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## Sources of Judicial Distrust of Social Science Evidence: A Comparison of Social Science and Jurisprudence

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# Sources of Judicial Distrust of Social Science Evidence: A Comparison of Social Science and Jurisprudence

## INTRODUCTION

Judges have traditionally exercised control over the decisionmaking process of the jury. “[J]udicial oversight and control of the process of introducing evidence to the jury [is what] gave our system birth; and he who would understand it must keep this fact constantly in mind.”<sup>1</sup> The presentation of social science evidence to a jury is perceived by many jurists as a threat to judicial control. This Note will examine three basic reasons for judicial distrust of social science evidence. First, the knowledge which social science can provide does not coincide with the knowledge that legal doctrine traditionally requires. Second, conservative jurists see the use of social science evidence as a threat to traditional legal methods. And third, the evidentiary value of social science evidence can be distorted by the adversary process. A failure to reveal all inadequacies and uncertainties can lead a jury to rely too heavily on seemingly precise statistical testimony. This Note will also propose policies to address each of these judicial concerns.

### I. JUDICIAL SKEPTICISM OF SOCIAL SCIENCE EVIDENCE

As the evolution of the jury and its responsibilities has progressed, so have the mechanisms for jury control. For centuries the great check on the jury was the attaint.<sup>2</sup> But as the jury became the sole finder of fact, judges began to devise other means to control and diminish jury discretion.<sup>3</sup> These means

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1. J. THAYER, *A PRELIMINARY TREATISE ON EVIDENCE AT THE COMMON LAW* 181 (1898).

2. “[A] proceeding in which the original parties and also the first jury were parties, and where a larger jury, made up of knights or other more considerable persons than the first, passed again on the same issue. If they found contrary to the first finding, then the first jury was convicted of perjury and heavily punished; and the first judgment was reversed.” *Id.* at 140.

3. W. LOH, *SOCIAL RESEARCH IN THE JUDICIAL PROCESS* 479 (1984).

[T]he general verdict confers on the jury a vast power to commit error and do mischief by loading it with technical burdens far beyond its ability to perform, by confusing it in aggregating instead of segregating the issues, and by shrouding in secrecy and mystery the actual results of its deliberations.

*Skidmore v. Baltimore & O.R.R.*, 167 F.2d 54, 61 (2d Cir. 1948) (Frank, J.), *cert. denied*, 335 U.S. 816 (1948). In response, “[T]he judge has assumed an increasingly important and active role in conducting a jury trial, representing the legal system’s commitment to a fair, efficient, and consistent adjudicatory procedure.” J. FRIEDENTHAL, M.K. KANE & A. MILLER, *CIVIL PROCEDURE*, 479 (1985).

included procedural devices such as the directed verdict, the special verdict, the judgment notwithstanding the verdict, the granting of a new trial, and rules of evidence which regulate the flow of information to the jury.<sup>4</sup>

Regulating the flow of information to the jury is perhaps the most important method of restraining jury discretion today. There are numerous volumes of writing addressed to the law of evidence, and evidentiary issues are continuously visited by all levels of courts. The commonly stated purposes supporting these complex rules of evidence are to prevent the jury from uncritically accepting any proffered evidence<sup>5</sup> and from being confused and misled.<sup>6</sup>

Since the early part of this century, a new threat to judicial control over the decisionmaking process of the jury has arisen: the use of statistical and probabilistic social science evidence.<sup>7</sup> Members of many legal disciplines exhibit a deep distrust of this evidence. Judicial opinions reveal an anxiety that "statistical probabilities can make the uncertain seem all but proven,"<sup>8</sup> unduly impress jurors who are unable to assess the relevancy or value of social science evidence,<sup>9</sup> and thereby "distort[] the jury's traditional role of determining guilt or innocence according to long-settled rules."<sup>10</sup> Legal scholars have echoed the judges' mistrust.<sup>11</sup> Some comment that even Supreme Court Justices mention social science evidence only when that evidence "bolsters a decision favored by the Justice on other grounds."<sup>12</sup> It has similarly been observed that lawyers present social science evidence only as a last resort, preferring to use more traditional evidence when available.<sup>13</sup>

Strong resistance to social science evidence occurs when it is to be presented to a jury. When judges are acting as fact-finders, they "often have not

4. W. LOH, *supra* note 3, at 479.

5. *Id.*

6. J. THAYER, *supra* note 1, at 2 (Thayer observes that the judicial system is "constant, anxious, and over-anxious [in this] endeavor.').

7. See D. BARNES & J. CONLEY, *STATISTICAL EVIDENCE IN LITIGATION* 7-10 (1986); N. CHANNELS, *SOCIAL SCIENCE METHODS IN THE LEGAL PROCESS* 5-6 (1985); Haney, *Psychology and Legal Change: On the Limits of a Factual Jurisprudence*, 4 LAW & HUM. BEHAV. 147, 148-150 (1979); Loftus & Monahan, *Trial by Data: Psychological Research as Legal Evidence*, 35 AM. PSYCHOLOGIST 270, 270-71 (1980).

8. *State v. Carlson*, 267 N.W.2d 170, 176 (Minn. 1978).

9. *People v. Collins*, 68 Cal. 2d 319, 332, 438 P.2d 33, 41, 66 Cal. Rptr. 487, 505 (1968).

10. *Id.* at 320, 438 P.2d at 33, 66 Cal. Rptr. at 497.

11. See, e.g., Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329, 1334 (1971) "[T]he very mystery that surrounds mathematical arguments—the relative obscurity that makes them at once impenetrable by the layman and impressive to him—creates a credence they may not deserve and a weight they cannot logically claim." *Id.*

12. Kerr, *Social Science and the Supreme Court*, in *THE IMPACT OF SOCIAL PSYCHOLOGY ON PROCEDURAL JUSTICE* 56, 64-65 (M. Kaplan ed. 1986); Wasby, *History and State of the Art of Applied Social Research in the Courts*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL RESEARCH IN THE COURTS* 15, 16 (M. Saks & C. Baron eds. 1980). It has similarly been observed that supportive social science data is treated by the Supreme Court much as precedent—it "need only be located, not evaluated." Kerr, *supra*, at 71 (emphasis in original).

13. Kerr, *supra* note 12, at 66 (citing Haney, *supra* note 7).

hesitated to examine publicly available research literature in forming or at least fashioning their opinions."<sup>14</sup> Because judges are exempt from scrupulous jury trial rules,<sup>15</sup> their search for legislative facts is left unrestricted. In general, judges are comparably open to social science evidence as a part of pretrial motions to structure litigation,<sup>16</sup> but wary about allowing that same evidence before the jury.<sup>17</sup>

The fear most commonly expressed by judges is that the jury will grant statistical and probabilistic evidence far more weight than it deserves, and that the court will be powerless to stop the jury from doing so. Wrote one court, "Undoubtedly the jurors were unduly impressed by the mystique of the mathematical demonstration but were unable to assess its relevancy or value"<sup>18</sup> and "[T]he testimony . . . foreclosed the possibility of an effective defense by an attorney apparently unschooled in mathematical refinements."<sup>19</sup> Other judges have made such statements as: "Our concern over this evidence is . . . with its potentially exaggerated impact on the trier of fact"<sup>20</sup>; and "[C]ourts have routinely excluded [valid probability evidence] when [it] invites the jury to focus upon a seemingly scientific, numerical conclusion rather than to analyze the evidence before it and decide where truth lies."<sup>21</sup>

Much of this judicial concern lies in the dichotomy between the method of reasoning used by the law and that used by social science. Traditional legal reasoning is deductive: The law must present its conclusions as certainties, which can be prescribed to society.<sup>22</sup> The jury trial system accomplishes this goal admirably. Because it keeps secret the process of moving from data to inference to conclusion, any uncertainties inherent in the data or in the inference process are obscured by the jury's final verdict.<sup>23</sup>

14. Saks, *The Impact of Information: Data as Evidence*, in *THE IMPACT OF SOCIAL PSYCHOLOGY ON PROCEDURAL JUSTICE* 194, 199, 205 (M. Kaplan ed. 1986). For example, in *Almeida v. Correa*, 51 Haw. 594, 465 P.2d 564 (1970), the court reviewed leading authorities in the fields of genetics and physical anthropology, independent of the attorneys, before deciding that it was improper for the jury to be shown the plaintiff's child for the purpose of observing the resemblance to the defendant in a paternity suit.

15. W. LOH, *supra* note 3, at 480. This may be because statistical proof is more readily digested in a bench trial than in a jury trial. Curtis & Wilson, *The Use of Statistics and Statisticians in the Litigation Process*, 20 *JURIMETRICS J.* 109, 111 (1979).

16. For example, social science evidence is often used in selecting jurors, deciding motions to include or exclude certain classes of jurors, structuring the voir dire process, and removing trials to another jurisdiction. Saks, *supra* note 14, at 208.

17. *Id.* at 203.

18. *Collins*, 68 Cal. 2d at 332, 438 P.2d at 41, 66 Cal. Rptr. at 505.

19. *Id.* at 327, 438 P.2d at 38, 66 Cal. Rptr. at 502.

20. *Carlson*, 267 N.W.2d at 176.

21. *State v. Rammel*, 721 P.2d 498, 501 (Utah 1986).

22. See J. RICHARDSON, *MODERN SCIENTIFIC EVIDENCE: CIVIL & CRIMINAL* 44 (2d ed. 1974); KERR, *supra* note 12, at 69; Loevinger, *Science, Technology and Law in Modern Society*, 26 *JURIMETRICS J.* 1, 3 (1985).

23. When the law asks the jurors to represent a cross-section of the community, to mollify the rigor of the law in light of their knowledge of the world and their sense of

In contrast, scientific reasoning is inductive. At best, the "conclusions" it reaches are only probably true.<sup>24</sup> Encouraging free inquiry into the uncertainties of the process through which it reaches its conclusions is a strength of social science. While the law makes its pronouncements with complete certainty by shrouding any imprecision in the mystery of jury secrecy, social science relies on free inquiry into methodological precision<sup>25</sup> and the conflict of conclusions for its justification.<sup>26</sup>

If social scientists are scrupulous about revealing inadequacies and uncertainties, it may seem ironic that jurists, "who specialize in dealing with evidence containing varying degrees of probativeness," view social science evidence so skeptically.<sup>27</sup> Nevertheless, the uncertain nature of social science "conclusions" frequently frustrates the courts.<sup>28</sup> Wrote one judge, "Statistics are elusive things at best, and it is a truism that almost anything can be proved by them."<sup>29</sup> The reasons for this judicial skepticism will now be examined and policies to address each concern will be proposed.

fairness, and finally to speak in a single, unequivocal voice, the rules of the game must incorporate some means of covering up the diversities and inconsistencies lurking behind the outcome.

Fraher, *Adjudicative Facts, Non-Evidence Facts, and Permissible Jury Background Information*, 62 IND. L.J. 333, 350-51 (1987). "The general verdict is as inscrutable and essentially mysterious as the judgment which issued from the ancient oracle of Delphi." Sunderland, *Verdicts, General and Special*, 29 YALE L.J. 253 (1920).

24. Kerr, *supra* note 12, at 69. See also J. RICHARDSON, *supra* note 22; Loevinger, *supra* note 22.

25. Haney, *supra* note 7, at 165-66. "Science demands precision, not certainty. Law aims at certainty but lacks precision because its quest for certainty glosses over innumerable variables of individual and situational diversities which probably will always cause law to be uncertain." *Id.* at 166 (quoting Marshall, *Fact Finding in Law and Science*, 65 A.B.A. J. 1442 (1979)). Haney states that the ideal of science is "to reduce bias, error, and distortion in observation and inference." *Id.* at 162. In the law, "[b]ias and self-interest . . . are assumed at the outset and thought to be the very strength and motive" of the adversary process. *Id.*

26. [T]he paradigm of social science research is itself a dialectic. I write my study, somebody else writes his study; we build incrementally and often through a conflict. But judges have to make decisions. Social science researchers usually don't make decisions. The judge has to invoke the rule of finality and come down on one side or the other.

Sarat, *Misuses of Applied Social Research*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL RESEARCH IN THE COURTS* 34, 36-37 (M. Saks & C. Baron eds. 1980).

27. Cohen, *Factors of Resistance to the Resources of the Behavioral Sciences*, 12 J. LEGAL EDUC. 67, 68-69 (1959); see also Loevinger, *supra* note 22, at 8-9.

28. Kaye, *Is Proof of Statistical Significance Relevant?*, 61 WASH. L. REV. 1333, 1333 (1986). See also Loevinger, *supra* note 22, at 3. See, e.g., *Singer Co. v. United States*, 449 F.2d 413, 424 (1971) ("This fact, if one accepts survey results as fact . . .") (emphasis in original); *contra* Phillips by and through *Utah v. Jackson*, 615 P.2d 1228, 1235 (Utah 1980) (Adjudication means fact-finding, and while speculation is not legitimate in that process, a trier of fact should not be deprived of scientific data because some controversy attaches to it. Management of doubt is a major aspect of our rules of procedure and evidence, and that which reasonably leads to resolution of doubt and ascertainment of truth should be adducible.).

29. *Maxwell v. Bishop*, 257 F. Supp. 710, 720 (E.D. Ark. 1966), *aff'd*, 398 F.2d 138 (8th Cir. 1968), *vacated*, 398 U.S. 262 (1970).

## II. NOMOTHETIC KNOWLEDGE VERSUS IDIOGRAPHIC KNOWLEDGE

To render an unqualified verdict on the individuals standing before it, a court must focus on the individual case and the facts idiosyncratic to that case. In sum, the law seeks idiographic knowledge. On the other hand, social science is concerned with general principles, relationships and patterns which transcend the individual instance; social science produces nomothetic information.<sup>30</sup> Yet perhaps this analysis is too simple. The law does not always focus its inquiry on idiographic knowledge. In fact, the law ultimately makes nomothetic pronouncements: Its ultimate goal is to enunciate "abstract, general, or universal statements or laws."<sup>31</sup>

It follows that the law should welcome nomothetic information when it makes a nomothetic inquiry. For example, appellate courts could take nomothetic information into account when creating new doctrine, and legislatures when contemplating their statutory schemes.

However, relying on nomothetic information creates uncertainty in an idiographic inquiry. Idiographic knowledge about the behavior of individuals cannot be reliably inferred from nomothetic knowledge about the behavior of whole classes of people.<sup>32</sup> It is not surprising then, that trial courts are wary about allowing social science—nomothetic—evidence before a jury. The jury must make decisions about the particular parties standing before it, not about society as a whole.

Still, in some circumstances courts will admit social science conclusions into evidence. Social science evidence has been admitted when it provides idiographic information about an individual and when the court would prefer idiographic knowledge, but is willing to accept nomothetic information because of convenience or necessity. For example, courts routinely accept statistical evidence in cases involving questions such as percentage of market control, public confusion of trademarks, randomness of jury selection, and

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30. Haney, *supra* note 7, at 164; see also Kerr, *supra* note 12, at 70; Saks, *supra* note 14, at 171. Incidentally, this is exactly why sociologists and psychologists are less accepted as testifying experts than medical doctors or even psychiatrists. The focus of doctors and psychiatrists is on the individual—they are comfortable testifying about their exact conclusion about the particular individual before them. Sociologists, when faced with a unique individual, can do no more than draw tenuous inferences from generalized findings about whole classes of people. Haney, *supra* note 7, at 151-52.

31. "Nomothetic" is defined as "relating to, involving, or dealing with abstract, general, or universal statements or laws." WEBSTER'S NEW COLLEGIATE DICTIONARY (150th anniversary ed. 1973).

32. Horowitz, *Overcoming Barriers to the Use of Applied Social Research in the Courts*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL RESEARCH IN THE COURTS* 149 (M. Saks & C. Baron eds. 1980) ("The behavior of a class of people cannot necessarily be inferred from the behavior of litigants. Nor can the behavior of litigants be inferred from general findings about whole classes of people. The reliance on one to infer the other is a very perilous venture." *Id.* at 150.

expected lifetime earnings.<sup>33</sup> Legal scholars explain this circumstance by pointing out that the substantive law in these areas requires statistical evidence.<sup>34</sup> However, they do not explain *why* the substantive law in these areas requires statistical evidence.

In cases implicating percentage of market control and public confusion of trademarks, the knowledge about an individual that social science provides is exactly the idiographic knowledge about that particular individual that the court is seeking. Social science statistics inform the court about the position of the particular litigant before it; the litigant's position in the market or the litigant's position in the minds of the public.

In jury selection and potential income cases, the court would prefer idiographic information, but the information is either unavailable or unhelpful. Discrimination in the jury selection process is generally subtle enough that an obvious discriminatory policy is not evident. The discrimination must be proven by its statistically discriminatory effect. Similarly, the calculation of lifetime earnings cannot be accurately determined without reference to statistical averages.

However, courts should consider more than just the necessity or convenience of social science evidence when the available social science information is not the information the court would prefer. The court plays a significant role in our society as a legitimator of basic societal values. The jury plays an important part in this role. Because the jury is drawn from the community, when it interprets the law it "maintain[s] popular support for [the law] and the legal system, thus helping to build and shape the application of the general laws in a way that will be widely accepted."<sup>35</sup> Beyond deciding whether the facts fit the law, the secrecy surrounding the jury allows the jury to decide whether the application of the law is morally correct.<sup>36</sup> If the jury

33. See Tribe, *supra* note 11, at 1338-39.

34. *Id.* See also *Boucher v. Bomhoff*, 495 P.2d 77, 84 (Alaska 1972) (Erwin, J., concurring).

35. C. JOINER, *CIVIL JUSTICE AND THE JURY* 38 (1962).

36. While the virtue of this aspect of the jury system has been debated, see H. KALVEN & H. ZEISEL, *THE AMERICAN JURY* 8 (1966), most jurists agree that the jury brings the political convictions of the community into its decisions. Levine, *What Factors Influence Jury Decisions*, 66 *JUDICATURE* 453 (1983). As Justice Holmes wrote,

Indeed one reason why I believe in our practice of leaving questions [to the jury] . . . is what is precisely one of their gravest defects from the point of view of their theoretical function: that they will introduce into their verdict a certain amount—a very large amount, so far as I have observed—of popular prejudice, and thus keep the administration of the law in accord with the wishes and feelings of the community.

O. HOLMES, *COLLECTED LEGAL PAPERS* 237-38 (1920).

The Supreme Court has written, "We . . . have been guided by the sentencing decisions of juries, because they are 'a significant and reliable objective index of contemporary values.'" *McCleskey v. Kemp*, 481 U.S. 279 (1987), *reh'g denied*, 482 U.S. 920 (1987) (quoting *Gregg v. Georgia*, 428 U.S. 153, 181 (1976) (plurality opinion), *reh'g denied*, 429 U.S. 875 (1976)). This aspect of jury decisionmaking has been the subject of several empirical studies. While

is to function as a voice of society's moral values, it is essential that the jury not be tempted to surrender its responsibility to decide whether a particular individual acted rightly to a social scientist's study of averages.

An examination of the recent case of *McCleskey v. Kemp*<sup>37</sup> shows the concern of the Supreme Court to protect this moral value decision entrusted to the jury. In *McCleskey*, the Court found that the death penalty in Georgia did not violate the equal protection clause or amount to cruel and unusual punishment. It reached this conclusion in the face of a study showing that defendants convicted of killing white victims are more than four times more likely to be sentenced to death than defendants convicted of killing black victims.<sup>38</sup>

Even after "taking account of 230 variables that could have explained the disparities on nonracial grounds,"<sup>39</sup> the study showed a discriminatory impact in the administration of the death penalty in Georgia. However, the discriminatory impact was dependent on the race of the victim, not the race of the defendant. The Court noted that "[t]he raw numbers . . . indicate a reverse racial disparity according to the race of the defendant: 4% of the black defendants received the death penalty, as opposed to 7% of the white defendants."<sup>40</sup> *McCleskey* was therefore forced to base his claim for equal protection on the race of his victim, rather than on his own race.<sup>41</sup>

the studies have generally shown that jury decisions do reflect popular opinion, the validity of the studies is subject to attack. See Levine, *The Legislative Role of Juries*, 1984 AM. B. FOUND. RES. J. 605.

37. 481 U.S. 279.

38. The study

demonstrated that prosecutors sought the death penalty in 70 percent of cases involving black defendants and white victims, but in only 19 percent of cases involving white defendants and black victims. The death penalty was actually imposed on 22 percent of black defendants with white victims, but on only 3 percent of white defendants with black victims. Even after factoring out 39 nonracial variables, the study found that defendants charged with killing white victims were 4.3 times as likely to receive the death sentence as defendants charged with killing blacks. Finally, the study found that race was as significant a factor as prior conviction for murder or as acting as the principal planner of homicide in imposing the death penalty.

Bernstein, *Supreme Court Review*, TRIAL, Sept. 1987, at 98, 98.

One year before this decision, the Supreme Court considered the constitutionality of prosecutors using peremptory challenges to remove black jurors when the defendant was black. In *Batson v. Kentucky*, 476 U.S. 79 (1986), the Court stated that discriminatory impact of governmental action may demonstrate unconstitutionality when the discriminatory impact is very difficult to explain on nonracial grounds. *Id.* at 93. Thus an invitation was seemingly issued for positive social science evidence of discriminatory effect of governmental action.

39. *McCleskey*, 481 U.S. at 287.

40. *Id.* at 286. The reverse racial disparity in the race of defendants receiving the death penalty is due to the fact that most killers of blacks are black. Kennedy, *McCleskey v. Kemp: Race, Capital Punishment, and the Supreme Court*, 101 HARV. L. REV. 1388, 1392 (1988).

41. *McCleskey* also brought an equal protection claim based on his own race. However, that claim was clearly subordinate to his claim based on the race of his victim. Kennedy, *supra* note 40, at 1390 n.13.

Some courts have denied standing for equal protection claims based on the race of the victim,<sup>42</sup> stating that litigants should be allowed to assert only their own legal rights and not those of third parties.<sup>43</sup> However, the Supreme Court did not use this reasoning to reject McCleskey's petition. Instead the Court found that McCleskey had standing<sup>44</sup> and accepted the validity of the study unconditionally.<sup>45</sup> The Court then rejected McCleskey's claim, insisting that McCleskey "prove that the decisionmakers in *his* case acted with discriminatory purpose."<sup>46</sup>

The Court refused to allow social science statistics to interfere with the jury's status as society's moral value legitimator, in both the equal protection and eighth amendment contexts. With regard to McCleskey's equal protection claim, the Court wrote:

[T]he nature of the capital sentencing decision, and the relationship of the statistics to that decision, are fundamentally different from the corresponding elements in the venire-selection or Title VII cases. Most importantly, each particular decision to impose the death penalty is made by a petit jury selected from a properly constituted venire. Each jury is unique in its composition, and the Constitution requires that its decision rest on consideration of innumerable factors that vary according to the characteristics of the individual defendant and the facts of the particular capital offense.<sup>47</sup>

Regarding the jury's role and McCleskey's eighth amendment claim, the Court stated, "'[T]he inestimable privilege of trial by jury . . . is a vital principle, underlying the whole administration of criminal justice,' . . . [I]t is the jury's function to make the difficult and uniquely human judgments that defy codification and that 'buil[d] discretion, equity, and flexibility into a legal system.'"<sup>48</sup> Thus the Supreme Court rejected as proof of discrimination the nomothetic social science study which it had accepted as unconditionally true, and required McCleskey to present idiographic evidence.

Four dissenting Justices<sup>49</sup> and many jurists have decried this decision as a

42. *E.g.*, Britton v. Rogers, 631 F.2d 572, 577 n.3 (8th Cir. 1980), *cert. denied*, 451 U.S. 939 (1981).

43. Kennedy, *supra* note 40, at 1422.

44. The Court found that McCleskey had standing to assert that he was discriminated against on the basis of his victim's race. *McCleskey*, 481 U.S. 291 n.8.

45. *Id.* at 291 n.7.

46. *Id.* at 292 (emphasis in original).

47. *Id.* at 294. For a critique of the reasoning used by the Court to distinguish capital sentencing decisions from juror selection decisions, see Kennedy, *supra* note 40, at 1427-29.

48. *McCleskey*, 481 U.S. at 302, 309 (quoting *Ex parte Milligan*, 71 U.S. 2, 123 (4 Wall. 1866) & H. KALVEN & H. ZEISEL, *supra* note 36, at 498).

49. Justice Brennan, dissenting and joined by Justices Marshall, Blackmun, and Stevens, wrote:

At some point in this case, Warren McCleskey doubtless asked his lawyer whether a jury was likely to sentence him to die. A candid reply to this question would have been disturbing. . . . The story could be told in a variety of ways,

tragic acceptance of covert racism.<sup>50</sup> But regardless of the moral principle which it supports, the truth remains that *McCleskey* “acknowledge[d] that racial prejudices are, or at least very strongly appear to be, at work . . . , but dismiss[ed] them because of the perceived greater value of jury discretion and jury secrecy.”<sup>51</sup> The Supreme Court has “implied that the value of judicial discretion [is] too great to be interfered with.”<sup>52</sup>

This result is hardly surprising. Nineteen years earlier, in *Witherspoon v. Illinois*,<sup>53</sup> the Court declared the importance of the jury’s role as moral value legitimator in the criminal process. Justice Stewart wrote that “one of the most important functions any jury can perform . . . is to maintain a link between contemporary community values and the penal system—a link without which the determination of punishment could hardly reflect ‘the evolving standards of decency that mark the progress of a maturing society.’”<sup>54</sup>

The Court did more in *McCleskey*, however, than simply exalt the value of the jury trial system. By accepting the validity of the Baldus study unconditionally, the Supreme Court protected the function of the jury in capital sentencing decisions from erosion by ever more sophisticated studies establishing discriminatory impact.<sup>55</sup>

but *McCleskey* could not fail to grasp its essential narrative line: there was a significant chance that race would play a prominent role in determining if he lived or died.

The Court today holds that Warren *McCleskey*’s sentence was constitutionally imposed. It finds no fault in a system in which lawyers must tell their clients that race casts a large shadow on the capital sentencing process.

*Id.* at 1782 (Brennan, J., dissenting).

50. See Kennedy, *supra* note 40, at 1388-89 (“As in those prior disasters of judicial decisionmaking, [*Plessy v. Ferguson*, 163 U.S. 537 (1896) and *Korematsu v. United States*, 323 U.S. 214 (1944)] the majority in *McCleskey* repressed the truth and validated racially oppressive official conduct.”); Bernstein, *supra* note 38, at 100 (“[The decision] recognizes the racial discrimination inherent in the Georgia capital-punishment system, but does not consider any remedial action necessary or appropriate. This opinion is a national tragedy. It truly makes one wonder how far our nation has progressed since the Black Codes of the 1800s.”); Neisser, *Hidden Racism at the Gallows*, 119 N.J.L.J. May 28, 1987, at 6, col. 2 (“One can only gasp at such a decision from a Court that allegedly banned racial discrimination in this country 33 years ago. The only explanation is that the Court considers hidden racism more acceptable than overt racism.”).

51. Neisser, *supra* note 50, at 6, col. 2.

52. Bernstein, *supra* note 38, at 99.

53. 391 U.S. 510 (1968).

54. *Id.* at 519 n.15 (quoting *Trop v. Dulles*, 356 U.S. 86, 101 (1958) (plurality opinion)). The Court also wrote, “[A] jury that must choose between life imprisonment and capital punishment can do little more—and must do nothing less—than express the conscience of the community on the ultimate question of life or death.” *Id.* at 519.

55. Professor Kennedy maintains that decisions rendered by the Supreme Court have a “special moral meaning [which] . . . chart the lines of legitimacy.” Kennedy, *supra* note 40, at 1440. Because of this, racially discriminatory conduct has been legitimated by the *McCleskey* decision. *Id.* However, *McCleskey* also protected a fundamental means of legitimating our laws—the jury system.

When the jury's duty to pass moral judgment is of ultimate importance, as it is in death penalty cases and is likely to be in other criminal cases, there exists a great danger to our legal system if the jury forfeits its duty to an expert offering seemingly conclusive social science statistics. In these circumstances, such evidence should be kept from the jury. This approach is justified by the inability of a court to ensure that a jury understands that "probability is irrelevant as *proof* of an *actualistic* element of a claim or affirmative defense. And . . . no calculus of probability is competent to measure sufficiency or weight of litigational evidence."<sup>56</sup>

In contrast, when the moral value judgment of the jury is not as significant, a court should be more willing to accept social science evidence. However, there is often still great resistance to the use of social science evidence.

### III. CONSERVATIVE MISTRUST

It has been suggested that a major source of legal resistance to the resources of the social sciences has been the lawyer's "fear of his inability to cope with the enormous task of mastering these resources himself and of shaping them to his particular needs . . . . [This] is the fear . . . of his ultimate replacement—in terms of power and prestige—by the specialist and expert."<sup>57</sup> While this may be an overstatement and may not describe all members of the legal profession,<sup>58</sup> it does contain a ring of truth.

In general the duty of the law is to tell society how it should behave; that is, the law is a prescriptive instrumentality.<sup>59</sup> Since the law prescribes to society the way it should act, it is necessarily codified and authoritative.<sup>60</sup>

56. Jaffee, *Of Probativity and Probability: Statistics, Scientific Evidence, and the Calculus of Chance at Trial*, 46 U. PITT. L. REV. 925, 929 (1985).

57. Cohen, *supra* note 27, at 68. See also P. ROSEN, *THE SUPREME COURT AND SOCIAL SCIENCE* 117 (1972); Kerr, *supra* note 12, at 71.

58. Judge Bazelon, speaking to a meeting of social scientists, stated, "There are those who feel that your insights are a threat to established attitudes and institutions . . . . [Y]ou can be assured that as far as I am concerned, there are a hell of a lot of attitudes and institutions that need to be threatened." Bazelon, *Veils, Values, and Social Responsibility*, AM. PSYCHOLOGIST, Feb. 1982, at 115, 115-16.

59. See J. RICHARDSON, *supra* note 22, at 53; Kerr, *supra* note 12, at 70; Loewinger, *supra* note 22, at 3. Put another way, "[L]aw is the binding practice or custom of a community enforced by controlling authority. . . . [S]cience is study and research based upon reason in the discovery, observation and classification of verifiable . . . facts." J. RICHARDSON, *supra* note 22, at 34-35. There are two possible functions, prescriptive and descriptive, corresponding to two distinct modalities of knowledge: knowledge that centers on reinforcing and understanding social values and knowledge that orders reality for the purpose of exerting control over the processes of nature. Post, *Legal Concepts and Applied Social Research Concepts: Translation Problems*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL SCIENCE RESEARCH IN THE COURTS* 172, 173 (M. Saks & C. Baron eds. 1980). This idea can be alternatively described as an authoritative versus empirical dichotomy between law and science. See Haney, *supra* note 7, at 160.

60. P. ROSEN, *supra* note 57, at 116.

“Society requires stability and conformity, and it extracts obedience from the citizenry through the apotheosization of law, which is ultimately based on myth and dogma.”<sup>61</sup> Because of the law’s role as a shaper of society’s conduct a court must not only discover facts and maintain stare decisis, but also consider the practical and political consequences of its rulings.<sup>62</sup>

In contrast, social science is largely unconcerned about how society should act; its overriding goal is to describe how society does act. Social scientists reveal flaws in the judicial system and the false assumptions on which many legal decisions are based.<sup>63</sup> The social sciences’ propensity for debunking the very systems which the law is creating may be viewed as a legitimate threat to jurists’ position in society.

Conservative jurists, as members of a professional elite, may also be expected to defend their expertise in the manipulation of idiographic knowledge when it is threatened by the use of nomothetic information. Over time the law has developed legal doctrines which depend on idiographic knowledge for their application, and jurists have become experts at using this knowledge. The fact that liberal jurists are more likely to present social science evidence as justification for substantive legal change than conservative jurists—who have precedent ready at hand—engenders a degree of conservative suspicion towards social science evidence.<sup>64</sup>

Under this analysis, the law should become progressively more open to the use of statistical evidence as jurists feel less threatened by its use. The application of social science evidence in disputes involving new legal doctrines should increase. In our highly sophisticated society, new areas of law tend to be more complex than the old methods of idiographic proof can manage effectively.<sup>65</sup> If the questions presented are simply too complex to be analyzed anecdotally, that is, by using the idiographic knowledge relied on in the past, the court must allow the use of nomothetic information. In this instance, jurists are not losing the control which they once had and should be more willing to allow social science evidence.

As jurists are exposed to social science evidence, they should also become more adept at using the evidence—and, correspondingly, feel less threatened

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61. *Id.* at 116-17.

62. Kerr, *supra* note 12, at 70.

63. Tanford & Tanford, *Better Trials Through Science: A Defense of Psychologist-Lawyer Collaboration*, 66 N.C.L. REV. 741, 772-78 (1988). See also P. ROSEN, *supra* note 57.

64. Rosen, *History and State of the Art of Applied Social Science Research in the Courts*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL SCIENCE RESEARCH IN THE COURTS* 9, 11 (M. Saks & C. Baron eds. 1980).

65. One factor compelling the use of statistics in litigation is “the increasing intrusion of the federal government into the economy through various forms of regulation.” W. CURTIS, *STATISTICAL CONCEPTS FOR ATTORNEYS* 4 (1983). Highly technical disputes arise from this regulation. Examples are disputes over air and water quality, safety and economics of nuclear generators, deregulation of natural gas, and presence of carcinogens in the kitchen and work place. *Id.*

when presented with it. The education of lawyers in the concepts of statistics will also facilitate the effective and appropriate use of social science evidence.<sup>66</sup> It is unfortunate that "statistics is perhaps one of the most misunderstood and misused tools available to attorneys."<sup>67</sup> Justice Holmes predicted nearly a hundred years ago that "[f]or the rational study of the law the black-letter man may be the man of the present, but the man of the future is the man of statistics and the master of economics."<sup>68</sup> This prediction surely has "arrived slowly and with a halting gait, if indeed it has arrived at all."<sup>69</sup>

#### IV. DISTORTION OF EVIDENTIARY WEIGHT IN THE ADVERSARY SYSTEM

If a judge decides to admit social science evidence in a particular case, he must confront a further difficulty. It is an uncontrovertible fact that social science statistics can, at best, provide only an inference as to the likely explanation of any phenomenon.<sup>70</sup> Probability and statistics cannot prove causation. Even when the cause of a phenomenon appears clear, it can always be explained by chance.<sup>71</sup>

The problem of juries attaching undue significance to statistical proof is exacerbated by the adversary process which encourages experts to be less than truly objective.<sup>72</sup> Experts are naturally inclined to lean towards helping the party that is paying them.<sup>73</sup> Moreover, the attorney who questions the expert is committed to zealous advocacy, not to even-handedness or to scrupulous revelation of the limitations of his client's case. The attorney who has hired the expert is able to encourage him to let his own personal views affect his testimony,<sup>74</sup> limit his testimony to facts which the attorney chooses to bring to the court's attention,<sup>75</sup> and lead him during direct examination into overgeneralization by carefully molding questions to require seemingly precise yes and no answers.<sup>76</sup> Hostile cross examination encourages the expert to take

66. There are numerous books and articles devoted to the task of instructing attorneys in the rudiments of social science statistical technique. See, e.g., N. CHANNELS, *SOCIAL SCIENCE METHODS IN THE LEGAL PROCESS* (1985); W. CURTIS, *supra* note 65; Dawson, *Scientific Investigation of Fact—The Role of the Statistician*, 11 *FORUM* 896 (1976).

67. W. CURTIS, *supra* note 65, at 3.

68. Holmes, *The Path of the Law*, 10 *HARV. L. REV.* 457, 469 (1897).

69. D. BARNES & J. CONLEY, *supra* note 7, at 3.

70. D. BARNES, *STATISTICS AS PROOF* 393-94 (1983).

71. *Id.*

72. "[W]hatever the merits of the adversary system may be in general, it is well recognized that it wreaks havoc with expert testimony, and proposals for reform appear regularly." Meier, *Damned Liars and Expert Witnesses*, 81 *J. AM. STATISTICAL A.* 269, 272 (1986).

73. I. FRECKELTON, *THE TRIAL OF THE EXPERT: A STUDY OF EXPERT EVIDENCE AND FORENSIC EXPERTS* 132, 139 (1987).

74. *Id.* at 273-75.

75. *Id.* at 133.

76. *Id.*

an entrenched position and exaggerate the definiteness of his views in order to make his position clearer, protecting his ego and professional reputation.<sup>77</sup> Because of this, the evidentiary value of social science evidence becomes distorted. Juries are led to place too much confidence in the conclusiveness of the studies.

Suggested solutions to this problem generally focus around self-supervision by testifying experts<sup>78</sup> or neutral court-appointed experts.<sup>79</sup> Neither solution, however, is entirely satisfactory. Even those advocating adoption of a professional code of responsibility to enable testifying experts to police themselves admit that such a code will not prevent an expert from reacting defensively under cross examination.<sup>80</sup> And while it has been within the province of a judge to hire a court-appointed expert since the enactment of the 1975 Federal Rules of Evidence, judges rarely exercise this power.<sup>81</sup> The reason for this reluctance can be traced to the fact that experts who owe allegiance to no party may not develop the case in the manner the parties would like. For instance, he or she may pursue issues which the parties have agreed not to raise, thus disrupting the parties' litigation strategies.<sup>82</sup>

It may be true that the problem of uncertain and conflicting scientific views "is not one which the law can, or should, attempt to solve"<sup>83</sup> and that social science witnesses must ultimately decide whether "the value the adversary system places on partisan functioning is a sufficient justification for their own partisanship."<sup>84</sup> However, it is more profitable to attempt to cure the problem than to ignore it.

When statistical and probabilistic evidence is presented to the jury, full disclosure of all uncertainties and biases should be the rule. "[P]robabilistic evidence can be presented as such, with its application to a particular person left for the jury to decide."<sup>85</sup> An expert should strive to present the uncertainties and limitations of his conclusions.<sup>86</sup> The judicial system should support him in this endeavor as much as possible within the bounds of the adversary process.

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77. *Id.* at 132-33, 136.

78. Meier, *supra* note 72, at 275; Bazelon, *supra* note 58, at 119.

79. I. FRECKELTON, *supra* note 73, at 205.

80. Meier, *supra* note 72, at 276.

81. I. FRECKELTON, *supra* note 73, at 205.

82. Konopka, *Applied Social Research as Evidence in Litigation*, in *THE USE/NONUSE/MISUSE OF APPLIED SOCIAL SCIENCE RESEARCH IN THE COURTS* 129, 133 (M. Saks & C. Baron eds. 1980).

83. Loevinger, *supra* note 22, at 8.

84. Dillehay & Nietzel, *Psychological Consultation in Trial Preparation and Conduct*, in *THE IMPACT OF SOCIAL PSYCHOLOGY ON PROCEDURAL JUSTICE*, 167, 170 (M. Kaplan ed. 1986).

85. Loftus & Monahan, *supra* note 7, at 280.

86. See Fisher, *Statisticians, Econometricians, and Adversary Proceedings*, 81 J. AM. STATISTICAL A. 277, 277-81 (1986); Bazelon, *supra* note 58, at 116-17; Meier, *supra* note 72, at 275. See also Loftus & Monahan, *supra* note 7.

The Federal Rules of Evidence, considered to be the leading word on the development of court procedures and the admissibility of scientific evidence,<sup>87</sup> favor the spoken word of expert testimony over the introduction into evidence of the study itself.<sup>88</sup> Although some are discouraged by this preference of the federal rules,<sup>89</sup> the decision not to present the jurors with the written study will help prevent the jury from attaching undue significance to social science evidence simply because it, unlike other evidence, is presented in a reliable and official-looking document.

The policy outlined above will not solve all of the problems of presenting social science evidence before a jury. Unless the adversary system is abandoned entirely, there will always be a danger that attorneys presenting their best case will cause a jury to over estimate the evidentiary value of social science evidence. However, courts can lessen the detrimental impact of social science evidence by forbidding its use when the result of undue reliance is most detrimental and by encouraging full revelation of all social science evidence inadequacies. Perhaps in the future, commentators will be less willing to say, “[I]t is possible that more social science discoveries have occurred on the witness stand than in the library or the computer center or the laboratory.”<sup>90</sup>

#### CONCLUSION

The difficulties associated with the use of social science statistics in the legal setting are numerous and troublesome, but not insurmountable. With a better understanding of why the law regards social science evidence so skeptically in certain circumstances, the courts will be able to manage its use more effectively. When nomothetic social science evidence interferes with the moral value judgment entrusted to the jury, its use should be prohibited. When the nomothetic information does not interfere unduly with the judicial process, the evidence should be admitted and presented so as to reveal all of its uncertainties.

CONSTANCE R. LINDMAN

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87. Konopka, *supra* note 82, at 131.

88. Horowitz, *supra* note 32, at 151.

89. *See id.*

90. *Id.* at 152.