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IN QUEST OF BROWN'S PROMISE: SOCIAL RESEARCH AND SOCIAL VALUES IN SCHOOL DESEGREGATION

Book Review of TRIAL AND ERROR: THE DETROIT SCHOOL SEGREGATION CASE

By Eleanor Wolf. Detroit: Wayne State University Press, 1981. Pp. 392. \$19.95.

Reviewed by Wallace D. Loh*

I. INTRODUCTION

During oral argument in the School Desegregation Cases,¹ Justice Frankfurter remarked to counsel, "How to inform the judicial mind, you know, is one of the most complicated problems." On the one side are the legal and extralegal (including social science) materials introduced to help inform judicial deliberation, on the other side is the resulting decision that settles the controversy and may embody a new rule of law, and in between is the complex process of evaluating and using the information presented. These three interrelated aspects of judicial decisionmaking form the triptych of this article.

There is perhaps no better setting in which to discuss the role of social research in the courts than that of school desegregation. From its early, rural, southern beginnings in *Brown* to its present, urban, northern manifestation in the Detroit case of *Milliken v. Bradley*, empirical evidence has been used in the litigation. In 1954, the Supreme Court declared that "[s]eparate educational facilities are inherently unequal" and ruled that the separate-but-equal doctrine of *Plessy v. Ferguson*5—which for half a century had legitimated Jim Crow legislation—had "no place" in the

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^{1.} Brown v. Board of Educ., 347 U.S. 483 (1954), relief determined, 349 U.S. 249 (1955).

^{2.} Quoted in Argument: The Oral Argument Before the Supreme Court in Brown v. Board of Education of Topeka, 1952–55, at 63 (L. Friedman ed. 1969).

^{3. 418} U.S. 717 (1974).

^{4.} Brown v. Board of Educ., 347 U.S. 483, 495 (1954).

^{5. 163} U.S. 537 (1896).

^{6.} Brown v. Board of Educ., 347 U.S. 483, 495 (1954). Plessy's doctrine, as it originally ap-

public schools. The Court also found that segregation of school children "solely because of their race generates a feeling of inferiority" and tends to retard their educational and mental development, thereby repudiating in effect the Social Darwinist premise of Plessy that law-ways cannot change folkways. 8 Some two decades later, Federal District Court Judge Stephen Roth held that the Detroit Board of Education—composed of liberal members, including winners of NAACP awards, who were unswervingly committed to racial integration⁹—had purposefully segregated the city's schools. 10 The judge, a conservative Democrat who was on record prior to the trial as being unsympathetic to involuntary busing, 11 then ordered the most sweeping metropolitan busing program in the history of the Republic. 12 In Milliken v. Bradley (Milliken I), 13 the Supreme Court quickly struck down the metropolitan remedy but affirmed the finding of purposeful discrimination in Detroit, thus limiting desegregation to within the city's boundaries (then already sixty-four percent black and growing). ¹⁴ Subsequently, in Milliken v. Bradley (Milliken II), the Court approved a decree mandating substantial state expenditures to improve Detroit's mostly black schools. 15 Milliken is the first major setback for integration since Brown and may signal the start of a modern version of *Plessy*: mostly-separate-but-equal.

Eleanor Wolf, Professor of Sociology at Wayne State University, provides a detailed account of this litigation in *Trial and Error: The Detroit School Segregation Case*. ¹⁶ This article reviews the book and uses it as a

plied to public transportation, was squarely repudiated in Browder v. Gayle, 142 F. Supp. 707 (M.D. Ala.), aff d mem., 352 U.S. 903 (1956).

- 7. 347 U.S. at 494.
- 8. See Bernstein, Plessy v. Ferguson: Conservative Sociological Jurisprudence, 48 J. NEGRO HIST. 196 (1963).
- 9. Grant, The Detroit School Case: An Historical Overview, 21 WAYNE L. REV. 851, 854 (1975).
- 10. Bradley v. Milliken, 338 F. Supp. 582 (E.D. Mich. 1971), aff d. 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974).
- 11. He had criticized desegregation as "forced feeding" and urged that "outsiders" leave the city alone. See Grant, supra note 9, at 851.
- 12. Bradley v. Milliken, 345 F. Supp. 914 (E.D. Mich. 1972), aff d in part and vacated and remanded in part, 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974). The plan involved the busing of 40% of the 780,000 students (from kindergarten to twelfth grade) in 53 school districts, in order to achieve a ratio of 20 to 30% black to 80 to 70% white in each school. See E. WOLF, TRIAL AND ERROR: THE DETROIT SCHOOL SEGREGATION CASE 236–37 (1981).
 - 13. 418 U.S. 717 (1974).
- 14. Chief Justice Burger, speaking for the Court, ruled that there can be no interdistrict remedy absent both an interdistrict violation and a meaningful opportunity for the included neighboring school districts to present evidence or be heard on the remedy issue. *Id.* at 744–53
 - 15. 433 U.S 267 (1977).
- 16. (1981). The book expands Wolf's earlier article, Social Science and the Courts: The Detroit Schools Case, 42 Pub. Interest 102 (1976).

springboard to examine broader issues concerning the uses and limits of social research in the judicial process. Since judicial reliance on empirical inquiry may vary according to the problems under consideration, these issues cannot be addressed in the abstract. They have to be discussed in the context of a particular substantive problem; hence, the topic chosen here is school desegregation.

Wolf's book can be appreciated at several levels. It is a detective story that seeks to unravel a couple of mysteries: how could one of the most pro-integration school boards in the nation be found culpable of racial discrimination? And what prompted the extraordinary conversion of the judge from pretrial skeptic to posttrial champion of massive busing? Wolf's book is a methodical summary and unrelenting critique of the social science evidence introduced in the case. The appellate opinions in *Milliken I*¹⁷ made no reference to empirical data. This kind of documentary research is not common in social-legal scholarship and it yields new insights into the more subtle effects of empirical evidence on judicial decisionmaking. The testimony relied on studies of local and national scope, many of which had been cited in other school desegregation cases. Consequently, the implications of the book extend beyond the circumstances of Detroit.

Perhaps the most controversial level at which the book can be read is the ideological. In *Trial and Error*, Wolf emerges as one of the chief sociological rhetoricians of the growing national mood popularly described as the "new conservatism." In contrast to the traditional liberal ideology of the 1950's and 1960's which steadfastly espoused the integration ideal no matter what the cost, the 1970's and 1980's have seen an increasing number of apostates in the civil rights movement¹⁸ who have been bitterly derided as "neo-liberal revisionists." They include legal scholars, ²⁰ social scientists, ²¹ and black community groups, ²² all of

^{17. 484} F.2d 215 (6th Cir. 1973); 418 U.S. 717 (1974). Unless one sat through the trial or, as Wolf did, painstakingly combed through tens of thousands of pages of court transcript, one would not have realized that voluminous expert testimony had been presented at both the trial and remedy proceedings.

^{18.} When the Atlanta chapter of the NAACP agreed to a reduction in busing in an exchange for more black school administrators, it was suspended by the national office. See J. WILKINSON, FROM BROWN TO BAKKE: THE SUPREME COURT AND SCHOOL INTEGRATION 233 (1979).

^{19.} Clark, Social Science, Constitutional Rights, and the Courts, in EDUCATION, SOCIAL SCIENCE AND THE JUDICIAL PROCESS 1 (1977).

^{20.} E.g., Shades of Brown: New Perspectives on School Desegregation (D. Bell ed. 1980).

^{21.} E.g., N. GLAZER, AFFIRMATIVE DISCRIMINATION: ETHNIC INEQUALITY AND PUBLIC POLICY (1978); Armor, The Evidence on Busing, 28 Pub. Interest 90 (1972); Wolf, Northern School Desegregation and Residential Choice, 1977 Sup. Ct. Rev. 63; Coleman, Kelly & Moore, Trends in School Segregation, 1968–73 (April 2, 1975) (unpublished paper presented at American Educational Research Association annual meeting, 1975). But see Pettigrew & Green, School Desegregation in Large Cities: A Critique of the Coleman "White Flight" Thesis, 46 Harv. Educ. Rev. 1 (1976);

whom profess opposition to racial discrimination but nonetheless are profoundly skeptical of the validity and effectiveness of school integration via compulsory busing. Wolf juxtaposes the opposing claims based on social science and legal doctrines, and by deft argument and counterargument attempts to justify the neo-conservative commitment to the status quo. It is a heroic effort but, as I shall conclude, a flawed one.

The article is in several parts. Part II briefly revisits *Brown* and its progeny. It also summarizes and critiques the associated social research, with special attention given to the expert testimony presented at the Detroit trial (as described by Wolf). Part III evaluates the key ideas in Wolf's book and then analyzes the evolving interpretation of *Brown's* promise in light of the normative issues implicated by school desegregation. Part IV outlines the jurisprudential context for the school desegregation cases and for the use of social research in law. Part V pulls together the preceding sections and discusses the different uses of social science by the courts. These uses reflect the influence of different jurisprudential approaches to decisionmaking. Finally, the conclusion in Part VI identifies current thematic concerns of the law and social research in this field.

II. LEGAL AND SOCIAL RESEARCH BACKGROUND

The law of school desegregation is a rich tapestry of social science ideas and doctrinal concepts. To see how the social science is woven into the fabric of judicial decisions, we must begin by sketching the historical background.²³

Pettigrew, Useem, Normand & Smith, Busing: A Review of "The Evidence," 30 Pub. INTEREST 88 (1973); Rossell. A Response to "the 'White Flight' Controversy," 53 Pub. INTEREST 109 (1978).

- 22. For example, in Dallas' school desegregation case, a "Black Coalition to Maximize Education," composed of "a substantial body of blacks who are opposed to any escalation in the use of racial balance remedies to cure the effects of school segregation," sought instead alternative remedies "to improve educational quality and to eliminate the disparity in academic achievement." Tasby v. Wright, 520 F. Supp. 683, 690 (N.D. Tex. 1981). In the Nashville litigation, a "dramatic role reversal" was observed by the court, whereby "a white majority of the school board, acting on the advice of a white desegregation expert, recommend[ed] to the Court *more* busing to achieve *more* racial balance." whereas black plaintiffs urged "less busing, more neighborhood characteristics to the assignment plan, and the permissibility of majority black schools." Kelley v. Metropolitan County Bd. of Educ., 492 F. Supp. 167, 184 (M.D. Tenn. 1980).
- 23. Unless one identifies the legal parameters for empirical research. "there is no assurance that the particular aspect of the subject being studied at a given time has any special importance, or even relevance, to the ultimate inquiry." H. BERMAN & W. GREINER, THE NATURE AND FUNCTIONS OF LAW 16 (4th ed. 1980). Commentators have pointed out that social research (especially psychological research) on law, though it may validate scientific theories, is often irrelevant to the policy concerns of lawyers mainly because it does not take into account the legal dimensions of the problem under study. Elwork, Sales & Suggs, The Trial: A Research Review, in The Trial Process 1, 49 (B. Sales ed. 1981); Loh, Psychologial Research: Past and Present, 79 Mich. L. Rev. 659, 668 (1981). "[I]ssues of fact arise out of the law": it is the law (major premise) that renders certain types of facts

A. Southern School Desegregation and Social Research

One of the most publicized forensic roles of social science was in *Brown*. In lower court proceedings, Kenneth Clark, the plaintiff's leading expert, testified on studies that purported to show the harmful effects of segregation on children's personality and learning. ²⁴ On appeal to the Supreme Court, he was joined by some thirty other distinguished social scientists in appending to appellant's brief a "Social Science Statement" that summarized the available research on the consequences of segregation and the probable effects of desegregation. ²⁵ The "modern authority" for the Court's landmark ruling was the research of Clark and others, cited in the now celebrated footnote eleven. ²⁶ "Proof [of the wrongfulness of segregation]," said Clark, "had to come from the social psychologists." ²⁷

The reaction from the legal community was swift and caustic. Edmond Cahn rightly criticized the methodological shortcomings and unjustified inferences of Clark's doll-preference experiments. Moreover, he feared that even if reliable data were tendered on the issue, the merits would be thought to stand or fall with them, so that a change in scientific results would force a change in the constitutional findings regarding segregation. He argued, "I would not have the constitutional rights of Negroes—or of other Americans—rest on any such flimsy foundation as some of the scientific demonstrations in these records." He also dismissed a poll cited

(minor premise) applicable or not. Hart & McNaughton, Evidence and Inference in Law, in EVIDENCE AND INFERENCE 48, 61 (D. Lerner ed. 1959). The importance of starting with the legal side of social-legal inquiry was recognized half a century ago: "[T]he first step in the development of legal psychology [or legal sociology, etc.] should be a[n]... analysis of legal situations," and after "the analysis is made the student of behavior may step in ... [to] investiga[te] the behavioral hypotheses" Slesinger & Pilpel, Legal Psychology: A Bibliography and a Suggestion, 26 PSYCHOLOGICAL BULL. 677, 680, 681 (1929). This is not to say that social science remains a handmaiden to law. See infra note 220.

- 24. In Briggs v. Elliott, 98 F. Supp. 529 (1951), rev'd sub nom. Brown v. Board of Educ., 347 U.S. 483 (1954), Clark presented white and brown dolls to sixteen black children aged six to nine years in Clarendon County, South Carolina, where the trial was held. He found that most of the children identified with and preferred the white doll, even though they recognized that the brown doll was more like themselves. From this result, Clark inferred that the children had feelings of self-rejection and inferiority. For a critique of the methodology and debatable inferences of this study, see Banks, White Preference in Blacks: A Paradigm in Search of a Phenomenon, 83 PSYCHOLOGICAL BULL. 1179 (1976); Cahn, Jurisprudence, 30 N.Y.U. L. REV. 150, 161–65 (1955). See generally R. Kluger, Simple Justice 330–31 (1977) (detailed anecdotal account of the Clark tests).
- 25. Appendix to Appellants' Brief: The Effects of Segregation and the Consequences of Desegregation: A Social Science Statement, Brown v. Board of Educ., 347 U.S. 483 (1954), reprinted in 37 MINN. L. REV. 427 (1953).
 - 26. Brown v. Board of Educ., 347 U.S. 483, 494 n.11 (1954).
 - 27. Clark, Desegregation: An Appraisal of the Evidence, 9 J. Soc. Issues 1, 3 (1953).
 - 28. Cahn, supra note 24.
 - 29. Id. at 157-58. Some twenty years later, confronted with revisionist evidence, Clark made a

in footnote eleven, showing the nearly unanimous but undocumented opinions of social scientists on the detrimental impact of segregation, as "literary psychology." Other legal scholars, too, described the behavioral evidence contained in the "Brandeis brief"-like³¹ "Statement" as "more social than scientific" and "merely corroboratory of common sense." The footnote was seen as no more than a consolation gesture to Clark and company for their fidelity to the cause. This debate set the stage for subsequent assessments of the possibilities and limits of social research in constitutional adjudication.

A year later, during arguments on the implementation of *Brown*, both sides relied heavily on social science. Clark urged immediate desegregation with iron-fisted enforcement by federal officials on the theory that "change in attitude [follows] change in action." The southern states argued the opposite theory and proposed a gradual, sweet reasonableness approach to desegregation under the aegis of local authorities. Faced with a politically sensitive issue, the absence of judicial precedents, and conflicting social science recommendations on the timing and mechanics of desegregation, the Court treaded a fine line between resoluteness and accommodation. It reached a compromise solution without any mention

remarkable about-face. He warned that "[t]he business of social justice is too important to be left in the hands of . . . 'social scientists' who are primarily responsive to majority fashion, prejudices, and power." He urged "concerned citizens" to "put their faith and trust in our federal courts." Clark. supra note 19, at 9. See also Clark, Social Policy, Power, and Social Science Research. 43 Harv Educ. Rev. 113, 120 (1973) ("social scientists are indistinguishable from politicians" and "no more dependable in the quest for social justice than are other citizens"). The irony, of course, is that Clark's present fear that a change in social science conclusions will force a change in constitutional policy was precisely the alarm that Cahn critics sounded in the mid-50's and which Clark then brushed aside. Clark, The Desegregation Cases: Criticism of the Social Scientist's Role, 5 VILL. L. Rev. 224 (1960).

- 30. Cahn, supra note 24, at 161.
- 31. The so-called "Brandeis Brief" was first used by Louis Brandeis in Muller v. Oregon. 208 U.S. 412 (1908), to present social, psychological, and economic information in order to establish the reasonableness of social legislation limiting women's working hours, thereby providing factual support for the presumption of its constitutionality. See generally Doro, The Brandeis Brief, 11 VAND. L. REV. 783 (1958) (outlining the Brandeis "contextualistic" approach to legal argument). The situation was different in Brown when the Brandeis Brief was used to attack Jim Crow legislation. The validity, not just the mere existence of the factual foundation of legislation, was at issue in the desegregation case—unless, as Freund argues, the presumption was reversed because of the racial classification. P. FREUND, THE SUPREME COURT OF THE UNITED STATES 151–52 (rep. 1972). For the procedural purpose of shifting the burden to the state to come forward and prove that its actions were not presumptively unconstitutional, the Court was justified in accepting the social science results with an uncritical eye.
 - 32. Karst, Legislative Facts in Constitutional Litigation, 1960 Sup. Ct. Rev. 75, 105
 - 33. Black, The Lawfulness of the Segregation Decisions, 69 YALE L. J. 421, 430 n.25 (1960).
- 34. Brief for Appellants on further reargument at 18, Brown v. Board of Educ., 349 U.S. 294 (1955). See Clark, supra note 27, at 69–76.
- 35. E.g., Amicus Curiae Brief of the Attorney General of Florida, Appendix A, Brown v. Board of Educ., 349 U.S. 294 (1955).

of empirical findings: desegregation by local school boards, under the supervision of federal district courts, conducted with "all deliberate speed"—a formula that combined opposite ideas for epigrammatic effect.³⁶

The first dozen years produced only token desegregation.³⁷ Brown's holding underwent a transformation as it was applied by the lower courts. As it often happens in constitutional adjudication, a gap appeared between the initial grandiloquent statement of lofty principle and its subsequent implementation in specific cases.³⁸ On remand, Judge Parker interpreted Brown to mean that "[t]he Constitution . . . does not require integration. It merely forbids discrimination."³⁹ This so-called Parker Doctrine—that integration and desegregation are descriptive of two different concepts—served to deflect the mandate of Brown short of outright defiance. It provided the legal justification for tokenism. "Between the idea and the reality," in the words of T. S. Eliot, ". . . falls the Shadow."⁴⁰

The Supreme Court observed in silence from the sidelines the disheart-ening process of desegregation, mired as it was in delays and obstructions.⁴¹ Finally, in 1968, it intervened to order the conversion "now" to a "unitary system in which racial discrimination would be eliminated root and branch."⁴² Three years later, the Court declared an affirmative obligation to end racially separate schools because they were "vestiges" of pre-1954 racial assignment laws.⁴³ Without turning to any of the empirical evidence introduced in the proceedings below,⁴⁴ the Court assumed a causal link between the former state-imposed (de jure) segregation and the existing patterns of (de facto) separation in residential neighborhoods

^{36.} Brown v. Board of Educ., 349 U.S. 294, 301 (1955).

^{37.} See generally Read, Judicial Evolution of the Law of School Integration since Brown v. Board of Education, 39 LAW & CONTEMP. PROBS., Winter 1975, at 7 (dividing the post-Brown years into four periods, each of which was characterized by a unique response to the integration decree); Wilkinson, supra note 19 (a more general treatment of the desegregation problem).

^{38.} In the criminal procedure area, for example, see Amsterdam, *The Supreme Court and the Rights of Suspects in Criminal Cases*, 45 N.Y.U. L. Rev. 785, 786 (1970); see also D. McBarnet, Conviction: Law, the State, and the Construction of Justice 46 (1981).

^{39.} Briggs v. Elliott, 132 F. Supp. 776, 777 (E.D.S.C. 1955).

^{40.} T. S. ELIOT, *The Hollow Men*, in THE COMPLETE POEMS AND PLAYS 1909–1950, at 56, 58 (1971).

^{41.} The example of examples was the New Orleans desegregation case which involved 41 decisions over 10 years. M. Inger, Politics and Reality in an American City: The New Orleans School Crisis of 1960 (1969).

^{42.} Green v. County School Bd., 391 U.S. 430, 439, 437-38 (1968).

^{43.} Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 15 (1971).

^{44.} See Yudof, Equal Educational Opportunity and the Courts, 51 Tex. L. Rev. 411, 452 (1973).

and schools.⁴⁵ By the early 1970's massive school desegregation had arrived in the South, reaching dimensions unrivaled anywhere else in the nation.⁴⁶

B. Northern School Desegregation and Social Research

For almost two decades after *Brown*, the courts generally ignored racial imbalance in barrio and ghetto schools.⁴⁷ Desegregation was deemed a southern problem. So long as the imbalance was not the product of official action and did not have a history of state-sanctioned segregation, it was not subject to constitutional attack. Two demographic trends, begun earlier in the century but accelerated in the 1950's, made the racial disproportion increasingly acute: the northward migration of southern blacks and the exodus of the white middle class to the suburbs.⁴⁸ In 1973, the Court finally put the North on notice that it too had to comply with *Brown*'s mandate. It ruled that intentional (de jure) segregative acts by the Denver school board in a mostly black neighborhood created "a presumption that other segregated schooling within the system is not adventitious." The Court ordered city-wide desegregation when school officials were unable to overcome the presumption that the wrong done in one part of the system had infected the whole.

Denver, however, is not representative of the northern urban metropolis, in part because blacks constitute a minority of the city's population. More typical is Detroit. It has a bull's eye population pattern consisting of a predominantly black inner core surrounded by rings of white suburbs. A steady out-migration of whites has left a school population that is largely

^{45.} One could argue that the justification for the decision rested on the theory that the detrimental effects of the state-mandated segregation of the past carried over to the present generation of students. Alternately, Fiss suggests that the idea of past de jure or vestigial segregation can be seen as an attempt to preserve continuity with *Brown*, though in fact the Court's attention was on the racial patterns themselves and not with the causal link between past and present. Fiss, *The Charlotte-Mecklenburg Case—Its Significance for Northern School Desegregation*, 38 U. Chil. L. Rev. 697, 705 (1971).

^{46.} In 1971, 43.9% of black children in the South attended predominantly white schools, compared to only 27.8% in the North and West. Keyes v. School Dist. No. 1, 413 U.S. 189, 218 n.3 (1973).

^{47.} Early lawsuits against northern school systems were unsuccessful. Federal appellate courts denied there was a constitutional duty to abolish de facto segregation, and the Supreme Court refused to grant certiorari. *See, e.g.*, Deal v. Cincinnati Bd. of Educ., 369 F.2d 55 (6th Cir. 1966), *cert. denied*, 389 U.S. 847 (1967); Bell v. School City, 324 F.2d 209 (7th Cir. 1963), *cert. denied*, 377 U.S. 924 (1964).

^{48.} See generally U.S. Commission on Civil Rights, Survey of School Desegregation in the Southern and Border States 1965–66 (1966).

^{49.} Keyes v. School Dist. No. 1, 413 U.S. 189, 208 (1973).

black and is forecast to be virtually 100% black by 1990.⁵⁰ Thus, in Detroit and other major cities, the problem is not only racially separate schools, but also racially separate communities within a single metropolitan area. Against this background, the Detroit school case was decided.

The social science testimony presented in the Detroit case, as described by Wolf based on her analysis of the trial transcript, is not atypical of that introduced in other northern school cases.⁵¹ It dealt with the causes and extent of residential and school segregation, the educational and social psychological consequences of desegregation, and the purportedly unconstitutional conduct of school officials in maintaining racially separate schools.

1. Residential Segregation and School Segregation

For nearly six weeks during the trial, plaintiffs' expert witnesses set forth what was considered "the most extensive testimony ever presented on the interrelationship between segregation in the schools and in housing." The theory was that government agencies and policies contributed to residential segregation which, coupled with the seemingly neutral policy of assignment to neighborhood schools, resulted in racially imbalanced schools—that de facto segregation was really de jure segregation once removed. It was a wholly one-sided presentation. Defendants introduced no rebuttal evidence; under existing case law, school officials were not responsible for racial imbalances arising solely from demographic changes.

According to Wolf, this testimony was of "poor quality,"55 in part

^{50.} Bradley v. Milliken, 338 F. Supp. 582, 585 (E.D. Mich. 1971), aff'd, 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974).

^{51.} See Levin & Moise, School Desegregation Litigation in the Seventies and the Use of Social Science Evidence: An Annotated Guide, 39 LAW & CONTEMP. PROBS., Winter 1975, at 50.

^{52.} Grant, supra note 9, at 862.

^{53.} Racial imbalance that is not the product of official action and does not have a history of segregation by law is not subject to equal protection challenge. Keyes v. School Dist. No. 1, 413 U.S. 189 (1973); Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1 (1971).

^{54.} On appeal, the issue of racial containment in housing was nimbly sidestepped, perhaps in order to perpetuate the de jure-de facto distinction. The Sixth Circuit expressly noted that it did not rely on the housing testimony in upholding the finding of de jure segregation. Milliken v. Bradley, 484 F.2d 215, 242 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974). The Supreme Court also said "the case does not present any question concerning possible state housing violations." Milliken v. Bradley, 418 U.S. 717, 728 n.7 (1974). In a footnote to his concurring opinion, Justice Stewart cryptically characterized the causes of residential and school segregation as "unknown and perhaps unknowable." Id. at 756 n.2. Karl Taeuber, the noted demographer who testified extensively at trial responded dryly: "I don't know whether to feel insulted or challenged." Taeuber, Demographic Perspectives on Housing and School Segregation, 21 WAYNE L. REV. 833, 833 (1975).

^{55.} E. WOLF, supra note 12, at 70.

"misleading," 56 and "not the result of a review of research on the matter" but "a lawyer's argument" to justify a finding of de jure segregation.⁵⁷ Defective as it was, she asserts that it nonetheless "played a crucial role in determining the outcome of the trial."58 The trial judge was misled by the testimony into concluding that "racial discrimination, both public and private" rather than voluntary preferences of blacks or their lower income, was the chief cause of racial concentrations in housing. and that there was a "corresponding effect" or reciprocal relationship between racial patterns in schools and in neighborhoods.⁵⁹ Despite independent documentation of government complicity in housing segregation in the 1930's and 1940's,60 not mentioned in the book, Wolf counterargues that black residential segregation in the North is merely a "conjunctural phenomenon involving the acts of millions of households over the years," such acts consisting in "large part" of "white avoidance" (read: white prejudice). Since racial concentrations in housing are of long standing, antedating New Deal policies, they cannot be traced unequivocally to "discriminatory acts by government." 61 What the government has not done, Wolf says, it should not intervene to undo.

Social science no doubt lacks the tools to disentangle precisely the effects of government action from the welter of demographic, economic, and attitudinal factors that influence residential choice. A noted demographer cautioned that conclusions regarding residential segregation reflect a "complex interplay of hypotheses and evidence." Wolf, though conceding that her conclusions are "deductions" from data, 63 is relentless in her "cross-examination" of plaintiffs' experts. 64 Every datum

^{56.} Id. at 77.

^{57.} Id. at 33.

^{58.} Id. at 26.

^{59.} Bradley v. Milliken, 338 F. Supp. 582, 587 (E.D. Mich. 1971), aff d, 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974).

^{60.} Federal agencies encouraged homeowners to include racially restrictive convenants in deeds which the courts did not refuse to enforce until Shelley v. Kraemer, 334 U.S. I (1948). An F.H.A. Underwriting Manual at the time urged that "properties shall continue to be occupied by the same social and racial classes" in order to preserve neighborhood stability. *Quoted in Goodman. De Facto School Segregation: A Constitutional and Empirical Analysis*, 60 CALIF. L. REv. 275, 332 & n.192 (1972). *See also* Taylor, *The Supreme Court and Urban Reality: A Tactical Analysis of Milliken v. Bradley*, 21 WAYNE L. REv. 751, 765–66 (1975) (historically, action at all levels of government helped to foster and maintain racially segregated neighborhoods).

^{61.} E. WOLF, supra note 12, at 33

^{62.} Taeuber, supra note 54, at 847.

^{63.} E. Wolf, supra note 12, at 204.

^{64.} For example, there was expert testimony that residential choice for blacks was negligible. The results of a national poll showed that 64–66% of blacks want to live in integrated neighborhoods, while one-fifth or less prefer all-black areas. Wolf combined the latter figure with one-half of the undecided group to conclude that a proportion "approach[ing] 30% favor all-black neighborhoods." *Id.* at 39. This new figure was sufficiently large to support the inference that own-group preference—

supporting a finding of discrimination is reinterpreted; no theory of state wrongdoing is left unchallenged. Even if it cannot be proven that state policies were the sole cause of segregated housing, it is undeniable that they at least legitimated and perpetuated this condition. Wolf's position should lead her to conclude—which she does not—that *Brown* was wrongly decided, because segregated public schools existed in parts of the South as a matter of social custom prior to the enactment of Jim Crow legislation.

2. Educational and Social Psychological Effects of Desegregation

Numerous educational psychologists and other experts for both sides were nearly unanimous in their testimony on the personal benefits of desegregation. They asserted that racial and/or social class heterogeneity in classrooms improved the academic achievement, aspirations, and self-esteem of black students without any corresponding detriment to white students. Desegregation was also said to reduce prejudice and promote intergroup relations at an early age. One-race schools breed intolerance and have long-range fallout effects on the level of racial disharmony in society at large. The experts also minimized or denied any educational differences between white and black children upon entry into the schools, claiming in any event that teacher expectations and enhanced educational resources would offset or overcome them.

Wolf evaluates each of these assertions and finds them "confused or inaccurate." In many instances, she is certainly correct in charging that the research literature does not quite support the claims made by the integration-minded experts. They were engaged in "law office social science." But Wolf is hardly innocent in the craft of advocacy either. She

not discrimination—"would make a considerable contribution" to residential segregation. *Id.* Wolf also cited other surveys that indicate that blacks are concerned not so much with actually living next to whites as with the right to do so. It may well be, as she concludes, that if there were truly open occupancy, there would still be voluntary enclaves of mostly black areas as there are of predominantly Jewish and other ethnic areas. Ties of kinship and friendship channel residential behavior. This is a non sequitur because truly free access is not the norm for blacks. In any event, so long as there is no way to determine how much of the racial concentration is voluntary and how much is due to private or public discrimination, it cannot be concluded that "prospects for stable residential mixtures seem dim." *Id.* at 41–42.

- 65. E. WOLF, supra note 12, at 101.
- 66. A glaring example was the statement made by an expert that the landmark "Coleman Report" did not find that social-economic status was a chief source of variation in academic achievement. E. Wolf, *supra* note 12, at 106. The opposite is true: "A simple general statement of the major result is that the closest portion of the child's social environment—his family and his fellow students—affect his achievement most" Coleman, *A Brief Summary of the Coleman Report*, in EQUAL EDUCATIONAL OPPORTUNITY 259 (1969).
 - 67. "Law Office History" was coined by Kelly to describe the opposing briefs by noted histori-

too marshalled every possible scrap of evidence in favor of her desired interpretation and doctored, twisted, or omitted all evidence to the contrary. For example, it is simply untrue, as she states based upon only one cited study, that there is a "possibly adverse impact of classrooms with low achievement averages upon higher-achieving (mostly white) students." There is near consensus in the literature on the absence of any negative effects of desegregation on the achievement of white students. 69

3. Unconstitutional Behavior of School Authorities

A basic teaching of the post-*Brown* cases is that there is no judicial remedy for segregated schools without first establishing a constitutional violation by some level of government. To Evidence of purposeful discrimination is the "trigger" that fires the "cannon" of mandatory desegregation. A court must find the smoking gun before it can order that the smoke be cleared. Judge Roth found several kinds of unconstitutional practices by Detroit school officials: building new schools in locations that would result in their becoming mostly one-race schools; busing black but not white children; using optional attendance zones in changing neighborhoods to enable whites to avoid going to mostly black schools: and manipulating boundary lines to perpetuate racial separation. These findings were sustained by the appellate courts, but Wolf dismisses the evidence as "approach[ing] the absurd," and in some cases as "inadequate" and "trivial."

Judge Roth's opinion, paradoxically, devoted more space to praising the pro-integration efforts of the Detroit School Board than to discussing its purported violations. He admitted that "if racial segregation . . . is an evil, then it should make no difference whether we classify it as de jure or de facto." Ya Since no-fault liability is impossible under present law. Wolf

ans, submitted in the second round of the *Brown* appeals, that examined the circumstances surrounding the adoption of the fourteenth amendment. Kelly, *Clio and the Court: An Illicit Love Affair*. 1965 SUP. CT. REV. 119, 122 n.13, 143–45.

^{68.} E. WOLF, supra note 12, at 230-31.

^{69.} See Weinberg, The Relationship Between School Desegregation and Academic Achievement: A Review of the Research, 39 Law & Contemp. Probs., Spring 1975, at 241; see generally N. St. John, School Desegregation Outcomes for Children 34–36, 157–62 (1975).

^{70.} Milliken v. Bradley, 418 U.S. 717, 737 (1974); Keyes v. School Dist. No. 1, 413 U.S. 189, 198 (1973).

^{71.} See Fiss, supra note 45, at 705.

^{72.} E. WOLF, supra note 12, at 201.

^{73.} *Id.* at 202. For example, while she concedes that whites were rarely bused to black schools, she argues that one-way busing of blacks is justifiable to relieve overcrowding, and such overcrowding was found only in black schools. *Id.* at 178.

^{74.} Bradley v. Milliken, 338 F. Supp. 582, 592 (E.D. Mich. 1971). aff d, 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974).

argues that "[i]t is hard to escape the conclusion that his inclusion of school violations was a reluctant concession to the requirements of legal precedent." She derides the linkage between the violations and segregated schools as an "unsubstantiated causal theory," "fillogical," and harmful to judicial credibility." It is astonishing," she writes, "that sociologists and demographers have not challenged this [causal] analysis." Her implication is that the doctrine of de jure violations is judicial legerdemain whereby color-blind actions are transformed into color-based culpability.

In short, then, Wolf's thesis about the sources of school and residential segregation can be stated as follows. Segregated schools are the product not of official discrimination but of neutral policies of neighborhood attendance superimposed upon racially separate neighborhoods. The latter, in turn, also result not from official discrimination but from nonactionable "white avoidance" over the years. She does not deny that *some* official violations have occurred in the past, but insists that "racial predominance violates the constitution only if it can be shown that acts of school authorities played a *substantial* causal role."81

Wolf is right in asserting as an empirical matter that if official misconduct contributed to only a small proportion of the variance in racial makeup of the schools, such actions are not *the* cause of segregation. But the issue is not the marginal increment in school segregation due to these actions, which is nearly impossible to measure. The issue is whether school and state officials should be held responsible even if their role in causing segregation in the past and/or legitimating racial imbalances in the present was small or unmeasurable. What is required is a normative judgment, not more sophisticated "sociological-demographic analysis." Her criticism of the attenuated causal nexus is really a quarrel with the substantive law rather than with the quality of the social research presented at the trial. The Supreme Court has never demanded that there be "substantial" unconstitutional behavior for a finding of wrong. Indeed,

^{75.} E. WOLF, supra note 12, at 160.

^{76.} Id. at 243.

^{77.} Id. at 257.

^{78.} Id. at 292.

^{79.} *Id.* at 243. Wolf is not alone in observing that the causation is a legal fiction. *See* Columbus School Bd. of Educ. v. Penick, 443 U.S. 449, 479, 489 (1979) (Powell, J., dissenting) (Rehnquist, J., dissenting); Dayton School Bd. of Educ. v. Brinkman, 443 U.S. 526, 542, 542–43 (1979) (Powell, J., dissenting) (Rehnquist, J., dissenting); Fiss, *supra* note 43.

^{80.} E. WOLF, supra note 12, at 335 n.26.

^{81.} Id. at 245 (emphasis added).

^{82.} Id. at 257.

its decisions have set a relatively low standard⁸³ that makes it difficult for school authorities to rebut the prima facie showing of purposeful discrimination.⁸⁴ This is because with a problem as complex as northern school segregation, it may not be possible to identify any single smoking gun. There could be many smoking guns. In any event, there is smoke everywhere—and Wolf's position is that the smoke cannot be cleared until *the* gun is found.⁸⁵

III. SOCIAL VALUES IN SCHOOL DESEGREGATION

A. The Liberal Ideology

Law is an instrument of social policy. Wolf's disagreement with the present law of school desegregation reflects, at bottom, a disagreement with the social values that the law embodies. Judge Roth observed that "[t]he task we are called upon to perform is a social one which society has been unable to accomplish. In reality our courts are called upon in these school cases to attain a goal through the educational system by using law as a lever.''86 There are two basic normative questions that underlie school desegregation. First, do we as a nation want to have an integrated society, relying on integrated public schools as a stepping-stone towards that ultimate goal? Second, if yes, is compulsory busing the desired means for achieving integrated schools? Traditional liberal ideology answers both questions affirmatively. The societal ideal is "one [racially integrated] nation, indivisible, with liberty and justice for all." Public education, Brown declared, "is the very foundation of good citizenship." the "principal instrument in awakening the child to cultural values." 87 Historically, it has been the main avenue for the assimilation of different ethnic groups into mainstream America. It is an article of faith that "Negro and white children playing innocently together in the schoolyard are the primary liberating promise in a society imprisoned by racial con-

^{83.} The vestigial segregation notion, Swann v. Charlotte-Mecklenburg Bd of Educ., 402 U.S 1, 15 (1971), implies a highly attenuated causal nexus.

^{84.} Keyes v. School Dist. No. 1, 413 U.S. 189 (1973).

^{85.} Wolf's position can be recast in terms of hypothesis-testing in applied social research. Her criticisms are ostensibly directed at the conclusions of the studies cited in the expert testimony. In fact, the point of contention lies with the standard of proof required for rejecting the null-hypothesis and not with the substantive results. Wolf is unwilling to accept as true any findings that do not reach a high level of significance (say .001), even though the scientific community has accepted a lower decision criterion for false positives (say .10) in the given area of applied research. The lax standard is defensible if numerous replications of the study consistently show the expected, but weak, treatment effect.

^{86.} Bradley v. Milliken, 484 F.2d 215, 260–61 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974).

^{87.} Brown v. Board of Educ., 347 U.S. 483, 493 (1954).

sciousness." ⁸⁸ Because of widespread residential segregation, busing became virtually synonymous with integrated schooling.

Wolf scorns the scientific basis of the liberal ideology. "[T]here is enough contrary evidence . . . to justify a considerable degree of skepticism" about the factual premises of the integrationist ideal. "[T]he case for the school as the most effective arena for the work of societal unification rests upon empirical propositions," none of which is (for her) "self-evident" or proven. Such "empirical verification" is required because "the case for mandatory integration" is based "largely" on instrumentalist grounds. Her approach exemplifies a broader style of thought described as "technocratic" or, in an earlier age, as "scientistic." In this view, science is the measure of all things. The quest for the New Jerusalem is converted into "sociological-demographic" analysis; the hope that the lion will lay down with the lamb becomes a matter of technical know-how.

B. Facts, Values, and the Adversary Process

Although the days of any serious claim to a value-free social science are long behind us, 93 Wolf claims to see a clear and "entirely proper" distinction between "ethical values" and "current scientific evidence." She professes to engage in "objective and systematic" inquiry while integration-minded social scientists take the stand to grind ideological axes. Their testimony is a "caricature of social science," scarcely above the level of pop sociology." To claim such privileged

^{88.} Hobson v. Hansen, 269 F. Supp. 401, 419 (D.D.C. 1967), aff d sub nom. Smuck v. Hobson, 408 F.2d 175 (D.C. Cir. 1969).

^{89.} E. WOLF, supra note 12, at 257.

^{90.} Id. at 256-57.

^{91.} T. ROSZAK, THE MAKING OF A COUNTER-CULTURE 5-22 (1969).

^{92.} A. KAPLAN, THE CONDUCT OF INQUIRY 405 (1964), describes scientism as "the pernicious exaggeration of both the status and function of science in relation to our values."

^{93.} Values intrude in every phase of scientific inquiry: in the selection of problems for study, M. Weber, The Methodology of the Social Sciences 21–22 (1949); in the formulation of hypotheses, Black, *The Boundaries of Legal Sociology*, 81 Yale L.J. 1086, 1093–95 (1972); and in the handling and interpretation of data, G. Myrdal, An American Dilemma 1041 (1944).

^{94.} E. Wolf, *supra* note 12, at 251–52. The positivist tradition in social science has always insisted on value-neutrality in the analysis—if not in the selection—of problems as a precondition for objectivity. Unless scientists are indifferent to individual and collective purposes, they risk setting out to confirm what they already believe. *See generally* M. Rein, Social Science and Public Policy 37–43 (1976).

^{95.} E. Wolf, supra note 12, at 258.

^{96.} Id. at 260.

^{97.} Id. at 262.

exemption from ideological bias by reason of exposing such bias in others is a kind of epistemological self-righteousness.

A clear-cut dichotomy beween facts and values—between the 'is' and the 'ought'—is artificial. There is no immaculate conception of facts. Observation is a goal-directed activity and is not immune from value contamination. All inquiry is selective; some facts are attended to and others are neglected. Empirical knowledge of the social order is interwoven with the beliefs and ideologies one holds. Truth is not found in facts themselves but in the way they are organized in relation to some interpretive scheme. This scheme shapes one's perceptions of social reality and explains why things are the way they seem to be. To recognize that descriptive and normative thought co-mingle is not to say that scientific inquiry is impossible. Values shape scientific statements (which are subject to verification by the methods of science), but that does not render them value statements (which are empirically unverifiable). In the clear of the content of th

Wolf attributes the slanted testimony of the experts at the Detroit trial not only to their liberal ideology, but also to the nature of the adversary process which pushes them into advocacy roles. It is "absurd," she says, to use trial procedures "to inform the judicial mind" of social science. The courtroom is a "poor classroom." "There are not two sides to purely factual matters any more than there are two answers to a problem in arithmetic, nor is the answer somewhere in the middle." Science has

^{98. &}quot;Facts do *not* speak for themselves." Kaplan, *supra* note 92, at 375. "All the so-called facts' of science imply for their meaning a judgment of value." C. CHURCHMAN, THEORY OF EXPERIMENTAL INFERENCE viii (1948).

^{99.} This is one of the chief concerns of the sociology of knowledge: how does one know when one's capacity to inquire is bounded by one's position in time and location in society? See K. Mannheim, Essays on the Sociology of Knowledge (1952).

^{100.} There are different ways in which values, expressed or subconscious, influence empirical research. For example, conflicting expert claims over "white flight" stem in part from differences in measurement which, in turn, reflect competing social values. Suppose that in a given jurisdiction there are 200,000 white students, comprising 80% of the school population. After desegregation is instituted, 40,000 of these students transfer out to private or suburban schools, so that the percentage of white students changes to 76.2. Some researchers conclude that this 3.8% drop is "minimal," especially if white enrollment stabilizes thereafter. Others, looking at the same figures, conclude that white flight is "massive," since 20,000 represents one-fifth of all the white students. Ideology colors one's view of whether the cup of reform is half full or half empty. For a discussion of other ways in which values permeate social research, see M. Rein, supra note 94, at 80–92.

^{101.} Rejection of a value-free social science does not require espousal of a value-partisan social science (such as, for example, Marxist analysis, in which the ideology of class conflict informs all research, and new information merely reinforces this ideology). There is the in-between position of trying to be conscious of the values' premises and to subject them to critical review. *See* M. Rein. *supra* note 94, at 13–14.

^{102.} See Gouldner, Anti-Minotaur: The Myth of a Value-Free Sociology, 9 Soc. PROB. 199 (1962).

^{103.} E. WOLF, supra note 12, at 262.

"safeguards and restraints that help to minimize" distortions created by one's biases, but "these are almost entirely absent at trial." She proposes, instead, panels of impartial experts (drawn from learned societies or composed of joint lawyer-social scientist teams) or "factfinders from each side" who would present a "report of agreed-upon data" to the court. Other social scientists, including those with a liberal tilt, have also faulted the adversary process for distorting fact-determinations of science.

One commonly suggested means of dealing with the intrusion of values in empirical study is simply increased self-awareness and disclosure of them. 107 But researchers may not be conscious of the ideological scheme in which they operate, any more than fish are aware of the medium in which they swim. The adversary process can help expose these normative assumptions. It is precisely because there is no scientific consensus on the kinds of complex facts implicated in social policy matters—facts based upon an intricate structure of data and inferences, not upon simple mathematics—that they are at issue in litigation. Even physical science proponents of a "science court"—a forum in which controverted factual (not policy) issues are decided by scientifically-trained decisionmakers agree that an adversary relation is "necessary for the proper resolution of scientific questions." 108 It provides an institutional check on experts who might foist their preferences on policy in the guise of scientific expertise. Moreover, the processes of authority yield finality to competing claims of fact more cheaply, categorically, and immediately than the processes of science. To preserve social order, disputes must be resolved one way or another even in the absence of complete information. Science is inden-

^{104.} Id. at 274.

^{105.} Id. at 262. Other commentators, too, have pointed out the "inadequacy of the judicial machinery" for learning about legislative facts. Hart & McNaughton, supra note 23, at 63 (there is a "strange neglect of problems of how legislative facts are to be determined by a court"); Note, Social and Economic Facts—Appraisal of Suggested Techniques for Presenting Them to the Courts, 61 HARV. L. REV. 692, 693 (1948). Several proposals have been put forth, including a "Ministry of Justice," but nothing much has come of them. See Cardozo, A Ministry of Justice, 35 HARV. L. REV. 113 (1921). See also Sperlich, Social Science Evidence and the Courts: Reaching Beyond the Adversary Process, 63 Judicature 280 (1980).

^{106.} The authority and prestige of social science is said to derive from its "objectivity." "When science is explicitly politicized its image [of objectivity] is tarnished and its authority wanes. By bringing it into the adversarial confines of law, it is rendered controversial and sometimes impotent." Haney, Psychology and Legal Change: On the Limits of a Factual Jurisprudence, 4 L. & Hum. Beh. 147, 183 (1980). See also Sperlich, supra note 105 (arguing that the courts ought to establish methods of validating any scientific evidence that they use in making social policy decisions).

^{107. &}quot;A 'disinterested social science' is . . . pure nonsense. It never existed, and it will never exist. We can strive to make our thinking rational in spite of this, but only by facing the valuations, not by evading them." Myrdal, quoted in Miller & Howell, The Myth of Neutrality in Constitutional Adjudication, 27 U. Chi. L. Rev. 661, 669 (1960).

^{108.} Martin, The Proposed "Science Court," 75 MICH. L. REV. 1058, 1066 (1977).

tured to tomorrow's evidence; faced with uncertainty, it withholds judgment. Law, however, has a device for definitive settlement. It simply allocates the loss to the party that failed to sustain the burden of proof. The confrontation inherent at trial also helps bring issues to a head. Cross-examination puts to affirmative use the inevitable bias of experts by revealing the weaknesses of the other side. The adversary system ensures that opposing views are raised. 109 The irony is that Wolf's book disproves her own argument that confrontation distorts scientific factfinding. She is a consummate advocate and her evaluation of the expert testimony at the trial represents a formidable example of "forensic social science." 110 We shall never know, of course, if the trial outcome would have been different if she had testified for the defense. 111 It is safe to say that if there was "trial and error" in the Detroit case, it was for want of an adversary relation between the litigants, not because there was too much confrontation. As one commentator put it, it was a "sweetheart suit." 112

C. The New Conservative Ideology

In the final two chapters, Wolf drops the scientific veil and reveals her ideological colors. She denounces mandatory busing on the grounds that it does not "appeal to [the] self-interest" of blacks (because there is no proof of its beneficial consequences) and it "lack[s] moral authority"

^{109.} In fact, social scientists have argued that "the scientific enterprise as a whole follows an adversary model," though without the formalized procedures of law. Peer review and critical replications of studies are analogues of "cross-examination." Levine, Scientific Method and the Adversary Model: Some Preliminary Thoughts, 28 AM, PSYCHOLOGIST 661, 669 (1974).

^{110.} See Rivlin, Forensic Social Science, 43 HARV. EDUC. REV. 25 (1973). The idea is that teams of scholars would prepare briefs for or against policy positions. The criterion of evaluation in a "public policy court" would not be whether they are "balanced and objective" but whether they are "convincing."

^{111.} In other cases where revisionist and integrationist social scientists have squared with each other, the courts have purported to reject the evidence of both sides but still granted an integration remedy. In the Boston school case, the First Circuit said in exasperation:

Throughout this series of submissions this court has been burdened with reports written for sociologists by sociologists utilizing sophisticated statistical and mathematical techniques. We lack the expertise to evaluate these studies on their merits. We do come to one conclusion, however. The relationship between white flight and court ordered desegregation is a matter of heated debate among experts

The court then proceeded to reject all these materials as "irrelevant to the issues before us." Morgan v. Kerrigan, 530 F.2d 401, 421 n.29, 420 n.29 (1st Cir.), cert. denied, 426 U.S. 935 (1976). Likewise, in ruling against ability-tracking in the Washington, D.C. schools, Judge Skelly Wright complained that the expert testimony of both sides was "tainted by a vice well known in the statistical trade—data shopping and scanning to reach a preconceived result." Applying "common sense." he reached the decision "based upon burden of proof, and upon straightforward moral and constitutional arithmetic." Hobson v. Hansen, 327 F. Supp. 844, 859 (D.D.C. 1971).

^{112.} Rossum, A Sweetheart Suit, NAT'L REv., Oct. 30, 1981, at 1279.

(because of the contrived fiction of de jure violations). ¹¹³ She questions not only the means for but also the ends of integrated schools in an integrated society: "[I]t is hard to see why such heterogeneous association between ethnic groups should be considered a goal which is either attainable or urgently required." ¹¹⁴ Other critics of busing do not go as far as Wolf. They say they are in favor of neighborhood schools, not against racial integration. A clean separation between means and ends is difficult to maintain. Multiple roads to Rome is a poor model for the pursuit of values; basic values do not exist independently of their instrumentalities but are defined by them. Racial integration is an abstraction and ultimate ends are appraised in terms of the means they call for. Ends determine the means and vice versa. ¹¹⁵ Wolf's position has the virtue of consistency. 'Rejection of busing in the face of massive residential segregation implies, in large measure, rejection of integrated schools and an integrated society.

The neo-conservative vision of the preferred society, as articulated by Wolf, comes at the end of the nearly thirty-year journey of school desegregation from the South to the North. The thesis of *Brown* (separate-is-inherently-unequal) is giving way to the antithesis of a modernized, de facto version of *Plessy* (mostly-separate-but-equal). The moral logic which once seemed so simple and irrefutable is being replaced by a social science at once complex and uncertain. My purpose here is not to pass on the merits of the new social philosophy, but to examine its intellectual origins in evolving interpretations of *Brown*'s promise and in changing social-political conditions. This analysis will place the Detroit case in perspective and suggest the contours of the emerging synthesis in the law and social research on school desegregation.

D. Evolving Interpretations of Brown: Input and Output Perspectives

Depending on one's view of what *Brown* promised, it stands as a monument to unfulfilled hopes (racially segregated schools remain the norm in most large cities today)¹¹⁶ or to judicial power to effect social change (it did, quite simply, bury Jim Crow).¹¹⁷ There is a fundamental ambiguity in *Brown* regarding the constitutional entitlement it created and the

^{113.} E. Wolf, supra note 12, at 293.

^{114.} Id. at 300.

^{115.} A. KAPLAN, supra note 92, at 393-96.

^{116.} The 20 largest school districts in the country have an average of 60% minority enrollment. In some (e.g., Atlanta, Detroit, Chicago), the figure is 80%. SHADES OF *Brown:* New Perspectives on School Desegregation viii (D. Bell ed. 1980).

^{117. &}quot;The promise of *Brown* was realized. Black children may not be denied admittance to any school on account of their race" N. GLAZER, *supra* note 21, at 127.

remedy it implied upon its violation. This ambiguity has colored the subsequent development of all racial discrimination law.

On the one hand, *Brown* can be interpreted as proscribing color-conscious policies and actions that result in racial exclusion. Official apartheid is inherently wrong because it rests upon assumptions of racial superiority and inferiority that are repugnant to American aspirations of equality. The remedy for its violation is color-blind decisionmaking: "equal educational opportunit[y]." The emphasis is on equality of access to schools rather than on the quality of the schooling. This is an "input perspective" on the system of segregation. It seeks to identify and neutralize the specific "villains" who are the "cause" of the wrong.

On the other hand, *Brown* can be seen as safeguarding minority children against the social, psychological, and educational harms said to result from racial segregation. The constitutional right is defined in terms of the consequential injury. The remedy for its breach is color-conscious decisionmaking: racial integration. This relief promises more than just open access and an end to racial exclusion. It mandates deliberate racial mixture in order to bestow upon the underclass the purported advantages of exposure to the upperclass. To This is an "output perspective" on segregation. It looks to the results of segregation, irrespective of its cause, with the purpose of improving the lot of the constitutionally protected group.

Through the years, liberals have clung steadfastly to the original understanding of *Brown* that racial integration and equal educational opportunity are inextricably related—the former guarantees the latter. When schools were in fact separate and unequal, pragmatic and moral considerations supported the integrationist strategy. Because white-dominated school boards favored white schools, black children had to go to the same schools attended by white children in order to receive the same educational package. "[T]o get what the white kids have, you must go where the white kids are." 122

^{118.} Brown v. Board of Educ., 347 U.S. 483, 493 (1954).

^{119.} Logically, this remedy is inconsistent with the race-neutral remedy under the input perspective.

^{120.} One court has termed this the "osmosis effect." Kelley v. Metropolitan County Bd. of Educ., 492 F. Supp. 167, 191 (M.D. Tenn. 1980).

^{121.} This input/output analysis draws from similar distinctions made by Fiss between process-orientation/result-orientation and by Freeman between perpetrator/victim interpretations. Fiss, *The Fate of An Idea Whose Time Has Come: Antidiscrimination Law in the Second Decade after* Brown v. Board of Education, 41 U. Chi. L. Rev. 742, 764–70 (1974). *See* Freeman, *Legitimizing Racial Discrimination Through Antidiscrimination Law: A Critical Review of Supreme Court Doctrine*, 62 MINN. L. Rev. 1049, 1052–57 (1978).

^{122.} Bell, School Littgation Strategies for the 1970's: New Phases in the Continuing Quest for Quality Schools, 1970 Wis. L. Rev. 257, 275 (1970).

Today, new developments on several fronts—intradistrict equalization of educational funding; widespread white and emerging black opposition to involuntary busing; changing demographic patterns that frustrate intradistrict desegregation; doubts about the claimed benefits of racial integration in the classroom—render school desegregation an increasingly elusive remedy in the nation's metropolitan areas. The revisionist view does not equate the right to equal educational opportunity with the right to an integrated education. Instead, it reinterprets *Brown* as promising only nondiscriminatory access, a modern version of the old Parker Doctrine that desegregation-does-not-mean-integration. 123

E. The Detroit Case: Through-Put Perspective

Pressed by competing demands for busing and for neighborhood schools, the Milliken Court strove for a balance between activism and restraint. Consistent with its other post-Brown decisions, it avoided any finding on the harm of segregation. If the wrong were defined in terms of its effects rather than its cause, then racial imbalances in every sphere of life, whether de jure or de facto, would have to be eradicated "root and branch''124—a true "Greening of America."125 The output perspective implicates system-wide relief. The Court, however, has wisely abstained from a sweeping, panoramic analysis of segregation. It has not stigmatized all fruits of past segregation as original sin. An equality-cum-integration remedy on any large scale could have a dislocative impact on the white majority. Neo-conservatives fear that massive racial balancing would undermine the social-political consensus of our multi-ethnic society. 126 What the Court has done, instead, in this case and in others, 127 is to attribute the "cause" of segregation to specific "villains"—including integration-minded school boards—and find them culpable of de jure violations. Although Wolf reviles this causal analysis as unscientific and "legal hocus-pocus," 128 it is a pragmatic means of distinguishing between permissible and impermissible forms of racial imbalance depending upon the equities of a particular case. The requirement of proximate causation implicit in intentional discrimination serves to limit the widespread allocation of blame. If everyone is responsible, nobody is.

^{123.} See supra notes 38-39 and accompanying text.

^{124.} Green v. County School Bd., 391 U.S. 430, 438 (1968).

^{125.} C. Reich, The Greening of America (1970).

^{126.} N. GLAZER, supra note 21, at 168-69.

^{127.} Columbus Bd. of Educ. v. Penick, 443 U.S. 449 (1979); Dayton Bd. of Educ. v. Brinkman, 433 U.S. 406 (1977).

^{128.} E. Wolf, supra note 12, at 292.

In the Detroit case, the Court adopted an input perspective on the violation, but did not confine the remedy to guaranteeing equal opportunity¹²⁹—"the proper objective of public policy," according to the new conservative view. ¹³⁰ It recognized that a color-blind remedy can be and is "an obstacle to school integration;" ¹³¹ facially-neutral decisions can result in disproportional racial impact. The Court steered a middle-of-the-road course between color-conscious and color-blind remedial strategies. *Milliken II*¹³² affirmed the trial court's decree that the State of Michigan and the Detroit School Board each expend \$5.8 million for compensatory education, training, and counseling programs for students, faculty, and staff of the city schools, in addition to any intradistrict busing and in lieu of any interdistrict busing. ¹³³ It signaled the end of the integration line of *Brown* and the start of the neo-*Plessy* doctrine of mostly-separate-but-equal, ¹³⁴ at least where demographic conditions such as those of Detroit prevail.

This outcome suggests a third way of analyzing the promise of *Brown*: a "through-put perspective." The preceding two perspectives tend to slight the education component in *Brown v. Board of Education*. ¹³⁵ They focus on the inputs of discriminatory actions that produce racial imbalances, or on the outputs of new racial balances and social-educational improvements. The through-put perspective attends more to the quality of the schooling than to racial considerations. ¹³⁶ *Milliken II* should be seen

^{129.} There is no agreed-upon definition of equal educational opportunity. For different formulations, see Coleman, *The Concept of Equality of Educational Opportunity*, 38 HARV. EDUC REV. 7 (1968); Gordon, *Toward Defining Equality of Educational Opportunity*, in ON EQUALITY OF EDUCATIONAL OPPORTUNITY 423 (1972).

^{130.} N. GLAZER, supra note 20, at 168.

^{131.} Ravitch, *Desegregation: Varieties of Meaning*, in SHADES OF *Brown*: New Perspectives on SCHOOL DESEGREGATION 37 (D. Bell ed. 1980).

^{132.} Milliken v. Bradley, 433 U.S. 267 (1977).

^{133.} The School Board welcomed the opportunity to dip into the state treasury in consideration for giving up some of its autonomy. The State of Michigan, the "real" and reluctant defendant, was compelled to contribute because the Detroit school system was "chaotic and incapable of effective administration." *Id.* at 296 (Powell, J., concurring). Exigency tends to create its own remedial rules.

^{134.} See supra notes 5–8 and accompanying text. The Brown and neo-Plessy doctrines need not be read as mutually exclusive. Integration continues unabated on an intradistrict basis. There is a lot of "mopping-up" to be done in small- and medium-sized locations where integration is possible without widespread busing. Pettigrew, A Sociological View of the Post-Bradley Era, 21 WAYNE L. Rev. 813, 818 (1975). In large urban centers with a mostly black student population, integration may well be coming to an end.

^{135.} Some northern school administrators, recognizing that their schools have "always been segregated" and that "it is a given that [they] are going to be segregated," are now shifting their efforts to "addressing education rather than desegregation." Go to the Head of the Class. Newsweek, Oct. 4, 1982, at 64, 65. See generally Aleinikoff, The Limits of Litigation: Putting the Education Back into Brown v. Board of Education, 80 Mich. L. Rev. 896 (1982) (discussing reinterpreting Brown in terms of quality education rather than desegregation).

^{136.} Another manifestation of judicial concern with intraschool policies that affect educational

against the background of a growing "effective education movement" in the black community that rejects racial integration as necessary to black educational achievement. 137 This movement subscribes to the belief that predominantly black schools that "incorporate the cultural wisdom and experience of black families and meaningfully collaborate with parents and community" can foster academic excellence. 138

Table 1 summarizes the three perspectives on the constitutional entitlement and remedy promised by *Brown*. The doctrinal difficulty with the

Table 1 Perspectives on Brown's Promise Brown's Promise entitlement remedy

Input Perspectives	de jure segregation (color-conscious decisions) are inherently unequal	right to <i>equal</i> (color-blind) educational opportunity
Output Perspectives	freedom from social-educational harms of segregation	right to integrated (color-conscious) education
Through-put Perspectives	(undefined)	right to <i>effective</i> education

through-put perspective is that it offers a new remedy without a corre-

effectiveness is the decisions proscribing the use of standardized aptitude and intelligence tests for placement of students (including a disproportionate number from minority races) in separate and usually inferior educational tracks or in "educable mentally retarded" programs. Larry P. v. Riles, 495 F. Supp. 926 (N.D. Cal. 1979); Hobson v. Hansen, 269 F. Supp. 401 (D.D.C. 1967), aff'd sub nom. Smuck v. Hobson, 408 F.2d 175 (D.C. Cir. 1969).

^{137.} See supra note 22. For over a decade, Derrick Bell has criticized the single-minded pursuit of integration in lieu of quality schooling. D. Bell, RACE, RACISM, AND AMERICAN LAW 431-44 (2d ed. 1980); Bell, Brown v. Board of Education and the Interest-Convergence Dilemma, 93 Harv. L. Rev. 518 (1980).

^{138.} S. LIGHTFOOT, WORLDS APART: RELATIONSHIPS BETWEEN FAMILIES AND SCHOOLS 129 (1978). In contrast, integration of a few low-income blacks into an upper-income, all-white school means racial assimilation—"socializing nonwhite students to act, speak and believe very much like white students"—and can wreak psychological and educational havoc on the black children. R. RIST, THE INVISIBLE CHILDREN: SCHOOL INTEGRATION IN AMERICAN SOCIETY 15 (1978).

sponding redefinition of the underlying right that triggers it. Educational effectiveness is nonactionable¹³⁹ because the Court has ruled that the fourteenth amendment does not embrace a fundamental guarantee of quality education,¹⁴⁰ and no right in *Brown* supports educational remedies to equalize racially separate schools. *Milliken II* and subsequent lower court decisions¹⁴¹ have nimbly sidestepped this issue by finding de jure violations and using this fiction as the constitutional peg upon which to hang the effective education remedy.¹⁴²

In summary, the Court in the Detroit case takes on the role of a virtuoso playing two keyboards. On the left keyboard, it plays the traditional liberal music; on the right, the new conservative sound. To the first audience, the notes of racial equality give courage to carry on with reform: to the second audience, the score of equal opportunity gives assurance that the existing class structure will not be fundamentally altered. The playing of both keyboards indicates the dilemma of resolving conflicting claims of constitutional dimension. The Court opted, as it sometimes does when faced with a lack of consensual values, for a kind of rough justice, a Solomonic compromise rather than a clear choice between the competing interests. ¹⁴³ It gave dignity and credibility to both claims and framed a remedy that attempted to split the baby, though perhaps unevenly. By recognizing and articulating the felt needs of the age, the Court assisted in the ongoing creation of national values that set the framework within which the political processes of government act to resolve the conflict. ¹⁴⁴

^{139.} Jones, School Desegregation, 86 YALE L. J. 378, 379 (1976) (letter to the editor).

^{140.} In San Antonio Indep. School Dist. v. Rodriguez, 411 U.S. 1 (1973), the Court refused to order interdistrict equalization of school funding on the grounds that education was not a fundamental right protected by the due process clause. Some state supreme courts, however, have granted such relief based on state constitutions. Serrano v. Priest, 18 Cal. 3d 728, 557 P.2d 929, 135 Cal. Rptr. 345 (1976), cert. denied, 432 U.S. 907 (1977); Seattle School Dist. No. 1 v State, 90 Wn. 2d 476, 585 P.2d 71 (1978). It is an alternative to desegregation litigation as a means for improving educational effectiveness.

^{141.} Tasby v. Wright, 520 F. Supp. 683 (N.D. Tex. 1981); Kelley v. Metropolitan County Bd. of Educ., 492 F. Supp. 167 (M.D. Tenn. 1980).

^{142.} The risk of this makeshift justification according to Aleinikoff, *supra* note 135, at 917–20, is that once a school system has cleansed itself of the vestiges of segregation, there will no longer be a violation to activate the educational remedy. Under Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 31–32 (1971), schools are not "required to make year-by-year adjustments of the racial composition of student bodies once the affirmative duty to desegregate has been accomplished" On the other hand, if de jure violations is as malleable a concept as the Court has made it appear to be in the Detroit case, improper state action can always be found.

^{143.} See, e.g., Regents of the Univ. of Cal. v. Bakke, 438 U.S. 265 (1978) (racial quotas in affirmative action admissions are impermissible but race is a factor that can be taken into account): Miranda v. Arizona, 384 U.S. 436 (1966) (right to warning of silence as a compromise between outright ban of police interrogations and uncontrolled questioning); Brown v. Board of Educ., 349 U.S. 294, 300–01 (1955) ("all deliberate speed").

^{144.} Court decisions cannot be read, of course, in a political vacuum. They are designed to influence the electorate and its representatives, thereby setting in motion the "dialectics of adjudica-

F. Implications for Social Research

The perspectives on *Brown*'s meaning bear implications for empirical inquiry in school desegregation. So long as the remedial objective was integration, social science also adopted an output perspective on research. In the mid-1950's psychologists conducted small scale experimental studies on the social and personality effects of segregation. 145 In the mid-1960's, sociologists gathered extensive cross-sectional data and applied sophisticated multivariate analyses to examine the social and educational effects of "natural" desegregation. 146 In the mid-1970's, similar large scale surveys were done by revisionist sociologists on the effects of "induced" desegregation via mandatory busing. 147 In all these instances, the basic research question was "what is the effect of school segregation or desegregation on certain outcomes?" The question presumed a global impact of racial and/or social class composition on the dependent measures. Researchers were interested in establishing first-order relationships. 148 There is a certain allure to the idea that heterogeneity in the schools based on race and/or social class can bring about the educational and social millenium.

After the mid-1970's, coincident with the emergence of the effective education movement, social scientists began to pay more attention to conditions inside the schools. They noted that factors such as the nature of intergroup contact and the social climate in the classroom can be as important as simple racial balancing, if not more so. Social psychologists differentiated between "merely desegregated" and "genuinely integrated" schools. 149 The former refers to the mere mix of races and implies nothing about the quality of racial interaction that is a precondition to effective learning. The latter involves the presence of those conditions,

tion": the process of action and reaction, influence and response, between the judicial and political sectors of government. Present meaning is breathed into the Constitution as a result of these interchanges. See White, The Evolution of Reasoned Elaboration: Jurisprudential Criticism and Social Change, 59 VA. L. REV. 279, 296–98 (1973).

- 145. See supra note 24.
- 146. See J. Coleman, E. Campbell, C. Hobson, J. McPartland, A. Mood, F. Weinfeld & R. York. Equality of Educational Opportunity (1966).
 - 147. See Armor, supra note 21; Coleman, Kelly & Moore, supra note 21.
- 148. A "first-order" relationship, also known as a "main effect," refers to the association between any two variables, such as between racial integration of the classroom ("independent" or predictor variable) and academic achievement of minority students ("dependent" or outcome variable). A "higher-order" relationship or "interaction effect" refers to the association between any two variables as mediated by the influence of a third variable or additional variables (e.g., classroom integration is correlated with improved academic performance among minority students in elementary school but not in high school—school year is the mediating variable in this hypothetical). Most complex social phenomena involve higher-order rather than first-order relationships, because in real life everything is related to everything else.
 - 149. Pettigrew, Useem, Normand & Smith, supra note 21, at 88.

identified by Gordon Allport, as necessary for favorable intergroup relations: equal status, common goals, noncompetitive atmosphere, and institutional resources. 150 Researchers began to examine higher-order relationships. The question they asked was "under what circumstances can schools maximize the desired outcomes?"

The through-put perspective directs researchers to think about the remedy in terms of an on-going process rather than as a final product. It focuses attention not only on what goes into and what comes out of the school system but also on the myriad of events that transpire in between. School desegregation, in short, cannot be thought of as a kind of experimental treatment in education. The analogy fails because desegregation programs are not all alike. The quality of education may be entirely different in schools with the same racial balance because the conditions of learning and interracial contact are different. Is it is unrealistic to expect desegregation to have any across-the-board impact on educational performance or any other outcome. The emphasis now is on the situational and other social factors that influence the result, and researchers are undertaking in-depth, longitudinal studies of a given school or school district in order to supplement the cross-section surveys of the past two decades.

IV. THE JURISPRUDENTIAL FRAMEWORK

A. Styles of Judicial Decisionmaking

"Every legal decision," Justice Frankfurter noted, "is a function of some juristic philosophy." In deciding a case, a judge's substantive preoccupation merges with his implicit theory of law and his reasoning style, and all impose patterns on his perception and resolution of the problem. A judge's notions of what law is and how decisions should be made are also bound to affect his use, if any, of social science in reaching or

^{150.} G. ALLPORT, THE NATURE OF PREJUDICE (1954).

^{151.} For an example of induced desegregation without integration, see the Riverside, California study of H. GERARD & N. MILLER, SCHOOL DESEGREGATION A LONG-TERM STUDY (1975). See also R RIST, supra note 138 ("racial assimilation," i.e., socializing non-white students to behave like white students, may not constitute integration).

^{152.} Crain & Mahard, Desegregation and Black Achievement: A Review of the Research, 42 Law & Contemp Probs., Summer 1978, at 17, 47; McConahay, The Effects of School Desegregation Upon Students' Racial Attitudes and Behavior: A Critical Review of the Literature and a Prolegomenon to Future Research, 42 Law & Contemp. Probs., Summer 1978, at 77, 102.

^{153.} For example, there is "clear and unmistakable" evidence that the earlier the grade level at which desegregation occurs, the greater the positive impact on black achievement. Crain & Mahard, *supra* note 152, at 34.

^{154.} Quoted in H. BERMAN & W. GREINER, supra note 23, at 37.

justifying the outcome. The issues of the school desegregation cases and the related empirical studies need to be understood in their jurisprudential setting.

There are three principal modes of judicial reasoning: formalism, which flowered in the latter half of the nineteenth century and is known also as conceptualism or mechanical jurisprudence; ¹⁵⁵ legal realism, which achieved primacy in the 1930's as a reaction against formalism; ¹⁵⁶ and purposive analysis, also denominated policy analysis or reasoned elaboration, which combined elements of formalism and realism to become, since the 1950's, the principal methodology of contemporary jurisprudence. ¹⁵⁷ All three have had a profound effect on American law.

The formalist conception of law was born at a time when American society was relatively stable and the model of the physical world was dominated by Newtonian mechanics. It consisted of a closed system of rules, all neatly and symmetrically dovetailed with each other. The rules embodied hidden ideas drawn from the dominant ideologies of the day (laissez-faire and Social Darwinism)¹⁵⁸ and accepted as axiomatic. Decisions in specific cases were then derived from these rules by the sole application of logic. Plessy exemplifies formalist decisionmaking: starting with the premise that it is impossible and unwise to change racial attitudes by law, the Court then reasoned downward to the conclusion that legislation providing for separate but equal facilities was not invalid. Thus, formalism saw decisionmaking as a deductive-syllogistic exercise, conditioned on "the belief that justice must be administered in accordance with fixed rules, which can be applied by a rather mechanical process of logical reasoning to a given state of facts, and can be made to produce an inevitable result."159 The conceptual fit between the result and the existing precedents was of greater importance than the social consequences of the decision or its utility in advancing desired ends.

Steeped in this philosophy which left little room for empirical inquiry, American law developed by disavowing change—that is, by denying ju-

^{155.} See generally G. GILMORE, The Age of Faith, in The Ages of American Law (1977); M. Horowitz, The Transformation of American Law, 1780-1860 (1977).

^{156.} See generally W. RUMBLE, AMERICAN LEGAL REALISM (1968); Llewellyn, A Realistic Jurisprudence: The Next Step, 30 COLUM. L. REV. 431 (1930); White, From Sociological Jurisprudence to Realism: Jurisprudence and Social Change in Early Twentieth-Century America, 58 Va. L. Rev. 999 (1972).

^{157.} See generally Dauer, Law and the Life of the Mind, 27 YALE L. REPORT, Winter 1980-1981, at 13; White, supra note 144.

^{158.} See generally P. ROSEN, THE SUPREME COURT AND SOCIAL SCIENCE chs. 2-4 (1972) (detailing Social Darwinism in the law and the rise of sociological jurisprudence).

^{159.} Haines, General Observations of the Effects of Personal, Political, and Economic Influences in the Decisions of Judges, in Readings in Jurisprudence and Legal Philosophy 461–62 (1951).

dicial choice. Formalist judges, committed to a quietistic role in government, pretended merely to "find" rather than "create" law. 160 Law was made, one assumes, by the judicial stork. In the formalists' view, a judicial decision is not the law but only evidence of the principles of law. As a falling apple is evidence of the law of gravity, so a decision is evidence of the law that underlies it—law exists "out there," to be discovered by the legal scientist (scholar) and then applied by the legal practitioner (attorney and judge). Although the social-economic values upon which formalism was predicated are now outmoded, the style of reasoning remains an integral part of the modern lawyer's intellectual equipment. The process of extracting principles from past cases and applying them to decide new ones is still the bedrock of legal analysis.

A new way of looking at the decisional process arose in the first third of this century and it scorned rule-deductive decisionmaking as sterile nonsense. It was called realism by its proponents because, like the realist movements in art and literature, they sought to lay bare the ostensibly "real" or "true" nature of law and legal reasoning. Starting with the assumption that law is not a static code of rules but a dynamic method of dispute resolution, realism described judicial decisions as ad hoc, discretionary responses to the unique facts and equities of specific cases. Legal doctrines are after-the-fact justifications or rationalizations that mask the real and usually unstated bases of decisions, which include "the felt necessities of the time," "intuitions of public policy, avowed or unconscious," and "even the prejudices which judges share with their fellow-men." By emphasizing the factual underpinning of rules, the behavioral impact of decisions, and the social policies served by law, realism opened the door to empirical research in law. 162

This method of decisionmaking emphasizes choice. In every case, there are at least two conflicting legal rules or premises that could be applied to the given facts. A confrontation of interests is what adjudication is all about. If precedent is unavailable or undesirable, a judge has to decide among alternative courses of action, and the one chosen will extend dominion over the case. Decisionmaking, then, is synonymous with choosing. Nurtured by the reform spirit of the New Deal, realism prompted a more forthright recognition of the lawmaking role of judges.

^{160.} Formalism conceived of law as an inductive science. "Adjudged cases are to judicial science what ascertained facts and experiments are to the natural sciences." Hoover, *Stare Decisis*, 52 Alb. L. J. 73, 73 (1895).

^{161.} O. W. HOLMES, THE COMMON LAW I (1881).

^{162.} It was in this climate that social scientists began to be appointed to law faculties and courses in law and social science began to be offered in law schools. See Stevens, Two Cheers for 1870: The American Law School, in Law in American History 470–81 (1971); Schlegel, American Legal Realism and Empirical Social Science: From the Yale Experience, 28 BUFFALO L. REV 459 (1979)

It exposed judicial creativity, but failed to come to grips with the basic question in the calculus of choice: how does or should a judge choose among competing rules and values?

The rise of the Axis Powers challenged the ideals of civilization and justice. If one saw what Nazi judges did in the name of law, then the realist method could be a prescription for authoritarianism. 163 Realism reduces the rule of the law to the rule of the judge; it calls into question the legitimacy of judicial decisionmaking in general and of judicial review in particular. In the postwar years, American intellectuals began to disavow moral relativism and search, once again, for unalterable moral principles. 164 A new generation of normatively-oriented scholars sought to articulate the values of American culture that made it unique and distinguishable from totalitarian regimes. 165 One result was the emergence of a jurisprudence aimed at using law as an instrument for attaining the ideals for which this nation stood and for which it had fought on two continents, the ideals of liberty and equality. It was in this climate that the Warren Court delivered its opinions dedicated to egalitarianism: equality for racial minorities in schools¹⁶⁶ and in public life, ¹⁶⁷ for the politically powerless, 168 and for indigent criminal defendants. 169 Many of the movements of the 1950's and 1960's—civil rights, consumerism, environmentalism—had their intellectual underpinning in the view of law as policy.

Purposive jurisprudence¹⁷⁰ views the judicial function as a self-con-

^{163. &}quot;Democracy versus the Absolute State means Natural Law versus Realism," cried the critics. Lucey, Natural Law and American Legal Realism: Their Respective Contributions to a Theory of Law in a Democratic Society, 30 GEO. L.J. 493, 533 (1942). See also Palmer, Hobbes, Holmes and Hitler, 31 A.B.A. J. 569 (1945) (warning that the pragmatic, utilitarian approach to law, best typified by Justice Holmes, could, in the end, lead to totalitarianism).

^{164. &}quot;We have begun to ask ourselves whether . . . there are not some standards of decency so fundamental and so permanent that they may properly be described as absolute." Howe, *The Positivism of Mr. Justice Holmes*, 64 Harv. L. Rev. 529, 545 (1951). Others searched for transcendental "neutral principles" for constitutional decisionmaking. Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 Harv. L. Rev. 1 (1959).

^{165.} The function of law and law schools in a democratic society was the overriding theme of the day. As stated by Lasswell and McDougal: "The proper function of our law schools is . . . to contribute to the training of policy-makers for the ever more complete achievement of the democratic values that constitute the professed ends of American polity." Lasswell & McDougal, Legal Education and Public Policy: Professional Training in the Public Interest, 52 YALE L.J. 203, 206 (1943).

^{166.} Brown v. Board of Educ., 347 U.S. 483 (1954).

^{167.} Per curiam decisions after *Brown* desegregated public parks, beaches, buses and other aspects of public life. *See* New Orleans City Park Improvements Ass'n v. Detiege, 358 U.S. 54 (1958) (public parks), *aff'g* 242 F.2d 122 (5th Cir. 1958); Gayle v. Browder, 352 U.S. 903 (1956) (public buses), *aff'g* 142 F. Supp. 707 (M.D. Ala. 1956); Mayor & City Council v. Dawson, 350 U.S. 877 (1955) (public beaches and bathhouses), *aff'g* 220 F.2d 386 (4th Cir. 1955).

^{168.} Baker v. Carr, 369 U.S. 186 (1962) (one person, one vote).

^{169.} Gideon v. Wainwright, 372 U.S. 335 (1963) (right to court-appointed counsel).

^{170.} Purposive jurisprudence is an umbrella term that covers several more or less related approaches to the challenge posed by realism: (1) reasoned elaboration of the grounds of a decision, see

scious weighing of competing value positions and a principled explanation of the grounds of that normative choice. Like realism, it acknowledges the active role of the judge in creating (rather than merely applying) legal rules. Like formalism, it recognizes the obligation to provide a logically consistent and rigorously reasoned (rather than merely ad hoc) justification for the decision—a justification that sometimes rests on social science, as in the *Brown* footnote.¹⁷¹ Today, many in the legal community "have adopted a point of view midway between traditional legal formalism and rule-skepticism." ¹⁷²

B. Implications for Empirical Inquiry in Law

Empirical inquiry first came into law on a systematic basis with the advent of legal realism. The rejection of the formalist orthodoxy went hand in hand with the courtship of the social sciences. Realism yoked the reformist politics of the pre-war period¹⁷³ with the emerging quantitative approach of the social sciences,¹⁷⁴ in an attempt to bring about social amelioration via legal change and scientific fact-finding.¹⁷⁵ The courtship, however, was short-lived. Some of the reasons provide insights into the limits of applying social research in law.

Although social science and legal realism were offshoots of the same historical root, viz., social reform, ¹⁷⁶ by the 1930's they were growing in different directions. Social scientists aspired to academic respectability

supra note 144; (2) articulation of the "neutral principles" that justify particular outcomes, see supra note 164; (3) judicial capacity for moral leadership; (4) policy analysis based on assertedly democratic values and scientific inquiry, see supra note 165; (5) decisionmaking rooted in "background morality," see R. Dworkin, Taking Rights Seriously (1978). For still other approaches, see C. Black, Structure and Relationship in Constitutional Law (1969).

- 171. 347 U.S. at 494 n.11.
- 172. W. RUMBLE, supra note 156, at 54.
- 173. On the intellectual roots of realism in the progressivist heritage, see generally O. GRAHAM. AN ENCORE FOR REFORM (1967), and on its New Deal context, see White, *supra* note 156.
- 174. An emerging statistical ethos was the new wave in the social sciences in the 1930's. It was spurred in part by the development of scientific sampling techniques in connection with New Deal social programs. At the same time, the process of fragmentation of the unified "social science" of the late 19th century into the various "social sciences" as we know them today, was nearing completion. The specialist disciplines were institutionalized in separate academic departments: e.g., psychology split off from philosophy, and sociology from political science, See T. HASKELL, THE EMERGENCE OF PROFESSIONAL SCIENCE: THE AMERICAN SOCIAL SCIENCE ASSOCIATION AND THE NINETEENTH CENTURY CRISIS OF AUTHORITY (1977).
- 175. Dean Charles Clark of Yale, a leading realist, described the attempt to hybridize law and social science as follows: "We regard facts as the prerequisite of reform." *Quoted in Schlegel*, *supra* note 162, at 468.
- 176. An intellectual origin of the social sciences is found in the progressive reform tradition. *See generally* L. Bernard & J. Bernard, Origins of American Sociology (1943); M. Furner, Advocacy and Objectivity: A Crisis in the Professionalization of American Social Science, 1865–1905 (1975).

and political neutrality by severing their ties to social action and adopting the language and manners of the physical sciences.¹⁷⁷ They became preoccupied with counting and niceties of experimental design. Realist lawyers, on the other hand, soon found the quantitatively-oriented discipline a difficult reform horse to ride. They disliked being hobbled by the methods of science and the constraints of data. The exigencies of change shaped the nature and scope of their inquiry. For legal realists, reliable data was less important than effective data. Their interest in empirical facts rested more on expediency than on commitment to scientific knowledge.¹⁷⁸

In addition, social science did not turn out to be directly and immediately applicable to the policy concerns of the law, however much it may have illuminated the factual background of policy issues. ¹⁷⁹ Perhaps the fault lay not so much in the limits of social research methodology as in the expectation of reformers that empirical data could yield or support normative conclusions. ¹⁸⁰ In the end, the tension between the legal and scientific methods of inquiry could not be overcome without each compromising its respective norms. Of the two facets of legal realism, the philosophical and the scientific, the former—which gave the movement its name and fame—flourished, while the latter—like an old soldier—did not die but simply faded away.

Efforts to integrate law and social science continued in the post-realist

^{177.} The differentiation of the social sciences into specialized departments has been linked to the rise of the large-scale research university. The divorce of research from immediate policy considerations was a precondition for recognition by the university community of the scientific status of the newly formed departments. See T. HASKELL, supra note 174.

^{178.} The experience with empirical research of William O. Douglas at Yale was typical. With a social scientist, he studied the causes of business failures and the efficiency of bankruptcy administration, a subject that then commanded widespread attention. To the dismay of his social science colleague, he drew causal inferences and reached conclusions which were unwarranted by the results, but which supported his reform expectations. "[N]ot only did he not follow the appropriate methodological rules, he reverted to the kind of arm-chair theorizing that methodological rules were designed to foreclose." Schlegel, *supra* note 162, at 543.

^{179.} In Stevens' view, "[t]he social sciences had been oversold. They proved to be of far less help to the legal scholar than had been expected." Stevens, *supra* note 162, at 475–76. Robert Hutchins, who co-authored several studies on the psychology of evidence with Donald Slesinger, a psychologist, concluded that "[w]hat we actually discovered was that psychology had dealt with very few of the points raised by the law of evidence; and that the basic psychological problem of the law of evidence, what will affect juries, and in what way, was one psychology had never touched at all." Hutchins, *The Autobiography of an Ex-Law Student*, 1 U. Chi. L. Rev. 511, 513 (1934).

^{180.} A basic difference between the two modes of inquiry is that scientific statements are descriptive and predictive, while the pronouncements of law are descriptive and prescriptive. Law expresses human purposes. This is why decisions cannot be deduced simply from the facts to which legal doctrines are applied, in the same manner that empirical conclusions can be derived from the data to which scientific theories are applied. See generally Loevinger, Law and Science as Rival Systems, 19 U. Fla. L. Rev. 530 (1966).

period, but little progress was made.¹⁸¹ Normatively-oriented scholars sought to meet the quandary of moral relativism, posed and unanswered by the realists, by focusing on reasoned and orderly processes of judicial decisionmaking.¹⁸² Common to the various strands of purposive analysis is a value-laden and data-free methodology. This is the jurisprudential outlook that informs the legal critique of social research on school desegregation, from the simple doll studies of the fifties¹⁸³ to the sophisticated research on busing one generation later.¹⁸⁴ Today, compared to the 1930's, the positions of social scientists and legal scholars have been reversed. Many liberal and neo-conservative social scientists are engaged in policy-oriented research. But many legal academics, unlike their realist predecessors, are skeptical that the answer to the problem of the legitimacy of judicial review is found in instrumentalist-empirical analysis.¹⁸⁵ Like the formalists of old, they urge a modest judicial role in social policymaking.¹⁸⁶

V. IMPACT OF SOCIAL RESEARCH ON LAW

A. The "Indoctrination" Function: A Neo-Realist View

There is a substantial literature on "how to inform the judicial mind" of social science. It consists mostly of scholarly exegeses of appellate decisionmaking, 188 and, to a lesser extent, of reports by

^{181.} Lasswell and McDougal observed that the "[h]eroic, but random, efforts [of realists] to integrate 'law' and 'the other social sciences' fail through lack of clarity about what is being integrated, and how, and for what purposes." Lasswell & McDougal, supra note 165, at 204. They proposed a comprehensive policy-science scheme that welded the intellectual themes of the 1930's: empirical inquiry, policymaking, and rule-deductive reasoning. It marked the start of the post-realist jurisprudence, but its social scientific underpinnings failed to appeal to other legal scholars who were more normatively oriented.

^{182.} The classic exposition is found in H. HART & A. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW (1958). Hence the prevalent notion among these scholars that social science is all very interesting but essentially irrelevant to deciding issues of constitutional dimension.

^{183.} See supra notes 24-33 and accompanying text.

^{184.} See, e.g., Dworkin, Social Sciences and Constitutional Rights—The Consequences of Uncertainty, in EDUCATION, SOCIAL SCIENCE, AND THE JUDICIAL PROCESS 20 (1977).

^{185.} See, e.g., Linde, Judges, Critics, and the Realist Tradition, 82 YALE L.J. 227 (1972): O'Brien, The Seduction of the Judiciary: Social Science and the Courts, 64 Judicature 9 (1980): Yudof, School Desegregation: Legal Realism, Reasoned Elaboration, and Social Science Research in the Supreme Court, 42 LAW & CONTEMP. PROBS., Autumn 1978, at 57.

^{186.} See, e.g., R. BERGER, GOVERNMENT BY JUDICIARY: THE TRANSFORMATION OF THE FOUR-TEENTH AMENDMENT (1977); L. GRAGLIA, DISASTER BY DECREE (1976). There are also, of course, social scientists who share the same viewpoint. See Moynihan, Social Science and the Courts, 54 Pub. Interest 12 (1979); Glazer, Towards an Imperial Judiciary, 41 Pub. Interest 104 (1975).

^{187.} See supra note 2.

^{188.} See, e.g., D. HOROWITZ, THE COURTS AND SOCIAL POLICY (1977); P. ROSEN. supra note

judges, ¹⁸⁹ lawyers, ¹⁹⁰ and others ¹⁹¹ with an insider's knowledge of the litigation process. Wolf contributes a different perspective on the subject. By studying the trial transcript, she arrives at observations about the impact of social science on the judge that an examination of other sources of information might not have disclosed.

In the Detroit case, much of the social science evidence introduced at the trial was irrelevant and unnecessary under the existing law; hence, it went unmentioned in the appellate opinions. Wolf argues that despite the absence of any legal need for such proof, there is an underlying "pressure to offer some semblance of plausible evidence to justify" desegregation beyond reliance on case precedents. 192 Her assessment of the impact of the expert testimony—admittedly "a hazardous and speculative undertaking" 193—is that it "profoundly and greatly influenced" the trial outcome. 194 "I am convinced," she said, "although I cannot prove the point, that in Detroit, as in some other cases,"195 the testimony on residential segregation and the reciprocal effects on school segregation aroused the judge's sense of wrong and provided him with the justification for finding de jure violations by school officials. The testimony on social-educational benefits "misled" the judge into believing that racially mixed classrooms were the necessary and desirable remedy. 197 In essence, social science was "an important aspect of Judge Roth's indoctrination."198

- 190. See, e.g., Greenberg, Social Scientists Take the Stand: A Review and Appraisal of their Testimony in Litigation, 54 MICH. L. REV. 953 (1956).
 - 191. See, e.g., R. KLUGER, SIMPLE JUSTICE (1977).
 - 192. E. WOLF, supra note 12, at 214.
 - 193. Id. at 21.
 - 194. Id. at 81.
 - 195. Id. at 245. Wolf does not identify these other cases.
 - 196. Id. at 101.
 - 197. Id. at 81, 245.
- 198. Id. at 119. A journalist covering the trial reached the same conclusion: "Without [Judge Roth's] conversion, it is unlikely that the Detroit school case would have become very significant in the history of school desegregation litigation." Grant, supra note 9, at 851. After the trial, Judge Roth confided that the testimony on residential segregation was "the ke[y] to understanding the case." Id. at 863. Equally remarkable was the mid-trial change of heart of Alexander Ritchie, counsel for intervening defendants (the white parents resisting integration). Toward the end of the trial, he conceded that Detroit was segregated with respect to housing and schools, and endorsed a metropoli-

^{158;} Rosenblum, A Place for Social Science Along the Judiciary's Constitutional Law Frontier, 66 Nw. U.L. Rev. 455 (1971); Yudof, supra note 185, at 68–77.

^{189.} See, e.g., Craven, The Impact of Social Science Evidence on the Judge: A Personal Comment, 39 LAW & CONTEMP. PROBS., Winter 1975, at 150; Doyle, Social Science Evidence in Court Cases, in Education, Social Science, and the Judicial Process 10 (1977); Hallisey, Applied Social Research as Evidence in Litigation, in The Use/Nonuse/Misuse of Applied Social Research in the Courts 135–39 (1980); Wisdom, Random Remarks on the Role of the Social Sciences in the Judicial Decisionmaking Process in School Desegregation Cases, 39 LAW & CONTEMP. PROBS., Winter 1975, at 134.

Social science reviewers seem persuaded by this brainwashing hypothesis, ¹⁹⁹ but a legal reviewer says that it may be "wrong." ²⁰⁰ I find it intuitively appealing but overstated. The intellectual progenitor of this view of judicial decisionmaking is, of course, the radical faction of realist jurisprudence. ²⁰¹ In seeking a complete overhaul of formalism, realism denied that legal precepts have any effect on case law except as after-the-fact rationalizations of decisions. ²⁰² It elevated emotional experiences and personal history to first causes of judicial behavior; ²⁰³ it made no accommodation for purposiveness and ratiocination as springs of conduct. ²⁰⁴ In this view, judges do not begin with a legal premise from which they reason downward to a conclusion. Instead, they begin backwards with a conclusion vaguely formed, and then they try to substantiate it with a legal premise. ²⁰⁵ The impulse for the result is an intuitive "hunch" of what is right or wrong in a particular case. ²⁰⁶

Wolf is a latter-day realist attired in empirical clothes. Her selective use and manipulation of data to support preconceived value positions is

tan remedy! His change moved the judge. "We all got an education during the course of the trial." Judge Roth commented afterward. *Id.*, at 863-64.

- 199. Ravitch, Social Scientists on the Stand, New Leader, Feb. 8, 1982, at 19; Rossum, supra note 112.
 - 200. Book Review, 80 MICH. L. REV. 955, 956 (1982).
- 201. Not all realists marched under one flag. See generally Kennedy, Psychologism in the Law. 29 GEO. L.J. 139 (1940) (opposing psychology as a basis for legal reform until more developed). The middle-of-the-road faction also recognized that judicial decisions were shaped by societal and personal influences, but nonetheless believed that rules played an effective though limited role on the totality of law. See Fuller, American Legal Realism, 82 U. PA. L. REV. 429, 430 (1934).
- 202. One of the "chief uses" of legal rules is "to enable the judges to give formal justifications—rationalizations—of the conclusions at which they otherwise arrive." J. Frank, Law and The Modern Mind 130 (1930).
- 203. "[T]he most salient [feature of the judicial process] is that decision is reached after an emotive experience in which principles and logic play a secondary part." Yntema, *The Hornbook Method and the Conflict of Laws*, 37 YALE L.J. 468, 480 (1928). "An opinion is but the smoke" that covers the underlying psychological processes. L. GREEN, JUDGE AND JURY 55 (1930).
- 204. A judge does not follow law, but law follows the judicial hunch—emotion and intuition, not precedents or reasoning, control judicial decisions. Hutcheson, *The Judgment Intuitive: The Function of the "Hunch" in Judicial Decision*, 14 CORNELL L. REV. 274 (1929). Certainty and rationality in the law were dismissed as a "myth." J. FRANK, *supra* note 202, at 2.
- 205. John Dewey observed that realism is pragmatism in law. "[W]hile the syllogism sets forth the results of thinking, it has nothing to do with the operation of thinking." Dewey, *Logical Method and Law*, in LANDMARKS OF LAW: HIGHLIGHTS OF LEGAL OPINION 122 (R. Henson ed. 1960).
- 206. In describing the art of advocacy, Cahn wrote: "[I]f you wish a judge to overturn a settled and established rule of law, you must convince both his mind and his emotions, which together in indissociable blend constitute his sense of injustice. . . . His mind must see not only that the law has erred but also that the law itself proffers a remedy. Then he can feel free to correct the error without betraying the consistency and continuity of the legal order because he will only be replacing mistaken law with correct law. . . . all this he may determine to do—if you are able to arouse the propulsive force in his sense of injustice, i.e., the excitement of glands and emotions that any man may experience when he witnesses the inflicting of injustice." E. Cahn, The Predicament of Democratic Man 129 (1961).

reminiscent of the realists' commitment of expediency to social science. Hers is also a philosophy of debunkery—she seeks to debunk legal fictions and unmask the pretensions of law with empirical evidence. In fact, much of empirically-oriented impact research on law, which comprises the bulk of social-legal scholarship, is preoccupied with debunking—it exposes the gap between theory and practice, between the law-in-thebooks and the law-in-action.²⁰⁷ Like the realists of the 1930's, Wolf (and impact researchers generally) overstates her case. To suggest that decisions are conditioned on emotive experiences triggered by expert testimony, and nothing more, is to substitute the rule of the judge—or the vicarious rule of the social scientist—for the rule of law. Realism fails to explain how judges exercise their concededly discretionary judgment without sliding into idiosyncratic or authoritarian decisionmaking. The explanation supplied by purposive jurisprudence is that judicial intuition of national values provides the basis for principled decisionmaking. Judicial decisions express more than just personal hunches. They embody values that are deemed inherent to American civilization at a given time. To safeguard against the imposition of ad hoc, subjective preferences upon society, the judiciary—unlike the other branches of government has to give written reasons that lay bare the whys and wherefores of its judgments.²⁰⁸ Political acceptance of judicial rulings depends in part on whether they further perceived national ideals. In this normative scheme, social science is necessary but not sufficient for law. Empirical evidence may well elicit the psychological forces that animate a judgment, but the legitimacy of the decision rests more on reasoned elaboration of its normative predicates. The next section locates Wolf's observations on the impact of social research in a broader context.

B. Uses of Social Research in Judicial Decisionmaking

The role of social research in the courts is part of the broader subject of how information about social reality ("what has already become" contributes to shaping the way society should be ordered ("what is in the

^{207.} The flexible, open-textured characteristic of legal doctrines and the instrumentalist, case-by-case method of decisionmaking facilitates the maintenance of the duality between abstract ideals and their implementation amid situational pressures. It is the very method of law that enables courts to give lip service to exalted principles and at the same time justify a deviation from them in particular instances. See Davies, Do Criminal Due Process Principles Make a Difference?, 1982 Am. B. FOUND. RESEARCH J. 247.

^{208.} See White, supra note 144.

^{209.} K. MANNHEIM, IDEOLOGY AND UTOPIA 112 (1936).

process of becoming''²¹⁰). It deals with the integration of the objectively true with the morally right.

There is no single, elegant, and consensual link between the realms of fact and value.²¹¹ One way to map this role is in terms of judicial functions. If decisions reflect some underlying jurisprudential philosophy, then so do the applications of social research in decisionmaking. There are three paradigmatic uses of social research²¹²—in judicial adjudication, judicial legislation, and judicial rationalization—which reflect, respectively, the influence of three jurisprudential approaches to judicial decisions: formalism, realism, and reasoned elaboration.

Law "consists of decisions, not rules." It is a method of problem-solving that applies a legal rule (a kind of prescriptive major premise) to the facts of the case (minor premise) in order to reach a conclusion. The rule or the facts may be certain or disputed. There are four possible categories of decisionmaking based on the foregoing combinations: certain rule/certain facts, disputed rule/certain facts, certain rule/disputed facts, and disputed rule/disputed facts. When the facts are certain, empirical inquiry is unlikely to have any role. In the first category, litigation may not even arise; the dispute would be settled by application of precedent. The second category would involve nonfactual, doctrinal interpretation and textual exegesis. Social science is relevant, then, only in the last two types of decisionmaking.

1. Judicial Adjudication

When the rule itself is uncontested and only the facts are at issue, social science evidence aids in determining the applicability of the rule—that is, in judicial adjudication. For example, if studies show unequal resources between black and white schools within a jurisdiction, the rule requiring separate-but-equal educational facilities might lead to a decree of equal-

^{210.} Id.

^{211.} To paraphrase Kalven, the problem is one of how to "empiricize" jurisprudence and "intellectualize" factfinding. Kalven, *The Quest for the Middle Range: Empirical Inquiry and Legal Policy*, in LAW IN A CHANGING AMERICA 56, 72 (G. Hazard ed. 1968).

^{212.} It is difficult to give a generalized account on how social research is used by the courts. There is no single, ubiquitous, across-the-board relevance of social science to law. See Grundstein. The Relevance of Behavioral Science for Law. 19 Case W. Res. L. Rev. 87 (1967). In part, this is because "there exists no authoritative body of learning or generally agreed upon ideas on the subject of how legal decisions are actually arrived at, to say nothing of how they ought to be arrived at." Cowan, Decision Theory in Law, Science, and Technology. 17 Rutgers L. Rev. 499, 508 (1963). Styles of decisionmaking, and the uses of social science therein, vary according to the particular subject matter and policies at stake. The three uses discussed in the text, therefore, exemplify but do not encompass all the possibilities.

^{213.} J. Frank, supra note 202, at 128.

ization of funding. It is a kind of programmed or prefabricated decision-making—a jurisprudence of antecedents, which is associated with formalism. Once the "adjudicative facts" ²¹⁴ are ascertained, the judge reasons from the governing rule to the inescapable conclusion. ²¹⁵ The use of social research here is not problematic—it does not lead to any change in legal doctrine or policy.

2. Judicial Legislation

A more unsettled role of social research is in the creation of law—that is, in judicial legislation. When both the applicable law and the facts are at issue, as they were in *Brown*, a court must resolve conflicting claims of "legislative fact" and decide between opposing interests. It is a kind of unprogrammed decisionmaking, used in original, first-impression types of cases—a jurisprudence of discretion, associated with realism. The presentation of empirical data on the disputed facts can influence judge-made law either directly or indirectly.

A direct or instrumental role of social research is in ascertaining the impact of decisions.²¹⁷ One ground for choosing between different legal premises is an evaluation of their anticipated social and behavioral effects.²¹⁸ Decision implies choice, and choice implies prediction. Impact research can help shape decisions because of the reciprocal relationship between issues of fact and law. It is a central feature of the nature and growth of law that "[the] issues of fact arise out of the law but, at the point of application of law, the issues of law also arise out of the facts."²¹⁹ Existing legal rules give facts their legal significance, but facts, in turn, can also beget new legal rules.²²⁰ This result-oriented method of

^{214.} These are facts specific to the case: who, what, where, and when. K. DAVIS, ADMINISTRATIVE LAW TREATISE §15.03 (1958).

^{215.} But see Weinstein, Some Difficulties in Devising Rules for Determining Truth in Judicial Trials, 66 COLUM. L. REV. 223, 236–39 (1966) (instances in which deliberate "bending" of the facts are countenanced or dictated for reasons of legal policy).

^{216.} These facts go beyond the particular lawsuit and look toward the future—they pertain to broad social, economic, and behavioral processes. Adjudicative facts can also have legislative implications. K. Davis, *supra* note 214. Of course, the line between "factfinding" and "lawmaking" is often blurred at the point of application, since both kinds of decisionmaking may be proceeding concurrently.

^{217.} See Miller & Howell, supra note 107, at 690.

^{218.} In the absence of consensus on desired ends, judges may not choose but instead accommodate or compromise between competing values. *See supra* text accompanying note 142.

^{219.} Hart & McNaughton, supra note 23, at 61.

^{220.} The "chicken-and-egg relationship" between issues of fact and law suggests a method for collaboration between lawyers and social scientists in reform-oriented litigation. In the course of identifying the legal issues, a lawyer can indicate to the social scientist the kinds of empirical data that might be needed. Legal rules define the types of facts relevant for adjudication. An anti-segrega-

decisionmaking²²¹ is not unique to law. It has parallels in "rational-comprehensive" and "scientific" decisionmaking in public administration²²² and organizational behavior.²²³ Empirical evaluation and informed commentary on the decisional products of a court are part of the lawmaking processes of the judiciary.²²⁴

Another direct role of social research is in formulating and implementing remedies for proven constitutional violations. Although empirical data may not be dispositive in establishing a wrong, it may help shape the design of remedial decrees. Some courts, for example, now take into account the potential for white flight in determining the extent of desegregation, ²²⁵ and expert assistance has been used in preparing compensatory education programs as alternatives or supplements to integration. ²²⁶

Nonetheless, there are judges and legal scholars who deny that social

tion rule might state, for example, that there is wrongful discrimination if there is substantial racial imbalance in a school system as a result of deliberate actions by school officials. It is only when segregation is deemed wrong (a normative judgment embodied in the rule) that one needs to inquire about the facts of racial imbalance and official conduct-"The issues of fact arise out of the law." Although the initial factual questions for investigation are posed by the lawyer, the social scientist does not remain in a handmaiden's role. He may call attention to other facts which the lawyer had not considered and which could alter the character of the legal issues itself. He might do research that shows that segregated schooling produces harmful effects on minority children irrespective of whether the segregation came about by deliberate action or fortuitous circumstances. The lawyer could use these findings (if well established) to challenge the existing rule by arguing that these effects are sufficient to find unlawful discrimination, without any further showing of improper official motive. Here is an instance of using social research to help create new law. This is possible because "at the point of application of law, the issues of law also arise out of the facts." As Hart and McNaughton state, "[T]he truth is that neither [the lawyer nor the social scientist] can be in complete command. They have to learn how to work together . . . and each having a sense of the other's potential contribution in developing the analysis. "Id. at 61-62.

- 221. For a description of an "experimental jurisprudence" "based upon a rigorous application of the scientific method" and designed to study "the effect of law upon society and the efficacy of laws in accomplishing the purposes for which they came into existence." see F. Beutel. Experimental Jurisprudence 18 (1957). Impact analysis consists of three interrelated components: prediction of the effects of alternative rules; evaluation of the social impact of the rule chosen; and reformulation of the rule in light of the evaluation. See Mayo & Jones, Legal-Policy Decision Process: Alternative Thinking and the Predictive Function, 33 GEO. WASH. L. Rev. 318, 339 (1964).
 - 222. Lindblom, The Science of "Muddling Through," 19 Pub. Ad. Rev. 79, 81 (1959)
- 223. See generally H SIMON, ADMINISTRATIVE BEHAVIOR (2d ed. 1957) (discussing decision-making processes in administrative organizations).
- 224. Realists saw "the focal point" of legal inquiry to be the "area of contact between judicial (or official) behavior and the behavior of laymen"—that is, the social impact of law. Llewellyn, supra note 156, at 442-43
 - 225. See Parent Ass'n v. Ambach, 598 F.2d 705, 719 (2d Cir. 1979).
- 226. Although some social scientists argue that formulation of such decrees is "largely a matter of applied social psychology," Haney, *supra* note 106, at 172, others caution that in the remedy phase, as in the violation phase, social science findings—even when reliable and generally agreed upon—"are not the primary factor in the decision to order the adoption of a particular plan." Levin. *School Desegregation Remedies and the Role of Social Science Research*, 42 LAW & CONTEMP. PROBS., Autumn 1978, at 1, 2.

research has any real effect on constitutional decisionmaking.²²⁷ This view encompasses two related issues. One is that of legitimacy: *whether* empirical evidence should be relied upon at all in decisionmaking; the other involves capability: *how* can it be used in decisionmaking.

Critics of judicial reliance on social science—many of whom, unsurprisingly, also disfavor judicial activism²²⁸ in social policymaking²²⁹—argue *inter alia* that it would provide a "rationale for noncompliance and for open political attack on constitutional guarantees."²³⁰ If desegregation does not raise achievement scores of minority children, the right is undercut by studies that challenge the factual predicate. Social research findings are said to be inconclusive, subjective, and labile;²³¹ therefore, constitutional principles should not be made to rest on the latest empirical generalizations.²³² Normatively-oriented scholars assert that judges should and in fact do "make interpretive rather than causal judgments."²³³

However, judges have the power to control the influence of social science evidence; at the outset, they can frame the right in question in instrumentalist or normative terms. The right to desegregated education can be

^{227. &}quot;[S]ocial science data or other evidence are less important in judicial decision-making in the field of constitutional law than most people think." Doyle, *supra* note 189, at 10. "Social science research has not played a very great part in school desegregation litigation." Yudof, *supra* note 185, at 107.

This view, however, is not universally shared. "It is undeniable . . . that, since Brown, social science research findings have played a role in school desegregation litigation." Levin, supra note 226, at 1. Judge McMillan observed that social science data "can add valuable information and opinion to responsible judging—pragmatic, principled, or otherwise," and therefore "should be considered by the court." McMillan, Social Science and the District Court: The Observations of a Journeyman Trial Judge, 39 LAW & CONTEMP. PROBS., Winter 1978, at 157, 163, 157.

^{228.} The argument that judges should be modest and not give free rein to their own policy preferences has been forcefully stated in O'Brien, *supra* note 185, at 16-17.

^{229.} The association between social science and liberally-oriented judicial lawmaking is long-standing. Social scientists, as a group, subscribe to liberal social and political values, a fact which they readily acknowledge and have subjected to self-examination. Social science seeks to understand and predict future events. It tends to attract to the profession those who are more interested in shaping the future than in preserving the past. Teaching and research focus on "social change," not on the "status quo." In this regard, Wolf and her neo-conservative colleagues represent a minority—but growing—viewpoint.

^{230.} Linde, supra note 185, at 240.

^{231.} See infra text accompanying notes 256-63.

^{232.} This is the criticism that Cahn, *supra* note 24, raised of the early doll studies, and which since has been reiterated by other normatively-oriented commentators.

^{233.} Yudof, *supra* note 185, at 77. "Interpretive" or value judgments are based on shared understandings and political morality. They do not imply quantitative, causal relationships—which, arguably, cannot be unravelled anyway for complex, social processes, given the present state-of-theart of social research—but they locate "a particular phenomenon within a particular category of phenomena by specifying its meaning within the society in which it occurs." Dworkin, *supra* note 184, at 21. The unexplained assumption is that judges are somehow more capable at value analysis than fact analysis.

premised on its purported academic benefits or on the imperative of vindicating the interest in equality and fairness. Since the days of realism, we all know that rarely are judicial decisions wholly or largely effective in achieving their stated objectives, even though we continue to feign amazement at the gap between the ideal and the real.²³⁴ How the issue is posed loads the dice. In any event, when judges have turned to social facts, they have been careful not to place constitutional rulings exclusively on the proverbial slippery slope of instrumentalist reasoning. They have tread a middle ground, relying on both causal premises and normative judgments.²³⁵

The difficult issue, then, is not whether social science has a role but how it can be used. Kalven proposed that empirical inquiry is most productive when it is applied to issues "in the middle range" of the fact-value continuum.²³⁶ These are issues which do not involve deeply held values and inaccessible facts (e.g., the wrongfulness of segregation) or, on the other hand, problems which involve facts too well known to warrant empirical footnoting (e.g., the unreliability of hearsay). Holdings embodying a moral judgment are not, of course, grounded on factual proof. If, as *Brown* said, segregation is "inherently unequal," its wrongfulness represents an axiomatic claim. Instrumental analysis becomes less relevant as the questions become more aspirational.

It does not follow, however, that data may not have an *indirect* or *heuristic* effect on shaping the outcome. What was claimed by legal critics of *Brown*'s footnote eleven to have been common knowledge about the consequences of segregation was the product, at least in part, of the substantial corpus of research that had accumulated over the years and worked its way into popular learning and then into the living law. Even normative conclusions are generated by an awareness of facts. Research results can illuminate or sharpen the factual premises of constitutional decisionmak-

^{234.} Abel, Redirecting Social Studies of Law, 14 Law & Socy Rev. 805, 827 (1980), argues that this gap is a "nonproblem." Attention should focus not on the existence of the gap but on the reasons for its perpetuation and the consequences that follow therefrom. See also Davies, supra note 207 (discussing the divorce between legal principles and decisions in the British and American systems).

^{235.} In *Brown*, for example, the Court stressed the "inherent" inequality of segregated schools. an assertion which bespeaks a value judgment, in addition to citing the empirical studies in footnote 11. 347 U.S. at 495. In Miranda v. Arizona, 384 U.S. 436 (1966), the Court repeatedly pronounced custodial interrogation to be permeated by "inherent compulsion," in addition to quoting from empirical texts on the coercive methods of police interrogation. *Id.* at 445–58.

^{236.} Kalven, *supra* note 211, at 67. He does not articulate the parameters of this mid-range, but Rosenberg gives a "homely test" of whether an issue involves interpretive judgments not responsive to empirical data: "Can you visualize evidence concerning the impact of your preferred version upon human behavior or conditions that would lead you to reject that choice for an alternative one? If not, the choice is animated by value considerations." Rosenberg, *Comments*, 23 J. LEGAL Ed. 199, 202 (1970).

ing. Empirical reality defines what purposes are realizable and thereby sharpens the focus of moral debate.²³⁷ Whether intended or not, the use of social science can also frame or redefine the policy issue. In school finance litigation,²³⁸ for example, the opposing sides disagreed on the impact of greater expenditures on educational quality, but implicitly they (and the court) agreed that educational quality was measured by performance on standardized achievement tests.²³⁹ Social research channeled thinking about the issue as a technical matter of improving test scores of low-income minority children rather than as a moral dilemma posed by economic inequality. In the Detroit case, expert testimony was a factor in persuading the judge that improved achievement scores made school desegregation worth the candle. The indoctrination hypothesis is another instance of the heuristic role of social science.²⁴⁰

In brief, there is both a chasm and a bridge between the realms of fact and value. Without the chasm, there would be no place for purposive analysis—normative issues would surrender to empirical inquiry. Without the bridge, social research would have nothing to contribute to the moral choices that preoccupy the law. The role of empirical inquiry in judicial lawmaking is not an either-or matter. Both instrumentalist and interpretive judgments are implicated because the empirical and the normative are interwoven.²⁴¹

^{237.} Although social science cannot tell us which ends to pursue, it could channel the direction of inquiry by disclosing the costs of their attainment. Homans, What Kind of a Myth is the Myth of a Value-Free Social Science?, 58 SOCIAL SCI. Q. 530 (1978).

^{238.} See generally Andersen, School Finance Litigation—The Styles of Judicial Intervention, 55 WASH. L. REV. 137, 164-67 (1979).

^{239.} Levin, Education, Life Chances, and the Courts: The Role of Social Science Evidence, 39 Law & Contemp. Probs., Spring 1975, at 217, 237 ("There is little doubt that the research agenda has framed the issue."). See also Coons, Recent Trends in Science Fiction: Serrano Among the People of Number, in Education, Social Science, and the Judicial Process 50 (1977) (observing that only if the decisional norm adopted by the court poses social science questions will social science research be relevant).

^{240. &}quot;[S]ocial science research may indirectly affect the legal process by changing or influencing... the attitudes and beliefs of lawyers, judges..." Lochner, Some Limits on the Application of Social Science Research in the Legal Process, 1973 LAW & Soc. Order 815, 820.

^{241.} The circular relationship between law and facts—law defines the relevant facts, but facts also beget new law, see supra note 220—suggests an analogous view of the relationship between social values and social research. In the short run, values organize facts. Empirical inquiry cannot be conducted, and its results cannot be interpreted, independently of the normative framework that provides its context and meaning. In the long run, however, facts can organize values. Over the course of time, as reality unfolds into history, values can also arise out of facts. Knowledge can become a source of authority for purposive action. Social research is a cumulative enterprise. Ideas and findings, not of any single study but of the totality of established knowledge, can have a long term and indirect influence on social judgments. For example, the insights into human behavior of Freud and Skinner first caught hold of intellectual life and then gradually filtered into public consciousness. They now shape how people think and feel. Perhaps this is what Kalven had in mind when he mused.

3. Judicial Rationalization

The requirement that judges elaborate in writing the justifications for their rulings serves as an institutional safeguard against idiosyncratic decisionmaking. A third role of social research, then, is in the legitimation of judicial lawmaking—that is, in judicial rationalization.

Although "in substance the growth of the law is legislative," ²⁴² judges are reluctant to engage openly in the function of creating law. In order to preserve the appearance of continuity and certainty in the law, unprogrammed decisions are dressed in formalist attire. Landmark decisions are said not to constitute "an abrupt break" with the past but merely a "retur[n] to . . . old precedents." ²⁴³ Reform-minded judges, according to the jurisprudence of reasoned elaboration, "decide cases intuitively and then search to justify their intuitions by making arguments directed at a wide audience." ²⁴⁴ They intuit the values endemic to American society at a particular time and then give elaborate reasons in order to persuade the public of the legitimacy of their judgment.

Impact-thinking can be a form of rationalization in that it sets forth the results—rather than the actual processes—of decisionmaking. To consider all the possible consequences of alternative courses of action prior to making a decision assumes a degree of rationality and information availability that is exaggerated. In law and in public administration generally, there is often no agreement on desired ends, and decisionmakers are reduced to choosing without first clarifying the goals sought. Decisionmaking is incremental²⁴⁵—a "muddling through" process in which each step produces only a marginal change, and each decision is a successive approximation to the objective, even as the objective itself continues to change under reconsideration. However, since decisionmakers are expected to justify their actions, they discharge their responsibility by pretending to engage in "rational-comprehensive" analysis.²⁴⁶

Some proponents of principled judicial decisions, while acknowledging that social research has some impact on adjudicative and legislative functions, nonetheless object to instrumentalist justifications of deci-

[&]quot;[f]or social science learning to have an impact on the living law, will it first have to become *popular* learning and thus enter law via the normal political process?" Kalven, *supra* note 211, at 68.

^{242.} O.W. HOLMES, THE COMMON LAW 35 (1881).

^{243.} Gideon v. Wainwright, 372 U.S. 335, 344 (1963) (right to appointed counsel). In requiring certain warnings prior to police interrogations, the Court in *Miranda* said: "our holding is not an innovation in our jurisprudence, but is an application of principles long recognized." Miranda v. Arizona, 384 U.S. 436, 442 (1966).

^{244.} White, supra note 144, at 300.

^{245.} See Shapiro, Stability and Change in Judicial Decision-Making: Incrementalism or Stare Decisis?, 2 Law Transition Q. 134 (1965).

^{246.} Lindblom, supra note 222.

sions.²⁴⁷ They insist that decisions be premised on "impartial, consistent, and neutral application of legal principles," rather than on social science materials.²⁴⁸ Courts often do use empirical findings the way a drunk uses a lamppost: for support rather than illumination. The findings serve to ornament decisions reached on other grounds. If "the final business of law is not truth but political preference,"²⁴⁹ social research can be used for purposes of "judicial statecraft."²⁵⁰ Judges have been known to cite studies the way they cite cases, treating scientific conclusions as highly malleable holdings that can be assimilated into an existing normative scheme.²⁵¹

However, instrumentalist justifications need not necessarily be ad hoc, any more than normative justifications are by definition "principled." Decisions can be conditioned, at least in part, on well-established facts, and done so in a consistent and coherent fashion. Indeed, if social research influenced judicial thinking—for example, by helping to diagnose the nature of the social problem, to anticipate the possible consequences of alternative choices, or to inform on the prospects of public compliance—it would be unjustifiable to pretend that such considerations never entered into the decisionmaking. The "ought" cannot be derived from the "is," but accurate knowledge of social reality can discipline or condition thinking so as to make possible the normative leap. The explication of these factual predicates is not incompatible with purposive analysis, unless one posits an unbridgeable gap between facts and values.

Thus, the imprimatur of "modern authority" in *Brown* helped to justify the avoidance of the *Plessy* doctrine which was itself rationalized in terms of the "psychological knowledge" of its time. ²⁵² The united front of the social scientists, documented in footnote eleven, served the statecraft purpose of reinforcing the image of broadly-based agreement ²⁵³ on

^{247.} There are "certain benefits" in judicial attention to social science evidence, but to rest decisions on them is "subversive to judicial craftsmanship per se and pernicious rather than salutary for the prestige and efficacy of the judiciary." O'Brien, supra note 185, at 16, 19.

^{248.} O'Brien, Of Judicial Myths, Motivations, and Justifications: A Postscript on Social Science and the Law, 64 JUDICATURE 285, 287 (1981).

^{249.} Kalven, supra note 211, at 67.

^{250. &}quot;Judicial statecraft" refers to the "calculation of the political consequences" of decisions, in contrast to "judicial craftsmanship" which is a code word for sharply reasoned and non-activist decisionmaking. Linde, *supra* note 185, at 232, 234.

^{251.} A good example is Justice Blackmun's manipulation of the studies on the functioning and impact of six- versus twelve-person criminal juries, which Justice Powell in a concurring opinion derided as "numerology." Ballew v. Georgia, 435 U.S. 223, 240 (1978) (Powell, J., concurring). See Loh, supra note 23, at 694–95.

^{252.} Brown v. Board of Educ., 347 U.S. 483, 495 (1954).

^{253.} The legitimacy of judicial decisionmaking rests not only on reasoned elaboration of its premises but also on public acceptance of the rightness of the decision. This is the "ultimate secret" of effective law. A. BICKEL, THE SUPREME COURT AND THE IDEA OF PROGRESS 91-92 (1970). In the

the evil of segregation that the Court sought to convey with its own unanimous opinion. A lesson of *Brown* is that judges are more likely to use social research for rationalization when the evidence is agreed upon by the experts, it clearly supports or refutes the legal matter at issue, and it implies a solution that is within the court's control. Absent these attributes, as in the northern school desegregation cases, judges avoid any overt justification based upon social research and rely instead on flexible legal fictions such as de jure violations.

VI. CONCLUSION

A theme that emerges from the long history of school desegregation from *Brown* to the present is that things are no longer as simple as they appeared back in 1954. With respect to both legal policy and the associated empirical research, there is now more dissensus than consensus, more complexity than simplicity, more indeterminacy than certainty. "School desegregation," says Bell, "is our twentieth century equivalent of the Christian Crusades. Once-clear issues are now hopelessly confused. Goals that seemed reasonable are now unattainable." 254

Today, rarely does the wrong appear as overt and easily detectable as the segregation statutes of yesteryear. School segregation is part of the more general problem of "invisible race discrimination." If an employer hires only on the basis of job qualifications but most of the successful applicants turn out to be whites; if a police officer stops and questions only those suspected of crime but most of the suspects happen to be blacks; if a school district seeks by its attendance policy only to preserve the advantages of neighborhood schools but the result is mostly one-race schools—if, in short, facially neutral policies or actions result in disproportional racial impact, is there "invisible" discriminatory purpose with the neutral justifications serving as racial surrogates, or is the outcome the product of genuinely unbiased decisionmaking? A violation, once found, no longer implies the predictable remedy of integration.

Empirical inquiry has also evolved along a similar path. As Judge Wisdom notes, "[t]here is a vast amount of solid research on school desegregation But there is little agreement on methodology or conclusions, even when the data relied on are the same"256 The more

absence of consensus on what is right, legitimacy arises from the dialectical interchange between the Court and the public: the initial decision may elicit a political response, which, in turn, leads to legitimation or revision of the decision. This "dialectic of adjudication" between the judicial and political processes has been described by White, *supra* note 144, at 296.

- 254. Bell, Book Review, 92 HARV. L. REV. 1826, 1826 (1979).
- 255. J. WILKINSON, SERVING JUSTICE: A SUPREME COURT CLERK'S VIEW 134 (1974).
- 256. Wisdom, *supra* note 189, at 136 n.18.

sophisticated the studies become and the more the information gained, the greater our sense of the complexity of the issues, the more apparent our ignorance, and the more conflicting our explanations. When one thinks about the assertions that were so confidently declared—that segregation has negative psychological effects, period—based on some studies cited in a footnote, it cannot but elicit a yearning for the simplicity of the past.

However, the assumption that increased knowledge should lead to improved recommendations for policy reflects a misapprehension about social research. Thornstein Veblen pointed out that "the outcome of any serious research can only be to make two questions grow where one question grew before."²⁵⁷ In the physical sciences, advances in research lead to greater clarity about the phenomena and to convergence of conceptual paradigms.²⁵⁸ In the social sciences, the result is sometimes the opposite, especially when the facts at issue are intertwined with normative considerations.²⁵⁹ Uncertainty in research conclusions exists not only because of the epistemological limitations of the discipline,²⁶⁰ but also because of the values that precondition empirical inquiry and the uncertainty surrounding the social purposes of the problem under study.²⁶¹ The fact that social research at this time cannot provide law-like, predictive generalizations of complex social phenomena²⁶² does not necessarily mean, as some legal scholars are bold to assert, that there is a "crisis of legitimacy" in

^{257.} Quoted in Weinberg, supra note 69, at 241.

^{258.} See generally T. Kuhn, The Structure of Scientific Revolutions (1962).

^{259.} See Cohen & Weiss, Social Science and Social Policy: Schools and Race, in EDUCATION, SOCIAL SCIENCE AND THE JUDICIAL PROCESS 72, 92 (1977) ("improved knowledge does not always lead to more effective action").

^{260.} Social science has not been successful in tracing complex, causal relationships. The forces that shape social process are multiple and in continuing flux. Therefore, perceived patterns of relationships tend to be ephemeral, predictions have a wide margin of indeterminacy, and generalizations are not invariable. These methodological issues of social research are discussed in E. NAGEL, THE STRUCTURE OF SCIENCE: PROBLEMS IN THE LOGIC OF SCIENTIFIC EXPLANATION chs. 13, 14 (1961). "Sociological-demographic" analyses of the kind proposed by Wolf to unravel the causes of school segregation, see supra text accompanying note 80, rely at best on highly stylized conceptual models that rest on heroic assumptions. Her causal statements should be read as "facts with a value signature." M. REIN, supra note 94, at 53. "[S]ocial science cannot develop a secure understanding of causal relationships which will permit it to predict important social events. In this sense, social science cannot be a science." Id. at 70.

^{261.} On the competing normative paradigms that shape legal and empirical inquiry on school desegregation, see *supra* parts III D & III E.

^{262.} There are mixed views on whether social science can ever aspire to general laws of social phenomena. Compare Yudof, supra note 185, at 109 (" '[T]hose who still wait for a Newton' of the social sciences 'are not only waiting for a train that won't arrive, they're in the wrong station altogether' ") (quoting Anthony Giddens) with Jones, Legal Inquiry and the Methods of Science, in LAW AND THE SOCIAL ROLE OF SCIENCE 120, 128 (H. Jones ed. 1967) ("genuinely scientific knowledge is not unachievable in the social sciences"). One need not, of course, resolve the issue to assert that social science can have a role in judicial decisionmaking.

the social sciences which casts "widespread doubts" as to their "relevance" for constitutional decisionmaking. 263

So long as one expects social science to provide guidance in policy decisions, that is, to serve a deterministic role in the judicial process, one is bound to be disillusioned and to want to cast (as some judges had done)²⁶⁴ a pox on both liberal and revisionist houses of social science. On the other hand, if one sees that social science plays mainly a heuristic role in policy matters, educating the courts and society at large about the factual dimensions of the issue at stake, 265 one begins to appreciate its uses and limits in judicial decisionmaking. It can expose the varied facets of social problems and stimulate further reflection on the adequacy of one's preconceptions. It might prompt a different view of the issue and expand the range of alternative solutions. In short, it can inform and make more responsible the exercise of judgment, even though it should not and cannot displace the act of judging itself.266 "How to inform the judicial mind"267 of social science yields no easy solutions. One can, however, take comfort in the fact that although social science might not answer all the questions about school desegregation, it could make us wiser about its mysteries.

^{263.} Yudof, supra note 185, at 71. See also Frankel, The Autonomy of the Social Sciences. in Controversies and Decisions 9, 29 (C. Frankel ed. 1976), noting that "[t]he social sciences . . . are inextricably involved in politics."

^{264.} See supra note 111.

^{265.} Applied social research, Cohen and Weiss suggest, "constitutes a form of reporting to society." It is a vehicle by which society learns what is happening regarding the effects of social policies. Because of the selection and interpretation of evidence by researchers, the reporting is also an attempt to influence what society learns. Cohen & Weiss, *supra* note 259, at 79.

^{266.} In a pluralistic world with conflicting social values, it is not unexpected and no disgrace to find dissensus among the experts on social facts. These uncertainties stimulate debate about social purposes. If there were no dilemmas because facts resolved the ethical issues, there would be no opportunity for moral discourse on human affairs. The surrender of ethics to science is "at war with the very purpose and the principal *modus operandi* of a free society." Hart & McNaughton. *supra* note 23, at 72.

^{267.} See supra note 2 and accompanying text.