The Economic Analysis of Evidence Law: Common Sense on Stilts

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Nous sommes en 50 avant Jésus-Christ. Toute la Gaule est occupée par les Romains... Toute? Non! Un village peuplé d'irréductibles Gaulois résiste encore et toujours à l'envahisseur.¹

I. A FABLE: ECONOMISTS INVADE LAW'S EMPIRE²

THERE was a time when the empire of Law was not overrun by economists. The economists had their own fiefdoms to be sure—there was the Duchy of Antitrust and the Kingdom of Regulatory Law—but the economists lived in peace within these borders, welcoming many unlike themselves into their midst, only gently proselytizing their students in the first few classes of a term, and swearing fealty to the law. It is true that a few marauders from beyond the borders saw the wealth of the empire and sought to colonize it, but even the most daring, Archbishop Coase³ and Duke Gary of Becker,⁴ for example, had too few troops to do much damage and largely failed in their attempts to convert the heathen. In retrospect, however, it is clear that their assaults softened resistance. When a new champion arose, this time not from beyond Law's borders but from within the heart of the kingdom, resistance crumbled and the floodgates were opened.⁵ How proud Sir Richard Posner must have felt when from behind the well-fortified ramparts of Castle Chicago, he saw bands of economists spreading over Law's

¹ Une Aventure D'Astérix: Astérix Le Gaulois 3 (Dargaud Ed. 1992) (“We are in the year fifty B.C. All Gaul is occupied by the Romans.... All? No! One village inhabited by unyielding Gauls continues to, and will always, resist the invader.”) (author's translation).
² I hope economists will read this with the same smiles with which it is written.
⁵ The work that marked this opening is Richard A. Posner, Economic Analysis of Law (1972).
terrain. Some of the fiercest and strongest fighters came from outside, but more, including some who were equally fierce, were willing converts from the ranks of the empire's citizens.

Economists soon spread over much of Law's Empire, even colonizing areas like Criminallawland that once seemed implacably hostile. In Law's oldest realms, the civil kingdoms of the common law, the economists' triumph was such that it is today hard to find respectable citizens who, if they have not interbred with, have at least learned the language of, the invaders. In other fiefdoms, like the aforementioned Antitrust, the economists expelled most of the doctrinalists and others with whom they once cohabitated. Indeed, they even intimidated the courts.

But one kingdom of Law's Empire held out. Few economists ventured into the rocky hills of Evidence, and even fewer citizens of Evidenceland converted to the new faith. Economists' inhabitants went about their business secure in their isolation and confident in their defenses. They neither welcomed nor fought the few economists who ventured into their realm. Rather, they ignored them. But now a clarion has sounded. That same Sir Richard (now Lord Posner) who triggered the initial all out assault on Law's Empire has cast his eye on this lonely holdout kingdom and like Lars Porsena is on the march. "Extraordinary," some will say, for Sir Richard has long since been elevated from knight to Law Lord, a position of wisdom that for lesser men means retirement from the field of battle.

Now you seek an oracle. You ask, "What does this assault mean for Evidenceland?" Let us read the entrails together.

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7 But see Bush v. Gore, 531 U.S. 98 (2000) (showing that even the most elevated law lords do not always shun the risk of disgracing themselves in battle).
II. EVIDENCE AND ECONOMICS

JOHN HENRY WIGMORE ON PRIVILEGES

(1) The communications must originate in confidence that they will not be disclosed;
(2) This element of confidentiality must be essential to the full and satisfactory maintenance of the relation between the parties;
(3) The relation must be one which in the opinion of the community ought to be sedulously fostered; and
(4) The injury that would inure to the relation by the disclosure of the communications must be greater than the benefit thereby gained for the correct disposal of litigation.8

A. The Unimportance of Economics to Evidence: A Hypothesis

Judge Richard Posner,9 significantly expanding on observations he has previously made,10 has written what he justly calls "the first comprehensive . . . economic analysis of" the law of evidence.11 This is potentially a milestone, for as Posner notes, "the economic literature dealing with the rules [of evidence law] themselves is scanty in relation to the scope and importance of evidence law."12 If the economic perspective can shed new light on how courts are or should be informed of facts, or if it simply challenges old explanations, new vistas for evidence research will be opened akin to the lines of research opened by those doing what I once called "the New Evidence Scholarship."13 Even if Posner and other econo-

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9 Henceforth, I will drop the honorific "Judge" when referring to Judge Posner. No disrespect is intended, but it is more efficient to refer to Judge Posner by just his last name and, in my view, more felicitous stylistically as well.
11 Posner, supra note 6, at 1478.
12 Id. at 1477–78.
mists\textsuperscript{14} have little to offer evidence law, understanding why this is so will tell us something about evidence law and the scholarship that informs it.

If the title of this Section has not already revealed my position, I will state it directly: I do not think economics will have the same impact on evidence scholarship as it has had on the study of torts, contracts, property, and many other areas of law. Indeed, I do not think it will have much impact at all, for I see it yielding few new insights, and I expect it will rarely pose serious challenges to received wisdom in the field. This is not so much because what Posner and other economists have to offer is silly or wrong (although some of it is certainly the latter). Rather it is because much of it is uninteresting; either it says little of relevance to the world in which evidence rules are applied, or what it says has long since been seen by others. To judge by Posner’s article, the insights of economics are in large measure existing common sense. The economic perspective often tracks familiar modes of analysis and endorses commonplace conclusions. Too often economics seems not so much to add to the field’s common sense as to place it on stilts: Getting anywhere requires extra effort and the position is inherently unstable.

These are firmly stated conclusions, but I do not offer them that way. Rather I offer them as hypotheses. Posner’s synthetic commentary on the economics of evidence law is a welcome vehicle to test these hypotheses, for if any scholar can disprove them, it is likely to be Posner. But before turning to his work, let me suggest reasons why economists have shied away from evidence law and why what economics has to offer evidence law is likely to be limited.

1. Not News

First, the rational actor perspective that is associated with economics is already well represented in evidence law; indeed I would argue that it dominates the field.\textsuperscript{15} Wigmore’s requisites for privi-

\textsuperscript{14} When I speak of economists in this paper, I refer not just to people with advanced degrees in economics but to law professors who apply the models and methods of law and economics in their work.

\textsuperscript{15} See also Michael L. Seigel, A Pragmatic Critique of Modern Evidence Scholarship, 88 Nw. U. L. Rev. 995, 996 (1994) ("[T]he state of contemporary
leges, which I quoted to start this Part, have the same rational actor roots as Judge Learned Hand's famous formula in *United States v. Carroll Towing Co.*,\(^6\) the rock on which the economic approach to tort law is built. Posner claims the rational actor perspective for economics,\(^7\) but if this is all economics can offer evidence law, there is no need for the gift. We already have it, some would claim to excess.\(^8\)

2. No Fit

**Justice Robert H. Jackson on Impeachment by Prior Bad Acts**

We concur in the general opinion of courts, textwriters and the profession that much of this law is archaic, paradoxical and full of compromises and compensations by which an irrational advantage to one side is offset by a poorly reasoned counterprivilege to the other. But somehow it has proved a workable even if clumsy system when moderated by discretionary controls in the hands of a wise and strong trial court. To pull one misshapen stone out of the grotesque structure is more likely simply to up-

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\(^{16}\) 159 F.2d 169, 173 (2d Cir. 1947).

\(^{17}\) This rational actor perspective, with its close attention to costs and benefits, is not distinctive to economics but is also encountered in sociology, political science, law, and other disciplines.

\(^{18}\) Seigel, supra note 15. The rationalist who seeks to maximize truth finding at trial differs from the rational person of economics who seeks to maximize social welfare. But Posner argues that there is a link between truth finding and social welfare mediated by deterrence. Posner, supra note 6, at 1481–84. Hence, Posner casts much of his analysis of evidence rules in terms of what they contribute to truth finding. It is the coincidence between traditional evidence law scholarship's concern for truth and Posner's general equation of true verdicts with verdicts that promote social welfare that allows me to claim that much of what Posner's economic analysis offers evidence law is already familiar to evidence scholars and often even part of the field's common sense. Even if Posner is right about the relationship between accurate verdicts and deterrence, however, not all social welfare implications of evidence law are determined by that law's implications for getting at the truth. In some cases, most notably privilege law, other welfare implications of evidence law are seen as outweighing the truth. Here, too, however, the economist's rational actor perspective is not just familiar to evidence scholars, but rather, as the quotation from Wigmore on privileges suggests, it has dominated their analysis.
set its present balance between adverse interests than to establish a rational edifice.¹⁹

Justice Jackson's well-known statement on impeachment by prior bad acts is a second reason why economics is of limited use in sophisticated evidentiary analysis. If the rational actor perspective has dominated traditional evidence scholarship and motivates (or at least rationalizes) many of the rules that exist, apparent irrationalities also permeate the system. Economists perhaps have tools to identify and clear up these irrationalities, but the problem to which Justice Jackson's quote eloquently testifies is not that evidence scholars are unaware of the irrationalities that exist.²⁰ Rather it is that evidence law often reflects complex compromises between different goals, with uncertain implications for the quality of verdicts. For example, we want to get at the truth in litigation. We are more likely to get at the truth if witnesses tell what they know. We are worried, however, that interested witnesses will lie—indeed once we were so worried that we would not let parties testify under oath. But barring interested witnesses does not make sense, since they are likely to know more about what happened than anyone else. As a compromise, we let interested witnesses testify but allow them to be impeached by bad acts apparently relating to veracity, by testimony that they have bad reputations for truth and veracity, by criminal convictions that suggest dishonesty, and, often, by any felony. Moreover, since interestedness comes in degrees and may be shaped by such subtleties as who calls an apparently disinterested witness,²¹ we apply these rules of impeachment to all witnesses.

¹⁹ Michelson v. United States, 335 U.S. 469, 486 (1948).
²⁰ Interestingly, some rules that seem irrational today are legacies of policies that at one time seemed rational. Thus, with a different view of the dangers of hearsay and human psychology, hearsay exceptions, like the excited utterance exception and the dying declaration, were at one time self-evidently justified from a rational actor perspective. Today, changed views about the most likely sources of testimonial error and what leads to truth-telling lead many to regard these exceptions as poorly justified if the goal is to admit reliable hearsay. These examples caution us against giving too great weight to what may appear to be reasonable assumptions about what is rational. Tomorrow we may think differently.
Perhaps the most striking impeachment rule is not the bad acts rule which was the subject of Justice Jackson's opinion, but Federal Rule of Evidence 609, which often places a price (possible exposure of a past crime) on a convicted felon's decision to take the stand, even though his self-interest is clear. From a cost-benefit perspective, the obvious question is whether this rule does more to discourage or successfully impeach testimony by witnesses who absent the rule might lie convincingly if they testified than it does to impeach the testimony of truthful witnesses or to discourage their testimony. When the witness is a criminal defendant, there is reason to think that dishonest denials of guilt are more likely to be discouraged or discredited than honest protestations of innocence. True stories usually hang together better than false ones, and they are probably harder to discredit by cross-examination. Hence, innocent defendants are likely to appear more credible than guilty ones, even, or indeed maybe especially, when both have prior records. This means the innocent are more likely than the guilty to think that the gains from testifying will offset the prejudice of impeachment. Moreover, an attorney seeking to keep a client from testifying in order to prevent perjury has in the impeachment rule a powerful tool of persuasion that will typically be wielded only against guilty defendants. Hence the rule seems justified—or does it?

The question we asked is only a starting point. Suppose impeachment by prior felony convictions were not allowed. Presumably, more innocent, truth-telling defendants and more guilty, lying defendants would take the stand. But would the gains from disallowing prior conviction impeachment be the same for both groups? Arguably not. Although both would benefit by avoiding prejudice and perhaps by appearing more credible, one would expect the guilty to be more likely to be thought liars than the innocent, because their stories would have holes that would tend to make their lies transparent. Moreover, their attorneys might do little to help them make their stories convincing or might try to dissuade them from testifying. So, even if the threat of prior conviction impeachment dissuades proportionately fewer innocent than guilty defendants from testifying or is less likely to render the truthful testimony of

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22 Fed. R. Evid. 609.
innocent defendants incredible, the threat or realization of impeachment by prior convictions may still lead to more wrongful convictions than its abolition would to mistaken acquittals.\(^2\) This is because the marginal harm (that is, convictions that would not occur given only the other evidence) to guilty defendants will be small if we are correct in hypothesizing that almost all would be convicted whether or not they testify or, if they testify, are impeached, while the harm to innocent defendants even if rare will be great since they would be acquitted if they testified and were not impeached.\(^2\)

We can thus, under one set of assumptions, conclude that innocent defendants are harmed more by the felony impeachment rule than guilty defendants would be helped by its abolition, but do we know this to be true? No. If we are nonetheless willing to assume this to be true, do we have any idea of the extent to which it is true? None at all, I think. Moreover, true or not, is it politically feasible to ban felony impeachment? In most jurisdictions, no. Prosecutors would scream too loudly, for convictions would be harder to achieve. When prosecutors scream loudly, they are usually heard by legislators. Does this mean that criticizing the felony impeachment rule for its purported unfairness and irrationality is

\(^2\) If these suppositions are true, and we count the cost of mistaken verdicts in either direction the same, prior conviction impeachment should be forbidden if equal numbers of guilty and innocent defendants are brought to trial. If, as seems likely, more guilty than innocent defendants are tried, the rule might lead to more correct verdicts in the aggregate, even if innocent defendants were more likely than guilty defendants to be harmed by the rule or helped by its abolition. Normatively, however, we may wish to weigh the cost of wrongfully convicting innocent defendants far more than the cost of wrongfully acquitting guilty ones. The position has strong cultural and philosophical support. From a different perspective, however, one can argue that the social costs of wrongful acquittals exceed those of wrongful convictions since the wrongfully acquitted defendant may commit more crimes. This may be why there is no evidence that the seriousness of crimes reduces mistaken convictions, and, in particular, why the insanity defense is notoriously unsuccessful. Even if people share a sense that it is worse to convict someone wrongfully of rape or murder than of writing bad checks, this sense is likely to be outweighed by the difference in perceived costs associated with wrongful acquittals.

\(^2\) Harry Kalven and Hans Zeisel’s data suggest that compared to testifying and not being impeached by prior convictions, not testifying or testifying and being impeached are about equal in their tendencies to raise the probability of conviction. Their reported data do not tell us about the factual guilt of those who might have been harmed by the rule’s existence. Harry Kalven, Jr. & Hans Zeisel, The American Jury, 177–81, 388–89 (1966).
pointless? No. Some courts have been persuaded to limit felony impeachment because of such arguments, and the contours of Federal Rule 609 and its state counterparts have been shaped by conflicting interests and arguments. Ultimately we have a compromise between intuitions about the probative value of evidence, intuitions about how the threat of impeachment affects decisions to testify, ideals about the precautions we should take in protecting the innocent, desires to convict the guilty, and the political power of various interest groups.

What is economic analysis, or rational actor analysis, going to do with such a mess? Can it get us out of it? No, again. Economic analysis is at its most powerful when there are clear, objectively measurable values to be maximized (or minimized). You cannot maximize a compromise. At best you can suggest tradeoffs that will allow clearer thinking about an issue or maximize some value given constraints on other values that figure in the mix. But suggestions based on questionable assumptions are likely to be of limited practical utility, and it is dangerous to base policy on them.

What we need and are unlikely to get is empirical information. For example, with respect to Federal Rule 609, it would be good to know, among other things, what prior felony convictions tell us about the propensity of a defendant to lie beyond a defendant’s obvious self-interest, how this information affects juries, and whether the fact of a criminal conviction interacts with the quality of a defendant’s story such that liars are hurt more than truth-tellers by prior conviction impeachment. We also need good theories about how lawyers and witnesses would react to changed rules, for rule changes that would be salutary at present might not be so

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25 The bad act impeachment rule seems less irrational because the rule limits those bad acts that can be considered to acts that relate to veracity. The same is true of the non-felony prong of the prior conviction rule, which applies only to convictions for crimes involving dishonesty. But although these rules appear more rational in that the impeachment they allow seems more probative of veracity, we do not know if defendants impeached by evidence allowed under these rules are less likely to testify honestly than defendants who are not vulnerable to such impeachment or whether such impeachment makes for more accurate juror assessments of witness credibility. Even if the assumed relationship of witness credibility to past behavior that motivates these rules is generally correct, the relationship may not hold for the group of highly selected and obviously self-interested criminal defendants who take the stand.

26 I am aware the rule applies to all witnesses and not just criminal defendants, but the situation of the criminal defendant is complex enough to illustrate my point.
once the system adjusted to them. In short, Justice Jackson may be right in suggesting that any effort to escape the current mess is as likely to create a bigger mess as to improve the situation.

Indeed, maybe we do not have a mess at all, if the goal is accurate verdicts. To know whether we do requires information about the base rate of guilty offenders among those impeachable by prior felonies. If it is high enough, the prejudicial effect of prior conviction evidence might increase the proportion of correctly decided cases, even if all probative value is lacking. This information would, however, leave open the question of the desired tradeoff between wrongful convictions and wrongful acquittals. While rational actor analysis might help us sort out some of the issues here, it cannot provide the final answer. Sorting out issues may, of course, itself be a contribution, but I do not think the problems we face in deciding whether Federal Rule 609 is desirable stem from not understanding the issues. Rather the problems exist because we lack relevant empirical information and disagree on values.

The fact that economics today has little to say about the virtues of rules like Federal Rule 609 does not mean that we are unable to rationally argue its merits. Indeed, experimental evidence supports the common sense judgment that prior crimes evidence prejudices juries against defendants, even when it has no strong bearing on credibility. It is not silly to argue that if prior conviction evidence is unrelated to credibility it should be barred as impeachment, even if the base rate guilt among impeachable defendants is so high that the prejudice the evidence engenders is likely to reduce substantially overall verdict error. We can reject this information, and with it the economic perspective, because trials are not just about getting facts right. They are about getting facts right for certain reasons (for example, a prejudice-free rational evaluation of the evidence that leads to a particular conclusion) by following certain procedures (for example, without torture and with confrontation).

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One can argue that there is nonetheless a role for the economic perspective here. Posner, for example, tells us that maximizing the proportion of cases decided correctly is desirable because it helps achieve intended deterrence.\(^\text{28}\) But economics cannot tell us whether deterring crime is more important than condemning torture or what degree of deterrence is worth what amount of torture. More to the point, it cannot tell us whether deterring crimes by convicting guilty people is of greater value than maintaining a system which convicts no one, guilty or innocent, because of the prejudicial effects of minimally probative evidence. Even if one has strong intuitions favoring deterrence, these intuitions may not apply to the marginal case where the incremental increase in deterrence from convicting a guilty person is small, but the injustice of securing a conviction through prejudice is as high as it was in the first case. It may be that all cases determined by the prejudicial effects of prior conviction evidence are on the margin.\(^\text{29}\)

It is nonetheless possible that a formal economic analysis can clarify the implication of different assumptions for tradeoffs between values and so might elucidate or call into question the logic of particular policy arguments. But I would like to see such an exercise before concluding that economic analysis is likely to add to what those who have pondered different evidence rules have discovered without the aid of economics.

3. Wrong Aim

A third reason to be skeptical of what the economic perspective can offer evidence is that trials aim not at correct results,\(^\text{30}\) but at justice. Justice usually entails correct results but does not necessarily do so. If, for example, the evidence against a person is an illegally

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\(^{28}\) Posner, supra note 6, at 1483. On this point, see infra notes 63–78 and accompanying text.

\(^{29}\) I am ignoring the fact that in Posner's model, the wrongful conviction of the innocent also diminishes deterrence. Posner, supra note 6, at 1483. This further complicates the situation and, absent empirical information, further reduces the likelihood that economic analysis will provide answers to Federal Rule 609 policy problems.

\(^{30}\) Again, I want to remind the reader that I am here taking Posner's claim that his is a comprehensive economic analysis of evidence law at face value. Economists might argue that a normative economic analysis seeks rules that maximize social welfare and that a positive analysis would examine evidence rules with the implications for social welfare in mind. Posner, however, sees correct verdicts as welfare maximizing decisions.
coerced confession coupled with unconvincing circumstantial evidence, the just result is a not guilty verdict, even if the judge or jury has heard the confession and finds it convincing. Moreover, justice entails certain procedures.\textsuperscript{31} Correct results might be more likely if honest witnesses could not be cross-examined, yet we would regard it as unjust if a judge denied parties the right to cross-examine those witnesses she thought were honest, even if the judge was an excellent judge of honesty.\textsuperscript{32}

The economic approach aims at maximizing values and identifying tradeoffs. Most commonly, it is about maximizing efficiency, not in the colloquial sense of the term but in the sense that overall social welfare is enhanced if particular arrangements are made or certain trades consummated. Often moves that are efficient in the colloquial sense, in that they cost less and engender lower levels of waste than competing moves, are also efficient in the economic sense, but this need not be so. Just trials may require procedures that seem inefficient in both the colloquial and technical sense, if reaching accurate verdicts with minimal expense is the criterion by which efficiency is measured.\textsuperscript{33} Colloquially inefficient procedures may, however, yield technically efficient results because justice cannot

\textsuperscript{31} I cannot prove the claims I make in this paragraph about the priority of justice as empirical facts, because definitions of justice may be contested; I do, however, have some confidence in the proposition that the priority of justice over correct results is deeply rooted in American legal culture, as exemplified in the Fourth through Seventh Amendments to the Constitution and realized in court decisions over the two centuries since the Bill of Rights was enacted. At the conference at which this paper was presented, Posner professed not to know what this thing called "justice" was. See Richard A. Posner, Comment on Lempert on Posner, 87 Va. L. Rev. 1619, 1717 (2001). I suggest he begin with the Bill of Rights, and note that when he acts as Judge Posner, ideas of justice do not seem so foreign to him. See, e.g., United States v. Santos, 201 F.3d 953 (7th Cir. 2000) (reversing lower court for error causing prejudice to defendant). Also, justice may be defined operationally based on people's reactions to outcomes, distributions, and procedure. A large body of psychological research does this. Indeed, at least one journal, Social Justice Research, is devoted to the topic.

\textsuperscript{32} I think the analysis holds even if the opposing party's sole purpose in cross-examining the witness is to shake the witness's story rather than to place it in context or develop additional information favorable to his side.

be ruled out as a component of social welfare. Thus costlier procedures may be welfare-enhancing, even if they yield the same or, indeed, less accurate results than other less expensive procedures.\textsuperscript{34}

Although valuing justice is not necessarily antithetical to the economic perspective, economists seem to have no way to get hold of this problem except by narrowing the conception of trial justice in ways that defy common understanding. Economists like Posner cannot measure justice in units commensurate with either the costs of legal processes or the values of accurate verdicts, and so justice is either ignored in their analyses or equated with accurate verdicts. Without models that value and measure procedural justice, economists cannot say what rules of evidence or trial procedure are just.\textsuperscript{35} Thus they are hard pressed to help us understand what justice means in the trial context.

Economics can, in theory, help us understand some of the costs or tradeoffs that different rules or procedures entail, and this information may influence beliefs about what procedural justice demands. Some authors taking an economic perspective, especially

\textsuperscript{34} Professors Louis Kaplow and Steven Shavell have written an impressive, almost encyclopedic, work in which they argue that, from a normative standpoint, social welfare, properly conceived, does all the work one might ask of the concept "justice" and does it better. They acknowledge, however, that a taste for justice is a value included in a properly conceived social welfare function. Many philosophers will take issue with the Kaplow-Shavell analysis, but even accepting it, my arguments hold if our collective taste for justice at trials is substantial, as I believe it is. Moreover, despite their acknowledgment that justice tastes are values that are properly included in social welfare functions, their discussion largely neglects tastes for justice or tries to reduce them to other preferences. See Louis Kaplow & Steven Shavell, Fairness Versus Welfare, 114 Harv. L. Rev. 961 (2001).

\textsuperscript{35} Research indicates that the perceived justice of legal processes depends more on the procedures used than the outcomes reached. Jonathan D. Casper, American Criminal Justice: The Defendant’s Perspective 168–72 (1972); E. Allan Lind & Tom R. Tyler, The Social Psychology of Procedural Justice 66 (1988). In commenting on this paper, Posner suggested that justice was such an amorphous concept that it was impossible to talk rationally about it, and it should therefore not be part of our discourse. See Posner, supra note 31, at 1717. I disagree. Justice can be operationally defined and measured. Moreover, perceptions of justice motivate many activities, some with obvious economic dimensions that I am sure Posner would recognize. For example, Lind and his colleagues found that when arbitration proceedings were regarded as fair, litigants were less likely to seek trial de novo. E. Allan Lind, Arbitrating High-Stakes Cases: An Evaluation of Court-Annexed Arbitration in a United States District Court, at xiv (1990); E. Allan Lind et al., Individual and Corporate Dispute Resolution: Using Procedural Fairness as a Decision Heuristic, 38 Admin. Sci. Q. 224, 224–25 (1993).
those writing on the attorney-client privilege, have attempted to do this, but they do not always agree, and most such discussions have done little to enhance prior understandings of privileges or the cases for and against them. Indeed, so long as economists assume rather than investigate states of the world and causal relations, I doubt they will add much of great value to evidence scholarship, for evidence scholars have shown themselves to be quite skilled at imagining and manipulating plausible world states. Evidence is likely to gain substantially from economists laboring in its vineyard only if economists become empirical as well as (or instead of) theoretical laborers. I have not yet found empirical work by an economist interested in evidence law.

4. Barriers to Comprehension

A fourth reason evidence law is likely to remain largely unaffected by law and economics is language: Much of the best economic analysis is formal and quantitative; it is written in a mathematical language that few evidence teachers and fewer judges can understand. This


37 Compare Bundy & Elhauge, supra note 36, at 315 (noting that litigation advice generally increases a tribunal’s ability to do its job), with Kaplow & Shavell, supra note 36, at 568 (finding that “there is no a priori basis for believing that such advice tends to promote socially desirable behavior”).

38 In commenting on this paper, Posner reads my several suggestions that economists have most to offer evidence by doing empirical work as demeaning. See Posner, supra note 31, at 1714. He seemed to feel that I was suggesting that economists uncover information which true evidence scholars could use and then get out of the way. I do not mean my remarks this way, but instead write as an admirer of econometric methods and what empirically oriented economists have been able to learn from them. Moreover, I expect empirical economists to remain economists, with economic theory guiding their problem selection and analyses. I also recognize the value of formal modeling in clarifying thinking and guiding empirical research. See, e.g., Richard Lempert & Joseph Sanders, An Invitation to Law and Social Sciences 137–95 (1986).

39 See, e.g., Andrew F. Daughety & Jennifer F. Reinganum, On the Economics of Trials: Adversarial Process, Evidence, and Equilibrium Bias, 16 J.L. Econ. & Org. 365
is not, of course, an insurmountable barrier. Formal economists regularly present crucial assumptions of their models and the implications of their findings in English. Also, when an economist's ideas are valuable for understanding or critiquing the law, either the original author or some follower is likely to express those ideas in language all can understand. But when a model's assumptions are sufficiently unreal that results seem likely to have little practical import or when they echo ideas already present in the evidence literature or are otherwise not surprising, the translation of formal analyses for the non-mathematically inclined is less likely. For this reason, I expect the formal modelers in economics are likely to talk mainly to other economists.40

Evidence law is an exciting area to teach and write about because it is both theoretically rich and intensely practical. Unlike torts and contracts, which have provided rich fields for economists to plow, evidence law is not concerned with the theoretically best way of allocating goods. Nor is it intended as a set of default rules when parties cannot agree on how to resolve their disputes. Evidence rules are intended to be applied, not bargained around. Although parties can contract around some evidence rules, explicitly through stipulations and implicitly by failing to object to what an opponent offers, parties who use the rules of evidence are not doing so because they have been unable to agree on more mutually advantageous rules of admissibility.41 The idea that parties should


40 In his comments, Posner suggests that I approve of mathematical ignorance and that all legal academics could be expected to have some facility with mathematics. See Posner, supra note 31, at 1715. I agree with the latter proposition as an aspiration, but empirically, the aspiration is not always realized. More to the point, I was not talking about a mathematical education that enables one to follow and critique the kind of simple equations and manipulations of inequalities that one finds in Posner's work. Rather, I am thinking of work like that which Jennifer Reinganum and her colleagues do, where substantial training in mathematics and economics would aid greatly in following the argument. Also, let me be clear, this is a positive prediction, not a normative claim. I do not mean to suggest that economists should not engage in complex formal modeling or that nothing valuable can come from it or even that models based on implausible assumptions are useless. I mean merely to suggest that these characteristics limit the likely penetration of economics, even very good economics, into evidence scholarship.

41 Of course, being in court represents an often costly failure to resolve differences. But the differences that are not resolved are not differences over obligations, given
bargain over the body of rules that will govern the admissibility of evidence, given that they are taking a dispute to court, is not on the radar screen of most lawyers.42

While purely theoretical thinking can inform evidence law,43 most evidence scholarship, even if theoretically informed, aims at practical application. What the field needs today is not so much new theoretical perspectives as reliable empirical information. Evidence law does not need formally derived conclusions from admittedly incomplete or questionable assumptions. The work done on evidence law to date suggests that economists are more likely to provide the latter than the former.

I do not mean to say that economists are unconcerned with the empirical. On the contrary, economists have made important empirical contributions to understanding law.44 Moreover, experimental economics45 and the new behavioral economics46 are both intensely

the rules of evidence, but rather differences over obligations, given tort law, contract law, antitrust law, etc.

42 Occasionally, there may be agreement on the application of a few select rules; for example, parties may agree to present video depositions rather than live testimony or may mutually stipulate to the qualifications of experts. The choice of alternative dispute resolution may also reflect an agreement on what evidence rules should control.

43 Some very interesting work is theoretical in nature. See, e.g., L. Jonathan Cohen, The Probable and the Provable (1977); Allen et al., supra note 36. Much of the best evidence scholarship, as with scholarship in other areas, usually has an important theoretical component. Hence I do not mean to suggest that evidence scholars should suppress their theoretical instincts. Indeed, I have written purely theoretical work myself. See Richard O. Lempert, Modeling Relevance, 75 Mich. L. Rev. 1021 (1977).


interested in how people actually reach decisions. But when economists are not dealing with inherently economic variables or values that can be easily monetized, there is often little that is distinctively economic about their empirical research beyond econometric methods that are now common throughout the social sciences. Moreover, when empirical economists use the methods and adopt the perspective of social psychology, cognitive psychology, sociology, or even anthropology, we may benefit from excellent research, but it is often work that people in these other disciplines do equally well. Economists do not monopolize the study of economic variables.

This does not mean that economic variables have no role to play in analyzing evidence law or that the likely behavior of the self-interested rational actor we think of as economic man has no role to play in understanding evidence law. If, however, we limit ourselves to economic variables and the rational actor model of human behavior, our research will be impoverished and inadequate to the tasks of developing positive models of the evolution and operation of rules of evidence and workable normative models of how systems of evidence law should operate. Economic considerations should figure in both the positive and normative analysis of evidence law, but they are factors of greater or lesser importance, not master variables.

5. Incentive Structures

A final reason why I do not think economic analysis will have a substantial long-run impact on evidence law is that I expect politics and its implications for opportunity structures to limit the number of economists attracted to the study of evidence. Although the field of law and economics today encompasses scholars of all political persuasions, and the economic perspective does not necessarily yield conservative or pro-big business results, it is no secret that the growth of law and economics during the 1970s and 1980s was fueled by presumed ties between the economics perspective and conservative, especially pro-business, political agendas. Educational programs for lawyers and judges paid for by private

foundations had a distinctly Chicago-economics slant, and many of those who wrote from the then-new law and economics perspective were regarded as leading conservative theorists or foes of the regulatory state. Moreover, the widespread acceptance within law and economics of the Kalder-Hicks concept of efficiency can have profoundly conservative implications in a highly unequal society, since it brackets (if it does not deny) the existence of distributional issues.

Although there is no political orthodoxy among those doing law and economics today, it is still fair to say that a generalized faith in the efficiency of free markets and frequent inattention to issues of distributive justice give an anti-regulation and politically conservative cast to much of the legal scholarship that takes an economic perspective. Moreover, and from a positive point of view more importantly, major funders of law and economics seem to have a pro-business, anti-regulation, and/or generally conservative political agenda they wish to promote. Although the Olin Foundation’s support of this conference and its willingness to support intellectual activities that promote no coherent social agenda are contrary to my hypothesis, I still do not believe that evidence law will be a high priority for support among law and economics research funders.

47 Many names could be given; among the most prominent were Richard Posner, Henry Manne, and Frank Easterbrook.

48 In connection with litigation, there has been some major corporate funding of empirical research on trials. Following the punitive damage award in the Exxon-Valdez disaster, the Exxon Corporation invested substantial sums in jury-related and other research on punitive damages, yielding at least six law review articles. Elizabeth Amon, Exxon Bankrolls Critics of Punitives, Nat’l L.J., May 17, 1999, at A1. Even before this, in disputes about the right to jury trial in complex cases, corporations invested in historical research on the domain of the civil jury in 1791. See generally Morris S. Arnold, A Historical Inquiry into the Right to Trial by Jury in Complex Civil Litigation, 128 U. Pa. L. Rev. 829 (1980) (explaining how English courts in 1791 accounted for the practical limitations of jurors); Patrick Devlin, Jury Trial of Complex Cases: English Practice at the Time of the Seventh Amendment, 80 Colum. L. Rev. 43 (1980) (same). But these efforts, even when they have involved economists, have by and large not involved economic research. See, e.g., Reid Hastie & W. Kip Viscusi, What Juries Can’t Do Well: The Jury’s Performance as a Risk Manager, 40 Ariz. L. Rev. 901 (1998) (attempting to show that because of hindsight bias and other reasons, jury verdicts in tort litigation are poorly suited to risk regulation); Cass R. Sunstein et al., Assessing Punitive Damages (with Notes on Cognition and Valuation in Law), 107 Yale L.J. 2071 (1998) (reporting an experiment that shows substantial variability in the punitive damage awards of mock jurors). Even where economists have largely claimed an area as their own, as with hedonic damages, the survey
Not only does evidence law not deal with issues that are at the core of what funders hope to establish through economic research, but, as Posner points out, when the lamp of economics shines on evidence law, what it reveals is not necessarily compatible with conservative or big business political agendas. Posner, for example, argues that a law and economics perspective supports the institution of jury trial, a message that business supporters of law and economics are unlikely to relish.

If I may (in the best tradition of law and economics) rely on a reasonable assumption, I assume that law and economics scholars (perhaps more than most legal scholars) respond to financial incentives such as research support, leave money, and consulting fees. Since I expect the economics of evidence to be a low priority for funders of law and economics scholars, I expect that even without the difficulties I mention above, few economists will be drawn to issues in this area.

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research techniques and analytical methods they have used have not been distinctly economic in nature, but could have been done, and sometimes have been done, by sociologists and psychologists as well as by economists. See, e.g., Gregory W. Joseph et al., Admissibility of Expert Psychological Testimony in the Era of Daubert: The Case of Hedonic Damages, 18 Am. J. Forensic Psychol. 3 (2000); W. Kip Viscusi, The Value of Life in Legal Contexts: Survey and Critique, 2 Am. L. & Econ. Rev. 195 (2000).

Posner, supra note 6, at 1542.

Id.

This does not mean that they are right in looking unkindly on jury trials. The best and most complete discussion of how juries treat business cases sharply questions the existence of an irrational anti-big business bias among most jurors. Valerie P. Hans, Business on Trial: The Civil Jury and Corporate Responsibility (2000).

I do not intend this discussion of incentives to have any normative implications. Rather, I am making observations (which may be wrong) about support for law and economics research and motivations for that support, which I think has implications for the likelihood that those who specialize in law and economics will make a substantial investment in understanding evidence law. I should add that the primary motive for scholars to explore an issue is not a focused external incentive but the inherent interest of an issue and the sense that one can contribute to its resolution. I think this is as true of legal economists as it is of other legal scholars. The discussion in this Section is only meant to suggest that economists not otherwise fascinated by evidence issues are unlikely to find that financial incentives direct their attention to evidence as an area of inquiry.
B. Only Hypotheses

I have sketched several reasons why I think law and economics has hitherto left the field of evidence largely alone and why I think the law and economics perspective has little new or otherwise undiscoverable to offer evidence scholarship. But to make these claims, even if they strike readers as reasonable, is not to prove them. Rather they must be regarded as hypotheses. Posner’s article provides an opportunity to test my hypothesis that evidence law has relatively little to gain from attracting the interest of economists. If anyone can refute this proposition, it is he. In the next Part, I examine Posner’s article in detail. I shall point to places where I think Posner builds his analysis on false assumptions, to places where economic analysis yields only common sense or familiar results, to many places where empirical research has far more to offer than theoretical economics, and to a few places where I think economics may have something new to offer evidence. We shall see also that much of what Posner offers is not a distinctly economic approach but either a non-rigorous rational choice perspective of a kind that has influenced, if not dominated, evidence scholarship at least since Bentham or formal thinking about matters like naked statistical evidence that are for the most part familiar. After discussing Posner’s scholarship, I will turn to the work of others who have drawn on economics to illuminate aspects of evidence law and see if their work makes a stronger case than Posner’s for the utility of economics to evidence law.

III. Posner’s Analysis

A. Theory and Institutions

1. Core Concepts

Perhaps the most striking feature of Posner’s article is how broadly he defines core concepts. I have already alluded to his encompassing view of what constitutes the economics perspective. He takes a similarly broad view of evidence law. Although Posner defines the law of evidence as “the body of rules that determines what, and how, information may be provided to a legal tribunal that must re-
solve a factual dispute,"53 his analysis roams beyond these boundaries. Both the institution of jury trial and the adversary system are grist for his mill. The Federal Rules of Evidence and their common law ancestry, which are almost the sole focus of law school evidence courses,54 receive relatively scant attention.55 I must confess I was disappointed. It is not that the institutional and other issues Posner directs his attention toward are uninteresting. They are well worth discussing, perhaps more so than the Federal Rules, because they are more fundamental to how our factfinding system works. But the detailed economic analysis of the Federal Rules that I was looking forward to seeing, because I, and other evidence teachers, confront them every day, is, to a large extent, lacking.

I take the shape of Posner’s article as some support for my thesis that economics has little to offer evidence law. If I may draw on the extended metaphor with which I opened this article, most of Posner’s attention is directed to evidence law’s hinterland; indeed much of it is directed at areas that evidence scholars regard as neighboring kingdoms. Understanding evidence law and its normative analysis requires knowledge of related institutions like the adversary and jury systems, but these institutions are not central to evidence law’s domain and seldom are discussed in depth in evidence courses. This point is not a criticism of Posner’s work, for the topics he looks at are well worth examination. But I think the fact that Posner pays so much attention to issues that are peripheral to most evidence scholarship, relative to the attention he gives the rules of evidence, may say something about the likely utility of economics to the study of evidence rules.

Posner’s effort to show an economic logic at the heart of evidence law and in the design of trial systems rests on assumptions about the factfinding process and on the implications of getting things right. I find his assumptions reasonable, but I do not believe they are always correct. Hence the structure Posner builds on these

53 Posner, supra note 6, at 1477.
55 Only twenty-six of sixty pages are devoted to analyses of the Federal Rules, and of these, six pages are devoted to a non-rule-oriented analysis of expert evidence.
assumptions and the conclusions he reaches do not necessarily apply to the real world of trials or to evidence law in practice.

2. The Efficient Search for Evidence

The first set of assumptions Posner makes concerns the costs and benefits of searching for evidence. Benefits are a positive function of the stakes in the case and of the probability that if sought evidence is considered by the trier of fact, the case will be decided correctly; the costs of a trial are a positive function of the amount of evidence, and the optimum search is one carried out to the point where marginal benefit equals marginal cost.\(^56\)

While recognizing the intuitive plausibility of the assumption that the costs of the trial are a positive function of the amount of evidence, I do not think this assumption always holds. Taking “trial” to mean the factfinding process that yields a legal resolution of a legal dispute, which I think is consistent with the economic perspective, the assumption fails because uncovering more evidence may pretermit trial processes that would be more costly than the pretrial search for additional evidence. To put this more simply, in many cases, the more that is known about what happened, the greater the chance of a plea bargain or civil settlement. Since those stages of the trial that involve the presentation of and argument about evidence can be far more expensive than the evidence gathering stages, the expected cost of a trial will be a diminishing rather than a positive function of the amount of evidence gathered whenever the expected savings from the diminished likelihood of having to present the evidence to a court exceeds the expected costs of searching for additional evidence. Hence, although Posner’s assumption is likely to pertain at the point a trial becomes inevitable,\(^57\) it is wrong to think of total trial costs as increasing always with increasing evidence. Moreover, if appeals and retrials are considered part of the expected trial cost, which seems consistent with the economic perspective, additional evidence can also reduce trial costs by reducing the likelihood that an appeal will be

\(^56\) Posner, supra note 6, at 1481.

\(^57\) Even this may not happen. Accumulated evidence may reduce later trial costs by leading an opponent to cut out part of her case or by substantially simplifying the factfinder’s task and so lowering the cost of arriving at a verdict.
taken or, if there is an appeal, that a new trial will be ordered because of trial court errors.

Similarly problematic is the suggestion that as more and more evidence is obtained, the effect of additional evidence on the outcome of the case will tend to decrease, at least over broad ranges of acquired evidence. Posner recognizes this, as he adds the qualification, “especially if the searcher begins the search with the most probative evidence,” and he introduces a search model developed by Professor Martin Weitzman which allows information from the Nth+1 source investigated to be more valuable than evidence found at the Nth location. However, not only does the Weitzman model fail to address the issues of evidence accumulation which Posner’s assumptions are intended to capture (a limitation Posner recognizes), but the model seems ill-suited to trial applications, as it assumes sources of evidence are independent, in the sense that discovering valuable evidence from one source does not affect the chances of acquiring valuable evidence from another. Evidence searches, however, tend to be just the opposite. An item of evidence often has value not just in what it tells us but also in the leads it provides to other evidence. Indeed, the latter value may exceed the former.

With respect to alternative sources of similar evidence, the Weitzman model counsels us to find an evidence source whose value exceeds the expected value of the remaining possible sources and to stop searching once we have found such a source; as Posner writes, “this means stopping at the first success if each success has the same evidentiary value.” This economically rational advice may not, however, be good advice for the lawyer. Consider, for example, a lawyer who needs to prove a particular fact to win a case. She would be well-advised to find and present the best possible witness to that fact. But she might also be well-advised to present other less convincing witnesses to the same fact, because even though they are not as persuasive as witness number one, their testimony may be crucial in nailing down for the factfinder what the lawyer must prove. Moreover, the source that is most valuable in

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58 Posner, supra note 6, at 1482.
59 Id.
60 Id.
the sense that most observers would be convinced by it may still leave some observers (one or more jurors) unconvinced, while an objectively less convincing source may convince observers whom the former source left unmoved. An economic search model could be designed to accommodate these circumstances, but why go through the exercise? What will a lawyer, or scholar for that matter, learn about evidence search strategies that common sense does not already teach?

Posner’s discussion of search issues is not naive or unsophisticated. He recognizes areas of poor fit between what follows from his models and actual situations at trials. He notes, for example, that early acquired evidence may reduce the cost of obtaining additional evidence. But recognizing areas of poor fit does not necessarily make Posner’s economic analysis more useful. We encounter here, as in so much law and economics, the general problem of the second best. When the real world does not fit a model’s assumptions, we cannot be certain what the model implies for action in the real world.

3. Accurate Factfinding and Deterrence

The second pillar on which Posner’s economic approach rests is the proposition that “[m]ore accurate factfinding increases deterrence of wrongful conduct, which in turn reduces the number of cases and hence the aggregate costs of the legal process.” This is because “greater accuracy in the determination of guilt increases the returns to being innocent.” It is “transparent” according to Posner’s formalization that if punishment is imposed randomly, so that the probability of punishment is the same regardless of guilt, the expected punishment cost for committing the crime will be

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62 The problem arguably is less severe here than in some other areas, for common sense seems able to perceive many of the areas where the model’s assumptions do not hold and to anticipate adjustments that should be made in figuring real world implications. Whether these adjustments are in fact adequate is an empirical rather than a theoretical problem.
63 Posner, supra note 6, at 1483.
64 Id.
from which it follows, according to Posner, that the threat of punishment will have no deterrent effect. These propositions, like the "cost of trial" assumptions, are intuitively plausible, but they are mostly wrong, at least in the unconditional way Posner asserts them. Rather than proving that accurate factfinding promotes deterrence while randomly inflicted punishment negates it, the assumptions illustrate the shortcomings of an axiomatic scheme that, like the microeconomic approach Posner advances, ignores the organizational and psychological elements of social life.

The claim that randomly inflicted punishment cannot deter is challenged empirically by the choice Nazis and other occupying powers have sometimes made in punishing crimes against them. In response to violence against them, these regimes sometimes selected people for execution randomly from among a locale's inhabitants. If their goal was deterrence, were they employing a worthless strategy, as Posner's formulas imply? I think not. The expected punishment cost for those tempted to disrupt the German occupation, for example, was not just the punishment they would suffer discounted by its probability of infliction, but also harm to people they cared about, discounted by its probability of being inflicted. Since the latter probability could be made to approach 100 percent, and since the certainty of punishment has consistently been shown to be more closely related to deterrence than its severity, the deterrent effect of a threat to visit punishment randomly on a defined population might be substantial, even if there was little chance that the "criminal" would be among those selected for punishment.

65 Id.
66 Id.
Occupying armies and those who resist them are in a special relationship, but the threat of punishing randomly within defined populations might also deter ordinary crimes in ordinary times. Would-be criminals who might be undeterred by the risk that they might have to pay a price for a crime might be deterred by the possibility that a parent, child, or friend would be punished for their crimes. More importantly, neighbors would have incentives to limit crime by creating anti-crime norms and by turning in criminals, thus increasing deterrence. Random punishment is, to be sure, abhorrent in free societies to the point of being impermissible, but this is for reasons of justice and our view of the kind of society we want to live in, not because it is necessarily unsound from a deterrence perspective.\footnote{Once punishment is confined to a defined population, it is not strictly random, but all random sampling is random only within defined populations. Posner's deterrence argument turns on the dilution of a law breaker's perceived threat of punishment when punishment is random, and substantial dilution occurs even when the population vulnerable to punishment is relatively small. The core point is that Posner's microeconomics perspective on the importance of correct verdicts is not necessarily or always correct, even from his economic perspective.}

The limiting case of randomly inflicted punishment illustrates a blind spot in Posner's economic perspective, but it does not address the presumed connection between an accurate factfinding process and deterrence, since random punishment does not require an effort to link defendants to crimes. But even in a world where we seek to punish only wrongdoers, accurate factfinding does not necessarily maximize deterrence. Posner is not blind to this possibility, for he recognizes that the possibility of being mistakenly convicted may cause people with prior records to steer clear of activities that make them vulnerable to arrest. The point is, however, more general, for it applies not just to those with prior records. Suppose, for example, that the criminal justice system never makes the mistake of arresting and convicting for buying or selling those who come merely to gawk at open air drug markets. There would, under the economic model, be no incentive for a mere gawker to forego the pleasure of watching drugs bought and sold. But if it is known that the police sometimes mistakenly arrest mere gawkers and, even worse, lie about finding drugs on them, and if it is known that the courts sometimes convict innocent gawkers, then gawkers have an
incentive to stay away from the scene. Hence, mistaken convictions can reduce crime because gawking may be a stage on the road to purchasing or selling, because the presence of large numbers of gawkers may make it more difficult to spot and arrest sellers and buyers, and because buyers and sellers, seeing that even innocent gawkers have a chance of being arrested and convicted of drug dealing, may increase their estimates of their own vulnerability.

Posner also ignores the fact that deterrence is a subjective theory, or, if he is aware of this, implicitly assumes that the objective probabilities of rightful or wrongful convictions coincide, at least over the long run, with subjective probabilities. This is not necessarily so. As far as deterrence is concerned, the correctness of particular verdicts matters little in most cases. It will not matter much because those who might be deterred by correct convictions or encouraged to commit crimes by incorrect ones will seldom be able to tell if a conviction is correct. The predominance of bargained dispositions on both the criminal and civil side virtually guarantees ignorance of details. This does not mean that overall conviction rates or crime clearance rates do not matter for deterrence. They may matter a good deal in giving would-be criminals a sense of the efficacy of policing and of the willingness of courts to punish, but whether these rates reflect accurate or mistaken ver-

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69 The surest way to ensure that no innocent gawker is wrongfully convicted is, of course, to arrest no one.

70 Like Posner, I speak here in the language of criminal justice but believe that what I write extends to the civil justice system as well, although the magnitude of effects may differ across different areas of law.

71 I am thinking here of general deterrence, which captures the implications of punishing A for the future criminality of others. The implications of punishing A for his own future behavior is called special or specific deterrence. Without empirical evidence, I find the special deterrence implications of wrongful convictions indeterminate. Some people following Posner’s logic may think that since they are liable to be punished whether or not they have engaged in crime, they might as well secure the benefits of crime. Others may think they never want to experience punishment again and assiduously avoid all situations where they are even suspected of crime. My hunch is that the latter attitude is more likely to characterize the wrongfully convicted than the former, so that from a pure deterrence standpoint wrongful convictions enhance special deterrence. However, I would expect this effect to be swamped by the criminogenic effects of incarceration and the limits on legitimate career opportunities ex-convicts face. Hence, even while increasing specific deterrence, I would expect being wrongfully convicted to increase future crime among the affected population. These are, of course, guesses about matters that can only be sorted out by (hard to do) empirical research.
dicts will be generally unknown. Moreover, to the extent that conviction accuracy is locally known, its deterrence implications are indeterminate. For example, when a person knows another has been convicted of a crime he himself committed, it is uncertain how he will react. A possible reaction is to commit another crime, emboldened by the fallibility of the system. An equally plausible reaction is not to test one's luck again, having seen the system's commitment to punishment. Generally speaking, so long as most convictions are thought to be accurate, which I believe they are, I see little reason to think that local knowledge of a few inaccurate convictions has any important implications for the deterrent effect of the criminal law.

To the extent that verdicts in specific cases have implications for deterrence, theory suggests that widely followed cases will be most important. What is important in these instances, however, is not actual guilt but perceived guilt or innocence. Since the legal system usually does not convict in publicized cases unless the perception of guilt is strong, whether a conviction is accurate is likely to have little to do with its deterrence implications. Some scholarship, for example, has suggested that Bruno Hauptmann, the alleged kidnapper of the Lindbergh baby, and Ethel Rosenberg, the accused atomic spy, were possibly innocent of the crimes for which they were executed. But even if Hauptmann and Ethel Rosenberg were innocent, their widespread perceived guilt would have given deterrent force to their punishment.

Posner's case for the relationship between verdict accuracy and deterrence focuses on what he sees as criminogenic implications of wrongful convictions. As the returns to innocence diminish, one is more likely to commit crimes. I believe that I have shown that an economic analysis which yields this implication considers too few relevant factors to be trusted. The argument that deterrence requires correct verdicts does, however, seem more plausible when

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73 See, e.g., Walter Schneir & Miriam Schneir, Invitation to an Inquest (1965); Joseph H. Sharlitt, Fatal Error: The Miscarriage of Justice that Sealed the Rosenberg's Fate (1989) (arguing that the execution of Julius and Ethel Rosenberg was illegal, regardless of their guilt or innocence).
cast in the opposite direction. It is reasonable to think that mistaken acquittals may undermine deterrence, perhaps substantially, even if mistaken convictions do not lessen it or do so to only a slight degree. A mistaken acquittal, however, will not threaten deterrence unless some facts suggesting guilt are known. Moreover, to threaten deterrence over the long run, I expect that mistaken acquittals must regularly occur, at least in particular types of cases or perhaps in cases involving certain types of people. On the one hand, I doubt that most people who think O.J. Simpson was wrongfully acquitted of murder are any less deterred by spouse abuse or homicide laws than they were before the trial, if for no other reason than their knowledge that they could never afford to mount the kind of defense that Simpson did. On the other hand, I would not be surprised if the apparent tendencies of prosecutors to refuse to prosecute and, if charges are filed, of jurors to acquit police officers accused of using excessive or deadly force has reduced the deterrent force of assault and homicide laws among the police.74 The same can happen when tendencies to wrongfully acquit in certain kinds of crimes are known by people attracted to those crimes. Examples in some places and at some times have included drunk driving,75 gambling violations,76 and certain game law violations.77 Although I think it unlikely that the occasional mistaken acquittal, even the highly publicized one, has great implications for deterrence,

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74 It is not clear whether from an economic perspective this is a good thing or a bad thing, because accurate enforcement of homicide and other laws against the police could overdeter in the sense that police intimidated by the prospect of being convicted of a crime if they are not careful might exercise too much care and avoid using force in many instances where it would be socially beneficial. The effects of overdeterrence might outweigh the costs of those wrongful assaults and killings by police that are not now deterred. Yet, the fact that I can make this argument and that it sounds sensible within the economic framework will be for many people, including myself, an argument against applying normative economics to trials. Just because tolerating injustice is more costly, within the limits of our ability to measure it, than ignoring or promoting it, does not mean injustice should be tolerated, and sacrificing innocents for the good of others is intolerable under many philosophical schemes. See, e.g., Eric Rakowski, Equal Justice 333–67 (1991) (discussing the circumstances, if any, under which one may sacrifice an innocent to save others).

75 Kalven & Zeisel, supra note 24, at 293–95.

76 Id. at 289–90.

77 Id. at 287–88.
patterned acquittals suggestive of jury (or judge) nullification will probably diminish deterrence.\textsuperscript{78}

"Deterrence," Posner tells us, "plays a starring role in the economic analysis of evidence because it links the concern with accuracy that is so central to the evidentiary process with the economist's conception of law as a system for creating incentives for efficient conduct."\textsuperscript{79}

If Posner is right, and the viability of the economic approach to law depends on giving deterrence a starring role, we can leave the economics bandwagon now. If it is deterrence that mediates between accurate decisions and efficiency, the link is highly problematic, and an analysis that assumes that verdict accuracy need be the goal in every case is suspect. Hence, contrary to what Posner says, analyses that proceed on the assumption that verdict accuracy is a value that must be maximized in order to maximize efficiency are misguided. Moreover, although it is plausible to suppose that verdicts in most cases must be accurate to promote deterrence, it does not follow that increasing deterrence, and hence law abidingness, will promote efficiency. The link between deterrence and efficiency that Posner posits assumes that following the law yields efficient outcomes. Many economists would argue, particularly with respect to many civil regulatory laws, that this is not always so.\textsuperscript{80} There are similar disputes about the efficiency implications of some criminal

\textsuperscript{78} More important than acquittals in undermining deterrence may be police failures to arrest and prosecutorial failures to press charges.

\textsuperscript{79} Posner, supra note 6, at 1484.

laws,\textsuperscript{81} and many believe efficiency is not how we should think about the criminal law in the first instance.\textsuperscript{82}

But we need not desert Posner's economic analysis of evidence law so quickly, even if it rests on the assumption that there is always value in deciding cases correctly. Although the conclusion that a true verdict is always a goal does not follow from economics, we may be able to rest this conclusion on non-economic grounds. Most obviously it is supported by ideas of justice. We believe people deserve to be convicted of crimes when they are in fact guilty and not otherwise, to pay damages when they are in fact liable, and not otherwise, etc. Thus economic analyses that begin from the proposition that legal rules should promote accuracy are on sound ground as far as evidence law is concerned, even if they rest on sand, economically speaking. And the economic perspective offers more. Even if justice calls for correct results in every case, it is still important to ask, "At what cost?" While injustice may not be commensurate with economic costs, it will not automatically trump them. We could deliver greater justice if we invested more in our legal system.\textsuperscript{83} If, for example, DNA tests were done whenever they might matter, mistaken conviction and acquittal rates would both be diminished. We might find, however, that before we reached the point where testing yielded no further justice benefits, the cost of testing in numerous cases where likely returns were low would, in most people's minds, exceed the benefits of having a few additional cases decided correctly.


\textsuperscript{83} We might start with giving defendants who face the death penalty funds sufficient to hire counsel who do not sleep through trials. Burdine v. Johnson, 231 F.3d 950 (5th Cir. 2000) (holding that prejudice to defendant is not presumed even where defense counsel slept at some point during court proceedings), rev'd en banc, 262 F.3d 336 (5th Cir. 2001).
The economic approach Posner advances also ignores legitimacy, arguably the most important by-product of justice. Indeed, the undercutting of legitimacy, rather than the undercutting of deterrence, is the likely reason that people are not selected for punishment more or less at random following crimes. Although research indicates that the procedures for deciding cases are more important than outcomes to the legitimacy of decisionmaking systems, it is likely that producing correct outcomes is also important, at least when correct outcomes can be known.

Legitimacy, like deterrence, depends on subjective states of mind, and, as with deterrence, the link between objective outcomes and subjective states may be far from tight. Similarly, known errors do not mean legitimacy will be lost. People know that good faith fact-finding will not always get things right. Unlike deterrence, however, where it is plausible to suppose that known inaccuracies might, contra Posner, increase deterrent effects, known verdict errors are unlikely to increase the legal system’s legitimacy, except possibly in those cases in which a law or its enforcement is itself thought illegitimate.

Legitimacy is also like deterrence in that the degree to which it is threatened by mistaken verdicts is an empirical question. Without empirical evidence, we cannot estimate the degree to which incorrect verdicts will threaten legitimacy. Hence, if the non-economic value of justice is ignored, it is difficult to estimate how important achieving accurate verdicts is to valued ends. Ideas of justice, however, let us assume that correct verdicts are always valuable, even if their value can be exceeded by their costs.

Posner recognizes, if not this specific point, something like it in the alternative cost-minimization model he provides. This model sees the social goal of the evidentiary process as minimizing the

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84 Casper, supra note 35, at 168, 171; Lind & Tyler, supra note 35, at 66.
85 Justice does not, however, necessarily require verdict accuracy. There are many conceptions of justice and what it requires. Some conceptions of distributive justice might justify findings in favor of individuals and against corporate defendants by far less than a preponderance of the evidence. Dispute about what justice entails can explain, and in the minds of some people justifies, much jury nullification. What we can say is that it is the law’s internal view that correct verdicts are just ones. The law makes no assumptions about the relationship between justice and deterrence or legitimacy.
86 Posner, supra note 6, at 1484.
sum of the cost of error and the cost of error avoidance. It recognizes that costs can take non-economic forms, including, I assume, the cost of injustice, although Posner does not mention it.\textsuperscript{87} Posner’s analysis is not wrong here, but the point he makes has long been obvious to evidence scholars. This too is something Posner realizes. He writes:

The basic insight of [economic] analysis as applied to evidence law—that the law is engaged in making tradeoffs between accuracy and cost of trials—is also a familiar and even orthodox theme in noneconomic writing about evidence law. The economic approach serves more to refine and extend them to challenge the intuition of the legal professional.\textsuperscript{88}

I agree. The approach Posner champions rarely challenges intuitions that have long guided analyses of evidence rules, but in my view, it also rarely refines or extends them in any useful fashion.

4. \textit{Inquisitorial (Judge) vs. Adversarial (Jury) Factfinding}

Posner devotes the second portion of his article to the structure of factual inquiry. He begins this portion contrasting inquisitorial judge trial systems with adversarial jury trial systems. Although he identifies areas where he expects judges to do better than juries, the jury system comes off surprisingly well in the contrast. This is a contribution, if only because it challenges the notion that economic approaches to law necessarily yield outcomes that coincide with corporate interests and conservative political positions.

Posner begins his discussion by constructing two ideal types ("pure systems") of factfinding—an inquisitorial regime of judicial factfinding and an adversarial system of jury decisionmaking. In drawing his contrasts, however, Posner ignores the distinction between the ideal and the real, as he draws heavily on empirical

\textsuperscript{87} The model he presents does not quite fit the trial, for in order for the optimum it describes to exist, increases in the amount of evidence acquired must have a diminishing effect in reducing the correct decision probability times the stakes. However, through much of the range over which evidence is collected, the next acquired item of evidence may have a greater effect than the sum of the earlier acquired evidence in producing a correct decision. The most familiar example is the uncovering of a so-called “smoking gun,” but this will be true whenever earlier acquired evidence is inadmissible at trial but points the way to admissible evidence.

\textsuperscript{88} Posner, supra note 6, at 1485.
research to bolster his conclusions. This is more of a strength than a weakness. Perhaps because of it, much of what Posner says about the judge-jury comparison seems correct. Posner discusses the advantages and disadvantages of enduring (judicial) versus ad hoc (jury) tribunals, raises legitimate questions about the quality of American trial judges, notes that the trial judge is for some purposes a thirteenth juror who can save the other twelve from error, and concludes with a list of recommendations for reforming the jury system that shows considerable sense. But most of Posner's analysis is neither original nor obviously dependent on economic reasoning.

Posner also seems on the mark when he suggests that rules of evidence do not apply or are underenforced in bench trials, less because the rules' protections are superfluous than because there is no good way to deny judges information that should be excluded. His assertions that a competitive system of gathering evidence will tend to favor the party who would win in an error-free world, and that cross-examination may be more valuable in discouraging the presentation of weak evidence than in providing a vehicle for destroying witness credibility at trial also ring true. But these propositions, too, are common sense, with the last, in particular, revealing Posner's creative vision when released from the confines of the economic box.

Where the economic perspective more directly guides Posner's analysis, it usually does not take us very far, for the real world implications of economic reasoning are, for the most part, indeterminate. Perhaps this will change, but to judge by Posner's work, the eco-

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89 For example, jury trials take longer than bench trials, but jurors bring a fresh perspective to each case. Id. at 1491, 1494.
90 Id. at 1495–96.
91 Id. at 1493.
92 Id. at 1498–99.
93 I, among others, have reached many of the same conclusions as Posner, and I made many of the same recommendations some years ago. Conscious reflection on what economics suggested played no part in my thinking. The same seems true of most others who have made similar suggestions. See Richard Lempert, Civil Juries and Complex Cases: Taking Stock after Twelve Years, in Verdict: Assessing the Civil Jury System 181–247 (Robert E. Litan ed., 1993).
94 Posner, supra note 6, at 1494.
95 Id. at 1492–93.
96 Id. at 1490.
onomic models currently available are of limited use because they ignore too many salient facts that condition their implications. Posner expresses this indeterminacy better than I when he writes: "It might seem that our searcher-judge would be an extremely efficient searcher . . . . But maybe not." 97 A major reason for this indeterminacy is that in many ways the real world is unlike Posner's ideal types. For example, speaking of the adversarial process, Posner writes: "Because trial lawyers are compensated directly or indirectly on the basis of success at trial, their incentive to develop evidence favorable to their client and to find the flaws in the opponent's evidence is very great . . . ." 98 But, to use Posner's words, "maybe not;" if an incentive exists, maybe it is so dwarfed by other incentives and organizational pressures that we can reach no conclusions from its existence.

On the criminal side, both prosecutors and public defenders may be judged more by their ability to move cases as part of a courtroom "workgroup" than by what happens in the rare cases that go to trial. 99 Moreover, in many cases, the state's evidence is largely what has been developed by the police, while the defense lawyer's search for evidence begins and ends with leads the defendant provides. Even in death penalty cases, where both the symbolic and actual stakes are huge, little exonerative evidence may be presented or, indeed, sought out. This may be because a lawyer thinks the chance of uncovering anything exonerative is small, but it is more likely because of resource constraints and the fact that, in some jurisdictions, trial counsel in death penalty cases seem to be chosen in part because they do not seem strongly motivated to find flaws in the state's case. 100 Even on the civil side, where money for

97 Id. at 1488.
98 Id. at 1488.
100 See, e.g., Panel Discussion, The Death of Fairness? Counsel Competency and Due Process in Death Penalty Cases, 31 Hous. L. Rev. 1105, 1198 (1994) (theorizing that judges subject to reelection who must appear tough on crime may appoint defense counsel of low quality); Douglas W. Vick, Poorhouse Justice: Underfunded Indigent Defense Services and Arbitrary Death Sentences, 43 Buff. L. Rev. 329, 410 (1995) (noting "the disproportionate number of incompetent attorneys assigned to death cases, the lack of experience and expertise of defense counsel, [and] the repeated failure of defense attorneys to investigate and present available mitigating evidence"); Note, The Eighth Amendment and Ineffective Assistance of Counsel in
plaintiffs translates into money for lawyers, there is no guarantee that the lawyer will be highly motivated to search out evidence. As Douglas Rosenthal long ago pointed out, lawyers may secure higher hourly returns by quickly settling cases for smaller sums than by litigating them successfully for larger sums.101

I do not deny that incentives, especially financial ones, affect the amount of evidence lawyers gather. My examples illustrate this, but in service of different points than those Posner makes. First, we do not need the guidance of economists to appreciate how financial incentives affect lawyer search behaviors. All that is required is common sense, and nothing Posner writes about incentives to search out evidence takes us beyond common sense. Second, lawyers’ financial incentives are so context-dependent that speculation from ideal types cannot tell us whether it is the inquisitorial or the adversarial system that is likely to do better at uncovering appropriate amounts of evidence, even assuming “appropriate” could be operationally defined.

Moreover, even as an intellectual exercise, Posner’s microeconomics approach has serious weaknesses for thinking about the legal system. One weakness is its neglect of organizational variables. The kinds of organizations lawyers work in; the resources available to them; the way representation is structured; the incentive structures of law firms, states’ attorneys’ offices, and legal aid agencies; and courtroom, firm, and agency cultures combine to shape the kind and extent of evidence searches that lawyers conduct for their clients. Organizational variables also figure importantly in inquisitorial systems because inquisitorial judges usually do not conduct personal searches for evidence but instead are parts of organizational networks that do so. While using party incentives to explain the scope of evidence gathering makes theoretical sense, when most incentives are embedded in organizational structures, it is difficult to foretell how they will play out in actual evidence searches. A theory that ignores organizations cannot provide accurate

answers. One that includes organizations will require considerable empirical investigation before we can rely on it.¹⁰²

A more general problem with Posner’s focus on lawyers’ incentives to gather evidence for trials is that, in most legal cases, the game is not winning at trial but achieving an acceptable settlement.¹⁰³ Indeed, it is probably safe to say that most evidence searches occur with the expectation that a settlement will result. Hence evidence gathering may be aimed not so much at persuading a jury as it is at determining what a case is worth. Moreover, gamesmanship—such as signaling the intensity with which one will fight—may lead a party to favor more rather than less expensive ways of gathering evidence, particularly if this threatens to impose non-trivial costs on the other side.¹⁰⁴ Thus, contrary to what Posner suggests,¹⁰⁵ the fact that one party knows that any additional evidence it uncovers can be nullified by evidence the other party uncovers may not necessarily, even in the economist’s world, induce the parties to agree not to seek more evidence. Appearing to be recklessly unconcerned with costs in a bargaining game can sometimes be an advantage.¹⁰⁶

¹⁰² Note that my critique here is specific to the actor-focused microeconomic perspective that Posner employs. Organizational variables have long been important constituents of many theoretical and empirical economic models. See, e.g., such seminal works as Oliver Williamson, Markets and Hierarchies (1975) (examining the interplay between organizational structures and market forces), and Mancur Olsen, The Logic of Collective Action (1971) (noting that group size and ease of communication are important variables).

¹⁰³ A survey of 45 large urban general jurisdiction courts reports that 61.5% of all civil cases were settled or dismissed. Only 3.3% went to trial. Others were disposed of by summary judgments (3.5%), default judgments (13.5%), transfers (4.5%), dismissals (11%), or arbitration awards (2.7%). Examining the Work of State Courts, 1996: A National Perspective from the Court Statistics Project 24 (Brian J. Ostrom & Neal B. Kauder eds., 1997). A survey of criminal filing dispositions in 25 state unified and general jurisdiction courts found that only 4% of criminal cases proceeded to trial. Most were disposed of by pleas (63.1%), followed by dismissal or refusal to continue to prosecute (18.7%), and other (14.2%). Id. at 58; see also Bureau of Justice Statistics, Sourcebook of Criminal Justice Statistics 1999, at 454 (Ann L. Pastore & Kathleen Maguire eds., 2000) (indicating that in 1996, 91% of convicted felons in state courts pled guilty) [hereinafter Sourcebook].


¹⁰⁵ Posner, supra note 6, at 1489.

¹⁰⁶ Cf. Lucian Arye Bebchuk & Andrew T. Guzman, How Would You Like to Pay for That? The Strategic Effects of Fee Arrangements on Settlement Terms, 1 Harv.
According to Posner, the economic perspective also tells us that "other things being equal, more evidence will be obtained the closer the case is." This argument objectifies the closeness of legal cases. In a sense, however, no cases are close on the facts, for facts exist outside of cases and will favor one side or the other. Cases may appear close on the facts, however, and this appearance can propel parties to seek more evidence. But whether cases appear close depends on the evidence gathered. Cases are socially constructed. So Posner’s conclusion can be turned around, for gathering more evidence is often what makes a case close.

Nevertheless, Posner’s insight can be reformulated to make sense. If we think of an event that becomes the focus of a legal case as throwing off (brute) facts, some of which suggest legal liability and some of which do not, we can imagine that in some situations the facts thrown off will overwhelmingly favor one side, while in others, the factual skew will be less extreme. In one homicide case, for example, a man may have bought a gun, taken it to a meeting he arranged with another man, threatened that other man, cursed him, and then shot him. Several witnesses to each of these events may be present. A sample of facts from this universe is likely to strongly favor the state. In another case, two men may have gotten into a fight, one may have pulled a gun, and the gun might have discharged, killing one of the fighters. A sample of facts from this universe may not strongly favor either party. To some witnesses it may look as if the gun accidentally discharged during the fight, while other witnesses may be willing to swear that one man wrested the gun from the other, deliberately aimed, and then fired. It will be hard to determine the true facts from the evidence available. Yet if we knew the true facts, the proper verdict in this case might be as clear as it seems in the first example.

Nevertheless, most people would say that the second case is "closer" than the first one. But whether it is actually closer as a legal case depends on the evidence presented. If in the first case the prosecutor found and presented only one witness, an eyewitness

Negot. L. Rev. 53 (1996) (discussing the effect of contingency or hourly fee arrangements on settlement negotiations).

107 Posner, supra note 6, at 1489.

108 The legal implications of clear facts may be doubtful, but this is not the concern here, for Posner is comparing the judge and jury as factfinders.
who is confident of what he saw but is near-sighted and didn’t have a very good view, and if the defendant presented a plausible alibi, then that case might seem close on the facts. If in the second case, the prosecutor presents three witnesses, each of whom testifies that the defendant wrested the gun from the victim, stood back, aimed, and fired, and if the defendant in that case testifies that the gun accidentally discharged when they were fighting, the case might not seem close. In each case, parties will have incentives to get more evidence. In the first case the incentive will be on the prosecutor to get more evidence because the case appears close, and in the latter case, the incentive will be on the defendant to get more evidence because the case does not appear close. So the apparent conclusion from economics that case closeness creates incentives to gather evidence will not always apply in a world where cases are socially constructed.

What I think does follow, and what I expect Posner means to argue, is that in a case where the easily accessible evidence predominantly favors one side, evidence gathering will stop with less evidence collected than in a case where easily accessible evidence appears to cut equally in favor of each party. In the latter instance, additional, harder to gather evidence is likely to have a greater marginal pay-off. Thus, in the first example, the prosecutor in our theoretical world is likely to uncover and call only one of the available witnesses to each event in the chain, presumably choosing the best, while in the latter case, each party will attempt to uncover and call all available supporting witnesses, knowing the other party will do the same. In the real world, evidence gathering will stop sooner in the first case than the second, because, unless the defendant has nothing to lose by going to trial, the case is likely to settle. The second case appears more likely to go to trial, but if both parties are risk averse, it, too, is likely to settle.

Although there may be a greater incentive to search out additional evidence in close cases than in clear ones, it does not follow, as Posner seems to suggest, that more evidence will be presented to factfinders in close cases than in clear ones. This is because the cost side of the equation may swamp the benefit side. If it is quick and easy to gather evidence, as it often is when the underlying facts are highly skewed, one would expect a lot of evidence to be gathered, even if its expected marginal utility is low. If it is difficult and ex-
pensive to gather evidence, as it may be when the underlying facts are not highly skewed, parties may not invest in searching out additional evidence, even if any evidence received might have high marginal utility for them. Hence, it would not be surprising if courts on average received a higher proportion of the available brute case facts in clear cases than in close ones. Receipt of a high proportion of available brute facts may be what makes cases clear.

What may be more likely to distinguish clear from close cases is not the amount of evidence acquired or a party's willingness to acquire more evidence, but rather the willingness of parties to make investments in evidence quality. In clear cases, one might expect that neither party will spend much time preparing witnesses, even when they are important, but in close cases, considerable witness preparation may occur.

My suggested refinements of Posner's analysis of incentives and evidence gathering may strike some as sleeping with the enemy since there is a strong economic motivation to my argument. To those who react this way, I make three points. First, economics is not the enemy; if it helps us better understand evidence law, it is a friend. Second, making my argument did not require familiarity with the apparatus of economics, which is a good thing since I am not an economist. Third, what my analysis required was a view of how incentives work, awareness of the social constructivist perspective on reality, and some knowledge about organizational and other factors that can influence searches for evidence. Only the first type of knowledge is economic in nature, and my need to rely on it does not extend beyond common sense. When one adds to the mix the implications of organizational variables and the differential accessibility of underlying brute case facts, the economic approach again yields indeterminate solutions. We cannot say whether a higher proportion of relevant underlying facts will be presented to tribunals in close cases then in clear ones.

Toward the end of his discussion of the adversarial (jury) and the inquisitorial (judge) systems, Posner attributes the apparent conscientiousness of juries who have "no career stakes in doing their job as jurors well" and a "financial incentive to conduct a

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109 Posner, supra note 6, at 1497.
careful sifting of the evidence [that] is nil"\textsuperscript{110} largely to the theatrics of trial by jury. Posner’s slighting of altruistic motives,\textsuperscript{111} ideological commitments, pride in doing a job well, and the social pressure to contribute to group products illustrates the tendency of the economic perspective to limit vision. Even more interesting is Posner’s claim that attributing motivational effect to the drama of jury decisionmaking “is no more (or less) surprising from the standpoint of rational choice than the fact that an audience can be frightened by a scary movie even though everyone knows that it is make-believe.”\textsuperscript{112}

It is easy to dispute the analogy, for the movie audience is responding to a stimulus designed to bypass cognitive screens and play on emotions, while trial lawyers, even if they might sometimes wish to arouse emotion, are generally appealing to cognitive reasoning. Moreover, not much turns on whether movie audiences are aroused by scary flicks except enjoyment, and little work is involved in watching a film. Jurors, by contrast, realize that much may turn on what they decide, paying attention as a juror requires work,\textsuperscript{113} and deliberating can be difficult and even unpleasant, especially if one has a minority view.

But these are quibbles. What is important is that to anyone but an economist (and a few political scientists), there is no puzzle here. The fact that jurors perform well in the absence of financial incentives or career stakes is not surprising. Rather it suggests the limits of a rational choice model that privileges economic values in understanding trial systems. While rational choice models that employ largely economic variables help explain considerable legal behavior (for example, decisions to sue or civil settlements), they have no general explanatory value over much of the terrain Posner investigates. Rather, they constrict vision and draw attention from non-economic explanatory variables.\textsuperscript{114} This does not mean rational

\textsuperscript{110} Id.
\textsuperscript{111} Although Posner notes that jurors are screened for conscientiousness, this is the less important element for him, and he never tells us why people should be conscientious. Id.
\textsuperscript{112} Id.
\textsuperscript{113} It is here that the drama of a trial—if it is dramatic—may ease the burden.
\textsuperscript{114} In principle, an economic model can incorporate any variable it can recognize as a benefit or a cost. See Kaplow and Shavell, supra note 36. But many such variables are difficult if not impossible to operationalize, and in practice, the rational choice
choice models cannot be expanded to explain various aspects of trials, but when they are, they lose the power they have to make sense of some kinds of actions and decisions. When involvement in the trial drama must be given pride of place in a rational choice model of jury conscientiousness with no empirical evidence that this is more important than a sense of civic duty or the fact that there is intrinsic satisfaction in doing a job well, we have reason to question the model’s utility. Not only is there no strong reason to believe that drama has the importance Posner attributes to it, but the need to posit such a variable suggests a gap in understanding that rational choice economics does not fill in.

I could quarrel with other aspects of Posner’s comparison of the inquisitorial and adversarial systems, but I think I have written enough to explain why, on the one hand, I do not think economics does much to advance our understanding of the issues Posner addresses. On the other hand, empirical research, which Posner often draws on, careful observation, like that reflected in the more nuanced of Posner’s analyses, and common sense, which Posner also employs, do advance the discussion, even if there remains much to learn.

B. Weighing Evidence

1. Burdens of Proof

The next portion of Posner’s paper examines evidentiary rules, beginning with burdens of proof. Posner’s discussion of the production burden is a good example of an evidentiary rule that makes economic sense. As Posner points out, it is usually good economics to have the production burden aligned with the persuasion burden. Since the plaintiff (whom we will assume is the party with the per-
suasion burden) will lose if she cannot establish a prima facie case, there is no point in forcing a defendant to pay the costs of presenting evidence unless such a case can be established. There is, however, a puzzle here that Posner does not pursue. If the rational actor model fits the trial, why should it matter who has the production burden? A rational plaintiff would not bring suit if she knew she would lose even if the defendant presented no evidence. Some answers are possible. One is that a plaintiff may think her evidence establishes a prima facie case when it does not. Another is that if the production burden were on defendants, the nuisance value of suits would rise.

There are similar reasons for not placing the production burden on plaintiffs with respect to a defendant's affirmative defenses, and as Posner notes, even stronger reasons for not requiring a plaintiff to negate possible affirmative defenses as part of her case-in-chief. The latter would expend court and party resources to refute claims the defendant might not make and so would unnecessarily raise the costs of bringing suit.\(^{115}\) There is similar economic sense, as Posner points out, to rules like the \textit{McDonnell Douglas}\(^{116}\) rule, which shift the production burden when a plaintiff has presented certain circumstantial evidence consistent with his claim and the defendant is well positioned to refute any misleading implications of that evidence.

In short, the rules regarding burdens of proof make considerable economic sense,\(^{117}\) but special knowledge of economics is not needed to see the sense in them.\(^{118}\) Moreover, to show that burden

\(^{115}\) The law is not completely or consistently rational in this way. To make out a prima facie case, the plaintiff or prosecution may have to prove matters the defense does not intend to dispute. In civil cases, these costs may be minimized by the use of stipulations and requests for admission. In criminal cases, only the former are available, and a prosecutor who could save costs by entering a stipulation may refuse for tactical reasons.


\(^{117}\) E.g., Thomas R. Lee, Pleading and Proof: The Economics of Legal Burdens, 1997 BYU L. Rev. 1; Bruce L. Hay, Allocating the Burden of Proof, 72 Ind. L.J. 651 (1997).

of proof rules make sense is not to show an economic motif that rationalizes the rules of evidence. There is, for example, no McDonnell Douglas principle that shifts production burdens whenever evidence needed to resolve an issue is more easily accessed by the defendant than by the plaintiff. Indeed some rules, like the Fifth Amendment, exist in defiance of what economics might see as efficient trial practice. We should not be surprised that trial procedures often make good sense economically, but we should not think this is the whole, or even the most important part, of the story.

Posner’s attempt to explain the legal norms surrounding burdens of proof using an economic framework seems especially problematic when he shifts his attention from the production burden to the burden of persuasion and, in particular, to the “beyond a reasonable doubt” standard that applies in criminal cases. Posner gives two justifications for this high burden. The first is an efficiency justification: “[T]he cost to an innocent defendant of criminal punishment may well exceed the social benefit of one more conviction of a guilty person.”119 So it may, but it also may not. We do not know, a priori. Moreover, the cost to a guilty defendant of criminal punishment may also exceed the social benefit of one more conviction. Indeed, it is difficult to see why convictions cost guilty persons more than they cost innocent ones.120 With respect to the social benefits of general deterrence, so long as those convicted are thought guilty by most observers, actual guilt should not matter.121 The one area where the social benefit from correct convictions seems, on average, clearly to exceed that from wrongful convictions is in the specific deterrent and incapacitative effects of criminal convictions. Taking guilty defendants off the streets is likely to stop them from committing future crimes, and this outcome perhaps justifies the costs of the trial and incarceration.

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119 Posner, supra note 6, at 1504.
120 Perhaps on average the opportunity costs of criminal convictions to innocent people will be greater than they are to guilty people, because innocent people have better job prospects. Innocent people wrongfully caught up in the criminal justice system, however, are often people whose prospects for substantial market success are slim. This may be why they are suspected criminals. Also, the opportunity costs of being unable to commit more crimes may exceed the costs of being unable to work at a legal job. But for good reasons we are unwilling to recognize the former as costs, even if the additional crimes would not raise costs for others.
121 See discussion supra note 71.
Removing innocent defendants from the streets is less likely to have crime reduction effects. But it would be sheer coincidence if the differential benefit in special deterrence mirrored the tradeoff wrought by the beyond a reasonable doubt standard. Indeed, as Posner recognizes,\textsuperscript{122} no particular tradeoff is implicit in the standard because it depends on the proportions of guilty and innocent defendants among those tried for crimes.\textsuperscript{123} Furthermore, we do not adjust the criminal burden of proof based on likely sanctions, although sanctions largely determine the costs paid by convicted defendants. Nor do we adjust the burden to track the benefits to society of correct convictions.\textsuperscript{124} We do not, for example, decrease the government's burden of proof when it prosecutes highly publicized cases, even if convictions in these cases are likely to have substantially greater deterrent effects than convictions of unknown people for run-of-the-mill crimes. In short, if there is an economic logic to the burden of proof in criminal cases, this strand of Posner's argument does not capture it.

Posner's other economic justification for the higher burden in criminal than in civil cases is similarly weak. Posner argues that the prosecution has an inherent resource advantage in criminal cases,\textsuperscript{125} and with a lower standard they could allocate those resources to put especially heavy pressure on defendants who choose to fight. It is true that the prosecution has an inherent resource advantage over most criminal defendants; but often in civil cases, one side or the other has an equally substantial resource advantage, and no compensatory change in the burden of proof follows. Indeed, there is not even a right to appointed counsel in civil cases, whatever the imbalance. Moreover, the suggestion that the government will exploit its advantage across cases to "wallop the occasional defendant

\textsuperscript{122} Posner, supra note 6, at 1506.


\textsuperscript{124} For example, a conviction for a crime like drug dealing may bring little in the way of deterrence because so many people are convicted of dealing that an additional conviction has little marginal value. Yet the penalty is often quite heavy. A conviction of price fixing or insider trading may have a substantial deterrent impact because it shows the government is willing to enforce the law. Yet sentences may be relatively light. In prosecuting both crimes the government will have to prove its case by what is in theory the same beyond a reasonable doubt standard.

\textsuperscript{125} Posner, supra note 6, at 1505.
who does invoke his right to a trial"\textsuperscript{126} is seldom likely to be true. Usually the prosecution's case is made by the police or by prosecutorial investigators who develop the evidence needed to arrest. Thus, by the time of trial, many of the prosecution's evidence search costs are sunk, even if evidence presentation has additional costs. The prime incentive defendants have to plead guilty is not that if they go to trial the government will allocate resources they have husbanded in order to get them, but rather that guilty defendants know they are guilty, know that their cases are likely to be weak because the truth is against them, and know that they will get stiffer sentences if they go to trial rather than plead.

Not only are the economic rationales for the beyond a reasonable doubt standard in criminal cases weak ones, they are not needed to explain it. There are obvious non-economic reasons why we adopt this standard in criminal cases. In particular, the standard expresses an aspiration to never convict innocent people and a moral judgment about the wrongfulness of inflicting the pain of criminal conviction on people who are not guilty of crimes. The prosecutorial resource advantage noted by Posner may play a role, but not because (to use his analogy) a lower standard would make it rational for the prosecution to reallocate resources in the same way predatory pricing can be a rational strategy when there is unequal access to capital markets.\textsuperscript{127} Rather, fairness is an important value in the justice system, and given that the state can usually be expected to have power, moral, and other advantages, the high criminal burden of proof seems like a fair means to correct the balance.

The standard can also be defended on Kantian-type grounds: The freedom of innocent people should not be abrogated as a means to ensure that no guilty people escape punishment. Alternatively, people behind a Rawlsian veil of ignorance would want a high burden of proof in criminal cases because they would expect to be among the large majority of innocent people; therefore, given risk aversion, they would want to ensure that they were not wrongly convicted of crimes. Once the veil was lifted, they might face a potentially substantial risk of wrongful conviction if the burden of

\textsuperscript{126} Id.

\textsuperscript{127} Id.
proof in criminal cases were too low. Taking a more sociological perspective, the legal system’s legitimacy might be destroyed by too many wrongful convictions. Cultural and historical circumstances also help explain this standard.129 Finally, the standard does not seem to pose great problems. Plea bargain rates of ninety percent and higher are common in criminal courts,130 and among those who go to trial, most are convicted.131 Moreover, prosecutors do not complain of their burden and rarely speak of cases they might bring were their burden lower. In short, there are many ways to explain the origin and persistence of the beyond a reasonable doubt standard in criminal cases; economic arguments are not needed to explain it and add little or nothing to our understanding of why the standard exists.

Economic variables, considered in the way economists think about them, help make sense of the production burden aspect of the burden of proof, even if the considerations they highlight have long been part of evidence law’s common sense. These same variables and modes of thought contribute little if anything to understanding the burden of persuasion aspect of the burden of proof, at least as it applies in criminal cases. Posner, however, must argue for an economic justification to support his suggestion that a general economic motif unifies the law of evidence. For me, the criminal burden of proof, and the failure of economics to explain it, makes the opposite point. Even if some evidence rules are consistent with economic rationality and tend toward the efficient,

128 For the first time since the 1960s, support for the death penalty in this country is diminishing. There is some reason to believe that a major factor in this change of opinion is that DNA evidence has demonstrated that a number of people on death row did not commit the crimes of which they were convicted. The Illinois moratorium on the death penalty is the most striking indicator of the effect of information about wrongful convictions. Sam Gross & Phoebe Ellsworth, Second Thoughts: Americans’ Views on the Death Penalty at the Turn of the Century, in The Modern Machinery of Death, The Future of Capital Punishment in America (Stephen P. Garvey ed., forthcoming 2001).


130 In 1996, 91% of felons convicted in state courts pled guilty. See Sourcebook, supra note 103, at 454.

131 Kalven & Zeisel, supra note 24, at 20 (noting that acquittal rates range from 14-51%, depending on the crime); Sourcebook, supra note 103, at 460 (listing a total conviction rate of 70%).
economic principles leave much about the law of evidence unexplained—too much to support the claim that an economic spine runs through the law of evidence or that the economic perspective provides a unique understanding of evidence law.\textsuperscript{132}

2. Naked Statistical Evidence

Posner next turns his attention to statistical evidence. He presents his perspective on the famous blue bus/green bus hypothetical and his justification for the strong intuition that, even though the civil burden of proof is a preponderance of the evidence, a person hit by a bus he cannot identify cannot successfully sue the Blue Bus Company simply by showing that fifty-one percent of a town’s buses are blue.\textsuperscript{133} Although some of Posner’s arguments are familiar, such as his questioning of the implicit assumption that the only available evidence is statistical,\textsuperscript{134} he introduces two interesting and original arguments that support the intuition where it seems most questionable: (1) when the plaintiff has either not investigated the accident beyond collecting statistics or (2) when the statistical evidence is all that is available even after extensive investigation.\textsuperscript{135} In the first situation, Posner argues, society can demand that the plaintiff investigate further, because the state contributes resources to trials and will get no deterrence returns if it turns out that the bus that hit the plaintiff was green.\textsuperscript{136} Hence, before the state expends resources on the plaintiff’s case, the plaintiff can be required to do

\textsuperscript{132} I do think highlighting the tradeoff between Type I and II error as Posner does clearly captures much of what is at stake in setting a particular persuasion burden. Posner, supra note 6, at 1504–05. These concepts are not economic, however, but statistical, and one does not need to be aware of these labels or how they are used in statistics to realize that a standard that makes it more likely that innocent defendants will go free will also free more guilty ones and vice versa.

\textsuperscript{133} The hypothetical involves a person hit by a bus on a road where 51\% of the buses that pass by at random times during a day are blue and owned by the Blue Bus Company, and 49\% are green and owned by the Green Bus Company. Although the plaintiff can present convincing evidence of negligence, she does not know the color of the bus that hit her and sues the Blue Bus Company because, given the information she has, their market shares make it more likely than not that a blue bus hit her. The hypothetical problem was inspired by an actual case, Smith v. Rapid City Transit, Inc., 58 N.E.2d 754 (Mass. 1945).

\textsuperscript{134} See David Kaye, Naked Statistical Evidence, 89 Yale L.J. 601 (1980); Lempert, supra note 13.

\textsuperscript{135} Posner, supra note 6, at 1509.

\textsuperscript{136} Id.
enough of an investigation to make it likely that the state's investment of judicial resources will be worthwhile.\textsuperscript{137}

Yet more helpful is Posner's contribution to thinking about the hardest problem in this area: the situation where the statistical evidence is all that can be found, and more correct than incorrect decisions would be achieved in the long run by deciding on the basis of naked statistics. Suppose, for example, that fifty-one percent of the buses in town were blue. If the plaintiff prevailed in one thousand cases where only statistical evidence was available, 510 verdicts could be expected to be correct. This means twenty more cases would be decided correctly than if the evidence was not allowed and the defendant won each case. Posner points out that the gain of twenty correct decisions over the no trial status quo would be unlikely to equal the social costs of trying the thousand cases necessary to achieve these gains.

Posner's argument valuably advances thinking about this classic problem, because it shows that intuitions about the inadequacy of naked statistical evidence do not necessarily conflict with rational actor models of legal decisionmaking. It also shows the value of tracing out the social cost implications of legal activity. Here the economic perspective draws attention both to social costs, which importantly include the costs of the tribunal, and benefits.

Nevertheless, Posner's analysis leaves many issues open. First, it does not tell us why the intuition that naked statistical evidence is inadequate persists when higher proportions of the buses that might have caused the accident, say seventy-five percent, are blue.\textsuperscript{138} Posner's response that with a greater statistical imbalance, the statistics should perhaps be enough is, however, a fair one. There is no reason why economic thinking need support our intuitions to be

\textsuperscript{137} The requirement of an investigation that goes beyond statistics also diminishes the dissipation of judicial resources in nuisance litigation. A plaintiff who has suffered a low stakes injury, or any injury through his own fault, might sue the Blue Bus Company, asking for less than the cost to the company of refuting his prima facie case—if statistics were sufficient to establish it. Hence, settling would cost Blue Bus less than defending. The expenditure of court resources in such settlements may be small, but there would be some cost, and, more importantly, suing for nuisance value is inefficient and unjust.

helpful; often it is most helpful when it challenges them. If seventy-five percent of the buses that might have caused an accident are blue, and if it is impossible to provide more than statistical evidence, then perhaps the Blue Bus Company should pay every time.

Second, Posner ignores justice as a reason why courts should invest in resolving disputes. As between the parties, the compensation decision is a transfer payment, and its resolution has no necessary social welfare implications. Posner's apparent assumption that investing judicial resources makes sense only to the extent that significant social benefits, like deterrence, will result is mistaken to the extent that it does not treat justice between the parties, regardless of its efficiency implications, as a benefit. Indeed, ideas of justice probably explain why many regard naked statistical evidence as insufficient to justify imposing liability on the Blue Bus Company, even when trial costs are low and seventy-five percent of the town's buses are blue. In matters of justice, people ordinarily do not think statistically. They see justice not as a phenomenon to be maximized over the long run, but as an ideal to be realized in each case. If a bus company is to be punished, it should be for what its driver did and not for having more buses on the road than its competition. With naked statistics, it seems as if the bus company is being punished for its dominant position. Hence, the situation in which seventy-five percent of the buses in town are blue differs from the situation where there are an equal number of blue and green buses in town, and a witness who is judged to have a seventy-five percent chance of being right testifies that the bus that hit the plaintiff was blue. In the latter instance, the jurors feel they are punishing the Blue Bus Company for what one of its bus drivers did, even if they feel there is a twenty-five percent chance they have gotten the culprit company's identity wrong. As psychologists have known for

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139 The legal inferiority of naked statistical evidence is seen as manifested by the fact that a case will not be allowed to go to a jury on the basis of naked statistical evidence when it would be allowed to go to the jury on the basis of witness testimony that is no more likely to identify the true culprit than the statistical evidence. I think the claim that this shows the law disfavors statistical evidence confuses the possible probative value of the evidence with the weight a jury will give it. In the case of naked statistical evidence these probabilities are presumptively the same. If 51% of the buses are blue and this is all the evidence that can reasonably be uncovered, the jury would be unreasonable to conclude that the probability that the Blue Bus Company is responsible for an accident is anything other than 51%. In the case of the fallible witness, it may
some time, but mainstream economists have only recently begun to realize, how an issue is framed for cognitive processing has predictable effects on the conclusions people reach. Naked statistical evidence and witness causal testimony are likely to be framed differently, even if they implicate the Blue Bus Company in the accident with the same probability.

It is also important to note that our unwillingness to allow jurors to decide issues on statistics alone, and the likely reluctance of jurors to base liability decisions on less than overwhelming statistical evidence, has exceptions. One of the factors that drives our intuition in the blue bus hypothetical is that even if we can hypothetically consider the implications of disallowing this evidence in a thousand cases, we know that we will not in our lifetimes encounter a thousand accidents in which statistics are the only evidence tending to show which company's bus is responsible. We would not encounter that many cases if we lived to be a thousand years old. If, however, thousands of cases arose every year in which unknown buses injured passengers, the matter would come to be framed differently, and I expect we would let statistical market share information justify assignments of responsibility. This is in fact what has happened in areas where market share liability is accepted. Large numbers of cases allow for a reframing of the issue so that what matters is not whether some company is responsible for a certain injury but rather what share of a large number of injuries a given company is likely to have caused. Naked statistics, although they do not link companies to specific injuries, do not offend most people's intuition when used this way, because although particular

be that the jury ultimately concludes that there is a 51% chance that she is right, but when the evidence was presented in court there was almost certainly a range of probabilities that could reasonably be attached to the testimony. If there were not—if, for example, a witness testified that she was quite uncertain what the bus color was, that it may have been green or it may have been blue, but she leans slightly toward thinking it was blue—a judge might well direct a verdict for the Blue Bus Company holding that a jury verdict against Blue Bus would be based solely on speculation.

141 See Jolls et al., supra note 46, at 1546.
142 See Wells, supra note 138.
companies cannot be linked causally to particular injuries, each company appears to be paying in proportion to the damage it has caused.

I have noted how, in his analysis of naked statistical evidence, Posner's economic perspective has helped him make a contribution to the literature on evidence law that is original and neither obvious nor common sense. His discussion of naked statistical evidence, however, also illustrates how the reductionism of economics can lead one to push an argument to the point of silliness. As a final justification for judicial hostility to naked statistical evidence, Posner tells us that if Company A is always held liable for accidents, almost half of which are caused by Company B, then:

A will have a big incentive to be careful and B little or no incentive to be careful. As a result, over time, more than half the accidents will be caused by B, increasing the error rate resulting from allowing juries to base decisions on the ratio of the companies' buses on the route in question. Eventually, A, having higher liability costs, will probably withdraw from the route; the rules on burden of proof will have created a monopoly!144

The exclamation point at the end is Posner's, and it certainly should be there, unless perhaps it should be replaced by the glyph, ":-)"). Surely Posner is joking, for the argument is bad economics and even worse behavioral science.

First, the incentive on Company A to be careful will be no greater than if it were not responsible for B's accidents, for A's care will do nothing to prevent B from being involved in accidents, for which A will be held responsible. Second, B's incentive to take care would in practice hardly diminish, because most bus accidents would not leave only statistical evidence in their wake. Third, if over time more than half the accidents were caused by Company B, A might reasonably argue that the proper statistical base was the proportion of accidents caused, not the proportion of buses on the road, and B might find that it, not A, was paying for all unattributable accidents. Fourth, assuming bus prevalence statistics were to control and that they were all the evidence available in many accidents, A's rational response would not be to drop the route (assuming it were otherwise profitable), but rather to reduce the number of buses it sent out to the same number sent out by B. That

144 Posner, supra note 6, at 1510.
way neither company would have to pay for unattributable accidents, the lower cost would mean that each company could afford to put an additional equal number of buses on the road, and bus service would improve!

This conclusion too would be a joke if I meant it as more than a refutation of Posner’s analysis. I offer it, however, to show potential drawbacks of the economic perspective. One wrapped up in this perspective can easily push it too far, neglecting the unreality of assumptions and drawing attention from sounder arguments. In some measure, tracing out the implications of economics for evidence law is a game, and I suppose there is nothing wrong in engaging in it just for fun. But when one does, both positive and normative payoffs are likely to be nil. Nevertheless, the temptation to think the results of the game should inform policy may be great, and policymakers are all too willing to use questionable research to justify policies they favor on other grounds.

3. Other Statistical Evidence

When Posner turns to statistical evidence in general, he gets some things right and some things wrong. If I may be pardoned for accentuating the negative, I will only discuss the latter. Specifically, I have difficulties with his suggestion that the higher the significance level, the more reliable a study is as evidence, and I think he is wrong when he suggests that the time needed to explain a study’s design at trial increases with diminishing robustness.

Significance tests deal with one concern: whether it is plausible to suppose that an identified relationship results from chance

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145 This assumes that B was not sending out an optimum number of buses from its perspective apart from liability considerations, a likely assumption since a major benefit from keeping the number of its buses down was avoiding liability in unattributable accident cases.

146 For a recent example consider how projections of surpluses for the next decade were used to justify the 2001 Bush tax cut, although few economists would claim that they could accurately project budget surpluses ten years into the future.

147 Posner, supra note 6, at 1511.

148 In a certain sense, this is a truism, for robustness can mean that the results of an analysis are not threatened by the violation of certain assumptions. But Posner does not seem to be using the term this way. Rather, he seems to associate robustness with greater statistical significance. What I quarrel with is his suggestion that the greater the significance level reached, the less need there is to explore issues of study design.
rather than from the specific reasons the study's proponent proposes. The most likely reason for a low significance level is that a hypothesized relationship does not exist. Some of the model building problems Posner sees as possible reasons for low significance, such as the omission of relevant variables, can increase the apparent statistical significance of a variable rather than lower it. More importantly, levels of statistical significance depend not only on the strength of relationships, but also on the number of cases considered and the distribution of values on different variables. For most legal purposes, the strength of apparent relationships is more important than significance levels. Usually it will matter little if a significance level is .01 rather than .001, for in either case, if the model is correctly specified, the results are unlikely to reflect a chance relationship. Although it may vary with the legal issue, a strong relationship that is significant at the .01 level will almost always merit more evidentiary weight than a weaker relationship significant at the .001 level. More generally, contrary to what Posner seems to suggest, when relationships are statistically significant, it is a mistake to look primarily to significance levels to assess the value of evidence. I expect Posner knows this and so am puzzled as to why he writes as if levels of statistical significance were a good test of relative evidentiary value.

I am also puzzled by Posner's claim that the weaker the statistical evidence, "the more time will have to be spent at trial exploring the design of the study." This strikes me as often wrong. If statistical evidence is weak because it is not significant, it carries its own consumer warning. One does not have to probe the study for design flaws that will undercut its apparent implications. On the one hand, when statistical evidence seems strong, one wants to be sure that the apparent strength does not result from the exclusion of important variables, from model building aimed at establishing a significant relationship rather than at fairly testing a null hypothe-

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149 I am following Posner and using low significance levels to refer to relationships that are not highly significant. In fact, statistical significance increases as the significance level grows smaller. Thus a relationship significant at the .01 level is less likely to be attributable to chance than a relationship significant at the .05 level, and the latter relationship is less likely to be due to chance than a relationship significant at the .10 level.

150 Posner, supra note 6, at 1511.

151 Id. at 1512.
sis, or from a study design that was intentionally or unintentionally biased in favor of finding a strong relationship. On the other hand, if a model is offered to show the absence of a relationship, and evidence for its absence is found in weak or statistically insignificant relationships, then the study design and model construction must be closely studied to ensure that neither is biased against finding associations that in fact exist. The bottom line is that when statistical studies are presented, design and model building issues should be probed to ensure that the study's results, whether manifested by significant or insignificant relationships, can reasonably be relied upon.  

C. The Federal Rules of Evidence

It is not until the third section of his paper, more than halfway through, that Posner turns to the stuff of most evidence courses, the Federal Rules of Evidence. What one finds is by now familiar. Some of what the economic perspective suggests is misguided, and much of the rest is already understood as a matter of common sense.  

I have little to say about two other topics Posner discusses under the rubric Burden of Proof: the product rule and biased factfinders. I think Posner's discussion of the product rule is quite sensible, but like my colleague Rick Friedman, I disagree with Posner's claim that a factfinder who is free from bias approaches a case, whether civil or criminal, with prior odds of 1:1. Professor Friedman, in my view, persuasively refutes Posner's claims on this score. See Richard D. Friedman, A Presumption of Innocence, Not of Even Odds, 52 Stan. L. Rev. 873, 873–74 (2000) (arguing that Posner's view of the unbiased factfinder is wrong in principle and as a matter of probability theory). I also do not think Posner's analysis has anything to say about the desirability of peremptory challenges. While I agree a jury's diversity contributes importantly to its strengths, strong biases can interfere with the rational factfinding we seek. So long as trial judges refuse to dismiss jurors who say they can be fair despite a strong likelihood the jurors are biased, the availability of peremptory challenges is likely to enhance the accuracy of jury factfinding and the quality of jury justice. See Barbara Allen Babcock, Voir Dire: Preserving "Its Wonderful Power," 27 Stan. L. Rev. 545, 553–54 (1975); Richard Lempert, Jury Size and the Peremptory Challenge: Testimony on Jury Reform, 22 L. Quadrangle Notes 8, 12 (1978). Posner's mistake here is that he considers only one aspect of the issue and reaches normative conclusions based on what that aspect implies. This is particularly unwise when what is considered is an abstract proposition rather than the real world workings of a complex institution.
1. Harmless Error

Posner begins his discussion with Federal Rule 103, the harmless error rule. Despite its presence in the Federal Rules, Rule 103 is not a rule of evidence. Rather it is an instruction to judges that provides that errors in admitting or excluding evidence that do not affect substantial rights of parties cannot justify motions for new trials or reversals on appeal. Posner makes an interesting, and to my knowledge original, attack on the harmless error rule. He points out that an appellate court, not seeing the jury, will regard each jury as average in its propensity to convict. A prosecutor, however, may realize that the jury she is arguing to is more acquittal prone than average and may opportunistically offer impermissible evidence or object to the defendant's admissible evidence, knowing first that if the trial judge rules mistakenly in her favor it may sway this jury's verdict, and second, that a resulting conviction will probably be sustained on appeal. This result may occur because the appellate court, thinking of an average jury, will believe the evidentiary mistake had no effect on the verdict.\(^\text{153}\)

The problem with the argument is that, although it makes sense in the abstract, there is little reason to believe prosecutors or judges act as Posner's model assumes. To the extent prosecutors intentionally seek improper evidentiary advantages, it is probably because they realize that without them, almost any jury would find their case weak. They also know that even if an average jury would be swayed by the error, an average appellate judge will find a way to ignore this.\(^\text{154}\) As Posner observes, "it takes a highly disciplined judge to vote to reverse a conviction when he thinks the defendant is guilty," even if he acknowledges the error is not harmless\(^\text{155}\) and even if, I would add, what convinces him of the defendant's factual guilt is the inadmissible evidence.

\(^\text{153}\)Posner, supra note 6, at 1518. Posner also offers a formal treatment of this argument, but I think it adds little to the verbal formulation. I also think it contains a mistake, as the cost of the original trial is not included as a cost in the state of the world where a conviction is followed by a retrial. I do not believe this mistake is consequential at the model's level of abstraction.


\(^\text{155}\)Posner, supra note 6, at 1518.
I also quarrel with Posner’s assumption that the harmless error rule ordinarily works to “head off remands that would be all costs and no benefits.”\(^{156}\) This claim ignores the benefits of increasing doctrinal clarity,\(^{157}\) deterring prosecutorial misconduct and hence reducing the cost of cases reversed for errors that are not harmless,\(^{158}\) and promoting procedural justice. Posner concludes his discussion of harmless error by suggesting that errors deliberately committed or induced by prosecutors be made automatic grounds for reversal. I agree for procedural justice reasons, but I doubt the ability (and desire) of most appellate courts to distinguish deliberate errors from inadvertent ones.\(^{159}\)

Overall, I think the great expansion of the harmless error doctrine over the past three decades\(^{160}\) illustrates the influence of simple economic intuitions on judicial analysis. Surely the expansion owes much to the sense that reversals when errors are harmless are “all costs and no benefits,” even if this is not so. My claim is not that the economic costs should be ignored in considering how harmless error should be treated; they are properly regarded as important. Rather, it is that the economic costs—in money and the time required for retrials that will not change verdicts—are so salient for judges that they are easily overweighted relative to the benefits of reversing despite likely harmlessness.\(^{161}\) Even if the deterrent value of reversing for harmless errors would make reversals economically cheaper in the long run, the prospect

\(^{156}\) Id.

\(^{157}\) Doctrinal issues are likely to be given more attention when errors are grounds for reversal rather than dismissed as harmless.

\(^{158}\) In Posner’s scheme one might want to balance the cost of deliberate error against convictions of actually guilty people that would not have occurred but for the evidentiary error. See Posner, supra note 6, at 1519. One should also consider the empirical costs of overdeterrence.

\(^{159}\) Also, difficult questions arise. Is it deliberate error when a prosecutor offers inadmissible hearsay knowing that if the defendant chooses to waive the hearsay objection the evidence may fairly be considered by the jury? Does it become deliberate error if the defendant does object and the prosecutor argues in favor of admissibility or stands passively by while the judge mistakenly overrules the objection?

\(^{160}\) See Charles S. Chapel, The Irony of Harmless Error, 51 Okla. L. Rev. 501, 503 n.15 (1998) (listing the Supreme Court cases in which the harmless error doctrine has been extended).

\(^{161}\) The costs of retrials may also induce courts to hold that errors are harmless when they may not have been.
of immediately saving time and money by avoiding retrials is likely to dominate judicial thinking.\footnote{A liberal harmless error doctrine has an important practical benefit that makes me think better of it than my textual discussion might suggest. It allows judges to affirm the verdicts of the obviously guilty without distorting legal doctrine. Without a liberal harmless error rule, some appellate courts would be tempted to interpret their laws so as to uphold trial court convictions in order to keep heinous criminals in jail. Hence, bad faith applications of the harmless error doctrine may contribute more to the integrity of the legal system than good faith application of the rule.}

2. Federal Rule 403: Relevance and Prejudice

Posner next turns his attention to Federal Rule 403, the rule which tells judges to weigh the probative value of evidence against the likelihood that it will prejudice or confuse the jury or require more time than it is worth. He sees Federal Rule 403 as central to the economic analysis of evidence law, because it mandates a cost-benefit analysis in deciding whether to admit evidence, and he analogizes it to the well-known Hand formula which reduces negligence to a cost-benefit test.\footnote{Posner, supra note 6, at 1522-23.} Federal Rule 403 operates in a common sense fashion, however, and since many of the costs it recognizes are not distinctively economic ones, unlike the Hand formula with respect to tort law, it does not signify an inherent economic logic underlying the law of evidence. Indeed, the requirement that probative value be “substantially outweighed” by associated costs indicates that the drafters were not thinking in purely cost-benefit, much less economic, terms.

Federal Rule 403’s “substantially outweighs” language may have been intended to serve the function Posner suggests, namely preventing judges from displacing juries as factfinders by making admissibility decisions based on whom the judge thinks should win,\footnote{Id. at 1523.} but I doubt it. The Federal Rules do not seem to have been designed to control biased judges.\footnote{Consider, for example, the wide discretion Federal Rule 611 gives judges to control the examination of witnesses or the discretion judges have to find preliminary questions of fact. Indeed, draft versions of the Federal Rules would have made admitting hearsay a matter of judicial discretion.} Rather, I think Federal Rule 403 is tilted toward admissibility because the Federal Rules contain a general commitment, found in Federal Rule 402, to admit all
relevant evidence unless there is a good reason to exclude it. The drafters thought that the mere likelihood that prejudice, waste of time, or the like outweighed probative value was not sufficient to justify excluding relevant evidence. I expect they wanted to avoid not just the biased exclusion of evidence that concerns Posner, but its mistaken unbiased exclusion. Moreover, determining whether probative value is outweighed by other considerations can be difficult. For a jury that is in equipoise, even slightly probative evidence can tip the balance, and the court cannot be sure what the jurors think of cases before their verdicts. Excluding probative evidence that would tip the balance will lead to injustice, whereas admitting it will lead to the proper result, even if the jury is far more influenced by the evidence than a rational jury should be.

Also, the drafters may have realized what the Supreme Court recently recognized, namely, that the apparently objective test of relevance in Federal Rule 401 is incomplete. This at least is the lesson I draw from Old Chief v. United States, where the Court recognizes what I call narrative relevance: Namely, that evidence may be admissible simply because it fills out the contours of a party's story. This concept recognizes the likely validity of the "story model" of jury information processing and its implication, namely that even apart from cognitive biases, the rational actor of economic analysis does not adequately model juror decisionmaking. Hence, had Federal Rule 403 been constructed so that in an ideal world it would give a rational actor's decisions the highest possible payoff over the long run, it would probably not be the best

166 519 U.S. 172 (1997).
167 See Lempert et al., supra note 54, at 251–54.
170 A scheme that excludes evidence whenever probative value is less than the costs mentioned in Federal Rule 403 will not necessarily lead to more accurate decisions, even if the judge is always accurate in striking the balance and jurors respond to both the probative and prejudicial aspects of evidence. Although a piece of evidence might be considerably more prejudicial than probative, if its probative value tips the scales,
scheme to maximize payoffs from imperfectly rational human decisionmaking. A rule that admits some evidence because it contributes to a coherent narrative, that allows considerable redundancy, and that fits familiar and easy to apply competing causal schemas is likely to yield better outcomes than a rule based strictly on rational actor assumptions. Federal Rule 403 wisely assumes that neither judges nor jurors are fully rational decisionmakers, and it opts for decisions in which errors admitting useless or even harmful information are more likely than errors excluding helpful information.171

Federal Rule 403’s logic is thus contrary to Posner’s intuition. It is one of common sense consideration of costs and benefits, with a strong tilt toward admission when costs and benefits are only somewhat unbalanced. It does not embrace the logic of either economics or rational actor models.172

Posner also seems to think that trial judges are too lax in invoking Federal Rule 403’s permission to exclude evidence that wastes time, for he suggests that trials might be considerably shorter than they now are. Again, I think the economic perspective misleads, because it does not consider all the values a trial serves, especially legitimacy.173 Research suggests that when people are being judged, legitimacy is greatly enhanced if they feel they have been allowed excluding it will lead to a mistaken verdict if other evidence sufficient to tip the scales is not available. One could, of course, tautologically argue that this could never happen because if the evidence was essential its probative value would always exceed the prejudice it brings. But judges pass on evidence as a case unfolds, when it is not clear how close a case will ultimately be.

171 Lempert et al., supra note 54, at 226, 233–34.

172 The logic of Federal Rule 401, which provides that “[r]elevant evidence’ means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence,” does imply a rational actor model. Fed. R. Evid. 401; see Lempert, supra note 43 (arguing that Bayesian likelihood ratios provide an adequate model of Federal Rule 401). It is probably for this reason that, although the rule is fundamental, it has never fully guided admissibility decisions. See Old Chief, 519 U.S. at 178–79; Lempert et al., supra note 54, at 220–26.

173 Let me make clear that I am not saying legitimacy could not be a value taken into account in an economic analysis of optimum trial length. See Kaplow & Shavell, supra note 36. But I am making the conceptual claim that legitimacy is not inherently economic in nature and the empirical claim that, consistent with writing on the economics of evidence law by Posner and others, it is not a value that the economic perspective brings to mind and is one that is not often (if ever) included in formal economic models of trial processes.
to tell their full stories. A trial that aspires to legitimacy in the eyes of the parties may have to allow victims, defendants, their spokespersons (that is, lawyers), and even witnesses to talk past the point where what they say has diminishing evidentiary returns. The same result may be demanded by the public’s desire to know the full story of what happened.


Posner makes a number of intriguing points in his treatment of character evidence. He offers as a justification for Federal Rule 404, the propensity rule, the argument that the weak probative force of propensity character evidence is counterbalanced by the likelihood that recidivists will be punished more harshly than first time offenders and so have a greater incentive to refrain from crime. He also provides an intriguing justification for Federal Rules 413–15, which allow character evidence to show propensity in the case of certain sex crimes. Posner thinks these exceptions to Federal Rule 404(b) are justified, because the impulses that lead to most sex crimes are not widely shared, and those who commit such crimes have few substitute ways of gratification. Other crimes, like theft, for example, are motivated by widely shared desires, which

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175 Posner also seems to think that shortening trials to what is logically relevant to prove a case will reduce the cognitive overload on jurors. The question of what constitutes cognitive overload is an empirical one. Evidence that seems logically unnecessary to prove a case may not cause overload and may have substantial cognitive benefits. Sheer redundancy is valuable because a point that has escaped a juror the first time it is made may be caught on the second or third go round. Also, evidence with no logical bearing on a point may fill in a gap in a story and so facilitate comprehension of a party’s position. Finally, a jury decision can be a hard one because people read evidence differently and disagree about its impact. What is overkill for most jurors may be dispositive for some. Hence, some kinds of redundancy and overkill make a jury’s decisionmaking task easier, as would some evidence we keep from juries. Anecdotally, I have heard jurors express great relief when, after they have convicted a person, they hear that he has a substantial record of past crimes. Along with the relief goes the sense that their deliberations would have been far less agonizing had they only known.
176 The rule excludes evidence of prior crimes when offered to show a propensity to commit a charged crime.
177 Posner, supra note 6, at 1525.
can be satisfied in a number of different legal ways. Finally, Posner argues that Federal Rule 609, which allows impeachment by prior felonies, is misguided because recidivists and first offenders have similar incentives to lie so long as they are facing similar punishment.

These are interesting ideas, even if they are not all new. The argument regarding Federal Rules 413–15, which reflects an economist’s concern with the substitutability of goods, is a nice example of how one discipline’s thought patterns can yield new and potentially valid insights for another field.

Yet as justifications for or reasons to change existing rules, none of Posner’s arguments takes us far beyond where we are now. This is mainly because we do not know whether Posner’s claims are empirically valid. Habitual criminals and first time offenders may not have similar incentives to lie, even when they are accused of crimes with similar penalties, because they may differently fear the penalties they face or differently assess the likelihood that they will go free without lying. We also know little about the degree to which past criminal convictions predict future crime or how the threat of enhanced penalties for recidivist crime or the effects of past encounters with the criminal justice system reduce (or possibly enhance) propensities toward crime.

Even Posner’s reasonable suppositions about the relative strength of the impulses that motivate sex criminals and thieves and the likely substitutability of legitimate versus illegal means of satisfying them require empirical verification. The strength of motives (at least as evidenced by recidivism) among sex criminals seems to vary widely. Moreover, at some level the motive of sexual gratification is widely shared and, in the case of some sex crimes, may have easily available legal outlets. For example, the inebriated date rapist who interprets a “no” as a “yes” may have a normal sex drive and no special difficulty in finding women who consent. As for theft and other non-sex crimes, Jack Katz has suggested that many crimes have peculiar and powerful seductions for

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178 Id.
179 Id. at 1527.
those who engage in them, regardless of the material objectives at which they aim. So the difference between the crimes that fall under Federal Rule 404’s ban on propensity evidence and the crimes excepted from the ban by Federal Rules 413–15 may not be as stark as Posner supposes.

Moreover, even if past sex crimes are more probative of enduring criminal propensities than other crimes, we are not much closer to knowing whether the exceptional treatment of the Federal Rule 413–15 crimes is warranted, given the values that must be balanced. Evidence of past sex crimes may be considerably more prejudicial than evidence of most other crimes, and juries may be more prone to overestimate the probative value of prior sex crimes than of crimes that do not seem to be the product of a depraved character. The relative probative value of different kinds of crimes does not alone make the case for an exception to Federal Rule 404(b); one must also consider costs, although a non-economist should not have to remind an economist of this.

Posner’s analysis of Federal Rules 404, 413–15, and 609 could also be strengthened by greater attention to institutional, as opposed to individual, variables. The plea bargaining process, which in some jurisdictions disposes of ninety percent or more of the criminal docket, seems likely to disproportionately yield up two kinds of past offenders for trial: innocent defendants and guilty defendants who have little to lose by going to trial because they cannot win substantial concessions by bargaining. The chance that innocent past offenders will face trials is likely to be compounded by police and prosecutorial practices. Police often begin an investigation with attention to “usual suspects” and seek to build cases against them. Prosecutors assessing the strength of cases and deciding whether to drop charges will consider the use they can make of a defendant’s past convictions if a case goes to trial. These proclivities, which can entangle the innocent in prosecutions, are likely to be greatest when a defendant’s past crimes are highly prejudicial or

182 More precisely, it is likely to leave a disproportionate number of offenders who confront weak cases against them. Like Posner elsewhere in his paper, I assume that an important reason why the case against a defendant seems weak is that the defendant is in fact innocent.
are thought to be highly predictive of future behavior. So if police
and prosecutors share Posner's intuition about the special link be-
tween character and sex crimes, then a past conviction for a sex
crime could be less predictive of guilt among cases tried for sex
crimes than convictions for crimes like theft are of tried theft cases,
even if sex criminals are more likely to recidivate than thieves. 
Again, abstract analysis resolves nothing. Empirical data are
needed.

Or empirical evidence may be irrelevant. One may reasonably
argue that treating offenders who have paid their debts to society
as if they have started fresh is an important value that should shape
trials, even at the cost of excluding probative evidence. The eco-

tomic perspective does not recognize such values if it is rooted
only in the presumed importance of accurate verdicts to deter-

rence, as it is in Posner's version of the model. Hence, if evidence
law is evaluated only by its tendencies to serve economic values,
debate about the desirability of different evidentiary rules would
be impoverished.

Posner further argues that if prior crimes evidence were freely
admissible, and jurors were highly prone to convict habitual of-
fenders regardless of guilt, then the deterrence of habitual
offenders would be undermined. This builds nicely on his earlier
argument about the importance of accurate verdicts to deter-

rence, but as I note earlier, there are substantial weaknesses in
the argument. Although if the deterrence argument applies to any-

one, it should apply to habitual offenders, marginal effects are
likely to be tiny. Prosecutors should not intentionally seek to
convict innocent defendants, and even habitual criminals will not
usually be convicted without substantial other evidence of their
criminal behavior. For the same reason, although I do not quarrel
with the economic logic that suggests that given limited prosecuto-


183 Posner, supra note 6, at 1526.
184 Id. at 1483–84.
185 Since habitual offenders have a greater chance than most people of being convicted
of something they did not do and have already shown a willingness to engage in
crime, the argument that they will commit crimes because they feel they will be
punished for crimes even if they do not commit them appears to fit their situation
better than that of people who have never done anything criminal. But even among
habitual offenders, false convictions are likely to be unusual, and one habitual
offender may know of few, if any, instances where this has actually happened.
rial resources, prosecutorial attention to first time offenders will diminish as the expected payoff from prosecuting habitual offenders increases.\textsuperscript{186} I would expect the real world effects of any such tendency to be de minimus and of little policy importance. The more general point is that Posner seldom pays attention to the likely magnitude of the effects his economic analysis predicts. Hence, even if his assumptions are reasonable and the effects he predicts occur, absent empirical investigation, we seldom have reason to believe that the effects will be sufficiently large to justify the policies he espouses.

Despite my quarrels with his argument, I think Posner’s discussion of character evidence is more successful than most other portions of his article. He presents new arguments that deserve to be considered in the character evidence debate, and he reinforces existing arguments from what, in some instances, is a novel perspective. Although I believe his assumptions about how economic incentives play themselves out are far too weakly grounded to justify drawing practical normative implications from his analysis, it is also true that so little is known empirically about the implications of evidence rules for behavior that all of us, including lawmakers, base much of what we prescribe on poorly grounded assumptions. Hence, one cannot reject Posner’s work simply because he makes assumptions, but at the same time, one must reflect on the plausibility of his assumptions and the values and behavior they ignore.


The hearsay rule, which is at the heart of many evidence courses, is barely discussed by Posner. He suggests that it is probably not needed given Federal Rule 403 and the fact that ordinary people are used to evaluating hearsay.\textsuperscript{187} Posner does, however, see an economic justification for the hearsay rule. He believes it serves to terminate the search for evidence before the additional benefits of searching exceed incremental costs, with exceptions existing for

\textsuperscript{186} Posner, supra note 6, at 1526.

situations where this is not likely to happen. One can sympathize with Posner for not wanting to get too deeply entwined in the hearsay thicket, but it is disappointing that he did not try to penetrate it further, particularly as his efforts to bypass it are not entirely convincing.

I would be quite surprised if the hearsay rule served to terminate evidentiary searches at the point of diminishing returns. Most of the costs of such searches occur before trial. Before trial, there is considerable incentive to uncover relevant hearsay whether or not it will be admissible because, as the discovery rules recognize, inadmissible hearsay may point to admissible evidence. Moreover, there are so many ways that statements may be used for non-hearsay purposes or may be fit into an exception that a lawyer would be foolish not to search for hearsay evidence. If it were relevant, there is quite likely to be some way to get it admitted.

As for the presentation of evidence, which in Posner's model is part of the tribunal's search process, Posner's intuition seems right, at least in theory. Federal Rule 403 does everything one could ask of the hearsay rule. Indeed, in theory it does a better job, for the ideal, all-knowing judge would always correctly balance the probative value of hearsay against the costs of confusion, waste of time, and prejudice that the presentation of hearsay would entail. It is true that a blanket rule necessarily errs in a number of cases, but by the same token, no one has yet found the ideal judge.

Although Posner slights the hearsay rule, there is much that an economic analysis of the rule could address. Arguably, the entire rule is justifiable on economic grounds. Given that we want to keep unreliable evidence from the jury, it may be cheaper financially, cognitively, and in terms of cost effectiveness to do so by a rule that is admittedly both over- and underinclusive than to do so by the decisions of a less than ideal judge. With such a rule, the parties may do considerable self-policing—so many issues that would be brought to the judge in the absence of a rule would never arise.

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188 Posner, supra note 6, at 1530.
189 The text here, like Posner's argument, simplifies a bit. A judge applying Federal Rule 403 would not always exclude hearsay worth less than the time it takes to present it. This is because Federal Rule 403's "substantially outweigh" language mandates what, in the ideal world, would be a less than optimal tradeoff. See supra text accompanying notes 164–171.
The bright-line character of the hearsay rule (at least as compared to Federal Rule 403) might make decisions easier, both at trial and on appeal. With a clear rule, parties can more efficiently plan their cases, because they are less likely to be surprised by what evidence is admissible. Judicial biases will have less effect on admissibility decisions, and, in order to reverse a trial judge, appellate courts will have to point to a rule violation rather than simply disagree with the trial judge's exercise of discretion.

Moreover, some specific exceptions seem in large measure to be justified on economic grounds. Federal Rule 803(6) pertaining to business records and Federal Rule 803(8) dealing with official records are, for example, justified not just because the evidence they admit is likely to be reliable, but because of the particularly high costs of bringing those who prepare business and official records to court. The same could be said of rules regarding learned treatises,190 ancient documents,191 prior convictions,192 and, indeed, most of the Federal Rule 803 provisions from 803(9) on. Using the broader economic perspective Posner champions, which sees verdict accuracy as maximizing efficiency through deterrence, a further economic basis can be found for all hearsay exceptions, since all are aimed at drawing a line between evidence that aids and evidence that hinders accurate decisionmaking.

Of course, against these economic virtues, one would have to balance costs. One major cost, as any law student could testify to, is the cost of learning the rule and its exceptions, not to mention the additional money paid for texts that, to judge by my own,193 are about twenty percent longer than they would be without the rule. There are also the efficiency costs to admitting unreliable and excluding reliable hearsay, as well as the costs of having to secure live witnesses to matters that could be proven just as convincingly and far more cheaply by hearsay. No doubt the reader can add to this list.

I can, however, treat my own economic justifications for the hearsay rule as critically as I have treated many of Posner's ideas. Some of my arguments, such as the economic justification for Federal

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190 Fed. R. Evid. 803(18).
192 Fed. R. Evid. 803(22).
193 See Lempert et al., supra note 54.
Rule 806, are already part of the common sense of the profession. Other assumptions I have made, although not unreasonable, may be wrong. Given the tendency of appellate judges to defer to trial judges' discretion, making the admission of hearsay a matter of discretion under Federal Rule 403 as opposed to a matter of rule might diminish rather than increase appellate reversals for hearsay reasons. Normatively, my economic analysis, like so many of Posner's, provides almost no guidance. We do not know empirically how much valid evidence the hearsay rule keeps out or how much misleading evidence it admits, nor do we know what judges would do if admitting hearsay were always a matter of discretion. Also, the analysis ignores changes in behavior that the demise of the hearsay rule might stimulate, as well as how the balance of advantage at trial might change depending on a party's ability to create or gather hearsay. Finally, the analysis ignores important noneconomic values that motivate the hearsay rule (and its close relative, the Confrontation Clause). Even when courtroom testimony is not constitutionally required, the virtues of in-court testimony that Justice Antonin Scalia so eloquently described in his opinion in *Coy v. Iowa* still exist. These advantages are lost when hearsay is admitted.

My ability to identify as many shortcomings in my own economic analysis of the hearsay rule as I have in most of Posner's evidence rule analyses tells me that, if the goal is to say something useful about evidence law that goes beyond common sense, the difficulty lies not in Posner but in his project. The hearsay rule is not different from other rules I have discussed. Economics does not obviously provide information, methods, or theory likely to enhance our understanding of the rule or to increase our ability to improve it. The common sense injunction I followed, to examine the hearsay rule in light of its costs and benefits, does not require economics as its herald. Although economics might contribute to understanding or reforming the hearsay rule if we had considerably

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194 For a discussion of these matters see id. at 702-07.
195 487 U.S. 1012, 1018 (1988). Justice Scalia notes: "The phrase still persists, 'Look me in the eye and say that.' Given these human feelings of what is necessary for fairness, the right of confrontation 'contributes to the establishment of a system of criminal justice in which the perception as well as the reality of fairness prevails.'" Id. at 1018-19 (citations omitted).
more empirical information than we now have about trial processes and the implication of the rule for judge, jury and litigant behavior, at the moment we lack adequate information about these matters and seem a long way from acquiring it. So with hearsay, as with other evidence rules, I do not see economics as offering important, novel contributions.

5. Marital Privilege

Posner's discussion of privileges has some of the same weaknesses as my discussion of hearsay: untested if not unrealistic assumptions; a failure to acknowledge important noneconomic values; and an analysis that, in the absence of reliable empirical information, becomes indeterminate as more factors are considered. Posner sees the marital privilege as designed to protect statements to spouses for fear of weakening marriages by making spouses distrustful of each other; although he has doubts about the validity of this rationale, he offers no other.\textsuperscript{196} Posner can be excused for giving only this reason; it is the establishment line.\textsuperscript{197} But as I have suggested elsewhere,\textsuperscript{198} and as others before me have recognized,\textsuperscript{199} there are good non-utilitarian reasons for respecting intimate relationships and for not wanting to force one spouse to be the instrument of the other's downfall. As Professor James Gardner put it, "something in the spirit is shocked and hurt at the betrayal of former confidences, at the revelation of the secrets of the bed-chamber, and perhaps at the vindictiveness of alienated ex-spouses."\textsuperscript{200} Moreover, putting aside these arguments, which McCormick denigrates as "interests of delicacy,"\textsuperscript{201} we might want a society in which the police know they cannot get evidence by coercing a presumably innocent spouse to cooperate in punishing a perhaps guilty loved one.\textsuperscript{202}

\textsuperscript{196} Posner, supra note 6, at 1531.
\textsuperscript{197} Trammel v. United States, 445 U.S. 40, 44 (1980); Jeremy Bentham, A Treatise on Judicial Evidence 238 (London, J.W. Paget 1825); 8 Wigmore, supra note 8, § 2332.
\textsuperscript{198} Richard O. Lempert, A Right to Every Woman's Evidence, 66 Iowa L. Rev. 725 (1981).
\textsuperscript{200} Id. at 489.
\textsuperscript{201} McCormick on Evidence § 90, at 180 (1st ed. 1954).
\textsuperscript{202} This was what happened in the two cases in which the Supreme Court faced the issue of whether the witness spouse or defendant spouse had the power to invoke
Posner also speculates about the detrimental effects of the privilege, especially in lowering the cost of crime for married people and so encouraging people to commit crimes. Since a criminal life is destabilizing, he suggests the privilege might actually have the perverse effect of harming marriages. I would love to see even anecdotal evidence about marriages that broke up because a spouse committed a crime that he would not have committed but for the privilege. Posner suggests, however, that the privilege might not cost the state much evidence, because if its abolition were widely known, spouses would be less likely to make damaging admissions to each other. Still, Posner suggests, the benefits from discouraging crime are not wholly negligible. However, if we push the economic analysis further, it appears that the privilege might forestall crime. Regardless of the privilege, a substantial number of marriages today break up with some bitterness. The privilege for confidential marital communications only protects a criminal from an ex-spouse’s (or spouse’s) testimony in court. It does not stop her from going to the police, informing them of her husband’s crimes, and giving them solid leads that will result in his conviction. If abolishing the privilege leads to less communication by spouses about their criminal activities, angry spouses or ex spouses would have less to disclose about their mates. Hence, abolishing the privilege might lead to more rather than less unpunished crime and lessened

(and waive) the adverse testimony variant of the marital privilege. This version of the privilege provides, with some exceptions, that one spouse cannot be required to testify against the other in a criminal case. In Hawkins v. United States, where the Court maintained the traditional rule vesting the privilege in the defendant spouse, the defendant’s wife had been detained as a material witness and told that she would be freed if she agreed to testify against her husband. Hawkins v. United States, 358 U.S. 74, 82–83 (1958) (Stewart, J., concurring). In Trammel v. United States, where the Court decided the witness spouse should be the holder of the privilege, the government promised the defendant’s wife, who was apparently not innocent, lenient treatment for her alleged part in the crime if she agreed to testify against her husband. Trammel, 445 U.S. at 42–43.

203 Posner never distinguishes between the adverse testimony privilege and the privilege for confidential marital communications. He seems here to be talking about the adverse testimony privilege for he says that the privilege might induce some people to marry who would not otherwise do so, and the adverse testimony privilege is more likely to have this effect; but he also says a stronger argument could be made for the privilege if it were limited to civil cases, and the adverse testimony privilege usually does not apply in civil cases.

204 Posner, supra note 6, at 1531. Here Posner is clearly thinking of the privilege for confidential marital communications.
deterrence. Of course, if criminals were aware the privilege did not prevent spouses from talking outside of court, they might react by not disclosing their crimes to their spouses.

But there is no sense in continuing along this chain of reasoning, even if it is fun to spin out possibilities. We simply do not know what the implications of the privilege are for capturing criminals or whether the marital privileges matter sufficiently to make a difference in crime or its deterrence. Without empirical information, the economic approach is again indeterminate in its implications for the rules of evidence, even when only values recognized by economics are considered. Add to the indeterminacy of the economic analysis the important implications of noneconomic values, and a strong case can be made on Federal Rule 403 grounds (waste of time, more prejudicial than probative) for excluding economic analyses altogether from discussions of the spousal privilege. [?] But this will not help. Instrumental analyses resting on ungrounded empirical assumptions are common in discussions of privileges, and they influence courts and legislatures alike. Economists might as well join in the fray.

6. Attorney-Client Privilege

Posner next briefly explores the attorney-client privilege. The logic of his analysis leads him to conclude that abolishing the attorney-client privilege would make people wary of confiding in lawyers, unless they knew what admissions would be damaging, which would in turn give people an incentive to learn more law, so “[a]brogating the privilege might thus increase enrollment at law schools!”205 The first part of this chain of reasoning is entirely orthodox, but the notion that abolishing the privilege might increase law school enrollments is an original contribution of the economic perspective. Again, however, there is an exclamation mark; I assume Posner is joking, and I did smile. But the fact that, absent empirical evidence, there is no obvious stopping point in the chain of economic reasoning until this absurd conclusion suggests the limitations of economic analysis rather than its utility. Aside from this point, Posner’s observations about the attorney-client privilege and what it implies for evidence gathering are reasonable but completely familiar.

205 Id. at 1532.
7. The Mapp Rule

Posner makes an interesting point in discussing the Mapp\textsuperscript{206} exclusionary rule. If effective sanctions were substituted for the exclusionary rule, he tells us, there would be no evidentiary gains, because the sanctions would presumably deter the very searches that now yield suppressed evidence.\textsuperscript{207} For this reason, he suggests that a search be deemed illegal only if the evidentiary benefits do not at least equal the cost to the victim or that illegal searches be sanctioned only by suits for damages. The first suggestion is no solution at all. It is hard enough to place a value on removing one drug dealer from the streets along with a pound of cocaine, and it is yet more difficult to place a value on twenty years behind bars, except by arbitrary assumptions, which in practice would surely come to favor the state. More importantly, unlike the exclusionary rule, which, if it had its intended effect, would eliminate most searches without probable cause because little would be gained from them,\textsuperscript{208} Posner's suggestion does not help those whom society is most interested in protecting: people who are stopped without probable cause and suffer the indignities of a search, although they have nothing illegal on them. Posner's second solution could protect innocent victims only if the costs of suing were less than expected damage awards. I do not think this is likely. A better tactic might be for police to give everyone searched a ticket redeemable for, say, five dollars, regardless of whether contraband was found. If the police complied (a big if), police commanders would know which officers had the worst cost to evidence ratio, and they might establish reasonable search norms and work to control the overzealous.\textsuperscript{209}

\textsuperscript{207}Posner, supra note 6, at 1533.
\textsuperscript{208}I use the words "most" and "little" because the police might value harassing people or removing guns or contraband from the streets.
\textsuperscript{209}If one wanted to increase deterrence, the money for search tickets would come from a bonus fund the police would receive each year. To be sure there was no overdeterrence, the fund could be replenished for each hit. Of course then one might have to have stiff penalties for planting evidence in order to reduce the temptation to do this. Again, in the absence of empirical evidence, the economic perspective provides ideas but no guidance.
8. The Privilege Against Self-Incrimination

Posner devotes the most space in his consideration of privileges to the privilege against self-incrimination. As many others have, he questions its value. Although he acknowledges the danger of torture by the police if the provision did not exist, he feels that problem can be dealt with by outlawing torture and other high pressure forms of police questioning. To think that, absent the Fifth Amendment, a law would be enough to moderate police tactics is optimistic given the psychologically coercive tactics that are sometimes used today despite the protection of *Miranda* and the Fifth Amendment. Posner also suggests that if people were deciding whether to have a Fifth Amendment from behind a Rawlsian veil of ignorance, most people would not want it since they would not expect to be criminals. I wonder. Even those who would not expect the absence of the privilege to hurt them might not want to live in a society where some people were hurt (for example, tortured or otherwise coerced to confess) because the privilege did not exist. Moreover, the privilege protects innocent people as well as criminals, so the fact that people do not expect to be criminals does not mean they would not want the privilege.

Posner acknowledges that if innocent people benefit from the Fifth Amendment, the economic case for its abolition is problematic and depends on empirical evidence. Perhaps if police interrogators put no pressure to speak on those they arrest, but simply did not give *Miranda* warnings, the innocent would lose nothing from the privilege’s abrogation. This will not happen. Even with the protection of the privilege and the prophylactic rules that surround it, suspects who confess often do so because of the psychological pressure the police place on them, and mistaken verdicts can result.

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212 Id. at 1031–32.
213 Jim Dwyer et al., Actual Innocence: Five Days to Execution and Other Dispatches from the Wrongly Convicted 78 (2000). In Japan, which does not have a Fifth Amendment, two cases in which accused criminals were mistakenly convicted of murder and sentenced to death were a major impetus for considering whether to institute jury trials. In each case, the state’s evidence consisted largely of a confession. As I write, the Commonwealth of Virginia just freed a man from death row when his innocence was shown by DNA evidence. His conviction was based on a confession.
Posner also argues for allowing guilt to be inferred from a defendant’s refusal to take the stand.\textsuperscript{214} He is clear about his reasons. He says he is hard pressed to think of a credible explanation for why an innocent person might fear the consequences of testifying, and he thinks that the danger of an innocent person making admissions that would lead the jury to think him guilty may be theoretical rather than real.\textsuperscript{215} If he is right, his recommendations make sense to me. But Posner is forgetting his own analysis of Federal Rule 609’s provision for impeachment by prior convictions, which is one reason an innocent person might not want to testify. The prospect of facing impeachment by evidence about one’s prior bad acts or by testimony that one has a bad character for truth and veracity is another. Also, the literature on eyewitness testimony indicates that juries use witness confidence as a cue to accuracy, even though confidence seems to reflect aspects of personality that have little if any relationship to whether testimony is correct.\textsuperscript{216} An innocent defendant who would be a nervous witness might rightfully fear he would be hurt rather than helped by taking the stand, especially if the jury were to contrast his demeanor with that of a confident police officer, eyewitness, or expert witnesses testifying for the state. Finally, the state invariably has good faith reasons for arresting and prosecuting defendants. An innocent defendant might hurt his case by confirming portions of the state’s case; for example, that he owns a gun of the same caliber as the one used in a killing. In short, there are many reasons to doubt Posner’s suggestion that the innocent will always waive the Fifth Amendment to signal their innocence. Allowing an accused’s silence to be held against him will, for some innocent people, increase the chance of a wrongful conviction, either because the inference hurts them or because the inference persuades them to testify, which opens the door to prejudicial im-

\textsuperscript{214} Posner, supra note 6, at 1534–35.
\textsuperscript{215} Id. at 1535.
peachment or other kinds of harm. Of course there would be benefits to putting a price on claiming the Fifth Amendment—presumably more guilty people would be convicted. Theory, however, says nothing about what the tradeoff will be. Wise policy requires empirical evidence that we do not have and have little prospect of acquiring. But even reliable empirical evidence supporting Posner’s position would not necessarily end discussion, for it is not unreasonable to value the privilege for what it says about human dignity, even if its abrogation would diminish mistaken acquittals without increasing wrongful convictions.

9. Expert Evidence

Posner devotes more space to expert witnesses than he does to any other topic in his third section, perhaps because experts pose particularly vexing problems for the law. Much of Posner’s discussion and many of his recommendations for reform do not draw especially on economics, and where they do, the implications of economic reasoning are usually indeterminate, resolvable, in principle, only by empirical investigation and, realistically, probably not resolvable at all.

In discussing experts, Posner makes a number of implicit assumptions about experts and trials that are perhaps (and in some cases certainly) not true as a general matter. For example, he argues that experts can be made to hold themselves to high standards

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217 This may, of course, happen today, for the jurors can make adverse inferences even if they are told not to treat an accused’s failure to testify as evidence of guilt. Posner makes the interesting, and I think correct, suggestion that if jurors are to take seriously the admonition that they are not to infer guilt from the fact that the accused has not testified, it will help if they are given a credible reason why an innocent accused would not take the stand. However, the most likely explanation, fear of impeachment, might do more harm than good. Although Kalven and Zeisel found that not taking the stand was about as harmful as taking the stand and being impeached by prior crimes, defendants who do not take the stand are sometimes acquitted. Kalven and Zeisel, supra note 24, at 180.

218 Posner’s most intriguing and original observation, and the one that most clearly represents a law and economics perspective, is his suggestion that a social cost of expert testimony is the deflection of academic researchers from scholarly work to testifying. But then Posner goes on to suggest reasons why social costs may not exceed social gains after all. He properly notes, as a gain, enhanced deterrence that may result because expert testimony increases the likelihood of a correct verdict, but his economic perspective again seems to give no weight to the value of just outcomes. Posner, supra note 6, at 1540.
by the threat of reputational sanctions. But Posner’s image of an expert seems to be the academic expert or an employee of a consulting firm testifying to an issue of science or economics. The most commonly found experts in civil litigation are, however, physicians, who are most often treating physicians or other clinicians. In criminal cases they are usually police officers or forensic scientists employed by the state. It is unlikely that the reputational sanctions that Posner sees as disciplining expert testimony will have much bite with such witnesses. Moreover, it is a mistake to suppose that information about an expert’s past failings as a witness will be uncovered by a later litigant or used effectively if it is. The trial judge, who, according to Posner, might destroy the market value of an expert through public criticism is unlikely to do so, and when he does so he may be wrong. What is more likely is that a judge who feels an expert’s testimony deserves no credence will exclude it under Daubert. A Daubert exclusion may itself carry a signal, but if taken as an indicator of junk science or expert incompetence, it carries a substantial danger of being misread.

In Daubert, for example, the experts whose testimony was later excluded were reputable, and standing by itself, their expert testimony was, for the most part, not unsound. In the face of substantial epidemiological evidence that showed no association between Bendectin and birth defects, however, it would have been unreasonable for a jury to credit the plaintiff’s evidence over the defendant’s, and a directed verdict would have been proper had the case reached trial. It was for this reason and not because of shoddy science that the expert testimony was excluded and summary judgment issued. The signaling value of summary judgments or directed verdicts is

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220 Consider Texas’s so-called “Dr. Death,” who regularly testified that homicide defendants were sure to be dangerous, although the psychology profession publicly stated that it was impossible to predict dangerousness with such confidence. See Barefoot v. Estelle, 463 U.S. 880, 896–902 (1983).

221 Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993). The Supreme Court case dealt with the proper interpretation of Federal Rule 702 regarding the admissibility of expert evidence. The substantive issue at trial was whether the popular morning sickness drug Bendectin had teratogenic effects. Id.

222 Id. at 583 & n.2; Ronald Simon, Some Answers to the Daubert Puzzle, 9 St. John’s J. Legal Comment. 37, 41 (1994).
also weak, because expert testimony may bear on only part of a case, meaning that a case may be lost on a directed verdict or summary judgment although an expert’s testimony is persuasive on the point for which it is offered. Criticism by a judge or a devastating cross-examination in one case may, as Posner suggests, come back to haunt an expert in future cases; but often it will not, because opposing parties in later cases will not have the information. Inconsistencies in an academic expert’s writing may also be overlooked. While in some high stakes cases it would be derelict not to do a searching examination of an opposing expert’s history, in other cases different kinds of trial preparation will be wiser investments.

Posner, like many non-economist commentators,223 urges more use of court-appointed experts.224 But like others before him, he ignores structural barriers to the use of such experts, particularly the difficulty, noted by Professor Samuel Gross, of preparing an expert to testify in an adversary system.225 This is not to say that innovative uses of experts should not be pursued. For example, court-appointed statistical experts might work with the parties’ experts before trial to develop a common data file or to resolve model specification issues.226 Or an expert might be appointed to answer juror questions about other expert evidence without giving an opinion on the merits.227

Posner’s other cures for the problems posed by expert testimony include (1) having professional associations maintain abstracts of members’ testimony along with criticisms by opposing counsel or other experts and (2) requiring lawyers to disclose the names of all experts they consult in order to discourage shopping until the rare

224 Posner, supra note 6, at 1539.
225 Gross, Expert Evidence, supra note 219, at 1138–41 (explaining the difficulty of preparing expert witnesses).
expert who agrees with the lawyer's position is found. Neither of these recommendations rests especially on economics, and each has its difficulties.

Although I think that there is a place for peer review of expert testimony,228 I do not think Posner's plan is workable. Abstracts of expert testimony may fail to capture the important qualifications or nuances of an expert's testimony, and opposing counsel or experts may have personal as well as professional reasons to want to sully an expert's reputation. I expect professional associations would not want to have to resolve such disputes or to face the danger of lawsuits if they decided wrongly. Perhaps occasional article-length synopses of, or comments on, expert testimony are a better way to proceed.229 If all experts in a discipline had to turn in copies of their expert testimony to their disciplinary association with a risk it would be chosen for commentary in a discipline journal, sloppy or dishonest expert testimony might be deterred.

Requiring parties to list all experts they consult has much to commend it for the reason Posner gives. At the same time there are serious potential costs. A law firm knowing that it would have to reveal the names of all the experts it consults would want to ensure that the first expert they consulted agreed with their position. This would lead them to seek out experts who, through their writing, past testimony, or otherwise, had signaled the positions they were likely to take in particular kinds of cases. But people with strong prior positions and a willingness to signal them might not be the best experts in their fields. They would certainly not be the most open-minded. Also, there are benefits from expert shopping. If a party goes to the two or three best experts she can find and none thinks she has a case, the rational response will ordinarily be to settle the litigation rather than to continue searching in the hope of finding an expert who is both favorable and credible. Whether the costs of discouraging expert shopping exceed the benefits of discouraging it, and of disclosing it when it does occur, is an em-

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228 A panel on Statistics and the Courts on which I served made such a recommendation. The Evolving Role of Statistical Assessments as Evidence in the Courts 183 (Stephen E. Fienberg ed., 1989).

pirical question. Perhaps a wise compromise is to require parties to disclose the number of experts consulted, their fields, and what each was asked to do, while allowing them to keep secret the names of the experts consulted and their views. Thinking about incentives as an economist might brings me to this position, but economics is not needed for such thinking. Evidence scholars do it all the time.

D. Posner's Conclusion

Posner ends his article by specifying seventeen points he thinks he has established. I have already commented on many of the lessons that Posner thinks economics can teach. Here I shall only comment on Posner’s first point—his effort to summarize what economics can offer evidence law.

Posner writes that “[t]he process by which evidence is obtained, presented, and evaluated in a trial can be fruitfully modeled in economic terms,” and he claims that “[e]conomic analysis also . . . provides a guide to optimal regulation of evidence”; hence, “[i]t can . . . be used as a criterion for evaluating the law of evidence.” If I disagree. In commenting on Posner’s separate claims, I think I have established that, at least until we have more reliable empirical information, economic analyses of the kind Posner employs will ordinarily have little to offer evidence law. Both positively and normatively, Posner’s economics does not adequately address evidence law’s problems, except perhaps in some narrow areas or where economics tracks common sense. In the latter instance it is not needed. Consider one aspect of Posner’s conclusion: “Economic analysis of evidence reveals, among other things, that the amount of evidence generated in an unregulated adversary system may be more or less than the social optimum.”

Evidence scholars are not used to thinking in terms of the social optimum of evidence, but I dare say if they were, not one of them would need to resort to economic analysis to know what Posner claims his economic analysis reveals.

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230 Posner, supra note 6, at 1542.
231 Id.
232 I know; I am not being fair to Posner. His point, I assume, is that in an abstractly ideal system, the adversarial presentation of evidence is compatible with both the over- and underproduction of evidence from the standpoint of welfare maximization. If this is true, it has a certain abstract interest. But what actually happens in
I began by hypothesizing that the reason few economists had turned their attention to evidence law was because economics did not have much to offer students of the rules of evidence. I turned to Posner's article in the spirit of hypothesis testing. Given Posner's prominence in championing the use of economics to understand legal rules and make normative prescriptions for law, as well as the fact that his article is the first attempt to survey the field of evidence from the perspective of economics, it was reasonable to expect that if any article could make the case for the value of economics in understanding evidence law, it would be this piece. My conclusion is that the case has not been made.

Posner, in fact, foreshadows this conclusion in the modest claims he makes for the economic analysis of evidence law at the start of his article. First, he notes that economics does not furnish many of the tools he will draw on in his effort to better understand evidence law. He also draws on a psychologically-oriented empirical literature on trials, decision theory, and ideas of statistical inference, intentionally taking an "eclectic" rather than a "narrowly economic" approach.233 Posner is also modest in what he thinks his approach will ultimately offer. For the most part, he says, it will serve "more to refine and extend [rather] than to challenge the intuitions of the legal professional."234 Even with these modest goals, I think that in most areas Posner's article falls short. But his effort is decidedly not an effort at "economic imperialism." Moreover, even if he overclaims at points, Posner is usually well aware of the indeterminacy of the economic perspective given current empirical knowledge, and he also knows that much of what he says is not "news" in the field. Yet I, for one, hope he will stay interested in

adversarial systems is an empirical question. At the moment we do not have the faintest empirical notion whether the average adversarial or inquisitorial system comes closer to producing the socially optimal amount of evidence. Indeed, we do not have the faintest empirically grounded notion of what the socially optimal amount of evidence is, within or across cases. I suppose, if the only value that counted was achieving a correct verdict, it would be the minimum amount of evidence needed to reach that verdict. But, since we do not know when we start which verdict is correct, this perspective is of no help in determining when a search should be terminated. Similarly, I think the conclusion that the adversary system may generate more or less evidence than the social optimum is of no help in thinking about the desirability of the adversary system or about any problem of evidence law or policy.

233 Posner, supra note 6, at 1479.
234 Id. at 1485.
evidence law. Despite my many criticisms, I think the field can only gain from his provocative involvement.

IV. OTHER ECONOMIC ANALYSES

Posner is not the first person to apply an economic perspective to the analysis of evidence law, although he is the first to attempt such an encompassing statement. One consequence of the broad task Posner sets himself is that he seldom devotes more than a few paragraphs to topics about which other scholars writing from an economic perspective have written entire articles. Perhaps these articles are a better test than Posner’s article of my hypothesis that economics has little to offer evidence law beyond what common sense tells us.

It seems fair to look at the challenge these other articles pose for my hypothesis from a market-oriented perspective. As Posner says at the outset of his article, and as a search done for me by the University of Michigan Law School’s staff confirms,235 economic analyses are not common in evidence scholarship, although law and economics approaches have been common in other common law scholarship for decades.236 This itself is a sign that economics has little to offer evidence law. If the field of evidence could make good use of such scholarship, if economic models provided more than a common sense understanding of evidence rules, or if an economic logic unified evidence law, one would have expected a number of law and economics scholars to have plowed this turf long before now.237

More importantly, when we look at the scholarship that has been produced by people writing from a law and economics perspective,

235 I am grateful to Nancy Vettorello and those she supervises for conducting this search. It was done in January 2001.

236 Although the evidence rules are now codified in the federal and most state jurisdictions, much of what has been codified is similar to earlier common law formulations. If there is an economic logic to the common law of evidence, similar to what has been claimed for tort, contract, and property law, it should permeate modern evidence codes as well.

237 I think this is true even if the suggestion I make about incentive effects, supra text accompanying note 52, holds. Although I do not think most funding sources will seek to draw the attention of economists to rules of evidence, the ability to make important contributions to an area of law is also a substantial attraction. If there were obvious important contributions economists could make to evidence law, I think more would have been drawn to the field by now.
we see few signs of influence within the field. To determine this, I asked the University of Michigan Law Library to do an exhaustive search for articles that examined rules of evidence from an economic perspective and then to investigate all citations to those articles. Table One gives the results of this investigation. It lists the article, the author(s), whether an author is listed as an evidence teacher in the AALS Directory, the total number of articles each piece is cited in (excluding self-citations), the number of citations by scholars listed in the evidence law section of the most recent AALS Directory, the yearly rate of citations overall and by evidence scholars through the year 2000, and the evidence rule or issue that is the subject of the article.

The table may well miss some articles, but if only a few are missed, it should not matter, for the articles found are likely to be biased in favor of more rather than less influential pieces. A more serious deficiency, for some purposes, is the lack of a control group. Maybe evidence articles receive few citations no matter how they approach their subject. If I were trying here to show that articles that take an economic approach to evidence are less influential than articles that take another approach, this would be a serious and hard to remedy deficiency.\textsuperscript{238} When my thesis is that articles taking an economic approach to evidence have had little influence on the field, however, it does not matter if other articles have had little influence as well.

\textsuperscript{238} Having gotten into the spirit of the economics perspective, I realized that the cost of trying to develop a valid control sample was not worth the benefits. To do so one would have to identify articles on the same topics as the economic articles I identified; they would have to be by scholars similar in prominence to the authors of these articles, and the works should be of similar length and published in similarly prominent and accessible journals.
Table One: Citations to Articles That Take an Avowedly Economic Approach to Issues in Evidence Law

<table>
<thead>
<tr>
<th>Article</th>
<th>Author(s)</th>
<th>Evidence Section Author (ESA)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Economics of Trials: Adversarial Process, Evidence and Equilibrium Bias</td>
<td>Andrew F. Daughety, Jennifer F. Reinganum</td>
<td>No</td>
<td>2000</td>
</tr>
<tr>
<td>Keeping society in the dark: on the admissibility of pretrial negotiations as evidence in court</td>
<td>Andrew F. Daughety, Jennifer F. Reinganum</td>
<td>No</td>
<td>1995</td>
</tr>
<tr>
<td>Lawyers and Confidentiality</td>
<td>Daniel R. Fischel</td>
<td>Yes</td>
<td>1998</td>
</tr>
<tr>
<td>Toward a Partial Economic, Game-Theoretic Analysis of Hearsay</td>
<td>Richard D. Friedman</td>
<td>Yes</td>
<td>1992</td>
</tr>
<tr>
<td>A Presumption of Innocence, Not of Even Odds</td>
<td>Richard D. Friedman</td>
<td>Yes</td>
<td>2000</td>
</tr>
<tr>
<td>The Practice and Theory of Evidence Law-A Note.</td>
<td>Thomas Gibbons, Allan C. Hutchinson</td>
<td>No</td>
<td>1982</td>
</tr>
</tbody>
</table>

245 76 Minn. L. Rev. 723 (1992).
247 2 Int'l Rev. L. & Econ. 119 (1982).
<table>
<thead>
<tr>
<th>Evidence Issue</th>
<th>Total Cites</th>
<th>Cites per Year</th>
<th>Cites by ESA</th>
<th>Cites per year by ESA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attorney-client privilege/Work product</td>
<td>15</td>
<td>1.5</td>
<td>3</td>
<td>.3</td>
</tr>
<tr>
<td>Evidence gathering Attorney-client privilege, work product</td>
<td>19</td>
<td>2.1</td>
<td>3</td>
<td>.3</td>
</tr>
<tr>
<td>Evidence gathering</td>
<td>1</td>
<td>—</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>Settlement offers (FRE 408)</td>
<td>2</td>
<td>.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Privileges</td>
<td>150</td>
<td>7.9</td>
<td>10</td>
<td>.5</td>
</tr>
<tr>
<td>Privileges</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Hearsay</td>
<td>10</td>
<td>1.1</td>
<td>7</td>
<td>.8</td>
</tr>
<tr>
<td>Presumption of innocence</td>
<td>0</td>
<td>—</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>Relevance/ Burden of proof</td>
<td>2</td>
<td>.1</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>Article</td>
<td>Author(s)</td>
<td>Evidence Section Author (ESA)</td>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------</td>
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<td>-------</td>
<td></td>
</tr>
<tr>
<td>Allocating the Burden of Proof(^{246})</td>
<td>Bruce L. Hay</td>
<td>No</td>
<td>1997</td>
<td></td>
</tr>
<tr>
<td>Burdens of Proof in Civil Litigation: An Economic Perspective(^{247})</td>
<td>Bruce L. Hay, Kathryn E. Spier</td>
<td>No</td>
<td>1997</td>
<td></td>
</tr>
<tr>
<td>Legal Advice About Information to Present in Litigation: Its Effects and Social Desirability(^{248})</td>
<td>Louis Kaplow, Steven Shavell</td>
<td>No</td>
<td>1989</td>
<td></td>
</tr>
<tr>
<td>Daubert’s debut: The Supreme Court, the Economics of Scientific Evidence, and the Adversarial System(^{249})</td>
<td>Jeffrey S. Parker</td>
<td>Yes</td>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>An Economic Approach to the Law of Evidence(^{250})</td>
<td>Richard A. Posner</td>
<td>No</td>
<td>1999</td>
<td></td>
</tr>
<tr>
<td>The Law and Economics of the Economic Expert Witness(^{251})</td>
<td>Richard A. Posner</td>
<td>No</td>
<td>1999</td>
<td></td>
</tr>
<tr>
<td>Mezzanatto and the Economics of Self-incrimination(^{252})</td>
<td>Eric Rasmussen</td>
<td>No</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Crime and Prejudice: The Use of Character Evidence in Criminal Trials(^{253})</td>
<td>Joel Schrag, Suzanne Scotchmer</td>
<td>No</td>
<td>1994</td>
<td></td>
</tr>
</tbody>
</table>

\(^{246}\) 72 Ind. L.J. 651 (1997).
\(^{247}\) 26 J. Legal Stud. 413 (1997).
\(^{251}\) 13 J. Econ. Persp. 91 (1999).
\(^{253}\) 10 J.L. Econ. & Org. 319 (1994).
Table One provides striking evidence of how little influence the economic perspective has had on evidence law. Only two articles in the table have averaged more than one citation per year by scholars who list evidence as one of their teaching fields in the AALS Directory of Law Teachers, and five of the sixteen articles that were published before 2000 have no citations from evidence teachers. The papers that average more than one citation, Professor Rasmusen’s article and the article by Posner on which I have

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commented, do not change the picture. Two of the three evidence scholars who cite Rasmusen’s paper were commenting on it in a symposium issue of the *Cardozo Law Review*,257 and Posner’s work is cited in one article for a point that is not original to him258 and in another article that persuasively argues against one of the claims he makes.259

There are, I am sure, various reasons why the articles I identify are seldom cited.260 Some reasons have to do with the organization of scholarship. People tend to read the work of people whom they know personally or by reputation. Many of the authors whose work I identify are relatively unknown to students of evidence law, even if they have strong reputations in law and economics.

Other reasons are revealed in the work. A number of these articles, such as one article by Professors Stephen Bundy and Einer Elhauge261 and another by Professors Louis Kaplow and Stephen Shavell,262 even if they touch on evidence rules, do not deal with the law of evidence, but rather, like much of Posner’s article, are concerned with information flows and the adversary system.

Some articles, including one paper by Professors Andrew Daughety and Jennifer Reinganum263 and another by Professors

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257 Friedman, supra note 6, at 1534 n.14; Myrna S. Raeder, Cost-Benefit Analysis, Unintended Consequences, and Evidentiary Policy: A Critique and a Rethinking of the Application of a Single Set of Evidence Rules to Civil and Criminal Cases, 19 Cardozo L. Rev. 1585, 1587 n.6 (1998). This issue grew out of the meetings of the AALS section on Evidence Law in 1997—the session topic was the economic analysis of rules of evidence.


260 I should note that I would not be surprised if Posner’s article proves to gather many more citations than the other articles in Table One. This is in part because he is such a celebrated scholar that people who ordinarily do not search out law and economics papers will read his work, and in part because his article is so encompassing. But I do not believe his article will affect many people’s thinking about the law of evidence. Instead, I expect most citations will be by those who either, like Professor Friedman, take issue with something Posner wrote or, like Professor McGinnis, find Posner’s article a convenient source to cite for a familiar proposition.

261 Bundy & Elhauge, supra note 36.

262 Kaplow & Shavell, supra note 36.

263 Daughety & Reinganum, supra note 39.
Joel Schrag and Suzanne Scotchmer\textsuperscript{264} use formal mathematical approaches that most legal academics will find hard to follow. This does not, however, fully explain their lack of citations. When a formal treatment yields important results, people give it the attention needed to grasp its main points or other articles are written to restate its findings without hard to understand mathematics. This has not happened with these pieces because the assumptions on which the technical models rest lead to justified skepticism about the value of what follows for ordinary evidence scholarship. I expect most evidence scholars will see pieces like these not as normative works directed to them, but as abstract think pieces written for other economists. Even where articles are not quantitative and are easy to follow, a failure to appreciate the spectrum of values at stake, unreal assumptions, or blindness about aspects of the litigation process can limit their impact.\textsuperscript{265}

Other articles, like Posner's article on experts\textsuperscript{266} and the articles by Professor Bruce Hay\textsuperscript{267} Hay and Professor Kathryn Spier,\textsuperscript{268} and Professor Steven Salop\textsuperscript{269} make familiar points, even if the language they make them in is unfamiliar. Finally, as with Posner's article, many of these articles, including those by Judge Frank Easterbrook\textsuperscript{270} and Bundy and Elhauge,\textsuperscript{271} do not reach determinate conclusions. Hence, some will find them of little help in thinking about how

\begin{itemize}
  \item Schrag & Scotchmer, supra note 39.
  \item See Allen et al., supra note 36 (dismissing rights-based theories of the attorney-client privilege because they do not adequately explain it, without recognizing that the privilege's contours may reflect several concerns); Jeffrey S. Parker, Daubert's Debut: The Supreme Court, the Economics of Scientific Evidence, and the Adversarial System, 4 Sup. Ct. Econ. Rev. 1 (1995) (overweighing an unsubstantiated theoretical objection to the \textit{Frye} standard for admitting scientific evidence and largely ignoring the science quality and jury/judge capacity issues that concern most courts and commentators).
  \item Bruce L. Hay, Allocating the Burden of Proof, 72 Ind. L.J. 651 (1997).
  \item Bruce L. Hay & Kathryn E. Spier, Burdens of Proof in Civil Litigation: An Economic Perspective, 26 J. Legal Stud. 413 (1997).
  \item Steven C. Salop, Evaluating Uncertain Evidence with Sir Thomas Bayes: A Note for Teachers, 1 J. Econ. Persp. 155 (1987). This article is not in Table One because it is not sufficiently concerned with evidence issues.
  \item Easterbrook, supra note 36.
  \item Bundy & Elhauge, supra note 36.
\end{itemize}
evidence rules operate and what reforms make sense. What the field needs is not formal analysis but empirical research.

I expect that I could make many of the foregoing criticisms, especially the last, of many articles written by established evidence scholars dealing with core issues in the field using familiar analytic methods. So I am not saying that the economic approach to evidence necessarily leads to work that is less sensible or practically useful than the work scholars like me produce. But when a new perspective, particularly one strongly associated with specialized methods and modes of thinking, seeks to enter a new field and wield influence there, it has to offer that field something more than it already has. It should complement or improve on scholarship in the field or at least offer a new way of seeing that has a prima facie claim to validity and promises to enhance thinking about problems that have long puzzled the field. Whether or not one likes the results, I believe the economic perspective has done this for areas of law like torts, contracts, and commercial law. I do not see Posner’s article or the articles collected in Table One as doing this for the field of evidence law. Nor do I think that the likelihood that future economics scholarship will bring these blessings is great.

This does not mean there is no place for economic thinking in evidence scholarship. As I pointed out at the start, one reason to expect only a small marginal gain from involving economists in evidence is because so much thinking and writing about evidence law already applies cost-benefit models. Although this is usually done verbally and less rigorously than economists like, much of this scholarship seems sensitive enough to yield conclusions congruent with what more formal modeling efforts would show. Indeed, informal modeling often may be superior to formal treatments, because the “soft” cost-benefit analyses that motivate most normative evidence scholarship easily incorporate values, like justice, that formal economic models generally slight. What is needed to improve both positive and normative evidence scholarship is not formal rigor but empirical research that reveals how evidence rules play out in the real world. The economists with the most to offer
evidence scholarship are likely to be empirical rather than theoretical economists.272

So far empirical economists have kept their distance from the law of evidence. This is not surprising. With the exception of some psychologists,273 few scholars have attempted to shed an empirical light on evidentiary issues. One reason for our lack of empirical knowledge is that it is hard to study the effects of evidence rules outside the laboratory, and laboratory studies raise substantial external validity problems. Such studies are particularly inadequate if one is interested in the economic ramifications of rules of evidence.

Perhaps the greatest strength of economists writing on evidence issues is the field's core concern with social costs.274 Evidence scholars have not been oblivious to issues of social costs, and commonly seek to estimate the impact that evidence rules have outside the courtroom. But they tend to bracket such issues as the cost of incorrect verdicts and seldom think about social costs as rigorously or in as encompassing a fashion as economists do. Nor are they as concerned as economists are with tracing the incentive effects of evidence rules throughout the social structure. If there is a unique contribution economists can make to the study of evidence, it is to draw attention to social cost and incentive issues. The difficulty, as my critique of Posner's article reveals, is that without more of an empirical base, formal analysis can only take us so far. Nevertheless, research that thoroughly explores an area can be helpful.

Of the articles I read in preparing this paper, one stands out. It is the article by Bundy and Elhauge.275 Their encompassing rational actor view of how litigation advice influences information reaching a tribunal provides a good foothold for thinking about the social

272 I recognize that the distinction is not rigid and that the best empirical economists are well versed in and regularly draw on economic theory. I also do not mean to suggest that formal modeling is necessarily of no use in understanding or criticizing evidence law. Rather, I am speaking to issues of likely relative value.


274 Perhaps the fundamental weakness of Posner's article is that he frequently loses sight of the possible social cost implications of his suggestions because of his early (and flawed) move to translate social costs to deterrence and, hence, to correct verdicts.

275 Bundy & Elhauge, supra note 36.
costs of the adversary system, and it has implications, some of which they draw out, for the attorney-client privilege and work product protection. Ultimately, Bundy and Elhauge conclude that the implications of their rational actor model are indeterminate and that understanding what confidentiality rules portend for information reaching tribunals requires empirical investigation. But they also make a strong case for the proposition that, more often than not, we can expect existing confidentiality rules to have salutary effects. At the same time, they suggest that in thinking about confidentiality rules and the adversary system, less thorough economic analyses than theirs are likely to be of little help, if not misleading. Bundy and Elhauge also recognize that their rational actor model ignores values that the legal system and the regime of law might seek to promote. Hence, no normative conclusions would necessarily follow from their results, even if their analysis reached determinate conclusions. Despite these limitations, their article has much to offer those who labor in the vineyards of evidence law: It clears conceptual ground, it rigorously and plausibly traces out implications of evidence rules, and it suggests areas where empirical research might have the largest payoffs.

On this note of reconciliation, I shall end what I hope my economist friends, and especially Judge Posner, will recognize as a friendly, if serious, critique. It is friendly in that I see scholars who approach the law from an economics perspective as passionately devoted to the same goals I am: to better understand the logic of legal rules, to learn how legal rules actually work, and to use this knowledge to improve them. Without serious critique, this will not happen.

V. INVASION AND AFTERMATH (A FABLE’S CONCLUSION)

Following the banner of Sir Richard, economists did invade Evidence-land, not in anything like the numbers that had descended on the Kingdoms of Torts and of Contracts, but more than Evidence-land had ever seen. They even converted a few of the natives to their religion, but most of the territory’s people ignored the invaders and

276 Id. See their running critique of Kaplow & Shavell, supra note 36, and their comments on the limitations of the Allen et al. model, supra note 36. Bundy & Elhauge, supra note 36.
went on with their lives and writing as they had before. Some of the
more perceptive natives noticed that the newcomers' religion had
some remarkable similarities to their own, but the invaders' rituals
were so unusual and confusing, and their priests so often seemed to
have their heads in the clouds, that there was no temptation to con-
vert.

As the years passed, some invading economists went native or at
least showed respect for the natives' traditions, even to the point of
incorporating some of the natives' beliefs in their rituals. A few
made their disdain for the natives' simplicity clear, not realizing that
many of the natives, when they noticed them at all, regarded them
with similar disdain and as being of no use to anyone. Most econo-
mists, however, after barely exploring the territory, left for kingdoms
where they felt more welcome.

As for Sir Richard, the wise Law Lord, he was unprepared for the
wrath of some of Evidenceland's inhabitants, but they calmed down
and so did he. Rather than try to conquer the land, he staked out a
small corner of it, and for a few years he returned from time to time
to sow seeds, though the harvest was typically meager. Although
most of his neighbors never seemed to warm to him, many claimed
to honor him despite his heretical views, and he found himself more
than occasionally invited to the land's great feasts. These might have
been more enjoyable had his toasts not so often been returned by an
enemy rather than a friend. After a few years, as it had so often in
the past, wanderlust took hold, and he gave up his fields in Evi-
denceland to the few vassals he had acquired and went off in search
of fresh adventure.

Looking back at Sir Richard's forays left the inhabitants of Evi-
denceland with mixed feelings. Many liked the idea that they had
gotten some attention in the far off country of LawAndEconomics, a
rich territory, where almost everyone claimed to be of noble blood,
and a place where few of Evidenceland's inhabitants had ever ven-
tured. Others, however, feared their land was polluted forever,
continually quarreled with Sir Richard's vassals and wished Sir
Richard had never come. A few perspicacious residents even felt a
bit guilty, for they wondered after Sir Richard's departure if they had
not been less willing to learn from him than he was from them.
As for the soothsayer, he was delighted when he saw his predictions realized. For, truth be told, he always knew he might be wrong. What would occur was, after all, an empirical question.277

277 Judge Posner concludes his response to my critique by saying I want “to strangle the infant [economic analysis of evidence law] in its crib.” See Posner, supra note 31, at 1721. This is not what I want. Rather, I am curious about whether it will thrive and do not think the prognosis is good. I could be wrong. Indeed, maybe this critique will help make me wrong, for it might induce some economists to turn to topics in evidence law in order to prove my views mistaken. Moreover, as the careful reader will have noted, I have not been reluctant to employ economic reasoning in this article, and I have suggested some paths that the economic analysis of evidence law might take. If economic analysis can lead to a better understanding of evidence law and wiser policy prescriptions, I will join Judge Posner in applauding the results. We differ not in our desired ends but in our expectations of the likely utility of economics in taking us there.