values that do not fit the economic model.

Lempert gives several reasons, different from those I have expressed above, for doubting that economic analysis will lead very far in the study of evidence law. He thinks that evidence scholars can form plenty of hypotheses on their own without the need for Posner's approach;⁴⁰ I think that economics-oriented legal scholars can come up with ideas that others would not. I suspect that forthcoming articles, and Posner's article itself, will have more influence than the works Lempert examines in the final part of his article.⁴¹

I am not as sure as Lempert that the existence of messy trade-offs means that law and economics is unlikely to have anything to contribute.⁴² Sometimes all that Lempert does in demonstrating how messy the issues are is to show the difficulty of reaching a firm conclusion about evidence issues by *any* method.⁴³ If that is so, then at least economic analysis might help us to see how complicated the problem is and to resist facile changes. Change itself is a cost.

Lempert also thinks that economics will be of little help because "trials aim not at correct results but at justice."⁴⁴ He may be right that economics does not have an easy way of measuring justice; but then, no one does, and looking at what maximizes correct results may help us understand the cost of pursuing some other kind of justice.

He also raises the practical doubt that evidence and economics will receive much funding, since it does not exactly fit in with a conservative agenda, unlike, for example, tort reform. He notes that "the growth of law and economics during the 1970s and 1980s

⁴⁰ Id. at 1698.

⁴¹ Chris William Sanchirico, *Character Evidence and the Object of Trial*, 101 *Colum. L. Rev.* 1227 (2001); Daniel J. Seidmann & Alex Stein, *The Right to Silence Helps the Innocent: A Game-Theoretic Analysis of the Fifth Amendment Privilege*, 114 *Harv. L. Rev.* 430 (2000).

⁴² Lempert, *supra* note 9, at 1622–1639.

⁴³ Id. at 1643.

⁴⁴ Id. at 1630.

was fueled by presumed ties between the economics perspective and conservative, especially pro business, political agendas.”⁴⁵ Even if that is true, conventional evidence scholarship does not have much funding either, and empirical investigation does not have as much as it needs. The type of law and economics article written by Posner—inferences from a model, without confirmatory empirical work—can proceed without any funding beyond the salaries paid by law schools. But Lempert is probably right in suggesting that the economics of evidence will not get the same funding boost that economic scholarship in other areas of law has received.

I also dissent in part from Lempert’s thematic proposition that Posner’s article has nothing to offer but common sense. The disagreement may be more a matter of definition than of substance. To me, the idea that it is a bad thing to evict a poor family in a snowstorm is common sense. The idea that it is a good thing to do because the eviction helps other poor families buy homes is economics.⁴⁶ I suspect that Lempert’s “common sense” is sophisticated enough to include, implicitly, many of the ways of thinking that the law and economics movement has helped bring to law teachers. At any rate, I think that Posner’s *ex ante* approach and rational choice assumptions lead him to several new ideas, some of them worthwhile, and I suspect that his knowledge of economic theory had a role in focusing his attention.⁴⁷

I have expressed doubt about whether rational choice theory should be the first tool reached for when assessing rules designed to prevent inferential error. Where evidence rules are intended to affect planned primary conduct, however, it is a reasonable starting point. There is nothing globally unrealistic about Posner’s rational choice assumptions. In general, when this sort of analysis leads to a conclusion about how actors behave, one cannot dismiss the conclusion simply for lack of systematic empirical verification. Of course, conclusions reached from the model should not be accepted without question, either. One can wish for, and perhaps seek to produce, confirming or disconfirming evidence from a spe-

⁴⁵ See *id.* at 1636.

⁴⁶ The example is from Arthur Allen Leff, *Economic Analysis of Law: Some Realism About Nominalism*, 60 *Va. L. Rev.* 451, 460–61 (1974).

⁴⁷ See, e.g., Posner, *supra* note 1, at 1508–10 (naked statistical evidence); *id.* at 1518 (harmless error).

cific social science study that examines the particular situation. If that is not feasible, one might consider a conclusion improbable on the grounds that more general behavioral science research indicates that humans do not behave according to the rational choice model because of endowment effect, availability bias, or other behavioral phenomena.

In the absence of other evidence, one must decide whether the conclusion is probable based on lessons learned from history, experience, and common sense. It is unfortunate that those are bases to which we must so often resort when assessing legal policy recommendations, but that is just the way the world is. Not everything has been systematically studied and there is no reason to reject anecdotal evidence when nothing better is available. In making this common-sense judgment, it seems to me that the premise that humans normally act rationally in their self-interest, seeking benefits and avoiding penalties, is a pretty good rule of thumb in the absence of evidence to the contrary. Thus I would not be quite as skeptical as Lempert about the likelihood that economists have something to contribute without doing formal empirical work. Probably our difference is only one of degree.

ALLEN AND LEITER, "NATURALIZED EPISTEMOLOGY AND THE
LAW OF EVIDENCE"⁴⁸

I agree with much of what Professors Ronald J. Allen and Brian Leiter prescribe for the evidence scholar. They favor looking at the real world instead of reasoning *a priori*, and using the tools of social science in trying to find out what is happening in the world. They advise not to pass off one's preconceptions as truth, especially in the face of disconfirming data, but to test them empirically. They believe that "ought implies can," that is, that normative epistemology ought not ask the truth-seeker to do something that people are not capable of doing. They think that it is a good idea to judge evidence law by its consequences.

These recommendations are tied to a broader or deeper philosophical position about what is knowable and how knowledge is acquired. Allen and Leiter say that one of their goals is to bring

⁴⁸ Ronald J. Allen & Brian Leiter, *Naturalized Epistemology and the Law of Evidence*, 87 Va. L. Rev. 1491 (2001).

lawyers up to date on epistemology,⁴⁹ but I doubt that many lawyers can handle the authors' references to what philosophers have said about each other without more foundation. For example, the sentence "Gettier's refutation of the then prevailing analysis of the concept of knowledge as 'justified true belief' was taken by many to show 'that the epistemic status of a belief state depends on the etiology of the state and, consequently, on psychological facts about the subject,'"⁵⁰ springs forth without any foundation. I doubt that readers not already familiar with Gettier, Quine, and Goldman will get much out of Allen and Leiter's summary of their views. This author would have benefited from a more accessible treatment of the subject.

There is a question, for workaday lawyers and law professors, whether understanding the ins and outs of Gettier, Quine, and Goldman—or even of Allen and Leiter—is worth the time and effort. We all have some sort of explicit or implicit idea of a "general theory" of evidence law—for example, that we should aim for accuracy and speed while keeping down costs—and the question is whether a grander theory will help achieve the goals of evidence scholars. No body of knowledge is cost-free. Those who study epistemology must study something else less. If ought implies can, then Allen and Leiter may need to readjust their way of explaining their ideas to lawyers.

Notwithstanding my doubts about how useful this sort of article will be to the typical lawyer and law professor, I draw some comfort from Allen and Leiter's conclusions. They help me avoid feeling that the way I go about examining the world is fundamentally inferior, and that there is some body of philosophical knowledge out there that would reveal my fallacy. Perhaps the lesson for the typical evidence expert is that one need not worry that grand, fancy theories hold some secret truth about how to view evidence that refutes our practical, patched-up holistic approach of combining social science with inductions from experience.

Allen and Leiter follow their philosophical discussion with examples of naturalized epistemology in action. Their specific applications illustrate a methodology pretty much like the one I

⁴⁹ Id. at 1492.

⁵⁰ Id. at 1496.

would use—indeed, they say that “[f]or the great bulk of evidentiary scholars, then, this article merely solidifies the ground beneath their feet.”⁵¹

I will turn first to their example of naturalized epistemology at work in the analysis of character evidence, since of their examples character evidence is the subject most familiar to me. They start by stating that situationism is the “now dominant view” of social psychologists about dispositions.⁵² Social psychologists tend to believe that laypeople, in predicting human behavior, attribute too much power to dispositions and too little to situations.⁵³

The authors go on to draw some conclusions from the social science data. They say that since lay reasoners attribute too much importance to disposition, perhaps Federal Rule 404(b) goes too far in allowing evidence that might reflect upon character to be admitted, because it might be misused.⁵⁴

The authors then critique one of the classic experiments on the power of the situation: the 1973 Darley and Batson study of Good Samaritan behavior by seminarians.⁵⁵ Darley and Batson measured what Allen and Leiter call the “altruism” of seminarians⁵⁶ by administering personality measures that aim at classifying different

⁵¹ *Id.* at 1493.

⁵² For another view about the status of situationism, see Susan Marlene Davies, *Evidence of Character to Prove Conduct: A Reassessment of Relevancy*, 27 *Crim. L. Bull.* 504, 535–36 (1991).

⁵³ See Lee Ross and Richard E. Nisbett, *The Person and the Situation: Perspectives of Social Psychology* 87–89 (1991).

⁵⁴ Allen & Leiter, *supra* note 48, at 1548. For other articles that have used situationist personality theory to support limits on character evidence, see Miguel Angel Mendez, *California's New Law on Character Evidence: Evidence Code Section 352 and the Impact of Recent Psychological Studies*, 31 *UCLA L. Rev.* 1003, 1052 (1984); see also Robert G. Lawson, *Credibility and Character: A Different Look at an Interminable Problem*, 50 *Notre Dame Law.* 758, 783–84, 787–88 (1975) (using specificity theory to argue against impeachment with prior convictions); David P. Leonard, *The Use of Character to Prove Conduct: Rationality and Catharsis in the Law of Evidence*, 58 *U. Colo. L. Rev.* 1, 26–31 (1986–87) (arguing that the admission of character evidence is not logically relevant because the underlying assumptions concerning predictability of conduct are invalid); Robert G. Spector, *Rule 609: A Last Plea for Its Withdrawal*, 32 *Okla. L. Rev.* 334, 351 (1979) (asserting that character evidence is of no probative value in light of specificity theory).

⁵⁵ See Allen & Leiter, *supra* note 48, at 1548–49; John M. Darley & C. Daniel Batson, “From Jerusalem to Jericho”: A Study of Situational and Dispositional Variables in Helping Behavior, 27 *J. Personality & Soc. Psychol.* 100 (1973).

⁵⁶ Allen & Leiter, *supra* note 48, at 1549.

types of religiosity. Though the measures are not fully described in the published study, Darley and Batson considered them to be useful in determining, among other things, whether subjects were religious for what it would gain them, for its own intrinsic value, or as a quest for the meaning of life.⁵⁷ Persons whom the personality measures classified either as religious for intrinsic reasons or as being on a quest were considered "Samaritanlike" by Darley and Batson.⁵⁸

The authors apparently regard the Darley and Batson study as representative of the literature on situationism that they would look to for guidance about character evidence policy, and they have some reservations about it. They critique the study by asking whether character might have been a factor in the conduct of the ten percent of the hurried seminarians who did help.⁵⁹ They also ask whether the results would be generalizable to a trial situation in which the jurors, unlike the subjects in the experiment, had the benefit of cross-examination, instruction, and group deliberation.⁶⁰

A closer examination of the study suggests that much more powerful objections can be made to the use of this study to draw policy conclusions about the law of character evidence.

⁵⁷ Some idea of the way in which Darley and Batson operationalized the trait that Allen and Leiter describe as "altruism" may be derived from their reference to personality measures:

The general personality construct under examination was religiosity. . . . [I]n the present research, types of religiosity were measured with three instruments which together provided six separate scales: (a) a *doctrinal orthodoxy* (D-O) scale patterned after that used by Glock and Stark (1966), scaling agreement with classic doctrines of Protestant theology; (b) the Allport-Ross *extrinsic* (AR-E) scale, measuring the use of religion as a means to an end rather than as an end in itself; (c) the Allport-Ross *intrinsic* (AR-I) scale, measuring the use of religion as an end in itself; (d) the *extrinsic external* scale of Batson's Religious Life Inventory (RELI-EE), designed to measure the influence of significant others and situations in generating one's religiosity; (e) the *extrinsic internal* scale of the Religious Life Inventory (RELI-EI), designed to measure the degree of "driveness" in one's religiosity; and (f) the *intrinsic* scale of the Religious Life Inventory (RELI-I), designed to measure the degree to which one's religiosity involves a questioning of the meaning of life arising out of one's interactions with his social environment.

Darley & Batson, *supra* note 55, at 102.

⁵⁸ *Id.* at 107.

⁵⁹ Allen & Leiter, *supra* note 48, at 1549.

⁶⁰ *Id.* at 1549.

First, the "selfish" subjects were the ones who kept a commitment to show up on time to help the assistant whom they had been told would be waiting for them. Those subjects were being just as altruistic as those who stopped in the alley to inquire about the condition of an ill-dressed, possibly drunk man sitting slumped in a doorway. One set was helping the experimenter, the other the slumped man. (All subjects were paid \$1.50, and there is no reason to think that the ones who stopped to help the slumped man feared losing their payment.)

Second, even if helping the slumped man was a nobler form of help, selfish seminarians interested in personal salvation might be expected to do a good deed, particularly one praised in the Bible, just as often as intrinsics and questers. The good deed could help them earn salvation. Though it is interesting to see the power of situational factors in determining the conduct of the seminarians, some of whom were actually on the way to preach a sermon on the Good Samaritan,⁶¹ a stronger test of the relative power of a character trait to influence conduct would have been presented if the character trait had been established by something other than a personality test, and if the situational conditions had been ones that clearly would call for those possessing the trait to act differently from those who lacked it. It is a bit of a stretch to treat the Darley and Batson experiment as one showing that the trait of altruism does not exist or does not have much influence on conduct.

Third, it is an even bigger stretch to generalize from the experiment to policy proscriptions for the law of character evidence in criminal trials. The argument that because religiosity questionnaires did not predict whether seminarians would stop to help a slumped man, therefore a criminal record is not predictive of criminal propensity, is so preposterous as not to merit extended comment.

The problem of generalizability persists when one looks beyond Darley and Batson to the rest of the literature on situationist personality theory.

⁶¹ The independent variables in the Darley and Batson experiment were whether the subjects had been asked to preach a sermon on the Good Samaritan, whether the subjects were in a hurry (based on how long they had been given to get to the destination), and the subjects' performance on the religiosity tests. Darley & Batson, *supra* note 55, at 102-04.

First, the conclusions of personality theorists about cross-situational consistency of behavior have been based on studies that examine nonviolent, noncriminal behavior. We should be cautious in using studies of conformity, altruism, extroversion, conditionability, and the like to infer whether prior crimes are predictive of future criminal behavior. If character is a poor predictor of whether someone will help a person on the sidewalk, it is not necessarily a poor predictor of whether someone will murder a person on the sidewalk. Studies of aggression, a trait that may underlie much criminal behavior, indicate a greater degree of persistence and stability of behavior than traits like altruism. In short, since character evidence problems typically involve problems of other crimes, it makes more sense to look at studies of criminal behavior than at studies of noncriminal behavior.⁶²

Second, even as to noncriminal behavior, prior instances of *extreme* behavior—extreme extroversion, for example—are of greater use in predicting future behavior than prior instances of normal behavior.⁶³ Since character evidence often involves evidence of prior extreme behavior, this circumstance also limits the generalizability of the studies.

Third, the features of the courtroom situation, such as the procedural features mentioned by Allen and Leiter, also possibly limit the generalizability of the studies.⁶⁴ But in some ways they may make character evidence at trial less dangerous than in experiments showing attribution error, which ordinarily lack cross-examination, investigation to reveal context, and formal procedures for revealing both sides and reminding subjects of evidentiary dangers.

Allen and Leiter also critique Posner's article, criticizing it as an example of the limits of a priori reasoning about evidence law.⁶⁵ They say the article is valuable to the extent that it is eclectic "from the stance of the empiricist," but that "the value of his article is in an inverse relationship to its reliance on a priori microeconomic

⁶² Park, *supra* note 11, at 730–35.

⁶³ *Id.* at 737–38.

⁶⁴ *Id.*

⁶⁵ Allen & Leiter, *supra* note 48, at 1503.

reasoning.”⁶⁶ They suggest naturalized epistemology as an alternative conceptual foundation for thinking about evidence law.⁶⁷

I should note that I agree with many of their points. In fact, the Allen and Leiter critique of particular Posner applications, like Lempert’s, is sometimes overpoweringly convincing. One example is their critique of Posner’s example of the Blue Bus Company going out of business.⁶⁸ This is so thoroughly demolished by Allen and Leiter (and by Lempert) that I wonder why Posner would make the point in the first place. Perhaps he was being playful. It does seem to me that he must enjoy revving up his models and seeing where they go, whatever the results. I agree with Allen and Leiter that we would be better off considering results that are empirically plausible.

Allen and Leiter are right on target much of the time in their analysis of Posner, and it would be pointless for me to merely second their comments. Sometimes, however, I think they may get carried away. One example is their criticism of Posner’s assumption that penalties deter conduct.⁶⁹ Posner’s assumption seems like a plausible working hypothesis to me, subject of course to exceptions in particular situations in which there are reasons to think otherwise. For example, I would be willing to believe that increasing the cost of illegal parking would deter that activity, and that students are motivated to study partly by fear of getting a bad grade. The “disconfirming” study cited by Allen and Leiter⁷⁰—the Gneezy and Rustichini study of a day care center⁷¹—seems to me hardly to challenge the notion that we will act rationally in our own self-interest. It was a study in which a day care center had a problem with parents who arrived late to pick up their children. A money fine was instituted, and subsequently the incidence of late arrival actually increased.⁷² It seems to me that, as Gneezy and Rustichini themselves suggest, one entirely plausible explanation is that formalization of the penalty gave parents “reason to believe

⁶⁶ Id. at 1511.

⁶⁷ Id. at 1537-49.

⁶⁸ Id. at 1523-25.

⁶⁹ Id. at 1516-19.

⁷⁰ Id. at 1517.

⁷¹ Uri Gneezy & Aldo Rustichini, *A Fine is a Price*, 29 J. Legal Stud. 1 (2000).

⁷² Id. at 3.

that a fine is the worst that [could] happen.”⁷³ In other words, the maximum cost, as reasonably perceived by the parents, went down. Even parents who are risk-neutral might reasonably have perceived that the expected cost of being late decreased after a fine was stipulated, given that the school had always had a “be on time” rule and that one would expect some sort of adverse consequence for repeated or egregious offenses.

The study described by Allen and Leiter does not show very much about whether penalties deter conduct. A better source might have been studies of the deterrent effect of criminal penalties, some of which find a significant deterrent effect.⁷⁴ Admittedly, the question of deterrence is a complicated one. It is possible that trying to deter crimes by increasing penalties does not deter criminal activity nearly as much as common sense would suggest—perhaps sometimes not at all—and at any rate, many factors, such as socialization and economic conditions, interact with the effects of certainty and severity of penalty.⁷⁵ Allen and Leiter are certainly

⁷³ *Id.* at 10.

⁷⁴ For cites to studies claiming significant deterrent effect, see Robert Cooter & Thomas Ulen, *Law and Economics* 413–14 (2d ed. 1997). See also studies cited in C.L. Ten, *supra* note 12, at 619–20.

⁷⁵ See Dan M. Kahan, *Social Influence, Social Meaning, and Deterrence*, 83 *Va. L. Rev.* 349 (1997). Professor Kahan discusses social influences that prevent the relationship between severity of penalty and incidence of crime from being a direct or simple one. For example, vigorous enforcement of laws against minor public order offenses can have a beneficial effect on public and peer attitudes about crime, including beliefs about whether others successfully commit crime. Enforcement of laws against minor offenses thus may indirectly deter serious crime, perhaps more than an increase in the severity of penalty for the serious crimes themselves. Similarly, certainty of punishment may be more important than severity, even if the expected cost of a criminal act is mathematically the same, because certainty affects public attitudes. For other scholarship displaying doubt about deterrent effects, see H. Lawrence Ross, *Confronting Drunk Driving* 54–63 (1992) (commenting on the lack of support for the belief that heavier sentences prevent drunk drivers from repeating offenses); Panel on Research on Deterrent and Incapacitative Effects, National Academy of Sciences, *Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates* 6 (Alfred Blumstein et al. eds., 1978) (“Analyses of natural variation, with few exceptions, find a negative association between crime rates and noncapital sanction risks.... Any conclusion that these negative associations reflect a deterrent effect, however, is limited principally by the inability to eliminate other factors that could account for the observed relationship, even in the absence of a deterrent effect.”).

right in saying that Posner should have paid more attention to empirical evidence.

Here as elsewhere, it seems that it can be a useful first step to do what Posner did, that is, to assume that actors rationally pursue their self-interest. What is needed after that is an examination of reasons, in the particular circumstances, why this model might not be accurate in predicting behavior. This Posner does not do, and I applaud Allen and Leiter for the general proposition that "what matters is how people and the system behave in fact, not how they are predicted to behave by the application of formal tools."⁷⁶

Allen and Leiter go too far in their section on "rootless theorizing,"⁷⁷ which takes on Posner's assertion that

the conviction rate is lower in bench trials than in jury trials. This is significant because in most states the decision in a criminal case as to whether to be tried by a judge or by a jury is entirely the defendant's. If juries are less accurate guilt determiners than judges, innocent defendants will choose to be tried by judges rather than run the risk of jury mistake, while guilty defendants will choose to be tried by juries, hoping *for* a mistake. The acquittal rate should therefore be higher in bench trials—and it is.⁷⁸

Allen and Leiter show that Posner was apparently wrong in saying that in most states the decision whether to be tried by a judge or a jury belongs to the defendant. They cite authority showing that the prosecutor has a veto power over the defendant's choice of judge-only trial in twenty-five states, that the defendant must obtain leave of court in nine states, and that the defendant has a unilateral right to a bench trial in six states.⁷⁹ (Of course, it is hard to know from statutes and cases whether it is true in practice that prosecutors have a veto, since prosecutors may feel institutional pressures to accept a cheaper method of trial (nonjury trial), or, as repeat players, be reluctant to offend a judge.)

That demonstration does not in itself show Posner's conclusion to be wrong. The Allen and Leiter authorities indicate that there

⁷⁶ Allen & Leiter, *supra* note 48, at 1518.

⁷⁷ *Id.* at 1521–27.

⁷⁸ Posner, *supra* note 1, at 1501.

⁷⁹ Allen & Leiter, *supra* note 48, at 1522–23 n.98.

are no states where the prosecutor alone gets to choose whether the trial is to judge or jury, and there are many where the defendant can choose with the consent of the judge. Therefore it is still quite possible that Posner's point (that the greater rate of acquittal in nonjury trials is evidence that defendants choose judges when they are innocent) could still be true; one needs to know more about the source of the acquittals. For example, if fifty percent of criminal nonjury trials are judge-only trials by agreement of both the defense and the prosecutor, and the other fifty percent are judge-only by sole choice of the defendant alone without the prosecutor having any veto power, then a higher rate of acquittal in judge-only trials could still be evidence that defendants choose judges when they have a stronger case.

Be that as it may, I fail to see how Judge Posner's mistake about the law shows how law and economics analysis leads to "rootless theorizing." Sometimes a mistake is just a mistake.

On the same point, Allen and Leiter add that "knowledge is not advanced" by reasoning about whether higher acquittal rates by judges might be due to choice by defendants, who choose judges when they are innocent because they know the judges are more accurate.⁸⁰ (Technically, Allen and Leiter's characterization applies to their extension of Posner's reasoning, but it is clearly meant to indicate that Posner's original point is also useless.) Apparently they would make this point even if Posner had not been in error about defendant choice. I disagree with the point. It seems to me that taking party choice into account in our inferences about convictions, acquittals, and reversal rates is inevitable and useful, if only to keep us from otherwise giving too much weight to this sort of data. And in fact this sort of speculation can lead to hypotheses that can be tested.

Suppose that a law professor is faced with the assertion that because there is a high acquittal rate in a certain type of criminal case, therefore the law is not being enforced in that area. Obviously one would want to look into the question whether the effect might instead be due to overzealous (or even to appropriately zealous) prosecution, that is, to choices by the prosecuting attorney about which cases to present. Or suppose the assertion is that in-

⁸⁰ Id. at 1523.

ferences should be drawn from the fact that the reversal rate before a change was the same as that after a change in the law, hence the change must have had no effect. Is it not proper to point out that lawyers choose which cases to appeal, and that the acquittal rate and the reversal rate may both be affected by this choice? In fact, it might even be worthwhile to speculate that in civil cases, once a rule of law is settled, the reversal rate will be the same regardless of the rule's substantive content, because of lawyer screening of cases for appeal—while at the same time recognizing that cognitive biases may make this prediction inaccurate. At any rate, I fail to see how the reasoning in my simpler hypotheticals is different in kind from the reasoning that Allen and Leiter disparage, or why it is obviously wrong. It is true that one can postulate effects and countereffects based upon choice and foresight of rational actors; but is that a reason for ignoring the effects of choice, or is it instead a reason for trying harder to decide which hypotheses about choice are likely and which ones are not?

The hypothesis posed by Posner is interesting and empirically testable. It is possible that where defendants, either practically or as a matter of formal legal right, are the ones who choose judge or jury, then defendants choose judges when they are innocent because they believe judges are more accurate, and that the higher acquittal rate in nonjury cases is evidence in support of this hypothesis. The hypothesis is not exactly irresistible; one rival hypothesis would be that there is a higher acquittal rate not because judges are more accurate, but because defense lawyers choose judges when they know their cases will appeal to the judge's prejudices (or when they have a special, and perhaps unsavory, influence upon the judge). At any rate, the proposition is testable; one approach would be to survey defense lawyers and prosecutors, asking them to identify reasons for choosing a nonjury trial.

DIAMOND AND VIDMAR, "JURY ROOM RUMINATIONS ON
FORBIDDEN TOPICS"⁸¹

The paper by Professors Shari Seidman Diamond and Neil Vidmar is different in spirit and goals from the papers by Posner,

⁸¹ Shari Seidman Diamond & Neil Vidmar, *Jury Room Ruminations on Forbidden Topics*, 87 Va. L. Rev. 1857 (2001).

Lempert, and Allen and Leiter. Diamond and Vidmar do not attempt to tell us what we should be doing, to get at the roots of knowledge, or to critique others who have a grand perspective on evidence law. They do present us with a splendid example of useful evidence scholarship.

Diamond and Vidmar successfully situate their study in the body of jury research in a way that will be intelligible to the intended audience. They describe other research that contributes relevant theoretical perspectives and hypotheses. They have an ample knowledge of the law⁸² and of the procedural alternatives at trial. Their results are consistent with other knowledge about the conduct of "blindfolded" jurors, and they certainly contribute to that knowledge. In fact, their results concerning insurance⁸³ seem quite counterintuitive (and therefore interesting) to me. I would never have guessed that juror discussion of the forbidden topic of insurance would show jurors are more interested in talking about collateral source payments to the plaintiff than in rebelling against the rule that liability must be proven before a deep pocket (the insurance company) can be made to pay for the injury.

Of course, one can always wish it would have been possible to do some things differently. For example, one could wish for a larger group of subjects. One could also wish that the subjects could have been randomly selected without the need for getting their permission, though the ninety percent participation rate, coupled with the absence of any obvious reason to think that non-participants would have talked differently about insurance than participants, calm my own worries about this problem. The danger that jurors would be affected by videotaping is also present, though one would think that the effect would have been to reduce insurance talk instead of increase it.⁸⁴

These kinds of problems are likely to arise in good field work, and in considering the evidence that we use to make evidence law,

⁸² This is not surprising in view of the background of the authors. In addition to their doctorates in other fields, one of the authors has been a law professor at Duke for fifteen years, the other has a J.D. from Chicago, has practiced law, and is a law professor at Northwestern. Although the authors will not necessarily be flattered by my note that they know their law, it is worth mentioning because it is an attribute that is not universal among law and psychology researchers.

⁸³ Diamond and Vidmar, *supra* note 81, at 1907.

⁸⁴ See *id.* at 1870 n.49 (presenting the authors' comment on the videotaping effect).

we have to consider the alternatives. One alternative is fireside policy inductions, something that we already have plenty of, even without Posner's recent contribution. Another is the controlled social science laboratory experiment. The latter frequently involves unrealistic paper and pencil stimuli, procedural environments that do not mimic the courtroom (for example, that lack cross-examination, deliberation, or argument of counsel), and use of undergraduate subjects, whose differences from jurors in motive, age, educational level and values impede generalization to the trial situation. Some of these problems can be ameliorated within the confines of the laboratory, though with difficulty and expense, but the motivation issue will always remain. Of course there is no one way to do empirical research. There is room for many different techniques, depending on the problem being addressed and one's goals. But the realism of the Diamond and Vidmar study is a valuable feature and appropriate for the point they study.

The authors not only chronicle the way jurors talk about insurance, but suggest better ways to encourage the jurors to follow the rules on the subject, invoking the "collaborative instruction" approach used by Diamond and Casper in a simulation study of jury verdicts in a mock treble damage antitrust case.⁸⁵ Diamond and Casper found in the prior study that the jurors followed the law better if its rationale was explained to them.⁸⁶ Thus, the prior instruction explained what Congress was trying to accomplish by passing the treble damage provision.⁸⁷ The authors do not try to do exactly the same thing in their proposed collateral source instruction, properly fearing that the purpose of the collateral source rule is so obscure or questionable that explaining it will not help. The proposed instruction would tell jurors that the parties are not allowed to present evidence about insurance and that some people are covered, some partly covered, and some not covered at all. It seems likely that their instruction will meet the danger that juries will be influenced by speculation about insurance more fully than a simple admonition, and of course the question is testable.

⁸⁵ *Id.* at 1908–09.

⁸⁶ *Id.* at 1909.

⁸⁷ *Id.*

The general approach suggested by Diamond and Casper's prior experiment should be considered for other instructions. For example, the instruction about not using a settlement to prove liability⁸⁸ could be improved by explaining to the jury (1) that settlements occur for reasons unrelated to liability, such as avoiding litigation costs, (2) that it is not worthwhile to take the time to put in evidence about the reason for a settlement, (3) and that, at any rate, settlement outcome is excluded to encourage the parties to discuss an out-of-court solution. Instructions about not using hearsay evidence for its truth might be improved by explaining the handicaps imposed by lack of the opportunity to cross-examine and by the limited knowledge of the in-court declarant, though in some hearsay situations the current instructions are probably beyond any help.⁸⁹

CONCLUSION

It should be obvious that I favor the Diamond and Vidmar type of legal scholarship. It has a direct message for legal policymakers. It will also be useful not only to academics but also to lawyers and judges, something that is certainly not essential to legal scholarship but that does help maintain a relationship between the teachers in a professional school and the profession itself.

But empirical research does have higher financial costs than other types of scholarship. Legal epistemology and legal economics can be done at home, with the need only of a modest collection of books. Empirical research requires funding for subjects and experimenters, and, for the principal investigators, it means going to

⁸⁸ See, e.g., BAJI 2.28, Limited Purpose of Evidence of Settlement with Witness, California Jury Instructions, Civil: Book of Approved Jury Instructions (8th ed. 1994) ("Evidence has been received that a [witness] [party] who also was involved in the accident in question compromised and settled a claim. Such evidence may be considered by you solely for the purpose of showing a fact from which an inference may, but need not, be drawn of any interest or bias on the part of the witness. It may not be considered by you as any admission of liability for any loss or damage.").

⁸⁹ See, e.g., BAJI 2.43, Statements Made by Patient to Physician, California Jury Instructions, Civil, *supra* note 88 ("Evidence has been received that [the plaintiff] [a patient] made statements to a [physician] for the purpose of diagnosis or treatment. That evidence may not be considered as proof of the truth of the facts stated; you may consider it only to the extent it does show the information upon which the physician's opinions are based.").

meetings, writing grant proposals, finding subjects, responding to peer review, and, in the case of studies like that of Diamond and Vidmar, negotiating with judges and lawyers. How is one to assess the benefit of these types of scholarship, given their different costs?

Thinking that it may take an equation to beat an equation, I will now offer one to illustrate how to calculate the value of different types of evidence research. They may fruitfully!⁹⁰ be modeled as follows. First, the benefit of abstract speculation:

$$B(s) = p(b_1s - b_2s^3)S - c(s).$$

Where $B(s)$ is the benefit of abstract speculation about evidence law, b_1s is helpful speculation, and b_2s is speculation that overloads, confuses, or misleads. The term b_2s is cubed to recognize the increasing rate of damage caused by an increase in harmful abstract speculation—an effect evidenced historically by ideological and religious conflicts. The symbol $c(s)$ represents, of course, the cost of the abstract speculation.

Second, the benefit of empirical research:

$$B(e) = p(b_1e - b_2e)S - c(e).$$

Here we see that the benefit of empirical research is a simple function of the probability that it will help minus its cost, with no cubing effect. In any situation in which there is a downside associated with abstract speculation, it may be seen that it is very likely that $B(s)$ will be less than $B(e)$.

That is not all there is to it. Increases in the probable benefit of empirical research are positively related to its cost, since allocating more resources to research design, paying subjects and assistants, production of stimuli, and peer review increases the probability of helpful empirical research. No such effect is known for abstract speculation, where the cost of production is mainly a function of the number of hours it takes the speculator to read the literature and write a law review article. That cost may actually bear an inverse relationship to benefit because it may be a sign of negative traits of the speculator, such as procrastination, poor reading skills,

⁹⁰This is a Posnerian exclamation point. Readers unfamiliar with this form of symbolic notation may want to substitute the symbol ;-) or simply to ignore the following equations.

and lack of confidence in the utility of the work.⁹¹ These relationships could also be modeled mathematically. But I will spare the reader that exercise. Needless to say, the equations demonstrate convincingly! that empirical research is a better investment.

⁹¹ Of course, I am talking about hypothetical speculators, since no one would suggest that Judge Posner or any of the other prolific scholars who have contributed to the speculation at the conference were in any way slow. For Judge Posner, scholarship is obviously quick and probably recreational.

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