

JUROR COMPREHENSION AND PUBLIC POLICY Perceived Problems and Proposed Solutions

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Laypersons, the media, and many legal scholars tend to attribute problems in the jury system to the dispositions of individual jurors and to recommend reforms in jury selection procedures and relaxation of the unanimity rule. Social scientists view problems as a consequence of the structure of the jurors' task and recommend reforms in trial procedures. Reforms recommended by both groups are reviewed and evaluated. After years of apathy, the legal system has proposed, and in some jurisdictions implemented, a variety of reforms, most of which are based on the social science perspective that the problem is not due to bad jurors but to unnecessary procedural obstacles to high-quality decision making. These reforms are described in the final section of the article.

What's Wrong With Juries? Social Scientific and Lay Views of the Problem

For a quarter of a century, social science researchers have expressed concern about jurors' ability to understand the law that they are supposed to apply in deciding on a verdict. An article on the topic appeared in the first volume of *Law and Human Behavior* (Elwork, Sales, & Alfini, 1977), and since then there has been a steady accumulation of research showing that jurors do not remember, understand, or apply the judge's instructions correctly (Lieberman & Sales, 1997), that this incompetence is a serious threat to the fairness of jury trials, that deliberation doesn't solve the problem (Diamond & Casper, 1999; Ellsworth, 1989), and that remedies that can substantially improve juror comprehension are available (Charrow & Charrow, 1979; Diamond & Levi, 1996; Elwork, Sales, & Alfini, 1982). The social scientists' calls for reform were singularly ineffective. In 1991, Tanford published a review of the responses of state courts, legislatures, and rule-making commissions to empirical work on two commonly discussed reforms: preinstructing the jury on the substantive law and providing jurors with written copies of the instructions. He found that by far the most common response on the part of all three potential change agents was to do nothing and that, although the sporadic reforms initiated by legislatures and rule-making commissions endorsed the reforms suggested by social scientists, those initiated by the courts made the opposite recommendations. Tanford suggested that "social science that is at odds

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with 'common knowledge' is likely to be ignored" (1991, p. 167), and common knowledge was that juries were in no particular need of reform.

It appears that in the years since Tanford's article was published, "common knowledge" has suddenly caught up with the social scientists, at least in expressions of concern about the competence of the jury. In the last decade, the emotions of the American public have been aroused by highly publicized cases with controversial verdicts (the beatings of Rodney King and Reginald Denny; the first trial of the Menendez brothers; and, of course, the trial of O.J. Simpson) and by "runaway damage awards" in civil cases. The kinds of cases that attract the most attention from the media and that provoke the greatest outrage are acquittals of defendants who are "obviously guilty" and awards of enormously high damages for injuries that are "obviously trivial." Plaintiffs who lose and criminal defendants who are wrongfully convicted rarely move the public to the same levels of passion, and, when they do (as in the 1997 Boston case in which a young British nanny was convicted of murdering the baby she was caring for), the jury is rarely identified as the problem. Leniency, not toughness, is considered evidence of mistake.

Criticism of the jury is nothing new. Ever since there have been juries or jurylike tribunals—in ancient Rome (Frier, 1985), in eighteenth-century Britain (Green, 1985), in early twentieth-century America (Taft, 1905)—there have been attacks on their competence and even calls for their abolition. Unlike many previous periods of indignation against the jury system, however, this one has provoked a number of proposals for specific modifications and has induced judges, legal pundits, and policymakers to think seriously about jury reform. A recent article coauthored by a judge and a law professor begins with the announcement that "the time to reform the American jury system is now. The nation is ready for change. The present system is being judged inadequate by the bench, the bar, the press, and the public" (Sullivan & Amar, 1996). The social scientists are conspicuously absent from this list of critics, probably because, as Tanford would argue, common knowledge is far more influential than "real" knowledge.

There is little evidence that the current dissatisfaction with the American jury is the result of any actual deterioration in jury functioning. Despite the claims of the critics (e.g., Rothwax, 1996), the data do not suggest that jury acquittal rates are on the rise (Parloff, 1997; Vidmar, Beale, Rose, & Donnelly, 1997). Vidmar et al. analyzed conviction rates in the federal courts and five state courts (CA, FL, NC, NY, TX) over periods ranging from 10 to 50 years and found no evidence of change in the state courts over the last 10 years, and a decrease in acquittals in federal courts over both the last 10 years and the last 50 years. Plaintiff victories in civil cases do not seem to be becoming more common (MacCoun, 1993). Although the mean level of damage awards in civil cases has risen slightly over the past quarter-century, this change is small and is largely due to a handful of extremely high awards. The median level is about what would be expected given the rate of inflation (Gross & Syverud, 1996; MacCoun, 1993). Punitive damages are rarely awarded, and there is no evidence that they are becoming more common (MacCoun, 1993). Likewise, there have been no alarming changes in the frequency of mistrials or of hung juries. In sum, there is no hard evidence for any significant recent changes in jury performance.

Solid, grey statistics, however reliable, are hardly likely to capture the public

imagination, particularly when they show no major changes. A vivid example, an egregious verdict, the true-life story of a stubborn irrational juror: These attract our attention, enliven our conversations as we hear and repeat them again and again, and ultimately shape our attitudes. *Two* egregious verdicts in highly publicized cases definitely suggest a trend. Nisbett and his colleagues demonstrated years ago that when people are faced with sound statistical evidence (for example, ratings of the quality of a course by dozens of students who took it last year) that is contradicted by one or two vivid counterexamples (for example, videotapes of two or three students describing their personal experiences in the course), the vivid, unreliable information is more persuasive than the boring, reliable information (Borgida & Nisbett, 1977; Nisbett, Borgida, Crandall, & Reed, 1976). The high school student reading a guide to colleges picks out the quotes from students and ignores the rest of the text; the new car buyer reads *Consumer Reports* but relies on his colleague's horror story about the day the gear shift fell off; the job candidate's 10-minute interview overwhelms her credentials (Nisbett & Ross, 1980).

People not only remember vivid examples more than ordinary ones, they also take vividness as a sign of prevalence. Vivid examples are readily available to memory and are taken as representative (Tversky & Kahneman, 1973). When a person is asked about the jury system, O.J. Simpson, Rodney King's attackers, and the McDonald's hot coffee cases come to mind and are seen as more typical than they are. Of course, one reason that these cases were so noteworthy, so talked about, and so available to consciousness is that they did strike many people as failures in the system. Susan Smith's trial and her jury functioned impeccably and are barely remembered, and even the juries that tried the Oklahoma City bombing cases are little discussed. So, paradoxically, the most unusual cases are seen as symptomatic of the dire state of the jury system in general.

Lay Perceptions of the Problem: Race, "Nullification," and the "Bad Juror" Theory

Both the O.J. Simpson case and the Rodney King beating case involved interracial crimes and juries (in the criminal case against Simpson and the state case against King's attackers) that were largely made up of people of the same race as the defendants. For some writers and members of the public, race undeniably plays a role in their concerns about jury functioning. A current theme is that jurors favor criminal defendants of their own race and that Black jurors are particularly reluctant to convict Blacks. A few striking examples are told and retold, in publications ranging from the *Reader's Digest* (Levine, 1996) to the *New Yorker* (Rosen, 1997), and are discussed as though they represent a growing trend that is reaching crisis proportions. The cases involve either juries with a majority of Black jurors, as in the 1993 Baltimore trial of Davon Neverdon (reported by Levine, 1996; Thernstrom & Fetter, 1996; Weiss & Zinsmeister, 1996), or cases in which a lone Black holdout prevents the jury from reaching a verdict (Rosen, 1997). Quotes from individual prosecutors or judges to the effect that Blacks commonly vote along racial lines are produced as indications of how widespread the problem is. A selective set of statistics on high acquittal rates in jurisdictions with large Black populations, most of which were originally pub-

lished in a single *Wall Street Journal* article published the day after the verdict in the first O.J. Simpson case (Holden, Cohen, & de Lissner, 1995), is used to buttress the quotes and anecdotes, sometimes citing the *Wall Street Journal* piece, more often not (Levine, 1996; Thernstrom & Fetter, 1996; Weiss & Zinsmeister, 1996; see Parloff, 1997, for an excellent investigative report of the unreliability of these statistics).

Many of the discussions about the influence of race make explicit an assumption that is implicit in more general discussions of jury functioning: "Jury nullification is undermining our system of justice" (Levine, 1996). Whereas much of the work by social scientists identifies the problem as one of hard-working, well-intentioned jurors who are simply unequal to the prodigious challenge of understanding and applying the law, public discussion adds the factor of intentional nullification and often fails to make a clear distinction between intentional and unintentional failure to follow the law.

Not all cases in which the jury reaches a verdict that is legally questionable involve nullification; in fact, it is likely that most do not. True nullification requires an understanding of the applicable law and a conscious decision to follow a different course. According to Green (1985), nullification can take three forms. First, the jury may repudiate the law itself, refusing to convict (or sometimes to acquit) the defendant because the law itself is seen as unjust. In medieval England, before the category of manslaughter came into existence, juries often refused to convict people who killed in moments of sudden extreme provocation, even though homicide law made no distinction between such cases and premeditated murderers. Euthanasia killings may be a current example. Second, the jury may refuse to convict a person who is legally guilty because the punishment is seen as unjustly harsh. The commonly cited example is the refusal of English juries to convict when petty theft and other minor offenses were capital crimes (Green, 1985; Weinstein, 1993). Thirty-year mandatory minimum sentences for small-time drug sales and California's "three strikes" law may evoke a similar reluctance in some modern juries. Finally, a jury may accept both the law and the punishment as generally fair but feel that, in the particular case under consideration, following the law would lead to an unjust outcome. Acquittals of battered women who kill their abusers, even though they are not in acute danger at the time they commit the act, may fall into this category. True nullification is often principled and always intentional. The freedom to nullify has often been cited as one of the great virtues of the jury system, infusing the application of the law with the conscience of the community and reflecting changes in morality that foreshadow changes in the formal law.

When critics of the modern jury rail about nullification, it is unlikely that they have these noble examples in mind. Popular attacks on the jury rarely include careful analyses or even descriptions of the nature of the problem that is so in need of remedy: The usual notorious examples serve both as the evidence that a problem exists and as a substitute for an explicit definition of the problem. Sometimes the term *nullification* is used; more often it is not. The salient, vivid image that seems to embody the fear and the outrage is that of the juror who intentionally decides to disregard the law "for no good reason," perhaps to express a general dissatisfaction with society or with the criminal justice system (Marder, 1999). The story of the Black juror who refuses to vote for conviction because of

an unwillingness to send any more young Black men to jail is frequently adduced (Rosen, 1997; Thernstrom & Fetter, 1996). The behavior is similar to nullification in that it is seen as intentional; but the principles, if there are any, are seen as disreputable—not conscientiousness, but what Green calls “dishonest partisanship” (1985, p. 28). It does not infuse the application of the law with the conscience of the community, at least not the conscience of the majority community. It undermines the rule of law with idiosyncratic refusals to see reason, or, alternatively, with the morality of a stubborn minority community. The problems with the jury system are blamed on the inclusion of bad jurors, whose misbehavior subverts an otherwise admirable system (Rosen, 1997), or, in the words of Judge James Rant, “the obstinate loner, the obsessive individual, the morally-challenged individual” (in Sullivan & Amar, 1996, p. 1154).

Proposed Reforms

The premise that the problem with the jury system is basically a problem of bad jurors leads to proposals for reform designed to reduce or eliminate the influence of these jurors. The most radical of these, of course, is to abolish juries altogether and turn their task over to judges. Although this solution has occasionally been proposed (e.g., Burger, 1971; Kapardis, 1997), most proposals are less drastic, focusing on the selection of more competent jurors and on the restriction or elimination of the influence of less competent ones. A good example of this perspective is a recent article by Sullivan and Amar (1996), in which the authors propose six reforms and preside over a debate in which lawyers, judges, legal commentators, and law professors take sides and argue for and against each reform. Two of the proposed reforms—allowing jurors to talk about the case and allowing jurors to ask questions—are system-focused reforms of the sort recommended by social scientists; the other four, one system-focused and the other three not, all reflect mistrust in the abilities of the individual juror and have been widely proposed by lay and legal critics of the jury system.

Two of these four proposals involve jury selection. A major theme of popular criticism is that competent, responsible people rarely serve on juries; instead, American juries are made up of incompetent people—the uneducated, the jobless, the people who pay so little attention to the news that they have never heard of litigants who are major public figures. This perception has led to proposals for mandatory jury service (this is not one of Sullivan and Amar’s proposals); and, in fact, with the increased representativeness of the jury pool and the growing prevalence of one-day/one-trial systems of jury service, America has gone a great distance toward full representativeness of the venire in the past few decades.

These developments, and even mandatory jury service, however, only broaden the jury pool; they do not necessarily increase the representativeness of actual juries because attorneys exercise selectivity in voir dire. So even if the well-behaved, competent jurors get into the courthouse, they do not get into the jury room. Although in the vast majority of cases attorneys get very few peremptory challenges (the modal number across states is six for felonies, three for misdemeanors and civil cases [Munsterman, Hannaford & Whitehead, 1997, Appendix 4]), voir dire is nonetheless seen as a significant threat to the competence of the jury. The high-publicity spectacle trials typically involve greatly

expanded voir dire, partly because they are high-publicity, so that the likelihood of finding jurors who have not yet formed a strong opinion is reduced. One consequence is that the media and the public are familiar with jury consultants and sophisticated, time-consuming selection techniques. According to Sullivan and Amar (1996), our current voir dire procedures allow lawyers to “whittle away at a jury panel until they have chosen a panel they feel would be most suited to arrive at a desired outcome” (p. 1145). Thus two of their proposed reforms are to shorten in-courtroom voir dire and to abolish peremptory challenges.

At first, these proposed reforms may seem to contradict our argument that popular criticisms of the jury are based on the “bad juror” theory. Surely people who are worried about “the obstinate loner, the obsessive individual, [and] the morally-challenged individual” should favor extensive voir dire to identify these deviants and prevent them from biasing or obstructing the decision-making process. We expect, however, that support for proposals like these stems from the suspicion that attorneys are not using voir dire to identify and challenge biased jurors but to identify and challenge the intelligent, rational, and unbiased jurors in an effort to “hand pick” juries that will favor their side. “Bad jurors” are seated on juries because they are the ones the attorneys and the jury consultants are looking for.

In any case, if the restriction of voir dire and the elimination of peremptory challenges result in the presence of an occasional biased or irrational person on the jury, it is not particularly consequential, because these two proposals for reform are almost always accompanied by a third popular proposal: the elimination of the unanimity requirement. Rather than attempting to identify and dismiss the biased juror ahead of time, the strategy is to seat everyone (the idea of 12 people selected “at random” is repeated with approval) but to muzzle the dissenters when it comes to the actual decision making. The obvious underlying assumption is that any juror who holds out against the views of the majority must be an unreasonable person. This assumption was implied by Justice White in one of the original Supreme Court decisions allowing nonunanimous jury verdicts: “A majority will cease discussion and outvote a minority only after reasoned discussion has ceased to have persuasive effect or to serve any other purpose—when a minority, that is, continues to insist upon acquittal without having persuasive reasons in support of its position” (*Johnson v. Louisiana*, 1972, p. 361). The same assumption is expressed by current critics of the unanimity requirement: “If they [the jurors] are reasonable and sensible, there will be give and take. They will arrive at the unanimity which is required. If they are not reasonable, or if two of them are not, and will not listen to sensible argument, then a verdict of ten will certainly suffice” (Judge Rant, in Sullivan & Amar, 1996, p. 1155). *Twelve Angry Men* no longer comes to mind as the popular image of the American jury. Other, less noble images of the lone holdout have supplanted it, and the idea that the dissenters might have something useful to say and should at least be listened to seems to be evaporating from contemporary consciousness. The social science research, which shows that juries operating under a unanimity rule are more thorough and less adversarial, that their members participate more equally and are more satisfied with the decision, and that in some cases the minority actually does persuade the majority (Hastie, Penrod, & Pennington, 1983) is ignored. Hung juries, once taken as a sign that the system was working well, in that majorities

were not railroading minorities to vote for a verdict against their conscience, are now taken as a simple sign of failure, as a sign that there are bad jurors in the room who are obstructing justice.

It is interesting that most of the current proposals for nonunanimous juries cover a range of recommendations from simple majority verdicts (e.g., Levine, 1996) to proposals for 10-to-2 verdicts (e.g., Sullivan & Amar, 1996), suggesting that bad jurors are seen as fairly widespread in today's society. If the fear were that a truly eccentric person might turn up on a jury and block the verdict, surely an 11-to-1 rule should be sufficient. The assumption that at least one sixth of the American jury-eligible population is so deficient that their views shouldn't count is considerably more extreme.

The final reform suggested by Sullivan and Amar (1996) is that the judge be required to summarize the facts and the law for the jury at the end of the trial before deliberation begins. That the judge should describe the law to the jurors is inevitable; there is substantial controversy about how it should be done but not about whether it should be done. The idea that the judge should also summarize the facts is much more problematical. Although it is a system-focused reform, it also reflects a lack of confidence in the jurors' abilities. Again, the clear assumption is that juries cannot be trusted to arrive at an accurate interpretation of the facts or the law without assistance from the judge. An underlying assumption, rather more dubious, is that there is only one "correct" interpretation of the evidence, and that the judge is more likely than a diverse group of ordinary citizens to know what it is. It has been argued that this very diversity of interpretation is what makes the jury a superior fact finder (Ellsworth, 1989; *Peters v. Kiff*, 1972), as it gives rise to more intense scrutiny of the evidence and more exhaustive and penetrating discussion in the attempt to reconcile differences. Unlike most judges, most jurors are forced to consider more than one view of the facts. It seems highly likely that the expression of this diverse mix of interpretations would be substantially curtailed if the judge provided a summary statement of the evidence. Jurors are already highly motivated to arrive at the verdict they believe the judge thinks is the right one, and they are highly attentive to cues that might reveal the judge's opinion (Blanck, Rosenthal, & Cordell, 1985; Greenbaum, 1975). Whether increased uniformity in the pre-deliberation views of the jurors is seen as desirable or undesirable depends on one's respect for the independent perspectives of the jurors. Those who believe that interpretations of the evidence that differ from the judge's interpretation are an indication of ignorance or bias on the part of the jurors see this reform as a way of keeping wrong ideas from influencing the discussion.

The Lay Perspective From a Psychological Point of View

Social scientists who have studied the strengths and weaknesses of jury decision making have a very different perspective. One of the central lessons of social psychology, illustrated by Solomon Asch's early experiments on conformity (Asch, 1951), Stanley Milgram's studies of obedience to authority (Milgram, 1963), the Darley and Latané (1968) studies of bystander intervention, and many others, is that the characteristics of the person are far less important in determining who conforms, who obeys, or who turns away from a call for help, and that the

characteristics of the situation are far more important than most people believe. People, perhaps especially Americans, naturally explain other people's behavior in terms of stable personal dispositions: their irrationality, their stubbornness, their traits and biases, whatever internal traits are stereotypically correlated with the way the person behaved. This tendency to overestimate the influence of personal causes is known as the "dispositional bias" or even the "fundamental attribution error" (Nisbett & Ross, 1980).

This pervasive attributional bias leads predictably to the conclusion that the problems with the jury system are problems in the individual jurors, and that the solutions must involve improved selection and tighter measures for neutralizing the influence of those who are intellectually or morally weak. Social psychologists have found time after time that individual attitudes, background, personality traits, and even intelligence are poor predictors of what a person will actually say or do in a particular situation (Mischel, 1968; Ross & Nisbett, 1991). An understanding of the situation is a much better predictor of a person's behavior than an understanding of the person. Jury researchers have searched in vain for individual differences—race, gender, class, attitudes, or personality—that reliably predict a person's verdict and have almost always come up empty handed (Hans & Vidmar, 1986; MacCoun, 1993).

Just as people tend to overestimate the influence of personal characteristics in determining behavior, they tend to underestimate the power of the situation. Apparently small changes in the situation can make significant differences in the way people behave. For example, whether a person is terrified of a deadly disease or relatively blasé about it does not tell you much about whether she will actually go and get a vaccination; whether someone has given her directions to a health center is much better predictor (Leventhal, Singer, & Jones, 1965). No personality measures have succeeded in predicting who will resist group pressure and stand up for their own opinion; however, whether the person is a minority of one or one of a minority of two makes an enormous difference (Asch, 1951). Whether one helps a person in need depends much more on whether one is late for an appointment than on whether one is an empathetic person (Darley & Batson, 1973). Thus it is no accident that social psychologists who study juries have attributed deficiencies in jury performance to deficiencies in the situation: the disorganized presentation of evidence, the withholding of information necessary to make a legal decision until after all the factual evidence has been presented; the prohibition against asking for clarification or even taking notes; the oral recitation of lengthy instructions in an unfamiliar, specialized language. Rather than concentrating on weeding out unqualified jurors, social scientists have concentrated on ways to modify their task. In the next section, we examine the social science perspective in more detail, reviewing the scientific literature on juror performance and the reforms proposed by social scientists.

The Social Science Perspective: Problem and Proposed Reforms

Juror Performance

A general characterization of jurors' cognitive performance during trials is that they are good at remembering and understanding the facts of a case but are poor at remembering, understanding, and applying the relevant laws. Researchers

have administered various recall and recognition tasks for case facts, with results often showing correct response rates of 75% or thereabouts (Cruse & Browne, 1987; ForsterLee, Horowitz, & Bourgeois, 1993; Kassin & Wrightsman, 1979; Smith, 1991a). Juror performance has tended to be much lower when it comes to the legal information in judges' instructions. In an earlier article (Reifman, Gusick, & Ellsworth, 1992), we characterized the situation as follows: "Study after study has shown that jurors do not understand the law they are given, often performing at no better than chance level on objective tests of comprehension" (p. 540). We found that people who had sat on a jury during an actual criminal trial answered an average of only 4.78 out of 10 questions correctly on the procedural criminal law instructions they had heard, although individuals who did not serve on criminal juries and so were not instructed performed even more poorly (Reifman et al., 1992). A thorough and more recent analysis of jurors' poor comprehension of the law has been prepared by Lieberman and Sales (1997).

Although jurors appear to perform substantially better on factual than on legal items, we cannot be absolutely sure that tests of the facts and of the law have been equal to one another in terms of difficulty. It has often been suggested that jurors are likely to have problems understanding the facts in cases that involve complex medical, technological, or financial evidence (Charrow, 1996). Some scholars suggest that such complex factual evidence is especially common in civil trials. According to ForsterLee et al. (1993), "in general, jurors in civil trials are required to interconnect and recall more evidentiary elements, combine these elements in different ways, and render more decisions than their criminal jury counterparts" (p. 14). Although jurors' processing of evidence is certainly a worthwhile topic of inquiry, we have preferred to focus on juror comprehension of legal instructions, given that instructions are more within the control of judges and legislators (and can thus be modified) than are facts. Our review thus reflects this emphasis, although research on jurors' memory for facts and reforms designed to improve their understanding are discussed where relevant.

Proposed Reforms

Overview. Psychologists and other social scientists have proposed several reforms aimed at overcoming (or at least reducing) jurors' cognitive difficulties. Unlike the reforms voiced in the media by policymakers and commentators that focus on jurors' qualifications, most of the social science reforms focus on aspects of the jurors' tasks; task-oriented reforms have also recently emerged from some court systems and judges (e.g., Council for Court Excellence District of Columbia Jury Project, 1998; Dann, 1993; these will be described and discussed in the final section). Table 1 lists a number of task-oriented jury reforms, ordered roughly to match the sequence of events in a trial, and provides selected (noncomprehensive) references for each. These proposed reforms vary in the amount of empirical testing to which they have been subjected; those that have been studied systematically are discussed in the next section on scientific evaluation of the proposed reforms.

Providing relevant information to prospective jurors before trial, thus increasing their familiarity with the legal system and the case at hand, may improve their performance during the actual trial (Dann, 1993). Several social science reforms

target the judge's communication to the jury. One prominent and fairly extensively studied reform is to have the judge instruct jurors on the law at both the beginning and the end of the trial (individual studies are summarized in the section on scientific evaluation; see also Lieberman & Sales, 1997, for a thorough review). Three more recent suggestions in the area of judges' communication to the jury include having judges attempt to rid jurors of preexisting erroneous conceptions of the law (Smith, 1991b), explain the reasons behind particular rulings (Diamond & Casper, 1999; Kassin & Sommers, 1997), and comment on or summarize the evidence and law (Heuer & Penrod, 1994b; Sullivan & Amar, 1996).

Another set of reforms suggested by social scientists targets juror behavior during the trial. Two of these fall under the rubric of "juror participation": allowing jurors to take notes and to ask questions of witnesses during the trial. These techniques have been investigated by Heuer and Penrod (1988, 1994a), as well as by other social scientists. The findings of these studies are summarized in the section Scientific Evaluation of Proposed Reforms.

Chronologically, the next step for jurors after seeing, hearing, and processing the evidence is to deliberate on how the law should be applied to the evidence. There are again several reforms that have been proposed with the goal of improving jurors' understanding and application of the law and the decision-making process in general. Before the jury even retires to the deliberation room, the judge can make suggestions about how to deliberate (which might help ensure that jurors discuss the evidence and law before voting; Council for Court Excellence, 1998); provide a written copy of the instructions; deliver the instructions in a case-specific form (e.g., mentioning the parties by name); and provide instructions before the attorneys' closing arguments. Of these four proposals, only the provision of written instructions has received substantial empirical attention, and it is discussed in the section on scientific evaluation.

Two proposed reforms apply to actual deliberations. The first reform involves the format for reaching a decision. A *general verdict*, the one most familiar to laypersons, is the decision as to who wins the case and any relief to be granted (Wiggins & Breckler, 1990). It is thought that juror performance may be enhanced by adding *interrogatories* (specific questions the jury must answer) to the general-verdict decision, or by using *special verdicts* (questions covering all issues of fact in a case, without a general verdict) (Wiggins & Breckler, 1990). A basic benefit to be expected from these procedures is that the requirement that jurors answer specific factual questions will focus their attention on the law (Wiggins & Breckler, 1990). The second reform involves allowing or encouraging jurors to ask questions of the judge and having the judge give clarifying answers (e.g., Severance & Loftus, 1982). Both of these areas have been investigated and are discussed in the scientific evaluation section.

The last type of proposed reform is targeted beyond the courtroom, to the legislatures that write the laws themselves. The idea of rewriting statutes and instructions to simplify the language is one of the oldest of all suggested reforms; indeed, the groundbreaking Elwork et al. (1977) article was devoted largely to this very idea. The development of the literature on simplification is discussed by Lieberman and Sales (1997), as well as in our section on scientific evaluation.

In the domain of capital punishment, in which jurors appear to have substan-

Table 1
Task-Oriented Jury Reforms, With Selected References

Reform	Reference
Reforms focusing on pretrial period	
Giving jurors an orientation session, ideally specific to their case	Council (1998); Dann (1993); Heuer & Penrod (1994b); Munsterman et al. (1997)
Mini-opening statements by lawyers before voir dire	Dann (1993); Munsterman et al. (1997)
Reforms focusing on judges' communication to the jury	
Having judge instruct jurors on law both at beginning and end of trial (preinstruction)	Council (1998); Dann (1993); Lieberman & Sales (1997); Munsterman et al. (1997)
Having judge provide interim instructions during trial	Council (1998)
Having judge attempt to rid jurors of preexisting erroneous conceptions of the law	Smith (1991b)
Having judge explain reasons behind particular rulings	Diamond & Casper (1999); Kassin & Sommers (1997)
Having judge comment on or summarize the evidence and law	Heuer & Penrod (1994b); Sullivan & Amar (1996)
Reforms focusing on juror behavior during trials	
Providing jurors with notebooks containing, e.g., list of witnesses, glossary of technical terms	Council (1998); Dann (1993); Munsterman et al. (1997)
Minimizing and pointing out distinguishing features of exhibits and documents (document control)	Dann (1993)
Allowing counsel to deliver summary statements at points during trial	Council (1998); Dann (1993); Munsterman et al. (1997)
Allowing jurors to take notes during trial	Council (1998); Dann (1993); Heuer & Penrod (1988; 1994a); Munsterman et al. (1997)
Allowing jurors to ask questions of witnesses during trial	Council (1998); Dann (1993); Heuer & Penrod (1988; 1994a); Munsterman et al. (1997); Sullivan & Amar (1996)
Allowing jurors to discuss the case during breaks within the trial	Dann (1993); Munsterman et al. (1997); Sullivan & Amar (1996)

Table 1 (*Continued*)

Reform	Reference
Reforms focusing on jurors during deliberation stage	
Having the judge make suggestions regarding the deliberation and group decision-making process (e.g., how to get started)	Council (1998); Dann (1993); Munsterman et al. (1997)
Providing written copy of the instructions	Council (1998); Dann (1993); Lieberman & Sales (1997); Munsterman et al. (1997)
Delivering instructions in a case-specific form (e.g., mentioning parties by name)	Council (1998); Dann (1993)
Providing instructions before attorneys' closing arguments	Council (1998); Dann (1993); Munsterman et al. (1997)
Structuring decision task so that jury must answer specific questions leading to overall verdict (interrogatories; special verdicts)	Heuer & Penrod (1994b); Munsterman et al. (1997); Wiggins & Breckler (1990)
Allowing or encouraging jurors to ask questions of judge, and having judge give clarifying answers	Dann (1993); O'Neill (1989); Munsterman et al. (1997); Severance & Loftus (1982)
Reforms involving legislative rewriting of statutes and instructions	
Having legislatures rewrite statutes and instructions to simplify the language of existing laws	Lieberman & Sales (1997); Munsterman et al. (1997)
Having legislatures change the law itself to reflect simpler underlying definitions of the law	Steiker (1996)

Note. Council = Council for Court Excellence District of Columbia Jury Project (1998).

tial difficulty with the instructions (see research by Haney & Lynch, 1994, 1997, showing jurors' great difficulty with the terms "aggravation" and "mitigation"), an even more radical proposal has been offered. Several scholars have suggested that, since the reinstatement of the death penalty, the law itself has become so convoluted, illogical, and contrary to empirical evidence that it cannot be applied in a principled way to arrive at fair and accurate decisions (Gross & Mauro, 1989; Steiker, 1996; Weisberg, 1983). Arbitrariness in death sentences may reflect the irrationality of laws governing capital sentencing rather than the irrationality of the jury. The only solution would involve changing the law itself (see, e.g., Steiker, 1996), although some scholars are pessimistic about the possibility of

drafting any capital sentencing law that can achieve just results. These difficulties were predicted by Justice Harlan before any of the current laws were drafted. In *McGautha v. California* (1971), he rejected the possibility of "guided discretion" as unworkable:

To identify before the fact those characteristics of criminal homicides and their perpetrators which call for the death penalty, and to express these characteristics in language which can be fairly understood by the sentencing authority, appear to be tasks which are beyond present human ability. (p. 264)

Psychological underpinnings. Many of the reforms proposed by social scientists are based on theory and research from cognitive and social psychology. Several proposals for rewriting statutes in simpler language, for example, have been based on psycholinguistic principles (see Elwork et al., 1977, for details). Scientific justifications for preinstruction by the judge and provision of written instructions are also available (Heuer & Penrod, 1989). Both of these policies could aid jurors' processing of the instructions through repeated exposure. Further, preliminary instruction can help create mental organizing frameworks, or *schemas*, for jurors, which might aid recall of both the evidence and the law (for additional discussion of the schema concept, see Bransford & Johnson, 1972; Fiske & Taylor, 1991; Markus & Zajonc, 1985).

Smith (1991b) points out, however, that jurors often come into court with their own (frequently erroneous) preexisting knowledge frameworks about the law, and so, "the objective of jury instruction, then, must be concept revision, not merely concept formation" (p. 869). Smith's research has been questioned to some extent because juror reliance on preexisting ideas to the exclusion of proper legal instructions may occur only (or primarily) when the instructions are incomprehensible; given clear instructions, perhaps jurors would be more likely to follow the law rather than their preexisting ideas (English & Sales, 1997; Lieberman & Sales, 1997). Because the research record overwhelmingly indicates that judicial instructions are not clear, this criticism may be more theoretical than practical. In addition, a finding by Diamond and Casper (1999) suggests that, at least under certain circumstances, jurors adhere to preexisting ideas even when the instructions are written clearly. Diamond and Casper compared rates of death sentences in a simulation experiment in which jurors were told that if the defendant were not sentenced to death, he would spend an unspecified amount of time in prison or would receive life without the possibility of parole (LWOP). The authors expected to find fewer death sentences in the LWOP condition because jurors could be certain that defendants would never go free, but the frequency of death sentences was virtually identical in the two conditions. Although the LWOP instruction was presumably clear and understandable (data from a manipulation check suggested this was so), the jurors in the LWOP condition appeared to rely on preexisting beliefs that LWOP did not really mean a life sentence. Diamond and Casper noted that

this distrust of the assurances offered by the judge provides quite striking evidence that jurors are not blank slates upon which judges write down rules and principles that jurors then apply. To the contrary, these prior beliefs may be held so strongly

that jurors discount or disregard specific and critical information provided by the judge. (chap. 3, manuscript p. 43)¹

Finally, in the area of interrogatories and special verdicts, the fact that these formats require juries to explain and justify their decisions has been raised as an objection against them because they take away juries' right to nullify (Wiggins & Breckler, 1990). However, social-psychological research on accountability by Tetlock (e.g., 1985) has shown that having to justify one's decisions to others can improve the quality of information processing. Thus, there would appear to be a scientific basis for expecting benefits from interrogatories and special verdicts. Also, if juries believed that the correct answers to the questions nonetheless led to a miscarriage of justice, they could express this belief to the judge, and it could be argued that doing so would reflect a thoughtful and principled attempt at nullification rather than general uneasiness or confusion.

Many of the social science proposals have been around for several years, allowing us to evaluate the amount of empirical support that exists for the efficacy of each proposed reform, as well as the extent to which they have been adopted by state and federal judicial systems. These two issues are considered in the following sections.

Scientific Evaluation of Proposed Reforms

The three proposed reforms that have received the greatest empirical attention are (a) rewriting instructions, (b) preinstructing jurors, and (c) providing a written copy of the instructions. Because these are reviewed extensively by Lieberman and Sales (1997), we provide only brief, selective summaries of them. More recent reforms (e.g., having judges explain the basis of their rulings) are also discussed briefly. Finally, we provide more extensive discussion (including a case study) of a technique for promoting juror comprehension of the law that could be

¹English and Sales's (1997) critique of Smith (1991b) falls within the larger debate over whether there is any limit to how much jurors' comprehension of the law can be improved by language simplification. English and Sales argue that there is insufficient extant evidence for such a limit, whereas Smith has argued that jurors' reliance on incorrect prior knowledge is likely to limit the level of comprehension they can attain. Neither the Diamond and Casper (1999) experiment nor any other single study is likely to resolve this debate. Although the Diamond and Casper experiment appears to provide relevant evidence of participants' personal preconceptions overriding an ostensibly clear instruction, some qualifications to this conclusion can be identified, based on English and Sales. First, Diamond and Casper rely upon a verdict-based criterion—death sentences in the LWOP versus unspecified sentence length conditions—that rests on the assumption that LWOP should lead to fewer death sentences. (English and Sales advocate the use of thorough, direct comprehension measures, which Diamond and Casper obtained to some extent with their manipulation checks). Second, English and Sales suggest the use of "dry," unemotional stimuli such as securities regulations cases, as these "would not be familiar (cognitively 'hot'), as would be death penalty scenarios and would thereby reduce the likelihood that intuitive and deeply held commonsense notions would be activated, leading to possible nullifications" (p. 398). Given the controversy over the death penalty and its prominence in research on jury decision making, there are good reasons for continuing to study jurors' responses to capital cases. Also, if the success of language simplification depends on the type of case, then general statements about the amount of improvement possible are clearly unwarranted, and type of case should be a variable in future studies.

implemented without formal legal reforms: having attorneys clarify legal instructions during their arguments to the jury.

Rewriting Instructions

In several studies, simplified instructions have led to higher comprehension rates than the original pattern instructions, although even with these improvements, jurors remain far from 100% accuracy (Lieberman & Sales, 1997). For example, although several instructional simplifications examined by Charrow and Charrow (1979) produced improvements in comprehension, all of the improvements put together brought juror performance only to approximately 60% accuracy. With repeated rewrites, Elwork, Sales, and Alfini (1982) raised comprehension to 80%. Lieberman and Sales (1997) suggest that an expert in psycholinguistics should be part of any team that attempts to rewrite pattern jury instructions. If this criterion is satisfied and the rewriters make sure to incorporate state-of-the-art findings from the psycholinguistic, linguistic, and cognitive literatures, Lieberman and Sales appear quite optimistic about the prospects for increased juror comprehension. Additionally, new instructions should be tested in the field so that the performance of people who might actually be in jury pools can be evaluated (Elwork et al., 1982). An example of this strategy is the work of Zeisel, Diamond, and Levi (American Bar Foundation, 1996).

Preinstruction of Jurors

In assessing the effectiveness of instructing jurors both before and after the evidence, as opposed to only afterward, it is useful to consider the three possible measures of juror comprehension of the law suggested by Smith (1991a). One is *abstract comprehension*, which is represented by objective multiple-choice or true-false questions about general legal principles (e.g., "A person who is threatened with an attack that justifies self-defense does not have the duty to flee or retreat," Smith, 1991a; see Heuer & Penrod, 1988, for an example of such a questionnaire). A second measure taps respondents' ability to apply the law to the facts of the instant case (assessed with similar questions, but with reference to the specific parties and facts in the case). A third measure examines the application of the law to novel facts by having jurors read scenarios of new cases and then try to come up with the legally correct verdict.

Three published studies have shown uniformly tiny effects of preinstruction on abstract comprehension of the law. Smith herself (1991a) found that subjects who were instructed before and after the evidence answered 70% of the abstract comprehension items correctly, whereas subjects instructed only afterward answered 68% correctly. Heuer and Penrod (1989) found a small difference in criminal cases between jurors who received preinstruction (mean of 6.9 items correct out of 9 possible, or 77%) and those who did not (73%), but there was no difference in civil cases (53% correct in each group). Finally, Elwork et al. (1977) found that jurors instructed both before and after the evidence answered 69% of the items correctly (mean of 8.3 out of 12 possible), whereas after-only jurors had an accuracy rate of 67%. However, Smith (1991a) found much larger improvements on the two other types of juror-comprehension measures. In applying the law to the instant case, subjects in the before-and-after condition responded

correctly 69% of the time, compared with 55% in the after-only condition. On application of the law to novel cases, the mean percentages correct were 75% for before and after, and 67% for after only.

Bourgeois, Horowitz, ForsterLee, and Grahe (1995) investigated the effects of preinstruction and group deliberation on juror performance in a simulated civil trial. A dependent measure used in this and other studies by these investigators that can be considered to tap juror understanding of the law is the degree to which jurors vary their damage awards to multiple plaintiffs in accordance with the severity of the plaintiffs' injuries (this also taps jurors' processing of the evidence). Bourgeois et al. used a complex study design that included several between- and within-subject factors, with levels of some factors not being paired with levels of others. In an analysis from their first study, which examined jurors who deliberated and "nominal" jurors who did not, Bourgeois et al. found that differentiation among plaintiffs was highest when instructions were given only before the evidence (a situation that does not exist in real trials) to nominal jurors. This study also found that preinstruction (a combination of before-only and before-and-after conditions) resulted in higher damage awards in general. Because, in the authors' view, the stimulus trial favored the plaintiffs, it could not be determined whether preinstruction led to high damages by creating a confirmatory proplaintiff search process (i.e., preinstruction may make salient in jurors' minds the kinds of evidence needed for a plaintiff win) or simply by leading jurors to process the evidence more systematically. Bourgeois et al. therefore performed a second study in which the stimulus trial materials favored the defense. This study also introduced trial complexity as a variable. Results showed that after deliberation, preinstruction led to more prodefense verdicts in the low-complexity context (presumably due to systematic processing) than did post-instruction, but that preinstruction led to more proplaintiff verdicts in the high-complexity context (presumably due to biased confirmatory processing).

As evidenced by the description of these studies, the literature on preinstructing jurors on the law is complex. Enhanced comprehension or information processing by jurors appears only under certain trial conditions and only on some types of dependent measures. Further, one factor that appears to moderate the effect of preinstruction, trial complexity, is something that is not typically under the control of the legal system.

Provision of Written Copies of the Law (or Other Supplementation)

Providing jurors with a written copy of the judge's instructions in addition to the traditional oral instructions has been a prominent jury-reform proposal (e.g., Heuer & Penrod, 1989). Written instructions are not the only technique judges use to augment the oral instructions, however. We found that in the jurisdiction we studied (Reifman et al., 1992), a far more common way in which judges augmented their instructions was by providing a tape-recorded copy of the instructions. It appears at this time that findings are mixed regarding augmentation of instructions: Lieberman and Sales (1997) summarized a set of studies, each of which contained conditions in which written instructions were either present or absent. Heuer and Penrod (1989) found no difference in comprehension in either civil or criminal cases as a function of written instructions, but Lieberman and

Sales also cite a pair of studies in which written instructions appeared to increase juror comprehension (Kramer & Koenig, 1990; Prager, Deckelbaum, & Cutler, 1989). Lieberman and Sales conclude that inclusion of written instructions as a matter of policy should be seriously considered, especially because there is no evidence of the suggested disadvantages of the technique (e.g., increasing jury deliberation time).

More Recent Reforms

Related to the idea of providing jurors with a copy of the judicial instructions is that of encouraging jurors to ask questions of the judge (which could lead to written or taped supplementation of the original instructions, an exact rereading of the instructions, or possibly an explanation in simpler terms). Reifman et al. (1992) reported data from a subset of the jurors who participated in their study, suggesting that those who requested and received help from the judge performed better on substantive, but not procedural, questions about the law than did jurors who never asked the judge for help. Qualitative data from interviews suggested, however, that many jurors felt intimidated by judges and were reluctant to request assistance. Judges' unwillingness to provide plain-English explanations of instructions in response to jury requests (apparently for fear of being overturned on appeal) has been thoroughly documented by Severance and Loftus (1982), who obtained actual courtroom records of questions deliberating juries had submitted to judges and the judges' responses. The results showed that judges overwhelmingly told juries that no additional instructions or information would be given, or simply referred juries back to the original instructions (see also Dann, 1993). O'Neill (1989) has published an article giving practical advice to judges on how to respond to jury queries, on the basis of statutes and case law.

The proposed reform of letting jurors ask questions of witnesses has been studied fairly extensively (Heuer & Penrod, 1988, 1994a, 1994b), but it has not been discussed at length in the present article because it is more relevant to jurors' processing of facts than to their understanding of the law. It should be noted, however, that Heuer and Penrod (1988, 1994b) interpret their studies to show that questioning witnesses is helpful to jurors in part because it clarifies complicated legal issues. One statistical interaction finding by Heuer and Penrod (1994b) is of particular note. Complexity of the law in a trial (as assessed by judges) was in general negatively related to jurors' perceptions of easiness of understanding the law. The magnitude of the negative coefficient was much smaller when jurors were allowed to question witnesses than when they were not. This suggests that juror questioning may mitigate some of the harmful consequences of complicated law.

Similarly, the reform of letting jurors take notes during the trial would also appear primarily relevant to jurors' processing of facts. Indeed, Heuer and Penrod (1988) found that jurors allowed to take notes did not show improved performance on multiple-choice tests of comprehension of judges' instructions, in either criminal or civil cases. However, ForsterLee, Horowitz, and Bourgeois (1994) obtained some interesting findings on the correspondence of damage awards to plaintiffs' injuries. Participants were assigned to one of three conditions: (a) allowed to take notes during trial and refer to them during decision making; (b)

allowed to take notes during trial but not allowed to use them during decision making; or (c) not allowed to take notes during trial. Results showed that jurors in the two notetaking conditions did a better job of differentiating among the plaintiffs than did jurors who were not allowed to take notes. These results suggest that it is the cognitive exercise of notetaking (i.e., encoding) that aids juror competence rather than the opportunity to refer to the notes during decision making. Another study by some of the same investigators (ForsterLee & Horowitz, 1997) looked at notetaking in conjunction with preinstruction and clarity of the evidence. Results showed that "jurors' ability to distinguish among the differentially injured plaintiffs and to render appropriate awards was enhanced by notetaking and exposure to pre-instructions, particularly under high liability (less ambiguous) evidence" (p. 311). For an additional study of notetaking, see Rosenhan, Eisner, and Robinson (1994).

Another recently studied reform, aimed at getting jurors to follow judicial admonitions to ignore certain information, is to have judges accompany their admonitions with an explanation. Kassin and Sommers (1997) studied mock murder trials and found that conviction rates were equally low (24%) in a no-confession control group and a group that heard the confession but were told to disregard it because it was unreliable. When the confession was deemed admissible, 79% of subjects voted to convict; when the confession was ruled inadmissible because of due process considerations, 55% voted to convict. These results suggest that not just any explanation will promote full adherence to the admonition; in this case, the explanation based on reliability and accuracy was much more effective. Diamond and Casper (1999) studied the effectiveness of an explanation in the context of treble damages in a civil case. One way in which juries have been instructed in these types of cases is to be told that their damage awards will be tripled after the case but that they should ignore this fact; the admonition to ignore is based on the concern that knowledge of the trebling will lead jurors to reduce their award from what it otherwise would have been, to avoid a plaintiff windfall. As part of a larger study design, Diamond and Casper found that when subjects were told about trebling, admonished to ignore this fact, and given an explanation, damage awards were significantly higher than when they were told about the trebling without admonitions or explanations, or were told about the trebling and admonished to ignore it but given no explanation. Providing an explanation has not always been found to promote adherence to judges' orders, however, as illustrated in research by Pickel (1995). Kassin and Sommers (1997) suggested that this may have been due to the extensiveness of the explanation, which can make the forbidden information more salient or lead to reactance (a desire to rebel against a perceived lack of freedom).

The use of special verdict forms has also been evaluated scientifically. Wiggins and Breckler (1990) compared comprehension of legal issues by participants who were assigned to special-verdict versus general-verdict conditions. They found that special-verdict participants gave more correct answers on questions relating to burden of proof than did general-verdict participants; however, on a second measure that had participants look at patterns of individual fact-finding and determine who should win the case, the two conditions did not differ. Heuer and Penrod (1994b) obtained ratings from jurors on numerous aspects of actual cases throughout the United States. The use of special verdict forms (which was

not randomly assigned) was found to correlate with favorable juror impressions of the correctness of their verdicts. Special verdict forms thus may be of some benefit, although it should be noted that jurors' perceptions of the accuracy of their understanding are often overly optimistic (Saxton, 1998). Within this same study by Heuer and Penrod, whether or not some type of orientation had been held for jurors was also investigated, but this did not seem to produce as much benefit as the special verdict forms.

Finally, another procedure sometimes listed as a "reform" is *deliberation*. This, of course, is not truly a reform in the legal system, as deliberation occurs in all jury trials. Deliberation is more a reform of laboratory research, as in many jury-simulation experiments mock jurors only respond individually. The role of deliberation has now gained greater scholarly attention, however. This is an important development because research suggesting the need for reform has in the past often been vulnerable to the criticism that jurors' apparent difficulties may be diminished through deliberation. In response to the majority judges' criticism of prior instruction-comprehension research on these grounds in the case of *Free v. Peters* (1993), Diamond and Levi (1996) included deliberations in a follow-up study. Also, Kerwin and Shaffer (1994) examined the role of deliberations in jurors' ability to follow judicial admonitions to ignore inadmissible testimony. Both of these studies revealed beneficial effects of deliberation, although the research of Diamond and Levi suggests that, in order for deliberation to improve performance, the information to be discussed by jurors must be understandable in the first place. Deliberation is not a panacea for jurors' difficulties in understanding the law, however. In content analysis of mock juries' deliberations, Ellsworth (1989) found that occurrences of jurors correcting other jurors' erroneous statements about the law (supposedly a benefit of deliberation) were offset virtually one-to-one by correct statements being replaced by erroneous ones. Also, participants who deliberated did not differ from those who did not on a test of knowledge of the judge's instructions. For further, in-depth examination of the effects of deliberation, see Diamond and Casper (1999).

Attorney Clarification of Legal Instructions

In our earlier article (Reifman et al., 1992), we discussed the possibility that juror comprehension of the law could be improved if attorneys clarified the law when they addressed the jury; this idea had previously been expressed in trial advocacy manuals and law review articles. Severance and Loftus (1982), in fact, suggest that their data on juries' questions to judges during deliberation could be used by attorneys to discover areas of the law that were difficult for jurors to understand and to develop closing arguments to address these difficulties. To our knowledge, there was no systematic empirical examination of whether trial attorneys actually used their arguments as opportunities to instruct—and how well they did so—until a recent study by Haney and Lynch (1997, Study 2). On the basis of these authors' previous findings that participants had great difficulty with the terms *aggravation* and *mitigation* (Haney & Lynch, 1994; 1997, Study 1), which are crucial in determining capital sentences, they undertook content analyses to examine whether attorneys' penalty phase arguments provided clarification.

Haney and Lynch (1997, Study 2) analyzed the content of penalty phase arguments from 20 California capital cases that took place from 1983 to 1995. According to the authors, attorneys “spent surprisingly little time attempting to clarify the capital penalty phase instructions” (p. 584). Attorneys defined “aggravation” in 6 of the cases, providing correct, nonlegalistic rewordings in only 4. “Mitigation” was defined in 8 cases, 7 times nonlegalistically. Haney and Lynch analyzed additional aspects of attorney arguments (e.g., whether they clarified how jurors were to weigh the various factors in reaching a decision). The authors’ bottom-line conclusion on whether attorneys made good use of their opportunities to educate the jury was that “this potential is unrealized” (p. 589).

An exemplary use of argument to clarify legal instructions occurred during the O. J. Simpson civil trial. As virtually all adult Americans are aware, the former football star was acquitted in 1995 in a criminal trial for the murders of his ex-wife Nicole Brown and Ronald Goldman. Simpson was also sued by the families of the deceased for wrongful death, and, in a verdict that was announced in early 1997, he was found liable and ordered to pay multimillion-dollar damages.

In the time between the criminal verdict and the start of the civil suit, numerous books were published on the Simpson trial. Among the most influential was one entitled *Outrage: The Five Reasons Why O.J. Simpson Got Away With Murder* by Vincent Bugliosi, a former prosecutor in the Los Angeles County District Attorney’s office (Bugliosi, 1996). In *Outrage*, Bugliosi gives his version of how the criminal case should have been prosecuted. One of the areas he discussed was juror misunderstanding of the law, which may seem surprising because the law relevant to murders of the type that were at issue in the Simpson criminal trial would not seem to be particularly complex. However, there are many potential nuances. One concerns reasonable doubt. As described by Bugliosi:

Both [Johnnie] Cochran and particularly [Barry] Scheck argued to the jury on several occasions that there was a reasonable doubt as to whether a *certain fact* was true, and hence this entitled them to a not-guilty verdict. . . . I kept waiting for the prosecutors, in their rebuttal, to point out that ‘the *only* thing we have to prove beyond a reasonable doubt *is Mr. Simpson’s guilt.*’ But they never did. Not once . . . the jury was led to believe that if there was a reasonable doubt as to *any* contested fact, Simpson was entitled to a not-guilty verdict. (excerpts from pp. 212–214, emphases in original)

Lead plaintiff attorney Daniel Petrocelli, who in his own book (Petrocelli, 1998) mentioned that Bugliosi’s book was his favorite among those he read in preparation for the civil case, addressed this issue as follows in his civil case summation:

The law does not require us to prove each and every detail about what happened that night.

We can’t tell you exactly which victim he encountered first, whether he had an argument there, what blows were delivered, the order of the blows . . .

The law does not require us to know those things or prove those things.

Nor do we have to give you a murder weapon . . .

Nor do we have to tell you what he did with any clothing that might have been bloody . . .

All we need to do is prove to you that he did it. And we know he did it 'cause every single piece of evidence tells us he did it.²

Going back to the criminal case, Bugliosi (1996) also found problematic the prosecution's handling of the issue of Simpson's motive. While acknowledging that prosecutor Christopher Darden informed the jury that the state did not have to prove motive, Bugliosi suggested that the high degree of certitude and detail in Darden's presentation about Simpson's state of mind ended up "setting up a burden for himself that he not only didn't have under the law, but had no way of meeting" (p. 170).

That the prosecution does not have to prove motive is difficult for jurors to understand. We (Reifman et al., 1992) found that only 30% of jurors who served on criminal cases (and thus heard relevant instructions) correctly responded "false" to the item: "The burden of proof is on the prosecution to prove beyond a reasonable doubt that the accused had a motive for the crime charged."³ Again, Petrocelli's courtroom performance on this issue exhibits skill at informing and clarifying:

Now I would like to discuss a little bit about motive.

What is motive?

You talk about motive, you usually talk about why did somebody do it, what was their reason, did they have a reason.

Let me make clear that under the law, we don't have to prove motive. We have no legal requirements to prove motive.

Petrocelli went on to discuss motive for strategic reasons, but these initial remarks presumably would have made it less likely that the jurors would have expected him to prove motive.

Attorney clarifications to the jury might also benefit from the use of colorful expressions instead of dry, literal terms. Howard (1997) compared colorful phrases (e.g., "don't put all your eggs in one basket") to literal equivalents ("don't risk everything on a single venture") in terms of their persuasive impact. The colorful phrases were found to be more persuasive than were literal phrases, but only under conditions under which processing of information might be impaired. There are several reasons to be cautious at this time about generalizing Howard's research to attorney arguments: Persuasion and comprehension are not the same thing; Howard's studies were not conducted in a legal or courtroom context; and, although the large amount of information jurors are given might impair their

²Transcripts of the Simpson civil case are available on the World Wide Web. The above passage can be accessed at <http://www.courtTV.com/casefiles/simpson/transcripts/jan/jan21.html>, or one can simply go to the main Court TV website (the part of the above address before "casefiles") and examine information from the Simpson case as desired. Generally speaking, unlike journal volumes in a library, websites that exist today are not guaranteed to be at the same address or even to exist at all in the future.

³In the Reifman et al. (1992) article, we erroneously stated that less than a third of criminal jurors correctly answered that "the prosecution had the burden of proof." The item in question was actually the one about the prosecution having to prove beyond a reasonable doubt that the accused had a motive. We did not have an item about which side had the basic burden of proof in a criminal case.

processing, their desire to pay close attention in an important legal case might promote vigilant information processing. Nonetheless, Howard's research may be able to help attorneys discuss legal instructions with jurors in ways that will be both understandable and interesting to the latter.

It is important to emphasize, however, that attorney clarification is unlikely to serve as a "magic bullet" in increasing juror comprehension of the law. For one thing, proper and accessible clarifications require adequate motivation and ability on the part of one or more attorneys. As we noted in our earlier article,

points of law that neither side considers particularly advantageous may go unmentioned. If the prosecutor is charging first degree murder and the defense attorney is arguing for self-defense, who is going to explain the difficult concepts of second-degree murder and manslaughter, even though these may be the most likely verdicts? (Reifman et al., 1992, p. 551)

Social Science Research and Recent Developments in Jury Reform

As we pointed out at the beginning of this article, the jury has been a target of public criticism for centuries. It has been a focus of empirical research by social scientists for decades, and there is unanimous agreement among the researchers that one of the most serious and pervasive sources of error in jury decisions is the jurors' inability to understand the judges' instructions and apply the law appropriately to the facts. Numerous reforms have been proposed and studied empirically, but, as of 1991, when Tanford examined the implementation of two of the simplest of these reforms—preinstructing the jury and providing written copies of the judge's instructions—the consequences of these proposed reforms for the actual conduct of jury trials were isolated and trivial⁴ (Tanford, 1991).

However, shortly after Tanford's research was completed, public attention was galvanized by a series of dramatic trials with controversial jury verdicts. The trial of the police officers for the beating of Rodney King, and especially the 17-month media extravaganza of the O. J. Simpson criminal case, became daily topics of conversation, topics like sports and the weather that provided a reliable common ground for interactions among strangers. The verdicts in both cases forcefully reminded the public of the extent of racial polarization in America and raised concern about the failings of the American jury. Once again the jury system came under attack, and calls for the abolition, the restriction, or at the very least the complete overhaul of the jury, proliferated.

This time, however, the calls were heard. The National Center for State Courts, the State Justice Institute, and the American Bar Association (ABA) undertook close examinations of the jury system. Jury commissions and bar associations in Colorado, Delaware, New York, Texas, West Virginia, and other

⁴There were substantial changes in the jury system in the 1970s, when the Supreme Court ruled that six-person juries (*Williams v. Florida*, 1970) and nonunanimous verdicts (*Apodaca et al. v. Oregon*, 1972; *Johnson v. Louisiana*, 1972) were constitutionally permitted in state courts, but these changes were not inspired by empirical research. Rather, the extension to the states of the right to trial by jury (*Duncan v. Louisiana*, 1968) required the Court to consider which characteristics of the jury were essential features. Social science research did influence the 1978 decision that five-person juries were unconstitutional (*Ballew v. Georgia*, 1978).

states studied various proposals for reform; and courts in Illinois (*People v. Oden*, 1994) and Oklahoma (*Cohee v. Oklahoma*, 1997) proposed reforms. The most comprehensive reforms are those of Arizona (Arizona Supreme Court Committee on More Effective Use of Juries, 1994; Dann, 1993) and the District of Columbia (Council for Court Excellence, 1998). Both jurisdictions have engaged in exhaustive analyses of the strengths and weaknesses of the jury system; and both have proposed detailed and wide-ranging reforms, reforms that cover every aspect of jury service from the initial recruitment of citizens to the provision of support services for jurors who have served in exceptionally stressful trials. A major emphasis of both efforts is a set of strategies for dealing with the difficulties jurors encounter in understanding complex evidence and especially the law. In 1997, the National Center for State Courts, in collaboration with the Jury Initiatives Task Force of the ABA Section on Litigation, published an exhaustive⁵ compendium of suggested techniques for improving jury performance, along with brief discussions of the related policy issues and the debates about the advantages and disadvantages of each proposal, examples of existing case law, and citations to selected scholarly articles and empirical research (Munsterman et al., 1997).⁶

Another attempt to bring the jury system and possible reforms into the public discourse is the book *Last Chance for Justice: The Juror's Lonely Quest* (Geller & Hemenway, 1997). This book appears to be aimed equally at scholarly, legal, and lay audiences. It takes the perspective of the phenomenology of the juror. Using the state trial of the police officers in the Rodney King beating as a case study, the book examines all the aspects of a trial (the judge, the juror, the evidence, etc.) and gives the reader various exercises and "thought experiments." The authors also propose several jury reforms.

Table 1 summarizes most of the proposed innovations. It is striking that all of these reform efforts are committed to the social scientists' view that deficiencies in the performance of juries reflect remediable flaws in the system, not intrinsic weaknesses of the individuals selected to serve on juries. The "bad juror"

⁵That is, it is exhaustive as of 1997. The very existence of this book suggests that it will not be exhaustive for long, as it has already been cited as authority in Court-recommended guidelines for reform (*Cohee v. Oklahoma*, 1997) and will doubtless continue to stimulate the very innovations it has attempted to catalogue.

⁶These various efforts at jury reform have not developed independently. Advisors and collaborators for the volume on jury trial innovations (Munsterman et al., 1997) included the Arizona judges who spearheaded the reforms in that bellwether state, judges from Nevada and the Third Circuit, and social scientists such as Shari Diamond and Vicki Smith, who had conducted important empirical research on proposed reforms. The Washington D.C. Jury Project Planning Committee included judges, attorneys, court administrators, academics, and former jurors. Their efforts were informed by the Arizona reform proposals, and Thomas Munsterman, an editor of *Jury Trial Innovations*, served as a consultant. The advisory committee for the empirical work to test the effects of the Arizona reforms (Hans, Hannaford, & Munsterman, 1999) includes Judge Michael Dann, one of the driving forces behind the reforms; Shari Diamond; Elizabeth Wiggins of the Federal Judicial Center; Judge Judy Retchin, of the D.C. Superior Court, who also served on the District of Columbia Jury Project; G. Marc Whitehead, an editor of *Jury Trial Innovations*; and Judge Judith McConnell of the San Diego County Superior Court. Lines of communication among researchers and reformers were developed early and have been maintained. To some extent, current jury reform efforts represent a movement—not a centrally organized movement, but a loosely collaborative group whose members can quickly learn of each other's ideas and plans.

hypothesis is disregarded as not worthy of serious attention, and, with the exception of the D.C. Jury Project Planning Committee's recommendation to reduce the number of peremptory challenges (not included in the table), none of the recommendations involves the selection of jurors or the composition of the jury. None of the proposals suggests relaxing the unanimity requirement. Instead, they provide specific plans for restructuring the jurors' task and providing tools for improving their attention, memory and understanding, and particularly for increasing their level of active participation. The reformers explicitly acknowledge the role of social science research as a primary basis for their proposals. For example, in the introduction to his seminal article on jury reform, Judge Michael Dann of Arizona states that "modern social science research and commonly accepted principles of psychology and education have exploded traditional legal assumptions and myths about juror behavior in general and learning and decision making by juries in particular" (1993, p. 1230).

The one apparent exception is the Washington D.C. Jury Project's recommendation that peremptory challenges be drastically reduced (Council for Court Excellence, 1998). At first glance, this proposal seem to be an instance of the "bad juror" explanation of jury incompetence, but the underlying logic is quite different. Sullivan and Amar (1996), like many opponents of peremptory challenges, present the restriction of peremptories as part of a package that also includes curtailing the questioning of prospective jurors during voir dire and permitting nonunanimous verdicts, a package that seems to be based on the simple-minded notion that lawyers use voir dire to select biased and unreasonable jurors and that the best way to nullify the influence of those jurors is to allow the majority to ignore them. The D.C. Jury Project's report does not recommend nonunanimous juries; and the reduction in peremptories is accompanied by a recommendation for broader, rather than narrower, questioning of prospective jurors, through the use of pretrial juror questionnaires, increased participation of the attorneys in voir dire, and expansion of the legal standard for challenges for cause.

The D.C. Jury Project Report's analysis of the problems in the voir dire process is balanced and finely nuanced. On the one hand, it recognizes that many prospective jurors may be prejudiced toward one side or the other, even though they say—and even though they believe—that they can be perfectly fair in evaluating the evidence. The sort of cursory questioning characteristic of typical voir dire examinations (especially the question "Would you be able to set aside your biases and follow the judge's instructions to be fair and impartial?") is ill suited to discovering differences between more biased and less biased jurors. Most Americans—Black, White, and Hispanic—believe that a person on trial for a crime is probably guilty and that the criminal justice system is too lenient; most White Americans believe that police officers are the most trustworthy witnesses. Many would be reluctant to admit to these beliefs in court, and it is easy to give the "right," unbiased answer in response to the leading, superficial questions commonly asked in voir dire. A fair trial requires an effective method for excusing jurors who cannot be fair in a particular case. Peremptory challenges are the usual method for eliminating prospective jurors with unacknowledged biases.

On the other hand, it is well known that peremptory challenges can be abused and often provide better evidence of the attorneys' prejudices than of the jurors'. It is well known that attorneys routinely use peremptory challenges to strike jurors

because of their race, gender, or other demographic characteristics (*Batson v. Kentucky*, 1986; Council for Court Excellence, 1998; Hoffman, 1997). It is widely believed that peremptories are also used to strike well-educated or otherwise highly qualified jurors. Some have argued that peremptories favor the prosecution, at least when both sides are given the same number of strikes, because a much higher proportion of jurors is predisposed to favor the prosecution than the defense; thus the prosecution may succeed in eliminating all of the prodefense jurors, whereas the defense can only eliminate some of the prosecution jurors (Hoffman, 1997). However, there is also some evidence that many attorneys base their strikes on conventional stereotypes and so in fact are not very good at identifying biased jurors (Hastie, 1991; Zeisel & Diamond, 1978). Thus, the argument goes, peremptories provide a public display of unacceptable stereotypes without resulting in a fairer jury.

Former jurors were well represented on the D.C. Jury Project, and it may be that the most important consideration in the decision to drastically reduce the number of peremptory challenges was that the jurors themselves see them as discriminatory and personally humiliating. Not surprisingly, they tend to believe that when no reason can be given for striking a juror, the decision is probably unreasonable. Thus the Project recommended reducing the number of strikes from 10 for each side in felony cases⁷ to 3, and from 3 to 1 in misdemeanor cases and civil cases.

The D.C. Jury Project members were not disturbed by the exclusion of citizens from jury service *per se*, but by the absence of a rationale for their exclusion and the suspicion that the real rationale was at best arbitrary and at worst blatantly discriminatory. Recognizing the importance of discovering genuine bias on the part of the jurors, the Council for Court Excellence recommended an alternative method: an expanded and better-informed method for exercising challenges for cause. Jurors are to be given detailed questionnaires to fill out when they arrive at the courthouse, and the judge and attorneys can review each juror's answers and use them as a basis for follow-up questions. During *voir dire*, the attorneys would be allowed to question each juror individually (or to ask follow-up questions if the judge conducted the initial *voir dire*) and privately, in order to encourage more honest responses and to spare the jurors the embarrassment of having to discuss sensitive or personal matters in front of all the other jurors. Finally, because under the proposed reforms few peremptory challenges exist for striking jurors whose behavior suggests prejudice but who say they could be fair, the bases for cause challenges are broadened:

The D.C. Jury Project believes that the standard for striking jurors for cause should be expanded to mandate the exclusion of any juror as to whom any reasonable doubt exists about the juror's impartiality, based either on the juror's demeanor or substantive answers to questions during *voir dire*; and where a trial judge is uncertain regarding the existence of such a reasonable doubt, the judge's uncer-

⁷Ten strikes for each side was well over the national average and over the ABA recommendation of 5 per side; 3 strikes for each side is at the national minimum for felony cases, matched only by Hawaii and New Hampshire (Munsterman et al., 1997).

tainty should be resolved in favor of striking the challenged juror. (Council for Court Excellence, 1998, p. 35)

Thus the new system is designed to protect the feelings of prospective jurors, to prevent attorneys from striking jurors for unacceptable reasons, and to increase the chances that the jurors chosen will be truly impartial. It remains to be seen whether these goals will be achieved, and whether judges will be able (or willing) to implement these reforms, but the reforms themselves represent a far more thoughtful and informed approach to the problems of jury selection than most of what has been written on the subject.⁸

Changes in the Jury's Task

Many of the innovations discussed by Munsterman et al. (1997) and included in the two most extensive jury reform efforts (Arizona Supreme Court Committee on More Effective Use of Juries, 1994; Council for Court Excellence, 1998) and the ABA Report (1989) are aimed at changing the trial procedures themselves so as to enhance the jurors' ability to understand, remember, and correctly use the information presented to them. Some innovations focus on the presentation of material during the trial, some on the legal instructions. Almost all are based on the underlying theoretical proposition that active participation and interaction enhance learning; because current trial procedures discourage active participation and force jurors into an entirely passive role, jurors are prevented from performing to the best of their ability. Judge Dann (1993) provides the most detailed description of this "legal" model and the contrasting "behavioral-educational" model. The traditional legal model treats the juror as a passive observer with no preconceptions or existing frames of reference, who objectively records a one-way stream of incoming information, reserving judgment until all the evidence is in and the applicable legal categories have been revealed (pp. 1229-1230). Social scientists, educators, and the new reformers find the assumption that the juror is a blank slate to be untenable (Smith, 1991b, 1997), and procedures based on that assumption to be ineffective. According to the behavioral-educational model, jurors come to the trial with existing frames of reference that they use to actively evaluate and organize the (selectively recalled) evidence, developing, raising, and abandoning hypotheses as the trial progresses. They feel frustrated by their passive role and baffled by the instructions. The trial process undermines attention, understanding, memory, and accurate application of the law. Many of the proposed reforms are aimed at getting jurors more actively involved and giving them more tools to work with.

Reforms designed to improve jurors' understanding of the evidence. For the most part, the new reforms are designed to transform the courtroom atmosphere into one in which the jurors are seriously involved in the case from the earliest

⁸One of the authors of the D.C. Jury Project Report, Judge Gregory E. Mize, is currently conducting a pilot project to discover whether individual questioning actually increases the chances of discovering jurors who should be challenged for cause. Preliminary results indicate that "the individual voir dire of all jurors [is] an indispensable way of ferreting out otherwise unknown juror qualities. Minimal questioning of each juror has exposed problematic UFOs so to speak, without any significant increase in time consumption" (G. E. Mize, personal communication, June 24, 1998).

possible moment. For example, Judge Dann (1993) recommends that, even before voir dire begins, prospective jurors be given an orientation speech outlining the major issues in the case (and perhaps attempting to correct preexisting misconceptions) and that the attorneys be allowed to give abbreviated versions of their opening statements. The rationale is that the voir dire questions will make more sense to the jurors if they know what the case is about; if they understand why they are being asked upsetting questions they will be less resentful and perhaps more candid.

All of the reformers also propose specific mechanisms for encouraging active participation, including (a) providing jurors with notebooks containing information such as descriptions of court personnel, a list of stipulations, a list of witnesses, copies of key exhibits, glossaries of legal and technical terms, and preliminary legal instructions; (b) inviting jurors to take notes; (c) improving the explanation and organization of documents admitted into evidence (and including the most important ones in the juror notebooks); and (d) allowing jurors to submit questions for the witnesses (subject to approval by the court and counsel). The aims of these innovations are to reduce confusion and to increase attention and a sense of active involvement (Council for Court Excellence, 1998; Dann, 1993).

Although only the first of these reforms includes a provision designed to improve jurors' understanding of the judge's instructions, it is possible that they all will have indirect benefits. In the first place, jurors are treated as more important participants in the trial process than is common under current procedures. They are treated with respect, provided with more information, and encouraged to take an active role in the proceedings. They are no longer expected to sit like inanimate objects until the trial is over. These measures may increase the jurors' attention to the testimony and encourage jurors to believe that they play a critical role in a difficult and extremely important decision, and that they should take their duties seriously and work hard to perform them in the most scrupulous possible manner. Jurors who assume this general attitude have a better chance of understanding the instructions as well. As we have seen, only notetaking and questioning of witnesses have been subject to significant empirical research. The evidence is ambiguous with regard to the advantages of notetaking, but it shows none of the anticipated disadvantages. What little research there is on questioning witnesses suggests that it may be helpful (see the section *More Recent Reforms*). It should be remembered that most of the social science research has studied each reform in isolation. Although scientifically appropriate, this strategy cannot provide much evidence about the energetic implementation of multiple reforms, which are characteristic of the D.C. and Arizona projects.

Reforms designed to improve jurors' understanding of the law. However, the reformers recognize that the most pervasive difficulty juries encounter in arriving at accurate verdicts across the whole range of criminal and civil cases is their inability to understand the judge's instructions about the law, and both the Arizona and the D.C. reforms devote special attention to this problem. First, they specifically endorse the practice of instructing jurors on important aspects of the law before the trial (as well as afterward), so that they will know the criteria that define the differences between the verdict choices before they hear the evidence. This recommendation follows directly from the work of Vicki Smith (1991b; see also Lieberman & Sales, 1997). Both the D.C. and the Arizona reform proposals

go considerably farther, however, recommending that interim instructions be given whenever they would be useful to explain issues that come up during the trial. Interim instructions might be used to explain the bases for sustained objections at the time of the objection, the standards for evaluating expert testimony at the time the first expert witness appears, or the purpose of closing arguments right before they begin. The goal is to help jurors to understand and organize the evidence in terms of the relevant law, with the possible additional benefits of improving jurors' recall and satisfaction more generally.

A third recommendation regarding the timing of instructions is that the final instructions be given to the jury before the attorneys make their closing arguments, reversing current practice. The rationale for this reform, proposed by both the Arizona and D.C. projects as well as by the New York State Bar Association Committee on Federal Courts (1988), is that jurors would be able to evaluate closing arguments in terms of the relevant legal categories, and that attorneys would be able to incorporate the instructions into their arguments more effectively. It is interesting that this reform has been so frequently suggested, as there is no research indicating that the timing of the final instructions matters; the question has never been studied.

As reflected in our discussion of the empirical research, most social scientists who have considered juries' understanding of the law would argue that although the timing of the instructions may be important, a more fundamental problem is the instructions themselves, which are typically written in language that is arcane, convoluted, and generally inaccessible even to well-educated citizens, unless they happen to be lawyers (Lieberman & Sales, 1997). All of the major proposals for reform recommend rewriting the instructions in clear and simple language and presenting them to the jury, not as disembodied abstractions, but as a framework for interpreting the particular facts of the actual case to be decided. The parties would be referred to by their own names, not as "the defendant" or "the plaintiff," and concrete, case-specific facts and examples would be incorporated into the instructions. Commissions given the task of redrafting the instructions should include psycholinguists and other social scientists in addition to legal professionals (ABA, 1989; Council of Court Excellence, 1998; Dann, 1993; Munsterman et al., 1997). Inclusion of these professionals may be desirable, but it is not in itself sufficient to guarantee comprehensibility. We have not noticed that the writings of psycholinguists or other social scientists are models of plain English. More important than the use of social science advisors is the use of social science methods: The comprehensibility of the old instructions and the proposed revisions should be compared empirically, on a sample of ordinary jury-eligible citizens, before concluding that the revisions are a significant improvement (Elwork et al., 1982; Sales, Elwork, & Alfini, 1977).

Also, in practice, the effort to make the instructions more vivid and concrete by incorporating case-specific details may create unanticipated difficulties and may raise questions of fairness. Substituting the names of the parties for their roles is not particularly problematical, but describing their actions may be. Subtle differences in choice of words, for example, can influence listeners' interpretation of what happened. Loftus and Palmer (1974) found that the use of the verbs "made contact," "hit," "bumped," "collided," and "smashed" in questioning observers of a car accident had a significant effect on observers' judgment of the speed of the

cars. Discretionary language allows the possibility of bias and raises concerns similar to those raised when the judge is allowed to "summarize" the facts for the jury at the end of the trial. This is, of course, why states turned to pattern instructions in the first place, in an attempt to ensure fairness by means of uniformity. Giving instructions that are clear, case-specific, and neutral is not as easy as it may sound, and it is important to conduct research on this practice before concluding that the consequences are entirely beneficial.

Although the research to date suggests that rewriting the instructions to make them more comprehensible is probably the single most beneficial reform, little actual progress has been made. Individual judges are reluctant to depart from the pattern instructions because they fear that their decisions will be reversed on appeal. New instructions that are both understandable and legally acceptable require some sort of consensual ratification; thus, rather than trying to change the instructions on their own, both the Arizona and the Washington D.C. proposals recommend that special commissions be formed to design and test alternative language. Although this method may seem frustratingly slow, it increases the likelihood of achieving an outcome that will be generally accepted.

The other recommendations involving instructions are fairly standard: Continue to permit notetaking during the instructions, include a written copy of the final instructions in each juror's notebook, inform the jurors that they may ask questions about the instructions, and invite them to do so. In addition, judges should make an honest effort to provide useful answers to jurors' questions, rather than simply repeating the incomprehensible instruction or advising jurors to use their own judgement. As Judge Dann puts it, "jurors' questions, looked on by many lawyers and judges as an inconvenience or worse, should be viewed as welcomed opportunities to learn about jurors' thinking and to determine whether additional or corrective action is necessary to ensure juror comprehension" (1993, p. 1261).

There are many other proposals included in these two groundbreaking sets of reforms that are not directly concerned with jurors' ability to understand and apply the law. Some of the more innovative include allowing jurors to discuss the trial while it is in progress, helping deadlocked juries to discover possible resolutions, and providing counseling for jurors after especially traumatic cases. The D.C. Jury Project recommends that juries be given some guidance about how to structure their deliberation process, including the suggestion that they discuss the evidence and the law before taking any votes (cf. Hastie, Penrod, & Pennington, 1983). Other reforms that do not appear on the Arizona or D.C. agendas, such as the use of special verdicts and written interrogatories, bifurcation and other proposals for dividing the trial into segments, and expanded use of court-appointed experts (Munsterman et al., 1997), are currently used on an ad hoc basis by individual judges; to our knowledge, they have not been considered by any courts, legislatures, or commissions as general policies. Arizona and Washington D.C. are not the only jurisdictions that have proposed jury reforms (see, e.g., *Cohee v. Oklahoma*, 1997), but theirs are the broadest and most carefully developed. As yet, there exists no comprehensive state-by-state compilation of proposed or actual jury reforms.

The Future

The reforms in Arizona and Washington D.C. are serious and far-reaching. After years of neglect, social science research has been embraced wholeheartedly in these jurisdictions. If anything, the reformers' confidence in the social science research surpasses that of the social scientists themselves. "Studies abound," according to Judge Dann, "documenting the benefits of permitting more juror participation in the trial process as suggested by the 'behavioral' or 'active juror' paradigm" (1993, p. 1243). They exist, certainly, but whether they "abound" is debatable.

Of course, the way to find out which of our findings are robust when implemented in real courtrooms is to conduct empirical research. Remarkably, given the courts' past aversion to innovation and empirical research, the new reforms include proposals for empirical research to evaluate their effectiveness. For example, the Arizona Supreme Court has authorized a random-assignment experiment to test the effects of allowing jurors to discuss the case before the trial is over (Arizona Supreme Court Administration Order No. 97-1, January 7, 1997; see Hans et al., 1999). Of all the proposed innovations, this commitment to well-designed empirical research as a means of evaluating the influence of the reforms is perhaps the most radical and the most admirable.

Yet empirical testing is not the whole story. One of the most interesting features of the new reformers is their willingness to consider basic psychological theory, as well as empirical studies of jury behavior, in designing their proposals. Many of the proposed jury reforms have been based on theories from cognitive and social psychology (e.g., schema-based models, active learning, psycholinguistic principles). Further theory development and attempts to arrive at richer conceptualizations of how jurors perform their task are needed, conceptualizations that go beyond a simple dichotomization of jury behavior into consistent with the law versus inconsistent with the law (Brown, 1998). There is every reason to believe that intensive interaction among those who do theory development, empirical research, and public policy development is the best means to achieve real reforms.

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