Getting Inside the Black Box: Toward a Better Understanding of Civil Jury Behavior

Robert J. MacCoun

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Prepared for
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Board of Overseers

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FOREWORD

The recent controversy over the fairness and predictability of the tort liability system has raised important questions about the performance of juries in civil cases. Do civil juries carefully consider the merits of the cases brought before them in accordance with judicial instructions and without bias against plaintiffs or defendants? Or are civil juries often swayed by passion and incapable of dealing with complicated legal and factual issues? The simple answer is: We don't know.

Prior Institute for Civil Justice analyses of jury verdicts reveal a great deal about the outcomes of the jury trial process. They reveal very little, however, about why and how juries arrive at their decisions. Instead, the jury deliberation process remains hidden in a black box, producing outcomes that we can count and classify but tell us virtually nothing about how juries sift through the evidence, what case characteristics they pay the most attention to, or how they calculate awards.

In this Note, based in part on a briefing given to the ICJ Board of Overseers on February 13, 1987, Robert MacCoun discusses the methods that have been used for studying jury behavior, summarizes major findings of previous research (primarily on criminal juries), and considers what various research strategies can contribute to our understanding of jury behavior. In so doing, he provides both a conceptual framework and an agenda for future research on civil jury behavior.

Unlike our series of Reports, ICJ Notes do not present findings of completed research. This Note provides a progress report on the initial stages of a new research effort. The author has identified the research and policy questions of interest, reviewed the relevant literature, and developed both a conceptual framework and a methodological approach to address those questions. In publishing this Note, the ICJ hopes to promote research on civil jury behavior, help establish a framework for such research, and apprise our supporters of new ICJ research initiatives.

Kevin F. McCarthy
Director, Institute for Civil Justice
SUMMARY

The role of the jury in civil litigation is a matter of ongoing debate. Critics claim that
civil juries are unpredictable, inequitable, and incapable of coping with complex litigation.
Unfortunately, there is little empirical research addressing these claims. Recent legislative
proposals for modifying the civil jury system are predicated on untested assumptions about
jury behavior. This paper will advocate the use of systematic empirical research on civil
jury behavior as an important tool in the policymaking process.

Because legislation prohibits attempts to observe jury deliberation, researchers have
developed a number of alternative methods for studying juries. Statistical analyses of jury
verdicts are useful for identifying predictors of verdicts and trends over time, but this method
is of limited utility for explaining the deliberation process. Two other methods, posttrial
juror interviews and shadow jury studies, can provide better insights into what goes on inside
the jury room. Field and mock jury experiments, in which juries are randomly assigned to
experimental conditions, are a powerful means of testing the effects of procedural,
evidentiary, or extraevidentiary factors on jury behavior. Each of these methods has certain
advantages but also certain limitations. The use of multiple methods can lead to discoveries
that would be overlooked if we were able to rely solely on a single favored research method.

Previous research has focused almost exclusively on criminal rather than civil juries.
Nevertheless, some findings seem likely to characterize jury decisionmaking regardless of
its context and content. In general, jurors’ demographic characteristics, personality traits,
and general attitudes have weak and unreliable effects on verdicts. The size of the jury and
the decision rule for consensus do not appear to have strong effects on verdicts in criminal
_trials, but these factors do affect other aspects of jury performance, including the amount of
deliberation and the probability of a hung jury. Jurors often fail to understand the judge’s
instructions, although comprehension can be significantly improved through the use of
clearer language. There is evidence that jurors can be influenced by evidence that they have
been instructed to disregard, and under some conditions jurors are susceptible to the effects
of extra-evidentiary factors. However, the strength of the evidence presented at trial appears
to be the most important determinant of the jury’s verdict. Although we know that jurors
can make mistakes, there is no solid evidence that they are less competent than judges as fact-
finders. Indeed, there is reason to believe that juries might be more competent; considerable
evidence shows that groups outperform individuals on a variety of intellectual tasks.
Although criminal and civil juries do share many common features, an analysis of the civil jury’s task reveals many topics that have been largely neglected in previous jury research. In order to understand and evaluate civil jury behavior and the likely effects of system interventions, we need more research specifically focusing on civil jury decisionmaking. Some directions for future research on the civil jury are outlined below.

How do jurors make inferences about liability in civil litigation? Psychologists have been studying related issues for many years under the rubric of “attribution theory,” which attempts to describe how social perceivers attribute causality and responsibility for events. Contemporary attribution research should examine the fit between the model of liability embodied in tort law and the implicit lay model of responsibility used by social perceivers. For example, how do legal fact-finders reconcile discrepancies between lay and legal responsibility judgments? How is liability allocated among multiple parties? The recent Story Model of juror cognition is another theoretical perspective that might be fruitfully applied to the understanding of civil liability judgments.

Concern regarding the size, equitability, and predictability of civil damage awards raises a host of relevant research questions. For example, what kinds of computational strategies do juries use? Do juries tend to compute compensatory damages one component at a time, or are they more likely to consider single lump sums? Do juries use the *ad damnum* (plaintiff’s claim for damages) as a cognitive anchor or reference point in their valuation of damages? Do juries take attorney fees, taxes, insurance, interest rates, or posttrial adjustments into account when computing damage awards? Do juries use averaging or other forms of compromise to resolve disputes regarding the appropriate award? Does deliberation systematically exaggerate—or perhaps attenuate—jurors’ pre-deliberation verdict preferences?

Critics claim that juries discriminate against defendants with “deep pockets.” Consistent with this argument, archival analyses indicate that juries award larger awards against corporate and government defendants, and that corporate defendants are more likely to be found liable when plaintiffs are severely injured. But there are a number of potential explanations for these results. First, there may be other case differences that were not accounted for in the analyses. Second, citizens might apply more stringent standards of conduct and responsibility to organizations than to individual defendants, so the same action is evaluated differently depending on the defendant’s identity. Alternatively, jurors might base their verdicts solely upon the needs of the plaintiff and the defendant’s financial ability to meet those needs. Future research should examine the validity of these and other alternative hypotheses.
Recent work by cognitive psychologists can provide insights into how legal fact-finders might cope with highly complex litigation. Researchers should examine ways of restructuring evidence and trial procedures in order to facilitate fact-finding in complex cases. Such steps include additional and/or improved jury instructions, greater use of note-taking, special verdicts, advisory awards ranges, and itemized verdicts.

The debate over civil jury performance has relied too heavily on speculation, hearsay, and circumstantial evidence. Systematic empirical research is needed for policymakers to draw sound conclusions about proposals modifying the civil jury system. We also know very little about how decisionmaking by judges and other potential fact-finders occurs in civil litigation. The selection of an appropriate legal fact-finder may involve inevitable tradeoffs among social desiderata. If so, our choices must be well-informed.
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I. THE POLICY CONTEXT

The jury is usually considered to be a hallmark of our democratic system. Yet other
democracies have abolished the jury from civil litigation, a move that some American
critics, including former Chief Justice Warren Burger (1971), appear to view favorably.
Critics contend that civil jury awards are often excessive, unpredictable, and inequitable.
Some have argued that many civil cases are too complex for a lay body of jurors to handle.
Finally, critics claim that civil jury trials take too long and cost too much. Others have
contested these claims, and the civil jury system retains many enthusiastic supporters. This
controversy is not new, of course. Many of the same issues have been debated for decades
(Green, 1962; Kalven, 1964).

A reasoned evaluation of civil jury performance should be premised on explicit
standards for legal decisionmaking and a rigorous empirical description of civil jury
performance relative to those standards. Scholars have identified a variety of standards that
legal experts and lay citizens have used to evaluate jury performance (e.g., Broeder, 1954;
Hastie, Penrod, and Pennington, 1983; Kalven, 1964; MacCoun and Tyler, forthcoming;
Selvin and Picus, 1987). I have summarized and integrated these standards in Table 1.

There is little consensus regarding the relative importance and appropriateness of
these standards (Selvin and Picus, 1987). In fact, this disagreement over standards
characterizes a great deal of the civil jury controversy. For example, some observers (e.g.,
Kalven, 1964) have questioned whether efficiency is a relevant criterion for evaluating the
jury.

The extent to which civil juries meet or fail to meet any of these standards has also
been a matter of dispute. Occasionally, a civil jury’s damage award seems unusually large
(over $10 billion to Pennzoil), unusually small ($1 to the USFL), or just plain unusual
($988,000 to a woman who alleged that a hospital CAT scan prevented her from using her
psychic powers), and receives a great deal of popular media coverage, with the implication
that the jury’s verdict was irrational. Anecdotes and apocryphal tales about seemingly
irrational jury deliberations circulate in most courthouses. In the absence of valid empirical
analyses, it has been difficult to assess whether such incidents are truly indicative of a wider
dilemma in jury decisionmaking.

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1The debate over the role of the jury in civil litigation is discussed in the following
Table 1

STANDARDS USED TO EVALUATE JURY PERFORMANCE

- REPRESENTATIVENESS
  - representation of an approximate cross-section of the community
  - representation and expression of a diversity of viewpoints

- FACT-FINDING COMPETENCE
  - thorough and accurate recollection of evidence
  - logical coherence of inferences drawn from the evidence

- LEGAL COMPETENCE
  - comprehension of relevant laws and legal standards
  - compliance with relevant laws and legal standards

- IMPARTIALITY
  - no extralegal biases in deliberation
  - no systematic patterns of extralegal bias in verdicts

- DECISION ACCURACY
  - correct attributions of guilt or liability
  - accurate calculation of economic damages in civil litigation

- DECISION CONSISTENCY
  - consistency across jury verdicts in similar cases
  - consistency between verdicts of juries and judges

- PUBLIC ACCEPTANCE
  - perceived legitimacy of jury venires, selection, and verdicts
  - satisfaction and sense of efficacy derived from participation

- EFFICIENCY
  - reasonable trial duration
  - reasonable trial expense

The need for systematic research on civil jury behavior becomes more pressing when judicial and legislative policymakers contemplate proposals for modifying the civil justice system. Recently, for example, there has been a great deal of legislative activity involving
the civil jury. In fact, concern about jury verdicts lies at the heart of the recent tort reform movement. Proposals aimed at modifying jury behavior or jury verdicts include the use of advisory ranges of awards to be provided to juries, a more stringent standard of proof for punitive damages, the requirement that juries itemize their awards, ceilings on punitive or noneconomic damages, and the use of “blue ribbon” juries or expert tribunals in complex litigation (Luneberg and Nordenberg, 1981).

Many of the legislative proposals for reform of the civil jury system are predicated on untested—and often implicit—hypotheses about jury behavior or predictions about the effects that new rules and procedures will have on jury decisionmaking. Hammitt, Carroll, and Relles (1985) have recently reviewed empirical research suggesting that previous tort reforms have had unintended effects because policy makers have failed to understand how juries behave. For example, in the early 1980s, many states enacted legislation enabling plaintiffs to recover prejudgment interest in personal injury suits in compensation for the delay between injury and recovery. However, statistical analyses indicate that jury awards already increase as a function of the time cases take to reach trial. Hammitt et al. suggest that, as a result, prejudgment-interest legislation has probably resulted in more compensation for delay than the policymakers ever intended.

Although many critics tend to focus on the outcomes of jury decisionmaking, liability verdicts and damage awards, effective policy evaluation and implementation also requires an understanding of the process of jury decisionmaking. For example, if we require juries to itemize their compensatory damage awards, they may calculate damages one item at a time, or they may start with a total award and then “work backwards” by dividing that lump sum among the items. The process that juries follow is likely to determine whether or not the policy has its intended effect upon compensatory awards (Kalven, 1958).

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3Ibid.


5Recent state legislative proposals vary on whether they explicitly mandate that juries be told of ceilings on damages (e.g., West Virginia) or that juries not be told (e.g., Michigan, Minnesota, Washington), or make no explicit recommendations regarding this question (e.g., Hawaii).
This paper discusses the potential contribution of systematic empirical research on civil jury behavior to the policymaking process. First, a variety of different methods of jury research are surveyed, with an emphasis on their comparative strengths and weaknesses. Next, relevant findings from previous research are summarized. As we shall see, little of this work has focused directly on the civil jury. An analysis of the civil jury’s task reveals a number of important research issues, leading to a proposed agenda for future research on the civil jury.
II. METHODS FOR STUDYING JURIES

An obvious way to investigate jury behavior is to observe deliberating juries and document the content of their deliberations. This approach was attempted in the mid-1950s as part of the Chicago Jury Project, a major research program undertaken at the University of Chicago. Having secured the court's permission, researchers proceeded to eavesdrop on the deliberations of several federal juries, without the participants' knowledge. But this endeavor was quickly aborted when congressional inquiries resulted in legislation prohibiting attempts to listen to or observe ongoing jury deliberation.\footnote{The Chicago Jury Project controversy is discussed in Kalven and Zeisel (1966, pp. vi-vii) and in Campbell (1985, pp. 190-191). The advantages and disadvantages of jury secrecy are considered in "Public Disclosures of Jury Deliberations," Harvard Law Review, Vol. 96, 1983, pp. 886-906.} Since then, juries have deliberated in private.\footnote{A recent Public Broadcasting Service television documentary, "Frontline: Inside the Jury Room" (April 11, 1986), provided a rare exception to this secrecy. University of Wisconsin Law Professor Stephen Herzberg convinced a Milwaukee Circuit Court judge to permit cameras in the jury room during deliberation in a criminal trial. Because Herzberg waited for several years to find a case in which jury nullification seemed likely, the documentary vividly illustrates the historically important role of jury discretion, but the deliberation is presumably unrepresentative of typical criminal cases. At any rate, the documentary provides an encouraging indication that courts might be willing to consider exceptions to jury secrecy when full cooperation is obtained from all concerned parties.}

Jury secrecy legislation puts researchers in a bind, for it places the behavior of juries inside a "black box." We can observe what goes into the box (the events at trial), and we can observe what comes out of the box (jury verdicts), but we don't really know what's going on \textit{inside} the box. This dilemma has forced social scientists to explore a number of alternative methods for studying juries. The major empirical research techniques include archival analyses, posttrial interviews, the use of shadow juries, field experiments, and mock jury experiments. Before describing these methods, however, two additional approaches should be distinguished. One approach, "scientific jury selection," appears to have more to do with social engineering than with social science. A second approach, the use of formal modeling and computer simulation, is a powerful analytic method but does not produce empirical data on jury behavior.
SCIENTIFIC JURY SELECTION TECHNIQUES

For many lawyers and judges, the topic of empirical jury research will call to mind a variety of consulting tools often marketed under the rubric of "Scientific (or Systematic) Jury Selection" (e.g., Schulman et al. 1973). These are techniques that consultants use in an adversarial fashion to assist attorneys during voir dire and range from clinical observations of the nonverbal behavior of prospective jurors to empirical surveys of community attitudes toward, and knowledge of, the issues in dispute. Because of their adversarial and commercial nature, critics have questioned the ethics of these applications (e.g., Etzioni, 1974). Moreover, there is some debate as to the central premise of these techniques—the claim that jurors' votes during deliberation can be predicted reliably using juror characteristics that can be observed prior to trial. This question will be addressed in more detail later.

Some of these jury selection tools, most notably community surveys, can be adapted for nonadversarial research on jury behavior, but such applications are rare. Because jury selection techniques tend to focus on pretrial variables and are often tailored for specific trials, they are of limited utility for jury research.

FORMAL MODELING AND COMPUTER SIMULATION

Since the 17th century, scholars have attempted to predict and explain jury verdicts by constructing formal mathematical models of juror and jury behavior. (See reviews by Davis, 1980; Pennington and Hastie, 1981; Penrod and Hastie, 1979.) Some recent models have been implemented in the form of computer programs (Hastie et al., 1983; Penrod and Hastie, 1980). Formal modeling is an attempt to understand jury behavior without actually observing it, by making inferences based on the inputs and outputs of the deliberation process. The modeling approach is unique, however, in that it attempts to simulate the deliberation process using assumptions derived from psychological and statistical theory.8 Predictions derived from formal models can demonstrate that a given set of assumptions about the deliberation process can explain jury verdicts, but they do not prove that the model

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8These models typically posit a probabilistic function governing transitions from any group state (i.e., distribution of jurors across distinct factions) to any other group state, given certain assumptions about group process. Thus, faction size usually serves as a direct index of social influence in these models, an assumption that does not always hold (cf. MacCoun and Kerr, forthcoming). More sophisticated formal models that can capture the role of individual and group information processing will require a great deal more complexity; for a review of some initial attempts, see Pennington and Hastie (1981).
is correct. There are usually plausible alternative models that can generate similar predictions.

Davis (1980) has argued that “thought experiments” based on mathematical models are a useful tool for addressing legal policy questions when the appropriate data cannot be feasibly obtained, and Hastie et al. (1983) describe the application of such models in appellate court proceedings. In addition, formal models of the jury deliberation process generate predictions about jury behavior that can guide empirical research using the other methods to be described below. These empirical tests can then lead to refinements in the models. Although empirical data are used to construct or to test these models, however, the modeling process does not provide any new empirical data on juries. Formal modeling is strictly an analytical tool that can be used in tandem with any of the empirical methods to be described here. Regrettably, formal modeling has focused almost exclusively on criminal juries. Formal modeling of liability and damage judgment processes in civil cases has only recently been undertaken (see Thomas, 1985).

EMPIRICAL METHODS FOR STUDYING THE JURY

Archival Analyses

Although jury deliberation takes place behind closed doors, we can still learn a great deal by studying case characteristics and jury verdicts—the inputs and outputs of jury deliberation. Mark Peterson and his colleagues at The Institute for Civil Justice (ICJ) have pioneered this archival approach with a series of statistical analyses of civil jury verdicts in California and in Cook County, Illinois. In these studies, civil jury verdicts and case characteristics are carefully coded, aggregated, and then statistically analyzed. Thus, the major strength of this approach is that it enables us to identify aggregate patterns and longitudinal trends in liability judgments and in compensatory and punitive damage awards. These archival studies have had a major impact on the policy debate by replacing anecdotes and speculation with empirically based conclusions.

The archival method is basically a correlational approach: Reliable relationships between certain litigant or case characteristics and jury verdicts are identified using statistical analyses. For example, Chin and Peterson (1985) found that in the 1960s and 1970s in Cook County, the size of jury awards was related to certain characteristics of the

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9The ICJ's archival work on juries is reported in Carroll, 1983; Chin and Peterson, 1985; Peterson, 1984, 1987; Peterson and Priest, 1982; Peterson, Sarma, and Shanley, 1987; and Shanley and Peterson, 1983. Other archival analyses of civil jury verdicts are reported by Broder (1986), and Daniels and Martin (1986). A recent example using criminal jury verdicts is reported by Werner et al., (1985).
plaintiff and the defendant. For example, juries tended to award more money in trials where
the plaintiff had a blue-collar occupation, and when injuries were severe, juries awarded
more money when the defendant was a corporation than when the defendant was an
individual. It is tempting to infer a causal link in these relationships. We may hypothesize
that juries are biased in favor of blue-collar workers, and corporations pay more because
they are thought to have “deeper pockets.” These causal hypotheses cast some doubt on the
equitability of civil jury verdicts.

However, it is important to recognize that these patterns might be explained with
reference to other factors. To some extent, effects of these other factors can be assessed
through using multivariate statistical analyses. For example, having identified a relationship
between certain litigant characteristics and the size of jury awards, Chin and Peterson
statistically controlled other litigant and case characteristics that might explain these effects.
They found that when the severity of injuries was taken into account, the fact that a plaintiff
was a blue-collar worker, per se, no longer predicted the size of the award; that is, plaintiffs
with severe injuries tend to receive larger awards, and blue-collar workers often have severe
injuries. On the other hand, even after taking into account other case and litigant
characteristics—including injuries and case type—Chin and Peterson still found that corporate
defendants paid 30 percent more than individuals.

But Chin and Peterson acknowledge that other factors might account for this apparent
effect of corporate identity.10 Unfortunately, the limitations of their jury verdict database
prevented them from examining such factors in their analyses. This is an inherent drawback
of the archival approach—archival sources of data rarely include measures of all of the
variables in which the analyst might be interested. In general, the archival approach is better
suited for describing the effects of jury deliberation than for explaining how and why juries
reach their judgments.

Posttrial Interviews

Although we cannot observe juries as they deliberate, jury secrecy legislation is
somewhat less restrictive with regard to postdeliberation interviews with jurors.11 This
approach has been taken by social scientists (e.g., Selvin and Picus, 1987), legal scholars
(e.g., Austin, 1984), and many journalists. (See Hinchcliff, 1986, for a review.)

10 A number of plausible alternative explanations for the effects of defendant identity
will be discussed later in this paper.

11 See Campbell (1985). A number of ethical and legal concerns regarding posttrial
juror interviews are raised in “Public Disclosures of Jury Deliberations,” Harvard Law
Posttrial juror interviews provide us with “eyewitness evidence” regarding the deliberation process. Like eyewitness trial testimony, these accounts are vulnerable to error and distortion, and similar caveats apply. Jury deliberation is typically a complex emotional experience, and jurors’ verdicts can have profound moral and political implications. Thus, jurors may distort or revise their recollections, whether consciously or unconsciously, in order to justify their decisions or cast their behavior in a more favorable light. A great deal of information may be rapidly forgotten, and jurors’ explanations of “why we did what we did” should be taken with a grain of salt. Psychological research has demonstrated that people—even experts—are able to accurately perceive and describe their judgment processes only under certain restricted conditions (Ericsson and Simon, 1984). A number of steps can be taken to enhance the quality of these—or any—eyewitness accounts (see Loftus, 1979). Obviously, interviews should be conducted as soon after deliberation as possible—ideally, at the conclusion of the trial, before jurors have had the chance to revise or embellish their recollections in discussions with family and friends. If possible, initial interviews should be conducted individually, and individual accounts of deliberation events should be corroborated whenever possible by other members of the same jury. Follow-up group interviews can clear up any discrepancies and may promote more extensive and candid recollections. Additional suggestions for improving the quality of interview data are provided by Sudman and Bradburn (1982). Unfortunately, posttrial juror interviews seldom meet these methodological standards.

Past posttrial juror interview studies typically have been case studies of a particular (and often controversial) jury trial. As a result, they presumably tell us more about that particular jury than about generic deliberation experiences. More studies involving interviews with jurors across many juries and trials (e.g., Vischer, 1987) are needed.

**Shadow Jurors**

The “shadow jury” technique (e.g., Vinson, 1982) usually involves asking a group of citizens, selected to mimic the demographic characteristics of an actual jury, to sit in a courtroom and observe a trial. Their reactions to trial events are explored through periodic interviews, and they can be asked to deliberate as if they were actually trying the case, although this feature of the method is apparently neglected in some applications. Like scientific jury selection, the shadow jury technique is typically used as an adversarial consulting tool for assisting attorneys in trial preparation and conduct. However, it can also be used as a research tool. For example, Zeisel and Diamond (1978) assessed the
effectiveness of voir dire strategies by comparing a jury’s verdict to the judgments of a shadow jury composed of jurors who were excused on peremptory challenges.

Shadow jury studies can give researchers immediate insights into jurors’ reactions, without the delays that plague posttrial interviews. They also allow researchers to examine how other juries might try the same case, but one drawback is that shadow jurors—unlike actual jurors—are aware that their judgments have no legal consequences. This characteristic is also shared by “mock jurors” and will be discussed in more detail below. There are also a number of practical limitations on the number of shadow juries that can be studied in any given trial. First, trials can last many days, with constant delays and interruptions, making it very expensive to pay shadow jurors for their time, and courtrooms rarely have the seating capacity to permit a large number of shadow juries to observe a case. Finally, these studies are often undermined when the litigants settle a case before the conclusion of a trial. Because of these problems, shadow jury methods are rarely used in jury research.

Field Experiments

The archival, posttrial interview, and shadow jury methods each share a common limitation: They study trials as they naturally occur in the legal system, and therefore limit our ability to draw causal inferences about the effects of various policy-relevant variables on jury behavior. If a sufficiently large number of cases are sampled, we can attempt to control statistically for the effects of the many variables that naturally covary in the legal environment; however, as seen in our discussion of the deep pockets effect (Chin and Peterson, 1985), statistical control can leave causal questions unanswered. Identifying the causes of jury behavior allows us to go beyond description to explanation, a step that is necessary for evaluating policies related to jury behavior. Causal variables are “policy levers”; if we fail to understand their effects, then policies may have undesirable effects or no effect at all.

The experimental method is the most powerful research tool for identifying causal variables (e.g., Cook and Campbell, 1979). In the experimental approach, a variable of interest is systematically varied while holding all other variables constant, in order to identify its effects. As an example of how this might be applied to jury behavior, consider the question of the effects of jury size on verdicts. Several archival analyses (reviewed in Kerr and MacCoun, 1985) have identified a relationship between jury size and verdicts, but these results are relatively uninformative because of differences in the types of cases assigned to six- and twelve-person juries. For example, if more serious cases are assigned to larger juries, then a relationship between jury size and verdicts might be spurious—an artifact
of the relationship between case severity and verdicts. But in a field experiment, cases could be randomly assigned to either a six- or a twelve-person jury. In a sufficiently large sample, random assignment would minimize the likelihood that jury size would systematically covary with other trial features. If systematic verdict differences were identified, then we could confidently attribute the effect to the causal role played by the jury size variable.

Despite their great potential, field experiments involving jury trials have rarely been conducted in the past, because of the difficult ethical and legal questions they raise. For example, Zeisel and his colleagues were asked by the U.S. District Court for Northern Illinois to evaluate the efficacy of bifurcated civil trials (described in Zeisel, 1973, pp. 108-110). The researchers proposed a strategy in which each case would be randomly assigned to either a traditional trial or a bifurcated trial in which damages would be determined by a separate jury when the initial jury found the defendant liable. However, trial judges rejected this plan and reserved the right to assign cases to bifurcated trials as they saw fit, presumably in cases where liability was likely to be found. Although this response might be legally defensible, it undermined the experimental approach, and greatly weakened the explanatory power of the research.

Randomized field experimentation on juries should be most feasible when (a) policymakers wish to test a tentatively adopted new policy relating to jury conduct prior to implementation, and (b) any inequities to litigants due to random assignment to policies are likely to be minimal, or (c) potential inequities to litigants can be remedied at the conclusion of the experiment (cf. Cook and Campbell, 1979, Chapter 8; Zeisel, 1973). For example, a field experiment on juries reported by Penrod (1985) apparently met the first two criteria. The Judicial Council of the State of Wisconsin wanted to evaluate two new statutes permitting jury note-taking and the use of supplemental written jury instructions, as well as two other techniques of interest, juror questioning of witnesses and pretrial instructions. Trial judges agreed to cooperate by permitting the researchers to randomly assign jury trials to different combinations of courtroom techniques. This study is a rare example of the successful implementation of a randomized field experiment on juries—the only one known to the author. Because of the enormous obstacles to field experimentation on juries, jury researchers often use an alternative experimental strategy, the mock jury simulation experiment, discussed below.
Mock Jury Experiments

The mock jury simulation method is an active research tradition in the social sciences—in fact, it is the most commonly used tool for studying jury behavior.\(^{12}\) Hundreds of mock jury simulation studies have been published since the early 1970s. (See Hans and Vidmar, 1986; Kerr and Bray, 1982.) A recent study conducted by Hastie, Penrod, and Pennington (1983) provides an example of a carefully planned, high-quality mock jury experiment. Hastie and his colleagues recruited over 800 prospective jurors from three jury pools in the Massachusetts Superior Court. These citizens were then assembled into 69 12-person mock juries. Jurors were shown a three-hour-long videotape of a criminal trial, re-enacted in a courtroom by a practicing judge and attorneys.\(^{13}\) Each jury was then asked to deliberate as if they were the actual jury trying the case.

What did the researchers gain by this artificial procedure that they couldn’t have gained by examining actual jury verdicts, interviewing actual jurors, or seating a shadow jury in the courtroom during the actual trial? Quite a lot. Although the mock jury technique is artificial, its artificiality provides it with a number of virtues that are difficult to achieve in the previous research methods discussed.

First, the mock jury methodology permits the use of the experimental method, while avoiding many of the logistical obstacles to field experiments. For example, Hastie and his colleagues were interested in the effects of the assigned decision rule for consensus on various aspects of jury deliberation (duration, accuracy, and amount of evidence recalled, participation, etc.), and jury trial outcomes (verdicts and hung jury rates). This problem could be studied using archival analyses of actual jury trials under unanimous and nonunanimous decision rules, but any differences in outcomes could be attributable to differences in the types of cases brought to these juries, or in the jurisdictions in which the procedures are used. Hastie et al. were able to avoid this inferential uncertainty by randomly

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\(^{12}\)Mock juries are occasionally asked to view an abbreviated case and then deliberate in order to help attorneys to prepare for a trial (e.g., Hans and Vidmar, 1986, pp. 77). In the present context, the mock jury method will be used to refer to mock jury research experiments rather than any adversarial trial applications.

\(^{13}\)Why didn’t the investigators use a videotape of an actual trial? First, actual trials of interest can last for extended periods of time, making it prohibitively expensive to videotape the trial and then reimburse hundreds of mock jurors for watching the entire videotape. Of course, as cameras in the courtroom become more prevalent, edited versions of videotaped trials will be more readily available for use in research. But re-enacted trials allow the researcher to construct and manipulate trial events for experimental purposes, as described in the remainder of this section.
assigning mock juries to one of three different decision rules while holding all other factors constant. Moreover, the mock jury approach made it feasible to examine how a large number of juries would try the same case, which made it more sensitive to the effects of the experimental factors under study.

Second, the mock jury method gives researchers a better idea of what goes on "inside the black box." Mock jury deliberations can be observed or videotaped to permit a systematic analysis of the decisionmaking process.\textsuperscript{14} By content-analyzing deliberation videotapes, Hastie and his colleagues identified a number of effects of the decision rule on jury behavior that would have been difficult to detect if they had limited their focus to jury verdicts.

Finally, the mock jury method permits almost unlimited variation in the legal procedures and rules, testimony, or characteristics of trial participants under study, including variations that would be all but impossible to explore in actual trials. This means that we can use the mock jury method to explore the potential effects of rules and procedures that aren't presently permissible in actual trials.\textsuperscript{15} The mock jury method can be used to predict the effects of proposed reforms before they are implemented. If the tested proposals do not have their intended effect, there is a tremendous advantage of being able to identify problems before full implementation of the policy takes place. This approach is also useful for studying the effects of rules that have recently been implemented, because it is not necessary to wait for a sufficient number of actual cases to close to obtain an adequate sample for archival analysis. Thus, the mock jury method is not simply a substitute for observations of actual jury deliberations. Even if jury deliberations were to be opened to public scrutiny, mock jury studies would remain an important research tool.

Nevertheless, the artificial nature of the mock jury approach has led critics to question the extent to which we can confidently generalize its results to the population of actual jury verdicts. (See Bray and Kerr, 1982, for a review.) There are numerous differences between mock jury studies and actual trials. The most obvious difference is that

\textsuperscript{14}Ericsson and Simon (1984) review evidence indicating that people can provide more accurate descriptions of their judgment processes when they "think out loud" while performing the judgment task. Fortunately, a great deal of the jury decisionmaking process naturally takes place out loud during deliberation, providing a richer source of data than is typically available in decision research.

\textsuperscript{15}For example, in a recent mock jury experiment, MacCoun and Kerr (forthcoming) instructed half of their criminal mock juries to operate under a "preponderance of evidence" standard of proof, instead of the "reasonable doubt" standard typically used in criminal trials. This allowed them to identify effects of standard of proof instructions that would be difficult to establish in studies of actual trials.
mock (and shadow) jurors know that their judgments will not have serious consequences (beyond contributing to the scientific study of juries). Hastie et al., (1983) note that research on the effects of real consequences on jury decisionmaking has yielded contradictory results, with studies finding mock juror verdicts sometimes harsher, sometimes more lenient, and sometimes no different than the verdicts of jurors who are—or believe that they are—actually trying a case. Thus, there does not appear to be a systematic pattern of bias inherent in mock jury verdicts. In carefully conducted simulation studies, mock jurors report that they take their task quite seriously, and their behavior usually attests to that fact; mock jurors will often deliberate for hours without any financial incentives to do so, and mock jurors have been known to become quite emotional when defending their positions.

An additional source of concern regarding mock jury research involves the heavy reliance (for economic reasons) on college students as mock jurors. However, several studies have compared the behavior of student mock jurors and mock jurors drawn from actual jury pools. These studies have found only minor differences across populations (e.g., Caspar and Benedict, 1987; Cutler, Penrod, and Dexter, 1987; MacCoun and Kerr, forthcoming; Tanford, Penrod, and Collins, 1985). Nevertheless, there appears to be a trend toward greater use of jury pool samples in policy-relevant mock jury research.

Investigators can never guarantee that the results of a simulation study will generalize to actual juries. Nevertheless, it should be pointed out that simulation experiments are a major tool in many basic and applied sciences (Hastie et al., 1983). The mock jury approach emphasizes the explanation of jury behavior, rather than a precise description of the actual population of jury verdicts. When a mock jury study is carefully conducted, and cautiously interpreted, it can make an important contribution to legal policy discussions.

COMPARING THE METHODS

In Table 2, the five major empirical methods for studying jury behavior are compared along a number of dimensions. The first six columns identify methodological features that are desirable in jury research. The first two features involve statistical replication, the ability to aggregate observations in order to make inferences about the reliability of events and relationships. Replication across trials allows researchers to examine trends in jury behavior over time and to correlate jury behavior with a host of trial variables, including litigant characteristics, issues in dispute, and operative laws and procedures. Replication across juries per trial enables researchers to examine how other juries might try the same case, thereby providing a more stable and sensitive estimate of how juries are responding to the factors under study.
<table>
<thead>
<tr>
<th>Method</th>
<th>Permit replication across trials?</th>
<th>Permit replication across juries per trial?</th>
<th>Permit control over trial attributes?</th>
<th>Permit control over juror attributes?</th>
<th>Provide deliberation process data?</th>
<th>Realism of trial and decision consequences?</th>
<th>Practical drawbacks or limitations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival analyses</td>
<td>Yes</td>
<td>No</td>
<td>Statistical control only</td>
<td>Statistical control if attributes are known</td>
<td>No</td>
<td>Trial and consequences are real</td>
<td>Limited by availability and quality of archival data</td>
</tr>
<tr>
<td>Posttrial interview</td>
<td>Yes, if multiple trials are studied</td>
<td>No</td>
<td>Statistical control if multiple trials</td>
<td>Statistical control</td>
<td>Indirectly through juror reports</td>
<td>Trial and consequences are real</td>
<td>Juror reports may be distorted or incomplete</td>
</tr>
<tr>
<td>Shadow jury</td>
<td>Yes, but usually one trial only</td>
<td>Yes, but practical limit on number</td>
<td>Limited experimental or statistical control</td>
<td>Limited experimental or statistical control</td>
<td>Yes, if shadow jurors deliberate</td>
<td>Real trial, mock verdicts</td>
<td>Expensive, space limitations, trials often end prematurely</td>
</tr>
<tr>
<td>Field experiment</td>
<td>Yes</td>
<td>No</td>
<td>Experimental and statistical control</td>
<td>Experimental and statistical control</td>
<td>No (unless combined with posttrial interviews)</td>
<td>Trial and consequences are real</td>
<td>Difficult to obtain court's permission and cooperation</td>
</tr>
<tr>
<td>Mock jury experiment</td>
<td>Yes, but practical limit on number</td>
<td>Yes</td>
<td>Experimental and statistical control</td>
<td>Experimental and statistical control</td>
<td>Yes</td>
<td>Realism of trial varies, mock verdicts</td>
<td>Difficult to simulate lengthy trials</td>
</tr>
</tbody>
</table>
Control over trial and juror attributes refers to the ability to draw valid inferences about the determinants of jury behavior by isolating the effects (or noneffects) of the variables of interest. Statistical control refers to the use of multivariate statistical techniques to tease apart the influence of factors. Experimental control goes further: It allows the researcher to actually manipulate trial or juror attributes of interest, systematically varying each factor while holding all others constant. Deliberation process data removes a great deal of the mystery from jury decisions; without such information, observers can only speculate as to why juries do what they do. The realism of the trial and the consequences of the jury’s decision enhance our confidence that empirical results will reliably generalize to jury trials in other settings.\(^{16}\) The final column of Table 2 reiterates some of the practical drawbacks and limitations that have been described for each method. This column serves as a reminder that, in practice, it is often difficult to realize each method’s ideal potential.

**CONCLUSIONS**

As with any policy-relevant research endeavor, the choice of jury research methods involves inevitable tradeoffs (see Cook and Campbell, 1979). Each of the major empirical methods in Table 2 has certain advantages but also certain limitations. None of the methods described here are necessarily preferable to the others in an absolute sense; instead, the relative strengths and weaknesses of each approach determine what it can and cannot contribute to the research question of interest. Many research questions can be more suitably addressed by some methods than by others. For example, if we want to examine trends in jury verdicts over time, the archival approach is clearly more appropriate than the mock jury method. On the other hand, the mock jury method is a powerful tool for examining the effects of evidentiary and extraevidentiary variables and procedural variables. Some research questions will suggest other methodologies that are not considered here; for example, survey methods for assessing public support for the jury system (e.g., MacCoun and Tyler, forthcoming) or economic analyses to determine the costs of jury trials (e.g., Kakalik and Robyn, 1982).

While it is sensible to match methods to research questions, we should ultimately extend initial research by using multiple methods in a programmatic fashion. In general, our understanding of any phenomenon is enhanced by convergent findings from alternative

\(^{16}\)Ultimately, every empirical study is bound by the unique setting in which it was conducted. Thus, there are inherent limitations in the generalizability of the results of any jury study, no matter what research methodology is adopted. (See Bray and Kerr, 1982.)
methodologies (Cook and Campbell, 1979). Moreover, the use of multiple methods can lead to discoveries that would be overlooked if we were able to rely solely on a single favored research method.
III. LESSONS FROM PREVIOUS RESEARCH

With the exception of the program of archival analyses at the Institute for Civil Justice, each of the methods described above has been applied primarily to criminal juries. Despite the controversy surrounding the jury’s role in civil litigation, researchers have largely neglected the study of civil jury decisionmaking.\textsuperscript{17} There are several plausible explanations for this neglect. Arguably, criminal trials are inherently more dramatic than civil trials, and they are more likely than civil trials to be depicted in fictional literature, film, and television. Also, the emphasis on criminal jury research has tended to be self-perpetuating; early jury research (e.g., Kalven and Zeisel, 1966) set an agenda for the research that followed it, extended it, and challenged it.

At any rate, a great deal is already known about the criminal jury. To some extent, we would expect to find that certain behavioral principles characterized jury decisionmaking regardless of its context and content. Some of the major results of several decades of empirical research on the criminal jury are outlined here.\textsuperscript{18} Research that focuses specifically on criminal topics (e.g., the insanity defense, capital punishment) can be omitted. But other criminal jury research has examined issues that are equally relevant for the civil jury, such as the effects of jury composition and structure, compliance with instructions from the bench, and the relative impact of evidentiary and nonevidentiary factors on jury decisionmaking. In addition, more basic social psychological research on group dynamics is obviously relevant to an understanding of the civil jury and is also summarized here. I have attempted to limit this review to findings that appear to be robust and reliable across multiple studies.

\textsuperscript{17}My own previous research is no exception (e.g., Kerr and MacCoun, 1985; MacCoun and Kerr, forthcoming; MacCoun and Tyler, forthcoming).

\textsuperscript{18}A thorough review research on criminal juries is beyond the scope of this paper. For more comprehensive reviews, the reader is referred to Hans and Vidmar (1986), Hastie, Penrod, and Pennington (1983), and Kerr and Bray (1982).
HOW IMPORTANT IS THE COMPOSITION OF THE JURY?

Intuition, as well as courtroom folklore, suggests that personal characteristics of jurors might predispose them toward certain types of verdicts. Practicing attorneys usually have their own pet theories and rules of thumb for selecting jurors; for example, the famous plaintiff attorney Melvin Belli has argued that "women are too brutal" and "accountants are too stingy" to make favorable jurors for plaintiffs (cited in Penrod and Linz, 1986). Recent applications of scientific jury selection techniques (Schulman et al., 1973) attempt to replace these informal voir dire strategies with systematic social science methods, including survey research and statistical analyses.

Nevertheless, a large body of systematic empirical research has called into question the efficacy of both traditional and scientific jury selection strategies. In general, jurors’ demographic characteristics, personality traits, and general attitudes have weak and unreliable effects on verdicts. This does not mean that the idiosyncrasies of particular jurors never influence verdicts in particular cases, or that jurors are basically interchangeable. Rather, it is extremely difficult to predict a juror’s verdict preference based on the kind of personal characteristics that can be observed prior to a trial.

But defenders of the scientific jury selection approach (e.g., Dillehay and Nietzel, 1986; Tindale and Nagao, 1986) argue that under certain conditions it can have a significant impact on trial outcomes. For example, it appears to be useful for bringing about a change of venue or venire, and it is more likely to be effective in trials involving controversial attitudinal issues that can be explored in pretrial surveys. Consistent with this latter point, there is an impressive body of evidence indicating that attitudes toward the death penalty systematically predict jurors’ verdict preferences in capital punishment cases.

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19There are a number of recent reviews of research on this literature, including ethical and legal critiques of scientific jury selection. See Hastie, Penrod, and Pennington (1983, Chapter 7), Hans and Vidmar (1986, Chapters 4-6), and Penrod and Linz (1986).

20In general, psychologists have found that such individual difference variables are more successful at predicting broad patterns of behavior than at predicting any single behavior, like voting for a verdict. (See Snyder and Ickes, 1985, for a review.) Of course, attorneys are usually interested in predicting a fairly limited number of behaviors during voir dire.

21This research is reviewed in the American Psychological Association’s Amicus Curiae brief (prepared by D. N. Bersoff and D. W. Ogden) in support of the respondent in Lockhart vs. McCree, an 1985 Supreme Court case. The brief has been reprinted in the American Psychologist, Vol. 42, 1987, pp. 59-68.
There may be similar pivotal issues that relate to civil liability. For example, Green (1967) found that mock jurors were significantly more likely to find the defendant liable in a negligence case involving a child victim if they were parents than if they were childless. In addition, personal juror characteristics may have a greater impact on award calculations than on guilt or liability verdicts. Damage awards provide jurors with a broader response scale than that provided by categorical guilt or liability judgments, so damages may be more sensitive to personal sentiments. For some evidence on this point see Kalven (1964, pp. 174). The efficacy of the scientific jury selection approach in civil litigation will have to be established in future research.

WHAT ARE THE EFFECTS OF USING SMALLER OR NONUNANIMOUS JURIES?

In the 1970s, a number of Supreme Court decisions paved the way for reductions in jury size (e.g., Ballew vs. Georgia, 1978; Williams vs. Florida, 1970) and the jury's required decision rule for consensus (Apodaca et al., vs. Oregon, 1972; Johnson v. Louisiana, 1972). Since then, a number of studies using a variety of methods have examined the effects of jury size and decision rule. (See reviews by Hans and Vidmar, 1986; Hastie et al., 1983; Kerr and MacCoun, 1985.) Although some studies have found differences in the verdicts rendered by smaller or nonunanimous juries, these results can typically be explained by other factors. For example, some archival studies have failed to account for differences in the types of cases brought to traditional or nontraditional types of juries. More carefully controlled studies have not found differences in conviction rates.22

On the other hand, jury size and decision rules have a number of other important effects on jury performance. The basic laws of probability tell us that smaller juries will be less likely to represent a cross-section of the community. In addition, jury studies suggest that smaller and nonunanimous juries recall less evidence, deliberate more quickly and less thoroughly than their traditional counterparts, and—perhaps as a consequence—are less likely to hang. Although these innovations in jury structure have undoubtedly lead to reductions in court costs and trial duration, the savings do not appear to be substantial (Sperlich, 1980). Whether these savings offset the probable effects on jury performance remains an issue for public debate.

22Recent research indicates that these structural factors might have greater influence on civil jury judgments. A mock jury study (Kaplan and Miller, 1987) suggests that unanimous juries might award larger punitive damages than nonunanimous juries. An archival analysis of the effects of jury size on liability judgments and damage awards is currently being conducted by Syam Sarma at the Institute for Civil Justice.
DO JURIES UNDERSTAND AND COMPLY WITH THE LAW?

A growing body of evidence (reviewed by Elwork and Sales, 1985: Hans and Vidmar, 1986) indicates that some jurors may fail to comprehend as much as 50 percent of the judge's instructions regarding the law. Studies show that comprehension levels can be improved significantly through the use of clearly worded "patterned jury instructions" and additional instructions provided at the beginning of the trial. Research also indicates that the judge's instructions during trial sometimes fail to have their intended effect. For example, a number of studies (Thompson, Fong, and Rosenhan, 1980) suggest that juries are influenced by inadmissible evidence even when they are instructed to disregard it. Not every instance of noncompliance can be explained by noncomprehension, however. On rare occasions, juries have been known to intentionally nullify the law when it conflicts with their standards for fairness; this "discretion to disobey" is often viewed as a desirable characteristic of the jury. (See Hans and Vidmar, 1986; Kadish and Kadish, 1973.)

ARE JURIES COMPETENT FACT-FINDERS?

Critics of the jury system occasionally claim that jury verdicts are more likely to be driven by whim, prejudice, or emotion than by the hard facts of the case (e.g., Frank, 1949). Indeed, there is considerable evidence that jurors are susceptible to the effects of extraevidentiary factors (see Hans and Vidmar, 1986). Research has examined how verdicts vary as a function of the physical characteristics of litigants (Dane and Wrightsman, 1982), presence and content of pretrial publicity (Carroll et al., 1986), and the joinder of multiple charges against a defendant (Tanford, Penrod, and Collins, 1985). While none of these factors have had consistent effects across studies or experimental conditions, the fact that they can have an influence has been established. Less is known about the more interesting question of how the effects of extraevidentiary factors can be attenuated.

The impact of extraevidentiary factors on jury judgments should not be exaggerated. In general, the strength of the evidence presented at trial appears to be a major—perhaps the most important—determinant of the jury's verdict (e.g., Kalven and Zeisel, 1966; Visher, 1987; Werner et al., 1985). If one party presents a stronger body of evidence, the jury's verdict will probably reflect that fact. Numerous studies have documented errors in jurors' understanding the evidence (e.g., Austin, 1984; Hastie et al., 1983; Selvin and Picus, 1987). However, it is difficult to evaluate the significance of such findings in the absence of a meaningful reference point (Lempert, 1981).23

23Mock jury experiments often provide a reference point by examining relative
Lempert (1981) has argued that jury performance should be evaluated relative to that of judges, because judges are the most likely alternative to the jury. Unfortunately, we know very little about the decisionmaking of trial judges. Kalven and Zeisel's seminal work, *The American Jury* (1966) compared the verdicts of juries with the verdicts that trial judges reported they would have rendered had they tried the case. Kalven and Zeisel found that judges agreed with jury verdicts about 80 percent of the time, and that judges were as likely to agree with juries in "complex" cases as in simpler ones. But since Kalven and Zeisel did not directly monitor decisionmaking by either juries or judges, it is difficult to draw inferences about fact-finding competence from their findings, for agreement rates tell us nothing about relative or absolute accuracy (see Selvin and Picus, 1987; Walsh, 1969). Future research might overcome this limitation by assessing fact-finding performance using direct measures of accuracy, such as the amount and accuracy of evidence recalled, comprehension of expert testimony, etc. Although we know that jurors can make mistakes, there is no solid evidence that they are less competent than judges as fact-finders, and as we shall see in the next section, it is conceivable that juries might be more competent.

**DO GROUPS PERFORM DIFFERENTLY THAN INDIVIDUALS?**

Some readers will greet the notion that juries might outperform judges with some skepticism. After all, judges are drawn from a more restrictive population than jurors, they are specially trained in the law, and they quickly accumulate a great deal more trial experience than most jurors are ever likely to get. But unlike judges (in the typical bench trial), jurors perform in groups rather than individually. Social psychologists have been comparing individual and group performance for decades (see reviews by Davis, 1973; Saks, 1981; Steiner, 1972), and there is considerable evidence showing that groups outperform individuals on a variety of intellectual tasks, including recall of factual material, generation of solutions to problems, and correction of errors. Of course, these studies typically compared the average performance of individuals and groups sampled from the same population, which is analogous to comparing a single juror to a group of jurors or a single judge to a group of judges. Comparison of the performance of legal fact-finders across populations—juries vs. single judges, juries vs. panels of judges, lay juries vs. expert tribunals, etc.—should be explored in future research.

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accuracy as a function of specific procedural factors, as in the jury size and decision rule studies.
A number of mock jury studies (see Davis, 1980; MacCoun and Kerr, forthcoming; Stasser, Kerr, and Bray, 1982), and at least one posttrial interview study of actual jurors (described in Kalven and Zeisel, 1966) have examined the relationship between the distribution of individual juror verdict preferences prior to deliberation and the jury’s final verdict. In general, there is a strong “strength-in-numbers” effect. The verdict favored by a majority of the jury at the onset of deliberation usually prevails. The movie Twelve Angry Men, in which Henry Fonda portrayed a lone juror who converted an 11-juror majority from conviction to acquittal, made for compelling drama, but research suggests that such occurrences are truly exceptional. Minority factions, especially minorities-of-one, rarely prevail in criminal jury deliberations.

A related phenomenon, group polarization, is one of the most reliable findings in research on small group behavior (see Isenberg, 1986; Myers and Lamm, 1976.) In general, when a bipolar issue is under consideration (e.g., guilt vs. innocence, pro vs. con, conservative vs. liberal), group discussion tends to shift both individual and group judgments in the direction of the average prediscussion opinion; e.g., slightly cautious groups become more cautious, and slightly risky groups become more risky. If the group has no dominant preference either way, then group polarization will not occur. The potential relevance of this phenomenon for compensatory and punitive damage judgments will be addressed below.

In the criminal realm, advocates of acquittal appear to be somewhat more influential in deliberation; this phenomenon is usually labeled a leniency bias (see MacCoun and Kerr, forthcoming). MacCoun and Kerr argue that this asymmetric pattern of influence is a consequence of our culture’s aversion to the prospect of convicting an innocent criminal defendant, as embodied in the presumption of innocence and the reasonable doubt standard of proof used in criminal trials. MacCoun and Kerr found no such leniency bias when mock juries were asked to apply the preponderance of evidence standard to a criminal case. Since the preponderance of evidence standard is typically used in civil trials, we would not expect a similar pattern of asymmetric influence. Consistent with this argument, Kalven and Zeisel (1966) found that when judges and juries disagreed, criminal juries were more lenient than judges, but civil juries were equally likely to favor either party.
IV. THE CIVIL JURY’S TASK

Criminal and civil juries share many common features. Both types of juries are drawn from a common pool of citizens, exposed to a similar procession of ritual, testimony, and debate, and then sent to the jury room to deliberate in secrecy. In the preceding section, I emphasized features that characterize decisionmaking by both criminal and civil juries. In this section, I focus more closely on features of the civil jury’s task. Some of these features are not unique to the civil jury, but they are arguably more prevalent in civil than criminal litigation. At any rate, this analysis reveals many aspects of jury decisionmaking that have been largely neglected in previous research.

CONCEPTUAL FRAMEWORK

Figure 1 depicts a tort case (e.g., automobile accident, product liability, or medical malpractice) in which an injured plaintiff is suing a defendant for damages. The figure graphically depicts a number of normative legal assumptions about civil jury decisionmaking:

1. The jury draws inferences from the evidence about the absolute level of fault of each party involved in the event. These inferences are governed by the elements of fault applicable to the particular issue in dispute. These elements can include acts of commission, acts of omission, causality, duty, foreseeability, and intent.

2. The jury then apportions the total responsibility for the injuries among the parties to determine the liability of the defendant, expressed in the figure as a percentage.\(^{24}\)

\(^{24}\)This apportionment process should vary as a function of the particular liability standard that applies to the case. Throughout this century, there has been a shift from a contributory negligence standard to various forms of comparative negligence (Prosser and Keeton, 1984). Under contributory negligence, a plaintiff who is partially responsible for his or her injuries cannot recover damages from the defendant(s). Under pure comparative negligence, a partially responsible plaintiff should receive compensation inversely proportional to his or her own fault relative to the collective fault of the defendants. Other forms of comparative negligence bar recovery when the plaintiff’s share of the total fault exceeds a certain threshold (e.g., 50 percent).
Fig. 1—Normative model of judgment process in tort litigation
3. The jury places a monetary value on the plaintiff’s injuries or damages. The model assumes that the responsibility judgments are made prior to the valuation of injuries, that the valuation judgment is made only when a defendant is found at least partially liable, and that the liability and damage judgments are made independently. The model assumes that the identity and financial resources of the defendant are legally irrelevant to these decisions.

4. The compensatory damage award against the defendant is determined by his proportion of liability and the amount of total damages as specified by the applicable negligence rule. The final products of jury deliberation vary somewhat depending on the court’s implementation of the applicable negligence rule. In some courts, juries determine the award against the defendant explicitly. In other courts, juries announce the apportionment of fault (using a special verdict) and the amount of total damages, and the judge then uses these findings to compute an award against the liable defendant.

The relationships, nonrelationships, and temporal ordering depicted in this model can be thought of as empirically testable psychological hypotheses about jury behavior. There are many important features of the civil jury’s task that are omitted from the highly simplified model in Figure 1, however. The figure fails to capture the complexity of the chain of inferences leading from the evidence to the jury’s liability and damage judgments.

ISSUES AND INFERENCES

Like the criminal jury, the civil jury must resolve factual issues; for example, civil jurors must evaluate testimony and evidence and reconstruct the events in dispute. In addition, they must determine the causal locus of events by human or nonhuman agents. Such inferences are often complicated by multiple causality, temporal chains of causality, and probabilistic (rather than deterministic) causal relationships. In many cases, civil jurors are asked to decide whether the defendant’s failure to act implies civil liability. And liability decisions commonly require inferences of mental state, including foreseeability, intentionality, reasonableness, and responsibility in human actions (see Hart and Honore’, 1959).
If the civil jury finds the defendant liable, the jurors face a number of additional decisions. First, how much compensation is needed to “make the plaintiff whole again?” Second, should punitive damages be awarded? If so, what is an appropriate punishment? Third, what will deter future wrongdoing, either by this defendant or the general class of potential defendants in similar cases in the future? Note that compensatory damage awards involve economic valuation and computation, tasks that criminal jurors only rarely encounter.

THE COMPLEXITY OF LITIGATION

In some ways the civil jury appears to face an inherently more complex task than the criminal jury, and indeed recent concerns about “complex litigation” have focused almost exclusively on the civil jury. The label “complex litigation” is regrettably vague and obscures a number of conceptually distinct characteristics of litigation. Some of these factors are listed in Table 3.

Table 3

SOME DIMENSIONS OF COMPLEXITY IN LITIGATION

- DISPUTE COMPLEXITY
  - Number and dispersion of disputants
  - Number of issues in dispute
  - Political context of the dispute

- EVIDENCE COMPLEXITY
  - Amount of evidence, number of witnesses, and duration of trial
  - Inconsistency among witnesses or items of evidence
  - Unreliability of witnesses or sources of evidence
  - Conceptual difficulty of scientific/technological testimony

- DECISION COMPLEXITY
  - Difficulty of understanding and applying relevant legal principles
  - Conflicting normative principles
  - Application of statistical/probabilistic evidence to unique events
  - Higher-order causal chains or “cascaded inferences”
Some complexity may be inherent in the features of the dispute itself. For example, an antitrust suit might involve disputed events spanning decades. Class action suits are occasionally brought by thousands of claimants widely dispersed across geographical and political boundaries. And many cases are politically controversial or serve a bellwether function for future litigation; such trials are likely to have repercussions extending far beyond the immediate stakes of the litigants.

Additional complexity often results from the characteristics of the evidence presented at trial. For example, the sheer amount of evidence and testimony presented at some trials seems likely to tax the cognitive resources of any fact-finder. Often fact-finders are confronted with inconsistent items of evidence or testimony, as when expert witnesses directly contradict each other. Even when the probative value of the evidence is clear, the reliability of its source may be in question. And expert testimony on economic, medical, scientific, or technological issues can be conceptually difficult for “lay” fact-finders to comprehend.

And finally, the decision process itself becomes quite complex when the decisionmaker is asked to apply ambiguous legal concepts to a complex body of evidence. Fact-finders often face difficult tradeoffs between competing normative principles (e.g., “make the plaintiff whole” vs. “find the truth”). There is an inherent difficulty in applying statistical evidence based on aggregated samples to a single, unique event. And decisions are often based on complex chains of causality or “cascaded inferences” (Schum and Martin, 1982) that are necessary to link the evidence to the ultimate questions at issue. Although each of these factors can characterize criminal as well as civil litigation, the civil jury debate has made these issues more salient for policymakers, and, hopefully, for researchers.
V. PROMISING DIRECTIONS FOR FUTURE RESEARCH

In order to understand and evaluate civil jury behavior and the likely effects of system interventions, we need more research focusing on civil jury decisionmaking. At present, such research is scarce. Some directions for future research on the civil jury are outlined below. Where available, examples from the existing research literature are given. However, the results of these studies should be viewed as tentative; most of these studies are as yet unpublished, their findings have not been replicated, and some of the studies have important methodological shortcomings. The civil jury literature is still much too fragmentary to permit the kind of broad generalizations that were made regarding criminal jury research.

LIABILITY JUDGMENTS
Attribution Theory

How do jurors make inferences about liability in civil litigation? Social psychologists have been studying similar questions for years under the rubric of “attribution theory” (Heider, 1959; Jones and Davis, 1965; Kelley, 1967). Attribution theory and research attempts to describe how people explain their world, and the implications of these explanations for subsequent judgments, emotions, and actions. Initially, attribution theory focused almost exclusively on the attribution of causality; humans were construed as “intuitive scientists,” drawing causal inferences via the configuration and covariation in time and space of events in the social world. But it soon became apparent that people’s attributions regularly departed from this normative scientific model (see Nisbett and Ross, 1980).

By coincidence, in 1980 two theoretical essays independently advanced an alternative model (Fincham and Jaspars, 1980; Hamilton, 1980) characterizing humans as “intuitive lawyers.” This model is based in part on the legal philosophy outlined in Hart and Honore’s classic work Causation in the Law (1959). In this model, attributions of responsibility are distinguished from attributions of causality; personal causation is seen as necessary, but not always sufficient, for moral liability. Thus, perceivers do not always hold actors responsible.

25The law also defines exceptions in which actors are liable for outcomes they did not cause directly, including “strict liability” and “vicarious liability” (see Fincham and Jaspars, 1980; Frosser and Keeton, 1984).
responsible for the outcomes their actions have caused. Our legal codes outline a number of additional requirements for an inference of guilt or liability following an inference of causality; as described earlier, these might include questions of foreseeability, intent, coercion, capacity, and duty.

Hart and Honore' (1959) argue that these legal concepts are derived from common sense. Thus, one objective of contemporary attribution research should be to test this alleged fit between the explicit legal model and the implicit lay model(s) of responsibility (see Jaspers, Fincham, and Hewstone, 1983; Shaver, 1985). For example, do perceptions of foreseeability and intent have consistent effects on lay judgments of responsibility? Do jurors understand and apply legal criteria for liability verdicts? How is liability allocated among multiple parties? How are these judgments converted into percentage terms when special verdicts are required?

The mock jury approach seems especially well-suited for exploring attributional processes in liability decisions. Mock jurors might be asked to try the same case, but with systematic variation in case and litigant characteristics and applicable legal rules. For example, Green (1967) manipulated the precautions taken by the defendant, the degree of risk, and the extent of injuries in a negligence case in order to explore how jurors assess "reasonable conduct." He found that mock jurors ignored the extent of injuries, but were sensitive to the risk and precaution factors. Johnson and Drobny (1985) manipulated the temporal and causal proximity between a negligent act and the injury to a plaintiff. Although legally irrelevant, these factors did influence mock jurors, who were more certain that the defendant was liable when relatively few events—and, for some types of cases, a relatively short time—intervened. Thomas and Parpal (1987), manipulated the foreseeability and intentionality of the actions of the plaintiff and defendant in four different civil suits, and found that mock jurors tended to attribute less liability to the defendant than a pure comparative negligence rule would predict. Unfortunately, mock jurors in each of these studies never deliberated in groups. In order to apply attribution theory to the jury, we need to now more about how attributions are communicated and debated in the jury room.

The Story Model

The recent story model of juror cognition (Bennett and Feldman, 1981; Pennington and Hastie, 1981, 1986) is another theoretical perspective that might be fruitfully applied to the understanding of civil liability judgments. According to the story model, jurors cognitively represent trial evidence by constructing a narrative "story" that integrates testimony and facilitates recall. Criminal verdict preferences have been found to vary with
the structure and content of these stories. We might hypothesize that the story that a juror constructs in a civil trial will have similar implications for liability judgments. Shadow jury and posttrial jury interview studies provide an excellent opportunity for exploring story construction by civil jurors. To be useful for policymakers, research applying this model should (a) demonstrate that the story structure actually determines the verdict, and (b) identify legal and evidentiary factors that predict liability verdicts through their impact on story construction. And like attribution theory, the story model should be expanded to explain how story structures are shared, revised, and integrated during group deliberation.

COMPENSATORY AND PUNITIVE DAMAGE AWARDS

The size, equitability, and predictability of civil damage awards appear to be the most salient issues in the civil jury debate. Participants and observers often find the “black box” dilemma especially frustrating here, and this frustration is enhanced by occasional anecdotes that suggest arbitrary or irrational behavior. For example, Kalven (1964, pp. 1069) describes a jury that allegedly (1) decided that the defendant was liable, (2) estimated the plaintiff attorney fees, and then (3) multiplied that estimate by ten to derive a damage award! There appears to be a pressing demand for empirical research on this topic.

Computation of Awards

Kalven (1958, pp. 161; 1964) argues that “it is a major characteristic of the jury’s approach to damages that it does not much concern itself with the damage components as an accountant might but searches rather for a single sum that is felt to be appropriate.” But in a posttrial interview case study, jurors told Selvin and Picus (1987) that they determined each separate component of each plaintiff’s damages and then summed them. Rigorous posttrial interview methodology should be applied to a wider array of civil trials in order to determine the extent to which either the accounting or the holistic model describes jury behavior.

Jurors’ computational processes can also be examined using the mock jury method. For example, Goodman, Loftus, and Greene (1987) asked jury pool members to recommend compensatory damage awards in descriptions of civil suits in which the defendant’s liability for the death of the plaintiff was already stipulated. The investigators hypothesized that awards would be based, in part, on estimates of the decedent’s potential future income given a natural life span. Recognizing that male decedents and younger decedents had greater earning potential, the age and gender of the decedent were experimentally varied. As expected, awards were larger when the decedent was male rather than female.26 Goodman et

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26In their analysis of Cook County jury awards in the 1960s and 1970s, Chin and
al. (1987) found that different jurors used different computational strategies; 31 percent used a simple multiplicative strategy to estimate lost future income, 26 percent used a similar strategy but adjusted the result upward or downward to reflect other factors, 15 percent made more sophisticated exponential computations to account for changes in potential income over time, and 27 percent simply selected an award recommendation without explicit computations. Unfortunately, this study examined only individual decisionmaking. It is important to discover what computational strategies tend to dominate in group deliberation. Future research should also examine how awards are influenced by computations provided by expert witnesses.

Evidence from posttrial interviews with civil jurors (Broder, 1959, pp. 756) suggests that the ad damnum—the plaintiff’s requested damage award—might serve as a reference point for the jury’s calculations. This is of interest because research in cognitive psychology (see Kahneman, Slovic, and Tversky, 1982) suggests that when making quantitative decisions, people often use a specific salient number as an “anchor” or starting point for decisionmaking. Other influential factors may lead to adjustments away from this anchor, but the size of the anchor influences the range into which the final decision will fall. Attorneys are believed to exploit this phenomenon by exaggerating the ad damnum (Broder, 1959, pp. 758).

A mock jury study reported by Zuehl (1982) provides some evidence for this anchoring effect, while suggesting some boundary conditions upon its influence. Mock juries tried a personal injury case in which the ad damnum was systematically varied. Each jury received one of four different damage requests: $10,000, $75,000, $150,000, or a request for “substantial compensation” with no specific dollar amount mentioned.

Zuehl reports that the ad damnum appeared to set an upper boundary; juries often adjusted downward, but only three juries exceeded the ad damnum request, and all three were in the $10,000 condition. When a precise dollar amount was requested, 50 percent of the damage awards matched that request exactly. As the amount requested increased, compliance with the ad damnum decreased, from 70 percent in the $10,000 condition to 29 percent in the $150,000 condition. The average awards in the three exact request conditions were $18,000, $62,800, and $101,400, with an average award of $74,600 in the substantial compensation condition. It would be interesting to simultaneously vary defense estimates of

Peterson (1985) also found that male plaintiffs received larger awards than female plaintiffs. But contrary to the Goodman et al. study (1980), Cook County juries awarded larger awards to plaintiffs over 40 than to plaintiffs in the 20-39 age range. This discrepancy might be due to a number of differences between studies, including the presence of a variety of nonfatal injuries in the Cook County sample.
damages, to discover whether defendants can provide a counter-anchor, or perhaps motivate jurors to relinquish the anchoring heuristic altogether.

Some of the major policy questions regarding civil jury awards involve the so-called "silent instructions" (Kalven, 1958, pp. 163). Traditionally, jury instructions have not told jurors whether, or how, to consider the implications of attorney fees, taxes, insurance, interest rates, or potential reductions on appeal when computing damage awards. Evidence from archival analyses (Carroll, 1983; Hammitt, Carroll, and Relles, 1985), posttrial interview studies (Broeder, 1959; Selvin and Picus, 1987), and mock jury experiments (Broeder, 1959) indicates that juries often take such considerations into account. Sometimes this occurs explicitly; on other occasions, such considerations might have an indirect influence through the personal preferences of some of the jurors. Thus, in the absence of explicit instructions, the effects of these factors are likely to be inconsistent and haphazard. Mock jury or field experiments should be conducted to examine the effects of explicit instructions regarding these factors.

**Group Dynamics**

Unlike decisions of guilt (and perhaps, liability), the determination of damages permits the possibility of *compromise*. Thus, the determination of damages might be predicted by the average of jurors' preferred damage awards, with jurors' preferences carrying equal weight or perhaps varying in weight as a function of their persuasiveness, prestige, or other social characteristics (cf. Graesser, 1982). After observing numerous mock juries, Kalven's (1958, pp. 177) impression was that some juries compute such an average but later modify it during deliberation, while other juries resort to it after other attempts at consensus will fail. Note, however, that a weighted average rule might accurately describe a jury award even if the jury never explicitly computed an average. Analyses of the relationship between individual preferences and final group decisions have provided important insights into criminal jury behavior (e.g., Davis, 1980; MacCoun and Kerr, forthcoming; Stasser et al., 1982). Similar analyses should be undertaken with civil juries.

Recall that social psychologists have detected a strong tendency for group discussion to create a polarization effect in which decisions become more extreme. Are civil jury awards influenced by such an effect? If so, it might help to explain why observers occasionally feel that jury awards are excessive. However, the theoretical basis for such a prediction is not clear. Polarization effects occur when the topic under discussion falls on a bipolar continuum with a midpoint, and it is difficult to conceptualize monetary awards in such terms.
Nevertheless, mock jury research has identified some extremity shifts for civil damages. For example, in his study of ad damnum effects, Zuehl (1982) reports that average jury awards exceeded average predeliberation juror recommendations in all four ad damnum conditions. In a recent experiment (Kaplan and Miller, 1987), mock jurors’ punitive damage recommendations became more extreme following deliberation under unanimity but not under majority rule; there was no extremity shift for compensatory damages in either condition. Analyses of deliberation content indicated that discussion of punitive damages was characterized by personal values and conformity pressures, whereas discussion of compensatory damages was characterized by references to testimony and inferences drawn from the evidence. The investigators argue that under a nonuniform decision rule, jurors with extremely punitive recommendations could be ignored.

EFFECTS OF LITIGANT AND CASE CHARACTERISTICS
Defendant Identity Effects

Mock jury experiments can help to explain some of the intriguing patterns identified by archival analyses of civil jury liability decisions. Consider Chin and Peterson’s (1985) finding that when plaintiffs were severely injured, corporate defendants were more likely to be held liable than government or individual defendants. This pattern might be an artifact of differences in legal standards, parties’ conduct, or settlement practices. If so, it should disappear when these factors are held constant in a mock jury setting.

However, Hans and Ermann (1986) recently conceptually replicated the Chin and Peterson (1985) analysis using a mock juror experiment. Hans and Ermann created a brief trial summary in which several workers received permanent lung damage following exposure to a toxic substance during a landscaping job. Students read one of two versions of the case in which the defendant was described as either “Mr. Jones” or “the Jones Corporation.” This simple manipulation influenced both liability and damage judgments. The corporation was held liable for significantly more claims than the individual, and awards against the corporation were significantly larger than awards against the individual in each category of damages: hospital bills, doctor bills, and especially “pain and suffering.”

Hans and Ermann (1986) point out that this pattern of verdicts might not require an inference that the corporate defendant has “deeper pockets” than the individual defendant. They suggest that their results can also be explained by an alternative standard hypothesis: Citizens might hold organizations to more stringent standards of conduct and responsibility than they apply to individual defendants, so that the same action is evaluated differently
depending on the defendant’s identity. This hypothesis can be viewed as an extension of the "reasonable person standard" used in tort law. Prosser and Keeton (1984, pp. 32) define this notion as "a personification of a community ideal of reasonable behavior, determined by the jury’s social judgment." Interestingly, they point out that the reasonable person’s physical attributes should match those of the actor in question; thus, a blind actor should be evaluated relative to what the jury would expect of a reasonable blind person. This suggests that the jury should adopt a "reasonable corporation" standard when evaluating a corporate defendant, and a "reasonable government" standard when evaluating a government standard. The alternative standard hypothesis is also consistent with Lieberman’s (1981) argument that there has been a general social and legal trend throughout this century toward stricter standards of liability, especially for businesses.

Several additional hypotheses are suggested by distributive justice research, which examines how people allocate resources and evaluate the fairness of resource distributions. Social psychological research on distributive justice has traditionally focused on the norm of equity or proportionality, which suggests that resources should be allocated in proportion to contributions or efforts (e.g., McClintock, Kramer, and Keil, 1984). Under a pure comparative negligence standard, the normative legal model can be thought of as a proportionality model. According to this norm, victims should be compensated in proportion to contribution to injuries, i.e., to fault. The alternative standards hypothesis suggests a variation of the proportionality norm in which the organization’s contribution is weighed more heavily in determining relative liability.

However, recent theory and research (e.g., Deutsch, 1975; Hochschild, 1981; Leventhal et al., 1980) indicates that distributive justice is multidimensional; equity is just one of many norms used in social exchange. The two most prominent alternatives are equality and need. The deep pockets argument that jurors’ verdicts are influenced by the defendant’s financial resources can be framed in terms of either one of these norms. For example, a pure equality hypothesis would suggest that jurors are using the trial context to redistribute wealth among parties. In order to do so, jurors must find deep pockets defendants liable. In its pure form, this model seems unlikely, since juries only find organizational defendants liable about 50 percent of the time (Chin and Peterson, 1985, pp. 42).

More plausibly, a pure need hypothesis would predict that jurors base their verdicts solely upon the needs of the plaintiff and the defendant’s financial ability to meet those needs. This is consistent with the claim that there is growing support for a "philosophy of entitlement," which holds that, whatever the specific nature of the process by which
compensation is measured out, it is intolerable that individuals should be required to shoulder the burden of injury without some form of assistance from a source acting as an agent for a concerned community" (Righting the Liability Balance, California Citizens Commission on Tort Reform, 1977, pp. 133). Recent research suggests that third-party allocators will allocate more rewards to the needier member of a dyad, even when the recipients contributed equally to a task, or the needy person contributed less (Schwinger, 1986). Interestingly, there is evidence that third-party allocation by need increases with the size of the available sum to be allocated (Schwinger, 1986). This suggests that when the defendant has extensive financial resources, jurors should be more likely to deviate from proportional-to-fault allocation and inflate awards. Research also indicates that allocation by need is less likely to occur when the would-be recipient is personally responsible for his or her own need (see reviews by Schwinger, 1986; Une and Kidd, 1980). Thus, allocation by need should be less prevalent when plaintiffs are clearly responsible for their own injuries.

Studies have generally failed to detect direct effects of the severity of the plaintiff’s injuries on liability judgments (Green, 1967; Peterson, 1984; Thomas and Parpal, 1987). However, Chin and Peterson (1985) found that the defendant identity effect on damages was greater when injuries were severe; more important, defendant identity only influenced liability judgments when injuries were severe. A moderating effect of injury severity on liability judgments creates difficulties for these alternative hypotheses. It is difficult for the alternative standards hypothesis to explain such an effect without making additional ad hoc assumptions. Why would jurors be more likely to apply stricter standards to corporations or governments when a plaintiff is severely injured? The pure need hypothesis predicts that jurors explicitly take into account the severity of injuries when determining liability, but it would predict a direct effect of injury severity, not a moderating effect. A severe need hypothesis would predict that injuries must be quite severe before jurors are willing to deviate from the proportionality norm and base their award computations solely upon the plaintiff’s need.

Figure 2 shows some of the additional links hypothesized by these alternative models. Future research should competitively test these alternative links against the normative legal model shown in Figure 1. This could be done by independently manipulating the defendant’s wealth and identity and the plaintiff’s injuries in a mock jury experiment.
Fig. 2—Hypothesized influences on judgment process in tort litigation
Effects of Case Type on Compensation

In his archival analysis of jury awards in Cook County, Peterson (1984; cf. Lloyd-Bostock, 1983) found that plaintiffs with similar injuries (e.g., loss of limbs) received dramatically different compensatory awards depending on the type of claim (work injury vs. automobile accident) at stake. On the face of it, this appears seriously inequitable, but it is difficult to evaluate this pattern without understanding how it came about. The pattern could result from systematic variation in any of a number of factors across claim types: (1) depth of defendants’ pockets, (2) juror biases for or against certain types of litigants, (3) the degree to which plaintiffs contribute to their own injuries, (4) legal arguments, trial strategies, and attorney quality, or (5) social norms and values regarding conduct, fault, and compensation (cf. Peterson, 1984, pp. 35-37). Mock jury experiments can be used to competitively test these alternatives by independently manipulating these and other factors that are naturally confounded in actual civil suits. Posttrial interviews might be used to determine whether different types of cases systematically evoke distinct values and standards of conduct.

COMPLEX LITIGATION AND THE JURY

As mentioned earlier, critics have raised concerns about the role of the jury in "complex litigation." But research described previously indicates that juries might actually be better suited than judges for coping with some aspects of complex litigation (see Lempert, 1981; Saks, 1981). Comparisons among fact-finding entities ("lay" juries, judges, experts, etc.) should be made empirically using behavioral measurements with demonstrable right or wrong answers, such as the frequency and accuracy of memory for evidence. Comparisons of fact-finders' verdicts in the absence of objective standards (e.g., Kalven and Zeisel, 1966) are difficult to interpret since we don't know what the correct verdicts should have been (Selvin and Picus, 1987; Walsh, 1969). Conceivably, judges, juries, and expert tribunals may each have different strengths and weaknesses in coping with the varied facets of complexity. Policies for handling complex litigation may involve making tradeoffs among the performance standards listed in Table 1.

Recent work by cognitive psychologists can provide insights into how legal fact-finders might cope with highly complex litigation. Researchers have identified a number of commonly used cognitive "heuristics" that people seem to rely on when forced to reach judgments under conditions of uncertainty (Kahneman, Slovic, and Tversky, 1982). Saks and Kidd (1980-1981) have illustrated how these simple cognitive rules of thumb can bias the legal fact-finding process. The story model (e.g., Pennington and Hastie, 1986) suggests
that jurors might cope with trial complexity by narrowing their focus to certain key elements that fit into a manageable story form. A recent attributional model (Einhorn and Hogarth, 1986) describes how observers isolate a single “cause” among a complex field of conditions preceding an undesired outcome. They argue that observers place special emphasis on conditions that deviate from the normal state of affairs in some way (cf. Hart and Honore, 1959; Mackie, 1974). 27

STRUCTURING THE JURY’S TASK

Many authors (e.g., Austin, 1984; Lempert, 1981; Sperlich, 1982) have argued that there are numerous steps we can take to restructure the civil jury’s task to improve jury performance. Such steps include additional and/or improved jury instructions, greater use of note-taking, special verdicts, advisory awards ranges, and itemized verdicts. A preliminary empirical test of many of these innovations was been rendered inconclusive by an inadequate sample size (Hastie, 1982). Penrod’s (1985) randomized field experiment, mentioned previously, evaluated a similar set of courtroom procedures. Penrod’s analyses of juror, judge, and attorney satisfaction measures indicated that, in general, trial participants had mildly favorable evaluations of these innovations; judges and attorneys who actually experienced the procedures did not encounter many of the potential drawbacks anticipated by their counterparts in the traditional court procedure conditions. Nevertheless, Penrod was unable to collect objective measures of jury behavior, and so the actual effects of these courtroom procedures upon trial conduct and trial outcomes are still uncertain.

Some states are now adopting special or itemized verdict formats, in which juries are told to break down personal injury awards into a series of elements or components. The assumption underlying this proposal is that it will make juries more publicly accountable and will inform the judge and the public as to the basis of the decision, paving the way for appeals or remittitur. The process is hypothesized to make jurors comply with the “accountant” model, by making a decision about the value of a claim for each element and then adding them up at the end. But Kalven (1958, pp. 162) has raised an alternative hypothesis regarding juries’ responses to this policy. Some juries may determine their award holistically, and then work backwards using arithmetic to determine the components. 28 As

27 A related model (Kahneman and Miller, 1986) suggests that when harm befalls a victim under abnormal conditions, observers will feel greater sympathy. This can lead them to recommend greater compensation for the victim if they can readily imagine an alternative scenario in which the victim would not have been harmed (Miller and McFarland, 1986). However, this prediction was not supported in a recent mock civil juror study (Goodman et al., 1987).

28 Recall that Goodman, Loftus, and Greene (1987) found that about 27 percent of the mock jurors in their sample arrived at a global damage award without explicit computations.
far as the judge or the public is concerned, the jury will seem to have followed a very rational piecemeal accounting process, when in fact, the jury did something very different. If this is the case, then itemization will not reduce inflated awards, and any posttrial activities will be based on misleading information.

The limited empirical evidence to date provides some support for the use of special or itemized verdicts. In Zuehl’s (1982) study of the effects of the ad damnum, mock juries were randomly assigned to one of three verdict formats: A global general verdict format, an itemized special verdict format, or a control condition in which no particular verdict format was required. Zuehl found that the ad damnum had the greatest impact on awards in the control condition and the least impact in the special verdict condition. Similarly, research on trial cognition in felony cases (Schum and Martin, 1982) indicates that certain logical and probabilistic inconsistencies are attenuated when the legal decisionmaker’s task is broken down into a series of subdecisions. However, the ability of special verdicts to mitigate extralegal biases in the awards process has not been established. For example, if certain extralegal factors heighten the sympathy that jurors feel for the plaintiff, will itemization make it more difficult for them to increase the award, or will they simply inflate one or more of the damage components? This issue could be explored by manipulating extralegally biasing factors (e.g., defendant attractiveness) in a mock jury study.

Other structural interventions might include additional jury instructions providing jurors with guidelines for deliberation. Kerr and MacCoun (1985) found that juries who were instructed to use open “show of hands” polling were more likely to deadlock than juries using secret ballots. Hastie et al. (1983) found that the timing of the initial poll predicted a number of features of deliberation. Juries that took immediate polls tended to have a verdict-driven deliberation style, characterized by an early alignment into factions, the use of evidence to bolster verdict preferences, and a somewhat higher hung jury rate. Juries that delayed polling tended to have an evidence-driven deliberation style, characterized by longer deliberation, a more extensive review of the evidence, and greater group cohesion. Future research should establish the strengths and weaknesses of these styles of deliberation, and identify procedures for eliciting the most effective style.
VI. CONCLUSIONS

The debate over civil jury performance has relied too heavily on speculation, hearsay, and circumstantial evidence. Throughout this paper, I have argued that systematic empirical research is needed if policymakers are to draw sound conclusions about proposals for modifying the civil jury system. The study of civil jury behavior needn’t start from scratch. There are a variety of methodological tools available for studying the jury, and each has benefited from a track record of use in criminal jury research.

Although I have emphasized the advantages of using an arsenal of multiple research methods to study jury behavior, the astute reader will note that I have given special emphasis to the mock jury experiment. This has been the most popular tool in criminal jury research, and it is the method with which I am most familiar. But more important, I’ve found that many people are initially puzzled by the mock jury approach; why study “mock” anything? So I hope that I’ve persuaded the reader that carefully conducted mock jury experiments are powerful tools for explaining patterns identified in archival analyses and for testing the effects of proposed policy changes.

I have discussed many aspects of civil jury behavior that merit attention, but I make no claim to have provided an exhaustive list of research questions. Indeed, I hope that this paper will entice criminal jury researchers and other social scientists to bring fresh insights to the study of the civil jury. Nevertheless, I would argue that there are four topics that should be given a high priority in the research agenda in light of their salience in the policy debate.

First, we should identify the processes that have brought about the apparent patterns of inequity identified in archival analyses of jury verdicts. Are they simply artifacts of unmeasured factors that distinguish different types of cases, or do juries discriminate against certain classes of litigants, and if so, why? Second, we need to know more about the relationship between damages and liability. Does a consideration of damages ever influence the liability decision? Does the distribution of fault ever influence the valuation of total damages? Third, many recent policy initiatives regarding jury awards can be implemented only through the use of special or itemized verdict forms. These forms inevitably increase the jury’s accountability and may also reduce the jury’s discretion. At present we know very little about how they affect the deliberation process, and how accurately they represent the jurors’ actual judgments. Finally, researchers should assist the courts in improving the
structure of the trial and the decision task so as to facilitate decisionmaking by juries—and by judges—under uncertainty and complexity.

This paper has focused on the jury, but it should be emphasized that we also know very little—perhaps even less—about the performance of judges and other potential fact-finders in civil litigation. For better or worse, judges—and expert tribunals—are likely to be vulnerable to many of the same psychological processes that characterize jury decisionmaking. In fact, there are reasons to expect that civil juries are better suited than judges for meeting some of the performance standards listed in Table 1. It is unrealistic to expect perfection from any legal fact-finding procedure. Indeed, the selection of an appropriate legal fact-finder may involve inevitable tradeoffs among social desiderata. If so, we should make sure that our choices are well-informed.
REFERENCES


Other ICJ Publications

R-2716-ICJ
The Law and Economics of Workers' Compensation
Policy Issues and Research Needs
L. Darling-Hammond and T. J. Kneser
1980

R-2717-ICJ
Models of Legal Decisionmaking
Research Design and Methods
D. A. Waterman and M. A. Peterson
1981

R-2732-ICJ
Court Efforts to Reduce Pretrial Delay
A National Inventory
P. Ebner, with the assistance of J. Adler, M. Selvin, and M. Yesley
1981

R-2733-ICJ
Judicial Arbitration in California
The First Year
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