REVISITING THE UNANIMITY REQUIREMENT: THE BEHAVIOR OF THE NON-UNANIMOUS CIVIL JURY

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I. INTRODUCTION

Legal scholarship in the twenty-first century reflects a growing interest in behavioral research on law and legal institutions.1 In this Essay, we turn to behavioral research on the jury and use a unique set of real jury deliberations to raise serious questions about the trend toward dispensing with the unanimity requirement in civil jury trials.

Recognition of empirical scholarship has deep roots at Northwestern and empirical studies appeared alongside doctrinal legal scholarship even in

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1 For example, the theme for the 2006 Annual Meeting of the Association of American Law Schools is Empirical Scholarship. See also, Shari Seidman Diamond, Empirical Marine Life in Legal Waters: Clams, Dolphins, and Plankton, 2002 U. ILL. L. REV. 803, 803–18.
the early issues of the *Northwestern University Law Review*. In a 1909 article, Northwestern’s Dean Wigmore presented a fictional trial of Professor Hugo Muensterberg who, reflecting enthusiasm for his emerging discipline of experimental psychology, had overstated what psychology at that point could offer the legal system and had purportedly libeled the legal profession for its neglect of psychological science. Although the Wigmore article is often remembered as an attack on Muensterberg, Wigmore also used the fictional trial to urge the legal profession to form a “friendly and energetic alliance of psychology and law.”

In the century since Wigmore’s article was published, both psychological research on legal issues and legal interest in that research have made substantial strides, although the struggle continues.

In 1939, the *Law Review* published another early engagement with empirical scholarship, a pioneering—albeit rudimentary—empirical study by Professor Fred Inbau that tested the ability of lay persons (Northwestern law professors!) and professional document examiners to distinguish between genuine and forged signatures. That study presaged a debate about the alleged expertise of document examiners that later took on even greater importance in the wake of *Daubert v. Merrell-Dow Pharmaceuticals, Inc.*

This centennial issue of the *Northwestern University Law Review* reflects the most recent generation of empirical scholarship at Northwestern. In addition to this article on the behavior of the non-unanimous civil jury, the issue includes a number of other essays that describe findings from empirical studies.

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2 See HUGO MUENSTERBERG, ON THE WITNESS STAND: ESSAYS ON PSYCHOLOGY AND CRIME (1908).
4 Id. at 432.
5 See, e.g., JAMES M. DOYLE, TRUE WITNESS: COPS, COURTS, SCIENCE, AND THE BATTLE AGAINST MISIDENTIFICATION (2005) (providing an insightful history of the early Muensterberg-Wigmore relationship and describing the more recent successes and failures of the psychology-law alliance applied to questions of eyewitness testimony).

Few institutions in society require unanimity to reach a decision. Yet the unanimity requirement for jury verdicts was settled law in the latter half of the fourteenth century. Most of the American colonies adopted the British tradition, and the requirement of unanimity remained a standard feature of the American jury trial for both criminal and civil cases through most of the nineteenth century. Over time, a few exceptions appeared, particularly for civil trials. Today, jury verdicts in felony trials must be unanimous in federal courts and in all states except Louisiana and Oregon. The unanimity standard, however, has significantly eroded for verdicts in civil cases. Federal juries must be unanimous, but only eighteen states require unanimity and another three accept a non-unanimous verdict after six hours of deliberation. The remaining states permit super-majorities of between two-thirds and five-sixths in civil cases. In a recent resurgence of support for unanimous jury verdicts, the American Bar Association (“ABA”), in its Principles for Juries and Jury Trials adopted in 2005, endorses unanimity as an optimal decision rule for both criminal and civil jury trials. ABA Principle 4A states: “In civil cases, jury decisions should be unanimous wherever feasible.” Nonetheless, the standard does allow for a less than unanimous verdict from a jury in a civil case after a reasonable period of deliberation if five-sixths of the jury and at least six jurors concur in the verdict.


10 FED. R. CRIM. P. 31(a).

11 See LA. CODE CRIM. PROC. art. 782 (2004) (requiring agreement by only ten of twelve jurors under some circumstances, but requiring unanimity in cases where the “punishment may be capital”); OR. REV. STAT. § 136.450 (2004) (requiring agreement by ten of twelve jurors, except for cases of murder and aggravated murder, where concurrence by eleven of twelve jurors is required).

12 FED. R. CIV. P. 48(1); see Am. Publ’n Co. v. Fisher, 166 U.S. 464, 467–68 (1897); Springville v. Thomas, 166 U.S. 707, 708–09 (1897).


14 ABA, PRINCIPLES FOR JURIES AND JURY TRIALS 21 (2005).

15 Id.

16 Id.
Supporters and critics of the unanimity requirement have debated its merits by drawing on history and precedent, but they have grounded much of their disagreement on conflicting claims about how the various decision rules are likely to affect jurors, jury deliberations, and jury verdicts. Permitting non-unanimous verdicts is variously viewed as a sensible efficiency matter, a threat to the quality of jury decisionmaking, or a change in form without substance. Advocates argue that the non-unanimous verdict protects the jury from the obstinacy of the erratic or otherwise unreasonable holdout juror, decreases the likelihood of a hung jury, and reduces the costs associated with re-trying a case when the jury fails to reach a verdict. Critics of the non-unanimous decision rule claim that it weakens the ability of jurors holding plausible minority viewpoints to be heard, undermines robust debate, and threatens the legitimacy of jury verdicts.

In evaluating the implications of a non-unanimous decision rule, however, both scholars and courts have been hampered by a lack of information about how juries deliberate when jurors are permitted to reach non-unanimous verdicts. To help fill that gap, we examine a unique set of 50 civil jury deliberations. This study provides the first direct evidence from real civil juries of how the decisionmaking process is handled when unanimity is not required.

We were able to examine these real jury deliberations because the Arizona Supreme Court between 1998 and 2001 permitted us to videotape a set of civil trials and the deliberations of the juries in order to evaluate a controversial innovation in Arizona (hereinafter “the Arizona Project”). The court also provided us with copies of exhibits and other written documents that were part of the trial record. Additional data included questionnaires administered to the jurors, the judge, and the attorneys at the end of the

17 E.g., Johnson v. Louisiana, 406 U.S. 356, 369–70 (1972) (Powell, J., concurring) (finding that the Court over time and “virtually without dissent” had recognized unanimity as “one of the indispensable features of federal jury trial” in both criminal and civil cases and that the result was “mandated by history”).
Juries in civil cases in Arizona consist of eight jurors. To reach a verdict, three-fourths (or six) of the jurors must agree.

Before presenting our analyses of the deliberations, we begin with a discussion of the emergence of the controversy over the non-unanimous jury in the Supreme Court in 1972. We then review the empirical research that the controversy has generated. Until recently, all empirical research on non-unanimous jury decisionmaking consisted of laboratory experiments and post-trial juror surveys, conducted almost exclusively on criminal trials. To that body of research we add our study of the actual deliberations of civil juries operating under a non-unanimous decision rule. The deliberations from the Arizona Project reveal that juries generally engage in extensive debate on the issues. The data also show that jurors are quite conscious that they need not resolve all of their disagreement to reach a verdict. This awareness in some instances translates into dismissive treatment of minority jurors (“holdouts”) who are not required to produce the requisite quorum. Indeed, questionnaire data reveal that both outvoted holdouts and majority jurors are less positive about their juries than jurors who reach unanimous verdicts, giving lower assessments of their jury’s thoroughness and the open-mindedness of their fellow jurors.

We examine the actual positions taken by holdouts at the end of deliberations and find no evidence that the outvoted holdouts are more likely to favor the plaintiff or the defendant, although the jury’s task is particularly awkward when the holdout opposes liability and the jury must decide on damages. Further, we find no evidence that these outvoted holdouts are irrational or eccentric in ways that justify isolating them or failing to seriously consider their views. Finding no evidence that the holdouts and their positions are either odd or extreme, we consider how outcomes, including the hung jury rate, are likely to change in civil cases by shifting from unanimity to a quorum decision rule. In evaluating the costs and benefits of the unanimity rule, we offer an explanation for why juries operate successfully under a unanimity requirement and conclude that the benefits of unanimity outweigh its costs.

22 Supreme Court of Arizona Administrative Order 98-10, supra note 20, reads in part:

[T]he materials and information collected for the study, including audio and videotapes may be used only for the purposes of scientific and educational research. The Court shall take all measures necessary to ensure confidentiality of all materials. All tapes shall be stored using appropriate security measures. The materials and information collected for the study, including audio and videotapes, shall not be subject to discovery or inspection by the parties or their attorneys, to use as evidence in any case, or for use on appeal.

As part of their obligations of confidentiality under the Supreme Court Order as well as additional assurances to parties and jurors undertaken by the principal investigators, the Authors of this Essay have changed certain details to disguise individual cases. The changes do not, however, affect the substantive nature of the findings that are reported.

23 ARIZ. R. CIV. P. 49.

24 Id.
II. CONTROVERSIES OVER THE UNANIMITY REQUIREMENT

In 1972, a sharply divided Supreme Court in *Johnson v. Louisiana*25 rejected the claim that a conviction based on a non-unanimous verdict in a state criminal trial violates the Due Process Clause of the Fourteenth Amendment. Rather than relying on history or precedent, the majority and dissent both grounded their decisions on claims about how the decision rule would affect jury functioning. Justice White, writing for the majority, concluded that the non-unanimous decision rule would have no effect on the deliberation process or trial outcomes, with the exception of permitting a modest reduction in the number of hung juries. He wrote:

We have no grounds for believing that majority jurors, aware of their responsibility and power over the liberty of the defendant, would simply refuse to listen to arguments presented to them in favor of acquittal, terminate discussion, and render a verdict. On the contrary it is far more likely that a juror presenting reasoned argument in favor of acquittal would either have his arguments answered or would carry enough other jurors with him to prevent conviction.26

According to the Court, majority jurors will “cease discussion and out-vote a minority only after reasoned discussion has ceased to have persuasive effect or to serve any other purpose . . . .”27 Justice Powell, while grounding his concurrence on history and precedent, also suggested that dispensing with unanimity “could well minimize the potential for hung juries occasioned either by bribery or juror irrationality” and avoid unjustified “agreement by none and compromise by all” induced by a unanimity requirement.28 The dissenting justices assumed that unanimous juries were constitutionally required in all criminal cases, consistent with history and precedent,29 but they too presented a functional analysis of how the unanimity requirement is likely to influence deliberations. Unlike the majority, however, they predicted that eliminating the need for unanimity would “diminish[] the reliability of a jury”30 by extracting this “automatic check against hasty factfinding [and thereby] . . . relieving jurors of the duty to hear out fully the dissenters,”31 that jurors would dispense with deliberation if the necessary majority was immediately obtained,32 and that the jury’s consideration of minority views might amount to mere “polite and academic conversation” rather than “the earnest and robust argument necessary to reach unanimity.”33

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26 *Johnson*, 406 U.S. at 361.
27 *Id.*
28 Id. at 377.
29 Id. at 382.
30 Id. at 388.
31 Id. at 389.
32 Id.
33 Id.
Although Johnson involved claims about jury behavior in criminal cases, the conflicts about unanimity in civil cases have raised some of the same issues. In addition to those concerns, some proponents of non-unanimous decision rules have argued that plaintiffs are disadvantaged by the unanimity requirement. They contend that to reach a unanimous verdict, the majority favoring the plaintiff may compromise on the size of the award to gain the support of minority jurors who favor a defense verdict.34 As others have pointed out, unanimity might also produce compromises that assist the plaintiff if an initial majority favoring a defense verdict agrees to make some award in order to get a unanimous verdict.35 To the extent that both of these occasions arise, the overall impact of a unanimity requirement on the fortunes of litigants will depend on their relative frequency.

III. EMPIRICAL RESEARCH ON THE EFFECTS OF A NON-UNANIMOUS DECISION RULE

Johnson and Apodaca stimulated a series of laboratory experiments on unanimous verdicts in criminal cases.36 The opinions in Johnson and Apodaca had contained a series of competing claims about juror behavior, but little empirical evidence was available at the time of these decisions to support those claims. A single study was cited both to uphold and to reject a requirement of unanimity.37 In that study, Kalven and Zeisel reported that hung juries in criminal cases were more likely in jurisdictions where unanimity was required, and that, according to the reported final votes by jurors on a sample of hung juries, a majority of hung juries ended their deliberations with more than two holdouts.38 That finding was replicated recently by researchers at the National Center for State Courts who found that 58% of hung juries in criminal cases ended their deliberations with at least three holdouts, while 42% ended with two or fewer holdouts.39 Thus, if hung jury rates on average are about 6.2%,40 in criminal cases, a quorum rule of five-sixths would be likely to reduce them to 3.6%.41

The dissent in Johnson also relied on the Kalven and Zeisel research, but used it to make a different point. According to the dissent, in view of the evidence that the minority on the first votes succeeds in reversing an ini-
tial majority in one case in ten, dispensing with the unanimity requirement may stand in the way of debate and persuasion.42

After Johnson and Apodaca, researchers conducted a series of laboratory experiments designed specifically to test the impact of decision rules and to study how individual verdict preferences are translated into group decisions. Mock juries who deliberated in response to the same trial were told either that their verdicts had to be unanimous or that a non-unanimous verdict was acceptable. Researchers found that deliberations were shorter when juries were permitted to reach a non-unanimous verdict and that hung jury rates were lower.43 Several studies also showed that jurors who were required to reach unanimity reported greater satisfaction and confidence in their verdicts.44 The process of deliberation also was fundamentally affected by the decision rule.45 When juries were not required to be unanimous, they tended to be more verdict-driven. That is, they were more likely to take the first formal ballot during the first ten minutes of deliberation and to vote often until they produced a verdict. In contrast, juries who heard the same case but were required to reach a unanimous verdict, tended to delay their first vote and discussed the evidence more thoroughly. These evidence-driven juries rated their deliberations as more serious and thorough.46

The laboratory findings on the effects of decision rule are consistent with the concerns raised by the dissenting justices in Johnson about the deliberation process, but they leave open the possibility that jurors would be more motivated when deciding real cases than in these simulations. Jurors might therefore engage in more robust debate in real cases, even in the absence of a unanimity requirement. Our study of actual deliberating juries discussed below addresses this concern.

Another limitation of prior legal scholarship,47 formal modeling efforts48 and empirical studies49 on the non-unanimous decision rule for juries

42 Johnson, 406 U.S. at 389 (Douglas, J., dissenting).
43 For a review, see Dennis J. Devine et al., Jury Decision Making: 45 Years of Empirical Research on Deliberating Groups, 7 PSYCHOL. PUB. POL’Y & L. 622, 669 (2001).
44 Id.
45 Id.
49 HASTIE ET AL., supra note 45; MICHAEL SAKS, JURY VERDICTS: THE ROLE OF GROUP SIZE AND SOCIAL DECISION RULE (1977); Robert Bockhout et al., Jury Verdicts: Comparison of 6- vs. 12-person Juries and Unanimous vs. Majority Decision Rule in a Murder Trial, 10 BULL. PSYCHONOMIC SOC’Y 175 (1977); James H. Davis et al., The Decision Processes of 6- and 12-person Mock Juries Assigned
is that it has almost exclusively (with two exceptions)\textsuperscript{50} focused on criminal cases. Although many of the group process issues are the same in criminal and civil cases, the non-unanimous decision rule raises some special procedural issues for the typical civil jury trial that do not occur in criminal trials. Unique questions arise for civil juries due to the differences in the structure and verdict choices in criminal and civil cases. The jury in a criminal case is charged with determining whether the defendant is guilty of a particular offense. The jury may be asked to decide on multiple counts involving different offenses or may be given a choice among verdict outcomes (e.g., first or second degree murder, manslaughter or self-defense), but in each instance the basic question to be answered is whether or not to convict the defendant on a particular charge.

In contrast, the typical civil jury is faced with a set of contingent decisions. In the ordinary civil case, the jury must determine whether or not the defendant is liable and then, if liable, how much the damage award should be. Juries operating under a non-unanimous decision rule must produce a verdict that the required majority agrees to endorse, but they receive no instruction on how to arrive at that decision if the jurors disagree on liability. Suppose that a majority of the jurors concludes that the defendant is liable and the votes of the remaining jurors are not needed to reach a verdict on liability. The jury must then decide how much the plaintiff should be awarded. If the jurors were not unanimous on liability, what role does (should) a juror who favored a defense verdict play in deliberations on damages? As the evidence below shows, jurors (and juries) differ in the way they answer this question.

Another difference between civil and criminal cases that can affect deliberations arises from the task itself. Rather than choosing from one of a small number of verdict alternatives, as jurors do in criminal cases, jurors in

\textsuperscript{50} James H. Davis et al., \textit{Effects of Group Size and Procedural Influence on Consensual Judgments of Quantity: The Examples of Damage Awards and Mock Civil Juries}, 73 J. PERSONALITY & SOC. PSYCHOL. 703 (1997) (finding that student juries deliberated longer when they were instructed that they had to be unanimous than when their verdict could be endorsed by a two-thirds majority); Martin F. Kaplan & Charles E. Miller, \textit{Group Decision Making and Normative Versus Informational Influence: Effects of Type of Issue and Assigned Decision Rule}, 53 J. PERSONALITY & SOC. PSYCHOL. 306 (1987) (finding that student jurors, deciding only compensatory and punitive damages, were more satisfied with their verdicts when verdicts had to be unanimous and that pre- to post-deliberations changes were affected by both normative and informational influence).
civil cases may be asked to allocate the percentages of liability between parties in a comparative negligence case, offering a broad range of verdict choices. If the jury finds the defendant liable and must decide on damages, the range of possible values is even broader. To complete that task, jurors must resolve their differences by pooling their damage assessments rather than selecting between majority and minority positions on guilt or liability within the jury. That is, they must reach a collective judgment rather than a group choice among discrete alternatives.  

The jury deliberations from the Arizona Project allow us to examine real civil jury deliberations when unanimity is not required. In light of current criticism of the civil jury, particularly in response to charges that the civil jury engages in erratic and unpredictable behavior, the operation of the civil jury under a non-unanimity decision rule is worth examining. The analysis presented here focuses primarily on juries that ended in non-unanimous verdicts and on the holdouts who did not vote with the majority.

IV. EVIDENCE FROM THE DELIBERATIONS OF REAL CIVIL JURIES

A. Selection of Cases and Jurors

The data from the Arizona Project consist of 50 civil jury trials and deliberations, in addition to exhibits and other court documents on the case, as well as post-trial questionnaires from jurors, attorneys, and judges. All prospective participants were informed of the Arizona Supreme Court order that ensured strict confidentiality and limited use of the tapes exclusively to the court-sanctioned research. The principal investigators made further assurances of confidentiality concerning the cases and the deliberations to the parties and jurors.

Attorneys and litigants with cases scheduled for trial in the courtrooms of participating judges were asked to participate in the study. Jurors were told about the videotaping project when they arrived at court for their jury service. If a juror preferred not to participate, the juror was assigned to cases not involved in the Project, but the juror participation rate ultimately proved to be over 95%. Attorneys and litigants were less willing to take part in the study. Some attorneys were generally willing to participate

52 Forthcoming work will focus explicitly on how juries reach decisions on damages.
53 See supra note 20.
when they had a case before one of the participating judges; others consistently refused. The result was a 22% yield among otherwise eligible trials.\textsuperscript{54}

Our sample of 50 cases reflected the typical distribution of case types in Pima County Superior Court where the cases were tried. It consisted of 26 (52\%) motor vehicle cases, 17 (34\%) non-motor-vehicle tort cases, 4 (8\%) medical malpractice cases, and 3 (6\%) contract cases.\textsuperscript{55} The 47 tort cases in the sample varied from the common rear-end collision with a claim of soft tissue injury to cases involving severe and permanent injury or death. Plaintiffs received an award in 65\% of the tort cases.\textsuperscript{56} Awards ranged from $1000 to $2.8 million dollars with a median award of $25,500.

\textbf{B. Videotaping the Deliberations}

To tape the deliberations, we mounted two unobtrusive cameras in opposite corners of the deliberation room at the ceiling level. These cameras made it possible to see jurors seated around the rectangular table on a split screen without disrupting their normal seating arrangement. Unobtrusive ceiling microphones recorded the discussions. An on-site technician located in another room videotaped the deliberations.\textsuperscript{57}

\textbf{C. The Verdicts}

Thirty-three of the 50 juries reached unanimous verdicts on all claims. One case resulted in a hung jury. The remaining 16 cases ended deliberations with at least one holdout on at least one claim. On those juries that reached non-unanimous verdicts, there were 31 holdouts on at least one claim.

\begin{itemize}
\item \textsuperscript{54} We defined an eligible trial as one that (1) was presided over by a participating judge, (2) began when two participating trials were not already occupying the video technician, (3) occurred in a courtroom that had been wired for taping near an available jury room that had also been wired for taping, and (4) was not expected to last longer than twelve days. Two eligible trials that were scheduled to last longer than twelve days were excluded in order to avoid tying up the video-eligible rooms for an extended period in an effort to maximize the number of cases in the study.
\item \textsuperscript{55} This distribution is nearly identical to the breakdown for civil jury trials for the Pima County Superior Court for the 1996–97 fiscal year: 55\% motor vehicle tort cases, 29\% non-motor-vehicle tort cases, 8\% medical malpractice cases, and 8\% contract cases (statistics provided by the Court Administrator of the Research Division, Superior Court of Pima County, 1996–97) (on file with authors).
\item \textsuperscript{56} In our sample, 65\% was 30.5 of 47 cases, treating the one hung jury as 0.5 of a plaintiff verdict and 0.5 of a defense verdict.
\item \textsuperscript{57} A crucial question is whether the jury behavior we observed was affected by the fact that the jurors were aware that their discussions and deliberations were being filmed. The jury experience is a gripping one for most citizens and the compelling interaction with their fellow jurors captures their attention. Moreover, the videotapes reveal some conversations and behaviors that jurors presumably would not want to risk being made public or available to any of the trial participants, suggesting they were not inhibited by the presence of the cameras. Previous research on the effects of videotaping on interactive behavior in nontherapeutic sessions suggests that any initial reactions to being videotaped dissipate rapidly. Karl E. Weick, \textit{Systematic Observational Methods}, in \textit{2 The Handbook of Social Psychology} 357, 372 (Gardner Lindzey & Elliot Aronson eds., 2d ed. 1968). Thus, although it is impossible to answer this question definitively, we have no reason to believe that the videotaping affected the way jurors reached their decisions in these trials.
\end{itemize}
claim or on the verdict involving one of multiple plaintiffs. On half (8 of 16) of the holdout cases, two jurors held substantially the same minority position. Five of the 16 trials with holdouts ended with a single outvoted holdout juror. The remaining three juries also had two holdouts, but the two jurors dissented on different plaintiffs in the same case or in different directions on the same plaintiff.

D. The Deliberation Process

1. An Overview of the Deliberations.—The deliberations of these 50 cases revealed that jurors actively engaged in debate as they discussed the evidence and arrived at their verdicts. Consistent with the widely accepted "story model," the jurors attempted to construct plausible accounts of the events that led to the plaintiff's suit. They evaluated competing accounts and considered alternative explanations for outcomes. They closely scrutinized the claims of plaintiffs with a skeptical eye, applying commonsense norms of behavior and drawing on their own experiences to sort out the inconsistent claims. They wrestled with the expert evidence and jury instructions in their efforts to reach the "correct" verdict. In the course of the deliberations, they both relied on and tested each other's impressions, correcting errors in recall and inference. They also expressed frustration with witnesses (and attorneys) who were unclear, condescending, or evasive, and thus stood in the way of the jurors' efforts to separate the wheat from the chaff in the unfamiliar legal system where they had been involuntarily pressed into service. The jurors were also practical. Thus, they were motivated both to come up with the right verdict and to resolve their differences efficiently, consistent with what they viewed as their obligations as jurors.

2. Jury References to the Quorum Requirement.—According to the majority justices in Johnson, jury deliberations should be unaffected by the prospect that unanimity is not required. Jurors should be eager to listen to the arguments of disagreeing fellow jurors in an effort to produce accurate and fair verdicts.

Indeed, we found that some of the Arizona juries pressed for unanimity, even while recognizing that it was not required. They were apparently attracted to the idea of resolving all disagreement and arriving at a consensus verdict that all would endorse. For example, in one of the cases in which the defendant had admitted negligence in causing an automobile accident, the defense argued that preexisting injuries were responsible for most or all of the plaintiff's medical expenses. Seven of the eight jurors eventually reached consensus on a modest award that was little more than

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58 Forthcoming work will present further elaboration of jury behavior in these deliberations.


60 See infra Part IV.E for a discussion of the benefits of unanimity for decisionmakers.
the amount the defense attorney had suggested in closing arguments and substantially less than the amount the defendant had offered in pretrial settlement discussions. The eighth juror, however, argued that the plaintiff had suffered serious enough injuries from the accident to warrant a substantially higher award. The other jurors recognized that they did not need the eighth juror’s vote; still, they continued trying to convince her that the lower award was all that was warranted in light of the plaintiff’s preexisting injuries when the accident occurred. In response, the eighth juror attempted to convince the other jurors to raise the award. When she ultimately agreed to join the others and accept the figure that was on the table, the jurors applauded at achieving the now unanimous verdict. It is, of course, unclear whether a unanimity requirement would have encouraged her to press the group further to increase the award.

Other juries did not ultimately persuade the holdouts, but their deliberations reflected active debate between the majority and the vocal minority. For example, one case turned on whether the defendant had failed to provide prompt medical treatment to the plaintiff and whether the outcome for the plaintiff would have been different if he had. The jurors debated both of these issues at length before the majority concluded that the defendant had fulfilled his obligations and that a change in his behavior would not have prevented the plaintiff’s injury. One juror, though, continued to believe that the defendant’s behavior was negligent and that prompt treatment might have made a difference. Another remained undecided. Neither signed the verdict form, but these jurors had nonetheless actively contributed to the reconstructions and assessment of the events surrounding the case well before the jury attempted any vote or mentioned the quorum required for a verdict.

Of the 50 juries, 13 gave no explicit indication in the course of their deliberations that they might have been influenced by the majority decision rule. In five of the 33 juries that reached unanimous verdicts on all claims, no juror even mentioned the fact that the verdict did not have to be unanimous. On another eight of the 33 unanimous juries, it was only when the jurors were signing the verdict form—and after they had reached a unanimous agreement—that some juror noted that the verdict did not have to be unanimous.

The completed verdict forms used in Arizona indicate whether or not the verdict was officially unanimous. A non-unanimous verdict requires the individual signatures of each juror agreeing to the final verdict. If the verdict is unanimous, only the foreperson has to sign the verdict form. As a

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61 In changing her vote, she explained that she was persuaded to agree based on another juror’s argument that insurance had already covered the plaintiff’s medical expenses. The justification was legally unwarranted, but is a concern that is frequently expressed by jurors who are generally unsympathetic to the collateral source rule. Diamond & Vidmar, supra note 21.

62 ARIZ. R. CIV. P. 49(a).
result, there is some modest incentive for jurors to agree to allow the verdict to appear unanimous, even when one or more of them would have preferred a different verdict. For example, at the end of one deliberation, the foreperson signed for the group even though she personally disagreed with the verdict. Another juror attempted to reassure her that if she was not comfortable, they could all sign the form individually. The foreperson responded:

 jurisdictions: No, it doesn’t matter, it really doesn’t matter, because if, listen, if I felt that my vote had a big difference, but it doesn’t, it doesn’t matter. All they need is six of you, so [signs the verdict form].

In another case, two jurors who were initially willing to sign the verdict form in the end did not sign it. Realizing that their votes were not required, they said that, on balance, they were not personally convinced that they agreed with the verdict enough to sign the form.

The majority of the juries, however, revealed the salience of the quorum required to reach a verdict by pointing it out early in the deliberations. In some instances, this early recognition explicitly discouraged a concerted effort to resolve differences. In three-quarters (37) of the cases, at some point before the jurors arrived at a verdict, at least one of the jurors alluded to the size of the quorum required for a verdict. In 12 of those cases, the first mention of the quorum occurred within the first ten minutes of deliberations. Juries with eventual holdouts were twice as likely to have early mentions of the quorum rule (6 of 16) than juries that reached unanimous verdicts (6 of 33), raising the possibility that early attention to the non-unanimous decision rule undercut efforts in deliberations to resolve disagreement.

Jurors in 20 cases highlighted the quorum requirement before or in the course of a first vote. For example, the following exchanges occurred in two of the jury deliberations:

(A) Juror #8: (foreperson): I think the first thing we have to do, and probably the easiest, is to decide which side to find for—Do we find for the plaintiff or do we find for the defendant? . . . Okay, but the second thing I wanted to mention is remember it is not unanimous, we don’t have to sit here and argue with one person because it’s 6 jurors that are required. So, how many find for the plaintiff?

(B) Juror #1: I think we should take a vote and see where everybody’s at.

Juror #3: Yeah, what if we all think the same way?
[Juror #6 nods.]

Juror #3: Maybe we’ll be all on the same wavelength.

Juror #1: See how divided we are.

Juror #4: Yeah, yeah.

Juror #2: That’s a good idea.

Juror #4: And then we can argue with each other about what we . . . [laughs].

Juror #3: What we think.

Juror #7: Well on one, I wouldn’t—on one, I’m not even, you know, I couldn’t even take a vote right now.

Juror #1: Well, let’s have “undecided,” too. (#7: Okay) Left, right, undecided.

Juror #2: Yeah.

Juror #4: Yeah, yeah.

Juror #8: And another good thing: We don’t have to be unanimous, right?

Juror #1: Yeah.

Juror #3: Oh, it is good.

Juror #2: Easy.

Juror #5: Six. Six, right?

3. **Handling Dissenters.**—The mere fact that jurors are conscious of the quorum requirement in principle need not affect the robustness of their debate and their willingness to consider minority views. Yet some juries holding both majority and minority jurors did use the quorum requirement explicitly to suppress debate. For example, in one case an early first vote revealed that the majority of the jurors believed the plaintiff and defendant each were partially at fault, but one juror would have found for the defendant because he saw the plaintiff as completely responsible for the accident. The jurors were beginning to discuss the issue of damages when the bailiff came in with some requested supplies. The following exchange took place:

Juror #6 (foreperson to the bailiff): I have a question, a procedural question. If one juror disagrees with the others, does that person have to stay? We have enough of a consensus for a verdict, but we’re arguing on some points, but
there’s one person who didn’t agree with the verdict that we came to a consen-
sus with. Does that person have to stay or can he be excused or do we all have
to be here?

[The bailiff confirms that the juror will stay and then leaves the jury room]:

Juror #6 [to Juror #4]: All right, no offense, but we are going to ignore you.
The jurors then turned to the task of determining the total damages and ap-
portioning the percentage of fault they would allocate to each party. Juror
#4 continued to participate but only sporadically, supporting jurors who
wanted to attribute less liability to the defendant. Ultimately, the group di-
vided fault between the two parties without further participation from Juror
#4 on the percent allocation or the total damage figure.

In this case, both the majority and the minority juror appeared to be-
lieve that the quorum rule made further contributions to deliberations by the
minority juror inappropriate. Yet in arguing how and why comparative li-
ability should be allocated, at least one juror specifically acknowledged the
merit of the minority juror’s earlier argument for holding the plaintiff fully
responsible, suggesting a continuing, if silent, impact of the minority juror:

Juror #2: I’m really leaning toward it being [the plaintiff’s] fault for making
the left hand turn [pointing to juror #4] . . . but, I know it was [the defendant’s]
fault, too, ’cause she was in a hurry, I’ve seen people do that . . . [they] see a
yellow and boom they’re going to make it through . . . so, it’s partially her
fault, too.

On other juries, there was some conflict about whether or not a juror
opposed to finding the defendant liable should participate in the discussion
on how much the damage award should be. In one case, after the first vote
revealed that two jurors opposed liability, the jury moved on to consider
damages. Juror #1, the foreperson, had voted against liability and ex-
pressed some concern over whether he should participate in the discussion
on damages. The other jurors assured him that he should, until the debate
over the size of the award became heated, with Juror #1 arguing that the
amount favored by Juror #4 was too high:

Juror #4: You voted against [liability] to begin with and now you’re trying to
sway us from our monetary decision—from what we think it is to what you
think it should be and to me ultimately that’s not right.

Juror #1: But I am part of this panel and we both feel that we have a voice
even though it might not ultimately make a decision. I have a voice to say.

Juror #4: I’m not saying you don’t, but . . .

On these juries, what role should a juror who favored a defense verdict
play in deliberations on damages? The decisions on liability and damages
are logically and legally independent (unless the dispute about liability
hinges only on whether or not the plaintiff was injured at all), so in principle a juror should be able to accept the majority’s decision on liability and be unencumbered by a reluctance to find the defendant liable when considering how much injury the plaintiff sustained. Nonetheless, jurors who, for example, do not see the plaintiff as a credible witness, may be less likely to believe the plaintiff’s testimony on damages as well as on liability. Moreover, strategic efforts by a defense-favoring juror may reduce awards as the juror attempts to win on damages what she could not achieve on liability. No instruction tells the jury whether or not such a juror should refrain from participating in the damages decision because of opposition to liability. Thus, while the unanimity rule requires a give and take among jurors at each step of the deliberation process, the quorum rule permits, and does not guide, the variety of approaches jurors may take to obtain a quorum.

4. *Do the Holdouts Tend to Favor the Defense (or the Plaintiff)?*—

The expectation that a non-unanimous decision rule is an advantage for plaintiffs assumes that holdouts should be more likely to side with the defendant’s view of the case.\(^{63}\) There is no evidence that plaintiffs on balance fare better if the holdouts are not needed to reach a verdict. Table 1 shows the position of the holdouts at the end of deliberations for each of the 50 cases.

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\(^{63}\) *See supra* note 34.
Table 1. Forms of Disagreement on Final Verdict (N = 50 Cases).

<table>
<thead>
<tr>
<th>Verdict Type:</th>
<th>N Cases^a</th>
</tr>
</thead>
</table>

**Plaintiff Verdicts (n = 33.5)^b**

- Unanimous: 23.5
- **Dissent on liability** 5
  - Holdouts assert defense is not at fault: 3
  - Holdouts assert liability on different claim: 1
  - Holdouts for both higher and lower percentages of defendant liability: 1
- **Dissent on damages**^c 5
  - Holdouts for higher award: 1
  - Holdouts for lower award: 3
  - Holdouts for both higher and lower awards: 1

**Defense Verdicts (n = 15.5)**

- Unanimous: 10
- **Dissent on liability** 5.5
- **Hung Jury** 1

Notes: ^a In two of the cases, the jury split in different ways on two plaintiffs. On one case, the jury was unanimous in awarding damages to one plaintiff, but split on liability regarding the second plaintiff; in the other case, the majority decided for one of the plaintiffs and a different majority decided against the second plaintiff. Each of the decisions for these two cases is treated as a half (0.5) case in the table.

^b In seven cases liability was uncontested.

Although the numbers are small, there were actually fewer cases with holdouts (3) for a defense verdict on liability than for a plaintiff verdict (5.5). Even treated as a proportion of plaintiff and defense verdicts in cases in which liability was contested, the pattern is the same: 3 of 26.5 plaintiff verdicts^64 versus 5.5 of 15.5 defense verdicts. If the 4 cases in which holdouts favored one side or the other solely on the issue of damages are added, a total of 6 cases had holdouts who would have found for the defense or

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^64 26.5 = 33.5 cases – 7 cases in which liability was not contested.
given a lower award, while 6.5 of the cases had holdouts who would have found for the plaintiff or given a higher award. In two cases, there were holdouts on both sides, one case on percent of liability and one case on damages. Although a sample of 50 cases does not guarantee that a larger sample of cases would show the same pattern of results, it provides the best empirical evidence available on the positions taken by outvoted holdout jurors under a non-unanimity rule. As the analysis reveals, the holdouts did not tend to favor the defense. This result thus contrasts sharply with predictions that plaintiffs would be systematically disadvantaged by a unanimity requirement.  

As the data in Table 1 indicate, holdouts do not systematically favor one side. Holdouts, however, could represent extreme or unreasonable positions. If they did, a non-unanimous decision rule might enable the jury to avoid becoming entangled with, and bogged down by, these unreasonable jurors. Indeed, the influence of jurors with unjustified or extreme positions might contribute to unwarranted variability in jury awards. If so, a non-unanimity rule could improve jury decisionmaking by limiting the influence of those with irrational or indefensible positions. Alternatively, if holdouts empowered by a unanimous decision rule would actually have a salutary and appropriate moderating effect, non-unanimous jury verdicts might threaten the ability of the jury system to deliver grounded and predictable jury verdicts. Evidence from other research (and statistical theory) would predict greater stability from decisions that pool results from a larger number of sources. For example, researchers have found that the median pre-deliberation award preference of jurors is the best predictor of jury awards. If a non-unanimous decision rule effectively reduces the number of jurors whose individual verdict preferences contribute to the median award, the median should be a less stable estimate of damages. Although we cannot know how juries operating under a unanimity rule would have decided these cases, we can examine the holdouts and their specific positions in these cases to analyze whether they represent extreme or indefensible stances that the jury may have been better off ignoring or discounting. The next question therefore is: What else do these cases and deliberations reveal about the holdout jurors and their positions?


66  The other, in our view more plausible, explanation for unwarranted variability in jury awards for compensatory damages is the failure to provide relevant guideposts to the jury. Shari Seidman Diamond et al., Juror Judgments About Liability and Damages: Sources of Variability and Ways to Increase Consistency, 48 DePaul L. Rev. 301 (1998); Michael J. Saks et al., Reducing Variability in Civil Jury Awards, 21 LAW & HUM. BEHAV. 243 (1997).

5. The Holdouts and Their Positions.—The worrisome image of the holdout juror is an obstructionist who has an unjustified view of the appropriate verdict—someone who simply resists the wisdom of the majority. We examined the holdout jurors for evidence of distinctive background characteristics and for indefensible positions taken during deliberations. The holdouts and majority jurors did not differ significantly on gender, race, age, education, or occupational background (professional or managerial). In addition, holdouts were equally likely to report having prior jury service and to be selected as forepersons. On average, they spoke as much as did other jurors.

We then examined the patterns of disagreements on the 16 cases with holdouts and found no evidence that the jurors who were outvoted by the majority were advocating indefensible positions. Although the majority in each of these cases took a different view of the evidence or the appropriate level of care, in none of the cases did the minority jurors indicate errors in recall or a misunderstanding of the legal framework in justifying their positions. The disagreements did not arise from confusion about the content of the evidence, but rather from conflict over how to interpret it and which witness to believe.

In each case, the holdout jurors articulated reasons for their positions based on judgments about appropriate behavior, the credibility of the witnesses, and/or the nature of appropriate compensation. The reasons they gave included an interpretation of what constituted reasonable or proper behavior by the parties (five cases) (“REASONABLE”); an inference about what caused an injury, including whether it was attributable to a pre-existing injury (eight cases) (“CAUSE”); and an assessment of how much injury or damage actually occurred, including the nature and amount of reasonable expenses the plaintiff incurred (six cases) (“INJURY”).

The following examples illustrate conflicts between the majority and the outvoted holdouts in each category. In the first case, the conflict was about the timing and quality of medical treatment. The majority decided that earlier treatment would not have prevented the plaintiff’s death. The holdout credited expert testimony that earlier treatment would have made the difference (REASONABLE, CAUSE). In a second case, the majority

68 See also HASTIE ET AL., supra note 49, at 149 (finding no distinctive personal demographic characteristics for holdouts in a simulated criminal case).

69 Holdouts and majority jurors did not differ significantly on percentage of words spoken or percentage of turns taken. Hastie et al. found a similar pattern for participation. Id.

70 In the course of deliberations, jurors frequently assist one another in reconstructing and understanding the evidence, correcting errors in recall and filling in gaps. They are less successful in correcting misunderstandings about jury instructions. Id. at 232; Shari Seidman Diamond & Judith N. Levi, Improving Decisions on Death by Revising and Testing Jury Instructions, 79 JUDICATURE 224 (1995); Phoebe C. Ellsworth, Are Twelve Heads Better than One?, 52 LAW & CONTEMP. PROBS. 205 (1989).

71 In several cases, the holdouts expressed more than one reason for disagreement with the majority’s position.
believed that the plaintiff had been emotionally damaged by the defendant to the point that his ability to work was impaired. One holdout questioned whether the defendant’s behavior was extreme enough to warrant holding the defendant liable and both holdouts questioned, even if it was, whether the plaintiff had suffered enough to warrant a substantial damage award (REASONABLE, INJURY). In a third case, the plaintiff claimed that the damage to his property was caused by the defendant’s faulty repair to the mechanism. The defendant argued that the plaintiff had caused the damage. Conflicting experts testified on the source of the damage and the majority concluded that the plaintiff had not proven that the defendant had caused the damage. The holdouts, both of whom had some technical experience, believed the plaintiff’s expert (CAUSE). And in a fourth case, the defendant’s car hit the rear end of the plaintiff’s car. The dispute was about whether the plaintiff suffered any injury from the accident, and if so, how much. The holdouts acknowledged that the defendant was negligent, but argued for no liability because they were not persuaded that the plaintiff had actually been injured. The majority found in favor of the plaintiff (CAUSE, INJURY).

In all but one of these cases, judgments about the credibility of the witnesses were central to the conflict between the majority and the holdouts. In the one case in which the disagreement did not implicate credibility judgments, the majority and the holdout disagreed over the meaning of a jury instruction, but it was the holdout who accurately interpreted the somewhat confusing language in the instruction. The case involved an allegedly dangerous condition at the site where the plaintiff was injured. The majority jurors concluded that the defendant, who owned the property, was not liable because, although he knew of the condition of the site where the injury occurred, he did not believe it was dangerous. The holdout argued that if the area was actually dangerous, the defendant’s personal belief that it was not dangerous was immaterial. When a vote revealed that the majority had enough votes for a defense verdict, conversation about the meaning of the instruction ended. Although the same outcome may have occurred if unanimity had been required, another possibility is that the need to obtain the holdout’s vote might have stimulated a question to the judge to resolve the conflict on the meaning of the instruction.

The judicial reactions to these cases provide another sign that valuable perspectives may be lost on occasion when the position of the holdouts is weakened by a non-unanimous decision rule. Each of the judges in the study completed a questionnaire while the jurors deliberated, indicating how they would have decided the case if it had been a bench trial. We compared the verdicts of the judge and jury, including the majority and minority positions on the non-unanimous juries and the verdicts when the jury

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72 In general, when jurors were confused about the jury instructions, the confusion was shared by a majority of the jurors. See, e.g., Diamond & Vidmar, supra note 21, at 1900–02.
was unanimous.\textsuperscript{73} On eight of the holdout cases, the judge would have reached the same verdict as the jury did, but on six of the holdout cases, the judge would have sided with the holdouts.\textsuperscript{74} When the jury verdict was unanimous, the judge agreed with the jury in 23.5\textsuperscript{75} of the 29.5 cases.\textsuperscript{76} Of course, in none of the disagreement cases can we identify who was more accurate—the holdouts or the majority jurors, the judge or the jury—or whether the judge and jury were both accurate when they agreed. Both the researchers who study jury behavior and the observers who evaluate the quality of jury verdicts face the same difficulty: No infallible measure of the “correct verdict” is ever available for any individual trial outcome. Occasionally, DNA may show that a criminal defendant could not have committed the offense for which he was convicted, but such independent evidence is rare in both criminal and civil cases.\textsuperscript{77} With that caveat in mind, the agreement between the judge and the holdout jurors on a substantial number of cases suggests that the conflict on some of these juries posed precisely the kind of challenge to the majority position that a deliberative process should address. The deliberation process should be strengthened when it is necessary to resolve differences in order to reach a verdict.

It is important to distinguish here between the deliberation process and the likely outcome of deliberations. Even if a unanimity rule would increase the robustness of deliberation, it is not clear how often the outcomes in these trials would have changed if unanimity had been required. Kalven and Zeisel concluded that deliberations do not affect trial outcomes; they argued that verdicts simply reflect the position that a majority of jurors held when deliberations began.\textsuperscript{78} According to their account, a deliberation is akin to a developing solution used to transform a photographic negative into

\textsuperscript{73} In the 35 cases in which liability was completely contested, we considered two decisionmakers to be in disagreement if they would have reached different liability judgments. In the 7 cases in which liability was not contested and the sole issue was damages (1 holdout case, 6 unanimous verdict cases), we considered the decisionmakers to disagree if the award of one was more than twice the award of the other. In the sole instance where liability was uncontested and this level of award disagreement occurred, the disagreement was between the judge and the majority; the judge and holdout juror’s award were identical. In the remaining 7 cases in which the jury reached a verdict, the judges did not indicate verdicts that could be compared with the juror verdicts (3 non-unanimous and 4 unanimous cases).

\textsuperscript{74} In one of these cases, the judge agreed with the majority on one plaintiff and with the holdout on the second plaintiff.

\textsuperscript{75} The .5 case involved two plaintiffs. The judge agreed with the unanimous jury on the first plaintiff. The jury was not unanimous on the other plaintiff and the questionnaire from the judge did not indicate a verdict for that plaintiff.

\textsuperscript{76} This rate of 79% agreement (23/29) for the unanimous jury verdicts bears an uncanny resemblance to the 78% rate of agreement obtained by Harry Kalven, Jr. and Hans Zeisel, based on a national study of approximately 4000 civil trials that took place in the late 1950s. KALVEN & ZEISEL, supra note 38, at 55–65.

\textsuperscript{77} Even in such cases, the error may be more attributable to distortions and omissions in the evidence that was presented at trial, rather than to poor performance by the judge or jury that convicted the defendant.

\textsuperscript{78} KALVEN & ZEISEL, supra note 38, at 489.
a print. The ultimate picture is invisible, but fully present, in the negative; deliberation merely develops it.\textsuperscript{79} This conception of the effect of deliberations presents some difficulties, however, because it is based on a survey of jurors in criminal cases who reported their initial vote distribution and their jury’s verdict. The researchers then compared the reported first votes with the verdicts. But juries often engage in substantial deliberation before taking any vote, so an evaluation of the impact of deliberations derived from comparing these first votes with the corresponding jury verdicts, even if accurately reported, will underestimate the influence that occurred before any vote was taken.

A modified version of this negative-to-print conception of deliberations emerges from a series of simulation studies in criminal cases. In simulations, it is possible to obtain jurors’ predeliberation verdict preferences before any impact of deliberation has occurred, thus avoiding the underestimate inherent in assessments derived from a comparison of first votes and final verdicts. According to the Social Decision Scheme developed by James Davis to explain group decisionmaking\textsuperscript{80} and tested in a series of jury simulation experiments, the majority will prevail if a jury begins deliberation with at least two-thirds favoring either conviction or acquittal. Otherwise, the jury will hang. More recent simulations suggest that an initial majority will dependably produce a conviction if the jury begins deliberations with at least three-fourths of the jurors favoring conviction. An acquittal is likely to result if at least half of the jurors initially favor a not guilty verdict.\textsuperscript{81} Even these controlled laboratory studies, however, may be misleading because the brief and limited deliberation time in experimental simulations produces high hung jury rates not found in actual jury trials.\textsuperscript{82} Moreover, all of the studies were conducted on criminal cases that required simple guilty/not guilty decisions.

Some research suggests that deliberations are more likely to influence outcomes when juries are faced with more than two potential verdicts, as they are in civil cases. For example, in an elaborate experiment involving a criminal trial with four alternative verdict outcomes, Reid Hastie and his colleagues found that the final jury verdict did not match the initial majority’s preferred verdict in 13 of the 69 cases.\textsuperscript{83} Only four of these juries were hung.

\textsuperscript{79} Id.
\textsuperscript{81} See Devine et al., supra note 43, at 692.
\textsuperscript{82} Id. at 691 tbl. 6 (summarizing predeliberation patterns and final votes across studies and finding hung jury rates between 28.6% and 70.8% for 12-member juries with predeliberation distributions between 4-8 and 8-4; cases in which deliberations would be most likely to influence outcomes).
\textsuperscript{83} HASTIE ET AL., supra note 45, at 167.
We cannot know the verdicts that the Arizona juries would have reached had unanimity been required, but it is likely that the majority view would have prevailed in most of them, as it typically does. Nonetheless, the deliberations provide evidence that the jury occasionally reached premature closure when the majority appeared to have the requisite number of votes, even when some of the votes were tentative. For example, one case involved two plaintiffs in an automobile accident in which the defendant admitted negligence. The dispute was over whether the accident caused injury to the plaintiffs. The jurors discussed the fact that Plaintiff #1’s preexisting injuries made it difficult to attribute any of the alleged soft-tissue injury to the accident itself. An early vote revealed that only Juror #1 favored a verdict for this plaintiff. The jurors noted that they did not need to be unanimous and began signing the verdict form while, at the request of Juror #6, the holdout Juror #1 explained her position, citing medical evidence of some immediate post-accident trauma. Two jurors showed some support for Juror #1’s justification for a modest award:

Juror #6: Well, I could see [a modest award] because he missed two days of work.

Juror #2: Yeah.

Juror #6: Can you put that down?

Juror #1: Well, it’s, we’ve decided for the defendant.

Juror #7: We’re already signing now, so . . .

It is unclear whether Jurors #2 and #6 were merely being polite, or whether they were having second thoughts about the defense verdict they had just endorsed. Either way, if the jury had needed unanimous agreement in order to reach a verdict, deliberations would have given Juror #1 an opportunity to develop support from fellow jurors apparently willing to listen to argument. This example may capture some of what the dissent in *Johnson* described as the difference between “polite and academic conversation” and “the earnest and robust argument necessary to reach unanimity.”84 Moreover, the inclination of Juror #1 to find in favor of the plaintiff was not idiosyncratic: The judge in this case also would have awarded damages to this plaintiff.

**E. Reactions to Non-Unanimous Verdicts**

Another way to assess the effects of non-unanimity is to examine how the jurors view the deliberation process. If jury deliberations enable jurors to fully discuss the evidence, present their arguments, and debate their dif-

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different perspectives, jurors should come away from the experience with a favorable impression of the quality of their deliberations and the open-mindedness of their fellow jurors. Each juror rated their jury on a 1-to-7 scale indicating how thoroughly other jurors’ views were considered and how open-minded the other jurors were. They also rated how influential they personally had been in deliberations. Table 2 shows the results.

**Table 2. Juror Evaluation of the Deliberation Process**

<table>
<thead>
<tr>
<th></th>
<th>Holdout Jurors</th>
<th>Majority Jurors</th>
<th>Unanimous Jurors</th>
</tr>
</thead>
<tbody>
<tr>
<td>How influential were you during deliberations?</td>
<td>3.4*</td>
<td>4.5b</td>
<td>4.5b</td>
</tr>
<tr>
<td>How open-minded were the other jurors?</td>
<td>4.4a</td>
<td>5.1b</td>
<td>6.0c</td>
</tr>
<tr>
<td>How thoroughly were others’ views considered?</td>
<td>4.9a</td>
<td>5.8b</td>
<td>6.2c</td>
</tr>
</tbody>
</table>

Notes: * Values in the same row with different subscripts significantly different at p<.01. All analyses control for possible correlations among ratings from jurors from the same case85

Holdout jurors, not surprisingly, saw themselves as significantly less influential than jurors who ended deliberations in the majority or jurors who reached unanimous verdicts. The majority and unanimous jurors rated themselves as equally influential. In addition, however, the holdouts rated their fellow deliberators as significantly less open-minded and their deliberations as less thorough than did the majority members of their juries. Either of these differences between the holdouts and the majority jurors could be attributable to a greater sense of satisfaction that a juror might feel from being on the winning side. That explanation, though, would not account for another difference that emerged: Majority jurors rated their deliberations as less thorough and their fellow jurors as less open-minded than did jurors on unanimous juries. Although the majority jurors may have seen the holdouts, and therefore their jury, as less open-minded because the holdouts failed to agree with the majority, that does not explain why the majority jurors’ saw their deliberations as less thorough.86 Thus, even though some of the jurors on the unanimous juries said in a post-trial questionnaire that they would have preferred a verdict different from the one the jury eventually


86 The specific question was, “How thoroughly did the jury consider all jurors’ points of view in your jury’s deliberations?”
settled on, jurors on the unanimous juries were, on average, significantly more enthusiastic about their deliberations than were the jurors who ended with a quorum verdict, regardless of whether the quorum jurors were among the holdouts or in the majority.

The nature of the cases decided by the unanimous and quorum jurors—rather than the nature of the deliberation process—may explain these differences, but the three groups of jurors did not differ in their ratings of how easy the evidence was, how easy the instructions were, how easy it was to decide who should win, or how close the case was. Their evaluations of the deliberation process were the focus of their different perceptions. Thus, the process of reaching a verdict is a likely explanation for the lower ratings of the perceived quality of the deliberation process when the case ended in a quorum verdict. Moreover, it replicates the pattern of results obtained in a simulation study in which the researchers randomly assigned mock jurors to deliberate on the identical criminal case under quorum or unanimous decision rules. Juries assigned to a 10/12 or 8/12 decision rule rated their juries lower on the thoroughness of deliberations as well as on the open-mindedness of their fellow jurors.

One attraction of unanimity is that it reflects confidence about the correctness of a decision and the quality of the decisionmaking process. As one juror observed about his jury’s verdict: “The fact that it was unanimous and that it was so quick tells them that we’re sure.” Others also have recognized the connection between unanimity and the legitimacy of decisions. In the early days of the United States Supreme Court, the Court followed the English model of having each justice deliver a separate opinion in each case. To promote the Court’s prestige and legitimacy, Chief Justice John Marshall dispensed with that practice. Dissents were largely invisible on the United States Supreme Court during most of its first 150 years. In the 1940s, dissents grew common during Franklin Roosevelt’s presidency, but when the Court decided *Brown v. Board of Education* in 1954, Chief Justice Earl Warren successfully argued that unanimity was required “on a

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87 On the postdeliberation questionnaire, jurors indicated the verdict they would have preferred if they had been a one-person jury.

88 The trials that resulted in non-unanimous verdicts were somewhat longer on average (p<.11), which may explain why their deliberations were somewhat longer as well. The correlation between length of trial and length of deliberations for the 49 verdict juries was .70. Both juries with unanimous and non-unanimous verdicts averaged roughly 5 minutes of deliberation per hour of trial (5.42 minutes for the unanimous juries and 5.11 minutes for the quorum juries, t<1).

89 HASTIE ET AL., supra note 45, at 77.


matter of this sensitivity."93 The Court managed to speak with one voice on desegregation cases over most of the next twenty years.94

Jeffrey Abramson makes a similar case for the unanimity requirement in criminal jury trials, arguing that unanimity is central to the legitimacy of jury verdicts.95 That legitimacy is reflected in a public opinion survey conducted by Robert MacCoun and Tom Tyler who found that community residents viewed unanimous procedures for arriving at jury verdicts in criminal cases as more accurate and fairer than majority procedures.96

The civil jury, which does not mobilize the power of the state against the defendant or threaten his personal freedom, arguably demands a less stringent standard. This difference was not lost on some of the jurors in the Arizona Project:

Juror #1: It does say that only 6 is sufficient.

Juror #2: That’s true.

Juror #1: I guess in the criminal it’s got to be unanimous. Everyone’s got to agree. Right?

Juror #6: Well they did in mine, in the federal case that I was on.

Juror #2: What you have to assume is the repercussions of what we’re doing. I mean nobody is going to get sent to the gas chamber. There are going to be some financial repercussions, but nobody is going to have to go to jail. So it is not quite the same. There are only eight of us.

Juror #1: Right.

Civil trials require a lesser standard of proof and have traditionally been afforded more procedural flexibility than criminal litigation.97 Nonetheless, the need for public confidence in verdicts applies to civil as well as to criminal trials.


94 Note that in recognizing the legitimizing force of unanimity, we do not dispute the important role of dissenting opinions. As Marty Redish has pointed out, courts give reasons for their decisions, and dissents contribute significantly to the growth and intellectual development of the law.


V. HUNG JURIES AND THE RESOLUTION OF DISAGREEMENT

Although public respect for jury verdicts and the jurors’ impressions of their own deliberations are enhanced by unanimity, several questions remain about the verdicts themselves and whether there are significant costs that overcome these benefits. One concern is that hung juries will interfere with the efficiency of the civil justice system when one or two jurors can block a verdict. Yet hung jury rates in civil cases are extremely low. In the federal courts, which use six-member unanimous juries, hung jury rates averaged 0.8% between 1980 and 1997. Even in jurisdictions with twelve-member juries required to reach unanimity, juries in civil cases rarely hang. For example, in Delaware, the rate was 2.7% for fiscal years 1997–1999. The rate for jury trials in Cook County in Illinois during 2003–2004 was 0.0%. Moreover, although we have no systematic research on what occurs following a hung jury in a civil case, it is likely that many of the cases settle. We do know that only one-third of the criminal cases resulting in hung juries are re-tried. Half are disposed of by plea agreements or dismissals. Thus, if we assume a civil hung jury rate of 3% with unanimity required, and that permitting a non-unanimous civil jury verdict would cut that rate in half, the hung jury rate would be reduced by 1.5%. If one-third of those cases were re-tried, mirroring the criminal jury rate, an estimated trial savings of 0.5% would result—a real but very modest cost savings.

We have characterized the hung jury here as a cost because it does not produce a final verdict, but it is also worth considering the signal that a hung jury conveys to the parties. The majority of hung juries in criminal cases in which unanimity is required do not reflect a lone holdout or even two dissenters, but rather a more evenly divided final vote. Parties taking a cue from this distribution may find settlement more appropriate than it appeared before trial.

The low rate of hung juries in civil cases provides an interesting contrast with the relatively high frequency of majority verdicts on juries that do not operate under a unanimity requirement. Among the 50 juries described in this study, 32% were non-unanimous. Similarly, a recent study found a 34% rate of non-unanimous verdicts for Ohio civil juries and a 57% rate of

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98 Hans, supra note 35, at 20.
99 Cook County includes the Chicago metropolitan area.
100 Larry Cosimini of the Cook County Clerk’s Office provided a computer analysis of all jury trials that occurred in the law division (claims of $50,000 or more) during 2003 and 2004. A single hung jury occurred in 2002, none in 2001, and one in 2000 (statistics on file with authors).
101 HANNAFORD-AGOR ET AL., supra note 39, at 83–84.
102 This estimate is a generous one based on the federal (0.8%) and Delaware (2.7%) numbers.
103 This estimated reduction exceeds the 42% estimated reduction in the Hannaford-Agor study. HANNAFORD-AGOR ET AL. supra note 39.
104 Id.
non-unanimity for Kentucky.\textsuperscript{105} If the holdouts, as our analysis above suggests, are typically neither eccentric nor unreasonable, the failure to win them over may reflect a loss in the quality of debate within the jury even if they ultimately would agree to endorse the majority position if unanimity were required. The unanimity requirement may also provide a control for the occasional erratic and unpredictable verdict: The more jurors who must agree to endorse a verdict, the less likely it is that the verdict will be the product of a deviant sample of juror opinions.\textsuperscript{106}

One remaining cost of requiring unanimity deserves attention. As simulation studies indicate, a jury deliberating under a unanimity rule is likely to deliberate longer than a jury deciding the same case under a quorum rule.\textsuperscript{107} Indeed, that potential for a longer deliberation necessarily follows from the fact that more extensive debate is likely to occur when unanimity is required. Although the judge and attorneys are able to turn to other activities while the jury is deliberating, the jurors cannot. It is therefore of particular interest that jurors operating under a unanimity rule express greater satisfaction with their deliberations despite the greater effort required to reach consensus than to reach a quorum verdict.\textsuperscript{108}

VI. CONCLUSION

In the thirty years since the Supreme Court ruled on the constitutional issue, no other states have joined Louisiana and Oregon in dispensing with the unanimity requirement for felony criminal trials. Perhaps they share the view of Justice Blackmun who voted with the five-to-four majority in \textit{Johnson} to uphold the constitutionality of the non-unanimous verdict. His concurrence emphasized that his vote meant only that a split-verdict system

\textsuperscript{105} Email from Paula L. Hannaford-Agor to Shari Seidman Diamond, Professor of Law, Northwestern Univ. Sch. of Law (May 15, 2005, TIME CST) (on file with authors). These unpublished figures were obtained from the 2001 \textit{Civil Justice Survey of State Courts}, a periodic survey of court records in jury trials conducted by the National Center for State Courts. \textit{See} Thomas H. Cohen & Steven K. Smith, \textit{Civil Trial Cases and Verdicts in Large Counties, 2001}, BUREAU OF JUST. STATS. BULL., April 2004, at 1, available at http://www.ojp.usdoj.gov/bjs/pub/pdf/ctcvlc01.pdf. The figures reported in the text are conservative estimates of the rates of non-unanimous verdicts because of missing information. In Ohio, 15% of the cases were missing information on whether or not the verdict was unanimous and in Kentucky, 4.5% of the cases were missing information on unanimity. Civil juries in Ohio require verdicts of 6 out of 8. \textit{See} OHIO CIV. R. 38(B); \textit{see also} OHIO CONST. art. XIII, § 5; OHIO CIV. R. 48. Civil juries in Kentucky circuit courts require verdicts of 9 out of 12. \textit{Ky. Rev. Stat. Ann.} § 29A.280(3) (West 2005).

\textsuperscript{106} Davis et al. found evidence in their mock jury study that the awards of juries assigned to deliberate under a two-thirds majority decision rule were substantially more variable than the awards of juries assigned to deliberate under a unanimity requirement. Davis et al., \textit{supra} note 50, at tbl 1. This same rationale applies in making the case for larger juries. \textit{See} Diamond et al., \textit{supra} note 66, at 317–18; Michael J. Saks, \textit{The Smaller the Jury, the Greater the Unpredictability}, 79 JUDICATURE 263, 263–64 (1996).

\textsuperscript{107} \textit{Hastie et al.}, \textit{supra} note 45, at 76.

\textsuperscript{108} \textit{Id.}; \textit{see also supra} Part IV.
was not constitutionally offensive, and that “Were I a legislator, I would disfavor it as a matter of policy.” 109 In contrast, states have taken a different path with civil juries: Half of them currently permit non-unanimous verdicts with two or more holdouts. The 2005 ABA Principles for Juries and Jury Trials reflect an effort to encourage states to revisit those decisions. The data presented here should inform the debate that the Principles are likely to stimulate.

The Arizona jury deliberations reveal that some of the claims made in favor of dispensing with unanimity are unfounded. The image of eccentric holdout jurors outvoted by sensible majorities receives no support. Indeed, the judge agreed with the verdict favored by the holdouts in a number of these cases. Instead, the deliberations demonstrate that thoughtful minorities are sometimes marginalized when the majority has the power to ignore them in reaching a verdict. Although the juries generally engage in serious and intense debate, the jurors themselves report more thorough and open-minded debate when they reach unanimity.

The primary cost frequently attributed to the unanimity requirement is that it increases the rate of hung juries, a cost that seems overblown in light of the low frequency of hung juries in civil cases, even when unanimity is required. More importantly, a slight increase in hung juries and the potential for a longer deliberation may be costs outweighed by the benefits of a tool that can stimulate robust debate and potentially decrease the likelihood of an anomalous verdict.