A Preliminary Model of Jury Decision Making As A Function of Jury Size, Effective Jury Decision Rule, And Mean Juror Judgmental Competence

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ABSTRACT

We present a simple combinatorial model (inspired by the work of Condorcet) which, for the simplying assumptions specified, enables us to predict (in general terms) the percentage of defendants who will be convicted (acquitted), the percentage of hung juries, and the proportion of correct verdicts as a function of jury size, effective jury decision, and mean juror judgmental competence. Introducing a weighting rule which expresses the number of guilty defendants we would be prepared to set free in order to

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reduce by one the expected number of innocent convicts convicted then allows us to express normative judgments about "optimal" jury rules. Four theorems are then derived from this model.

I. INTRODUCTION

With recent backlogs of court calendars sometimes stretching into years (Bloomstein, 1968, p. 119; Zeisel, Kalven and Buchhotz, 1959, esp. Chap. 6), there has been widespread interest in dispensing with jury trials whenever possible (Zimroth, 1972) and also modifying the jury size from the traditional twelve and/or in lowering the requirement for a verdict from unanimity to some lesser percentage (Institute of Judicial Administration, 1970, 1971) in order to speed the processes of jury deliberation and to reduce the costs in time and money of empanelling a jury (Pabst, 1973). Reversing earlier precedents, the constitutionality of felony convictions reached by juries of less than twelve or by less than unanimity, has now been upheld by the U. S. Supreme Court. In *Williams v. Florida* (1970) 398 U.S. 78, the U.S. Supreme Court upheld the constitutionality of felony convictions by state juries of less than twelve. In reviewing *Johnson v. Louisiana* (1972) 406 U.S. 356 1620, 1628, and *Apodaca v. Oregon* (1972) 406 U.S. 404, the Supreme Court held that 10 to 2 and 11 to 1 decisions (in Oregon) and a 9 to 3 decision in Louisiana did not violate the 6th Amendment right to a jury trial. The full impact of these cases is not yet clear, however.

As Fred Graham (1972) wrote in the New York Times: "If 9 to 3 convictions are constitutional, how about 8 to 4 or 7 to 5? If undersized juries need not be unanimous, how about 3 to 2 or 2 to 1? And when the Court finally does draw the line, where in the Constitution will it find the rationale?" The Court's findings in these cases are not such as to provide clear answers to Graham's questions. The court majority held, in effect, that there was nothing sacred about either the number twelve or the unanimity requirements and that both were historical "accidents." What minimum size and what minimum decision rules the court will ultimately decide the sixth amendment *does* require is, as far as I can tell, impossible to determine from the Court's reasoning in these cases, although in a dicta in *Williams*, the Court majority indicated its reluctance to accept less than six votes for conviction.

These Supreme Court rulings precipitated considerable outcry from constitutional scholars and civil libertarians, including an editorial in the *New York Times* (1972) condemning the Supreme Court's "Retreat on Rights." The rulings are expected to generate pressure on state legislatures to move to smaller juries and to less than unanimous jury verdicts in both criminal and civil cases. (See Saari, 1973; Zeisel, 1971, 1972.)

A natural question at this juncture is what difference can the Court's rulings be expected to make. As Sidney Ulmer (1963, p. 178) has put the question:

> Since traditional wisdom and practice holds that justice is best dispensed through collegial decision-making, we may ask what theoretical basis can

> be deduced for such a claim. . . Does it really matter whether juries decide by unanimous vote, a bare majority, or some vote in between? Does it make a difference whether the size of a decision-making group is 12, 212, or 10,000?

Intuitively, it seems reasonable that the fewer the number of jurors required to convict, the more likely is conviction; thus diminishing jury size and or permitting less than unanimous verdicts should clearly up the conviction rate—the question remains, however, "By how much?" Still a further question is "How will increases in the conviction rate affect the probability that defendants who are innocent will be *wrongly* convicted?" No satisfactory answers to either of these questions are presently available, and the reasoning offered by the Court in these cases is grossly unsatisfactory (Zeisel, 1972; Zeisel and Diamond, 1974).

We shall attempt to provide some preliminary answers to these questions by making some simplifying assumptions about the nature of the jury decision process. We shall use as our tools of analysis probability theory and combinatorial mathematics, building on the work which was done by early scholars such as Laplace (1814) and Condorcet (1785) and Poisson (1837), reviewed in Black (1958) and Gelfand and Solomon (1973); and more recent works by Rae (1969), Taylor (1969), and Curtis (1972).

We shall restrict ourselves to cases which actually go to trial (i.e., are not plea-bargained, settled out of court, or otherwise dispensed of), and we shall restrict ourselves to trials which bring in a verdict of innocent or one of guilty on some single count. The assumption of a single-count dichotomous choice avoids the necessity of dealing with bargaining among jurors across counts as to the nature of the verdict, such as apparently took place, for example, in the Chicago Seven Conspiracy trial. Even if there is more than one count in the indictment, our model may still be appropriate so long as each count may be treated separately (cf. Grofman, 1974).

We shall also assume that it makes sense to talk about the defendant's guilt or innocence of the count charged. Clearly, juries make judgments which are more complex than simply "Has the defendant committed the proscribed act?" For example, jurors may make judgments as to whether the defendant's probable punishment "fits" his crime or as to whether the law under which he is accused is indeed a "just" law by community standards. Such judgments on the part of jurors clearly help determine the defendant's probability of conviction (see Kalven and Zeisel, 1966). Moreover, even if the physical "facts" of a case are clear, jurors' judgments may still be difficult, e.g., involving judgments as to the defendant's "true" motives or the absence of premeditation. Nonetheless, in American jurisprudence the jury's task is to be the decider of the "facts" whether these be physical or psychological, and to abide by the judge's instructions as to the law. Our concern shall be with this "idealized" jury process, one in which defendants are either guilty or innocent of the count(s) charged, and one in which determining that guilt or innocence is the jury's sole concern. Such a view of the jury, while descriptively unrealistic, is, we belive, of clear normative importance.

II. THE BASIC JURY DECISION MODEL

Consider a jury of N members. Let G be used to denote guilt, and I innocence, of the count charged. Let P_{GG} be the conditional probability that a randomly chosen juror will judge a defendant guilty and will be correct in that judgment, i.e., P_{GG} is the average conditional probability that a juror will judge an individual who is guilty to be guilty. Similarly, let P_{II} be the average conditional probability that a randomly chosen juror will judge an innocent defendant innocent. Of course, $P_{GI} = 1 - P_{II}$ and $P_{IG} = 1 - P_{GG}$. For some category of crime, in some jurisdiction, let P_G be the proportion of defendants who are actually guilty of the count charged against them, and let P_C be the proportion of convictions, P_A be the proportion of acquittals and P_H be the proportion of hung juries. Let $P_I = 1 - P_G$, i.e. P_I is the proportion of defendants who are not guilty of the count charged. Let us assume:

(1) When k votes for conviction (k votes for acquittal) are achieved, the jury always brings in a verdict of guilty (innocent). If k votes are not achieved for either acquittal or conviction, then the jury shall be said to be hung. Note that we are not assuming that k is the legal majority required for conviction (acquittal). Rather, we are assuming that, whatever the de jure majority, k votes constitutes a de facto majority sufficient to guarantee that a legally sufficient majority of votes for conviction (acquittal) will be reached. We shall speak of k as the *effective* decision rule. Ample evidence exists that in 12-member juries, when 11 jurors are for conviction (acquittal), there is virtual certainty that the jury will bring in a unanimous verdict of conviction (acquittal) as the majority persuades (or browbeats) the lone holdout. (Kalven and Zeisel, 1966, pp. 460-462). Kalven and Zeisel (1966, p. 462) further argue that "it requires a massive minority of 4 to 5 jurors at the first vote to develop the likelihood of a hung jury." Further evidence supporting a view of jury decision-making in terms of an "effective" majority may be found in Davis (1973), Davis et al (1975a, 1975b), Grofman (1976), and Grofman and Hamilton (1976).

(2) The conditional probabilities, P_{GG} and P_{II}, that jurors will be correct in the judgments of guilt and innocence, are binomially distributed in the juror population, with means P_{GG} and P_{II} and variances $\frac{P_{GG}(1-P_{GG})}{N}$ and $\frac{P_{II}(1-P_{II})}{N}$ respectively.

(3) That $P_{GG} = P_{II} = p$, i.e. that jurors are, on average, as good at correctly determining the innocence of the innocent as they are at correctly determining the guilt of the guilty. (Note that this assumption about P_{GG} and P_{II} sets no restrictions on P_G and P_I).

For these assumptions we shall seek as our objective the specification of values for the following as a function of N, k, p, and P_G:

(a_1) the percentage of defendants who will be convicted.
(a_2) the percentage of defendants whose trials will result in hung juries.
(b_1) the probability that someone who is innocent will be found guilty.
(b_2) the probability that someone who is guilty will be found innocent.
(c) the probability that jurors will concur with the verdict that was reached.

Moreover, by hypothesizing a trade-off ratio R, which reflects the (expected) number of guilty defendants, we would be willing to set free in order to reduce by one the (expected) number of innocent defendants who are convicted, we shall be able to express judgments about the normative consequences of any combination of jury size and jury decision rules in terms of their expected consequences for convicting the innocent/freeing the guilty, for given values of R.

We wish to express this trade-off ratio R in such a way that we can treat it, like a probability, as having a weight between 0 and 1. We shall let $P_R = \frac{R}{R+1}$, where P_R is the relative weight to be attached to avoiding conviction of the innocent, and $1 - P_R = \frac{1}{R+1}$ is the relative weight to be attached to assuring conviction of the guilty. If R = 1, then $P_R = 1 - P_R = ½$. If R = 2/3, then $P_R = 2/5$, and $1 - P_R = 3/5$, etc. In more familiar terminology, if the odds on a horse are 1:1, then the horse is assumed to have a $\frac{1}{1+1}$ chance of winning; if the odds are 2:3, the horse is assumed to have a $\frac{2}{2+3}$ chance of winning, etc.

In American jurisprudence, it is sometimes asserted (although rarely by police or district attorneys) that R ought to be infinite, i.e., that rather than seeing a single innocent person convicted, we should allow every criminal to go scot free. On the other hand, it has recently been explicitly argued by the English Criminal Law Revision Committee (a standing committee consisting of judges of the Court of Appeal and the High Court, the Director of Public Prosecutions, the Metropolitan Magistrate of London, and senior academic lawyers whose recommendations are customarily translated into English law) that R ought to be 1, i.e., "that it is as much in the public interest that a guilty person should be convicted as it is that an innocent person should be acquitted." (English Criminal Law Revision, 1972, p. 16, cited in Edwards, 1973, p. 215.)

Analogous to our trade-off ratio between willingness to tolerate Type I and Type II error, we may construct for jurors an index D of relative disappointment, defined as the ratio of dissappointment caused by seeing (what from his viewpoint appears to be) an innocent person convicted to that of disappointment caused by seeing (again looking at things from his viewpoint) a guilty person go free. Clearly, caeteris paribus the less confident an individual is in his own judgment, the lower will be his disappointment if the jury verdict is not one with which he concurred. We shall denote the relative disappointment to a juror of believing he has committed a Type I error as $\frac{D}{D+1}$ which we shall notate as P_D. Similarly, the relative disappointment to a juror of believing he has committed a Type II error is $\frac{1}{D+1}$, which we shall notate as $(1\text{-}P_D)$.

This index may be used to construct a weighted measure of the *perceived* correctness of the actual jury verdict which was reached, from the standpoint of any given member of the jury.

III. JURY THEOREMS

We present below, without proof, our major results based on the assumptions specified above. Proof of these results and a considerable amplification of their implications, as well as some treatment of the sensitivity of the results to particular parameter assumptions along with voluminous tables specifying numerical values for a wide range of parameters may be found in Auchmuty and Grofman (1972), and Grofman (1973, 1975, 1976). For simplicity we shall assume N, the size of the jury, to be an odd number. Let m be a majority of the jury members = $(N+1)/2$. By a correct verdict, we shall mean either the conviction of the guilty or the acquittal of the innocent.

Theorem 1: (Condorcet Jury Theorem). If $k = m$, then the probability that a majority of the jury will reach a correct verdict (conviction of the guilty or acquittal of the innocent) is given by:

$$\sum_{h=m}^{N} \binom{N}{h} p^{h} (1-p)^{N-h} \tag{1}$$

Furthermore, if $1 > p > \frac{1}{2}$, the larger the jury the *more* likely it is that it will reach a correct verdict, while if $0 < p < \frac{1}{2}$, the larger the jury the *less* likely it is that the jury will reach a correct verdict. Finally, for $p = \frac{1}{2}$, the likelihood of a correct majority verdict is independent of N and is equal to ½. Furthermore, in the limiting cases $N \to \infty$ and $N \to 0$, the probabilities of a correct verdict approach 1 and 0, respectively. A version of this theorem was first proven by Condorcet (1785) (see also Grofman (1975)). In other words, if a group's members' probabilities of correct judgment are on average less than 1/2, then the majority group judgment is certainly inferior to the judgment of its best member, and the "the voice of the people" is apt to be quite wrong! Indeed, the more people the more wrong it is likely to be. If, on the other hand, the group's members' probabilities of correct judgment are on average even slightly better than ½, then the group verdict approaches infallibility quite rapidly as the group size approaches infinity, i.e., vox populi, vox dei.

Theorem 2: For given p, p_G, p_R, and k the weighted probability of a correct verdict is

$$\sum_{h=0}^{k-1} \left[\binom{N}{h} p^{N-h} (1-p)^{h} p_I p_R\right] + \sum_{h=k}^{N} \left[\binom{N}{h} p^{h} (1-p)^{N-h} p_G (1-p_R)\right] \tag{2}$$

and for fixed N, this expression is maximized as follows:

$$P_G = P_R \begin{cases} \text{for } p < \frac{1}{2} \text{ at } k=1 \text{ or } k=N \\ \text{for } p = \frac{1}{2} \text{ it is uniform} \\ \text{for } p > \frac{1}{2} \text{ at } k=m \end{cases}$$

$$P_G > P_R \begin{cases} \text{for } p < \frac{1}{2} \text{ at } k=1 \\ \text{for } p = \frac{1}{2} \text{ at } k=1 \\ \text{for } p > \frac{1}{2} \text{ at } k<m \end{cases}$$

$$P_G < P_R \begin{cases} \text{for } p < \frac{1}{2} \text{ at } k=N \\ \text{for } p = \frac{1}{2} \text{ at } k=N \\ \text{for } p > \frac{1}{2} \text{ at } k>m \end{cases}$$

In this next theorem, we treat a hung jury as equivalent to acquittal. Given the very low (less than 5%) occurence of hung juries in criminal trials and the less than 50% probability of a retrial occuring, this assumption should not significantly affect our results. By the weighted probability of a correct verdict, we mean a situation in which the expected number of innocent defendants is weighted by the factor p_R and the number of guilty defendants convicted is weighted by the factor $1-p_R$, and we seek to maximize the weighted sum. If we neglect p_R, the first term in the summand of expression (2) gives us the proportion of trials in which the jury will correctly reach a verdict of innocence, the second term, the proportion of trials in which the jury will correctly reach a verdict of guilty. Thus, given our assumptions, expression (2) enables us to specify the values of categories (b_1) and (b_2) in our list of objectives.

If $p_G = p_R$ we obtain the results that the expression is maximized: $p < ½$ for $k = 1$ or $k = N$, and $p > ½$ for $k = m$. For $P_G \neq P_R$ optima can occur at any value of k, depending upon the values of P_G and P_R. If, however, we believe, a priori, that most of those who will come up for trial are indeed guilty (i.e., $P_G \gg ½$, where $\gg$ is read considerably greater than), and if $P_R \leq ½$, then the optimal decision rule approaches (or equals) $k = 1$ as $P_G \to 1$ for all values of p and N. Similarly, if we place a very high weight on avoiding Type I (convicting the innocent) as opposed to Type II (freeing the guilty) errors (i.e., P_R [illegible] and if $P_G \leq ½$, then the optimal decision rule approaches (or equals) $k = N$ as $P_R \to 1$. Note that it does not require an infinite value of R to justify in normative terms a decision rule requiring unanimity to convict.

Theorem 3: The (weighted) probability that the verdict reached will be one with which a randomly chosen juror will/would concur, is given by

$$\sum_{h=k-1}^{N-1} \binom{N-1}{h} p^{h+1} (1-p)^{N-h-1} P_G(1-P_D)$$
$$+ \sum_{h=k-1}^{N-1} \binom{N-1}{h} \cdot p^{h-1}(1-p)^{N-h-1}(1-P_G) \; (1-P_D)$$

and this expression is maximized for $k = \lceil N \cdot p_D$, where $\lceil$ is the greatest integer bound.

A juror may concur with the jury verdict even though that verdict is incorrect and may disagree with that verdict in a case in which justice is being served, e.g., where (with a less than unanimous verdict required for conviction) the jury sets free an innocent defendant whom the juror believes to be guilty, or where the jury convicts a defendant whom the juror regards as innocent. Thus, the probability that the jury verdict will be correct and the probability that a given (typical) juror will concur in that verdict need not be identical, although they are, of course, related.

It is important to note that Theorem 3 implies that if we are interested only in the *perceived* correctness of (weighted disappointment in) a verdict, rather than its actual correctness, knowledge of the proportion of defendants who are actually guilty becomes irrelevant! Moreover, if $P_D = 1 - P_D$, i.e., if the same juror has a trade-off ratio in which disappointment in seeing (what from his perspective is) the guilty go free is exactly equalled by disappointment in seeing (what from his perspective is) the innocent being convicted, then the optimal jury decision rule from his perspective is that of simple majority. Similarly, if for example, for some juror $P_D = 2/3$, i.e. if the juror would be as disappointed by seeing two guilty defendants go free as at having one innocent defendant convicted, then the decision rule he should advocate is the 2/3rd rule. Expression (6) enables us to specify, for our given assumptions, the values of category (c) in our list of objectives.

Theorem 3 is formally identical to a theorem proved by Curtis (1972) which is a generalization of a theorem proved by Michael Taylor (1969) and first conjectured (although in a less general form) by Rae (1969). The problem as formulated by Rae, followed by Taylor and Curtis, is as follows: Consider a typical individual committee member, named Ego. Ego's vote on any given issue is independent of the votes of other committee members. All voters are characterized by the same probability (p) of voting "yes" on any given proposal. The selection of a quorum rule for the committee is at issue. At the time this decision rule is being chosen, the future proposals which will come before the committee are assumed unknown. Ego is assumed to wish the committee to choose a decision rule which will minmize the number of times he expects either A—to support a proposal which fails of passage or B—to oppose a proposal which carries. What quorum rule should he favor? In the Rae (1969) version, disappointment in outcomes A and B is assumed equal (in our terminology P_D is set equal to $1/2$) and also p is assumed to be $1/2$. In the Taylor (1969) version, the restriction that $p=1/2$ is dropped. In the Curtis (1972) version, the restriction to $p=1/2$ is dropped as well as the restriction that $P_D = 1 - P_D$. In a further generalization, Curtis (1969) drops the restriction that all committee members have an equal probability of voting "yes" and looks at the "average" committee member. Other generalizations of this theorem and related results may be found in papers by Badger (1972) and Schofield (1972).

Theorem 4:

$$P_C = \sum_{h=k}^{N} \left[\binom{N}{h} p^h (1-p)^{N-h} P_G + p^{N-h}(1-p)^h P_I \right]$$

$$P_A = \sum_{h=k}^{N} \left[\binom{N}{h} p^h (1-p)^{N-h} P_I + p^{N-h}(1-p)^h P_G \right]$$

$$P_H = \sum_{h=k}^{N} \left[\binom{N}{h} p^h (1-p)^{N-h} + p^{N-h}(1-p)^h \right]$$

Theorem 4 provides a specification of the values of categories (a) and (a in our original list of objectives.

Corollary 1 to Theorem 4: If we assume further that

$$p \gg \frac{1}{2}$$

$$\frac{k}{N} \gg \frac{1}{2}$$

$$N \gg 1$$

then

$$P_H = \sum_{h=0}^{k-1} \binom{N}{h} p^h (1-p)^{N-h}$$

$$P_C = \sum_{h=k}^{N} \binom{N}{h} p^h (1-p)^{N-h} P_G$$

$$P_A = \sum_{h=k}^{N} \binom{N}{h} p^h (1-p)^{N-h} P_I$$

Corollary 1 tells us that if we make the further (not implausible) assumptions that juries

(7) are reasonably accurate ($p \gg \frac{1}{2}$) on average;

(8) are using a decision rule reasonably close to unanimity ($\frac{k}{N} \gg \frac{1}{2}$) and

(9) are of reasonable size ($N \gg 1$, which for our purposes means $N \geq 6$); then P_H, the percentage of hung juries, is independent of P_G (the proportion of defendants who are actually guilty).

Corollary 2 to Theorem 4: If we further assume that

$$p \gg \frac{1}{2}$$

$$k = N$$

$$N \gg 1$$

$$P_H = 1-p^N$$

$$P_C = p^N P_C$$

$$P_A = p^N P_I$$

$$P_G = \frac{P_G}{P_C + P_A}$$

$$P_I = \frac{P_A}{P_C + P_A}$$

$$p = (P_C + P_A)^{\frac{1}{N}}$$

Thus, if we confine ourselves to juries in which the effective decision rule is unanimity then, if we are prepared to assume reasonable average judgmental competence of our jurors and a reasonably sized jury, we can estimate the "true" proportion of guilty (innocent) defendants from the ratio of convictions to non-hung verdicts; and we can estimate the mean judgmental competence of jurors from the Nth root of the sum ($P_A + P_C$). Of course, if $P_{GG} \neq P_{II}$, Theorem 4 and corollaries thereto would have to be significantly modified.

Table I gives actual data on jury verdicts in the criminal trials in the Supreme Court of New York in the judicial year 1971-72 and shows the values of p, P_G, and P_I calculated from the observed values of P_C and P_A. (The Supreme Court of New York, despite its title, is the state's major trial court.) Note that under these assumptions, the probability of an innocent defendant being wrongly convicted is virtually zero, .0043 within New York City and .0025 outside of New York City. Note also that, under these assumptions, the ratio of guilty defendants to innocent defendants within hung juries will be the same as the ratio of convictions to acquittals in non-hung juries.

In the past decade in New York's Supreme Court, the percentage of hung juries in criminal cases has never exceeded five percent. For this remarkable concordance among jurors to take place given our other assumptions, an effective decision rule of unanimity necessitates postulating an absurdly high mean juror judgmental competence of $p > .99$ (See Table I.) Simply rejecting the assumption that $P_{GG} \neq P_{II}$ will not redeem the potential utility of an effective decision rule of unanimity assumption. For a discussion about available knowledge of the group conformity process in juries, see Grofman (1976).

Table I

Observed Values of P_C, P_A, and P_H and Hypothesized Values for p, P_G, and P_I Under the Unanimity Decision Model

		Outside New York City		Within New York City	
Observed	P_C	67%	N=665	61%	N=643
	P_A	30%	N=300	34%	N=360
	P_H	3%	N=30	5%	N=56
Hypothesized	p	.998		.995	
	P_G	69%		64%	
	P_I	31%		36%	
	P_G-P_C	2%		3%	
	P_I-P_A	1%		2%	

[a] Source: Report of the Administrative Board of the Judicial Conference for the Judicial Year, July 1, 1971 through June 30, 1972. Albany: New York, 1973, Table 12, p. A77 and Table 29, pp. A106–A107. Data refer to twelve-member juries in criminal trials.

Assuming near unanimity as our effective decision rule does, however, enable us to establish one further intersting result.

Corollary 3 to Theroem 4: For

p very close to 1 (A)

K/N very close to 1 (B)

$N \gg 1$ (C)

then for juries drawn from the same population, cutting jury size by a factor of K will reduce the percentage of hung juries by roughly a factor of K also, and the ratio $\frac{P_C}{P_A + P_C}$ will remain roughly invariant. If P_H is low (.10), which for criminal trials it does indeed appear to be, then for effective decision rules near unanimity the impact of jury size on conviction and acquittal rates will be minimal.

IV. CONCLUSION

We regard the models and theorems generated in this paper as only a preliminary to more sophisticated modelling of jury decision processes as sequential decision-making by actors of differentiated status among multiple alternatives. Nonetheless, we feel that our results, limited as they are by a network of special assumptions, are not wasted effort. They can be used as a baseline against which to compare the implications of alternative and more complex models. We also feel that our work ought to prove of some normative interest to students of democratic theory. It is a part of a long tradition of formal analysis of democratic institutions dating back to Condorcet (1875) whose modern practitioners have included scholars such as Douglas Rae (1969), Richard Niemi and Herbert Weisberg (1972), and James Buchanan and Gordon Tullock (1962). Limited as our models may be, at least we are explicit about our assumptions and where they lead us, rather than taking glib refuge in intuition or "common sense" (a la the Supreme Court's ruling in *Williams v. Florida*) to hide an inability to support predilections with sound reasoning.

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