

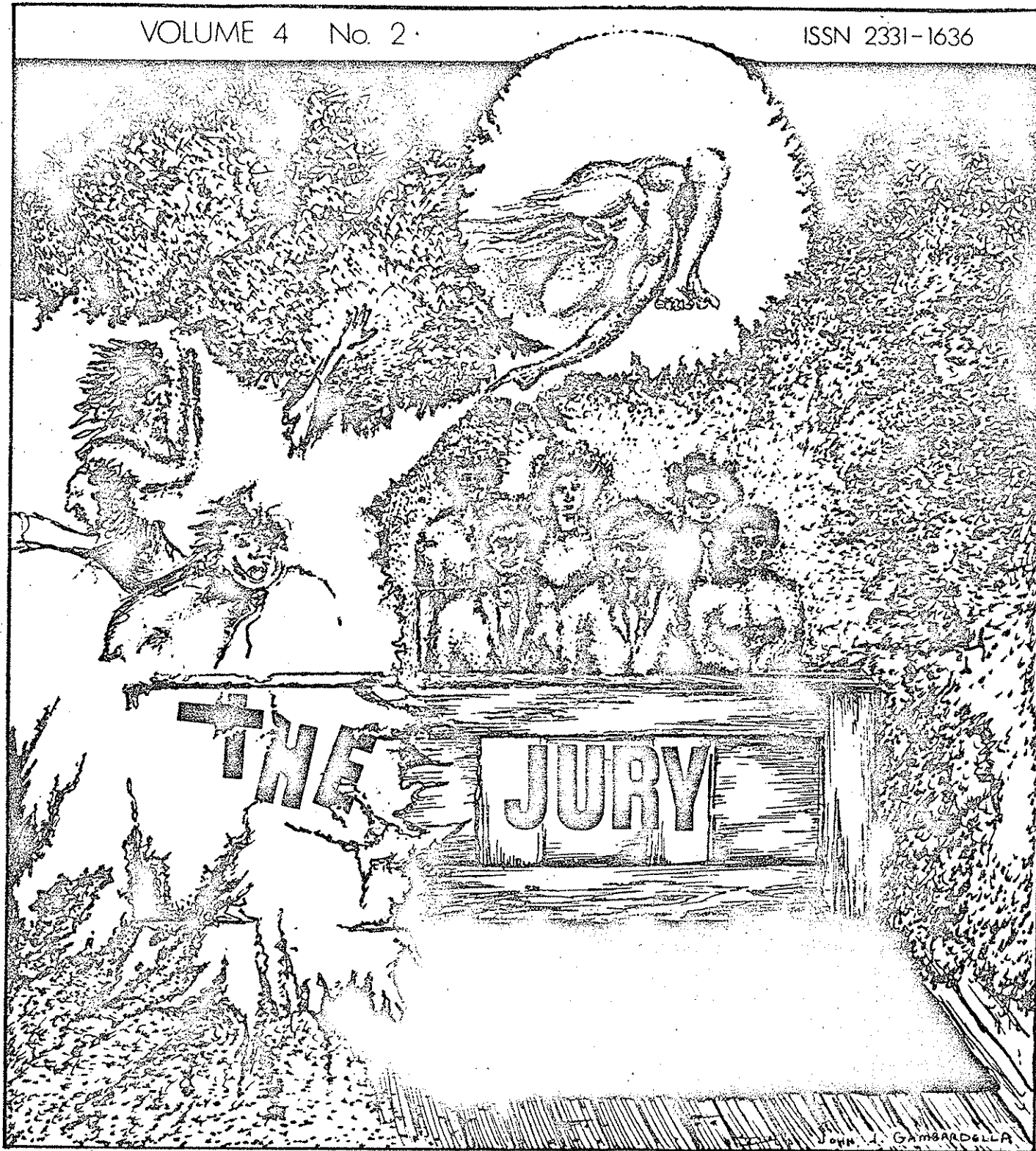
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...on second thought

COMMUNICATION:

"Differential Effects of Jury Size . . ." REVISITED *

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A recent study (Valenti and Downing, 1975a,b) claims to find significant differences in verdicts between juries of twelve and juries of six. Unfortunately, like most work on jury decision-making (see Zeisel 1971; Zeisel and Diamond 1974; Grofman, 1976, 1977a,b) we find the Valenti and Downing (1975a, 1975b) mock jury experiment marred by severe methodological flaws, and their interpretation of their data unjustified.

Valenti and Downing (1975a, 1975b) have argued for a pro-conviction bias in smaller sized (criminal juries) when predeliberation consensus as to the defendant's guilt is high. They find (Valenti and Downing, 1975a:8) that "jury size had no effect upon conviction where the case was defense oriented (only two out of ten juries of each size reached a guilty verdict) but where the case was prosecution oriented, six-member juries were substantially more likely to convict (9 out of 10) than were twelve-member juries (2 out of 10)." Despite the small sample size (ten juries of each size) in their mock jury experiment they assert (Valenti and Downing, 1975a:8) that " it shows that the Supreme Court erred in deciding in favor of the smaller jury, which is clearly more likely to convict than the twelve-person jury." Such confidence in the outcome of a single experiment particularly one with such a small sample size is, we believe, wrong-headed, especially since Valenti and Downing (1975b) themselves note that when all of the eight hung juries (all of which occurred in twelve-member juries) are arbitrarily assigned a verdict consistent with the majority of verdict preferences, the effects of jury size vanish in both defense oriented and prosecution oriented cases. Since Valenti and Downing allowed only a maximum of one hour for jury deliberation the full impact of majority pressure was not allowed to make itself felt. Had juries been forced to continue deliberation further, other experimental data (see Grofman, 1976 and discussion below) strongly suggest that most, if not all, hung juries would have been resolved in accord with the views of the initial (predeliberation) majority.

Even more importantly, despite the claim of Valenti and Downing (1975b: 661) that the jury pools from which the different sized juries were drawn were essentially identical, the properties of the draw led to important differences between the predeliberation preferences of six-member and twelve-member juries in the pro-conviction evidence condition, while no such difference occurred in the pro-acquittal evidence condition. In the pro-acquittal condition, the mean percentage of guilty votes on the first ballot for six-member juries was 38 percent vs. 42.5 percent for twelve-member juries--no

significant difference. On the other hand, in the pro-conviction evidence condition the mean percentage of guilty votes on the first ballot was 66 percent for the six-member juries and only 54 percent for the twelve-member juries. (Data provided by A. Valenti, personal communication, June 2, 1976, retabulated by the author.) Because the impact of jury deliberation is to accentuate verdict outcomes in the direction of the preferences of the pre-deliberation majority—the magnitude of this difference in the pro-conviction condition is such as to cast considerable doubt on the authors' finding of "pro-conviction bias" in the six-member juries in the pro-conviction oriented condition. The statistical test (ANOVA) performed by the authors masks this discrepancy by combining data from the pro-acquittal and pro-conviction conditions. The authors' finding (1975b:660) of no statistically significant difference across all four conditions seems to have blinded them to the possibility of pre-deliberation verdict differences as a possible source of bias.

Intuition would suggest that the larger the jury size, caeteris paribus, the less likely is conviction and also the more likely a hung jury. The problem, of course, is the caeteris paribus assumption. To determine the verdict impact of changes in jury size we need to know the relationship(s) between the pre-deliberation distribution of opinion and the expected final verdict in juries of differing sizes/decision rules. It is not at all obvious what this relationship should look like, or how it should vary as a function of jury size/rule (or indeed whether it might reasonably be expected to be invariant with respect to type of case, demographic characteristics of the juror, seating arrangement cf. Nemeth and Wachtler, 1974, etc.). However, there is considerable evidence that when, prior to the jury deliberations a majority of the jury is in accord as to the verdict, the likelihood is very high that the deliberations will give rise to a unanimous verdict with outcome congruent with the views of the initial majority. Presumably the majority persuade (or otherwise browbeat) the minority. In one study of twelve-member juries, ninety-three percent of the verdicts accorded with the views of the initial majority, four percent of the juries remained hung, and in only three percent of the cases did the minority persuade the majority (Broeder, 1959). Thus, the effect of the group conformity process which appears to operate in juries is to exaggerate the impact of the initial majority in the direction of a unanimous verdict consistent with their views.

The assertion that the size of the pre-deliberation majority largely serves to determine verdict outcome is supported by several other studies (Davis, 1973; Davis et al., 1976; Grofman and Hamilton, 1976; Nemeth, 1976b). However, the number of jurors on the majority side is not irrelevant. As Rosenblatt and Rosenblatt (1973, p. 631) note:

In a sample of over 200 criminal cases in Chicago and Brooklyn courts studied by the Chicago Jury Project (Kalven and Zeisel, 1966), all of the hung juries observed possessed a minority on the first ballot of at least three. In most of them the initial majority was four or five. Likewise an initial minority almost never prevailed in persuading the initial majority unless it, too, numbered at least three). Thus, although the final ballot often showed one lone juror holding out for acquittal, it is only after several others had previously shared that opinion. Thus, the "hanging juror" rarely exists except as one who tenaciously refuses to desert an unpopular view after others have fallen away.

As Kalven and Zeisel put it, "it requires a massive minority of four to five jurors (out of 12) at the first vote to develop the likelihood of a hung jury" (Kalven and Zeisel, 1966, p. 462). Their findings suggest that in juries of size 12, a predeliberation majority of 11-1 (1-11) will go to unanimity with virtual certainty, and a predeliberation majority of 10-2 (2-10) will go to unanimity with very high certainty while lesser majorities will go to unanimity with lower (but still high) probabilities.

These assertions are buttressed by data from other studies. Padawer-Singer and Barton (1975)¹ found that for twelve-member juries no reversal of the initial majority occurred unless the initial minority was at least four. For six-member juries they found no reversal of the initial majority occurred unless the initial majority was at least two in number.

In the Valenti and Downing (1975b) study in the pro-conviction condition there was a considerably higher percentage of predeliberation pro-conviction sentiments among six-member jurors (66 percent) than among twelve-member jurors (54 percent). We would expect this difference to be further exaggerated in terms of the number of six-member and twelve-member juries with a 2/3rds or greater predeliberation guilty sentiment. Indeed, it was. A striking 80 percent of the six-member juries in the pro-conviction condition had at least four of six votes (predeliberation) for conviction; while only 40 percent of the twelve-member juries in the pro-conviction condition had at least eight of twelve votes (predeliberation) for conviction. In contrast, in the low apparent guilt condition, the same percentage (10 percent) of six-member juries as of twelve-member juries began (predeliberation) with a 2/3rds or greater pro-conviction sentiment. We show in Table 1 the initial (predeliberation) distribution of preferences in the four conditions. Given the small sample size, it does not require ANOVA but only an eyeball inspection of the raw data to see that the differences in verdict outcomes between six- and twelve-member juries in the pro-conviction condition in the Valenti and Downing (1975a,b) study can be attributed almost entirely to the differences in the initial distributions of preferences in these two conditions—i.e., to sampling bias.

table 1

PREDELIBERATION PREFERENCES OF JURIES BY EXPERIMENTAL CONDITIONS IN VALENTI AND DOWNING (1975) STUDY^a

Number for Conviction-Predeliberation	6			12			6			12		
	Pro-Conviction			Pro-Conviction			Pro-Acquittal			Pro-Acquittal		
	G	NG	H	G	NG	H	G	NG	H	G	NG	H
5 or 6 (10, 11, or 12)	4	0	0	1	0	1	1	0	0	0	0	0
4 (8 or 9)	4	0	0	1	0	1	0	0	0	1	0	0
3 (5, 6, or 7)	1	0	0	0	1	3	1	2	0	1	3	1
2 (3 or 4)	0	1	0	0	1	0	0	3	0	0	3	0
0 or 1 (0, 1, or 2)	0	0	0	0	0	1	0	3	0	0	0	1

^aSource: Angelo C. Valenti (Personal Communication, June 2, 1976)

If we disregard hung juries (or assign them to a verdict consistent with the views of the predeliberation majority) we find that 100% of the juries which began with a 2/3rds or more pro-conviction majority reached a verdict of guilty—regardless of experimental condition. Similarly, 100% of juries which began with a 2/3rds or more pro-acquittal majority reaches a verdict of acquittal—regardless of experimental condition.² While we share the view of Valenti and Downing (1975b;662) that "apparent guilt of the defendant would interact with jury size," we must reject as based on an inadequately controlled sampling design, and an inadequate deliberation time for the resolution of hung verdicts, their assertion (1975b;655) that in prosecution oriented cases "six-member juries are substantially more likely to convict (9 out of 10) than were twelve-member juries (2 out of 10)." Indeed, a careful examination of their data reveals no statistically significant verdict differences between six-person and twelve-person juries—exactly what we would expect given their very limited sample size. (See Lempert, 1974 for more on this point.) □

FOOTNOTES

¹The Kalven and Zeisel (1966) data are not fully comparable with those of Padawer-Singer and Barton (1975), since the former are reporting first ballots and the latter predeliberation consensus.

²For calculations on the likelihood of juries beginning with a 2/3rds or greater accord as to verdict as a function of jury size and pro-conviction sentiment in the jury pool, see Grofman (1976).

³This research was supported by NSF Grant #SOC 7514091, Law and Social Sciences Program: We are deeply indebted to Professor W. Valenti for making available to us the raw data from his jury experiment. We very much appreciate the integrity of scholars such as Professors Valenti and Downing who are willing to share data so as to permit reanalysis, even though such reanalysis may lead to a challenge to their interpretation of the data.

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● REVIEW - Continued from Page 3

The most valuable part of the book lies in the many appendices which summarize existing data banks on studies of real jurors in a variety of counties in most of the states in the United States. Some of these data can be found nowhere else. I was especially impressed with the analysis of the degree to which the demographic discrepancies in jury wheels on their face would substantiate challenges to jury or grand jury composition. The author integrates some of the data quite well in his interpretation of selection practices. In a presentation of the data from the state of New Mexico, he was able to show that the prosecution was using peremptory challenges to reduce the number of young and non-white jurors while the defense aimed at removing the older and more established

jurors. Thus we have some empirical verification of some commonly held assertions.

While the author leans more to the legal side, he is one of the first writers in this field to integrate the many social science studies which have been done in recent years. The book may not reach as wide an audience as did the classic The American Jury by Kalven and Zeisel, but the data contained within the book is probably more valuable since it is both more up-to-date and better analyzed. Still the social scientist in me must quibble with the fact that the valuable data had not been subjected to sophisticated multi-variate analysis.

—Robert Buckhout