STATE OF MINNESOTA

IN SUPREME COURT

C6-84-2134
CX-89-1863

ORDER FOR HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE MINNESOTA RULES OF CIVIL PROCEDURE AND THE MINNESOTA CIVIL TRIALBOOK

ORDER

IT IS HEREBY ORDERED that a hearing be had before this Court in Courtroom 300 of the Minnesota Supreme Court, Minnesota Judicial Center, on February 26, 1997 at 2:00 p.m. to consider the petition of the Minnesota State Bar Association to amend the Rules of Civil Procedure and the Minnesota Civil Trialbook. A copy of the petition containing the proposed amendments is annexed to this order and may also be found at the Court's World Wide Web site: (www.courts.state.mn.us).

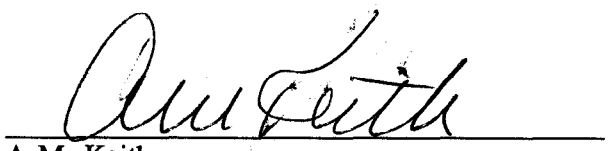
IT IS FURTHER ORDERED that:

1. All persons, including members of the Bench and Bar, desiring to present written statements concerning the subject matter of this hearing, but who do not wish to make an oral presentation at the hearing, shall file 12 copies of such statement with Frederick Grittner, Clerk of the Appellate Courts, 305 Judicial Center, 25 Constitution Avenue, St. Paul, Minnesota 55155, on or before February 20, 1997 and

2. All persons desiring to make an oral presentation at the hearing shall file 12 copies of the material to be so presented with the aforesaid Clerk together with 12 copies of a request to make an oral presentation. Such statements and requests shall be filed on or before February 20, 1997.

Dated: December 18, 1996

BY THE COURT:



A.M. Keith
Chief Justice

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RUDY V. ILLGEN
OF COUNSEL

MARCIA A. MILLICAN
OFFICE ADMINISTRATOR

February 4, 1997

Justices of the MN Supreme Court
305 Minnesota Judicial Center
25 Constitution Avenue
St. Paul, MN 55155

Re: Proposed Amendments to the MN Rules of Civil Procedure and the MN Civil Trialbook

Dear Justices:

I am writing this letter to comment on the proposed changes to the Minnesota Rules of Civil Procedure and the Minnesota Civil Trialbook.

I have practiced law in the State of Minnesota since 1975 specializing in civil trials. I am certified as a civil trial specialist by the National Board of Trial Advocacy and the Minnesota State Bar Association. I have tried hundreds of cases to juries in almost every district court in the State of Minnesota.

After literally every trial I try to speak to one or two jurors about their experience as jurors. I also keep myself up to date on research relating to jury persuasion and deliberation.

I will comment on the purposed changes in their order of importance to me:

1. Jurors should be permitted to question witnesses during trial with appropriate procedural safeguards. I strongly disagree with this purposed change. I believe it will significantly alter the relationship between courts, juries, lawyers and trial participants. In responding to the comments at paragraph 16 allowing jurors to ask questions would give them a greater sense of participation, however, their job is not to create or solicit facts but judge those facts. Just as it would be inappropriate to allow the judge or the lawyers to intrude upon the jury deliberation process it is inappropriate to allow jurors to participate in the factual presentation.

To contend that allowing jurors to ask questions would avoid confusion and allow jurors to pursue relevant information assumes a significantly higher level of technical legal sophistication than in my experience is warranted. This is not to say that I think juries are not smart because I think they are or that I think they make improper decisions because I believe that 99% of the time they make the appropriate decision. Proper and appropriate questioning of witnesses during the course of a trial is a skill that takes years to develop.

In my experience the questions asked by jurors are generally not relevant and deal primarily with whether certain items of damages have already been reimbursed, insurance coverage, and who will recover from whom. As always these questions are answered by the judge telling the jury they should not concern themselves with the above-mentioned areas of inquiry.

This procedure will also lead to a substantial time delay in the presentation of the trial. At the end of each witness the judge would have to stop the case and ask the jurors to write down any questions they may have. Once that is done the judge and the lawyers would have to review the questions making whatever arguments they feel are appropriate for or against the question and then the judge must make a decision and if done so affirmatively ask the question. This may lead to follow up questions by the lawyers and the jurors. When this cumbersome procedure is added to the trial I envision an additional 1/2 day added to many cases.

Many civil cases today are tried using videotaped depositions and this would put the lawyers and the jury in the position of being able to question some witnesses and not question others.

Allowing jurors to ask questions may force them in to premature deliberations. In my experience the jury deliberation process is a group or collegial process, therefore, to the extent they are allowed to discuss any questions that are being asked, it would certainly lead to deliberations of various views on the case. In addition any questions asked by jurors would give the lawyers significant insight in to that particular juror's opinions or conclusions regarding the case. To the extent such questions are arrived at through a group process they can direct the focus or attention of the jury to areas deemed important by less than a majority of the jury. To the extent that questions are asked by jurors those questions and areas can be given undue emphasis. There is also the problem of a witness not answering or evading a question thereby putting the witness at odds with a particular jury's "ownership" of his or her question.

In addition I can think of thousands of times during trials or depositions that I have heard a lawyer say "just one more question" and then go on for fifteen minutes to a half hour. If it is impossible for lawyers to ask just one more question, it will be impossible for jurors to ask just one more question.

In summary it is my position based on my years of experience trying cases that to allow jurors to ask questions has a minimal to non-existent positive side and a significant negative side.

2. The six person jury should be considered the minimum but not the maximum. First of all in my experience there is not significant discrepancies between what juries do. Just because there is the occasional unusual verdict does not mean that juries are inconsistent.

   I do not see any significant benefit or detriment to changing the size of the juries. The only thing I would ask is if you increase the size of the jury you also increase the number of strikes per party.

3. Civil juries should be provided with written copies of all instructions. The proposed rule requires that each jury be given a copy of the jury instructions. In my continuing effort to "save a tree" I would recommend that the jury be given one copy of the jury instructions. This would certainly serve their purposes without wasting resources.

Thank you for your consideration.

Yours truly,

JOHNSON & CONDON, P.A.

Mark J. Condon
Direct Dial: 806-0414

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STATE OF MINNESOTA
FOURTH JUDICIAL DISTRICT COURT

JUDGE ANN LESLIE ALTON
HENNEPIN COUNTY GOVERNMENT CENTER
MINNEAPOLIS, MINNESOTA 55487-0421
(612) 348-8105
FAX (612) 348-2131

February 20, 1997

Chief Justice Alexander Keith
Minnesota Supreme Court
Minnesota Judicial Center
25 Constitution Avenue
St. Paul, MN 55155

RE: Proposed Amendments to Minnesota Rules of Civil Procedure and Minnesota Civil Trialbook relating to Jury Reform

Dear Chief Justice Keith and Honorable Justices:

This letter is to express my written endorsement of the Minnesota State Bar Association Civil Jury Project's proposed rule changes, and to request the opportunity to address the Court in accordance with these written remarks at the hearing on February 26, 1997 at 2:00 PM, especially recommendations 3, 4 and 5, as follows:

3) **Jurors should be permitted to question witnesses during trial with appropriate safeguards (inserting new subsection in Minnesota Civil Trialbook § 10);**
4) **The judge should read the substantive instructions to the jury before closing arguments (amending Minn. R. Civ. P. 51);**
5) **Civil juries should be provided with written copies of all instructions (amending Minn. R. Civ. P. 51).**

I have utilized all three recommendations (numbers 3, 4 and 5) in approximately 40 civil jury trials since the spring of 1990 and I have utilized recommendations numbers 4

and 5 in all of my criminal jury trials since late 1989 without any objections.

All three recommendations are designed to increase communication with the jury. I define "communication" to mean "shared meaning" and believe that any reasonable measures in furtherance of sharing meaning with the jurors, individually and collectively, should be endorsed and encouraged if not compelled.

Learning theory identifies three primary adult learning styles and suggests that each adult human being has a primary and secondary learning style. The three primary adult learning styles are:

a) Visual Learners
   A little over 40% of the population. (People who learn best from visual input and who need charts, graphs, diagrams, overheads, transparencies, etc.)
b) Auditory Learners
   A little under 40% of the population. (People who learn best from auditory input, for whom the courtroom was designed.)
c) Kinesthetic Learners
   A little under 20% of the population. (People who need to see it, handle it, make notes, have a personal copy, see and touch models, and who are almost always in motion with some part of their bodies, if only to take notes).

In order to share meaning with the largest possible number of jurors (and judges) the largest possible amount of the time, it is important to permit jurors to take notes and to provide them with visual aids to accompany oral testimony and with individual copies of all important documents whenever possible.

3) **Jurors should be permitted to question witnesses during trial with appropriate safeguards (inserting new subsection in Minnesota Civil Trialbook § 10).**

My preliminary jury instruction is attached as Exhibit 1. I read the instruction to the jury as part of my preliminary instructions prior to opening statements and inform the jury that they may **only** ask **written** questions of

live witnesses (as opposed to deposition witnesses) and **only** before that witness leaves the stand. I follow the procedure recommended by the proposed amendment to Minn. Civ. Trialbook § 10, asking all approved questions of the witness myself and permitting the attorneys to re-direct and re-cross examine the witness as desired. I then repeat the procedure until all jurors' questions have been answered.

Certain questions have been asked by various members of the Bench and bar concerning the proposal to permit jurors to question witnesses. I will try to answer them from my own experience.

A) **How much time is added to the length of a trial when the jurors are permitted to ask questions?**

- In the average 3-5 day civil jury trial, the total amount of time added to the trial has been 20 minutes or less. In a number of cases, the jurors had not asked any questions at all. The few exceptions have been in technical trials, such as medical malpractice; however, in the only trial where the jurors' questions of the witnesses, (primarily the experts) approached a total of one hour, almost all the jurors' questions were questions I'd noted myself during the attorneys' examinations.

Please Note: I have **never** received a factual question from the jury during deliberations in a civil trial where the jurors have been allowed to question the witnesses. The same is **not** true of my criminal jury trials where the jurors are not permitted to ask questions of the witnesses and factual questions from the jury room are common.

Factual questions from the jury room are always a problem for the trial judge, who must be careful not to overemphasize the testimony of one witness at the expense of others. As a result, the trial judge often has to tell the jurors to rely upon their own recollections of the testimony and send them back to continue their deliberations without answering the factual questions at all.

B) **Does the right to ask questions interfere with a juror's responsibility to listen to the testimony?**

- I believe permission to ask questions gives each juror a greater sense of participation, inclusion, empowerment and importance in the trial. My experience has been that the jurors are more alert and attentive. In fact, the body language of a juror with permission to ask questions is very different from that of a juror who must just listen. With permission to ask questions, the entire jury tends to sit forward and remain far more alert with attentive posture rather than leaning back and looking passive. The jurors seem to take more notes and pay closer attention to details in both oral testimony and exhibits.

- Yes, on occasion a juror writes down a repetitive question. Attorneys usually withdraw the repetitive objection in favor of making sure every juror knows what's been said in the testimony. I ask some repetitive questions in court trials, especially when I've been writing a note and don't hear or appreciate the answer to a question.

C) **Is the right to ask questions abused by multiple questions from a single juror who takes on the self-appointed role of lawyer or spokesperson for the panel?**

- No. It is true that some jurors ask far more questions than others. In any given trial, some jurors ask no questions and occasionally, one or two jurors ask many questions. The number of questions seems to reflect the juror's analytical ability, personality, degree of extroversion, familiarity with the subject matter of the testimony, and learning style. The potential exists for a juror to abuse the privilege to ask questions of the witness, but the trial judge will be able to control the process, and limit the privilege if necessary.

On two occasions I had a juror express a lack of confidence about his ability to draft a written question.

In each case, the juror joined my sidebar conference with the attorneys and we formulated the question(s) for the juror. This worked well without embarrassing the juror, especially because I tell the jurors to stand up, stretch, relax, and talk to each other during every sidebar conference.

D) **What happens if the jurors ask objectionable or inadmissible questions?**

- In my preliminary instruction, I tell the jurors that if I do not ask a proposed question, there is a legal reason why I cannot do so, the juror must not speculate about the answer, and the juror must disregard it altogether. Jurors do ask improper questions; when this happens, I try to tell the jury that the particular subject is improper and remind the jurors that they must disregard the subject matter altogether. I view improper questions as an opportunity to eliminate inappropriate topics from being considered by the jury during deliberations.

- Examples: In most personal injury auto accident cases a juror will ask about the availability of insurance and/or whether or not the occupants of the vehicles(s) were wearing seatbelts.

  - I answer the insurance question by telling the jury that insurance is utterly irrelevant to the case because their job is to determine 1) Was one or were both drivers negligent?; 2) If so, was such negligence a direct cause of the accident or injury?; and 3) What is the amount of the money damages? Therefore, the presence or absence of insurance is irrelevant to the questions they must answer in the Special Verdict form and they must disregard the subject matter altogether.

  - I answer the seatbelt questions by telling them that a Minnesota statute prohibits asking whether or not the occupants of the vehicles were wearing seatbelts and they must disregard this subject altogether.

- In all events, it is the responsibility of the trial judge to decide whether a question is appropriate, phrase a question properly, and limit all inquiries to prevent error. In my experience, jurors respect the judge's responsibility and honor the trial judge's directives.

4) The judge should read the substantive instructions to the jury before closing arguments (amending Minn. R. Civ. P. 51).

I read the substantive instructions to the jury before closing arguments in **all** jury trials, both civil and criminal, to enable the jury to listen to and evaluate the closing arguments in light of the substantive law. Similarly, I read the key substantive instructions (like Negligence and Direct Cause in a personal injury trial) as a part of my preliminary instructions to the jury before opening statements so the jury has a context in which to hear the evidence.

5) Civil juries should be provided with written copies of all instructions (amending Minn. R. Civ. P. 51).

In **all** jury trials both civil and criminal, I distribute individual copies of a packet containing all of the jury instructions and Verdict Form(s) to each juror and alternate just before I read them aloud to the jury prior to closing arguments. The preliminary jury instructions as well as the closing instructions are included in the packet. I place a Table of Contents at the beginning of the Jury Instruction packet which includes the Jury Instruction Guide (JIG) numbers and titles in consecutive order corresponding to each JIG in the packet. It is contrary to the Minn. Civ. Trialbook, §15(f) to include the JIG numbers and titles, but a complete Table of Contents is necessary for the trial judge, lawyers and jurors to find a relevant instruction. I ask the attorneys not to object to the Table of Contents or to the distribution of individual copies. I then tell the jurors that the JIG numbers in the Table of Contents are simply a reference for the attorneys and court to be able to find a particular JIG in source materials and the title is

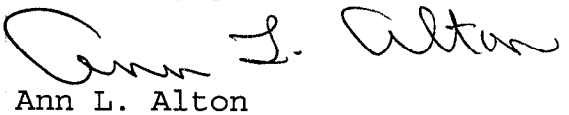
like a chapter heading to direct them to the subject matter that is **not** a part of the substantive instruction itself.

I tell the jurors that they may make notes on their individual packets of the Jury Instructions and Verdict Forms and that the packet is theirs to keep and take home if they wish after the verdict is rendered. I send a clean copy of the Jury Instructions packet and the Official Verdict Form(s) to the jury room separately for their collective use.

If you have any questions, please do not hesitate to contact me. I plan to be present at the hearing on February 26, 1997 at 2:00 PM. I would appreciate the opportunity to make a brief oral statement about my experience with these practices in accord with this letter and I will be available to answer any questions the Court may have.

Thank you for your consideration.

Sincerely yours,



Ann L. Alton
Judge of District Court

ALA:cy

This is my preliminary instruction for the jurors about permitting them to ask questions of live witnesses.
Judge Ann L. Alton

ALTON 3 - JUROR NOTES AND QUESTIONS TO LIVE WITNESSES

You may take notes throughout the trial if you wish. They are for your use only. Leave your note pads and pencils here whenever you leave the courtroom.

If you have any questions at the conclusion of any particular witness' testimony, please raise your hand. Do not state your question out loud. **Write down** the question on your note pad and sign your name on the bottom. I will discuss the question with the attorneys. I will decide if it is a proper question, and if it is, I will ask it. If I do not ask the question, please understand that there is some legal reason why I cannot do so. In that event, you must rely upon all of the available evidence in the case and not permit yourself to speculate about what the answer to your question might have been. Instead, if your question is not asked, you will know that you must disregard the subject of the question altogether and the question must not enter into your deliberations at all.

You may only ask questions of a witness who testifies live in the courtroom. You must ask all of your questions before the witness leaves the stand. The witness will not be recalled if you later think of another question. You may not ask any questions of a witness who testifies by means of a deposition because that person is not present in the courtroom to answer them.

EXHIBIT 1

BURKE & THOMAS

Attorneys

John M. Burke
Richard J. Thomas*
Thomas H. Jensen
*Also Licensed in Wisconsin

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Paralegals

Janice Massey
Janis O'Reilly
Michael J. Heifort
Michele Clarke

February 20, 1997

Mr. Frederick Grittner
Clerk of the Appellate Courts
305 Judicial Center
25 Constitution Avenue
St. Paul, MN 55155

HAND DELIVERED

Re: Proposed Amendments to the Minnesota Rules of Civil Procedure

Dear Sir:

Enclosed is an original and twelve copies of a Request for Oral Presentation and Written Statement by the MDLA with regard to proposed amendments to the Minnesota Rules of Civil Procedure.

Thank you.

Very truly yours,

Richard J. Thomas
for
BURKE & THOMAS

RJT:jo
Enclosure

cc. Wilbur W. Fluegel, Esq.
Rebecca Egge Moos, Esq.
Ms. Linda Jude

STATE OF MINNESOTA
IN SUPREME COURT
NO.:C6-84-2134
CX-89-1863

IN RE: HEARING TO CONSIDER
PROPOSED AMENDMENTS TO THE
MINNESOTA RULES OF CIVIL PROCEDURE.

REQUEST FOR ORAL PRESENTATION AND WRITTEN SUBMISSION

TO: THE SUPREME COURT OF THE STATE OF MINNESOTA:

Richard J. Thomas states as follows:

1. That he is an attorney licensed to practice law in the state of Minnesota and is co-chair of the Minnesota Defense Lawyers Association Law Improvement Committee and Vice President of the Association.

2. That he requests that he be allowed to participate in oral presentations scheduled by the court for February 26, 1997, to address proposed changes in the Minnesota Rules of Civil Procedure, which are of interest or concern to the membership of the Minnesota Defense Lawyers Association.

3. That he respectfully submits the attached written statement outlining the issues upon which the MDLA would like to address the Court.

Dated: 2/17/97

Respectfully submitted,

BURKE & THOMAS

By _____
Richard J. Thomas (#137327)
3900 Norwoods Drive
Suite 200
St. Paul, MN 55112
(612) 490-1808
Attorneys for Amicus, Minnesota Defense Lawyers Association

WRITTEN STATEMENT

The Minnesota Defense Lawyers Association is a voluntary organization of more than 800 Minnesota attorneys whose practice is substantially related to the defense of civil litigation.

The Minnesota Defense Lawyers Association would like to voice its objection to the proposed addition of subsection 10 to the Minnesota Trial Book. The Minnesota Defense Lawyer's Association would also support the proposed amendments to Rules 47 and 48 if additional peremptory strikes were allowed. The MDLA also supports the proposed amendments to Rule 51.

I.

DISCUSSION

A. PROPOSED CHANGES TO THE MINNESOTA CIVIL TRIAL BOOK.

The Minnesota Defense Lawyers Association recognizes the vital role that jurors play in civil trials. The MDLA also recognizes the benefits that come with jurors being interested and attentive to the case being tried before them. The MDLA, however, does not believe that the way to create an attentive jury is to amend the Civil Trial Book to allow jurors to ask questions of a witness. Although such an amendment would likely make jurors feel more included in the trial process, such an amendment would fundamentally alter their role as a neutral fact finder and lengthen trials. Accordingly, the MDLA objects to the proposed addition of Subsection 10 to the Civil Trial Book.

The primary concern of the MDLA to the addition to Subsection 10 stems from the fundamental shift which will occur when jurors are allowed to ask questions of a witness. Rather than being neutral fact finders, the jurors will tend to become advocates for

one side, one position or one theory of the case. When allowed to ask questions, jury members abrogate their traditional role as passive arbiters and may become participants in the advocacy process. Neutrality of jurors has been the hallmark of our civil litigation system for centuries. This balance of the lawyers as advocates and jurors as neutral fact finders will be upset if this proposed amendment is adopted. The MDLA foresees situations where jurors will put substantial weight on answers to questions posed by them for personal reasons. The MDLA does not support a proposed amendment which would fundamentally alter a juror's role at trial.

Additionally, the MDLA has concerns regarding this proposed amendment in that it would tend to slow proceedings. Under the proposed amendment, once a juror's question was submitted to the court, the safeguards under the proposed rule would require the trial court and counsel to discuss the question on the record outside the presence of the jury. Under such a system, every question submitted by a juror would result in at least a fifteen minute delay. Additionally, counsel may feel obligated to explore more fully with a witness the subject of the question. When a juror asks a question, the counsel to whom the question is favorable may ask additional questions to solidify the response. Likewise, opposing counsel may feel obligated to expound on the subject with the witness to put the response in context or rehabilitate the witness. Attempts by attorneys to streamline cases may be frustrated by numerous juror questions. This is particularly true when many of the questions relate to matters which, as the result of the Rules of Evidence or stipulations among the parties, are objectionable or irrelevant.

B. PROPOSED AMENDMENT TO RULE 48.

The MDLA supports the proposed amendment to Rule 48 which would make a six-person jury a minimum but not the maximum. Such an amendment, however, should be accompanied by additional peremptory striked for all counsel. Under current practice, attorneys are provided two peremptory challenges when a six-member jury is seated. If the jury increases in size, the number of peremptory strikes should increase in the same ratio so as to maintain the current balance of peremptory challenges to jury size.

C. PROPOSED AMENDMENT TO RULE 51.

With respect to the proposed amendments to Rule 51, the MDLA supports these changes and believes that they will assist the jury in its role as an informed fact finder. Providing each member of the jury with a written copy of the jury instructions to take into deliberations with them would be a positive change. This amendment would simply allow each juror to independently review the instructions during deliberations. The prevailing practice among Minnesota trial courts is to provide the jury one copy of the instructions. The proposed change makes no substantive alteration in the prevailing practice except to facilitate review of the instructions by jury members independently or as a group. Given the importance of jury instructions on instructing on the law to be applied to the case, the MDLA believes that this proposed amendment would be beneficial to the deliberation process.

The MDLA believes that the second proposed amendment to Rule 51, requiring the trial court to give the substantive jury instructions prior to closing arguments of counsel, would also be

a positive change to current practice. The purpose of jury instructions is to inform the jury of the law to which they must apply the facts. The instructions are, in essence, the framework of their fact finding. It seems not only appropriate but helpful, to give these instructions prior to closing arguments. This would allow the jury to put in context the closing arguments of the attorneys. Under the proposed amendment, following final argument the court would give closing instructions as well as repeat any of the substantive instructions deemed appropriate. Under this proposed procedure, neither side will have an unfair advantage of being the last to address the jury before deliberations begin. Additionally, this amendment may have the result of decreasing the length of closing arguments in that attorneys will not have to educate the jury regarding the law which it must apply or allude to the instructions which will be given because that will have been done already. The MDLA believes that this proposed amendment would assist the jury in better understanding the final arguments of counsel and, accordingly, should be adopted.

Dated: 2/20/97

Respectfully submitted,

BURKE & THOMAS

By _____

Richard J. Thomas (#137327)
Bryon G. Ascheman (237024)
3900 Northwoods Drive
Suite 200
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(612) 490-1808

Attorneys for Amicus, Minnesota Defense Lawyers Association

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Direct Dial No.
(612) 347-7061

February 17, 1997

Frederick Grittner
Clerk of the Appellate Courts
305 Judicial Center
25 Constitution Avenue
St. Paul, Minnesota 55155

Re: C6-84-2134, XC-89-1863
Order for Hearing to Consider Proposed Amendments to the Minnesota Rules of Civil Procedure and the Minnesota Civil Trialbook

Dear Mr. Grittner:

In connection with the above matter, I am enclosing 12 copies of the Honorable Duane M. Peterson's letter concerning the amendment of the Civil Trialbook to permit questioning by jurors. Please stamp and return to me in the enclosed envelope the copy of this letter acknowledging receipt of Judge Peterson's remarks. Thank you.

Very truly yours,

Leo G. Stern

LGS/mp/632178
Enclosures

DUANE M. PETERSON
JUDGE OF DISTRICT COURT

HOUSTON COUNTY COURTHOUSE
304 S. MARSHALL STREET
CALEDONIA, MN 55921

DODGE, FILLMORE, FREEBORN,
HOUSTON, MOWER, OLMSTED,
RICE, STEELE, WABASHA,
WASECA AND WINONA COUNTIES

TELEPHONE (507) 724-5806

DISTRICT COURT OF MINNESOTA
THIRD JUDICIAL DISTRICT

Frederick Grittner
Clerk of the Appellate Courts
305 Judicial Center
25 Constitution Avenue
St. Paul, MN 55155

Re: MSBA Civil Jury Project

Ladies and Gentlemen,

Some attorneys and judges have inquired of me about my experience with my practice of allowing jurors to ask questions of witnesses during trials. This has been my practice for seven years (since I first came on the bench). Since the civil jury project has recommended the practice and you are considering it, I feel that you might be interested in my comments.

The first thing that needs to be made clear is that I do not allow jurors to blurt out a question. They are instructed to write out any question and I will have the bailiff bring it to me. The attorneys will be invited to come to the bench and look at the question and make an objection, if they have any. Then I ask the question of the witness. The process is very controlled in order to avoid error.

The positive effects of the practice are (1) that the jury pays attention. They feel that they are participants in the process, not just spectators. (2) The lawyers are clued into what jurors think about what has been presented so far. (3) Good questions are asked to cover areas of proof that have been omitted through inadvertence.

The negative effects of the practice are (1) that an improper question is asked. I explain to jurors that they should not feel chagrined if their question is not answered. I point out that even trained lawyers sometimes ask a question that can't be answered under the rules of evidence. Occasionally I will give them a more detailed explanation as to why a question can't be answered, but I try to be careful about that.

I have heard rumors that some people fear that this practice will extend the time of the trial. My experience is that it will extend a three day trial by about 15 minutes. The most questions of any witness that I have experienced is five (5). In most trials we get only five questions for the entire trial. Time is just not a factor.

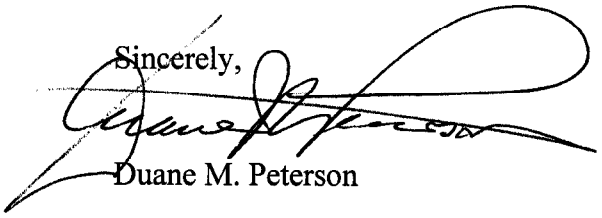
Does the right to ask questions interfere with the jury's responsibility to listen to testimony. My feeling is that it enhances this responsibility. I do all that I can to get the jury involved in the case through the use of visual aids and getting them to express themselves during voir dire. (I won't go into all of that unless someone wants to ask me.)

Does a single juror take on a self designated role of being a lawyer for the panel? If one were to do a study, one would probably find that jurors with a more assertive personality are likely to ask questions. Those are also the types who are likely to be chosen as the foreperson of a jury. The embarrassing thing for lawyers is when the juror asks a better question than they have.

In talking to jurors after trial I have had very positive feedback. They like the idea even if they did not have a question. They felt that they were given respect and that the court was trying to help them with the task they had to do. They were willing to serve again.

I hope this information is useful to the court in making its decision.

Sincerely,



Duane M. Peterson

SCHWEBEL
GOETZ
SIEBEN
&MOSKAL
ATTORNEYS

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January 13, 1997

Mr. Frederick Grittner
Clerk of Appellate Courts
305 Minnesota Judicial Center
25 Constitution Avenue
St. Paul, MN 55155

Dear Mr. Grittner:

As set forth in the Supreme Court's Order entitled "Order for Hearing to Consider Proposed Amendments to the Minnesota Rules of Civil Procedure in the Minnesota Civil Trial Book," dated December 18, 1996, I am submitting this letter to you, along with 12 copies. I would request the opportunity to make an oral presentation at the time of the hearing on February 26, 1997, at 2:00 p.m.

I was the co-chair of the committee on civil juries of the Civil Litigation Section of the Minnesota State Bar Association. As such, I was present at the meetings of the committee that prepared the Committee on Civil Juries Report and would like to make an oral presentation to briefly summarize what I feel are important considerations meriting the changes in the Civil Trial Book and Rules of Civil Procedure which the Minnesota State Bar Association now proposes to the Court. I do not mean to duplicate the considerations and rationale set forth in the Committee report; rather, I will simply try to highlight and summarize the most important of the considerations that merit adoption of these proposed changes.

The mission statement adopted by the Committee on Civil Juries stated that improvement of communication and juror convenience would enhance the jury system.

Early on in its work, the committee recognized that the process of a civil jury trial is one of education and communication. As such, the committee sought ways to improve both education and communication, as well as the efficient utilization of jurors' time. With those goals in mind, allow me to address each of the proposals in turn:

1. Jury Size. Inasmuch as the goal of the jury system is to obtain a verdict which, insofar is possible, reflects the judgment of the community, a larger jury will, in most cases, present a broader spectrum of opinion and thus, more closely achieve the goal of reflecting community judgment.

2. Alternate Deliberation. In focus groups, our committee found that jurors who served as alternates and were excused were quite frustrated by their inability to deliberate to a verdict in the case. In addition, the jurors who did deliberate were troubled by the absence of their colleague who had heard the evidence, but did not assist them in deciding the case. Inasmuch as the alternate jurors are viewed, under the law, as equally qualified as other jurors, they should be allowed to deliberate. This would not only improve the representative nature of the jury, but improve the experience for the jurors.

3. Juror Questioning. In every mode of teaching and communication, the asking of questions is an integral part of the communications process. It is difficult to imagine a teacher refusing to allow students to ask questions, yet most judges traditionally refuse to allow juries to inquire of witnesses.

   The experience of attorneys and judges who had allowed questions was quite positive, and only rarely did juror questions involve an impermissible area. Given the very specific procedure which is prescribed, there is no risk of an improper question being asked, and it is my view that jurors' misunderstanding of a witness' testimony is best corrected at the time of the witness' testimony, and not much later when jury deliberations begin.

4. Reading of Substantive Instructions before Closing Arguments. As an attorney with personal experience with arguing after substantive instructions, I can tell you I much prefer this procedure. It shortens my argument and then I do not have to spend a great deal of time laying out

what the Court "may" say about a specific topic, but instead can make direct reference to what the Court has just said. In addition, it provides a context for the jury to more clearly understand arguments of counsel. The committee did not find any arguments to support the practice of reading instructions after closing arguments.

5. Written Instructions. The practice of providing written instructions is widespread in Minnesota Courts already; as with the previous topic, we became aware of no drawbacks to written instructions, and many advantages as set forth in the report.

I wish to thank the members of the Court for their time and consideration of this important topic, and would be honored to have an opportunity to address the Court regarding these matters.

Very truly yours,

Peter W. Riley
Direct Dial No: 344-0425

PWR/mpn

Law Offices of

WENTZEL

FLUEGEL

A LEGAL PARTNERSHIP

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February 19, 1997

Clerk of Supreme Court
245 Minnesota Judicial Center
25 Constitution Avenue
St. Paul, Minnesota 55155-6102

Re: Hearing to Consider Proposed Amendments to the Minnesota Rules of Civil Procedure and Civil Trialbook
Court File No: C6-84-2134 & CX-89-1863

Dear Clerk:

Enclosed please find 12 copies of the Request for Oral Presentation and Written Submission regarding the Proposed Amendments to the Minnesota Rules of Civil Procedure and Minnesota Civil Trialbook. I understand that the hearing in this matter is set for February 26, 1997 at 2 p.m. I look forward to making a short presentation at that time on behalf of the Minnesota Trial Lawyers' Association.

Thank you for your attention to this matter. If you have any questions, please feel free to contact our office.

Very truly yours,

Wilbur W. Fluegel

enclosures

cc: MTLA

Wilbur W. Fluegel
Certified Civil Trial Specialist by Minnesota State Bar Association & National Board of Trial Advocacy / Also Admitted in Wisconsin

Willard L. Wentzel, Jr.
Certified Civil Trial Specialist by Minnesota State Bar Association & National Board of Trial Advocacy

STATE OF MINNESOTA

IN SUPREME COURT

No.: C6-84-2134, CX-89-1863

In re: Hearing to Consider Proposed Amendments to the Minnesota Rules of Civil Procedure and the Minnesota Civil Trialbook.

REQUEST FOR ORAL PRESENTATION & WRITTEN SUBMISSION

TO: The Supreme Court of the State of Minnesota:

Wilbur W. Fluegel, states as follows:

1. That, he is an attorney licensed to practice law in the State of Minnesota and co-chair of the Minnesota Trial Lawyers Association *Amicus Curiae* Committee.

2. That, he requests to participate in oral presentations scheduled by the Court for February 26, 1997 to address proposed changes in the Minnesota Rules of Civil Procedure and the Minnesota Civil Trialbook, which are of interest or concern to the membership of the Minnesota Trial Lawyers Association.

3. That, he respectfully submits the attached written statement outlining the issues upon which he would like to address the Court.

Dated: Feb 19 1997

Respectfully Submitted,

Wilbur W. Fluegel, #30429
WENTZEL & FLUEGEL
Suite 1200, 701 Fourth Avenue South
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(612) 337-9500
Attorneys for Amicus, Minnesota Trial Lawyers Association

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WRITTEN STATEMENT

I. Introduction

The Board of Governors of the Minnesota Trial Lawyers Association met on August 29, 1996 in special session to consider the proposed changes to the Minnesota Rules of Civil Procedure and Civil Trialbook, which are the subject of this hearing. The MTLA is a voluntary organization of over 1300 Minnesota trial attorneys who represent predominantly claimants in civil litigation.

The subject changes proposed to the Minnesota Rules of Civil Procedure and Minnesota Civil Trialbook, which are of concern to the organization relate primarily to alteration of the jury panel that would sit to decide civil disputes. Specifically proposed changes to rules 47.02, 48 and Civil Trialbook 10(j) are of concern. These modifications would have the effect of:

(1) Potentially increasing the presumptive size of the jury in a civil case from six to 12,[1] without any corollary increase in the two peremptory challenges

[1] The proposed change would amend MINN.R.CIV.P. 48 to add the following pertinent language: "If the parties do not stipulate as to the number of jurors, the court shall seat a jury of not fewer than six and not more than twelve members." The current rule provides that "The parties may stipulate that the jury shall consist of any number less than 12 . . . ."

allowed under Civil Trialbook Rule 6(d)[2] or MINN. STAT. § 546.10.[3]

(2) Abolishing the designation of "alternate juror"[4] and requiring all those who remain seated at the close of the case to participate in deliberation, again increasing the size of the deliberative panel, to potentially larger than 12.

(3) Allowing questions to be asked by jurors of all witnesses, under court supervision.[5]

According to the comments to the proposed changes, the intended purpose of the amendments is to: (1) increase jury size to aid "predictable verdicts" and (2) to enhance

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[2] The current rule--which is not the subject of a proposed amendment--provides, "Each adverse party *shall* be entitled to two peremptory challenges . . . ." MINN. CIVIL TRIALBOOK 6(d).

[3] The statute--which is presumably not subject to judicial modification, and would remain in force, despite the proposed amendments, states that "Each party *shall* be entitled to two peremptory challenges . . . ."

[4] Paragraph 15 of the MSBA's proposal is to strike MINN.R.CIV.P. 47.02 in its entirety. That rule describes a process by which alternate jurors are seated, and finds its parallel in MINN. STAT. § 546.10, which again will remain law, despite changes to the rules of procedure. The proposed change to would be to MINN.R.CIV.P. 48 which would be modified to state that "All jurors shall participate in the verdict unless excused from service by the court for good cause."

[5] The proposed change would enact a new section of the MINN. CIVIL TRIALBOOK as Rule 10(j), which would provide:

> A juror may submit a question for a witness through the judge. The juror shall submit the question in writing through appropriate court personnel. Upon receipt of such a written question through, the court shall review the propriety of the question with counsel, on the record outside the presence of the jury. The court shall then ask the question, in which case all parties shall have the opportunity to examine matters touched upon by the question; or shall tell the jury that the law prevented the question from being asked.

juror satisfaction.

The MTLA opposes these proposed changes, absent substantial additional study and public debate, as the trial lawyers are aware of research documenting that:

(1) contrary to the research cited by the MSBA,[6] modifications in jury size have the effect of significantly lowering the size of damages awards in personal injury cases without altering the consistency of results on which side more frequently prevails,[7] and

(2) contrary to the research cited by the MSBA,[8] juror questioning does not serve to enhance juror's deliberations.[9] Of more concern, it makes jurors into potentially

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[6] The MSBA cites at paragraph 9 of its proposal, the following three studies for the proposition that "8 to 12 person juries result[ ] in more consistent and predictable verdicts with less variability." *See* Lambert, *Uncovering Nondiscernable Differences: Empirical Research and the Jury-Size Cases*, 73 MICH. L. REV. 644 (1975); Zeisel, *The Diminution of the Federal Jury*, 38 U. CHI. L. REV. 710 (1971); Saks, *The Smaller the Jury, the Greater the Unpredictability,* 79 JUDICATURE 263 (Mar.-Apr. 1996).

[7] *See* National Center for State Courts Study Project, *reported in* The National Law Journal, n. 15, Dec. 18, 1989, at 6, col. 1 (1988-89 study of 8-person juries in 4 Los Angeles municipal courts by the National Center for State Courts revealed that larger panels "showed little difference in their willingness to rule for one side over another," but "smaller juries awarded more than twice as much to victorious plaintiffs.").

[8] The MSBA cites at paragraph 16 of its proposal, the following two studies for the proposition that ""questions by jurors are an important device for jury deliberation and participation." *See* Dann, *Learning Lessons and Speaking Rights: Creating Educated and Democratic Jurors*, 68 IND. L.J. 1229 (1993); Heuer & Penrod, *Increasing Juror Participation in Trials Through Note Taking and Question Asking*, 79 JUDICATURE 256 (Mar.-Apr. 1996).

[9] The results of the Heuer & Penrod study have been given a decidedly different "gloss" in *Study Debunks Myths About Juror Notes and Questions*, 30 TRIAL n.1, 85-86 (Jan. 1994), noting among other things that "Asking questions did not clearly help jurors get

partisan advocates rather than their constitutionally designated role of dispassionate judges of the facts.

For these reasons, the MTLA urges the Court not to adopt the foregoing changes, or in the alternative to adopt a version that stresses that:

(1) the presumptive jury size in a civil case shall remain at 6;

(2) alternates *may* [p]articipate with stipulation of counsel, and;

(3) juror questions may be allowed on an experimental basis, of lay witnesses only.

II. Juror size affects not only the deliberative decision making process, but also jury awards.

The MSBA has cited to several studies that suggest that the process by which 12 people decide an issue is different than the dynamics involved in how a group of six resolves the same controversy.[10] Even a modest familiarity with group decision making

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to the truth. Jurors who asked questions gave them only a 'modest endorsement' as helpers in finding the truth, and judges and lawyers were even less likely to believe the questions were useful." 71 trials were studied involving as many as 33 states for the study. An earlier version of the same study published in 1988 in LAW AND HUMAN BEHAVIOR studied the practices of 20 judges in 67 trials and found that "[m]ost juror questions concerned clarification of technical terms or simple matters of fact." 25 TRIAL n.9, at 14, 15 (Sept. 1989). Among problem areas developed by the researchers: "Juror questions might get out of hand, slowing the trial or sending it off on an irrelevant tangent. Jurors might upset lawyer strategies by asking untoward questions at a critical time. . . . The lawyers may be reluctant to object to juror's questions, fearing to offend them." *Id.*

[10] The MSBA cites at paragraph 9 of its proposal, the following three studies for the proposition that "8 to 12 person juries result[ ] in more consistent and predictable verdicts with less variability." *See* Lambert, *Uncovering Nondiscernable Differences: Empirical Research and the Jury-Size Cases*, 73 MICH. L. REV. 644 (1975); Zeisel, *The*

would lead to the conclusion that such a premise is obviously true. Larger groups resolve matters differently than smaller groups. Such is human psychology.

A more important inquiry is what the *result* of the deliberative process is, and whether such results are indeed changed when the size of the decision making group changes.

A. Studies of actual jury awards reveals they are less than half their former amount when a larger group deliberates.

In a two year study by the National Center for State Courts conducted in 1988-1989 in four municipal courts districts in Los Angeles, California of experimental eight-person juries, the conclusions reached were:

- larger panels "showed little difference in their willingness to rule for one side over another,"
- but "smaller juries awarded more than twice as much to victorious plaintiffs."

See National Center for State Courts Study Project, *reported in* The National Law Journal, n. 15, Dec. 18, 1989, at 6, col. 1.

Unless the Minnesota Supreme Court is convinced--at the end of hopefully a long and thoroughgoing debate--that personal injury jury awards in this state are unduly high,[11]

Diminution of the Federal Jury, 38 U. CHI. L. REV. 710 (1971); Saks, *The Smaller the Jury, the Greater the Unpredictability,* 79 JUDICATURE 263 (Mar.-Apr. 1996).

[11] The publication JURY VERDICT RESEARCH reflects that Minnesota civil jury awards are within the national average. Those in Hennepin and Ramsey County are within 8-9% of the national average.

the Court should not enter into the arena of legislating down the size of awards by increasing the size of the jury panels. At a minimum, at least a much greater debate should be afforded to the Court's deliberative process on this political issue.

B. No appreciable change is noted in the winner or loser decided by larger jury panels.

There is no recognized better "consistency" achieved through increasing the size of the jury panel. Contrary to the MSBA's assertions, the studies show essentially "no change" in results reached, rather than some objectively better result. This was the conclusion of the MSBA cited article by Lambert, *Uncovering Nondiscernable Differences: Empirical Research and the Jury-Size Cases*, 73 MICH. L. REV. 644 (1975).

It is also the conclusion of a later 1980 study published in the journal of LAW & SOCIETY REVIEW which studied 928 jurors in simulated trials comparing six and 12 person juries that heard the same cases.[12] While the study, determined that the process by which decisions were reached varied, it detected "no difference whatsoever between six- and twelve-person juries" regarding the outcome of winner or loser, and distinguished prior studies to the contrary.[13] As to the modest implications of juror size on the result of winner versus loser, the study recommended the following choices for the courts: (1) if the court's goal was to avoid making an innocent person liable for a wrong, then a larger jury

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[12] Roper, *Jury Size and Verdict Consistency: "A Line has to be Drawn Somewhere"?*, 14 LAW & SOC'Y REV. 977 (Summer 1980).

[13] *Id.* at 985.

was justified, as larger juries erred on the side of the defense, and (2) if the court's goal was to avoid the release from responsibility of a wrongdoer, then a smaller jury size best achieved that end, as smaller juries had a greater tendency to vote for the side prosecuting the claim.[14]

In a 1980 study funded by the National Science Foundation, the researchers examined a number of studies and concluded that the result reached by a smaller jury was not materially different than a larger one, and that such was indeed the premise behind the constitutionally-permissible approach of a non-unanimous verdict.[15]

Again, hopefully after a much lengthier debate than has thus far occurred, the Minnesota Supreme Court can decide whether to legislate in favor of defendants by adopting the proposed MSBA amendment, or to retain the current system.

C. Current rule allows flexibility and should be maintained.

Rather than embarking on any "legislative" activity, the Court should abstain from the proposed changes in the rules regarding jury size. The "modest" wording of the rule posits the shift to a larger jury as an "option," but the flavor of the MSBA's comments make its purpose unmistakable: to increase jury size.

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[14] *Id.* at 992-93.

[15] Grofman, *The Slippery Slope: Jury Size and Jury Verdict Requirements--Legal and Social Science Approaches,* 2 LAW & POLICY QUARTERLY 285, 296 (1980) (while the deliberative process is altered from a psycho-social perspective, "what happens in the epilog interval has no effect on the outcome of the trial."), *quoting* M.J. SAKS, JURY VERDICTS: THE ROLE OF GROUP SIZE AND SOCIAL DECISION RULE, 94 (1977).

III. Jury Questioning does not achieve its Desired Effects of Greater Juror Satisfaction and Deliberative Decision Making.

Just as the MSBA's goal behind allowing alternates to sit through decision making seems to have been to show the court's appreciation for the juror's coming, the proposal to allow jurors to question witnesses seems motivated by a desire to enhance juror appreciation for the trial experience.

Jurors are an essential part of the American justice system and their role should be supported as much as possible within the framework of the constitution and the laws. While it is useful to be respectful to the desires and needs of individual jurors, it is the process as a whole that must be protected above all else. The goal is to achieve a finding of the truth. The jury has a specific and well-settled role in that effort.

While the studies cited by the MSBA show that allowing juror questioning permits "jurors a greater sense of participation" and encourages them to be "more alert and focused on the issues,"[19] actual studies of jury decision making show that juror questions do not enhance their deliberations or aid the finding of "truth."[20]

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[19] MSBA Proposal at ¶ 16.

[20] The MSBA largely relies upon studies by Barnard College Professor Larry Heuer and University of Minnesota Professor Steven Penrod for its conclusions. These authors have been studying the role of note taking and jury questioning for at least ten years and have authored a number of reports of their data. They did find some utility to these two approaches to jury deliberation and it has been variously reported. Their article in JUDICATURE, which is cited by the MSBA, must be compared with their other publications to accomplish a complete understanding of their concerns as well as their endorsements.

A. Juror questions are not shown to statistically increase a jury's ability to seek the truth.

The studies of jury questioning conducted by Heuer and Penrod have been the most thoroughgoing. In 1994, they reported their study of juror questioning in 71 trials involving as many as 33 states. In the article, *Study Debunks Myths About Juror Notes and Questions*, 30 TRIAL n.1, 85-86 (Jan. 1994), their research was noted to establish that

- "Asking questions did not clearly help jurors get to the truth. Jurors who asked questions gave them only a 'modest endorsement' as helpers in finding the truth, and judges and lawyers were even less likely to believe the questions were useful."[21]

- An earlier version of the same study published in 1988 in LAW AND HUMAN BEHAVIOR studied the practices of 20 judges in 67 trials and found that "[m]ost juror questions concerned clarification of technical terms or simple matters of fact." 25 TRIAL n.9, at 14, 15 (Sept. 1989).

Among problem areas developed by the researchers: "Juror questions might get out of hand, slowing the trial or sending it off on an irrelevant tangent. Jurors might upset lawyer strategies by asking untoward questions at a critical time. . . . The lawyers may be reluctant to object to juror's questions, fearing to offend them." *Id.*

B. Jurors as "advocates" instead of "judges" is a material change that should be further studied before it is endorsed by the Court.

One concern not largely addressed by statistical studies, but among the most troubling to the Minnesota Trial Lawyers Association, is the subtle but profound shift in

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[21] *Study Debunks Myths About Juror Notes and Questions*, 30 TRIAL n.1, 86 (Jan. 1994).

the status occupied by jurors who are allowed to serve as cross-examiners under the proposed rule change (albeit indirectly through written notes to the court).[22]

Our justice system follows the respected tradition that jurors serve in the function of being dispassionate "judges of the facts."[23] The role afforded to attorneys in our system is as "officers of the court . . . to present evidence on behalf of their clients."[24] The respected common law tradition that has served America and Minnesota well, has respected these distinct roles.

Jurors have not been police--who ferret out facts and develop them for another's use--but rather have served as judges. They have impartially decided what is the truth. They have not been permitted to choose up sides and take on a witness whose testimony

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[22] The proposed change would enact a new section of the MINN. CIVIL TRIALBOOK as Rule 10(j), which would provide:

> A juror may submit a question for a witness through the judge. The juror shall submit the question in writing through appropriate court personnel. Upon receipt of such a written question through, the court shall review the propriety of the question with counsel, on the record outside the presence of the jury. The court shall then ask the question, in which case all parties shall have the opportunity to examine matters touched upon by the question; or shall tell the jury that the law prevented the question from being asked.

[23] "It will be your duty to find from the evidence what the facts are. You, and you alone, are the *judges of the facts*." MINN. DIST. JUDGE'S ASS'N, 4 MINNESOTA PRACTICE: JURY INSTRUCTION GUIDES, JIG III, no. 1, at 2 (3d ed. 1986) (emphasis added).

[24] *Id.*, JIG III, no. 5, at 9.

or a cause whose beliefs are personally satisfying or dissatisfying to them.

The fear of the MTLA is that when allowed to question all witnesses, a juror will potentially become an advocate--searching persistently for an answer to a question that is important to them (relevant or otherwise) and deciding a case based on which witness performed more directly to their personal inquiry than to the "evidence as a whole," which was formerly their task.

While a witness' ability to answer anyone's questions is a valid test of that individual's credibility, the prospect that jurors may consider their individual questions to have greater weight is an obvious threat. Moreover, the "proactive" juror who early establishes his or her lead for the role of foreperson through questioning, could take on more control to the exclusion of other's opinions, early in the process of a trial.

Finally, on a very practical note, modern injury trials face the economic constraint for plaintiff's practitioners of using *video* testimony or *depositions* that are read back to the jury. No "interactive" expert medical witness is thus typically available to plaintiffs. Defense counsel who more often rely on professional adverse witnesses whose careers are freed from constraints of patient care, more frequently have interactive medical witnesses *live* at trial and thus available for jury questioning. One can easily imagine the discussion in the jury room: "Dr. A was able to answer my questions pretty directly, but as Dr. B was on tape, I never got to put the important question to her." How important the "unasked question" may be in the overall pursuit of truth is subject to debate, but how

important it may loom in the eyes of a jury leader, is sure to be assigned greater weight by that juror.

Even if the matter is not viewed as a plaintiff-versus-defendant issue, if plaintiffs go to the added expense of bringing doctors to court and defendants don't do so, so as to minimize insurance carrier costs, there exists an advantage to one side over another. The advantage exists to whomever can afford to spend the substantially additional funds necessary to bring the expert in person to trial. This Court should avoid any rule that enhances the prospect of "justice to the highest bidder."

At a minimum, substantial further study and reflection should be undertaken before adoption of the change proposed by the MSBA.

C. Limiting questioning to fact witnesses may be an appropriate interim compromise until more experience is gained in Minnesota.

While there may be a study to support nearly any proposition, there is no direct data available in Minnesota--with the exception of anecdotal information from the few judges who have experimented with the technique of juror questioning and the practitioners who have worked before them.

Until more is learned about a "Minnesota experience" with juror questioning, if it is to be endorsed by rule, it should be limited to *lay witnesses* only. Data supports that most juror questions were of "simple matters of fact,"[25] and limiting inquiry to factual

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[25] *Juror Questions During Trial? The Verdict Isn't In*, 25 TRIAL 14, 15 (Sept. 1989) (Reporting first study of Heuer and Penrod).

witnesses may reduce the risk of giving one side an unfair advantage of affording "in person" expert witnesses for the jurors to question.

CONCLUSION

The right to trial by jury is a constitutionally protected right with a long history of respected tradition that should only be modified following a throughgoing analysis of the implications of any suggested change.

Increased jury size carries with it the statistically verified reality of lower verdicts and marginally more pro-defendant verdicts in civil cases. The MSBA's proposed changes to Rules 47 and 48 thus carry broad political and legislative implications that must be weighed, as the Court must choose whether to take a pro-defendant position in civil litigation before adopting the amendments.

Injecting juror questioning also carries the risk of changing jurors from impartial "judges of the facts" into vocal advocates. If the rule change is not limited to fact witnesses alone, juror questioning of experts may have the effect of giving an advantage to the side that can afford the added cost of producing its experts "live." Further study is needed before the Court can adopt the wholesale change endorsed by the MSBA.

Dated: Feb 19 1997

Respectfully Submitted,

Wilbur W. Fluegel, #30429
WENTZEL & FLUEGEL
Suite 1200, 701 Fourth Avenue South
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Attorneys for Amicus, Minnesota Trial Lawyers Association

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APPENDIX

Finance & Commerce, January 3,1997 (pgs. 27 - 29)

Trial, January 1994 (pgs. 85 -86)

Trial, *Jurur Questions During Trial? The Verdict Isn't In*, September 1989 (pgs. 14-19)

The National Law Journal, *Bigger Is Better?*, December 18, 1989

Law & Policy Quarterly, Bernard Grofman, *The Slippery Slope: Jury Size and Jury Verdict Requirements - Legal and Social Science Approaches*, July 1980 (pgs. 285 - 303)

Law & Society Review, Robert T. Roper, *Jury Size and Verdict Consistency: "A Line Has To Be Drawn Somewhere"?*, Summer 1980 (pgs. 977 - 995)

Law and Human Behavior, Irwin A. Horowitz & Kenneth S. Bordens, *The Effect of Outlier Presence, Plaintiff Population Size, and Aggregation of Plaintiffs on Simulated Civil Jury Decisions*, Vol. 12, No. 3, 1988 (pgs. 209 - 229).

(n) when appointed in cases in which a finding of domestic abuse has been made, including all cases with orders for protection or harassment restraining orders, gather and release information in a manner that best protects the safety of the child and victim, and that does not require the parties to have contact.

(o) request appointment of legal counsel, if necessary.

(p) when appointed in the case of an Indian child, as defined in Minnesota Statutes section 257.351, subdivision 6, interview tribal social services employees, maintain contact with the tribal representative, and otherwise comply with the Indian Child Welfare Act and the Minnesota Indian Family Preservation Act.

Sec. 3. [CONTESTED HEARING AND/OR ADJUDICATORY PHASES.]

In addition to the specific responsibilities set forth above, during the contested hearing and/or adjudicatory phases of every juvenile court case the specific responsibilities of a guardian ad litem are to:

(a) participate in negotiations in an attempt to arrive at a case plan and/or resolve the matter in a manner consistent with the best interests of the child.

(b) advocate for the child's presence or absence in court, whichever is in the child's best interest.

(c) as appropriate to the age and maturity of the child, assist the child in understanding the court proceedings.

(d) keep apprised of the child's/family's situation by communicating on a regular basis with the parties and service providers.

(e) when authorized, subpoena witnesses, present evidence, conduct direct and cross examination of witnesses, and provide testimony relative to the issues involved in the case and the best interests of the child.

(f) if the child is required to testify in the juvenile court or other judicial proceeding, take steps to ensure that this is done in a manner best suited to the child's emotional well-being, needs, and abilities.

(g) keep the court informed about other legal proceedings that may be occurring concurrently with the juvenile court proceeding.

(h) as appropriate to the case, make oral and/or written reports to the court regarding the best interests of the child, including conclusions and recommendations and the facts upon which they are based.

Sec. 4. [DISPOSITIONAL PHASE.]

In addition to the responsibilities set forth above, during the dispositional phase of every juvenile court case the specific responsibilities of a guardian ad litem are to:

(a) advocate for timely review hearings.

(b) monitor the case to ensure compliance with court orders and to bring to the court's attention any change in the circumstances that may require a modification of the order.

(c) maintain regular contact with the child and meet with and/or observe the child in a manner consistent with the child's developmental capabilities. Meetings with the child may be alone at the discretion of the guardian ad litem.

(d) monitor placement and/or visitation arrangements and, when appropriate, periodically observe placement and/or visitation.

(e) keep apprised of the child's/family's situation and bring appropriate matters to the attention of the court.

(f) as appropriate to the case, include in the reports to the court information regarding the best interests of the child, including conclusions and recommendations and the facts upon which they are based, that address the dispositional issues and options before the court.

CORE PRE-SERVICE TRAINING CURRICULUM

At a minimum, the core pre-service training curriculum should address the following topics:

(a) Roles and responsibilities of guardians ad litem;

(b) Roles and responsibilities of other case participants;

(c) Relevant laws, rules, and regulations, including the Indian Child Welfare Act, the Minnesota Indian Family Preservation Act, and the Minnesota Heritage Preservation Act;

(d) Stages of court proceedings and court procedures, including oral presentations, written reports, and development and presentation of recommendations;

(e) Information gathering and communication skills, especially for children of varying ages, abilities, and cultures;

(f) Confidentiality and ethics;

(g) Cultural competency;

(h) Stages of child development

(i) Special needs of children and parents with developmental disabilities;

(j) Attachment and separation;

(k) Visitation issues, including safety planning;

(l) Permanency planning;

(m) Dynamics of child abuse and neglect;

(n) Dynamics of domestic violence, including impact upon children and victim;

(o) Dynamics of chemical health issues, including impact on children;

(p) Dynamics of mental health issues, including impact on children;

(q) Services and resources available in the community;

(r) Negotiation and settlement processes; and

(s) Guardian ad litem personal safety.

ADDITIONAL JUVENILE COURT PRE-SERVICE CURRICULUM

At a minimum, the juvenile court pre-service training curriculum should address the following topics:

(a) Safety concerns regarding the child and the community (delinquency proceedings);

(b) Juvenile correctional placements (delinquency proceedings); and

(c) Transitional services to assist in reunification (child in need of protection or services and delinquency proceedings).

ADDITIONAL FAMILY COURT PRE-SERVICE CURRICULUM

At a minimum, the family court pre-service training curriculum should address the dynamics of divorce.

ORDER FOR HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE MINNESOTA RULES OF CIVIL PROCEDURE AND THE MINNESOTA CIVIL TRIALBOOK

ORDER

IT IS HEREBY ORDERED that a hearing be had before this Court in Courtroom 300 of the Minnesota Supreme Court, Minnesota Judicial Center, on February 26, 1997 at 2:00 p.m. to consider the petition of the Minnesota State Bar Association to amend the Rules of Civil Procedure and the Minnesota Civil Trialbook. A copy of the petition containing the proposed amendments is annexed to this order and may also be found at the Court's World Wide Web site: (www.courts.state.mn.us).

IT IS FURTHER ORDERED that:

1. All persons, including members of the Bench and Bar, desiring to present written statements concerning the subject matter of this hearing, but who do not wish to make an oral presentation at the hearing, shall file 12 copies of such statement with Frederick Grittner, Clerk of the Appellate Courts, 305 Judicial Center, 25 Constitution Avenue, St. Paul, Minnesota 55155, on or before February 20, 1997 and

2. All persons desiring to make an oral presentation at the hearing shall file 12copies of the material to be so presented with the aforesaid Clerk together with 12 copies of a request to make an oral presentation. Such statements and requests shall be filed on or before February 20, 1997.

Dated: December 18, 1996

BY THE COURT:
A.M. Keith
Chief Justice

Amendments to Rules of Civil Procedure and the General Rules of Practice (Civil Trialbook)

Petition of Minnesota State Bar Association

TO THE HONORABLE JUSTICES OF THE MINNESOTA SUPREME COURT:

Petitioner Minnesota State Bar Association (_MSBA_) respectfully petitions this Honorable Court to amend the Rules of Civil Procedure and the Minnesota Civil Trialbook to implement the following recommendations of the MSBA:

1. The six person jury should be considered the minimum but not the maximum (amending Minn. R. Civ. P. 48);

2. All alternates remaining at the close of a civil trial should deliberate and vote (striking Minn. R. Civ. P. 47.02 and amending Minn. R. Civ. P. 48);

3. Jurors should be permitted to question witnesses during trial with appropriate safeguards (inserting new subsection in Minn. Civ. Trialbook § 10);

4. The judge should read the substantive instructions to the jury before closing arguments (amending Minn. R. Civ. P. 51);

5. Civil juries should be provided with written copies of all instructions (amending Minn. R. Civ. P. 51).

In support of this Petition, MSBA would show the following:

1. Petitioner MSBA is a not-for-profit corporation of attorneys and judges admitted to practice law before this Court and the other courts of the State of Minnesota.

2. This Court has the exclusive and inherent power and duty to administer justice and to adopt rules of practice and procedure before the courts of this state and to establish standards for regulating the legal profession. This power has been expressly recognized by the legislature. See Minn. Stat. § 480.05 (1996).

3. This Court has adopted the Rules of Civil Procedure to govern the procedure in all suits of a civil nature. The Rules are to be construed to secure the just, speedy, and inexpensive determination of every action. See Minn R. Civ. P. 1. This Court has since amended those rules from time to time.

4. As part of the General Rules of Practice, this Court adopted the Minnesota Civil Trialbook, effective January 1, 1992. While not mandatory, the Trialbook is a declaration of the practical policies and procedures to be followed in the civil trials in all the trial courts in Minnesota. See Minn. Civ. Trialbook § 1 (1996).

5. In January of 1994, the Governing Council of the Civil Litigation Section of the MSBA established the Committee on Civil Juries and instructed it to investigate ways to improve the civil jury system in Minnesota. The Committee, made up of practitioners and judges from throughout the state, consulted with court administrators, judges who have used innovative jury participation techniques in their courtrooms, experts in jury research, and jurors themselves. The Committee also conducted focus groups. See Appendix A (Committee on Civil Juries Report). After substantial study and deliberation, the Committee issued numerous recommendations in its report. The Civil Juries Report was adopted by the Governing Council of the Civil Litigation Section of the MSBA in June 1995.

6. The Civil Litigation Section, together with the Court Rules and Administration Committee of the MSBA, submitted proposals for amendments of the Rules of Civil Procedure and the Civil Trialbook based on the Civil Juries Report to the MSBA General Assembly in June 1996. On June 21, 1996 those proposals were approved and are submitted herein to this Court. The proposed amendments are attached hereto as Appendix B.

7. The MSBA respectfully recommends and requests that this Court amend the Rules of Civil Procedure and the Minnesota Civil Trialbook as follows:

The Six-Person Jury Should Be Considered

The Minimum But Not The Maximum

8. This recommendation affects the present Rule 48 that _[t]he parties may stipulate that the jury shall consist of any number less than 12, or that a verdict or a finding of a stated majority of the jurors shall be taken as the verdict or finding of the jury._ See Minn. R. Civ. P. 48.

9. The MSBA's research shows that 8 to 12 person juries resulted in more consistent and predictable verdicts with less variability. Studies indicate that any additional costs are not appreciable. Many scholars have concluded that the change in the 1970's from a constitutional jury of 12 to 6 has depreciated the jury's value. See Richard Lempert, **Uncovering Nondiscernable Differences: Empirical Research and the Jury-Size Cases**, 73 Mich. L. Rev. 644 (1975); Hans Zeisel, **The Diminution of the Federal Jury**, 38 U. Chi. L. Rev. 710 (1971); **see also** Michael J. Saks, **The Smaller the Jury, the Greater the Unpredictability**, 79 Judicature 263 (March - April 1996).

10. The report shows that increasing jury size results in more consistent verdicts, more well considered verdicts and greater citizen participation in the jury process.

11. This recommendation also addresses the frustration of potential jurors who complain of reporting for service, waiting for days or weeks and never being called to serve.

12. The MSBA accordingly respectfully recommends and requests that this Court amend Rule 48 of the Rules of Civil Procedure as follows:

Rule 48. Juries Of Less Than Twelve; Majority Verdict

The parties may stipulate that the jury shall consist of any number less than 12, or that a verdict or a finding of a stated majority of the jurors shall be taken as the verdict or finding of the jury. If the parties do not stipulate as to the number of jurors, the court shall seat a jury of not fewer than six and not more than twelve members. All jurors shall participate in the verdict unless excused from service by the court for good cause. If the number of jurors falls below six, then the court shall declare a mistrial unless the parties have stipulated or do stipulate that the trial may proceed with fewer than six jurors, in which case the trial shall so proceed unless the court finds that manifest injustice will result.

All Alternates Remaining At The Close Of A Civil Trial Should Deliberate And Vote

13. Allowing alternate jurors to deliberate at the close of trial is consistent with the encouragement of larger juries. The alternate is treated like every other juror and has heard the entire case. Allowing the alternates to deliberate would avoid the frustration of the juror who is discharged without participating in the deliberation process.

14. Rule 47.02 of the Rules of Civil Procedure currently provides that the alternates be discharged once the jurors retire to deliberate.

15. The MSBA respectfully recommends and requests that this Court strike Rule 47.02 in its entirety and amend Rule 48 as follows:

Rule 48: Jurors Of Less Than Twelve; Majority Verdict

. . . All jurors shall participate in the verdict unless excused from service by the court for good cause.

Jurors Should Be Permitted To Question Witnesses During Trial With Appropriate Procedural Safeguards

16. Juror studies verify that questions by jurors are an important device for jury deliberation and participation. Permitting questions gives jurors a greater sense of participation, avoids confusion, and allows jurors to pursue relevant information not solicited by lawyers. In addition, jurors are more alert and focused on the issues. See Judge Michael Dann, **Learning Lessons and Speaking Rights: Creating Educated and Democratic Jurors**, 68 Ind. L. J. 1229 (1993); **see also** Larry Heuer & Steven Penrod, **Increasing Juror Participation in Trials Through Note Taking and Question Asking**, 79 Judicature 256 (March - April, 1996).

17. This proposal would allow jurors to submit written questions to the court. The court would then have the opportunity to review the questions to determine their propriety before directing them to counsel and the witnesses.

18. This proposal was drafted by drawing from the present Civil Trialbook section on questioning by the judge (Section 10(j)) and the present section on questions by jurors during deliberations (Section 16).

19. The MSBA respectfully requests that this Court insert in the Civil Trialbook a new Section 10(j) and that the following subsections be renumbered accordingly:

Section 10. Examination Of Witnesses

(j) Questioning by Jury. A juror may submit a question for a witness through the judge. The juror shall submit the question in writing through appropriate court personnel. Upon receipt of such a written question, the court shall review the propriety of the question with counsel, on the record outside the presence of the jury. The court shall then ask the question, in which case all parties shall have the opportunity to examine the matters touched upon by the question; or shall tell the jury that the law prevented the question from being asked.

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(**Plaintiff's Evidence**, *cont. from p. 13*) suffering from end-stage renal failure.

Porter and his wife sued Upjohn and Whitehall, and Porter's wife was substituted as primary plaintiff after Porter died in 1992. The defendants filed a motion for summary judgment, arguing that plaintiffs failed to establish that ibuprofen caused a serious disease leading to renal failure or that ibuprofen aggravated a preexisting condition leading to kidney failure.

Porter's treating physicians testified at deposition it was their opinion that ibuprofen caused his kidney failure. However, the district court held that "most experts stated that there can be no reasonable degree of medical certainty that ibuprofen caused [Porter's] acute renal failure."

Petri said that he and attorney Kenneth Chesebro of Cambridge, Massachusetts, are discussing whether to file an appeal. □

—Renée Cordes

Federal Rules Changes Effective December 1

Changes in the Federal Rules of Civil, Appellate, and Criminal Procedure went into effect December 1. Congress declined to overturn or amend the proposals or to extend the deadline before it adjourned but may take action in the new term. The proposals were approved by the U.S. Supreme Court after being approved by the full Judicial Conference last September.

In the meantime, the rules may radically change the way discovery is conducted. (*Debate Continues Over Federal Rules Changes*, TRIAL, July 1993, at 15.) Civil Rule 26(a), for example, requires litigants to automatically disclose during discovery specified categories of information such as the name, address, and telephone number of each person likely to have discoverable information relevant to disputed facts alleged in the pleadings. Another dramatic change in the rules requires litigants to agree or get court approval before taking more than 10 depositions.

Changes in the Rules of Criminal Procedure include allowing warrants to be sent by facsimile and giving defendants and the government an opportunity to comment on the propriety of ordering a mistrial. New appellate procedure rules eliminate the requirement of a statement of the case in oral argument and require that a discussion of the standard of review for each issue be included in the appellant's brief. □

Obese Gain Protection Under Disabilities Law

Job discrimination against obese people is illegal, a federal appeals court has ruled recently in a precedent-setting decision. (*Cook v. Rhode Island*, No. 93-1093, 1993 WL 470697 (1st Cir. Nov. 22, 1993).)

The decision, the first of its kind by a federal appeals court, "closes the door on an obesity exception to disability discrimination law," said attorney Lynette Labinger of Providence, Rhode Island. "This decision makes it clear that we look at all disabilities the same way and apply the same analysis without any differentiation," she added.

Labinger represented Bonnie Cook in a suit against the Rhode Island Department of Mental Health, Retardation and Hospitals. Citing Cook's morbid obesity—she weighed 300 pounds at the time—the department had refused to hire her as an attendant at a school for mentally retarded people.

A jury ruled in favor of Cook, and the state appealed the decision. The appeals court rejected the state's argument that Cook wasn't protected under the federal disabilities law because she could reduce her weight. (Wade Lambert, *U.S. Court Ruling Bars Hiring Bias Against the Obese*, Wall St. J., Nov. 23, 1993, at B12.) The court said that voluntariness is not a criterion for determining whether a person is disabled or perceived to be disabled. Voluntariness only comes into play if the condition can be easily controlled by the person, it added.

"This decision will send a very positive message to people in Bonnie Cook's position across the country that they can fight this type of discrimination," said Steven Brown, executive director of the American Civil Liberties Union affiliate in Rhode Island, which handled the case. An amicus brief in Cook's behalf, filed by the U.S. Equal Employment Opportunity Commission, declared that obese people are indeed protected under the federal disabilities law.

Mark Kosieradzki, an attorney in Minneapolis with a background in facial-disfigurement cases, applauded the ruling. "I'm happy to see the courts finally facing the right direction" with regard to people's employability, he said. "People should just start looking at people for who they are." □

—Renée Cordes

Study Debunks Myths About Juror Notes and Questions

Most hopes and fears about the consequences of allowing jurors to take notes or ask questions during trial are unfounded, according to a recent study. Researchers found that taking notes and asking questions did not help jurors better recall facts or improve their satisfaction with their decisions. Nor did these practices cause the jury to favor one side over the other. However, asking questions did help jurors better understand facts and issues.

The study—conducted by Larry Heuer, a social psychologist at Barnard College in New York City, and Steven Penrod of the University of Minnesota Law School—examined 160 trials in 33 states. Heuer and Penrod surveyed judges, lawyers, and jurors involved in the trials.

Jurors were allowed to take notes in 103 trials, and 87 percent reported doing so. Among the study's findings:

- Juror notes did not serve as a memory aid. When asked how accurately evidence was recalled and how much jurors relied on each other to remember evidence, jurors who took notes gave roughly the same answers as those who did not.
- Notetaking did not increase jurors' satisfaction with the trial or verdict. Satisfaction rates were similar for those who did and did not take notes.
- Juror notetaking did not produce a distorted view of the case. The researchers drew this conclusion because "neither the juries' decisions nor the rate of judge-jury agreement [about verdicts] was affected" by notetaking.

Jurors were allowed to ask questions in 71 trials. Some key findings:

• Asking questions improved jurors' understanding of facts and issues. "Jurors report feeling significantly better informed in those trials in which juror questions were allowed," the study said.

• Asking questions did not clearly help jurors get to the truth. Jurors who asked questions gave them only a "modest endorsement" as helpers in finding the truth, and judges and lawyers were even less likely to believe the questions were useful.

• Juror questions did not bias the jury. Asking questions did not affect the jurors' decisions, and judges and lawyers generally agreed that the questions did not cause prejudice to the lawyers' clients.

Heuer said the findings should encourage judges to allow juror notetaking and questions more often. Their potential advantages are hard to measure because jury deliberations cannot be observed, he said, but the study provides "quite good evidence that the disadvantages just aren't happening." He added that the lawyers and judges involved in the study expected to encounter problems, but "they are more in favor of these procedures after they see them in use."

Juror Notetaking and Question Asking During Trials: A National Field Experiment is to be published this spring in the journal *Law & Human Behavior.* □

—Julie Gannon Shoop

High Court Asked to Bar Gender-Based Jury Strikes

A case that began as a garden-variety paternity dispute in Alabama has taken on constitutional proportions and drawn the attention of the U.S. Supreme Court to the issue of sex discrimination in jury selection. In oral arguments on November 2, the justices considered whether lawyers should be prohibited from using stereotypes about men and women as a basis for striking potential jurors. (*J.E.B. v. State* ex rel. *T.B.*, 606 So. 2d 156 (Ala. Civ. App. 1992), *cert. granted*, 113 S. Ct. 2330 (1993) (No. 92-1239).)

The appeal was brought by James Bowman, the defendant in the paternity case. He claimed that the state, which filed the suit on behalf of the child's mother, deliberately removed men from the jury pool because they probably would have sided with Bowman. The 12-woman jury determined that he was the child's father, and a judge ordered him to pay child support.

"Men and women have the same ability to be unbiased," John Porter III, Bowman's lawyer, told the Supreme Court in November. He argued that the exclusion of men violated Bowman's equal-protection rights and those of the excluded male jurors. Porter urged the Court to extend *Batson v. Kentucky*, a decision that barred race-based peremptory challenges, to strikes based on gender. (476 U.S. 79 (1986).)

Alabama Assistant Attorney General Lois Brasfield argued that extending *Batson* beyond race would cause "a great

News & Trends

Juror Questions During Trial? The Verdict Isn't In

With so much litigation involving complex technology, obscure terminology, and sophisticated economic factors, the judicial system is under pressure to find ways to ensure jury comprehension. Consequently, new options are being considered, which include allowing jurors to ask written and oral questions. While these practices have adherents, some trial lawyers express reservations.

The State Justice Institute, based in Alexandria, Virginia, is funding a nationwide scientific study by Steven Penrod and Larry Heuer to measure the effects of permitting jurors to take notes and submit written questions directed to witnesses.

Michael Gibbs

Since autumn last year, Scott Wright, Chief Judge of the U.S. District Court for the Western District of Missouri, in Kansas City, has been allowing oral juror questions in all civil and criminal cases before him. After a witness has been examined and cross-examined, he gives jurors a chance to address questions to him. If they are proper, Judge Wright directs the witness to answer.

"It's absolutely great; I don't know why I didn't try it before. Lawyers and judges tend to underestimate jurors. They often ask better questions than the lawyers are asking. Of course, the judge has to be on his toes," he said. He prefers oral to written questions, which he finds cumbersome and often unclear. "Many jurors don't express themselves well on paper, but they can verbalize a question just fine."

Another innovator, U.S. District Chief Judge John Grady of the Northern District of Illinois, in Chicago, recently permitted a juror, Joseph Helsing, to act as spokesman for the other jurors. Helsing questioned witnesses orally at will throughout a complex 10-week civil trial concerning custom-designed computer software. Judge Grady first allowed oral questions in a comparably complex patent case three years ago, but the occasion to try the method again had not arisen in the interim.

Helsing, an Air Force colonel, is said to have asked pertinent questions. Neither lawyer objected to a juror question during the trial.

"He just raised his hand and said, 'I have a question,' and I said, 'Go ahead,'" Judge Grady recalled. "He seemed to think it was perfectly natural." This may be due in part to Helsing's military background; courts martial have required note-taking and permitted written juror questions, submitted after cross-examination, for at least a decade. However, oral questions are not allowed.

In Grady's experience, questions like "What does that term mean?" and "What document are you referring to? I cannot find it in my notebook" form the bulk of juror inquiries.

"Such questions have convinced me that the degree of communication that we assume is greatly in excess of what is actually taking place," said Grady. In his opinion, delaying needed clarification until the end of what often proved to be several days of arcane expert testimony would have been counterproductive, since few of the jurors understood the computer jargon being used in the courtroom.

Judge Grady's experiment has generated controversy, but practices like note-taking and submitting written questions are becoming more common, according to law professor Steven Penrod. However, they are not widespread, said Penrod, a lawyer and psychologist who began a new appointment to teach law at the University of Minnesota in Minneapolis this fall.

In 1987 and 1988 Penrod supervised a seminal study in this field for the State Judicial Council of Wisconsin, which was looking for ways to improve jury communications. The study was reported in the September 1988 issue of *Law and Human Behavior*, the quarterly journal of the American Psychology–Law Society, a division of the American Psychological Association. It covered juror note-taking questions, preliminary instructions for orientation purposes, and written final instructions. Some 20 judges participated, and 6 trials were studied.

Further Questions

Working with both judges and the lawyers from the council, Penrod formulated a procedure for introducing juror questions during trials (with the consent of both plaintiff and defendant).

Once a witness had testified and been cross-examined, the judge would ask jurors if they had any further questions. Jurors could jot down their queries without identifying themselves or consulting other jurors, and the batch would be given to the judge. After screening them for admissibility, the judge would give the remaining questions to the lawyers in conference; any question properly objected to would be disallowed.

The rest would be read to the witness by the judge. The lawyers could ask follow-up questions.

Pros and Cons

According to Penrod's colleague Larry Heuer, now teaching psychology at Northwestern University, Penrod and Heuer projected four possible advantages of introducing juror questions at trial. The questions might alleviate juror doubts about their verdicts, expose important issues neglected or submerged by the lawyers, improve juror satisfaction with the trial process, and provide useful feedback to the lawyers on how well they were making their points.

Penrod and Heuer identified several possible problem areas. Juror questions might get out of hand, slowing the trial or sending it off on an irrelevant tangent. Jurors might upset lawyer strategies by asking untoward questions at a critical time. They might not understand what type of questions are appropriate, get embarrassed or angry if their own questions were not asked, or make inappropriate inferences regarding the omission. The lawyers might be reluctant to object to jurors' questions, fearing to offend them.

Most of these concerns are groundless, they concluded. "Jurors seldom ask the penetrating question that reveals the smoking gun," said Penrod. "They aren't trained to do that. Lawyers are, and they're quite good at it. Don't forget, in every case where some juror might conceivably ask an explosive question, there is a highly trained opposition lawyer who is getting paid to find out and ask that very question. It's not very likely that an untrained juror will upset somebody's applecart."

Clearing the Air

Most juror questions concerned clarification of technical terms or simple matters of fact. About 80 percent of them went through, the researchers found. When questions were not appropriate, the participating judges explained why, so the jurors did not take it personally when their questions were excluded. The feedback actually helped the lawyers stay on course.

In most states the law is silent on the subject of juror notes and questions. But the idea has caught on in at least

ne state. Note-taking is now the law Illinois, and, according to David ent, staff director of the American Bar ssociation Litigation Section, the Illiois legislature is considering the impact f written questions.

The State Justice Institute has made substantial grant, administered by the hicago-based American Judicature Soiety, for Penrod and Heuer to conduct n expanded and fine-tuned study of uror note-taking and written questions. bout 100 judges have joined the naonwide project, and up to 400 more e sought, including some to act as a ontrol group.

ther Trials

Illinois circuit Judge Warren Wolfson eard about the Wisconsin study and ecided to allow written juror questions n appropriate cases. He has since tried bout a dozen cases in Cook County, alf of them civil and half criminal, sing this method.

By and large, he says, the lawyers find he questions neutral to positive, though he loser occasionally feels they must ave helped the opponent. "If a lawer's case is weak, of course it will show p in the questions. But the questions hemselves don't weaken or derail it."

The jurors reap most of the benefits f the process. "It brings the jurors ore into the trial; they listen more arefully, and comprehend the issues etter," said Wolfson. Judge Wright greed. "I haven't had a sleeping juror, r even a dozing juror, since I started his. It keeps the judge awake too."

So far, Wolfson has only opened up uror questions when the lawyers conent, but he thinks it is so useful to the ry and the public interest that he is inking about requiring it in his courtoom in appropriate cases.

udos and Caveats

Trial lawyer Philip Corboy of Chicago, participant in one such trial before olfson, liked the procedure. "It tells e something, just as juror note-taking lls me something. There is no reason fear it; it is an added resource, helping e lawyer decide on tactics and strat-y," he said.

However, he disliked Judge Grady's ethod of allowing jurors to question itnesses directly throughout the trial,

because he sees no way to control such questions and keep them within bounds.

"It could be dangerous, a harmful bastardization of the judicial process. The questions could be off the wall. Jurors don't know what makes a question relevant. They could go off on a tangent that would be distracting and mischievous. The lawyer knows what he's doing; why make an end run around him?" he asked.

Similar reservations were expressed by Leonard Ring of Chicago. "I would reserve judgment on oral questions until the procedure has been studied more," said Ring, a past ATLA president. "There is a risk that one juror would ask all the questions and gain prominence. The juror asking a question aloud would tend to reveal which way he's leaning. And without the judge and the lawyer screening the questions, the juror might get interested in something that was interesting but not relevant to the legal issues at hand."

According to Daniel Margolis, of Washington, D.C., head of the ABA Litigation Section committee on jury comprehension, allowing jurors to submit written questions generates some cautious interest among lawyers and judges. "I would favor allowing written questions," said Ring. "It provides lawyers the opportunity to make sure they are getting their points across. Since no one would know who asked a particular question, the jurors wouldn't be inhibited from going after answers to the things that are bothering them. Lawyers sometimes get too close to a case, and they don't ask the questions the jurors want answered."

Interpolated questions are generally seen as highly problematic, especially in criminal trials, said Margolis.

"Suppose a juror asks, 'How often have you been convicted for this before?' It's the sort of thing that occurs to the layperson, and once it has been said it can't be unsaid." Judges and lawyers do not want to open the door to mistrials due to innocent but improper and prejudicial juror questions. Besides, he noted, "As a trial lawyer, I don't even like it when the judge asks my witness questions; I'm always sure he's going to spoil my cross-examination."

Judge Wright and Judge Grady think that such concerns are unfounded.

cases where a juror blurts out a potentially prejudicial question—"Is this covered by insurance?" "How often have you done this before?"—the question was obviously on his mind, and it is just as well to bring it out in the open. This gives the judge a chance to admonish the jury about what may and may not be considered, which will clear the air, they said.

"This is the wave of the future," said Judge Grady. "Fifteen years ago, I was one of the first judges to permit jurors to take notes, and you had the same kind of controversy about it that you hear now about jurors' questions, but these days no one worries about notes. I expect that in 15 years there will be seminars for trial lawyers on how to get the jurors to ask the questions you want them to ask." ■

—Georgia Sargeant

First New-Tech Plastic Explosives Detector Delivered to FAA

The Federal Aviation Administration took delivery on the first of six 10-ton $1.1 million Thermal Neutron Analysis (TNA) machines at New York's Kennedy Airport in mid-August.

At the same time, Secretary of Transportation Samuel Skinner issued a proposed new rule that would require automated explosive detection systems for screening checked luggage on international flights at airports here and abroad.

The development of these devices was started in 1985. It received impetus from last year's Lockerbie air disaster involving Pan Am Flight 103, where 270 people died. The in-flight explosion is believed to have been caused by plastic explosives hidden in a transisitor radio shell in a passenger's checked bag. Until now, practical considerations have made detection virtually impossible.

Secretary Skinner said that while the proposed FAA rule does not specify a particular type of explosion detection system technology, the TNA device has been "shown to have the highest degree of explosive detection currently possible for detecting known civilian and military explosives manufactured here and abroad."

Any system used by the airlines would have to be approved by the FAA Ad-

LEGAL NEWS BRIEFS

CALIFORNIA

Microchip Landmark

LOS ANGELES — Last February's landmark ruling from federal court here that copyrights cover operating codes imbedded in the microchips of personal computers will stand under a settlement reached by NEC Corp. and Intel Corp. (NLJ, Feb. 2.)

The ruling cut both ways: While finding Intel's microcode was protected, the court said NEC did not copy from Intel. And NEC's attorneys scored big with the "clean-room defense," showing how a rival can legally develop a nearly identical product by forcing its engineers to work in intellectual isolation.

A month later, Intel sued NEC's attorneys — Santa Clara's Skjerven, Morrill, MacPherson, Franklin & Friel — alleging misappropriation of trade secrets in another case, a move Skjerven Morrill dismissed as retaliation.

The Dec. 4 joint settlement announcement gave few details, and attorneys said one of the terms is that they not comment. According to Skjerven Morrill partner Anthony de Alcuaz, the pact does not change the status of the suit against his firm.

COLORADO

A Hot Sale

DENVER — Pueblo police officers, who set up a stolen-property sale sting, obtained a search warrant and then entered a suspect's home without knocking, made an illegal forced entry, the *state* Supreme Court has ruled in a 5-2 decision. The court affirmed a lower court order suppressing evidence on the grounds that the officers failed to comply with the requirements of the law.

[redacted]

He's Got the Win

WASHINGTON — Rock star Prince won a legal battle Dec. 4 when the U.S. Supreme Court refused to revive a copyright-infringement lawsuit over his hit song "U Got The Look." The court, without comment, let stand decisions dismissing claims by Prince's half-sister, Lorna Nelson of Minneapolis, that his song's lyrics are too similar to an unpublished song she wrote. *Nelson v. PRN Productions*, 89-725.

FLORIDA

Policeman Is Convicted

MIAMI — A jury here has found a Hispanic police officer guilty of manslaughter in the deaths of two black men that led to three days of inner-city rioting.

Officer William Lozano was charged with firing unnecessarily and killing a motorcyclist and his passenger. Announcement of the verdict was withheld for two hours as police, social workers and community relations officials fanned out through the city's black neighborhoods, fearful that an acquittal would spark renewed violence. (NLJ, Nov. 27.)

ILLINOIS

Cultural Affairs

CHICAGO — A "local legal culture" that allows too many continuances is to blame for the backlog of felony cases in the Cook County criminal justice system, according to a five-month study of 10,000 cases conducted by the U.S. Department of Justice and American University. The study reported almost 87,000 continuances among the 10,000 cases, 22 percent of which were still pending more than a year after arraignment.

A separate study, conducted by the Criminal Justice Project, agreed that the legal criminal justice system is in disarray. This study found that the backlog of felony cases grew by 75 percent between 1980 and 1987, and it joined previous calls for better screening of drug cases to control the population at the Cook County Jail, which is paying a fine of $1,000 a day because of overcrowding. "There is absolutely no coordination of the criminal justice agencies that serve Cook County," says Jerold S. Solovy, partner in Chicago's Jenner & Block and chairman of the project, which made 21 recommendations in the 189-page report.

MINNESOTA

Firm Criticized

MINNEAPOLIS — A resolution signed by eight of the City Council's 13 members calls for cutting off future work for O'Connor & Hannan unless it stops representing El Salvador President Alfredo Cristiani. Since the resolution has the support of a majority of

Bigger Is Better?

LOS ANGELES — Those who want to retain the 12-member jury system have new ammunition, thanks to a two-year study by the National Center for State Courts.

The study, funded by the California Legislature, found that eight-person juries saved little time or money — on average, less than a half-hour and less than $2,000 — but excluded blacks and Hispanics. "The smaller the jury, the greater the chance minorities will not be represented," says the report by researchers G. Thomas Munsterman, Janice T. Munsterman and Steven D. Penrod. One possible explanation is that the smaller panel magnifies the effect of peremptory challenges while making it harder for a judge or opposing counsel to discern a pattern to exclusions.

Eight- and 12-person juries showed little difference in their willingness to rule for one side over the other. But for a reason the researchers could not explain, the smaller juries awarded more than twice as much to victorious plaintiffs.

The voluntary experiment ran in four municipal court districts in Los Angeles County. It was made possible when voters changed the state constitution in 1980 to allow smaller juries — at the urging of conservative and business interests, and over the objections of the American Civil Liberties Union and the plaintiff's bar.

— *Gail Diane Cox*

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CASE

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ALBERT R. MATHENY received his Ph.D. in Political Science from the University of Minnesota and is an Assistant Professor in the Department of Political Science at the University of Florida. He is currently principal investigator on a NILECJ grant for research on the choice between adversary and negotiative modes of disposition in the criminal process. He is also beginning research on stratification in the bar and its connection to reform in state judicial processes.

THE SLIPPERY SLOPE

Jury Size and Jury Verdict Requirements—Legal and Social Science Approaches

BERNARD GROFMAN

University of California, Irvine

We review six recent U.S. Supreme Court cases dealing with the constitutionality of decision-making by juries with fewer than twelve members or operating under verdict requirements less stringent than unanimity. For the issues raised in each of these cases, we contrast the views of Supreme Court justices with data drawn from social science research and from statistical models of group decision processes.

REVIEW OF RECENT SUPREME COURT CASES ON JURY SIZE AND JURY VERDICT REQUIREMENTS

In the past decade there have been six Supreme Court cases which have dealt with the constitutionality of jury decisions reached by juries with fewer than twelve members and/or by juries permitting less than unanimous verdicts. In the first of these cases, Williams v. Florida (1970: 102), the Court held that

> the fact that the jury at Common Law was composed of precisely 12 is a *historical accident,* unnecessary to effect the purposes of the jury system and wholly without significance 'except to mystics' [italics added].

AUTHOR'S NOTE: *This research was partially supported by NSF Grant SOC 77-24702, Law and Social Sciences Progam. An earlier version of this article was delivered as a paper at a graduate colloquium of the Department of Political Science, State University of New York at Stony Brook in September 1979. I would like to acknowledge the assistance of my secretary, Sue Pursche, and the Word Processing Center of the School of Social Sciences, University of California, Irvine, in translating my handwritten scribbles into finished copy.*

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In that case, in a seven-to-one decision (with Justice Marshall the lone dissenter) the Court held that six-member juries were constitutional in noncapital trials in state courts. In addition to its rejection of any historical requirement for twelve-member juries, the decision rested largely on the assertion (Williams v. Florida, 1970: 100) that

> the essential feature of a jury obviously lies in the interposition between the accused and his accuser of the *commonsense judgment* of a group of laymen, and in the community participation and shared responsibility that results from the group's determination of guilt or innocence. *The performance of this role is not a function of the particular number of the body that makes up the jury.* [italics added].

The court did, however, also assert (Williams v. Florida, 1970: 101) that "what few experiments have occurred—usually in the civil area—indicate that *there is no discernible difference* between the results reached by the different-sized juries" (italics added), i.e., six vs. twelve.

In the next two cases, which were concurrently considered by the Court—Johnson v. Louisiana (1972) and Apodaca v. Oregon (1972)—the Court upheld the constitutionality of a nine to three verdict in a Louisiana felony trial involving a mandatory sentence of hard labor upon conviction and a ten to two verdict in a noncapital criminal trial in Oregon. Both these cases were decided by a five to four margin, with Justice White (as in Williams) delivering the opinion of the Court, and Justice Marshall now joined in dissent by Justices Brennan, Douglas, and Stewart. The dissenting justices (in a total of four separate but partly shared opinions) argued that a unanimous jury was embedded in legal history as a constitutional standard in criminal cases, and that it was basic to the accusational system and necessary to properly effectuate the fundamental constitutional standard of guilt beyond a reasonable doubt. The Court majority repeated its assertion in Williams that "the essential feature of a jury obviously lies in the interposition between the accused and the accuser of the commonsense judgment of a group of laymen" and

then went on to claim (Apodaca v. Oregon, 1972: 410-411) that

> a requirement of unanimity . . . does not materially contribute to the exercise of this commonsense judgment. As we said in *Williams,* a jury will come to such a judgment as long as it consists of a group of laymen representing a cross section of the community who have the duty and the opportunity to deliberate, free from outside attempts at intimidation, on the question of a defendant's guilt. In terms of this function, we see no difference between jurors required to act unanimously and those permitted to convict or acquit by votes of 10 to two or 11 to one.

Earlier (Williams v. Florida, 1970: 361-362) the Court majority stated that

> we have no grounds for believing that majority jurors, aware of their responsibility and power over the liberty of the defendent would simply refuse to listen to arguments presented to them in favor of acquittal, terminate discussion, and render a verdict. . . . Appellant offers no evidence that majority jurors simply ignore the reasonable doubts of their colleagues or otherwise act irresponsibly in casting their votes in favor of conviction.

In the next case, Colegrove v. Battin (1973), again decided by a five to four lineup but with Justice Powell now in the minority and Justice Brennan now in the majority, the Court ruled that six-member federal civil juries met the Seventh Amendment requirement of trial by jury. As in Williams, the argument rested primarily on a reading of the historical evidence that twelve-member juries were not constitutionally mandated. The Court also made the quite striking claim (Colegrove v. Battins, 1973: n.15; italics added) that "four very recent studies have provided *convincing empirical evidence* of the Williams conclusion that 'there is no discernible difference'" in verdicts between six-member and twelve-member juries.

These court decisions met with a mixed reaction. While some judges hailed them (Bloom, 1973), most legal scholars condemned them as a threat to the integrity of the "guilt beyond a reasonable doubt" standard (Zeisel, 1971; New York Times, 1972), repudiated the accuracy of the historical arguments on

which they were based (Rosenblatt and Rosenblatt, 1973), strongly disputed the "no discernible difference" claim (Lempert, 1975), and criticized as methodologically flawed the social science studies which purportedly supported this claim (Zeisel and Diamond, 1974; Diamond, 1974; Saks, 1977). Nonetheless, these court decisions triggered a reduction in jury size or jury verdict requirements in a number of states (Delsner, 1975) and, for civil cases, in the federal courts as well (Sperlich, 1979: 201, n.43).

The fifth Supreme Court case involving jury decision-making was one in which the Court confronted the constitutionality of Georgia's five-member criminal juries, Ballew v. Georgia (1978). Justice Blackmun posed the issue in Ballew as follows:

> When the Court in Williams permitted the reduction in jury size . . . it expressly reserved ruling on the issue whether a number smaller than six passed constitutional scrutiny. . . . The Court refused to speculate when this so-called *'slippery slope'* would become too steep. We face, now, however, the two-fold question whether a further reduction in the size of the state criminal jury does make the grade too dangerous, that is, whether it inhibits the functioning of the jury to a significant degree, and, if so, whether any state interest counterbalances and justifies the disruption so as to preserve its constitutionality [Ballew v. Georgia, 1978: 230-231; italics added].

In Ballew, the court drew a line as to the minimum jury size constitutionally permitted by requiring juries in state court criminal trials to consist of at least six members. Georgia's fivemember jury was rejected as threatening Sixth and Fourteenth Amendment guarantees.[1] In Williams, the court had declined to judge what minimum number can still constitute a jury but asserted that "we do not doubt that six is above that minimum" (Williams v. Florida, 1970: 92, n.28).

Justice Blackmun announced the judgment of the Court, which was unanimous in rejecting five-member juries. However, there was little agreement on the court as to the reasons underpinning that judgment. There were four separate opinions in the case. Only Justice Stevens joined in the Blackmun opinion, whose line of reasoning was savagely attacked by Justice Powell (joined by

Justice Burger and Justice Rehnquist). Blackmun's opinion made extensive use of social science studies of verdict outcomes and of the nature of the deliberation process in mock juries, cited approvingly a statistical model of jury judgmental accuracy developed by two social scientists (Nagel and Neef, 1975), and reviewed other studies of small group decision processes as well. In his opinion in Ballew, Blackmun asserted that smaller juries have been shown to be less representative, less reliable, and less accurate than larger juries. One leading scholar has called Blackmun's opinion in Ballew the most extensive use ever made of social science by the court—one in which, for the first time, "social science moved out of the footnotes and into the body of the text" (Zeisel, 1978). Justices Powell, Rehnquist, and Burger, however, expressed "reservation as to the wisdom—as well as the necessity of Mr. Justice Blackmun's heavy *reliance on numerology* derived from statistical studies" (Ballew v. Georgia, 1978: 246, italics added). Powell's opinion in Ballew goes on to say that

> neither the validity nor the methodology employed by the studies cited was subject to the traditional testing mechanisms of the adversary process. The studies relied on merely represent *unexamined findings* of persons interested in the jury system [Ballew v. Georgia, 1978: 246, italics added].

The sixth and most recent court case, Burch v. Louisiana (1979), appears to have been written so as to be able to support the claim that it does not require either empirical social science data or statistical models for constitutional scholars, such as Supreme Court justices, to decide what jury verdict requirements violate constitutional guarantees of the right to trial by jury. In Burch, there was unanimity as to the principal holding that a five of six verdict for a state criminal trial was unconstitutional. The opinion of the court in Burch, written by Justice Rehnquist, cited no social science studies at all. It supported its conclusion as to the unconstitutionality of nonunanimous verdicts in six-member juries by recourse to two arguments. First, Justice Rehnquist pointed out that "of those states that utilize six-member juries in trials of nonpetty offenses, only two, including Louisiana, also allow nonunanimous verdicts" (Burch v. Louisiana, 1979: 1628).

Then Rehnquist went on to assert that "we think that this near-uniform judgment of the Nation provides a useful guide in delimiting the line between those jury practices that are constitutionally permissible and those that are not" (Burch v. Louisiana, 1979: 1628). Second, Rehnquist asserted that

> we think when a State has reduced the size of its juries to the minimum number of jurors permitted by the Constitution, the additional authorization of nonunanimous verdicts by such juries sufficiently threatens the constitutional principle that led to the establishment of the size threshold that any countervailing interest of the State should yield [Burch v. Louisiana, 1979: 1628].

Of course, if the first argument is accepted, then perhaps Johnson and Apodaca should have been decided differently, since nonunanimous verdicts in state felony trials were the exception rather that the rule when these cases were decided (Institute for Judical Administration, 1971a, 1971b). As to the second argument, it is simply unsupported assertion. Rehnquist provides no evidence that a five of six (83%) rule is more likely to threaten "constitutional principles" than the nine of twelve (75%) rule previously found to be constitutional in Johnson. It is interesting to compare Justice Rehnquist's standard of proof in Burch with Justice White's statement in Johnson (Johnson v. Louisiana, 1972: 362) that "before we alter our own longstanding perceptions about jury behavior and overturn considered legislative judgment that unanimity is not essential to reasoned jury verdicts, we must have some basis for doing so other than unsupported assumptions."

With Ballew, the court set the minimum jury size at six. With Burch, the court rejected nonunanimous verdicts for six-member juries. In principle, still open is the question of where the court will ultimately draw the line on nonunanimous verdicts. With nine of twelve verdicts permitted by Johnson, what about eight or twelve or even seven of twelve? There is little in Rehnquist's opinion in Burch or in White's opinion in Johnson or Apodaca to aid us.

Rehnquist's opinion in Burch cites a dictum in an earlier case (Duncan v. Louisiana, 1968: 161) about the process of drawing lines which "although essential, cannot be wholly satisfactory, for it requires attaching different consequences to events which, when they lie near the line, actually differ very little" (Duncan v. Louisiana, 1968: 161). Justice Powell said in Ballew that "a line has to be drawn somewhere" and of course, this is true. It does not follow, however, that the line has to be drawn arbitrarily and without good reason. As Justice Blackmun says in Ballew in justification for his heavy reliance on social science studies and analytic models of the jury decision process:

> We have considered them [these studies] carefully because they provide the only basis *besides judicial hunch,* for a decision about whether smaller and smaller juries will be able to fulfill the purpose and functions of the Sixth Amendment. Without an examination about how juries and small groups actually work, we would not understand the basis for the conclusion of Mr. Justice Powell that 'a line has to be drawn somewhere' [Ballew v. Georgia, 1978: n.10; italics added].

Having briefly reviewed recent Supreme Court decisions in the jury area, let us now turn to the data and models in the social science literature which bear on the issue of drawing the line between "permissible" and "impermissible" jury size/decision requirements. In doing so, we shall address both the question of how social science findings were actually used by the court and the question of how social science findings might (ideally) have been used by the court.

ASSESSING THE IMPACT OF CHANGES IN JURY SIZE AND/OR JURY VERDICT REQUIREMENTS

We shall review the social science literature on jury decision, focusing on modeling the implications of changes in jury decision rule and/or jury size for (a) verdict outcomes, (b) the nature of the

jury deliberation process, (c) jury representativeness, and (d) the achievement of substantive justice. For each of these issues, we shall compare social science findings with the assertions made by Supreme Court justices.

Verdict Outcomes

To model verdict outcomes as a function of jury size/verdict rule, we require (1) a population pool with some posited distribution of characteristics related to juror verdict preferences, (2) a sampling mechanism, and (3) a model of the process through which individual juror predeliberation verdict preferences are transformed into a final jury verdict.

The two most common models of underlying juror sampling characteristics are the one-parameter model, in which p is the probability that a randomly chosen juror can be expected to vote to convict (Walbert, 1971; Saks and Ostrom, 1975; Grofman, 1976); and the two-parameter model, in which p_{GG} is the probability that a randomly chosen juror will vote to convict a guilty defendant and p_{GI} is the probability that a randomly chosen jury will vote to convict an innocent defendant (Grofman, 1974, 1980c; Gelfand and Solomon, 1973, 1974, 1975, 1977).

Three approaches have commonly been taken to modeling the jury deliberation process. The simplest is to assume that the jury deliberation process has no effect and that jury outcomes can be treated as if perfectly predicted by juror predeliberation preferences (Saks and Ostrom, 1975). A second, somewhat more sophisticated view, is to assume that the de facto quorum rule and the de jure quorum rule need not coincide, but that both can be described as a K/N decision process—e.g., juries ostensibly requiring unanimity will reach unanimous accord once, say, eight of twelve are in agreement as to verdict (Gelfand and Solomon, 1973; Grofman, 1974, 1976). The third and most realistic approach is to assume that the jury deliberation process can be prepresented by a (N + 1) × 3 matrix whose cell matrices provide the likelihood that any given lineup of predeliberation preferences will eventuate in final verdicts of acquittal, conviction, or in a hung jury (Davis, 1973; Davis et al., 1975; Gelfand and Solomon, 1977; Grofman, 1980a).[2]

Space does not permit us to review these models in any further detail (see Penrod and Hastie, 1979; Grofman, 1980a). Suffice it to note that the most sophisticated modeling efforts now available predict aggregate conviction differences between twelve-member and six-member juries of only one to three percentage points (Gelfand and Solomon, 1977; Grofman, 1980a);[3] and for juries of a given size, predict little impact of reductions in jury unanimity requirements as long as at least a two-thirds majority is required (Grofman, 1976, 1979a, 1980b).

In the University of Chicago jury project's study of 225 criminal cases in Chicago and Brooklyn courts, 92% of the verdicts in the twelve-member juries accorded with the views of the initial majority, 5% of the juries remained hung, and in only 3% of the cases did the minority persuade the majority (Kalven and Zeisel, 1966: ch. 37). A reanalysis of the Kalven and Zeisel (1966) data showed (Grofman, 1980b) that even if the 225 cases examined by Kalven and Zeisel had been decided by simple majority, there would have been little difference in aggregate verdict outcomes. Under simple majority verdict, there would have been 65% convictions and 30% acquittals and (assuming no further revotes for juries split six to six) 4% hung juries compared to the 63% convictions, 32% acquittals, and 5% hung juries obtained under a unanimous verdict requirement. There does, however, appear to be some limited evidence (see, e.g., Nemeth, 1977) that minorities for acquittal are more resistant to majority persuasion than proconviction minorities.

Let us now turn to what various justices have had to say about the verdict consequences of changes in jury decision requirements and changes in jury size.

In Johnson (Johnson v. Louisiana, 1972: 391), Justice Douglas claimed that "the use of the nonunanimous jury stacks the truthdetermining process gainst the accused." Elsewhere (Grofman, 1980b), we have shown that the conclusion rests on a misreading of the data in Kalven and Zeisel (1966). When Douglas asserts (Johnson v. Louisiana, 1972: 389) that "initial

majorities normally prevail in the end but about a tenth of the time the rough and tumble of the jury room operates to *reverse completely* their preliminary perception of guilt or innocence," he is off by a factor of three. "A correct reading of the data in Kalven and Zeisel (1966) leads to the conclusion that verdict reversals occur not the nearly 10% of the time that Douglas claimed, but rather, roughly 3% of the time" (Grofman, 1980b, and see discussion above).

In Williams (Williams v. Florida, 1970: 101), Justice White asserted that lowering the sizes of juries from twelve to six (while preserving the unanimity requirement) would have no "discernible difference" on verdict outcomes, a view which he reasserted in Colegrove (Colegrove v. Battin, 1973: 159). We believe that Justice White was correct in this view only to the extent that (a) it is only aggregate percentages of convictions and acquittals which are ever discernible, not verdict differences in particular trials (see n.3); and (b) as previously noted, the expected differences in aggregate conviction rates that various scholars have predicted, using the most sophisticated models now available, are on the order of only a few percentage points. However, while we agree with Justice White's conclusion, we find the reasoning which led him to make it to have been erroneous on both occasions.

In Williams, Justice White cited six studies in support of his claim that what few "experiments have occurred" show that lowering the size of juries from twelve to six would have no "discernible difference" on verdict outcomes. However, as Saks trenchantly (and quite correctly) puts it, of the six "experiments"

> the first was a mere assertion with no evidence; the next three were casual observations of the verdicts rendered by smaller juries, two of those reports being of the same set of juries; the fifth was merely a report that a smaller jury had been used; and the sixth was a discussion of economic advantage, irrelevant to the question [Saks, 1977: 10].

In Colegrove, Justice White (Colegrove v. Battin, 1973: 150) asserted that since 1970 "much has been written about the

sixmember jury but nothing that persuades us to depart from the conclusion reached in Williams." He then goes on to assert that "four very recent studies have provided convincing empirical evidence of the correctness of the Williams conclusion" of no "discernible difference" (Colegrove v. Battin, 1973: 158-159, n. 13). These four studies have been reviewed and devastatingly critiqued by Zeisel and Diamond (1974) and Saks (1977: 37-49), and we shall not bother to repeat their lengthy criticisms here (see also Grofman, 1980b). Suffice it to state that the four studies were sufficiently marred by ceteris paribus problems or other methodological flaws as to be useless for proving anything one way or the other about probable verdict differences between six-member and twelve-member juries. Convincing empirical evidence they were not—a point fully acknowledged by Justice Blackmun in his opinion in Ballew (Ballew v. Georgia, 1978: n. 30).

Following Saks (1977: 86-87), Justice Blackmun in Ballew makes the claim that smaller juries are less consistent in their verdicts than larger ones. By this he means that if we imagined the same case tried repeatedly befor a number of different juries drawn from the same jury pool (as has been done in mock jury research, such as that of Saks), then the larger juries will reach agreement on the same verdict a higher proportion of time than will the smaller. In a study cited in the Blackmun opinion in Ballew, Saks (1977) finds, for example, in one study that the preponderant verdict was reached by 83% of twelve-member juries but by only 69% of the (unanimous) six-member juries. While one can construct hypothetical social decision schema for six-member and twelve-member juries for which the six-member juries will be *more* consistent than the twelve-member juries, based on the available empirical evidence on the actual social decision scheme likely to be operative in juries, we concur with Blackmun's judgment that the larger juries will be the more consistent.[4] However, with sufficiently large Ns, it is likely that the differences in the percentage of juries reaching the preponderant verdict between six-member and twelve-member juries will be considerably smaller than the fourteen percentage points found in the Saks (1977) study, which Blackmun cites.

Jury Deliberation

Justice White, discussing nonunanimous verdicts, asserted in Johnson (Johnson v. Louisiana, 1972: 361) that "we have no grounds for believing that majority jurors... would simply refuse to listen to arguments presented to them in favor of acquittal, terminate discussion and render a verdict." Rebutting this sanguine view, Justice Douglas, speaking for himself and two of the three other members of the minority in Johnson (Johnson v. Louisiana, 1972: 388), asserted that "as soon as the requisite majority is obtained further consideration is not required... even though the dissident jurors might, if given the chance, be able to convince the majority."

We have no grounds for believing either Justice White or Justice Douglas to have been correct.

The best available evidence for juries which do not require unanimous verdicts is that the presence of minority jurors after the necessary votes are identified

> causes continued deliberation and occasional further votes. *But what happens in the epilog interval has no effect on the outcome of the trial.* The minimum vote decision is as psychologically binding on the nonunanimous jury as the unanimous consensus is for a unanimous jury [Saks, 1977: 94; italics added; see also Nemeth, 1977).[5]

As for the relationship between jury size and jury deliberation, we have already noted that, according to Justice White, there were no "reason(s)" to think the requirement stated in Williams that "the number (of jurors) should . . . be large enough to promote group deliberation, free from outside attempts to intimidation" was "less likely to be achieved when the jury numbers six than when it numbers 12"—particularly if the requirement of unanimity is retained (Williams v. Florida, 1970: 100-101).[6] Of course, as noted previously, Justice White provides no indication as to what these reasons might be.

Taking a quite different view, in Ballew, Justice Blackmun asserts that "recent empirical data suggest that progressively

smaller juries are less likely to foster effective group deliberation," noting in particular that "as juries decrease in size . . . they are less likely to have members who remember each of the important pieces of evidence or argument" (Ballew v. Georgia, 1978: 232, and footnote citations therein). These conclusions seem not unreasonable ones, but rest too heavily on what is *very* limited empirical evidence (notably Saks, 1977). Furthermore, it is not clear why jury deliberations are relevant *except* insofar as they relate to jury fact-finding accuracy. In his discussion of jury deliberation, Blackmun does cite studies dealing with group accuracy and also with the issue of community representativeness. These topics we shall, however, discuss separately below.

Jury Representativeness

According to Justice White in Williams,

> While in theory the number of viewpoints represented on a randomly selected jury ought to increase as the size of the jury increases, *in practice the difference between the 12-man and the six-man jury in terms of the cross-section of the community represented seems likely to be negligible* [Williams v. Florida, 1970: 102, italics added].

As before, Justice White offers not one scintilla of evidence for his claim.

Justice Blackmun in Ballew relying on Lempert (1975)—who uses a straightforward binomial model to generate probability values—sets forth the following results:

> If a minority viewpoint is shared by 10% of the community, 28.2% of 12-member juries may be expected to have no minority representation, but 53.1% of six-member juries would have none. Thirty-four percent of 12-member panels could be expected to have two minority members while only 11% of six-member panels would have two. As the number diminishes below six even fewer panels would have one member with the minority viewpoint and still fewer would have two [Ballew v. Georgia, 1978: 237].

Differences which appeared negligible to Justice White's intuition appeared to Justice Blackmun to be quite substantial in light of Lempert's (1975) exact calculations, a conclusion which we share (see also Grofman, 1980a).

Jury Accuracy

Justice White, in Williams, asserts that "the reliability of the jury as a fact-finder hardly seems likely to be a function of its size" (Williams v. Florida, 1970: 100). Justice Blackmun in Ballew, citing several studies by social psychologists, takes a diametrically opposed point of view.

> The smaller the group, the less likely is it to overcome the biases of its members to obtain an accurate result. When individual and group decision making were compared, it was seen that groups permitted better decisions because prejudices of individuals were frequently counterbalanced, and objectivity resulted. Groups also exhibited increased motivation and self-criticism. All these advantages, except perhaps self-motivation tend to diminish with group size [Ballew v. Georgia, 1978: 233, footnotes deleted].

The issue of jury judgmental accuracy is an extremely complex one, and we shall do no more than touch upon it here (see Grofman, 1974, 1979a, 1980a, 1980c). The most sophisticated work on the judgmental accuracy of juries is that of Gelfand and Solomon (1973, 1974, 1975, 1977) who make use of the two-parameter model of the jury decision process and an adaptation of the Davis (1973) social decision scheme approach. Modeling data from Kalven and Zeisel (1966), they find (Gelfand and Solomon, 1977) that for twelve-member juries the probability of convicting an innocent person is .0221 and the probability of acquitting a guilty person is .0615. For six-member juries, these errors are increased by more than 50%—the error probabilities became .0325 and .1395 respectively. From these results, they conclude that twelve-member juries are superior to six-member juries. Gelfand and Solomon (1977) also look at judgmental accuracy of six-member and twelve-member juries. Here they find, quite counterintuitively, that majority verdict juries are *less* likely to make errors of either the Type I or the Type II kind than unanimous juries of the same size—although twelve-member juries are still more accurate than six-member ones for both sorts of errors. However, a six-member majority verdict jury is actually considerably *less* likely to convict an innocent defendant than is a twelve-member jury operating under unanimity (.006 v. .022). For a discussion of these findings and why they must be interpreted with considerable caution, see Penrod and Hastie (1979) and Grofman (1980a).

In Ballew, a model of jury judgmental accuracy proposed by Nagel and Neef (1975) which is conceptually quite similar to those offered by Gelfand and Solomon and by Grofman is given considerable prominence in Blackmun's opinion.[7]

> Statistical studies suggest that the risk of convicting an innocent person (Type I error) rises as the size of the jury diminishes. Because the risk of not convicting a guilty person (Type II error) increases with the size of the panel, an optimal size can be selected as a function of the interaction between the two risks. Nagel and Neef (1975) concluded that the optimal size, for the purpose of minimizing errors should vary with the importance attached to the two types of mistakes. After weighting Type I error as 10 times more significant than Type II, perhaps not an unreasonable assumption, they *concluded that the optimal jury size was between six and eight.* As the size diminished to five and below, the weighted sum of errors increased because of the enlarged risk of the conviction of innocent defendants [Ballew v. Georgia, 1978: 233; italics added, footnotes deleted].

While in general we have high praise for Blackmun's use of social science in his Ballew opinion, in summarizing the Nagel and Neef (1975) study he neglected the fact that it rested not just on one assumption (a tradeoff ratio of ten between Type I and Type II errors), but on several. The supposed optimality of juries between six and eight rests on an assumption made as to the number of defendants who are truly guilty. If that number is varied even slightly, a quite different optimal jury size is reached by Nagel and Neef (1975: 967-968), a fact which they, as

conscientious social scientists, are careful to point out. In particular, the Nagel and Neef (1975) study cannot be used as Blackmun used it, to justify rejecting five-member juries while accepting juries with six members.

CONCLUSIONS

We share the view of Peter Sperlich (1979: 208) that, in the jury cases, with the notable exception of Justice Blackmun's opinion in Ballew, "the Court's use of empirical evidence is uniformly dreadful." Even Justice Blackmun, however, is not without fault. Although his opinion is admirable in the range of social science research which it summarizes, and in its handling of complex issues and sophisticated statistical concepts, it is flawed "because . . . the Court's desire to preserve Williams required the misreading of texts and the skirting of inferences clearly demanded by the "date" (Sperlich, 1979: 224).

> First, the studies cited by Blackmun which deal with jury or mock jury decision making all refer exclusively to comparisons of *six*member and twelve-member juries. Thus, if these jury studies are to be used to conclude that smaller juries are constitutionally impermissible, it should be the case that it is *six*-member juries which are to be held impermissible. Second, the methodological studies which Blackmun approvingly cites (e.g., Zeisel and Diamond, 1974; Diamond, 1974) are ones which undermine totally the reliability of the studies cited in Colegrove to support the claim that six-member juries are not discernibly different from twelve-member juries. Hence, if those methodological antiques are to be taken seriously, as Blackmun apparently does, then the major empirical props underpinning the legitimacy of six-member juries have been knocked down. Third and finally, the single jury study which Blackmun cites to sustain the decision to draw the line at five but not at six does not justify such a conclusion [Grofman, 1980b; some renumbering].

With the considerable body of social science mock-jury data and modeling efforts now available to draw upon (much but not all of which was cited by Justice Blackmun in Ballew), a strong case for the superiority of twelve-member juries over six-member juries can be made. Such a case is unlikely to be made by the present court. Judging from the mishandling of social science evidence in Williams and Colegrove, the complete absence of social science evidence from Justice Rehnquist's opinion in Burch and Justice White's opinion in Johnson, Justices Powell, Burger, and Rehnquist's views on social science as numerology, and the fact that only Justice Stevens joined Justice Blackmun's opinion in Ballew, law and social science continue as at best uneasy bedfellows in the Burger Court as they have been in previous courts. At issue here is the practical incompatibility between social science standards of proof and judicial needs to reach reasonable decisions on specific cases.

NOTES

1. If asked to guess, we would predict that the court will hold the line at nine of twelve. Our reason for guessing so is that one justice in the Johnson majority, Justice Blackmun, is on record as expressing dislike for rules which do not require a "substantial majority of the jury to be convinced" (Johnson v. Louisiana, 1972: 366). Also, nine minus three is six, and White's dictum in *Williams* (and, the court's unanimous judgment in Ballew) suggests that six is the "magic" number. A nonunanimous verdict of say, eight to four leaves a preponderance of only four jurors on the majority side. Of course, given such reasoning, an eight of ten (80%) verdict requirement would be permitted even though a six of seven (86%) verdict requirement would not be.

2. Still, a fourth approach is to represent deliberation as a sequential process and to model it either in terms of simulation (Penrod and Hastie, 1979) or in terms of a stochastic process such as a Markov chain (Klevorick and Rothschild, 1979).

3. That some *particular* trials may be decided differently under juries of different sizes we have no doubt, although in comparing the proportion of such trials as less than 10% (see Grofman, 1980b; Lempert, 1975). On the other hand, we fully agree with Blackmun's observation in Ballew that "nationwide . . . small percentages will represent a large number of cases. And it is with respect to these cases that the jury trial might have its greatest value." In civil cases, smaller juries can be expected to have a higher variance in damage awards (Zeisel, 1971; Lempert, 1975).

4. Zeisel's (1971) analysis suggests that in criminal cases, the percentage of hung six-member juries will be half that for twelve-member juries, 2.4% vs. 5%.

5. In fairness to Justice Douglas, he points out that nonunanimous verdicts may also eliminate the circumstances under which a minority "while unable to persuade the majority to acquit, nonetheless could have convinced them to convict only on a lesser-included offense" (Johnson v. Louisiana, 1972: 188).

6. When juries are allowed to reach nonunanimous verdicts, the probability that the jurors will already have achieved sufficient consensus for a verdict before they begin deliberation is extremely high in smaller juries (see Grofman, 1976).

7. Neither the work of Gelfand and Solomon (1973, 1974, 1975, 1977) nor the very similiar work of Grofman (1974, 1980a, 1980c), has ever been referenced in opinions by the justices. Although the work of the latter was called to the court's attention in the defendent's oral argument in Burch v. Louisiana (1979), as noted above that was a case in which no social science studies were cited in the opinion. For a straightforward introduction to (and critique of) the Gelfand and Solomon, Grofman, and Nagel and Neef approaches to jury accuracy, see Penrod and Hastie (1979).

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JURY SIZE AND VERDICT CONSISTENCY: "A LINE HAS TO BE DRAWN SOMEWHERE"?

ROBERT T. ROPER*

This research tests the simulated impact of Supreme Court decisions which allow for smaller than twelve-member juries. It identifies variation in judicial output that results from competing operating structures of jury decision making. The research employed a quasi-experimental design to address important problems of simulation, such as structural and functional verisimilitude. The sample consisted of 110 juries composed of nearly 1000 jurors. The findings indicate that a jury's size affects its behavior. Larger juries hang more often than smaller ones do. The degree to which this avoids the committing of a Type I or Type II judicial error remains to be seen; nevertheless, the Court was wrong in assuming that there are no differences in the behavior of twelve- and six-member juries.

I. INTRODUCTION

The Supreme Court of the United States has frequently been called upon to assess the validity of changes in the size of juries. Although the Constitution does not specify jury size, over the years the number twelve has become widely accepted as the "proper" size. The Supreme Court first dealt with the issue of jury size in 1898, when it held in *Thompson* v. *Utah* that a twelve-member jury was constitutionally required in federal criminal cases. A year later, it held in *Capital Traction Co.* v. *Hof* (1899) that a twelve-member jury was also required in federal civil trials.[1] At the same time, in *Maxwell* v. *Dow* (1900), the Court rejected a challenge to the constitutionality of an eight-member jury in a state criminal case. The Court held that the Sixth Amendment's right to trial by jury was not applicable to the states by virtue of the Fourteenth Amendment, and in dictum it indicated its approval of the smaller jury in state cases.

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In 1968 the Court ruled, for the first time, that the Sixth Amendment's guarantee of a right to trial by jury *was* applicable to the states in all nonpetty criminal cases (*Duncan* v. *Louisiana*). This ruling opened the way for a direct challenge to smaller juries in state courts, and such a challenge occurred almost immediately: the case was *Williams* v. *Florida* (1970). At issue was a Florida statute permitting six-member juries to try all noncapital criminal cases. The Court found that although the size of a jury at common law was twelve, the Constitution should not be presumed to have incorporated that norm. If the framers had intended to stipulate the proper size of a jury, they would have done so. By a seven-to-one vote, the Court held that six-member juries are constitutional in noncapital state prosecutions. Writing for the majority, Justice White observed:

> [T]he fact that the jury at common law was composed of precisely 12 is a historical accident, unnecessary to effect the purposes of the jury system and wholly without significance "except to mystics."

A few, largely descriptive, studies of the effect of jury size (Wiehl, 1968; Tamm, 1962; Cronin, 1958; Note, 1958) were cited to support the Court's conclusion that ". . . there is no discernible difference between the results reached by the two different sized juries."

The *Williams* case stimulated a veritable industry of jury studies (Mills, 1973; Stoever, 1972; Kessler, 1973; Bermant and Coppock, 1973). This new research was in turn cited in a 1973 case, *Colgrove* v. *Battin*, which upheld the constitutionality of six-member juries in federal civil cases. By a five-to-four vote, the Supreme Court held that 12-member juries were not required by the Seventh Amendment's guarantee of trial by jury in civil cases.

Three states—Georgia, Louisiana, and Virginia—then enacted statutes reducing the size of some criminal court juries to five, and the constitutionality of five-member juries was challenged in *Ballew* v. *Georgia* (1978). The justices were unanimous in holding that juries of less than six persons in state criminal trials involving nonpetty offenses were unconstitutional. But there was no agreement on a common opinion. Only one justice, Stevens, joined Justice Blackmun in the main opinion; three justices—Powell, Burger, and Rehnquist—explicitly disdained Blackmun's "heavy reliance on numerology derived from statistical studies," noting that it had not been tested by the mechanism of the adversary process

and that "the studies relied on merely represent unexamined findings of persons interested in the jury system."

Blackmun's opinion was unusual in its synthesis of, and reliance upon, social science studies of jury size. It was, in fact, largely accurate in its portrayal of these studies, which showed important differences between six-and twelve-member juries. The opinion, and certainly the studies, thoroughly undermine the factual basis of the Court's judgments in *Williams* and *Colgrove*. But, perhaps because of the pull of ***stare decisis***, Blackmun concluded perversely that only juries of ***less than six*** members were invalid in state criminal cases.

> While we adhere to, and reaffirm our holdings in *Williams* v. *Florida*, . . . studies, most of which have been made since *Williams* was decided in 1970, lead us to conclude that the purpose and functioning of the jury in a criminal trial is seriously impaired, and to a constitutional degree, by a reduction in size to below six members (*Ballew*, 1978: 239).

Thus, research showing the difference between six- and twelve-member juries became the basis for supporting the constitutionality of six-member juries. No research was cited—none is available—which distinguished between five- and six-member juries. Powell's concurring opinion made no pretense at logic: ". . . the line between five- and six-member juries is difficult to justify, but a line has to be drawn somewhere if the substance of the jury trial is to be preserved." The research reported here makes a modest attempt to examine the accuracy of the Court's "line drawing" by studying the effect of a jury's size on its verdict, and on the process through which that verdict is reached.

II. MEASURING THE EFFECTS OF JURY SIZE

Jury research faces numerous practical and legal obstacles. Negative responses to efforts by the Chicago Jury Project to tape actual jury deliberations suggest that maintaining the confidentiality of jury deliberations is deeply ingrained in our culture. It is also protected by federal law[1] and Supreme Court doctrine.[2] With direct observation effectively foreclosed, jury research has proceeded along other paths. The "real world" approach,[3] mathematical modeling,[4] survey research,[5] and simulation constitute the main approaches and techniques.

[1] 18 USC § 1508. One phase of the Chicago Jury Project involved the taping of actual jury deliberations in Wichita, Kansas. This raised such an uproar about secrecy violations that a federal law prohibiting such direct observation was soon passed.

[2] See *Sinclair* v. *U.S.* (1929), where the Court frowned upon the attempts to discover what transpired during a jury's deliberations.

[3] See Beiser and Varrin (1975) and Mills (1973) as examples of jury research employing the "real world" approach.

Each has its advantages and limitations. The research reported in this article seeks to improve upon one of the most maligned yet potentially useful approaches—the quasi-experimental design of jury simulation.

The concept of simulation often evokes disquiet among social scientists, even though it is a commonly used technique in the biological sciences (Zeisel, 1973: 118). The basic drawback of simulation, according to some critics, is that some simulations lack realism and what Campbell and Stanley (1963) have called "external validity": the ability to generalize beyond the constraints of the limited simulation (Lempert, 1966). Is it ever really possible, they ask, to learn about the operation of a real institution or process merely by observing and measuring the behavior of a contrived substitute? There is much that is valid in this critique, but it is also true that problems inherent in operationalizing simulation techniques can be minimized with more rigorous simulation designs (Bermant *et al.*, 1974).

Jury simulations need to control three procedures especially vulnerable to bias: selection of a suitable case; maintenance of structural verisimilitude; and resolution of the reality critique through functional verisimilitude. Without adequate controls, data of questionable validity and reliability is likely to be produced.

Selection of a Suitable Case

Almost without exception, jury simulations have used cases in which the defendant's guilt or innocence was clear. But this is unrealistic. If a large majority of a project's participants initially evaluate the defendant as either guilty or innocent (Davis *et al.*, 1975), little variance can be found in group verdicts. Given the predominance of guilty pleas in criminal cases, and settlement rates in civil cases, jury trials are relatively rare events. They are not likely to occur where there is absolutely no doubt about the outcome. Simulations, to be meaningful, must utilize cases in which the defendant's guilt or innocence (or level of responsibility in a civil case) is at least uncertain. In this research, the search for a "balanced" verdict was fulfilled by using the transcript from a real murder trial in which the jury hung and its vote was divided among

[4] See Grofman (1979) and Penrod and Hastie (1979) for excellent reviews of mathematical modeling and jury decision making.

[5] See Reed (1965) as an example of survey jury research.

various alternative verdicts. A pretest supported these expectations.[6]

There is always a question of whether to use a criminal or civil case. Since another aspect of this research deals with the effects of possibly prejudicial pretrial publicity on juries, and since this phenomenon is predominantly associated with criminal cases, a criminal case was chosen.

Finally, many jury simulations fail to present sufficient evidence to allow variation in juror recall of evidence. Most real trials take longer than the conventional 20 to 30-minute simulation. In this study participants were given a 90-minute presentation—time enough, I thought, for them to become distracted and subsequently miss evidence as jurors do in real trials.

Maintenance of Structural Verisimilitude

Structural verisimilitude can be defined as the product of efforts to tailor "methods and means of subject selection more closely to the realities of courtroom practice" (Bermant *et al.*, 1974: 224). In some research this is referred to as experimental realism. Most jury simulations, however, employ (or coerce?) students as subjects. Coerced samples rarely behave naturally. Students may be less concerned with the effectiveness and outcome of the project than adults would be, and consequently they may take their role as "jurors" either too lightly or with undue seriousness of purpose. Students do not, for the most part, pay the taxes that support courts and juries, and they are probably more shielded than most adults are from the fear and effects of crime. They are less likely to become "involved" in the simulated trial, and they may be too casual in trying to interpret the evidence. If students are also impatient and inclined to end the experiment as soon as possible, the number of hung juries that results may be lower than might otherwise occur. Obviously, to the extent that any of these suppositions about student jurors is correct, the dynamics of a simulation experiment will be adversely affected.

A number of studies reveal that the behavioral orientation of students differs from that of the general population (Kessler, 1975; Simon and Mahan, 1971; Forston, 1972). Students tend to be more liberal in their political views, and their education may train them to be more attentive during presentations. This training may result in more efficient recall of evidence and better management of that evidence during deliberations.

[6] There were 77 guilty votes, 67 not guilty votes, and 39 jurors who refused to commit themselves.

Management of evidence may be critical to the outcome of deliberations, and the distribution of the values of the dependent variable may differ between students and real jurors. Any substantial fluctuation in the dependent variable between samples may mask or exaggerate the effect of the independent variable. For example, if there is no variance in the ability of students to reach a verdict or hang (e.g., if they always reached a verdict), then determining the impact of jury size is impossible.

For these reasons, and to offer contrast with most jury simulations, the participants in this project were drawn from the jury rolls in Fayette County, Kentucky. Lawyers, judges, individuals currently involved in police work, a member of Congress, doctors, and those who had served on a real jury during the preceding year were excluded from participation in the project, since all would have been excluded by statute from actual jury service.

Since there was an element of self-selection in choosing the participants in the project, the problem of generalizing from a possibly unrepresentative sample is clearly present. Jury research generally does not deal with this problem which is, of course, a common one in all survey research. Jurors who agreed to participate were compared to those who did not. Controlling for sex, race, age, and political party affiliations, no significant differences between the two groups were found.[7] The final sample totaled 928 jurors.

A second problem for jury simulations is to provide a setting which, as much as possible, duplicates the courtroom milieu. This simulation took place in a courtroom, contrary to common practice. For example, Bray (1976) found that only nine out of 45 studies took place in a real courtroom.

A related issue is the mode of presentation. The choice was between audiovisual presentation and a "live" (dramatically re-enacted) trial. Studies show few differences in the degree of motivation or interest of jurors, and in their retention of trial-related information, between a live trial and a videotaped presentation (Bermant and Jacoubovitch, 1975; Miller and Fontes, 1977). Needless to say, audiovisual techniques are more successful in simulating reality than either written summaries or use of audio equipment only (Juhnke *et al.*, 1979; Bermant *et al.*, 1975; Kessler, 1975;

[7] Research suggests that some demographics do affect juror behavior (e.g., Marston, 1924; Strodtbeck and Mann, 1956; James, 1959; Reed, 1965; Kalven and Zeisel, 1966; McGuire and Bermant, 1977).

Bermant *et al.*, 1974). A live trial is still preferable. But live trials have an additional and serious problem of exact presentation reproducibility. In this study, 110 performances would have been required. Consequently, audiovisual presentations were employed.

A third problem involves the decision-making process. Bray (1976) found that only half of the jury studies permitted actual juror deliberation. Clearly, asking a group of individuals to pass judgment on a simulated case without group interaction belies the notion of simulation. If one intends to study the jury as an institution, mock jurors must be allowed to act as a group. Indeed, simulating a deliberative setting and process is *the* most important element in maintaining structural verisimilitude (McGuire and Bermant, 1977; Myers and Kaplan, 1976; Hans and Doob, 1976; Izzett and Leginski, 1974; Davis *et al.*, 1975). Juries in this study were permitted to deliberate for an unlimited amount of time.

Functional Verisimilitude: A Need for Efficacious Decision Making

The most frequent complaint about jury simulations is that participants know their decision will not affect the defendant, and therefore has no consequence. If functional verisimilitude is to be maintained, a researcher must substitute a set of consequences for the one that is lost. In this case the substitute object of efficacy was the judicial system as a whole. Kentucky had recently adopted a judicial reform amendment to the State Constitution. Participants were informed that the results of this project would be forwarded to the Kentucky Administrative Office of the Courts for its consideration in implementing that amendment. They were also told that the U.S. Department of Justice would receive a copy of this research.

Several additional steps were taken to help insure conscientious participation. First, the taping of the sessions made participants more accountable for their behavior. Second, jurors were told their verdict would be compared to that of the real jury. This might have encouraged them to strive for what they thought was the "correct decision." Third, an initial vote was taken at the outset of the deliberations. As in real deliberations, a juror's self-esteem is at stake in defending a personal preference—a defense which may reduce the impact of the artificial setting. Finally, a juror's investment of time in the experiment is probably the most important factor

encouraging conscientious participation. The evidence suggests that our jurors did, in fact, undertake their task conscientiously.

III. OPERATIONALIZING JURY SIZE AND THE DIRECTION OF A VERDICT

Since the project was originally designed to test the simulated impact of *Williams* v. *Florida*, jurors were alternately assigned to either six- or twelve-member juries. However, some jurors never showed up, and numerous juries had odd numbers of jurors, ranging from four to twelve members. The Supreme Court's coincidental but judicious timing of the *Ballew* v. *Georgia* decision made it realistic to consider the behavior of juries with fewer than six members. Juries approximating twelve members were considered in the same category as twelve-member juries, partly for the sake of convenience and partly because the Court itself implied that there was little or no difference among sizes of six and above. The study proceeded, therefore, with 14 four- and five-member juries, 42 six-member juries, and 46 ten-, eleven- and twelve-member juries (of which 35 had twelve members).[8]

A jury's verdict can take three forms: guilty, not guilty, or hung. Juries that initially reported out deadlocked were sent back twice to try and reach a decision. However, if they returned a third time without a verdict, then a hung jury was declared.

Prior research suggests that variation in decision alternatives affects juror behavior (Vidmar, 1972). Therefore, jurors were provided an opportunity to vote "undecided," for two reasons. First, in a real setting jurors have a right to abstain. In fact, several jurors in the real case simulated by this project abstained on the final ballot. Second, we wanted to avoid situations where participants felt obligated to reach a verdict because they were participating in an experiment. Providing jurors with an "undecided" option may have mitigated an expectation that their duty was to reach a definitive verdict (i.e., guilty or not guilty)—a verdict that might not have been made in a realistic setting.

The first ballot was taken immediately prior to deliberation. Real juries often take a ballot before deliberating in order to

[8] Eight nine-member juries were excluded from the analysis because of the small sample size, as well as the fact that the Court never dealt with the issue of nine-member juries.

ascertain exactly where the group stands.[9] Deliberations were initiated if a definitive verdict was not reached on the first ballot. Future ballots were taken whenever the jury foreperson thought it appropriate.

IV. EFFECT OF JURY SIZE ON THE DIRECTION OF THE VERDICT

Controversy about the effect of a jury's size on the direction of its verdict is grounded less in theory than in speculation. Many objections to *Williams* v. *Florida* were premised on the assumption that smaller juries would convict at a greater rate. In *Williams* the Court rejected this thinking.[10]

> It might be suggested that the 12-man jury gives a defendant a greater advantage since he has more chance of finding a juror who will insist on acquittal and thus prevent conviction. But the advantage might just as easily belong to the State, which also needs only one juror out of twelve insisting on guilt to prevent acquittal.

In fact there is no *a priori* reason to suspect that the advantage or disadvantage of size will fall either to the state or to the defendant. That there is no inherent advantage or disadvantage of jury size is supported by the results reported in Table 1. In this study, there was no difference whatsoever between six- and twelve-member juries. It is true that other studies have found size to be associated with a propensity to convict. The most frequently cited are those employed by the Court to justify its *Colgrove* decision (Bermant and Coppock,

Table 1. Jury's Final Definitive Verdict by Jury Size

Jury's Final Definitive Verdict	Jury's Size Category	
	Six-Member	Twelve-Member
Guilty	41% (n.16)	41% (n.13)
Not Guilty	59% (n.23)	59% (n.19)

n. 71*
Corrected Chi. Sq. = 0.0 (1 df)
Chi. Sq. p. < 1.0
Kendall's Tau B = .004
* This Table includes only six- and twelve-member jury categories which had definitive verdicts.

[9] See Valenti and Downing (1975: 659 n. 1) for further substantiation of this point.

[10] This particular example must be restricted to juries working under a unanimous rule.

1973; Kessler, 1973; Mills, 1973; Stoever, 1972). However, these studies are plagued by methodological inadequacies already discussed at length in the literature and substantiated by other critiques (Penrod and Hastie, 1979; Gerbasi *et al.*, 1977; Saks, 1977; Lempert, 1975; Zeisel and Diamond, 1974; Diamond, 1974).

Most research to date relates jury size only to the final vote. Low correlation coefficients are usually interpreted to mean that size has no effect on jury behavior. But this procedure tells us nothing about the effect of size on the deliberations of the jury. This can only be done with reference to some measured predisposition at $Time_1$ when compared to the verdict at $Time_2$.

For example, let us assume that in a particular case there is no relationship between jury size and verdict (i.e., opinion at $Time_2$), based on correlation techniques. This would seem to support the assumptions of *Williams* and *Colgrove*. However, further analysis may reveal a strong relationship between jury size and its vote prior to deliberations (i.e., opinion at $Time_1$). If we want to identify causality between size and verdict we would now have evidence to suggest that something transpired between $Time_1$ (where a strong relationship existed) and $Time_2$ (where no relationship existed)—an event attributed to some difference between the two times. This difference would be the group dynamics associated with different group sizes. Therefore, an important potential effect of size would be masked if we only examined its impact on $Time_2$ (i.e., its verdict). Simulations provide us the opportunity to study "change" by looking at "panel data."

Given the goal of attributing change in opinion to jury size, Valenti and Downing (1975) provide us with an innovative perspective on the jury size debate. They argue that the critical factor is not the overall size of the jury which is probably related to the relative size of the minority, but rather the absolute size of the minority in each jury. Their argument is based on Asch's (1952) research which suggests it is the minority's *absolute* (i.e., a fixed number), not its *relative* size (i.e., a function of the jury's size) which reinforces its resistance to conforming. Once the size of the minority reaches a certain level (i.e., three), increasing its size by increasing the jury's size will not improve its resistance to majority pressures. It is merely "[p]roviding the minority member with an ally [that] greatly increase[s] his resistance to persuasion by the majority" (Valenti and Downing, 1975: 657). Other research also supports this opinion (Hare, 1976; Davis *et al.*, 1975; Rosenblatt and Rosenblatt, 1973; Zeisel, 1972; Thomas and Fink, 1963).

If we adopt Valenti and Downing's (1975) operational definition of a viable minority (i.e., at least two jurors), how can such a minority affect jury behavior? A viable minority can behave in a variety of ways: (1) it may refuse to conform to the majority's opinion; (2) it may convert the majority to its own point of view; or (3) it may eventually be persuaded to join the majority. This research examines the first two modes. Things left unexplained may be attributed to the third mode (i.e., a majority which prevailed on the final ballot).

The first of these behavior modes refers to a minority's ability to remain cohesive and resist pressures to conform. In a jury setting, such behavior would result in a hung jury.

Hypothesis 1: Juries with viable minorities hang more often than do juries without viable minorities.

However, in resisting conformity, viable minorities may yield a second outcome. The viable minority's refusal to conform stimulates discussion, and through this discussion the majority may eventually be persuaded of its "error." One indication of a minority's success in altering the majority's opinion is the finding of a defendant guilty or innocent as opposed to hanging. In short, how consistent is a jury's first ballot with its final verdict? Consistency is operationalized by comparing the majority vote prior to deliberations (i.e., the original verdict propensity) with the group's final verdict. Those whose original propensities matched their definitive verdicts were said to be consistent. Juries were labeled inconsistent where such matching failed to materialize. Since the jury is the level of analysis, there is no description of changes in the opinions of individual jurors. The article only deals with changes in the opinions of the group. This can be converted into the following hypothesis.

Hypothesis 2: Juries with viable minorities will have more inconsistencies between their original verdict propensities and their final verdicts than will juries who do not have viable minorities.

Table 2 documents Valenti and Downing's contention (1975: 657-658) that:

> [I]f having at least two supporters is the critical number that makes a minority viable, then it can be shown that viable minorities would occur more frequently in 12- than in 6-member juries. . . .

Hypotheses 1 and 2, and Valenti and Downing's contention, suggest how a jury's size affects both its propensity to hang and

Table 2. Size of the Jury's Minority by Jury Size

Size of Minority	Combined Jury Size Categories		
	Five-Member	Six-Member	Twelve-Member
No Minority	57% (n.8)	29% (n.12)	9% (n.4)
1 Member	29% (n.4)	38% (n.16)	11% (n.5)
2+ Members (Viable Minority)	14% (n.2)	33% (n.14)	80% (n.37)

n. 102*
Chi. Sq. = 32.03 (4 df)
Chi. Sq. p. < .00001
Gamma = .702

* This table excludes 8 nine-member juries.

consistency between its predisposition (i.e., the preliminary vote) and final verdict. Since viable minorities occur with greater frequency in larger juries, and since viable minorities probably produce more hung juries than nonviable minorities do (i.e., Hypothesis 1); then:

Hypothesis 3: Larger juries will hang significantly more often than smaller juries.

Finally, since viable minorities occur more frequently in larger juries, and since juries that have viable minorities will have more inconsistencies between their first ballot and their final verdicts than juries without viable minorities will (i.e., Hypothesis 2); then:

Hypothesis 4: The final verdicts of larger juries will differ from their first-ballot dispositions more often than is the case with smaller juries.

V. FINDINGS AND IMPLICATIONS

Table 3 presents data relevant to the behavior of viable minorities. Viable minorities (as defined by Ballot 1) are more likely to cause juries to hang than are nonviable minorities.[11] Therefore, it seems that viable minorities are more successful at resisting conformity pressures. Asch (1952), Zeisel (1972), and Valenti and Downing (1975) appear safe in their assumption that providing the dissenter with an ally increases the ability of the dissenter to resist pressures to conform.

[11] This result is further substantiated when the dependent variable is dichotomized into those juries that hung and those which reached a definitive verdict.

n. 68 Chi.Sq.p. .05
Chi.Sq. 5.65 (2 df) Cramer's V. .29

Table 3. Jury's Consistency Between Its Verdict and Predisposition, by Size of the Jury's Minority

Consistency Between Jury's Predisposition and Verdict	Size of Minority		
	0 No Minority	1 Nonviable	2+ Viable
Final Verdict Consistent with Predisposition	100% (n.14)	88% (n.15)	57% (n.21)
Final Verdict Inconsistent with Predisposition	0% (n.0)	0% (n.0)	16% (n.6)
Hung Jury	0% (n.0)	12% (n.2)	27% (n.10)

n. 68*
Chi. Sq. = 12.93 (4 df)
Chi Sq. p. < .01
Cramer's V. = .31

* Since this analysis deals only with those juries who had a definitive predisposition, the forty-two juries who did not have a predisposition that was definitive were excluded from the analysis.

However, it is much easier to resist the temptations of peer pressure than it is to convince a majority to abandon its position. Can intense minority preference facilitate the breakdown of majority consensus? Group deliberation is an important intervening variable. The discussion process allows for a complete examination of the issues—an examination which may bring to light issues that might change the majority's opinion.

The small chance of this occurrence affords special significance to the six cases, shown in Table 3, in which viable minorities prevailed over initial majorities. Only juries with viable minorities produced verdicts that were inconsistent with the group's predisposition.[12] This finding would probably have even greater import as the size of the minority increases; however, the number of viable minorities with more than two members in this data set is too small for further testing. In any event, juries with viable minorities tend to both hang and/or change the opinion of a majority more often than do juries without viable minorities. Since we have already demonstrated a strong correlation between jury size and the presence of a viable minority, the stage is now set for testing the syllogism's

[12] This finding maintains its legitimacy even when hung juries are excluded from the statistical analysis.

n. 56 Chi.Sq.p. .02
Chi.Sq. .02 Cramer's V. .36

final extension: do larger juries hang, and deviate from their predisposition, more often than smaller juries do?

Although Table 4 indicates that twelve-member juries hang with greater frequency than their smaller counterparts do, the small sample size (especially that of the unplanned-for, but tested, less-than-six-member juries) may account for the lack of statistical significance in this relationship.[13] If the 42 six- and twelve-member juries which had no definitive predispositions are included in the analysis, twelve-member juries hang significantly more often than do smaller juries.[14] This is primarily a function of the resistance ability of viable minorities. Table 4 further suggests that six-member juries show less consistency between their predisposition and verdict

Table 4. Jury's Consistency between Verdict and Predisposition by Size Category

Jury's Consistency Between Predisposition and Verdict	Jury's Size Category		
	Five-Member	Six-Member	Twelve-Member
Final Verdict Consistent With Predisposition	78% (n.7)	81% (n.17)	73% (n.24)
Final Verdict Inconsistent With Predisposition	0% (n.0)	14% (n.3)	3% (n.1)
Hung Jury	22% (n.2)	5% (n.1)	24% (n.8)

n. 63*
Chi. Sq. = 6.27 (4 df)
Chi. Sq. p. < .18
Cramer's V = .22

* Since this table only deals with six- and twelve-member juries which have definitive predispositions, 5 nine-member juries which had a predisposition and 42 other juries with no definitive predisposition were excluded from the analysis.

[13] If one looks at only the six and larger juries, the hypothesized relationship becomes more apparent.

n. 54 Chi.Sq.p. .07
Chi.Sq. 5.23 (2 df) Cramer's V. .31

[14]

n. 102 Chi.Sq.p. .03
Chi.Sq. 6.84 (2 df) Cramer's V. .26

[15] It is not significant even when hung juries are excluded from the statistical analysis.

n.52
Corrected Chi.Sq. .19 (1 df)
Phi .13

than do the larger ones. Although the relationship is not statistically significant,[15] the fact that it conflicts with the direction of Hypothesis 4 poses a real dilemma.

An explanation resides in the relationship between jury size and the presence of viable minorities. Since only juries with viable minorities had verdicts inconsistent with their predispositions (see Table 3), given the fact that 14 six-member juries had viable minorities (see Table 2), it is not surprising to find viable minorities with inconsistent opinions even in six-member juries.

In fact, we have an interesting phenomenon at work. Table 3 illustrates that almost all of the juries which either hung, or rendered verdicts at odds with their predispositions, had viable minorities. Therefore, most of the juries in Table 4 that either hung or rendered inconsistent verdicts also had viable minorities. What we need to examine is the behavior of viable minorities in groups of different sizes.

Table 5. Consistency between Verdict and Definitive Predisposition of Juries with Viable Minorities, by Jury's Size Category

Jury's Consistency between Predisposition and Verdict	Jury's Size Category	
	Six-Member	Twelve-Member
Final Verdict Consistent With Predisposition	40% (n.2)	95% (n.18)
Final Verdict Inconsistent With Predisposition	60% (n.3)	5% (n.1)

n.24*
Corrected Chi. Sq. = 5.05 (1 df)
Chi. Sq. p. < .02
Kendall's Tau B = −.60

* This Table 5 includes only those six- and twelve-member juries which had both viable minorities, and definitive final verdicts.

Although the sample of juries with viable minorities is relatively small, we do find a significant relationship worthy of comment. Viable minorities in six-member juries are more successful in converting the majority than are viable minorities in larger groups. The smaller the majority, the fewer the number of people that need to be converted. The smaller the jury, the easier it becomes to change the majority's opinion. This is not inconsistent with Hypothesis 3; the larger the jury, the larger the absolute size of the majority and the greater the

chances the conversion will not take place—subsequently the jury hangs.

If our judicial system is to be consistent and avoid both convictions in the presence of reasonable doubt, and the committing of either a Type I or Type II judicial error (i.e., conviction of an innocent person, or release of a guilty person), then the findings of this research have some modest policy implications. First, jury structures which promote resistance to majority persuasion are preferable to those which facilitate a quick and easy decision. Such resistance may not result in a reversal of the initial majority position, but it certainly encourages full discussion of the issues.

If we assume that hung juries are an indication of reasonable doubt, and accept some research findings which suggest that hung juries favor conviction significantly more often than acquittal (Flynn, 1977; Kalven and Zeisel, 1966), then policy makers who prefer to avoid a Type I rather than a Type II error should opt for the structure which produces more hung juries—for them the larger jury is the obvious answer. It may be preferable to release 100 guilty defendants rather than convict one innocent suspect, but we must also be cognizant of society's growing intolerance with the number of released "guilty" defendants. Thus, there is now increasing pressure to avoid Type II errors. This research takes neither position, but merely provides policy makers with a rationale for choosing between jury sizes.

Second, inconsistent behavior may assume different values depending on the environment (i.e., the size). In larger juries, inconsistent behavior may result from extended discussion, itself a function of the greater number of ideas produced by a larger number of people. Therefore, increased discussion and ideas may avoid judicial errors.

On the other hand, inconsistent behavior in smaller juries may result more from the smaller number of people who must be convinced than from increased discussion. In the environment of smaller groups, nothing indicates whether inconsistencies point toward a correct or incorrect decision. The changing of verdicts may be attributed to an authoritarian personality who finds it easier to gain control of a smaller group. All we can assume is that the stifling of discussion is not conducive to fact finding, a critical element in high-quality deliberations.

Since this research suggests that smaller juries have a greater propensity to be inconsistent (i.e., change their

opinions—changes more likely caused by factors other than those which would indicate high-quality deliberations) and that larger juries have a greater likelihood of hanging in preference to conviction, those policy makers preferring to avoid a Type I judicial error should clearly opt for the larger jury.

Generally speaking, there are some behavioral consequences when reverting to smaller juries—consequences which the Court later identified in *Ballew* (1978: 1035):

> [R]ecent empirical data suggest that progressively smaller juries are less likely to foster effective group deliberation. At some point, this decline leads to inaccurate fact finding and incorrect application of the common sense of the community to the facts. Generally, a positive correlation exists between group size and both the quality of the group performance and group productivity.

However, we need empirical research with tasks more comparative to that which juries perform than was cited in *Ballew*. The work of Saks (1977) provides a good starting point. Let us look at the effects of jury structure on such things as the accuracy of evidence recall and the quality of deliberations. If we can identify and operationalize some of these surrogate measures of "correctness," perhaps then we can correlate these measures with verdict consistency. After all, propensities to acquit or convict are relatively meaningless when compared to the goal of reaching a correct decision. We need to be more conscientious about "drawing the line" than simply suggesting it needs to be drawn *somewhere*.

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The Effects of Outlier Presence, Plaintiff Population Size, and Aggregation of Plaintiffs on Simulated Civil Jury Decisions*

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An experiment was performed to determine the effects of the size of the plaintiff population, the presence or absence of an outlier, defined as a plaintiff whose injuries were significantly more severe than other plaintiffs, and whether plaintiffs were tried individually or were aggregated in a group. Sixty-six person juries were assigned to one of eleven experimental conditions, listened to a 4-h toxic tort trial, and, after deliberating, delivered verdicts on liability, and damage awards. The verdicts were increased significantly by the presence of an outlier and by an increase in the plaintiff population. While the punitive awards were higher in the outlier condition, there was also a tendency for juries to find the company not liable.

The meaning of the above findings, as well as the fact that juries exhibited great variability in their verdicts was discussed. Evidence as to the decision-making process of the juries was also gathered and discussed.

INTRODUCTION

In the past decade we have witnessed a fundamental change in the type of case that civil courts must manage and resolve. The frequency and number of lawsuits filed to redress injuries caused by a product or agent manufactured on a national level has increased dramatically (Rosenberg, 1984). Many of these cases involve claims for similar injuries across plaintiffs including a number of insidious diseases, carcinogenic, mutagenic, or teratogenic in nature. These cases pose an unprecedented challenge for the tort system (Rosenberg, 1984).

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The sheer scope of a number of these mass tort cases appears overwhelming. Beginning in the early 1970s, over 30,000 personal injury lawsuits were filed by workers in connection with exposure to asbestos. It is clear that additional suits numbering in the thousands will still be filed in the future (Selikoff, 1981; Hensler, Felstiner, Selvin, & Ebener, 1985).

As Hensler et al. suggest, the severity of the injuries and the multiplicity of plaintiffs and defendants, the enormous financial implications, and the issues of social policy evoked by these cases test the limits of the civil justice system.

Whereas asbestos litigation is the most visible of these mass tort cases, there are a number of other examples of litigation that push the modern tort system to its very limits. More than 12,000 lawsuits have been filed against A. H. Robins, for example, alleging that the Dalkon Shield intrauterine birth control device caused infections, sterility, and spontaneous abortions (Rosenberg, 1984). About 8300 of those claims have been settled, costing the manufacturer and its insurers $314.6 million. It should be noted that Robins has sold another 1.7 million Dalkon Shields in 80 countries outside the U.S.A. Clearly additional lawsuits will eventuate from those sales. In fact, as many as 315,000 cases were filed by 1986 (Willging, 1986).

In another drug case 1000 plaintiffs have instituted suit in connection with the use of Diethylstilbestrol (DES), a synthetic estrogen approved in 1947 by the F.D.A. for the prevention of miscarriages. In 1971 the drug was banned because it was allegedly implicated in birth defects (Seltzer, 1983). Similarly, Merrill-Dow, a Cincinnati based pharmaceutical firm, has been in litigation for a decade in connection with its production of the morning sickness drug Bendectin, which was also allegedly implicated in producing birth defects. In a recent case 381 lawsuits against Merrill-Dow were consolidated for trial in Federal court in Cincinnati (*In re Bendectin Product Liability Litigation,* 1985).

The asbestos, Dalkon Shield, DES, and Bendectin cases represent a mere sample of the recent catalog of cases involving massive product liability litigation. In many instances these cases involve large numbers of plaintiffs, protracted trials, and very significant costs for all parties.

The trend towards mass tort cases has created a myriad of problems for the tort system, including how to manage the cases. Rather than the traditional focus on securing a fair hearing for each individual before the Bar, the logistical and evidentiary complexity of these cases has led to a concern about management and administration (McGovern, 1983).

The interest of the courts, understandably, turns to procedures that may expedite litigation, either through trial, or preferably pretrial settlement. This focus on case management techniques has raised concern about the number of litigants who may not get to the Bar (McGovern, 1983). The tension between the system's traditional concerns with individual needs and societal requirements has significantly increased.

In many instances the sheer number of plaintiffs may make a trial that includes all of them infeasible. Consequently, a representative sample of plaintiffs may be chosen for presentation to jury. The decision made by the jury concerning the sample may then be applied to the larger population of plaintiffs. In other words, what happens to the few happens to all (*Newman v. Johns-Manville, E.D.* Texas, 1984). In *Newman,* for example, the trial plaintiffs served as "bellwethers" for the plaintiff population on the issue of liability, which was tried as a separate and dispositive issue.

To summarize, then, courts, in response to increasingly complex litigation, have adopted as one of a number of case management techniques, a strategy of consolidating cases for trial. What the court does not know, however, is the impact that consolidation has on the decision-making processes of jurors. The very nature of the decision made by a jury in a consolidated trial may be fundamentally different from the individual decisions that would have been made had plaintiffs been given separate trials.

Rule 42A of The Federal Rules of Civil Procedure allows for the consolidation of separate actions for a joint trial, involving common issues of fact or law, in order to expedite litigation. Similarity of evidence appears to be the critical criterion for successful consolidation (*Compagnie Francaise D' Assurance v. Phillips Petroleum,* S.D.N.Y., 1984). Appellate courts have, however, been sensitive to the disposition of individual cases (*Arroyo v. Chardon,* D.P.R., 1981). Nevertheless, if the evidence to be presented is similar for the various plaintiffs and is to be given in testimony by the same witnesses, consolidation will occur.

Lawyers have been cognizant of the possibility of differential outcomes in mass trials due to the aggregation of plaintiffs. Concern has been expressed that if a person with less severe injuries is adjudicated along with a very seriously injured individual, prejudice to the *defendant* may occur (See *Kershaw V. Sterling Drug, Inc.,* 1969). Fear has been expressed that jurors will treat all the members of the plaintiff aggregate alike, homogenizing individual claims and overlooking separate defenses of individual defendants (*White v. Johns-Manville Corp.,* 4th Cir., 1981). Jurists have also suggested that as the number of plaintiffs increases so does the complexity of the decision-making process (Rubin, 1982). Doubts have been expressed about the jury's ability to effectively keep separate the information about each plaintiff (McGovern, 1985).

The concern expressed in *Kershaw* has found a number of echoes in other cases. For example, the defendants *In re All Asbestos Cases in the U.S. District Court for the District of Maryland* (1983) objected to consolidation on the grounds that a strong case would serve as an anchor for weak cases. There is no direct evidence that the jurors use the one unique plaintiff as an anchor that draws all other plaintiffs to the extreme of the scale used by the jurors to make decisions. There is evidence from nonjudicial contexts, however, that an extreme stimulus could very well alter the judgment scale (Wyer and Carlston, 1979). It is, however, just as plausible to expect that the combination rule used by most people is one that averages the various stimuli (Rosnow and Arms, 1968).

Hensler et al. (1985) suggest that when faced with a number of plaintiffs, jurors do not average but rather utilize the most extremely injured plaintiff as the anchor. Interviews with jurors in a recently completed asbestos litigation (*Newman v. Johns-Manville,* 1984) tend to indicate that jurors are unable to evaluate each plaintiff individually but instead assume that all the plaintiffs, no matter their current state of health, will ineluctably suffer as much harm as the most

severely injured person. While the jurors' self-reports indicate that they were aware of differences among plaintiffs, the jury awarded the exact same amount of punitive damages to each person ($1 million).

In *Newman* the individual who had suffered the greatest harm had an incontrovertible case of asbestosis. While Hensler et al. (1985) may be correct about the proposition that that individual was the engine that drove the verdict, it is also possible that Mr. Newman would have received a much higher award had his case been severed from the others.

There appear to be at least three major issues surrounding consolidation under rule 42A that lend themselves to empirical scrutiny. The first, and most general, issue concerns the impact of joining plaintiffs for trial. The second issue concerns the size of the parent (distal) population from which bellwether plaintiffs are chosen. The final issue surrounds the impact of the severity of injuries of one (or more) plaintiff on the awards given to other plaintiffs. The present study is designed to investigate these three issues.

Each of the issues just outlined can be evaluated from the perspective of psychological research and theory. Research on attribution theory, for example, suggests that an individual, compared to the members of a group, is perceived to be more responsible for his or her actions (Slovic, Fischoff, & Lichenstein, 1982). Feldman and Rosen (1978) reported that more responsibility is attributed to individuals acting alone than to those acting conjointly with others. Wilder (1978) has shown that when persons are presented to observers as a "group," there is a strong tendency to attribute similarity to all the group members. Wilder found evidence for a fundamental rule of attribution theory: The common behaviors of people perceived to be members of a group are attributed to situational factors, while nongroup members are thought to be driven by dispositional characteristics.

It is reasonable, then, to suggest that plaintiffs perceived as part of a aggregate of injured persons tied together by a commonality of exposure to a harmful agent and subsequent insult and injury will be held less accountable for their actions. Observers likely will perceive that these people were acted upon and are not responsible for their injuries. The net result, we suspect, is that the dollar awards for the disaggregated (nongroup) plaintiffs will be lower than for the same plaintiffs aggregated.

The second major issue to be explored here is the effect of the size of the parent population from which bellwether plaintiffs are chosen. It seems likely that as the size of the plaintiff group increases jurors will attribute more responsibility to the *defendant* (Bordens and Horowitz, 1985). As a consequence, we expect the damage awards to increase as the size of the plaintiff group increases.

As the size of the plaintiff group becomes larger, and as the information to be processed inevitably becomes more complex, observers may not be able to distinguish among members of the group to be evaluated (Rothbart, Fulero, Jensen, Howard, & Birrel, 1980). Individual characteristics are replaced by a cognitive mean. Observers, when confronted with so many clusters of information, tend to use an averaging model, which may, however, be heavily influenced by the person perceived as most extreme (Leon, Oden, & Anderson, 1973).

It is in fact quite likely that if one member of the plaintiff group has suffered significantly more harm than the others, then the judgment scale would be heavily influenced by that unique stimulus. Tversky and Kahneman (1973) postulate that people base their judgments on only a sample of information, that which is most readily accessible, and assume that the implications of this information are representative of the population. It is reasonable, therefore, to hypothesize that the existence of a severely injured plaintiff will serve as an anchor for jurors and will drive the average award higher.

Finally, we expect that the hypotheses will be most strongly supported when juries are asked to assign *punitive* damages. The assignment of compensatory damages is a more complex and constrained task in terms of dollar amounts than is the case in the assignment of punitive damages. Consequently, more evidence may be adduced in this aspect of the trial and the awards are constrained by specific dollar amounts attached to specific medical or financial losses. We expect that the juries' sentiments will most likely find expression in assignment of punitive damages.

METHOD

Subjects

The subjects were 396 men and women eligible for jury service in Lucas County, Ohio. Each subject was paid either $10.00 or $20.00, depending on the condition to which they were assigned. Subjects were constituted into 66 six-person juries.

Design

The design allows for a comparison of the fates of plaintiffs aggregated and disaggregated for the purposes of the experiment. The design is best described as a 2 (outlier or no outlier) × 3 (number of plaintiffs in the distal plaintiff population) factorial with five dangling control groups. An elaboration of the two independent variables in the factorial portion of the design follows:

Outlier

This is a manipulation of the composition of the plaintiff aggregate. There are two levels of this manipulation: Outlier and no outlier. The *outlier condition* includes an aggregate of four plaintiffs, one of whom has been severely injured in comparison with the others. The *no outlier condition* includes an aggregate of the same four plaintiffs, but the extremity of the injuries sustained by the most severely harmed person was modified so that the severity of the injuries to all plaintiffs were similar.

Number of Plaintiffs

In this manipulation the size of the distal plaintiff population is varied. Juries were assigned randomly to one of three conditions. In the *No Information* condition no information about the size of the distal plaintiff population was provided. In another condition juries were told that there were *26* plaintiffs in the distal population. In the final condition juries were told that there were *hundreds* of plaintiffs in the distal population. The "26" and "hundreds" levels were derived from actual mass tort cases (*Newman v. Johns-Manville,* 1984 (26) and *In re Bendectin,* 1985 (hundreds)).

Aggregation of Plaintiffs

Each of the plaintiffs' cases was heard as a separate and independent trial, severed from the other plaintiffs and attached to the no information condition. Thus, each of the plaintiffs (A (nonoutlier), A' (outlier), B, C, D) were all adjudicated individually in the *disaggregated condition.* The same plaintiffs, as described above, had their cases heard together in the *aggregated condition.*

Materials

The Trial

The trial consisted of a 4-hr audiotape on which roles of the various trial participants were acted by members of the Toledo Repertoire Theatre and members of the University of Toledo Department of Theatre. The recording was made in the moot courtroom at the University of Toledo School of Law.

The audiotaped trial consisted of an opening statement of the facts in the case, the trial judge's initial instructions to the jurors, opening statements by counsel, and presentation of evidence on liability, general causation, and damages. The presentation of evidence was accomplished by the testimony, through direct and cross-examination of the expert witnesses, the plaintiffs, and through the use of depositions. The trial evidence was complicated, long, and at times boring, thus reflecting the realities of a complex mass tort trial. Judge's instructions to the jury followed the closing statements by both sides. The judge's instructions, modified to fit the special circumstances of the present case, were taken from a similar toxic tort case (*Wilhite v. Olin,* 1984).

The presentation of the audiotape was accompanied by video slides representing the personages of the trial. The slide presentation was synchronized with the presentation of the role that was being performed on the audiotape.

The trial scenario was that of a prototypical toxic tort case. A large chemical concern (Northern Chemical Corporation) in a rural area of northern Ohio has been manufacturing a chemical known as "DBX." The effluent of this manufacturing process, via the drainage ditches and the dump sites, had found its way into the rivers and creeks of the area, threatening the food supply and the recreational facilities. Environmental studies indicated that the population has ingested

"DBX" by eating the fish and drinking the water. Both medical and economic, as well as psychological damage, was alleged by the plaintiffs.

Liability revolved around both negligence and the state-of-the-art issues: When did the company know that "DBX" was toxic and that the disposal methods were inadequate? And when did the company do something about it? Evidence as to liability and general causation was presented via the testimony of expert witnesses including environmental engineers, aquatic biologists, and epidemiologists.

The damages section of the trial included evidence for both compensatory damages and punitive damages. The primary evidence for compensable damages (causation-in-fact) was the testimony of an immunologist who has examined each of the plaintiffs. A local internist who had originally noted the confluence of patients and symptoms also testified. Direct testimony, as well as cross-examination, was taken from each plaintiff.

Evidence as to punitive damages centers on whether or not the defendant acted with wanton disregard for the safety of the plaintiffs as well as the question as to when the company knew of the harmfulness of the chemical. Evidence as to whether "Northern" tried to cover up the toxic seepage and promulgated false and misleading information as to the true state of affairs was also presented.

The plaintiffs' theory of damages resides in the theme that not only have they been put at excess risk by their exposure to "DBX" and that they have indeed sustained serious medical and financial injuries due to that exposure, but the plaintiffs have developed a "reasonable" fear of contracting cancer ("cancerphobia") if they have not already done so. The plaintiffs therefore claim that they are very likely to suffer increasingly serious injuries in the future, whatever their current state of health. Additionally, the worry and concern about the exposure to "DBX" has become the basis of their claim of mental distress.

The Plaintiffs

Each aggregate contained four plaintiffs. One aggregate had a most severely injured person. A summary of their injuries is presented below.

Charlotte Lamont. She is the most severely injured individual. This plaintiff, as an *outlier,* was portrayed as having liver angiosarcoma, a very rare liver cancer. Medical testimony points out that "two incidents of liver angiosarcoma in a population this size is an epidemic." No one disputes the seriousness of Mrs. Lamont's condition. She was also portrayed as suffering demonstrable economic losses.

In aggregate II, Lamont's symptoms are modified so as to be less severe. The references to cancer are deleted and a skin condition known as *chloracne* is substituted. This was an affliction common to people exposed to "DBX."

As is the case with all the plaintiffs, an unexplained rise in blood pressure was found in Mrs. Lamont.

Donald C. Bessant. He has suffered damage to his immune system and "has an increased susceptibility to infections, diabetes, and cancer." Mr. Bessant also suffers from "cancerphobia," although no specific symptoms now exist. He is

undergoing therapy by a psychologist, as are all the plaintiffs in the courtroom sample, with the exception of Lamont in the severely injured mode.

William Gallimore. Mr. Gallimore has suffered from chloracne, a debilitating skin disease, common to those who have used "DBX" in their work. Gallimore is a farm worker who has also eaten contaminated fish. He is taking medication for the skin disease. Gallimore may have continued to eat the fish after it became known that the food chain had been contaminated.

Elizabeth Stengel. Mrs. Stengel's overt losses are primarily economic. These losses appear to be significant. She may also have been exposed to "DBX." Stengel can document the precise amount of financial loss suffered due to the fact that her farm land and water supply was contaminated.

Members of a law school class judged the severity of the plaintiffs' injuries. The ratings showed that Lamont was perceived as presenting the strongest case as the outlier while Gallimore had the weakest case.

Size of the Distal Plaintiff Population

Information about the size of the distal population engaged in lawsuits against Northern Corporation was made known through the judge's remarks. Additionally, the size of the distal population was mentioned by the plaintiff's lawyer in both opening and closing statements. In one condition, as outlined above, no information was given about the size of the population. In the other two conditions the plaintiff population was described as either 26 or "many hundreds."

Dependent Measures

Verdicts on the trial issues, in particular the monetary awards, were the basic measures. Specifically, juries were first asked to find, based on the "preponderance of the evidence presented," whether the defendant was or was not liable for damages. If the jury found the defendant liable they were given a special verdict form on which they indicated the compensatory awards. After the assignment of compensatory awards, a separate punitive special verdict form was then used.

A postexperimental (postdeliberations) questionnaire was given to the jurors. Jurors were asked to apportion the responsibility for the injuries to the defendant, plaintiff(s), or other factors, including chance or fate.

Cognitive measures relative to the juror's decision making were also gathered. Jurors were asked to recall all the facts and thoughts relating to each (or the) plaintiff. These "cognitions" were rated as to the degree to which they favored either the plaintiff's or defendant's case. This was done with a ten-point rating scale, where 1 = cognition favored the plaintiff, and 10 = cognition favored the defense. They were also asked to generate as much of the important evidence they could recall and to weight that evidence as to probative value.

Procedure

Jurors were randomly assigned to one of the 11 experimental conditions. All the experimental sessions were run in the moot courtroom at the University of Toledo School of Law. Eight potential jurors were scheduled for each six-person jury. Whenever possible, in order to expedite data collection, multiple juries were scheduled at the same time. Juries sat separately in the moot courtroom and listened to the audiotape of the trial. Each jury then retired to a separate deliberation room. They were told to come to a unanimous verdict.

All potential jurors were given an informed consent sheet prior to selection as a member of the jury. This form explained the nature of the experiment and the length of the trial they would hear. Jurors were asked for their permission to audiotape and analyze the deliberations. Anonymity was assured and all subjects had the option of not participating without penalty.

If the subjects agreed to participate under the conditions outlined by the experimenter, lots were drawn among the potential jurors, and those not chosen were thanked and paid $5.00 for their participation.

RESULTS

Effects of Number of Plaintiffs and Outlier

Overview

To test the impact of the size of the distal plaintiff population and presence of an outlier on punitive damages a 3 × 2 MANOVA (run through SPSS-X) was used. Descriptive statistics showed that the data from the punitive damages, compensatory damages, and fault assigned to the plaintiffs were positively skewed. The skewness was reduced by applying a square-root transformation to the data (Tabachnick & Fidell, 1983). As a result of the transformation the numbers reported below can be interpreted as medians (Tabachnick & Fidell, 1983). Additionally, evaluations of the assumptions of homogeneity of variance, linearity, and multicollinearity were nominal.

Comparison between the aggregated and disaggregated plaintiff conditions was accomplished for each plaintiff with separate 3 × 2 ANOVAs with a dangling control group. Relationships between cognitive measures and verdicts were evaluated with both bivariate Pearson correlation coefficients and canonical correlation analyses. Where necessary, data were transformed to meet the assumptions of the multivariate tests applied to the data.

Punitive Damages

The MANOVA (using Hotellings' criterion) revealed a significant main effect of the size of the distal plaintiff population, $F(8,52) = 2.25$, $p < .038$. Univariate tests and a Roy–Bargman stepdown analysis were performed on the results for each plaintiff and revealed one significant finding. The univariate ANOVAs plaintiff Gallimore received higher punitive awards as the size of the plaintiff population increased, $F(2,30) = 4.48$, $p < .02$. This finding was mirrored by the results of the stepdown test ($F(2,27) = 5.78$, $p < .05$).

A significant effect of the outlier also appeared using Hotellings' criterion, $F(4,27) = 5.77$, $p < .02$. Figures 1 and 2 presented below illuminate the impact of

the two significant main effects on punitive damages. Figure 1 reveals the fact that the effect of the distal plaintiff population resides in the "hundreds" condition.

Figure 2 reflects the impact of the outlier on the punitive damage awards. The first feature to note is that, as compared to Figure 1, the amount of the monetary awards is much higher. The effect of the distal plaintiff population appears to be somewhat muted as compared to the no outlier data presented in Figure 1.

The results of the ANOVAs performed on the punitive damage awards for the individual plaintiffs yielded the following significant results: Lamont's awards increased in the outlier condition, $F(1,30) = 5.61$, $p < .05$. Gallimore's awards (recall that this was judged to be the weakest of all cases) significantly increased as the size of the plaintiff population (distal) increased, $F(2,30) = 6.26$, $p < .01$.

Compensatory Damages

A 3 × 2 MANOVA performed on the transformed compensatory damages data revealed no significant effects of either the size of the distal plaintiff population or the presence of an outlier.

Fault Assigned to the Plaintiffs

A 3 × 2 MANOVA was also applied to evalute the impact of distal population size and outlier presence on the amount of fault assigned to the plaintiffs.

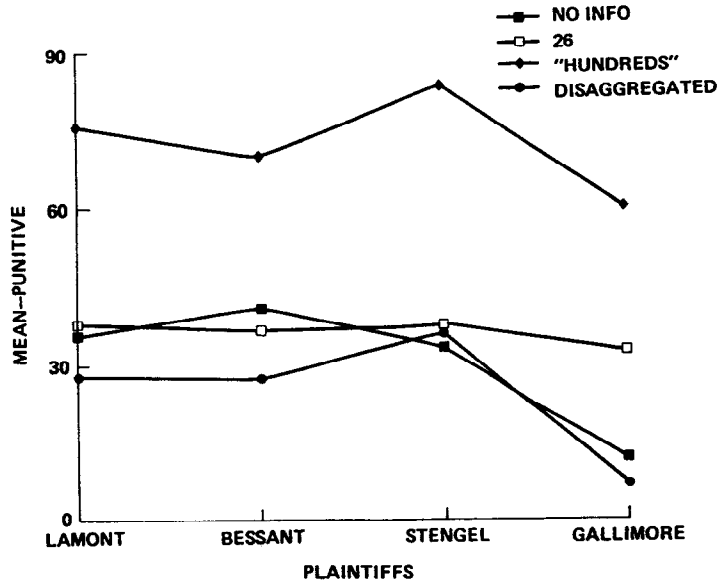

Fig. 1. Punitive damage awards in the no outlier condition.

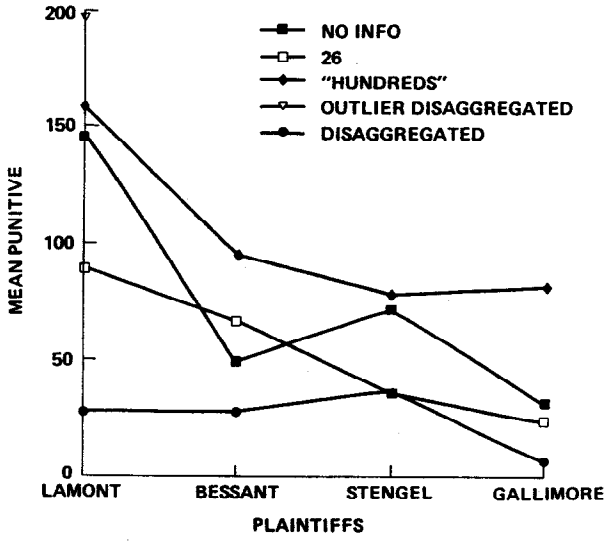

Fig. 2. Punitive awards in the outlier condition.

The analysis revealed a main effect of distal population size (again, using Hotelling's criterion), $F(8,52) = 3.49$, $p < .01$. Results from univariate ANOVAs showed that the effect appears to lie primarily with plaintiff Gallimore, $F(2,30) = 12.16$, $p < .001$. Additionally, there was a marginally significant effect for plaintiff Stengel, $F(2,30) = 3.91$, $p = .07$. The results from a Roy–Bargman stepdown test verify that plaintiff Gallimore was the primary reason for the significant effect of population size, $F(2,27) = 7.58$, $p < .01$. An inspection of the transformed means shows that when the subjects were told that there were 26 or hundreds of plaintiffs in the distal population, less fault was assigned to Gallimore ($M = .499$ and .412, respectively) than if no information was provided about distal population size ($M = .612$).

Aggregated versus Disaggregated Plaintiffs

Following Winer (1971), all analyses of the individual plaintiff awards included a comparison between the aggregated and disaggregated awards. Each dangling control (disaggregated) was compared with the pooled average of all aggregated conditions for that plaintiff. Only Gallimore, the weakest case, was aided by being aggregated, $F(1,30) = 4.26$, $p < .05$.

Liability Verdicts

Table 1 presents the liability verdicts for all 11 experimental conditions. The interesting feature shown in Table 1 is the number of findings for the defendant in the outlier condition. Recall that significantly higher punitive awards were re-

Table 1. Defendant Liability by Condition

	No outlier	
Plaintiff population	Liable	Not liable
No information	21	3
Twenty-six	24	0
Hundreds	22	2
Disaggregated	21	3
	Outlier	
Plaintiff population	Liable	Not liable
No information	16	8
Twenty-six	19	5
Hundreds	20	4
Disaggregated	5	1

turned in the outlier condition. While juries in the no outlier condition, and in the disaggregated trials, appeared to find distinctions among the plaintiffs, juries finding for the defendant in the outlier condition appeared—once they decided liability could not be assigned to the defendant—not to make any such distinctions. Individual juries in the no outlier trials would find the company liable in one circumstance and not in another (plaintiff). Juries in the outlier condition found for all plaintiffs, and gave high damage awards, or they found for none of the plaintiffs. Individual juries seemed to be quite consistent in their behavior.

The deliberation tapes indicate that juries that found for the defendant in the outlier condition appeared to have attributed fault to a plaintiff (the outlier) who was injured so much more severely than the others who were exposed to the same risks.

Table 2 presents the means, standard deviations, and the range of punitive awards for the aggregated experimental conditions. While Figures 1 and 2 capture the basic findings shown in Table 2, the table reflects the wide range of awards given in all conditions. Also noteworthy is the much greater variability in awards in the outlier condition, due in part to the liability findings.

Relationships Among Variables

One of the purposes of the present study was to investigate the process by which juries decide in complex litigation. To begin this investigation as to what factors drive these decisions, a consideration of the assignment of blame is appropriate. Table 3 presents the Pearson product correlations for the association of responsibility of the alleged injuries and the amount of award.

Table 3 shows that as responsibility for the injuries are increasingly assigned to the defendant, the plaintiffs, as expected, receive higher awards. Furthermore, the critical issue as to the date by which the defendant should reasonably have known that DBX was toxic was also significantly related to the awards (r = .4267, $p < .005$, n = 36). It would seem, then, that juries operated on a rational

Table 2. Cell Means and Standard Deviations for All Plaintiffs' Punitive Damages[a]

	Plaintiff: Lamont			
Plaintiff population	Outlier	Mean	Standard deviation	Range
No information	No	35.50	42.49	00–100
No information	Yes	145.83	158.44	00–350
Twenty-six	No	37.83	40.45	00–100
Twenty-six	Yes	89.17	70.39	00–175
Hundreds	No	83.33	66.46	00–200
Hundreds	Yes	158.33	176.71	00–500
	Plaintiff: Bessant			
Plaintiff population	Outlier	Mean	Standard deviation	Range
No information	No	40.83	46.52	00–100
No information	Yes	49.17	49.52	00–100
Twenty-six	No	36.67	33.42	10–90
Twenty-six	Yes	66.67	58.54	00–150
Hundreds	No	70.00	62.85	00–175
Hundreds	Yes	95.00	69.79	00–200
	Plaintiff: Stengel			
Plaintiff population	Outlier	Mean	Standard deviation	Range
No information	No	33.33	33.42	00–100
No information	Yes	72.50	114.53	00–300
Twenty-six	No	37.50	32.64	10–90
Twenty-six	Yes	35.83	49.03	00–125
Hundreds	No	78.33	64.24	30–200
Hundreds	Yes	78.00	77.57	00–200
	Plaintiff: Gallimore			
Plaintiff population	Outlier	Mean	Standard deviation	Range
No information	No	11.67	11.69	5–35
No information	Yes	31.67	41.31	00–100
Twenty-six	No	32.50	27.88	10–80
Twenty-six	Yes	24.17	23.75	00–50
Hundreds	No	60.00	38.60	5–100
Hundreds	Yes	81.67	69.40	00–200

[a] All awards are in thousands of dollars.

(although not necessarily accurate) basis in utilizing factors that were critical in the legal context.

Canonical Correlations

To clarify the effects of assignment of responsibility and date of reasonable knowledge, canonical correlations were performed. The aim of canonical correlations is to analyze the relationship between two sets of variables (Tabachnick &

Table 3. Correlations Between Awards and Perceived Responsibility

	Plaintiff			
Awards	Lamont	Bessant	Stengel	Gallimore
Compensatory	−.3393[a]	−.4723[b]	−.3872[b]	−.3790[b]
Punitive	−.3738[b]	−.4552[b]	−.3846[b]	−.5097[b]

[a] $p < .02$.
[b] $p < .01$, $n = 36$.

Fidell, 1983). Essentially, this procedure enabled us to outline the contours of the relationship. The analysis was performed on both punitive and compensatory awards as dependent variables for each plaintiff, using assignment of fault as the covariates. First, we will look at the results for compensatory damages.

The results of the canonical analysis, relating compensatory damages with the date Northern should have known about the toxic effects of DBX, fault assigned to each plaintiff, and the two independent variables, revealed two significant canonical functions ($F(2,28) = 4.22$, $p < .001$, and $F(1,28) = 2.89$, $p < .001$, respectively). Function 1 accounted for 70.2% of the variance, while function 2 accounted for 12.4%. Canonical variates 1 and 2 accounted for 25.28% and 12.71% of the variance, respectively. Table 4 shows the results of this analysis.

The first function shows that the magnitude of compensatory awards relates to the assignment of fault. When the company is seen as negligent (indicated by a belief that Northern should have been aware of the toxicity of DBX early) and the plaintiffs relatively blameless, compensatory damages are high. Hence, one factor that appears to mediate compensatory damages across plaintiffs is who the jury sees as responsible for the plaintiffs' injuries.

The second function also appears to relate compensatory damages to assignment of fault. Function 2, however, appears to be involved with differential blame

Table 4. Canonical Correlations: Compensatory Damages

Correlations between dependent and canonical variables		
Variable	Function 1	Function 2
Lamont	.896	.435
Bessant	.810	.457
Stengel	.886	−.161
Gallimore	.750	−.264
Correlations between covariates and canonical variable		
Covariate	Variable 1	Variable 2
Date	−.838	−.378
Fault/Lamont	−.670	−.571
Fault/Bessant	−.661	−.543
Fault/Stengel	−.685	.621
Fault/Gallimore	−.434	−.368
Outlier	.024	.320
Plaintiff numbers	.209	.128

among the plaintiffs. High awards to Lamont, Bessant, and Gallimore are associated with assignment of the bulk of the blame to the defendant. In contrast, the obverse holds true for Stengel. Stengel's injuries are primarily economic in nature. Even a cursory analysis of the deliberation recordings indicates that she is perceived less favorably by many, although not all, juries. Nevertheless, it appears that her awards are not directly affected by these perceptions because her losses are clearly quantifiable.

The punitive damage awards suggest a similar pattern as shown by Table 5, which presents the results of the canonical correlation for that measure.

Again, functions 1 and 2 accounted for the majority of the variance, 83.18% and 8.74%, respectively. The two significant canonical covariates accounted for 28.09% and 8.74%.

Function 1 suggests that blame assigned to the defendant makes higher punitive damages more likely. Furthermore, these results also indicate that as the size of the distal plaintiff population increases, so does the likelihood of larger punitive awards. Blame seems to attach more easily to a defendant being sued by large numbers of people.

Function 2 reflects the same pattern as did the analysis of compensatory damages. Note again that plaintiff Stengal is perceived as more blameworthy than the other three plaintiffs.

Cognitive Data

The cognitions generated by the juries were grouped into nine major categories: plaintiff responsibility, defendant responsibility, toxic chemical and scientific evidence, witnesses (plaintiff, experts, defendants), judge's instructions, lawyers' arguments, and legal terminology. The ratings of the cognitions were entered into

Table 5. Canonical Correlations: Punitive Damages

Correlations between dependent and canonical variables		
Variable	Function 1	Function 2
Lamont	−.898	.329
Bessant	−.927	.312
Stengel	−.885	−.368
Gallimore	−.937	.047
Correlations between covariates and canonical variable		
Covariate	Variable 1	Variable 2
Date	.868	−.133
Fault/Lamont	.769	−.331
Fault/Bessant	.796	−.298
Fault/Stengel	.553	.659
Fault/Gallimore	.619	.042
Outlier	−.016	.738
Plaintiff numbers	−.369	.074

Table 6. Structure Correlations for Compensatory Damages: Canonical Correlations

	Damages	Ratings of cognitions	
Lamont	−.899	Plaintiff responsibility	.665
Bessant	−.961	Toxic chemical	.664
Stengel	−.751	Scientific evidence	701
Gallimore	−.694	Plaintiff's witnesses	.534
		Expert witnesses	.735
		Defendant's witnesses	.330
		Lawyer's arguments	.660
		Legal terminology[a]	−.653

[a] This variable was reflexed; therefore, a low score favors the defendant.

a canonical correlation analysis with either compensatory or punitive damages as a "dependent variable set."

Before the analysis of the compensatory damages was performed the ratings of the lawyers' arguments variable was reflexed and then square-root transformed due to a negative skew in the data (Tabachnick & Fidell, 1983). The results showed a significant relationship between the two sets of variables entered (using Hotelling's criterion), $F(20,82) = 3.73$, $p < .01$ ($Rc = .86$, accounting for 73.6% of the variance). A dimension reduction analysis revealed that only one function was significant.

An inspection of the structure correlations, shown in Table 6, suggests that low compensatory damages are related to attributing responsibility to the plaintiffs, believing that DBX is not all that toxic, perceiving witnesses (plaintiff's expert, and defense) as more favorable to the defense than plaintiffs, and perceiving scientific evidence, lawyers' arguments, and legal terminology as favoring the defense.

A similar analysis was conducted using punitive damage awards as a variable set. This analysis also revealed a significant relationship between the two sets of variables, $F(40,82) = 3.39$, $p < .02$ ($Rc = .85$), accounting for 77.9% of the variance. A dimension reduction analysis, however, showed that the first function was only marginally significant, $F(40,85.28) = 1.42$, $p < .09$.

The structure correlations for this analysis are shown in Table 7. According to these correlations, high punitive damages are related to a pattern of variables

Table 7. Structure Correlations for Punitive Damages: Canonical Correlations

	Damages	Ratings of cognitions	
Lamont	.989	Plaintiff responsibility	−.319
Bessant	.922	Toxic chemical	−.578
Stengel	.655	Experts	−.418
Gallimore	.802		

indicating shifting responsibility away from the plaintiffs, perceiving DBX as toxic, and evaluating expert witnesses as favorable to the plaintiffs.

DISCUSSION

The impact of the independent variable manipulations was observed, as predicted, primarily in the award of punitive damages. Two main effects were significant: The presence of an outlier, a plaintiff with severe injuries as compared to other plaintiffs, increased both the amounts of the punitive awards as well as the variability of those awards; the awards were also increased by the juries' knowledge that the plaintiffs were part of a population that numbered in the hundreds. The same trend, although statistically nonsignificant, was observed in the compensatory awards.

While the presence of an outlier tended to help all plaintiffs, regardless of the severity of their injuries, the plaintiff with the weakest case benefited most significantly.

The outlier also increased the unpredictability of the verdicts. Clearly much more variability exists in this condition than in the no outlier condition. There were more instances of juries finding for the defendant in the outlier condition, that is, finding the company not liable. Interestingly, in the instances in which liability was not found, juries tended not to make distinctions between the outlier and the others. One might have reasonably expected a contrast effect, in which the outlier received a significant award and the others little or nothing. Instead, juries seemed to use the judgment of the outlier as a threshold test. If they decided that the company was indeed liable for the outlier's injuries then all plaintiffs benefited. If not, then all suffered. The rule seems to have been all-or-none.

In some juries the very severity of the outlier's injuries appeared to raise a question of fault, in that doubt may have been cast on whether the company could be so venal as to cause such injuries in pursuit of profit. Indeed, juries that did not find the company liable discussed the possibility that injuries as serious as those described could not have been foreseeable. Or that if these injuries were foreseeable, then it was incumbent upon the plaintiff, in good faith, to avoid the effects.

The effect of informing the juries about the size of the distal plaintiff population was most clearly realized in the "hundreds" condition. This trend was observed in both the punitive (significant) and compensatory (nonsignificant) parts of the trial. This manipulation was based upon the information given to juries in actual trials. In retrospect, it was quite likely that an adventitious variable was operating. The deliberation audiotapes suggest that when juries were informed that hundreds were involved, their imaginations as to the effects of the toxic chemical were, in a sense, liberated. When told that "26" others were involved, the ultimate effects of the tort was concretized and delimited. The former manipulation (hundreds) left the parameters of damage open and still dangerous while the latter (26) had defined boundaries (Willging, 1986). The perception that the possible

damage was relatively unrestrained increased the degree of responsibility assigned to the defendant.

The findings as to the effects of plaintiffs being aggregated or not suggest that a plaintiff with a relatively weak case is defintifely helped by aggregation; conversely, a plaintiff with a quite strong case (Lamont as outlier) appears to be better served by being disaggregated, particularly with reference to punitive damages. As the disaggregated control groups were run under a no information condition (concerning the plaintiff population) we do not know if information as to the distal population would have had an impact on these trials.

The primary cognitive factor driving the verdicts is, of course, the degree of responsibility assigned to the various parties. This is not surprising as the task required juries to make such estimates. These estimates of fault clearly affected the juries' perceptions of the worth of the cases under the several experimental manipulations (outlier and distal population). The data suggest that, not unlike Hensler et al.'s (1985) contention, juries assume that the less severely injured will, in time, suffer the same fate as did the outlier. Furthermore, the presence of an outlier makes it much more likely that juries will—in most although clearly not all circumstances—assign greater responsibility for the injuries to the defendant. The assignment of fault is a critical aspect of the juries' decision-making process and appears to drive the final outcome.

The canonical correlations show that the decisions concerning punitive damages rest entirely on shifting the responsibility from the plaintiffs to the defendant. Concomitantly, the juries' perceive that the toxic chemical DBX is highly toxic, a fact supported by expert testimony.

Furthermore, fault is increasingly attached to the defendant as the number of plaintiffs in the distal population increases. Not surprisingly, assignment of fault is a major variable mediating the award of both compensatory and punitive damages.

The responsibility perceptions operated most strongly in the assignment of punitive damage. These awards by their very nature are more subjective than the more concretized task facing juries in the assignment of compensation based on the cost of the observed injuries. In this study the sentiments of the juries were more likely to be reflected in the awarding of punitive damages.

Finally, the issue of the variability of the verdicts needs to be addressed. The issue here goes beyond every researcher's fear that an augmented error term may obscure important results. Indeed, there is no gainsaying such fears in this research. However, an overarching concern is the relative unpredictability of the verdicts from one jury to the next. While it was clear that certain manipulations increased the amount and degree of awards and perceptions, within those conditions juries' behavior varied widely.

What accounts for such variability? One possibility, of course, is that it is peculiar to the manipulations in the present research. That is, in absence of replication, what we have is a chance occurrence. Another possibility goes to the heart of the current controversies concerning the place of the jury in complex litigation and in multitort trials in particular (Arnold, 1980; Sperlich, 1982; Horowitz, 1985). This concerns the ability of juries to fairly evaluate evidence in a complex civil trial. Hensler et al. (1985) have noted that plaintiffs with very similar injuries obtain divergent outcomes in asbestos litigation. The present research also appears to indicate that juries faced with identical information and stimuli can respond quite differently.

The only actual evidence we are cognizant of that may add confidence to the validity of the findings of this study are the results of a trial conducted in Judge Robert Parker's courtroom in the Eastern District of Texas. In this unique trial, five plaintiffs were consolidated for trial against twelve defendants. The court impaneled five juries. Each plaintiff was assigned to one of the juries (Green, 1984).

All five juries remained in the court to hear all the evidence. Only questions common to all cases were presented. These included the date the defendants should have known that the products were dangerous; the issue of adequate warnings on the product; and whether one of the defendants had knowledge of the dangers and nevertheless proceeded to manufacture the product (Mealey's Litigation Reports, 1984).

Despite the uniformity of trial procedure and commonality of evidence, the juries' decisions on the evaluative issues were quite divergent (Willging, 1986). For example, as Green notes, the range as to the date that the danger of asbestos products should have reasonably been known varied from 1935 to 1965. In the present study, the range for this question, a task narrowly defined by the evidence, was 1967 to 1974, with the "correct" answer 1972.

Both the asbestos quintuplet trial and the current experiment suggest the vagaries of jury trial in complex cases. Aside from the issue of the generality of the current findings as well as those reported in Judge Parker's court, the controversy does not have a base line against which to compare these two results. We do not know that Judges would, in the event, be any more consistent than juries may have been.

Indeed, the evidence indicates that when judges are given the task of the sentencing disparities which so often occur in very similar criminal cases by consulting with one another on criteria, the result may be an *increase* in variability (Federal Judicial Center report, 1981).

Furthermore, Kassin (1985) reports, in a study of the interpretation and application of a newly introduced rule of civil procedure, that judges, reading hypothetical cases, often show marked disparities in their utilization of that rule.

The jury as an institution is useful because the public finds it an acceptable instrument of justice. It is therefore important to place the variability of jury verdicts in the context of results obtained by other judicial devices (Willging, 1987). It may be argued that the unpredictability of juries in civil cases has certain advantages. It is, after all, that very unpredictability which motivates lawyers to settle. Without this uncertainty the judicial landscape would take quite a different form than it does now.

It may very well be, however, that empirical data, while informing the debate, may not be as relevant as the observation that the function of the jury in

trials in which the facts are ambiguous and the legal standards indeterminate is to legitimize the outcome in a way that no jurist or professional adjudicator could (Green, 1984).

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