Reviews

The Judicial Mind: The Attitudes and Ideologies of Supreme Court Justices 1946-1963. By Glendon Schubert. Evanston: Northwestern University Press, 1965. Pp. 295. \$10.00.

The Judicial Mind¹ is the major attempt by the acknowledged dean of judicial behavioralists to explain both scientifically and unconventionally how Supreme Court Justices decide cases.2 The commitment to a political science of judicial behavior is based on the premises that scientific social study is possible and that traditional constitutional scholarship is "discursive commentary" which misses the real factors behind judicial decision. By scientific study, exponents mean research guided by an explicit theory, posing hypotheses with mathematical precision and objectivity which may be tested against real world evidence by an independent researcher.4 The Judicial Mind has received critical commendation for its analytical sophistication and novel conclusions, and has been hailed as a vindication of the genre.

If they were not putatively rooted in a scientific analysis, Schubert's conclusions would seem modest. The summary findings are that the Justices who have sat on the Supreme Court since 1946 show a consistency of decision during their careers, that blocs of Justices may be identified by their responses to certain types of issues, and that the bloc with the greatest influence in any given term can be determined.6 Three blocs are most significant—the liberals (including Justices Black, Douglas, and Warren), the conservatives (including Justices Burton, Reed, and Vinson), and a moderating group referred to as "the prag-

1. G. Schubert, The Judicial Mind (1965) [hereinafter cited as Schubert].

6. SCHUBERT 275-77.

^{2.} Schubert is Professor of Political Science at the University of North Carolina. He has written or edited six other books including Quantificative Analysis of Judicial Behavior (1959), Constitutional Politics (1960), and Judicial Behavior, A Reader in Theory and Research (ed. 1964). For an introduction to the literature of judicial behavior, see also the symposium Social Science Approaches to the Judicial Process, 79 Harv. I Pru 1861 (1966) L. REV. 1551 (1966).

^{3.} Schubert 10.
4. This meaning is used, for example, by Danelski, Values As Variables in Judicial Decision-Making: Notes Toward a Theory, 19 VAND. L. Rev. 721, 722 (1966).
5. Westin, Book Review, 61 Am. Pol. Sci. Rev. 763 (1967); Jacob, Book Review, 1966 Wis. L. Rev. 961; Grunbaum, Book Review, 4 Houston L. Rev. 165 (1966).

matic conservatives" (including Justices Frankfurter, Goldberg, Jackson, and Stewart⁸, who are relatively liberal on political issues and relatively conservative on economic ones). During the early fifties, the liberal bloc was in the minority. By the mid-fifties, Chief Justice Warren had joined the liberals and the Court began again to advance egalitarian policies in citizenship, legislative reapportionment, and racial integration cases, as it had during the 1946-48 terms when Justices Murphy and Rutledge sat. Egalitarianism became the value of greatest Court consensus in contrast to the continued divisions over economic and civil liberties issues.9

Schubert claims, however, that he can do better than merely report these trends in judicial politics. He can show scientifically that mere doctrinal explanations of judicial decision are inadequate. Schubert hypothesizes that two values or preferences are most influential in determining how a Justice decides a case. Therefore an analysis relating decisions to these values best explains judicial behavior. The first value is one of choice between the claims of "the economically affluent and the economically underprivileged"10 (the economic underdog or "E" value). The second is the choice between governmental authority and claims of private citizens "to personal (as distinguished from property) rights and freedoms," (the civil liberty or "C" value).11 One of these two value choices, Schubert believes, is raised by the facts of most cases submitted to the Court. Initially, several values may have been present in the case, but either the "C" or "E" value is usually sifted out as crucial to the decision through the Court's "jurisdictional screening."12 Merely by reading the headnotes of the reported opinions, one can identify the key value in each case. By focusing on those cases with dissenting opinions one can determine how the Justices in any single term rank according to a liberal or conservative commitment to these values.¹³ Schubert's scientific theory of judicial decision may, in the author's own words, be analogized to presenting to the Justices a preference questionnaire:

Each case asks the justices to respond to the question: is your attitude toward value X sufficiently favorable that you believe that

^{7.} Id. 274.

^{8.} Id. 270-77. The composition of each bloc is not set forth explicitly in the text. It must be drawn, approximately, from table 41 and from figure 16. Schubert 270-71.

9. Id. 224-26, 280.
10. Id. 197-20

^{10.} *Id.* 127-28. 11. *Id.* 101.

^{12.} Id. 37.
13. The ranking technique is called scaling and is described shortly.

a claim of degree Y should be upheld? (For example: Is your attitude toward political freedom sufficiently favorable that you believe that a witness before a congressional investigating committee cannot "constitutionally" be compelled to reveal his past associations, if any, with the Communist Party of the United States?)14

To justify this approach, Schubert relies on a statistical technique developed by mathematical psychologists called scaling.¹⁶ To scale is to order or rank people according to their expression of or commitment to a specific value. For example, assume that ten cases are presented to the Supreme Court, all raising the primary issue of whether or not petitioner's right to free expression should be restrained to achieve a valid state interest. Assume that all Justices agree that this is the sole issue for decision. Assume further that there is at least some disagreement among the Justices as to how to decide each case. Given these plausible assumptions, one could rank the Justices by assigning a positive or negative weight to their "votes" for or against free expression, with all votes favoring free expression weighed positively. If we selected actual cases decided in the late fifties, we would expect Justice Douglas and Black to be ranked high on the scale, with high positive scores, and Justices Burton and Clark to be ranked at the bottom of the scale, with high negative scores. Similarly the ten cases could be ranked downward from those in which free expression is approved only by Justice Douglas, or by Justices Douglas and Black, to those in which it is disapproved only by Justice Clark or by Justices Burton and Clark. If Justices always perceive the same value, if they each give that value a constant weight and do not vary their value commitment over time, it should be possible, theoretically, to rank Justices and cases with very few inconsistencies—that is, with very few cases in which Justices Burton or Clark uphold free expression while Justices Douglas and Black restrict it. The data for Schubert's analysis come from the construction of such scales for each of two "values," the "C" or civil liberties value and the "E" or economic underdog value, for each term of the Court from 1946 to 1963.16

Schubert finds that each scale does demonstrate a high rate of consistency when tested by the mathematical conventions deemed the

^{14.} SCHUBERT 75.15. Schubert assumes that the reader is familiar with the technique. He does not appraise its appropriateness, though he does refer to a discussion in one of his earlier books. Id. 75. See G. Schubert, Quantitative Analysis of Judicial Behavior 269-90 (1959). The technique was developed by Louis Guttman and was originally presented in S. Stouffer et al., The American Soldier: Studies in Social Psychology in World War II (1950). 16. Schubert 104-12, 130-38.

appropriate test statistics for consistency.¹⁷ He interprets this consistency as proving that the subjective expression of the two values, independent of legal doctrine, is what really determines how the cases are decided. Though this is not clearly set forth, he seems to assume that there is no room in a traditional (non-social science) view of the law for such values to be taken into explicit account. To him, the traditional view stands for neutral rules, merciless logic, and lifeless precedent—a Bleak House formalism.18 The fact that the two values scale, he believes, proves that they exist. If they exist, and if there is no place for them in legal doctrine, they must have a personal, meta-doctrinal influence on decision. Schubert does not say that the Justices themselves are unaware of the impact of their personal values, only that the Justices would have the public think that personal values do not play so great a part in the law as in fact they do. "[I]t seems evident," Schubert says, "that the whole point of the opinion-writing ritual is to provide acceptable rationales which will protect the justices from personal criticism—and even from personal responsibility—for their decisions."19

The Judicial Mind may be critized from two vantage points. Methodologically, the scales are biased and it is doubtful that there is any economic underdog value which ranks consistently. Jurisprudentially, Schubert's characterization of the traditional view of legal decision ignores the now commonplace appreciation of the role played by values in the formulation of legal principles and policies.

I have checked the reliability of the C and E scales by applying their defining criteria independently to cases reported for the year 1957. This was the year which Schubert investigated first and the year in which he found "the highest consistency in voting behavior toward economic issues for the entire period of seventeen terms." The repli-

^{17.} Schubert uses two test statistics, the coefficient of reproducibility (CR) and the coefficient of scalability (CS). For the 1957 terms, the test statistics are: C scale: CR = .959, CS = .838; E scale: CR = .989, CS = .902. CR is equal to 1 minus the fraction made up by the number of inconsistencies in each table divided by the number of cases in which there is a 7-2, 6-3 or 5-4 split, times the nine Justices. A CR greater than .90 is considered a proof of consistency. CS is equal to 1 minus the fraction made up by dividing the number of inconsistencies by the number of minority votes cast in all the cases. A CS greater than .60-.65 is considered a proof of consistency. For the theory behind these admittedly arbitrary ratios, see G. Schubert, Quantitative Analysis of Judicial Behavior 270-72 (1959); Schubert 78-83. Schubert's tables for the 1957 term are reproduced in summary form in the appendix infra.

^{18.} E.g., Schubert's reference to the "personal foundations of judicial decisions," SCHUBERT 7, to be contrasted with the "lawyer's model of judicial decision-making, which is based upon traditional logic and depends upon the stare decisis norm for its deus ex machina." The latter he sees as a "vast oversimplification of empirical reality." SCHUDERT 7, 286.

^{19.} Id. 14. 20. Id. 127.

cation shows that the economic value does not scale, and that the civil liberty value does—though less consistently than Schubert claims.21

Comparison of the E scales shows that Schubert included seven cases that I ignored,22 and I included three cases that he left out.23 In three others-all labor cases-we read the economic underdog value oppositely.24 Schubert also multiple counted, repeating six cases by counting separately eight companion cases decided on the same day, on the same issue, on the same or similar facts, disposed of by the same written opinion. Since none of the companion cases contained any inconsistent votes, the effect of the extra counting was to increase the denominators of the scalability ratios, biasing the tables toward consistency.25 Where Schubert found an unusually high degree of scalability, I found no evidence of consistent voting with respect to the economic value.20

Closer consideration of a few cases suggests the weakness of Schubert's three analytical assumptions: (1) that the Justices filter out a single issue for decision, (2) that they agree on the primary value which this issue represents, and (3) that Schubert can tap this value reliably in building his scales.

- 21. For my replications of the C and E scales for the 1957 term, see appendix infra. The test statistics are: C scale: CR = .937, CS = .810; E scale: CR = .836, CS = .517.
- 22. Carpenters Local 1976 v. NLRB, 357 U.S. 93 (1958) (hot-cargo provision held unenforceable); three price discrimination cases—FTC v. Standard Oil Co., 355 U.S. 396 (1958), Nashville Milk Co. v. Carnation Co., 355 U.S. 373 (1958) and Federal Maritime Bd. v. Isbrandtsen Co., 356 U.S. 481 (1958) (in none of these was it clear to me that either the public or smaller competitors gained from the rulings, nor could I decide which of these would be the underdog); Allegheny Corp. v. Breswick & Co., 355 U.S. 415 (1958) (dealt with a question of federal jurisdiction unrelated to any underdog), United States v. McNinch, 356 U.S. 595 (1958) (merely construed the Federal False Claims Act narrowly to limit criminal prosecution); and Byrd v. Blue Ridge Rural Elec. Coop., 356 U.S. 525 (1958) (where the underdog value hardly seems predominant, see p. 1437 infra).

 23. ICC v. Baltimore & O.R.R., 355 U.S. 175 (1957) (supposedly aiding the consumer by lowering iron prices); Public Utilities Comm'n v. United States, 355 U.S. 534 (1958) (local California carriers gaining some of my sympathy); and Hanson v. Denckla, 357 U.S. 235 (1958) (favoring out-of-state banks and insurance companies against widows and pensioners).

 24. In International Ass'n of Machinists v. Gonzales, 356 U.S. 617 (1958) and in United 22. Carpenters Local 1976 v. NLRB, 357 U.S. 93 (1958) (hot-cargo provision held un-

- 24. In International Ass'n of Machinists v. Gonzales, 356 U.S. 617 (1958) and in United Automobile Workers v. Russell, 356 U.S. 634 (1958), I took the worker suing his union as the underdog. Schubert wrestled, but saw it the other way. Schubert 168. The third case was Youngdahl v. Rainfair, Inc., 355 U.S. 131 (1957) in which union picketing was saved from a lower court injunction. If Schubert were consistent in seeing unions as the underdog interest, he should have found the dissenting Justices Black, Douglas, and Warren as the conservatives here.
- 25. Schubert offers no reason for his multiple counting other than a definitional one—he counts each case with a unique docket number. Schubert 46. For the multiple countings, see Schubert's E table. Schubert 130-38. All but one show up as repeated citations differentiated by docket numbers after the colons. The other repeater is NLRB v. Milk Drivers Locals 338 & 680, 357 U.S. 345 (1958), a companion case to Carpenters Local 1976 v. NLRB, supra note 22.
- 26. Schubert's CR was .989 and his CS .902 for the E scale; my CR was .836, and my CS was .517 (see appendix infra); Schubert's figures meet and exceed the conventional test for consistency; mine do not. See notes 17 and 21 supra and Schubert 104-12, 130-38.

In Byrd v. Blue Ridge Rural Electrical Cooperative27 an injured employee who resided in North Carolina sued the respondent South Carolina corporation for its alleged negligence. Byrd, the employee, worked for a subcontractor of Blue Ridge. Compensation was sought in the federal court of South Carolina. Blue Ridge raised the defense that petitioner was its employee for the purposes of the South Carolina Workmen's Compensation Act and that this state law provided Byrd's exclusive remedy. The district court struck the defense and found for Byrd; the Court of Appeals for the Fourth Circuit reversed and directed judgment for Blue Ridge. In overturning the Court of Appeals, the Supreme Court held that regardless of state law the employee was entitled in a federal court to have the factual issues raised by the defense heard by a jury. Schubert read this case as if it pivoted on the issue and value of who was the economic underdog. As an injured employee undertaking judicial combat with a utility company, Byrd might have drawn some sympathy. Clearly, however, there was more than this at stake. Even in Schubert's idiosyncratic terms, there was an issue of political rights—Byrd's right to a jury trial in a federal court, where federal and forum state law conflicted. This would appear to put the Byrd case more properly on the C scale. In context, it seems most likely that the case turned on a third issue and value—the relative applicability of federal and state law. A decade before, the Court through Justice Frankfurter had ruled in Guaranty Trust Co. v. Yorh²⁸ that state law must govern whenever its application to the case would decisively determine its outcome. By applying federal law here, the Court was significantly limiting the Guaranty rule.²⁹

United States v. Cores,³⁰ which Schubert places on the C scale, turned on a question of venue in construing the Immigration and Nationality Act. The majority held that an alien crewman who overstays his permitted period in the United States is guilty of a continuing offense which may be prosecuted in any district in which he is discovered. The dissenters interpreted the statute to limit jurisdiction to the district where he was when the period expired. The case cannot be reduced to a single issue turning on a single value. There are the questions of whether or not deportation powers should be considered

^{27. 356} U.S. 525 (1958).

^{28. 326} U.S. 99 (1945).
29. Yet a fourth value, raised in the case, is the relative competence of the Supreme Court to overturn the factual findings of inferior courts. Justice Frankfurter understood the Court of Appeals to be saying that even if a factual issue would have to be submitted to a jury, in this case there were no controverted facts. 356 U.S. at 558-59.

^{30. 356} U.S. 405 (1958).

penal and whether immigration enforcement powers should be narrowly or broadly granted under the Congressional mandate. The value of compassion for an alien and perhaps even the value of sympathy for the underdog may both affect the answers to these questions. The one value which seems least implied is the C scale value involving due process or protection of a civil right.

One suspects either intuition or circularity on Schubert's part for including Zavada v. United States³¹ on the C scale. No written opinion is reported for the case, merely a note that the Court ordered the case remanded for a hearing, that Justices Clark, Harlan, and Whittaker dissented from the order, and that two earlier Supreme Court cases were precedent for the disposition.³² No mention is made of the issue decided or the facts of the trial. Nor does reference to an earlier report of the case at the appellate level add information other than that one ground for appeal had to do with the sentence imposed.33 How did Schubert know that this case was decided on the basis of the C value? Did he research the cases cited or did he just guess that this was a criminal litigation and surmise that a Clark-Harlan-Whittaker alliance usually means a division over a civil right in a criminal case? If this reflects Schubert's reasoning his only basis for ranking the dissenters negatively on the C scale was foreknowledge of their putative preferences. Then to use the C scale to prove the very values which are assumed in constructing the scale is to reason in a circle.

There appears to be circularity as well in the way Schubert determines the values in the cases with reported opinions. He does not explain how he determines their presence beyond acknowledging that it is a "subjective" process.34 It is likely that he relies on the factual summaries, which give only a fraction of those facts that were submitted by the parties prior to the decision. These factual summaries best fit and reinforce the opinion's holding. Thus Schubert's values are dependent upon and not anterior to the reasoning of the opinion.

Though the assumptions are weak, replication shows that the C scale is significantly consistent.35 This supports the contention that the Jus-

^{31. 355} U.S. 392 (1958) (per curiam).
32. Walker v. Johnston, 312 U.S. 275 (1941); Holiday v. Johnston, 313 U.S. 342 (1941). These cases deal with appeals from the discharge of habeas corpus writs. The Walker petition for the writ was based on denial of counsel. The Holiday petition was based on the erroneous imposition of two sentences for a single offense. In both, the district judge was required to hold, personally, a hearing with argument on the bases for the writs.

^{33. 245} F.2d 956 (6th Cir. 1957). 34. SCHUBERT 101.

^{35.} Schubert finds a C scale CR of .96, a CS of .84. With seventeen fewer cases (Schubert multiple counts twelve times and five others seemed misplaced in the C scale), I find a CR of .94 and a CS of .81.

tices have divergent views of the Constitution when it comes to issues of civil liberties and that these differences often lead to split decisions. This is not a fresh insight. Lawyers and students of the Court have noted the alliances to which Schubert points, and have even ranked the Justices in terms of their relative civil libertarianism. 30 Moreover, although the technique may be original, it is wrong to take the fact of scalability as scientific proof that conflict over a single value determines the outcome of cases, and wrong to see this value as separate and outside of legal doctrine to the extent that it influences decisions. Civil liberties cases involve more values than just the citizen's freedom from governmental restriction: they also involve values raised by questions about the relative competence of court and legislature, appellate and trial courts, about proper jurisdiction between the federal and state governments, about the suitability of a particular dispute to the making of general rules, about fairness in criminal sentencing, and about the judicial ripeness of a dispute. Justices will differ on all these issues, and their different approaches and conclusions are reflected in the rules and principles of our law.

It is widely accepted in American jurisprudence that law is more than rules, that rules embody legal principles and legal policies and that these principles and policies are based on social values or preferences. Supreme Court Justices constantly face disputes which present value conflicts or in which the impact of these values is unclear. Such ambiguities give law what traditionalists refer to as its open texture. But when a Justice resolves a conflict, he does so within the framework of prior statutes and rulings which represent earlier efforts of past Jus-

36. See, e.g., the table compiled by The Commission of Law and Social Action of the American Jewish Congress, showing how the Justices sitting in 1957 stood "on questions of civil liberties."

	Favorable to Right	Against Right	No Vote
J. Douglas	56	1	
ľ. Black	52	5	
C. J. Warren	48	7	2
J. Brennan	48	7	2
J. Frankfurter	33	23	1
I. Whittaker	28	29	-
I. Harlan	27	30	
I. Burton	22	34	7
J. Clark	16	41	•

The only variation between the ranking of this table and the C scale is the reversed order of Justices Whittaker and Harlan. Bischoff, Constitutional Law and Civil Rights, 1958 Annual Survey of American Law 59, 60-61. See also the measure between pairs of Justices in table IV(B), The Supreme Court 1957 Term, 72 Harv. L. Rev. 77, 103.

tices to resolve the same conflicts over ambiguities. What makes one principle weightier than another is the contemporary acceptance of the values it implies. Schubert's particular mistake is to see no connection between the written opinions and the values touched by a dispute. Opinions are about values. They connect the decision about values which are raised in the present case to prior efforts to accommodate these values. If the prior decisions rest upon values now considered of lesser importance and slight values now considered controlling, we speak of the older law as being weak, or ripe for modification or rejection.

Schubert's statement of his theory and presentation of his empirical results occupy the first half of The Judicial Mind. The second half of the book is a breathless uphill spiraling of unscientific conjecture about judicial thinking. At bottom are the flawed assumptions about what each case stands for. Above this are the C and E scales, subdivided into smaller components and recombined.³⁷ At the highest level, Schubert intuits three key ideological factors or pure types of judicial philosophy. Factor I is the value of egalitarianism. Factor II is the value of freedom against authority. Factor III is the value of individual versus collective interests. The justification for these three factors is, in part, their correspondence with the major political doctrines of the nineteenth century—Liberté, Égalité, and Fraternité. 88 Factor I is later redefined as the measure of liberalism and conservatism, and factors II and III are combined and called the dimension of pragmatism and dogmatism.89

Dogmatism is a term redolent with insinuation. It has been used by social psychologists to characterize the phenomenon of rigid and intolerant thinking often attributed to political extremists. 40 Schubert cites this literature as proof that dogmatism/non-dogmatism is an important dimension in all thought—including judicial decision. Even if the attitude of rigid intolerance were precisely identifiable, which other social psychologists have questioned,41 it would be no authority for Schubert. He uses the word not to mean intolerance, but to mean support of government against private interests, demonstrated both by opposition to economic underdogs and by supporting state action chal-

^{37.} Schubert, tables 26 and 27, at 172-73.

^{38.} Id. 199-203.

^{39. 1}d. 155-203.
39. 1d. 257-59.
40. The two leading studies to which Schubert refers are H. Eysenck, The Psychology Of Politics (1954) and M. Rokeach, The Open and Closed Mind (1960).
41. E.g., Rokeach and Hanley, Eysenck's Tender-Mindedness Dimension: A Critique, 53 Psychological Bulletin 169 (1956); Roger Brown, Social Psychology 477-546 (1965).

lenging political rights. Nothing in the literature of social psychology demonstrates that an ideology which favors state authority is necessarily rigid, intolerant, or authoritarian. Nonetheless, Schubert "assumes" that it must be, and feels free to assume further that pragmatism/dogmatism is the second most important variable of judicial decision. Having asserted that it is dogmatic to be a statist, he changes the meaning of dogmatism a second time; now it is a distaste for overturning leading cases. "I think it requires no argument," says Schubert (thus sparing himself a Herculean task), "to support the judgment that to believe in the authority of precedent, that rules should be followed until they are formally changed, etc., corresponds with the Dogmatic ideology. . . . So Dogmatism is pro-stare decisis, and Pragmatism is anti-stare decisis." After all this Schubert measures the Justices' C and E scale ranks against the hypothesized dogmatism dimension and finds that not a single one is a dogmatist—a triumphant conclusion.

Even if the conjecture and unscientific assumptions of the second half of *The Judicial Mind* are ignored, does the remainder represent scientific analysis? It postulates a model of decision-making as stimulus, attitude and response. But on that level the model is a truism incapable of refutation: all behavior may be represented as a set of stimuli and responses. What gives a model scientific standing is its potential for being tested, for withstanding refutation. Only a fragment of Schubert's model passes testing—the consistency of one of the two scale values. The E scale does not meet the test of reproducibility, and the defining assumptions of the C value are less reliable for explanation than the traditional approach.

Schubert does use statistical techniques which may, but need not necessarily, promote scientific inquiry. As he himself admits,

[O]nly persons who do not comprehend the methodology will assume that once a scale has been constructed, it can serve as a substitute for the judgment of the analyst about his data. As I have tried to illustrate in various places in this work, scales and coefficients and factors and other quantified paraphenalia are useful guides to, but never substitutes for, the scientific intelligence (i.e., uncommon sense) of the analyst 45

But it is just such "scientific" intelligence that is missing from Schubert's book. The conceptual categories such as value and dogmatism are arbitrary and confused rather than "politically and psycho-

^{42.} The "most important" is liberalism/conservatism. Schubert, 259, 265.

^{43.} Id. 268.

^{44.} Id. 260, 265.

^{45.} Id. 169.

logically shrewd;"46 the tests are not systematically applied, let alone controlled. The statistics are used to generate hypotheses piecemeal, not to test them.⁴⁷ The scales do not prove that the Justices simply follow their subjective attitudes without attention to legal doctrine.48 In sum, Schubert has his cake and keeps his penny. He is a scientist without being responsible to the canons of scientific inference.⁴⁰ He is an intuitionist, but claims to be hard-nosed in some undefined sense that the legal scholars he deprecates are not. 50

Are the limitations of The Judicial Mind inevitable in any social study of judicial decision or administration? I think not. Schubert made two threshold but correctible mistakes. He underestimated the sophistication, if not the adequacy, of existing explanations of judicial decision—the place accorded values in explicit doctrine. He also started with a methodology in search of a question, the reverse of a proper research strategy. Schubert asked, "What mileage can I get out of attitude scaling and factor analysis?" Instead he should have asked, "What specifically is inadequate about present understandings of judicial decision, and how can I test this inadequacy?"

I do not share Schubert's view that present understandings of Supreme Court adjudication are "naive." Although the craftsmanship of the Justices varies, they attempt to explain often complex decisions, and sometimes succeed. The commentators and scholars who in turn criticize the Justices' work bring a sensitivity and subtlety to the task that is inevitably lost in a table which scales one value. Judicial value analysis is far more likely to contribute understanding in a study of baseline local and state courts. Written opinions are rare at this judicial level, and the skills of judges and attorneys are uneven. Extended courtroom observation and statistical description may well reveal a disparity between the values expressed in day-to-day dispositions and the values expressed in the applicable law. Lawyers have yet to undertake this task, partly because the data bits are so numerous as to defy analysis with their skills. The task is a worthy challenge for judicial behavioralists applying statistical tools which can reduce the mass of data to comprehensible dimensions. Douglas Rosenthalt

^{46.} The quoted words are Westin's, supra note 5.
47. Jacob credits Schubert with valid testing, supra note 5.
48. Grunbaum reports that such a proof is made, supra note 5.

^{49.} A succinct statement of and argument for the canons of scientific inference termed, by him, the "strong inference" method, are put forth in J. PLATT, THE STEP TO MAN 19-36 (1966). 50. SCHUBERT 76.

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APPENDIX
SCHUBERT'S E SCALE—1957 Term†

					Justices	·			
Cases	D	BI	Wa	Br	CI	Bu	Wh	H	F
6/595	X								
7/357:81	X X X X X X X X X X X X X X X	X	7.7						
6/617 6/634	X	:	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
5/131	$\hat{\mathbf{x}}$		Ŷ						
5/415:616	$\ddot{\mathbf{x}}$	x	\ddot{x}						
5/415:617	X	X	X						
5/415:618	X	X	X						
7/93:127	X	X	X						
7/93:273	X	X	X						
7/93:324 7/345	Ŷ	Ŷ	X Y						
7/357:289	$\hat{\mathbf{x}}$	x	x						
5/373	$\ddot{\mathbf{x}}$	$\ddot{\mathbf{x}}$	\ddot{x}	\mathbf{x}					
5/389	X	X	X	$\tilde{\mathbf{x}}$					
5/396	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}					
5/426	X	X	X	$\ddot{\mathbf{x}}$	X				
6/412		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X	X X X X X X X X X X X X X X X X X X X	X X X				
6/421 6/342	X X X X	X	X	Ž.	λ	~			
6/1	Ŷ	x	Ÿ	Ŷ	•	X X X X X X			
6/282:106	x	\ddot{x}	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$	\mathbf{x}	$\ddot{\mathbf{x}}$			
6/282:118	$\hat{\mathbf{x}}$	$\overline{\mathbf{x}}$	X	$\bar{\mathbf{x}}$	$\widetilde{\mathbf{x}}$	X			
6/525	\mathbf{x}	\mathbf{x}	X	X	X	\mathbf{x}			
7/221	X	X	X	X	\ddot{x}	X			_
6/252	X	X	X	X	X	X			:
6/271 6/481:73	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ		7.		_
6/481:74	$\hat{\hat{\mathbf{x}}}$	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$		ŝ		
6/326	X X X X X X X X X	X	\mathbf{x}	X	X X X X X X X	\mathbf{x}	X X X X X X		
7/155	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}		
5/83	\mathbf{x}	X	X	\mathbf{x}	X	X X X X	X	X	
5/253	\mathbf{x}	X	X	X	X	X	X	X	
5/62	X	X	X	X	X		X	X	
6/41	X X	\mathbf{x}	\mathbf{x}	X X	X X	X X		X X X X	*
6/320	X	X	X	X	X	X		X	×
3						<u> </u>		6	
$CR = 1 - \dots =$	989					(cs = 1		902
265								61	

† Across the top of each table, the Justices (last initials) are ordered from liberal on the left to conservative on the right. Down the side of the tables are ranked all of the cases which Schubert has determined raise each issue, from those which only receive a single positive vote to those receiving only a single negative vote. The numbers in the column are an abbreviated expression of the volume and page number of the published opinion in *United States Reports*. The opinions for the October 1957 Term are reported in Volumes 355, 356, and 357. Thus, 5/570 refers to *United States v. Hvass*, 355 U.S. 570 (1957). The x's in the tables are votes for the particular value. Blanks are negative votes and asterisks show that the Justice did not participate in that case. For an explanation of the coefficient of reproducibility (CR) and the coefficient of scalability (CS), see note 17 supra.

E SCALE REPLICATION

	Justices									
Cases	Br	Bu	BI	Cl	D	Wa	H	Wh	F	
7/357 5/534 7/235 6/421 6/412			x		X	X X				
5/534		X X				X	\mathbf{x}			
7/235	X	\mathbf{x}	\mathbf{x}							
6/421	X		X X X X	\mathbf{x}	\mathbf{x}	X X X				
6/412	X		\mathbf{x}	X X X X	X X X	X				
5/426 5/426 5/131 5/62 6/342 7/221 6/271 6/1 6/252	\mathbf{x}		\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}				
5/131	\mathbf{x}	\mathbf{x}		\mathbf{x}			\mathbf{x}	X X	X	
5/62	X		\mathbf{x}	\mathbf{x}	X	X		X		
6/342	X	X	\mathbf{x}		X X X X X X	X X X X X X			*	
7/221	X	X	\mathbf{x}	X	X	\mathbf{x}				
6/271	X	X	\mathbf{x}	X	X	X				
6/1	X	\mathbf{x}	\mathbf{x}	X X X X	Х	x				
6/252	X	X	\mathbf{x}	X	X	X				
6/282	X	X	X	X	X	X				
5/175	X	X	X		X		X	X	X	
6/634	X	X		X			X	X	X	
6/617	X	X	*	X			X X X	X	X X X	
7/155	X	X	X	X	x	X		X X X X X		
6/326	X	X	X	X	X	X		X		
6/41	X	X	\mathbf{x}	X	X	X	\mathbf{x}			
6/320	\mathbf{x}	X	\mathbf{x}	X	X	x	\mathbf{x}		X	
5/253	X	X	\mathbf{x}	X	\mathbf{x}	X	X	X		
6/282 5/175 6/634 6/617 7/155 6/326 6/41 6/320 5/253 5/83	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X	X X X X X	X X X X X	X X X X	X X		

$CR = 1 - \frac{29}{}$	- = .836					(cs = 1	=	.517	
177						`	-~ -	60		

177

SCHUBERT'S C SCALE-1957 Term

Cases 5/570	X X X X X X X X X X X X X X X X X X X	ВІ	Wa	Br	F	H	Wh	Bu	Cl
5/570	X X					**	44.77	Dи	CI.
F 0 P	X.								-
5/570 5/107 7/549:561	~			v	X X X				
7/549:562	Ÿ			X X	Ÿ				
5/286	Ŷ	x		Λ,	Λ.				
5/286 5/393 7/426	Ÿ	x							
71496	Ÿ	x							
K/66	Ÿ	Ÿ	Y						
5/66 5/233 6/405 7/371 6/44 6/464	x	x	x						
6/405	$\hat{\mathbf{x}}$	$\ddot{\mathbf{x}}$	$\tilde{\mathbf{x}}$						
7/371	X	\mathbf{x}	X						
6 /44	\mathbf{x}	\mathbf{x}	\mathbf{x}						
6/464	X	X	X	*					
7/504	X	X	X	*					
7/504 6/148 6/165 6/390 6/571 7/185 7/193 7/386 7/399	X	X	X	X					
6/165	X	X	X	X					
0/390	X	A.	A.	Y.					
0/3/1 7/10E	v.	Ŷ	Ŷ	Ŷ					
7/103	x	x	x	x					
7/386	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$	$\ddot{\mathbf{x}}$	$\ddot{\mathbf{x}}$					
7/399	$\overline{\mathbf{x}}$	X	x	$\ddot{\mathbf{x}}$					
7/433	X	\mathbf{x}	\mathbf{x}	\mathbf{x}					
7/468	X	\mathbf{x}	X	X,					
5/155	\mathbf{x}	X	X	X			X		
7/433 7/468 5/155 5/184 6/86	X	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X	X X X X X X X X X X X X X X X X X X X			X X X		
6/86	X	X	X	X			X		

SCHUBERT'S C SCALE-1957 TERM (Continued)

					Justices				
Cases	D	Bl	Wa	\mathbf{Br}	F	H	Wh	Bu	Cl
5/225	X	x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X					X
6/691	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X	X	_		X	X X X	37
7/214	X	X	X	X	•				X
5/392 5/115 7/116 7/144	X	X	X	X	X X X X X X X X X X X X X X X X X X X			A	
5/115	X V	A.	÷	÷	Ŷ				
7/110	Ŷ	Ŷ	Ŷ	$\hat{\mathbf{x}}$	Ŷ				
6/363	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	x			
6/660	$\hat{\mathbf{v}}$	Ÿ	Ŷ	Ŷ	Ÿ	Ÿ			
6/670	Ŷ	x	x	Ŷ	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$			
6/660 6/670 7/348	$\hat{\mathbf{x}}$	$\ddot{\mathbf{x}}$	$\hat{\mathbf{x}}$	x	$\ddot{\mathbf{x}}$	$\bar{\mathbf{x}}$			
7/480	$\bar{\mathbf{x}}$	$\bar{\mathbf{x}}$	$\bar{\mathbf{x}}$	x	$\ddot{\mathbf{x}}$	X X X X X X X X X			
7/576	\mathbf{x}	\mathbf{x}	X	X	X	\mathbf{x}			
6/576 5/80	X	\mathbf{x}	\mathbf{x}	X	\mathbf{x}	X		•	
5/80	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}		
67560	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	X	\mathbf{x}	\mathbf{x}		
7/301 7/493 7/573	\mathbf{x}	\mathbf{x}	\mathbf{x}	X	\mathbf{x}	\mathbf{x}	X		
7/493	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	X	X	X		
7 573	\mathbf{x}	\mathbf{x}	X	X	X	\mathbf{x}	X		
6/199	X	X	X	X	X		X	X	
5/313	X	X	X	X		X	X	X	
5/313 7/513:483 7/513:484 7/545:382	X	X	X	X	X	X	X	X	
7/513:484	X	X	•	X	X	X.	X	X.	
7/545:382	X	X	G G	X	X	Y.	X	X.	
7/545:385	X	X		X	X.	X		. A	
7/568	X X X X	X	*	X	X X X X X	X X X X X X	X X X X X X X X X X	X.	
5/579:80	\mathbf{X}	\mathbf{x}	X	X	X	X	X	X	
5/579:80 5/579:141	\mathbf{x}	X	X	\mathbf{x}	X X	\mathbf{x}	X	X X X X X X X X	
6/24	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	X	X	X	X	
								17	
$CR = 1 - \frac{17}{-}$	= .959					1	CS = 1	=	838
410	- -							105	

419 105

C SCALE REPLICATION

		Justices								
Cases	D	Bl	Wa	Br	F	H	Wh	Bu	Cl	
5/107	x				X X					
7/549	X			\mathbf{x}	\mathbf{x}					
7/426	\mathbf{x}	\mathbf{x}								
7/371	\mathbf{x}	\mathbf{x}	\mathbf{x}							
5,66	\mathbf{x}	\mathbf{x}	\mathbf{x}							
5/233	\mathbf{x}	\mathbf{x}	\mathbf{x}							
6/4 4	\mathbf{x}	\mathbf{x}	\mathbf{x}				X			
6/464	\mathbf{x}	\mathbf{x}	\mathbf{x}							
71504	X	\mathbf{x}	\mathbf{x}	•						
6/165	X	X	X	\mathbf{x}						
6/390	X	\mathbf{x}	\mathbf{x}	\mathbf{x}						
6/571	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}						
6/185	X	\mathbf{x}	\mathbf{x}	X						
7/386	X	\mathbf{x}	X	X						
6/198	X	Х	X	X						
7/399	X	\mathbf{x}	\mathbf{x}	\mathbf{x}						
71499	$\overline{\mathbf{x}}$	X	x	X						
5/155	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	$\hat{\mathbf{x}}$	$\widetilde{\mathbf{x}}$			x			
5/184	$\overline{\mathbf{x}}$	$\tilde{\mathbf{x}}$	$\hat{\mathbf{x}}$	$\hat{\mathbf{x}}$			X X X			
6186	$\overline{\mathbf{x}}$	$\tilde{\mathbf{x}}$	\ddot{x}	$\ddot{\mathbf{x}}$			$\ddot{\mathbf{x}}$			
7/549 7/426 7/371 5/66 5/233 6/44 6/464 7/504 6/165 6/390 6/571 6/185 7/386 6/198 7/399 7/433 5/155 5/184 6/86 5/225	$\tilde{\mathbf{x}}$	$\ddot{\mathbf{x}}$	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X					X	
0/440										

C SCALE REPLICATION (Continued)

					Justices				
Cases	D	BI	Wa	\mathbf{Br}	F	H	Wh	Bu	Cl
6/691 5/339	x	x	x	X			x	X	
5/339	77	77	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X *			37	**
7/214 5/115 7/116	X X X X X X X X X X X	X	X	X				x	X
5/115	X	X	X	X	X X X X X X X X				
7/116	<u>X.</u>	X	X	<u>x</u> .	X				
6/363	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}			
6/660	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}	\mathbf{x}			
7/480	\mathbf{x}	\mathbf{x}	\mathbf{x}	X	\mathbf{x}	X			
6/576	X	X	x	X	X	X X X X X X X		\mathbf{x}	
5/80	x	X	x	X	x	x	x		
7/301	$\tilde{\mathbf{x}}$	x	Ϋ́	Ÿ	$\bar{\mathbf{x}}$	x	Ŷ		
6/560	Ÿ	Ÿ	Ÿ	Ŷ	Ŷ	Ŷ	₩		
71409	v	v	÷	÷	÷.	Ŷ.	₽		
7 / 433	₩	A.	4		Λ.	4	♣		
5/313	X	<u> </u>	<u> </u>	X		X	X	X	
6/129	\mathbf{x}	X	X	\mathbf{x}	\mathbf{x}		\mathbf{x}	\mathbf{x}	
7/513	\mathbf{x}	\mathbf{x}		\mathbf{x}	X X	X	\mathbf{x}	X	
7/480 6/576 5/80 7/301 6/560 7/493 5/313 6/129 7/513 5/579	X	X	X	X	$\overline{\mathbf{x}}$	X X	\mathbf{x}	x	
6/386		X X X X X X X X X X X X X	X X				X X X X X X X	X X X X X	X
21								21	

$$CR = 1 - \frac{21}{334} = .937$$

$$CS = 1 - \frac{21}{117} = .810$$