JURIES, HINDSIGHT, AND PUNITIVE DAMAGES AWARDS: 
REPLY TO RICHARD LEMPERT

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INTRODUCTION

Richard Lempert, a Professor of Law and Sociology at the University of Michigan criticized our recent article on judge and jury performance of a punitive damage judgment task, calling it a “failure of a social science case for change.”¹ Professor Lempert’s depiction of our research is confusing and incorrect. However, because we believe a reading of only the Lempert critique can lead to a substantial misunderstanding of our research and its implications, we have written a reply.² Although nothing in our original paper is undermined by Professor Lempert’s critique, his comments drew our attention to some points that we believe could be restated with more clarity and emphasis.

The focus of our article was on hindsight bias in jury judgments of recklessness, a phenomenon that can be characterized as follows: The task of the jury is to evaluate the soundness of a risky action taken by the defendant.³ The action the jury evaluated occurred in the past, and by necessity, the decision to take the risk could be based on only information available at the time of the action. The jury’s responsibil-

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2. Although Professor Lempert was a commentator on our paper at the original “Courts on Trial” Symposium in Tucson, regrettably, he did not publish his critique in the same law review issue with the other symposium contributions. Had Lempert’s article appeared in the same law review issue as our paper, we would have simply relied on our original article to serve as a rebuttal. Because Lempert’s critique is isolated and remote from our article, we believe a formal reply is necessary.
3. For example, see the jury instructions in Jardel Co., Inc. v. Hughes, 523 A.2d 518, 532 (Del. 1987).
ity is to evaluate the decision based on this former state of information. However, jurors in practice are naturally prone to take advantage of subsequent information, including lessons provided by the accident itself. For example, the Challenger disaster has made us more apprehensive about the risks of space travel. To judge the quality of the fateful launch decision in a manner that takes advantage of the lessons learned after the disaster would be inappropriate and unfair to the NASA decision makers. This contamination of jurors' judgments about prospective risks prior to an accident by information available only afterward is the hindsight phenomenon that we studied.4

In our study, large samples of judges and jury eligible citizens considered a railroad accident scenario.5 Half of the subjects, the foresight group, were told nothing about the accident and were asked if the railroad company should be required to fix a section of hazardous tracks.6 The other half, the hindsight group, had exactly the same information except they were told an accident had occurred and were asked if punitive damages against the railroad company were warranted. Although judges were less susceptible to the phenomenon than were jurors, our results revealed a strong hindsight bias effect.7

II. SUMMARY OF OUR ORIGINAL ARGUMENT

The essence of our argument against the efficacy of jury punitive damages judgments from the Arizona Law Review article can be summarized in a few propositions. To assist in understanding the propositions, we briefly refer to the evidence underlying each claim.

First, jury punitive damage decisions serve a function of societal risk management. Compensatory damages are intended to be sufficient to restore losses and meet the income needs of the accident victim. Punitive damage judgments are primarily justified and evaluated with reference to their efficacy in discouraging behavior considered unduly risky by our society. In fact, we believe that the only coherent and practical rationale for punitive damages is with reference to their function as a deterrent device in the larger context of societal risk

4. A recent review of alternative conceptions of hindsight is provided by Mark Kelman, David E. Fallas, & Hilary Folger, Decomposing Hindsight Bias, 16 J. RISK & UNCERTAINTY 251 (1998).
5. The railroad accident case materials are described in Hastie & Viscusi, supra note 1; and in Reid Hastie, David A. Schkade, & John W. Payne, Juror Judgments in Civil Cases: Hindsight Effects on Judgments of Liability for Punitive Damages, 23 LAW & HUM. BEHAV. 597, 601-04 (1999)).
6. Id. at 602.
Second, risk assessment and management decisions (or judgments about others’ decisions) are difficult and are unlikely to be well executed by a decision maker such as the jury. Being inexperienced in such decisions, a jury is prone to many biases of judgment under uncertainty, including hindsight bias. These are biases that are distinctly significant and insidious in a punitive damages judgment, where inferences about what the defendant should have foreseen are central. The challenging judgment is made even more difficult because the jury is given information about only one event, rather than being provided with a comprehensive and balanced perspective on a range of similar hazardous events. We supported this claim with a review of relevant behavioral decision-making research.\textsuperscript{9}

Third, jurors, and probably juries, are prone to serious hindsight biases when judging liability for punitive damages on the basis of an assessment of recklessness of a defendant’s conduct. Evidence for this claim was provided by an original empirical study\textsuperscript{10} and by a comprehensive review of other empirical tests for hindsight in juror decisions.

Fourth, experienced trial judges make better punitive damages judgments than do lay petit juries. Judges exhibit smaller hindsight biases in ex post assessments of probabilities and liability. However, judges also exhibit consistent, though small, hindsight biases. We provided evidence for this claim in our original empirical study and in a peer-reviewed statistical analysis of our findings.\textsuperscript{11} Research published by independent researchers after the Lempert critique provides further support for our conclusion.\textsuperscript{12} Medical practice research has consistently shown that expertise is associated with reduced hindsight bias in relevant professional judgments.\textsuperscript{13} Professor Viscusi has ex-

\footnotesize{\textsuperscript{8} Stephen Breyer, Breaking the Vicious Circle 33-39 (1993). Firms will respond to setting levels of safety based on the expected costs imposed due to unsafe jobs or unsafe products. To the extent that firms anticipate punitive damages and the expected costs of risk increase, firms will have incentives to promote safety. A formal mode for the analogous economic situation in which there are regulatory sanctions for risk appears in W. Kip Viscusi, Fatal Tradeoffs: Public and Private Responsibilities for Risk 181-85 (1992).

\textsuperscript{9} Hastie & Viscusi, supra note 1, at 909-16.

\textsuperscript{10} This study was reported more fully in a peer-reviewed scientific publication. Hastie, Schkade, & Payne, supra note 5, at 601-04.


tended his studies of judges’ judgments under uncertainty and provides additional demonstrations of errors even by experienced jurists.\textsuperscript{14} Judges’ hindsight biases were, however, less than for jurors. All of these results reinforce our original conclusion.

III. PROFESSOR LEMPERT’S CRITIQUE

Professor Lempert summarizes the crux of his critique: “In particular, if punitive damage awards are not a useful risk management device, jury hindsight bias, as I shall show, is not an important reason.”\textsuperscript{15} This difficult to comprehend, conditional sentence is Lempert’s own best effort to summarize his argument. To the extent of our understanding, he agrees that “punitive damages awards are not a useful risk management device,”\textsuperscript{16} which is our primary assertion. But, he rejects our assertion that “jury hindsight bias . . . is . . . an important reason.”\textsuperscript{17} After presenting this confusing general statement of his argument, he lists four basic failings of our “empirical case against entrusting the task of setting punitive damages to juries.” We emphatically reject his arguments about each of these “failings.”\textsuperscript{18} We would like to comment on each of Professor Lempert’s “basic failings” and on two additional flaws that he claims are also present in our analysis.

First, Professor Lempert asserts, “[T]he institution of punitive damages arguably has nothing to do with risk management, so a system of punitive damages can be justified without regard to its implications for risk management.”\textsuperscript{19} Of course, there are alternative rationales for the institution of punitive damages. However, our view is that the clearest and most coherent argument for the existence of punitive damages is based on their efficacy to deter reckless or malicious conduct. Moreover, many of the vaguely stated rationales, such as fostering justice, simply recast the risk management function in a different language. Our concern with risk incentives led us to conceptualize the institution as a societal risk management device and to evaluate it in

\textsuperscript{14} Viscusi, supra note 11, at 26.
\textsuperscript{15} Lempert, supra note 1, at 867.
\textsuperscript{16} Id. (emphasis added).
\textsuperscript{17} Id.
\textsuperscript{18} Id. at 870.
\textsuperscript{19} Id.
terms of that perspective. Thus, our focus was on jurors’ performance making risk judgments under uncertainty, with a special emphasis on the hindsight bias as it affects the jurors’ judgments of a defendant’s conduct. We note that Professor Lempert appears to agree with our conclusion that trial by jury is a poor risk management procedure by stating, “Hastie and Viscusi are, however, probably correct in arguing that juries entrusted with the task of setting punitive damages are not good risk managers.”

It is possible that our discussion was confusing to some readers as we reviewed jurors’ estimates and predictions of the occurrence of uncertain events and jurors’ judgments of the defendant’s ex ante knowledge and decisions. A broad literature on the accuracy of judgments of hazards and risks demonstrates that people are inaccurate and exhibit many systematic biases. Thus, potential jurors are likely to make poor judgments of risky events like those that eventuate in punitive damages trials. We also reported two original studies of mock-jurors’ and experienced trial judges’ judgments made in hindsight about the ex ante states of mind of defendants in a punitive damages situation. Here, we also concluded that jurors, and to a lesser extent judges, are systematically biased and probably inaccurate.

Second, Professor Lempert comments, “Indeed, hindsight bias does more to undercut the case for jury-determined punitive damage awards under traditional rationales for punitive damages than it does under Hastie and Viscusi’s risk management rationale.” The reason we did not attempt to make an argument against jury punitive damages based on their efficacy as expressive moral statements is, again, that we do not believe the “traditional rationales” provide a solid foundation for such a critique. Professor Lempert’s summary of the traditional rationale is that “[p]unititive damages exist to punish parties for harmful conduct that is deemed immoral, either because a legal duty was violated intentionally or because the conduct was so reckless, given its potential for harm, that the carelessness itself is regarded as immoral.” Our reluctance to rely on this traditional rationale as the basis for the evaluation of jury punitive damages arises because we know of no practical method to assess the quality of a jury’s evaluations of “immoral conduct.”

20. Id. at 873.
22. Hastie & Viscusi, supra note 1, at 904-08.
23. Id. at 916-18.
24. Lempert, supra note 1, at 870.
25. Id. at 872.
What Lempert's criteria for immoral conduct are and how these criteria relate to standard jury instructions is not clear. Do Professor Lempert's moral beliefs, which he did not discuss in his critique, have any relationship to legal standards for reckless conduct? More fundamentally, even if the focus is on punishing immorality, should the existence of hindsight bias not be a concern? Is it appropriate for a judge or jury to judge decision makers in a manner that takes advantage of information that the decision makers could not have had at the time of the risky action because the information did not exist? In our view, the inconsistent informational reference point that is the central component of hindsight bias has troubling implications even if one is concerned with morality, however defined, and not solely with risk management.

Third, Professor Lempert claims that "[a]n initial reason to be cautious about accepting Hastie and Viscusi’s conclusions is that neither their own research nor the research they summarize in the second part of their paper involve deliberations."26 We agree that this is a good reason to be cautious about the implications of our empirical studies. We rely not only on our own experiments but also on the scientific literature comparing individual and group judgments to biases in judgment. This research consistently supports the conclusion that group deliberation is unlikely to remedy the effects of a powerful individual judgment bias, like the hindsight effects we demonstrate in our experiments.27 Professor Lempert notes that a full sequence of jury trial procedures might compensate for cognitive biases via discussion or via "judicial instructions designed to counter [those] biases."28 It is always possible that there is some innovation in trial procedures that would remedy any cognitive bias. We wish that Professor Lempert had provided a demonstration of such a procedure for the punitive damages judgment, or even a reference to an analogous procedural solution.29

26. Id. at 870.
27. Terry Connolly & Edward W. Bukzar, Hindsight Bias: Self-Flattery or Cognitive Error? 3 J. BEHAV. DECISION MAKING 205, 208-09 (1990); Dagmar Stahlberg et al., We Knew It All Along: Hindsight Bias in Groups, 63 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 46, 56-57 (1995); and for a review of the relationship between individual and group judgment biases, see Norbert L. Kerr et al., Bias in Judgment: Comparing Individuals and Groups, 103 PSYCHOL. REV. 687 (1996).
28. Lempert, supra note 1, at 871.
29. Lempert did not cite a paper that reviewed the relevant literature on de-biasing hindsight effects and tests such solution, such as Merrie Jo Stallard & Debra L. Worthington, Reducing the Hindsight Bias Utilizing Attorney Closing Arguments, 22 LAW & HUM. BEHAV. 671 (1998); nor did he discuss the ineffective debiasing method tested by Kim A. Kamin & Jeffrey J. Rachlin, Ex Post & Ex Ante: Determining Liability in Hindsight, 19 LAW & HUM. BEHAV. 89 (1995). The
Fourth, Professor Lempert notes that “[t]o the extent that Hastie and Viscusi are correct and debriefing individuals is ineffective when the process is purely intrapersonal, providing information about cognitive biases cannot be expected to reduce their impact on judges.”\textsuperscript{30} We did not speculate about methods to de-bias judges’ cognitive processes. We did demonstrate that experienced trial judges’ judgments of a representative case were biased, but less biased than the judgments of jurors.\textsuperscript{31}

Much of Professor Lempert’s article addresses a fifth issue that constitutes a critique of the validity and generality of our empirical studies of juror hindsight. Professor Lempert repeats his comments on the omission of jury deliberation in our experimental task, and he criticizes several details of the experimental materials, procedure, and data analysis.\textsuperscript{32} We firmly disagree with his specific criticisms of our methods and analysis, but will omit a detailed rebuttal. The study he critiques has been published in a peer-reviewed scientific journal,\textsuperscript{33} and Professor Lempert acknowledges at the end of his comments that “[n]one of this means that jurors do not exhibit hindsight bias. Given the seeming ubiquity of this bias in human decision making, it is likely they do.”\textsuperscript{34}

Lempert’s various critiques of the experimental evidence ignore the fundamental strength of our experimental design. Judges and jurors each were exposed to identical foresight and hindsight conditions and under similar circumstances.\textsuperscript{35} Neither group engaged in group deliberations. Thus, our comparison of the foresight and hindsight results for judges and jurors was symmetric. We also compared differences in these groups for scenarios before and after the accident, i.e., the difference between judgments of foresight and hindsight scenarios for each. Our experimental test focused on whether these differences are greater for jurors than judges, which they were.\textsuperscript{36} Influences common

\textsuperscript{30} Lempert, \textit{supra} note 1, at 871.

\textsuperscript{31} Hastie & Viscusi, \textit{supra} note 1, at 916-18.

\textsuperscript{32} Lempert, \textit{supra} note 1, at 876-87.

\textsuperscript{33} Contrary to Lempert’s prediction, “I do not think that their article would have survived social science peer review in its current form.” \textit{Id.} at 869-70.

\textsuperscript{34} \textit{Id.} at 881.

\textsuperscript{35} Hastie & Viscusi, \textit{supra} note 1, at 904-08 (reporting on the details of the methods in the original experiments).

\textsuperscript{36} \textit{Id.} at 906.
to the two groups, such as the absence of deliberations or questions about the foresight scenario wording as compared to the hindsight wording, simply do not come into play because they were the same for both judges and jurors. The experimental method eliminates these concerns about confounded test procedures.

In particular, for the foresight condition, which was the experimental treatment in which subjects were not told about an accident, our results indicated that 15% of judges favored repairing the track, as compared to 33% of citizen/jurors. In the hindsight condition, where subjects were told there had been an accident, 25% of judges and 67% of jurors favored punitive damages.37 Thus, there was a 10% increase in judges' anti-railroad responses in the hindsight case as compared to a 34% increase for jurors. Judges who were willing to impose punitive damages also said that the difference between the benefits and costs of safety improvements was particularly great. From an economic standpoint, this is a measure that should be strongly correlated with any assessment of recklessness. Surprisingly, Lempert does not agree that the relationship between the benefits and costs of safety should be pertinent to assessing punitive damages.38 However, it is when the safety benefits are substantial and the costs of achieving these benefits are low that the safety decision is most out of line with acceptable risk actions.

Finally, Professor Lempert criticizes our review of the extensive research literature on cognitive biases in risk judgments and on the relevance of this literature to the punitive damages decision. Again, we have rebutted his comments in subsequent publications.39

We have described the juror as a risk manager because we believe that the most useful framework within which to understand the punitive damages decision is to view it as a governing mechanism that is aimed to deter or control behavior that reduces the general social welfare.40 In theory, the decision maker who assigns punitive damage penalties would accurately and reliably estimate the probability that a class of behaviors will lead to socially costly consequences, estimate the social costs, and estimate the probability that the behaviors will be detected. Then, those estimates would be combined to determine if

37. Id.
38. Lempert, supra note 1, at 872-74.
punitive damages are warranted and in what amounts. We believe that the systematic biases we have demonstrated in our mock-jurors' judgments will result in erratic, unreliable judgments by jurors deciding on punitive damages. This will have a disruptive effect on the behavior of individuals and firms that might be vulnerable to punitive damages because they will be unable to anticipate the consequences of their actions and, thus, will make poor decisions about which risks to bear and which to avoid.

It is probably also true, as Professor Lempert asserts, that the erratic and hindsight-prone jury judgments will be unfair and the jury will perform poorly in its role as a moral compass. For example, Jeffrey Rachlinski concludes that in many cases jury decisions made in hindsight will appear to be unfair. However, he proposes that there is shared common knowledge among parties concerning the probability that a punitive damage award will be applied. Thus, Professor Rachlinski concludes that for most cases, jury hindsight is anticipated by potential defendants so that ultimately, despite appearances, there is a realistic expectation of the application of the punitive damages sanction. We do not agree. However, we are unable to spell out a clear rationale for the moral role of the jury or a method to evaluate the moral quality of jurors' judgments. So, we will defer to Professor Lempert's authority on the "traditional rationale" and accept his concurring conclusion that juror hindsight effects are likely to interfere with their punitive damages judgments.

IV. CONCLUDING REMARKS

In summary, Professor Lempert's critique of our empirical studies and our conceptual analysis does not undermine any of our conclusions. His critique is confusing to the reader. He seems to agree with our general conclusion that jury punitive damages decisions are flawed. But, he rejects our conceptualization of the rationale for the punitive damages institution, and he does not approve of the methods in our empirical studies. However, he also believes there are other reasons, better than those we adduce, to be unhappy with jury punitive damages decisions. Professor Lempert also comments that change in a traditional legal procedure should rarely, if ever, be moti-

42. Id. at 599-600.
43. Id. at 623-25.
vated by a single study. At the time of our original publication, a program of empirical studies of the quality of jury and judge punitive damages decisions was underway. We can now refer the reader to a comprehensive survey of more than twenty behavioral tests of the quality and reliability of punitive damages judgments. The systematic pattern of results from those studies converges in support of our conclusion in the Arizona Law Review article that jury punitive damages decisions are erratic, biased, and unreliable.

44. "I can think of no instances in which a single study can justify changing a familiar legal institution." Lempert, supra note 1, at 893.