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It is we who use words
As screens for thoughts
And weave dark garments
To cover the naked body
Of the too white Truth
It is we the civilized souls
Who are liars.
—Langston Hughes[1]

Introduction

While African-Americans' rate of enrollment in institutions of higher education is at an all-time high nationally,[2] admissions of Blacks and Latinos to Texas' most prestigious universities have dropped dramatically.[3] At the University of Texas Law School, minority admissions plummeted eighty-five percent in the 1996-97 academic year, while minority admissions were down twenty percent at the undergraduate school.[4] Of the eleven African-American students admitted to the law school for the 1997-98

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1. Langston Hughes, *Liars*, *in* THE COLLECTED POEMS OF LANGSTON HUGHES 44, 44 (Arnold Rampersad & David Roessel eds., 1994).

2. *See* A. Phillips Brooks, *Rival States Lure Minority Students*, AUSTIN AM. STATESMAN, Mar. 16, 1997, at B12.

3. *See* Peter Applebome, *Universities Report Less Minority Interest After Action to Ban Preferences*, N.Y. TIMES, Mar. 19, 1997, at B1.

4. *See* Charles Krauthammer, *Race and Classrooms*, WASH. POST, May 23, 1997, at A29.

school year, only one had accepted admission for the fall term.[5] Subsequently, that lone student declined enrollment, although four Blacks and twenty-five Latinos eventually enrolled for the academic year.[6] In previous years, thirty to forty African-American and Latino students typically enrolled annually at Texas' flagship law school.[7] In fact, the University of Texas has produced more minority attorneys than any other law school in the country.[8] In light of the University's former role in cultivating African-American and Latino lawyers, the recent decline in minority admissions to the law school is a sobering reality, indeed.

The current state of affairs at the University of Texas is the legacy of *Hopwood v. Texas*.[9] In *Hopwood* the Fifth Circuit found the University of Texas Law School's affirmative action policy unconstitutional and enjoined future consideration of race as a factor in the school's admissions process.[10] Predictably, the *Hopwood* decision has created or reinforced a perception among students of Color that the law school is hostile to them, contributing to the decline in applications from African-American and Latino students.[11] The school's admissions program is the primary reason for the denial of access to these students, however.[12] Admission to the law school is dependent to a great extent upon the Law School Admissions Test (LSAT)—a standardized test that commonly is known to obstruct access of racial minorities to legal education—but that is used extensively by universities for judging applicants, nevertheless.[13] *Hopwood* prevents admissions officials from using affirmative action policies

5. *See* Hopwood *Aftermath: Texas Must Find Ways to Boost Minority Enrollment*, DALLAS MORNING NEWS, June 1, 1997, at 2J [hereinafter Hopwood *Aftermath*].

6. *See* Alice McKenzie, *Lone Black Law Enrollee Withdraws: Media Scrutiny at UT Cited in His Decision*, DALLAS MORNING NEWS, May 22, 1997, at 1A; Lydia Lum, *The Hopwood Effect*, HOUSTON CHRON., Aug. 25, 1997, at A1. (At press time, the University of Texas Law School had not responded to the author to verify precisely the number of Blacks and Latinos who actually matriculated in 1997-98.)

7. *See* S.C. Gwynne, *Back to the Future: Forced to Scuttle Affirmative Action, Law Schools See Minority Enrollment Plummet to 1963 Levels*, TIME, June 2, 1997, at 48.

8. *See id.*

9. 78 F.3d 932 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

10. *See id.* at 934-35.

11. *See* McKenzie, *supra* note 6, at 1A.

12. *See* Eulius Simien, *The Law School Admission Test as a Barrier to Almost Twenty Years of Affirmative Action*, 12 T. MARSHALL L. REV. 359, 360 (1987) ("The primary reason for this underrepresentation [of Blacks in the legal profession] is attributable to current admission practices, and particularly to the heavy emphasis on the LSAT.").

13. *See id.* at 359-67.

to mitigate the disparate racial impact of heavy reliance on LSAT scores. Thus, its foreseeable result has been to limit greatly the number of African-Americans and Latinos able to enroll at the University of Texas Law School.[14]

The loss of African-American and Latino lawyers that is occurring as a result of the *Hopwood* decision is significant for many reasons. That the law school at the University of Texas would give rise to both *Sweatt v. Painter*[15] and *Hopwood* is remarkable.[16] The significance of *Hopwood* extends beyond this historical paradox, however: the loss of African-American and Latino lawyers that will result from the decision suggests the significant role that the case will play in redefining racial status relationships. Because lawyers occupy positions of power and prestige in our society, it follows that the maldistribution of lawyers among racial groups perpetuates race-based and socioeconomic inequalities.[17]

For this reason *Hopwood* invites a discussion about the integrity of the processes that have produced the present uneven distribution of educational and employment opportunities in our society, and an examination of the ways in which courts reason about these processes. This Article criticizes the mode of reasoning employed by the Fifth Circuit in reaching its outcome in *Hopwood*. I characterize the analytical posture embraced by the court as deficient—even irresponsible. This conclusion rests on my evaluation of the court's treatment of an issue that is salient to all cases in which affirmative action policies in higher education are attacked, but which is conspicuous in the *Hopwood* opinion: judicial rea-

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14. *See id.* at 360; Hopwood *Aftermath*, *supra* note 5, at 2J.

15. 339 U.S. 629 (1950) (finding segregated educational opportunities offered to African-American students unequal to those offered to Whites and therefore, unconstitutional). For a discussion of the legal history of *Sweatt* and its critical role in the NAACP's legal strategy to attain equal opportunity for African-Americans in education, see MARK TUSHNET, MAKING CIVIL RIGHTS LAW 128-29, 131-33, 134-36, 140-47 (1994); Douglas L. Jones, *The* Sweatt *Case and the Development of Legal Education for Negroes in Texas*, 47 TEXAS L. REV. 677, 677-93 (1969).

16. This uncanny historical discontinuity has generated somber commentary from numerous observers. *See, e.g.*, Constance Baker Motley, *Remarks at the Thurgood Marshall Commemorative Luncheon*, 62 BROOK. L. REV. 531, 541 (1996) ("It is pure, unadulterated irony that the University of Texas Law School, whose institutional segregation was felled by Marshall . . . should be the institution[ ] involved in these anti-affirmative action decisions."); Anthony Lewis, *Enrollment Crisis*: Hopwood *Decision Is Eliminating Diversity on Campus*, DALLAS MORNING NEWS, May 27, 1997, at 13A (quoting a University of Texas law professor's question, "What is it going to be like teaching *Brown v. Board of Education* with no blacks in the classroom?").

17. *See* David B. Wilkins, *Two Paths to the Mountaintop?: The Role of Legal Education in Shaping the Values of Black Corporate Lawyers*, 45 STAN. L. REV. 1981, 1984, 1986-88 (1993).

soning about an individual's just deserts[18] in the admissions process. Specifically, I refer to the relationship between the Fifth Circuit's reasoning about an individual's entitlement to education at the University of Texas Law School as a matter of constitutional law, as compared to her entitlement to education as determined by the quantitative criteria used to evaluate applicants in the law school admissions process. The court conflates these two concepts of desert, inappropriately making the latter a proxy for or precondition to the former.

The importance of the racial gap in admissions indices to the *Hopwood* court's reasoning about the constitutional issues presented in the case is a striking feature of the opinion.[19] The decision clearly rests in part upon normative judgments about the empirical data used in the Texas Index ("TI").[20] Yet, the court failed to openly and honestly rationalize its judgments about this data—"these cold numbers."[21] The unacceptable consequence of these maneuvers is that the court failed to justify the influence on its constitutional analysis of the measurement of legal aptitude embodied by the TI. Such evasion and obfuscation are inappropriate to an opinion written by a federal appellate court, especially one that boldly breaks with long-established precedent—indeed, to the

18. By referring to the concept of desert, I mean to invoke the dichotomous notion of rewards and penalties, victims and perpetrators, that is an ultimate value inherent in many areas of law, including tort and criminal law. *See* GEORGE F. FLETCHER, BASIC CONCEPTS OF LEGAL THOUGHT 96 (1996). For the purposes of this Article, I note that "desert" is especially relevant to the constitutional regime that addresses issues of racial discrimination, most famously in *Brown v. Board of Education*, 347 U.S. 483 (1954), and ensuing school desegregation efforts that were justified in terms of "corrective justice." *See* Paul Gewirtz, *Choice in the Transition: School Desegregation and the Corrective Ideal*, 86 COLUM. L. REV. 728, 731-36 (1986) (explaining the corrective theory of justice).

19. *See* Hopwood v. Texas, 78 F.3d 932, 935-38 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

20. The TI is the composite of scores used by the University of Texas in its law school admissions program. *See id.* at 935. During the period relevant to *Hopwood*, the LSAT score constituted 60% of the composite, while the undergraduate grade point average constituted 40% of the admissions index. *See id.* at 935 n.1.

21. *Id.* at 936. The court began its discussion with the statement that "[n]umbers are paramount for admission [to the Texas law school]." *Id.* at 935. It listed the relevant TI composites for admitted applicants as the following: 3.56 GPA/164 LSAT for Whites; 3.30/158 for African-Americans; and 3.24/157 for Mexican-Americans. *See id.* at 936-37, 937 n.7. The court then opined that the score differentials between White and non-White applicants—which it termed "these cold numbers"—were "striking" and "dramatic," such that the numbers demonstrated the lower ability of African-American and Mexican-American students at the University of Texas Law School. *See id.* at 934-36, 936 n.5, 937 n.7. After describing the relevant "cold numbers," the opinion assumed an analytical posture that pitted putatively high scoring Whites versus lower scoring students of Color. *See id.* at 937-38.

point of purporting to overturn the Supreme Court's decision in *Regents of University of California v. Bakke*.[22]

This Article takes issue with the court's treatment of the "cold numbers" by arguing its inconsistency with doctrinal conventions established in certain education and employment cases, as well as in other relevant areas.[23] The Article also challenges the court's reasoning on prudential grounds.[24] I aspire to bridge the gap created in the legal literature by the extremist positions customarily taken by mainstream scholars on the empirical issues underlying litigation challenging affirmative action programs: namely, liberal resignation to and conservative valoration of quantitative methodologies.[25]

In rendering this critique, my agenda is not, however, to discredit the *Hopwood* court's affinity for quantitative data or its attention to the concept of desert. Although this Article presupposes that legal thought and knowledge are socially constructed, my perspective is neither that truth, as in one's true intellectual ability, can never be known or measured, nor that quantificative methodologies are inherently subordinating.[26] The claims made in this

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22. 438 U.S. 265 (1978) (upholding the use of race as a factor in considering the admission of applicants to schools of higher education). The *Hopwood* court's treatment of *Bakke* is discussed *infra* notes 216-218 and accompanying text.

23. *See infra* notes 139-157 and accompanying text.

24. *See infra* text accompanying notes 230-259.

25. Many influential liberal scholars appear to have resigned themselves to the inevitability of standardized measurements of ability and their disparate impact on African-American and Latino students. *See, e.g.*, Paul Brest & Miranda Oshige, *Affirmative Action for Whom?*, 47 STAN. L. REV. 855, 857 & nn.5-6 (1995) (assuming that LSAT score and grade point average are good predictors of the legal aptitude of minority students). Taking advantage of the failure of mainstream liberals to consider seriously real racial differences in applicants' performance on standardized tests, scholars on the right have seized upon the racial disparity as incontrovertible proof that African-Americans and Latinos simply do not belong in competitive universities alongside Whites. *See, e.g.*, Lino A. Graglia, Hopwood v. Texas: *Racial Preferences in Higher Education Upheld and Endorsed*, 45 J. LEGAL EDUC. 79, 82 (1995) ("The dilemma of affirmative action programs in higher education is that what brings them into being—the inability of blacks (and Mexican-Americans) to compete academically with whites—also guarantees that they cannot succeed. The central fact about which all else turns is the very large gap (15 to 18 points) that exists between blacks and whites on standard tests of academic aptitude or achievement.").

26. That is, this Article is not written deliberately from a post-modernist orientation, the school of thought generally associated with the critique of Enlightenment concepts (such as reason and objectivity), the methodologies that these universal categories extol (for example, empiricism), and the institutions that support them. *See* JEAN FRANCOIS LYOTARD, THE POSTMODERN CONDITION: A REPORT ON KNOWLEDGE (1984) (explaining this theoretical tradition); *see also* VALERIE KERRUISH, JURISPRUDENCE AS IDEOLOGY (1991) (explaining ways that social experiences mediate and influence legal thought, practice and methodologies); Mark

Article transcend ideology, including one's position on affirmative action in higher education. This is true because this Article reveals the irresponsibility of the *Hopwood* court's approach to racial differences in applicants' TIs by demonstrating that it is unjustifiably uncritical under any conventional standard of reasonableness.[27] The court's dereliction of its obligation to be judicious is a fault that all reasonable minds should agree is a deeply troubling characteristic among the judiciary, regardless of ideological proclivity. For the *Hopwood* court's uncritical perspective on the quantitative data makes its opinion intellectually dishonest, undercutting the legitimacy of the court's reasoning.

Nevertheless, this Article does not proceed from the assumption that the *Hopwood* court's faulty reasoning resulted from bad faith. Rather, it suggests the influence of a facially neutral and seemingly benign construct on the court's reasoning: the credibility that the vast majority of lay people rather thoughtlessly attach to science, particularly scientific conceptions of ability.[28] In the *Hopwood* opinion, the belief in the integrity of science is exemplified by the court's response to the TI. In considering the significance of this index, the court fails to be mindful of the reality that "[a] scientific fact may be reliable and accurate . . . , but inferences made from it may be confusing or seriously misleading."[29] This proves to be a fatal defect, ultimately making the opinion rhetorically unpersuasive and of dubious value as a paradigm of coherent legal reasoning.

This Article's discussion proceeds in this way. Part I demonstrates the importance of quantitative conceptions of ability to the *Hopwood* opinion.[30] Part II suggests why the court's manner of reasoning about the "cold numbers" reflects a rigid, instrumental rationality that is inappropriate to the task of analyzing questions about the distribution of educational resources in our society.[31]

Kelman, *Trashing*, 36 STAN. L. REV. 293, 337-47 (1983-84) (implying that empiricism is inherently conservative from a critical studies perspective); Susan Sturm & Lani Guinier, *The Future of Affirmative Action: Reclaiming the Innovative Ideal*, 84 CALIF. L. REV. 953, 956 (1996) (arguing that affirmative action supplements arbitrary and exclusionary admissions procedures from the critical theory perspective and calling for a fundamental critique of the existing selection processes by proponents).

27. *See infra* notes 138-190 and accompanying text.

28. *See infra* notes 39-105 and accompanying text.

29. KENNETH R. FOSTER & PETER W. HUBER, JUDGING SCIENCE: SCIENTIFIC KNOWLEDGE AND THE FEDERAL COURTS 23 (1997).

30. *See infra* notes 39-69 and accompanying text.

31. *See infra* notes 70-105 and accompanying text.

Part III discusses three considerations that should have been deemed important to a thorough and thoughtful analysis of the facts presented in *Hopwood*, but which are either disregarded or downplayed in the Fifth Circuit's opinion.[32] First, is a consideration of historical issues.[33] Second, the Article considers the significance of the court's disregard of case law concerning validation of ability tests that result in the denial of educational and employment opportunities on the basis of race.[34] Finally, I discuss the inconsistency of the court's approach to the TI with preexisting law concerning judges' obligations in evaluating expert scientific testimony.[35]

Part IV discusses how the court's flawed analytical approach constrains its constitutional analysis of the compensatory and diversity rationales proffered by officials at the University of Texas Law School in defense of the school's affirmative action program.[36] Part V suggests legal and policy implications raised by the Fifth Circuit's analysis of the issues presented in *Hopwood*.[37] Having criticized the court's approach to the facts in that case as deficient, the Article concludes by suggesting a functional modality of reasoning about educational affirmative action.[38] This functional approach is more appropriate to the complex socioeconomic issues that animate concerns about the distribution of knowledge in the Information Age than the instrumentalism characterizing the *Hopwood* opinion.

I. *Hopwood* as Scientific Determinism

The use of science in the courtroom raises two issues that seem different but are in fact related at a deeper level: scientific uncertainty and misuse of science.[39] This is not to say that "truth" is relative, as a pernicious kind of postmodernism maintains.[40] Rather, it is to say that science has limited ability to answer questions of great social importance.[41]

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32. *See infra* notes 106-190 and accompanying text.
33. *See infra* notes 110-137 and accompanying text.
34. *See infra* notes 138-157 and accompanying text.
35. *See infra* notes 158-190 and accompanying text.
36. *See infra* notes 191-229 and accompanying text.
37. *See infra* notes 230-259 and accompanying text.
38. *See infra* notes 230-259 and accompanying text.
39. *See* FOSTER & HUBER, *supra* note 29, at 16.
40. *See id.* at 17.
41. *See id.*

This Part demonstrates the salience of the putatively scientific measurement of ability embodied in the TI to the Fifth Circuit's reasoning in *Hopwood*—or the court's uncritical embrace of quantitative methodologies. Noting the emphasis placed upon the "cold numbers" in the first pages of the decision, this Part argues that the rhetorical structure of the *Hopwood* opinion strongly suggests the significance that quantitative conceptions of ability held in the court's reasoning about the appropriate outcome in the case.[42] These initial passages leave the reader with a clear understanding that the court presumes the "cold numbers" of the TI to represent an applicant's just deserts in the admissions process, and therefore, that the affirmative action program, which undermines the natural progress of desert, is unfair and unconstitutional.[43]

A. The Rhetorical Structuring of Hopwood *Around the "Cold Numbers"*

The Fifth Circuit's decision in *Hopwood v. Texas* begins in a striking manner. The scores comprising the TI, the statistical index used by the University of Texas in law school admissions,[44] are among the facts mentioned by the court in the very first paragraphs of its opinion.[45]

The court's placement of its discussion of "cold numbers" at the very beginning of the opinion is quite significant in terms of the text's overall rhetorical structure. This prominent placement suggests that the court's reasoning about the appropriateness of affirmative action at Texas's law school is influenced to a large extent by the empirical data embodied in the TI. Moreover, this rhetorical construction seems designed to make the court's subsequent language against affirmative action at the law school flow logically from the discussion of the difference in "cold numbers" between White applicants and applicants of Color. The initial emphasis upon the race-based differentials in TIs also makes the Fifth Circuit's anti-affirmative action decision seem a humane gesture on behalf of low-scoring—and therefore misplaced—African-American and Latino applicants.

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42. *See* Hopwood v. Texas, 78 F.3d 932, 935 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

43. *See id.*

44. *See supra* notes 20-21 (explaining the TI).

45. *See Hopwood*, 78 F.3d at 935.

These effects are achieved by way of a kind of syllogism that is located in the first few pages of the opinion. That is, the court tells a story about the meaning of the "cold numbers" in three rhetorical steps placed in the opinion's opening paragraph.

The first proposition in the syllogism is the claim that the law school at the University of Texas is "one of the nation's leading law schools."[46] And that because of its greatness, the law school receives over 4,000 applications annually for admission to an entering class of only about 500.[47]

After extolling the quality of the law school, the court reveals that many of these 4,000 applicants "have some of the highest grades and test scores in the country."[48] This fact is the second part of the proof. The last sentence in the first paragraph frames the *Hopwood* opinion. It links the "cold numbers" to the intellectual ability of White applicants, and thereby, to the greatness of the law school.

The final proposition in the syllogism confirms the significance of the "cold numbers," and thereby the value of high scoring Whites, in the law school's admissions process. The court claims that because of the two propositions stated above, "numbers are therefore paramount for admission" to the University of Texas Law School.[49]

The sense of the court's normative and empirical commitment to the value of the "cold numbers" is underscored by the structural move that the opinion makes following the court's pronouncement that numbers are paramount in admissions to the University of Texas Law School. Soon after making this claim, the court notes that "Blacks and Mexican Americans were treated differently from other [White] candidates" in admissions.[50] TI ranges were "lowered to allow the law school to consider and admit more of them."[51]

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46. *Id.*

47. *See id.*

48. *Id.*

49. *Id.*

50. *Id.* at 936.

51. Since Asian-Americans often score higher than Whites on standardized measures of achievement, it is quite significant that the court excludes Asians from its analysis of minority/White differences in applicants' TI scores. *See* DANIEL A. FARBER & SUZANNA SHERRY, BEYOND ALL REASON 10 (1997); *see also* Selena Dong, *"Too Many Asians": The Challenge of Fighting Discrimination Against Asian-Americans and Preserving Affirmative Action*, 47 STAN. L. REV. 1027, 1057 n.4 (noting that "in 1990, Asian-Americans constituted only 2.9% of the national population, but represented 20%, 15%, and 24% respectively of the first-year classes entering Harvard, Yale, and Stanford, and outnumbered whites at

The court fails to note that it is not impossible—in fact it is likely—that some African-Americans and Latinos were among the high-scoring applicants. The Law School Admission Council reports that more than 3% of the 8,273 African-American law school applicants who took the LSAT in 1996-97 and more than 7% of the 5,770 Latinos who took the test that year received scores of 160 and above on the LSAT—which means that they scored higher than roughly 85% of all applicants applying to law school in that year, including Whites.[52] A significant number of African-American (68) and Latino (166) applicants received very high scores—between 165 and a perfect score of 180—meaning that they scored higher than over ninety percent of all applicants.[53] These high-scoring applicants, about eleven percent of African-Americans and Latinos who applied to law school in 1996-97, logically would have applied to the most selective programs. Thus, we can infer that some of these applicants applied to Texas' flagship law school, at which the median LSAT score of accepted students was 162 in the class entering in 1996.[54]

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both the Berkeley and Los Angeles campuses of the University of California"). However, without the exclusion of Asian-Americans' scores, the court's claims concerning the singular harm to Whites of affirmative action for African-Americans and Latinos would have been undermined. That is, if the TI scores of Asian-American applicants tended to be higher than those of Whites, the court's understanding of who "steals" law school seats from deserving Whites would have been destabilized.

52. Telephone Interview with Robert Carr, Director of Data Services, Law School Admissions Council (Feb. 4, 1998). Students identifying themselves as Mexican-American/Chicano, Hispanic/Latino and Puerto Rican comprise the group termed "Latinos." *See id.*

53. *See id.* It is important to note that this pattern of high-scoring Blacks and Latinos holds for performance on the Scholastic Admissions Test, upon which universities rely heavily in the undergraduate admissions process. *See* THE COLLEGE BOARD, 1997 PROFILE OF COLLEGE-BOUND SENIORS 9 (1997). Seven percent of Black women and 7% of Black men who took the SAT I Verbal scored well above average (between 600-800 on a scale of 200-800). *See id.* On the math portion of the test, 7% of African-American men and 3% of African-American women scored well above average. *See id.*

To the detriment of individual high-scoring African-Americans and Latinos, the focus of the literature is on the lower-than-average performance of African-Americans and Latinos as a group, as compared to Whites as a group, on standardized tests. The result of this narrow focus is that the achievement of these high-scoring minorities is ignored. The stereotyping of African-Americans and Latinos as low scorers is significant, as it is known to have an adverse effect on their performance on standardized tests. *See generally* Claude Steele, *A Threat in the Air: How Stereotypes Shape Intellectual Identity and Performance*, 52 AMER. PSYCH. 613 (1997) (arguing that stereotypes of women and African-Americans negatively affect their performance on standardized tests).

54. *See Best Graduate Schools*, U.S. NEWS & WORLD. REP., Mar. 10, 1997, at 76.

The structure of the *Hopwood* opinion does not, however, allow for a consideration of students who are outliers in the race-based TI hierarchy that the opinion depicts (based on the average performance of these groups). Acknowledgment of high-scoring African-Americans and Latinos would undercut the court's judgment that students of Color are simply less qualified for study at the Texas law school than White applicants. The court makes this judgment in the last sections of the first part of the opinion when it suggests that less qualified African-Americans and Latinos systematically hinder the admission of more qualified Whites to the University of Texas Law School.[55] In a rather backhanded fashion (a footnote), the court explicitly suggests that in 1992 favored minority students took law school seats from hundreds of presumably more deserving White applicants.[56]

The opinion describes the *Hopwood* plaintiffs, in particular, as deserving students displaced by less-qualified African-Americans and Latinos.[57] The court suggests, for example, that had Cheryl Hopwood been a member of one of the favored minority groups, she undoubtedly would have been admitted to the law school based on her "cold numbers."[58] By describing the four White plaintiffs' fates in the admissions process *in terms of* minority students (e.g., "If she were Black,"),[59] the opinion does not actually scrutinize the White plaintiffs' credentials.[60] For example,

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55. *See Hopwood*, 78 F.3d at 937-38.

56. *See id.* at 937 n.9 ("According to the plaintiffs, 600-700 higher-scoring white residents were passed over before the first blacks were denied admission.").

57. *See id.*

58. *Id.* at 937 n.8, 938. The court's theory about the relationship among Hopwood's scores, her race and the possibility of admission is curious, as it reveals a certain race myopia. Had Cheryl Hopwood been African-American or Hispanic in reality, it is likely that she would *not* have gotten the same LSAT score. Instead, she would have achieved a score consistent with the well-documented pattern revealing that African-Americans and Latinos are systematically disadvantaged by use of the LSAT in law school admissions. Thus, barring some policy of correcting for this disparate impact, "Black Cheryl" would *not* have been admitted to the University of Texas Law School.

59. *Id.* at 937 n.8.

60. In contrast to the approach of the *Hopwood* court, other courts have not framed their discussions of the constitutional issues presented around the academic superiority of White plaintiffs versus the inferiority of minority students—even while noting a significant difference between White and non-White students' quantitatively measured credentials. This is true even in cases where a court or individual members of a court have found affirmative action programs unlawful. *See, e.g.*, Regents of Univ. of Cal. v. Bakke, 438 U.S. 265, 269-78 (1978) (Powell, J., plurality opinion) (describing the special admissions program, Bakke's high scores and "significantly lower" scores of many minority admittees without making a normative judgment about the merit of two classes of students); *id.* at 321 (Powell, J., app. to plurality opinion) (noting that the number of applicants to Harvard

the fact that Cheryl Hopwood's high grade point average was downgraded by admissions officials is mentioned by the court only in passing.[61] Nor does the court acknowledge that Hopwood's scores were higher than 100 Whites who nevertheless were admitted ahead of her—a truly telling omission.[62]

B. An Alternative Narrative About the "Facts"

Despite the opinion's assured tone, its conclusion about the preeminence of "cold numbers" in the law school admissions process at Texas, or any other institution for that matter, is not inevitable. Rather, it is an assumption that is questionable empirically, as well as normatively. Just a few examples can illustrate the court's leap in logic.

As an empirical matter, it does not necessarily follow that numbers dominate a law school admissions process simply because certain quantifications purporting to be a proxy for ability happen to be reviewed by admissions committees. Nor can one reasonably reach the *Hopwood* court's conclusion simply because many or most applicants to a prestigious and competitive school have attained high scores. Consider the following hypotheticals that call into question the court's unyielding conclusion. A school could simply acknowledge applicants' scores but not establish any kind

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College deemed not "qualified" is "comparatively small" and that the College has never relied upon a single criterion of "scholarly excellence" in its admissions decisions); *id.* at 325-49, 363-64, 364 n.37, 377 (Brennan, J., concurring in the judgment in part and dissenting in part) (framing his opinion around the history of discrimination and noting applicability of employment law that requires the use of "test criteria that fairly reflect the qualifications of minority applicants . . . even if this means interpreting the qualifications of the applicant in light of his race"); Podberesky v. Kirwan, 38 F.3d 147, 151 (4th Cir. 1994) (describing both the scholarship program open only to African-Americans and the scholarship program open to all other students as "merit-based" although the two programs had significantly different scholastic standards for participation); Podberesky v. Kirwan, 956 F.2d 52, 53-57 (4th Cir. 1992) (noting the "excellent academic record" of Podberesky and the significantly lower minimum requirements for African-American scholarship recipients, but focusing on the constitutional issue of narrow tailoring), *cert. denied* 514 U.S. 1128 (1993); Hopwood v. Texas, 861 F. Supp. 551, 553-55, 557-58 (W.D.Tex. 1994) (focusing upon the history of discrimination in education against African-Americans and Latinos, and explaining that the baseline TI has been increased steadily over time due to the administrative convenience of using a number-based admissions procedure); Podberesky v. Kirwan, 838 F. Supp. 1075, 1089 (D.Md. 1993) (rejecting Podberesky's proposed minimum criterion for admission based on the combination of SAT scores and grade point averages because the use of numbers "ignores the variables in the admissions process and the intergenerational effects of segregated education on the applicant pool"); *see also* DeFunis v. Odegaard, 416 U.S. 312, 330-32 (1974) (Douglas, J., dissenting) (suggesting that the LSAT is a deficient admissions tool).

61. *See Hopwood*, 78 F.3d at 938.

62. *See* Sturm & Guinier, *supra* note 26, at 1036 n.28.

of numerically fixed admissions index pursuant to which students were classified as presumptive admits or presumptive denies.[63] Likewise, a school could choose to acknowledge applicants' scores, but assign values to them such that quantitative factors were not ever, in fact, the predominant factors in an admissions index.[64] Finally, even if quantifiable variables play a large role in a school's admissions decisions, this does not necessarily imply the "cold numbers only" selection process invoked by the *Hopwood* court. Many schools acknowledge scores, but many also make decisions about individual admissions on a case-by-case basis when such individualized scrutiny is deemed warranted.[65]

As a normative matter, a court interpreting facts involving any one or a combination of the hypothetical admissions processes described above could reasonably choose *not* to characterize numbers as the predominant factor in admissions. Let us take the intuitively worst case scenario for this Article's argument—the third one, where a law school's policy is to use an admissions index which heavily relies upon quantitative variables. Even under such a system, a court might think it important to take note of the fact that large numbers of students are not, in reality, admitted solely or even primarily based on their "cold numbers." These students might include those in the discretionary zone under an admissions index system such as the one the University of Texas used: waitlisted students; foreign students; legacies; children of faculty; students from underrepresented locales; religious minorities; disabled students; White women, and state residents who benefit from a quota when applying to publicly supported educational institutions

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63. Consider the following explanation of admissions standards to a leading law school:

> Admission is based on our estimate of the applicant's potential for academic excellence. We make this judgment upon the totality of information available; no one item, such as LSAT score, grades, or letters of recommendation, is conclusive . . . . There is no cut-off point for grade-point average or LSAT score below which an applicant is not considered.

YALE LAW SCHOOL, APPLICATION FOR ADMISSION 8 (1997).

64. *See* LAW SCHOOL ADMISSION COUNCIL, THE LAW SCHOOL ADMISSION TEST: SOURCES, CONTENTS, USES 16 (1991) (noting that some law schools "assign particular weights . . . to each of the two predictors[, LSAT and UGPA,] for their own policy reasons").

65. Interestingly, although the court characterizes the TI system as one in which the "cold numbers" are paramount, its opinion acknowledges that, in fact, the TI system operates in a much less rigid way than this characterization suggests. *See, e.g.*, *Hopwood*, 78 F.3d at 935 (stating that admissions officers "necessarily exercised judgment in interpreting the individual scores of applicants" and "considered what qualities each applicant might bring to his law school class").

in their state.[66] These are just a few categories of individuals who may be admitted to law school based in part upon qualities other than their numbers.

A court might refer to a system in which admissions decisions are based putatively on the numbers but where, in fact, a more ambiguous process operates as a "mixed" system. In a mixed admissions process two tiers of applicants exist: presumptive admits and those who are not presumptive admits. Since most admissions programs, including that operated by the University of Texas, probably consist of these two large classes of students, it is very appropriate to suggest that most law school admissions processes are mixed in nature *vis-à-vis* quantitative and non-quantitative criteria.[67] In fact, this would seem the *most* impartial manner in which to characterize most law school admissions processes.

The court's conclusion about the preeminence of the numbers in the University of Texas Law School's admissions process is both an empirical and a normative claim about the way in which the school makes admissions decisions. As to the empirical claim, the court does not critically assess the way in which the university *in fact* admits the majority of its law school class—that is, all of whom are not presumptive admits—in the way that I have suggested in the hypotheticals above. Rather, it accepts as empirical fact the credibility of the TI as a proxy for merit and that Texas rigidly applies this quantitative standard in its admissions decisions—except in the case of African-Americans and Latinos.[68] Thus the opinion's coherence is predicated upon a boldly stated assumption about the value of data that goes unchallenged: While praising the cold numbers as extremely valuable, the opinion completely ignores questions about whether this data is reliable and accurate, or about how it is interpreted and used by admissions officials at the University of Texas Law School. Certainly these questions were relevant to the case. They relate directly to the in-

66. The *Hopwood* plaintiffs benefited from an enormous legislatively mandated quota for state residents at the University of Texas Law School. *See id.* at 935 n.2. In 1992, the quota was set at 85% (i.e., only 15% of the entering class could be non-residents). *See id.* The court noted that "residency . . . had a strong, if not often determinate, effect" on admissions for applicants whose academic records were not the most impressive. *Id.* And yet, the court found this immense quota insignificant to reasoning about the *Hopwood* litigation. *See id.*

67. *See supra* note 60 (noting that courts other than *Hopwood* have addressed affirmative action issues without labeling White students as superior and minority students as inferior); *supra* notes 63-66 (describing the admissions processes of some law schools).

68. *See Hopwood*, 78 F.3d at 962.

tegrity of the data that the court finds indicative of an applicant's just deserts in the admissions process, and by extension, to the court's assessment of the fairness of the law school's affirmative action program.

As to the normative significance of the court's empirical findings, the prominent placement of the discussion of the numbers and the tone of that discussion—particularly the allusion to the TI as "cold numbers"[69]—strongly suggest that the court somehow approves of the law school's heavy reliance upon quantifications as proxies for an applicant's just desserts in the admissions process. Had the court simply introduced the concept of the TI in the first part of its opinion or discussed the index in an equivocal way, this Article's argument about its normative commitment to the credibility of these scores would be less persuasive. The court's discussion of the applicants' scores, however, was not in any way ambivalent. The Fifth Circuit discussed the index in a way that created the binary opposition of high-scoring Whites versus low-scoring "Blacks/Mexicans." The court made the supposed disparity in scores between these two classes of students seem central to one's conception of the scenario presented in *Hopwood*, if not the appropriate result in the case per se.

II. The Instrumental Nature of the Court's Analytical Approach

The previous Part suggested ways in which the structure of the *Hopwood* opinion implies the salience of quantitative measurements of ability in the Fifth Circuit's decision making process. The prominent position occupied by the empirical data in the opinion's structure is not meaningful alone, however. As this Article began to explain immediately above, the Fifth Circuit does not merely make mention of the TI at the beginning of the *Hopwood* opinion, but attaches normative significance to it. In claiming that White applicants to the law school's class of 1992 had "some of the highest grades and test scores in the country"[70] and that the score differential between these applicants and applicants of Color was "striking" and "dramatic,"[71] the court revealed two crucial normative judgments. First, it divulged its judgment that a clear relationship exists between the "cold numbers" of the TI and a student's qualification for study at the University of Texas Law

69. *See supra* Part I.A.
70. *Hopwood*, 78 F.3d at 935.
71. *Id.* at 936.

School.[72] Though left unstated, a second judgment follows from the first: that the TI would not be viewed in a critical light. Its reliability as a proxy for an applicant's aptitude for law school would go unquestioned.

The practical effect of these normative positions was to predispose the court to instrumental reasoning about the facts in *Hopwood*. The court's apparent belief in the salience of the minority/White TI difference influenced it to view the facts of the case through the prism of the stereotypical assumptions about the intellectual ability of African-Americans and Latinos, rather than in terms of each group's constitutional entitlement per se, or lack of entitlement per se, to a certain distribution of law school seats, or to general socioeconomic wellness. In this way, the court was predisposed to a dim view of the law school's race-conscious admissions policy and a finding of unconstitutionality.

This Part explores why the court may have been so persuaded by the TI.[73] I do not proceed from the assumption that the court's reasoning resulted from bad faith of any kind. Rather, the discussion in this section is meant to shed light upon the power and pervasiveness of scientific conceptions of ability in our culture, including in legal norms and reasoning.

A. The "Cold Numbers" as Science

Credibility often is automatically afforded to things that bear the imprimatur of science.[74] Credibility inheres in the scientific for good reason. Without expertise to critique scientific developments for themselves, most people are comfortable only appreciating, rather than criticizing, the ways that science and technology have radically changed our society over time.[75]

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72. *See id.*

73. *See infra* notes 74-105 and accompanying text.

74. *See, e.g.*, Sharon Begley, *The Science Wars*, NEWSWEEK, Apr. 21, 1997, at 54-56 (describing how "society is driven by science," by explaining that ordinary people depend upon scientists to answer important questions about heritability of diseases and merits of using IQ scores for assignment of children to classrooms); Daniel Callahan, *Calling Scientific Ideology to Account*, SOCIETY, May-June 1996, at 14-19 (describing how "[s]cience came almost totally to win the minds and emotions of educated Americans" during the 1970s and 1980s, and stating that faith in science remains ascendant in the cultural landscape).

75. *See, e.g.*, Steven Epstein, *Public Understandings*, 274 AMER. ASSOC. ADV. OF SCIENCE 732 (1996) (stating that laypeople view science with "respect, fear, and utter incomprehension") (reviewing CHRISTOPHER P. TOUMEY, CONJURING SCIENCE: SCIENTIFIC SYMBOLS AND CULTURAL MEANINGS IN AMERICAN LIFE (1996)).

Mathematics epitomizes the scientific method.[76] Mathematical formulas—with their neat axioms and theorems—imply certainty and "naturalness."[77] A mathematical proof is either considered valid or it is not. Thus, mathematical concepts seem different in kind from, say, historical narratives, the putative facts of which are commonly thought subject to interpretation and manipulation from one expert to the next.[78] Add to the seeming objectivity of mathematics its abstruseness. The practical significance of these realities is that society relies upon a small and elite corps of experts for quantitative truths about the many subjects to which mathematical analysis is applied.[79]

In light of the credibility presumptively afforded scientific concepts in Western culture, the Fifth Circuit's reference to the "striking" and "dramatic" difference between the TIs of White applicants and applicants of Color as a material fact is understandable. The TI is, after all, none other than a mathematical formula.[80] It is a composite that purports to be statistically verified as a proxy for success in law school.[81] As such, the TI is a paradigmatic representation of a "natural," quantitative truth. It comes as no surprise, then, that the court would be convinced of the TI's significance to the *Hopwood* litigation. I dare say any rational person with no statistical expertise would be predisposed to taking the TI for what its expert creators claim it to be—a student's aptitude for the study of law.

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76. *See* ROBERT LOPEZ ET AL., CIVILIZATIONS: WESTERN AND WORLD 745 (1975) (discussing the fundamental place of math in Comte's classification of positive knowledge); Eike Gebhardt, *A Critique of Methodology*, *in* THE ESSENTIAL FRANKFURT SCHOOL READER 375 (Andrew Arato & Eike Gebhardt eds., 1978) (analyzing the methodology of science with an eye toward critical theory and philosophy) [hereinafter FRANKFURT READER]. *See generally* Crispin Wright, *Wittgenstein on Mathematical Proof*, *in* WITTGENSTEIN CENTENARY ESSAYS 79, 79-99 (A. Phillips Griffiths ed., 1991) (describing and critiquing the theory of mathematics).

77. *See* Wright, *supra* note 76, at 81-82, 98.

78. *See, e.g.*, JOHN HOPE FRANKLIN, RACE AND HISTORY 10-58 (1989) (discussing changing themes in the historiography of race).

79. *See* Wright, *supra* note 76, at 97.

80. *See* Hopwood v. Texas, 78 F.3d 932, 935 n.1 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996). The court explained that "the formulae for the class entering in 1992 accorded an approximate 60% weight to LSAT scores and 40% to GPA. The formulae for students with a three-digit LSAT . . . was calculated as: LSAT + (10) (GPA) = TI. For students with a two-digit LSAT, the formula was: (1.25) LSAT + (10) GPA = TI." *Id.*

81. The formulae were written and statistically validated for success in the first year of law school by the Law School Data Assembly Service (LSDAS). *See id.* LSDAS found the LSAT to be a better predictor of success in law school than a four year cumulative grade point average. *See id.*

Still, might not a rational and critically thinking mind challenge the logic of the TI? For instance, one could interrogate the very idea that the true nature of aptitude for law, or intelligence generally, can actually be known or accurately measured by standardized tests.[82] Furthermore, even if one believed the TI's quantifications to represent something about a person's abilities during the first year of law school, one might question why entry to the legal profession should turn on one's expected performance during the first year of law school, as if that benchmark represents something particularly meaningful about legal aptitude over the course of one's career. One could also be concerned that the TI might be used in an arbitrary manner. One example of potentially arbitrary usage is attaching great significance to slight (and perhaps statistically insignificant) differences in scores. The meaning attached to the slightness in difference between applicants' scores might be an especially important concern if those who tend to attain scores on the lower end of the continuum are groups that historically have been subordinated in the American educational system by law. In fact, it would seem that the more restrictive a law school's admissions criteria and the greater the impact of them on these groups, the better a law school's justification should be for using certain criteria and admissions cutoffs. In sum, a critical thinker might ask on what *principled* basis does an institution that relies heavily upon a composite such as the TI set minimum requirements for admission?

Yes, one *might* ask these questions. But it is also quite possible that the rational actor would not question the authority of a statistical index such as the TI. The Frankfurt School's suggestion that scientific hegemony undermines critical thinking offers a compelling explanation for why most people would fail to question truths about ability that bear the imprimatur of science.[83] These philosophers believed that scientific-technical rationality engenders a constellation of social values that support the notion that

82. *See* ADELBERT H. JENKINS, TURNING CORNERS: THE PSYCHOLOGY OF AFRICAN AMERICANS 67-86, 101-20 (1995); Simien, *supra* note 12, at 381-85; Sturm & Guinier, *supra* note 26, at 967-80.

83. For representative works of the Frankfurt School's critique of the one dimensional reasoning they believed to be engendered by science's stress on rationality and efficiency, see HERBERT MARCUSE, ONE DIMENSIONAL MAN: STUDIES IN THE IDEOLOGY OF ADVANCED INDUSTRIAL SOCIETY (1964); Max Horkheimer, *Notes on Science and the Crisis*, *in* CRITICAL THEORY 3-9 (Matthew J. O'Connell et al. trans., 1972); Herbert Marcuse, *On Science and Phenomenology*, *in* FRANKFURT READER, *supra* note 76, at 466-76; Herbert Marcuse, *Some Social Implications of Modern Technology*, *in* FRANKFURT READER, *supra* note 76, at 138-62 [hereinafter *Social Implications*].

society is best understood in scientific terms, or in terms of quantification.[84] The result of such scientific cultural hegemony is that non-scientific or non-quantitative reasoning seems utterly subjective—making reasoning infused with immeasurable factors or values (e.g., social justice) seem illegitimate.[85] In a society where scientific norms dominate, raising questions that cast doubt upon the credibility of a putatively objective statistical composite (such as the TI) will likely seem unreasonable or even absurd. How does one explain resistance to statistics, for instance, without resorting to nonscientific (that is, "subjective") arguments if one is not proficient in the language of the statistician? It is because of such pressure—the effects of the hegemony of scientific methodologies upon lay people—that most of us simply defer to scientific knowledge over time. In the case of the use of the TI at the University of Texas, for example, society has accepted the transformation of "individual [students'] distinctions in the aptitude, insight, and knowledge" into "quanta of skill" that are then placed within the "framework of standardized performances."[86] With continued use

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84. Consider two passages from Marcuse's ONE DIMENSIONAL MAN that capture deftly the notion of scientific-technical rationality enveloping the entire cultural landscape. "As [the positivistic, scientific project] unfolds, it shapes the entire universe of discourse and action, intellectual and material culture. In the medium of technology, culture, politics, and the economy merge into an omnipresent system which swallows up or repulses all alternative . . . . Technological rationality has become political rationality." MARCUSE, *supra* note 83, at xvi.

Marcuse explains how quantitative thinking becomes predominant in society by explaining how we come to understand the concept of length:

> To find the length of an object, we have to perform certain physical operations. The concept of length is therefore fixed when the operations by which length is measured are fixed: that is, the concept of length involves as much and nothing more than the set of operations by which length is determined. In general, we mean by any concept nothing more than a set of operations; *the concept is synonymous with the corresponding set of operations.*

Id. at 13; *accord* GEORGE FRIEDMAN, THE POLITICAL PHILOSOPHY OF THE FRANKFURT SCHOOL 118-19, 121-22 (1981).

85. Again, Marcuse captures why objections to quantitative concepts such as the TI seem foolish in a society dominated by putatively scientific standardized testing: "The same de-realization affects all ideas which, by their very nature, cannot be verified by scientific method. No matter how much they may be recognized, respected, and sanctified, in their own right, they suffer from being non-objective . . . . Humanitarian, religious, and moral ideas are only 'ideal.'" MARCUSE, *supra* note 83, at 147-48; *accord Social Implications*, *supra* note 83, at 141-43.

86. *Social Implications*, *supra* note 83, at 142. Unlike the contemporary student, whose academic life is overrun with standardized measurements of progress, the student of the classical liberal era had great room for intellectual development.

> The individual, as a rational being, was deemed capable of finding these forms [the full development of his abilities] by his own thinking and, once he had acquired freedom of thought, of pursuing the course of action

over time, those standardized scores have come to represent truths about students' abilities, rather than measurements whose meaning is subject to varying interpretations and usages. Nuance is lost.

The Frankfurt School's emphasis on the top-down manner in which society is transformed by the hegemony of science is an important factor that makes their social theory more intuitively compelling: it reassures those of us who are disinclined to accept what might be perceived as their disbelief in human agency. The School stressed that the drive toward quantification impacts society first at the level of institutions, such as the University of Texas Law School, as opposed to individuals, such as an admissions officer, or a federal judge.[87] The lay person dominated by institutional norms has little choice but to succumb to science-based reasoning about the intellect.[88] Even the most critical thinkers existing within hegemonic spaces are vulnerable to accepting scientific measurements that are sanctioned by society's important institutions.

In light of the Frankfurt School's theories, the Fifth Circuit's structuring of the *Hopwood* opinion around the TI without any reflection upon its credibility does not seem odd, but quite rational. Precisely because it is quantitative and putatively statistically validated evidence, the court took the TI for "fact." Its reference to the TI as the "cold numbers" surely says a mouthful in this regard.

B. Antecedent "Fact": The LSAT as Science

The LSAT's role in inspiring the Fifth Circuit's faith in the TI should not be underestimated.[89] The assessment of a student's legal aptitude provided by the LSAT score is the single piece of "evidence" that is most likely to have compelled the court to find the difference in TI scores between applicants of Color and White applicants to the University of Texas Law School to be "striking"

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which would actualize them. Society's task was to grant him such freedom and to remove all restrictions upon his rational course of action.

Id.

87. *See Social Implications*, *supra* note 83, at 140.

88. *See id.* at 140.

89. The undergraduate GPA was also an important element in inspiring confidence in the index. *See* Hopwood v. Texas, 78 F.3d 932, 935 & n.1 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996). However, it is my sense that minimal GPA differentials do not create a basis in scientific "fact" for asserting that students of Color are less qualified than Whites. Rather, it is the on-average 100 point LSAT score difference between White and African-American, Latino and Native American students that is the culprit in the supposed inferiority of African-American and Latino applicants to law schools. *See* David Kaye, *Searching for Truth About Testing*, 90 YALE L.J. 431, 438 (1980) (book review).

and "dramatic."[90] The nature of the LSAT's ostensible measurement of a student's ability is thus of singular import in appreciating the court's perception of the unfairness created by Texas' affirmative action program.

The LSAT score is such a compelling measurement of ability because it is said to be statistically validated as a proxy for law school ability in the first year.[91] Index formulas such as the TI are based on correlation studies conducted by the Law School Admission Council (LSAC).[92] An LSAC correlation report indicates a formula that is designed to yield a composite of two variables, the LSAT and UGPA, that will have the highest linear relationship, statistically speaking, with actual law school performance as measured by a student's first year grades.[93] The LSAT and the admissions composites derived from it are, then, complex statistical measurements whose integrity as proxies for a student's legal aptitude is established through detailed psychometric analysis.[94]

And thus, the reality that law schools rely upon experts associated with the LSAC, a client organization of the LSAT's formulator,[95] to establish the LSAT's integrity is a fact whose significance cannot be understated. The process of collaboration between law schools and the LSAC from which admissions indexes are derived means that there effectively is no check—no authoritative second opinion—about the test's validity. Effectively, one company creates, administers, and validates a test that has the power to keep a

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90. *Hopwood*, 78 F.3d at 936.

91. *See, e.g.*, LAW SCHOOL ADMISSION COUNCIL, THE LSAT 1, 16 (1991) [hereinafter THE LSAT]; LINDA F. WIGHTMAN, LAW SCHOOL ADMISSION COUNCIL, WOMEN IN LEGAL EDUCATION: A COMPARISON OF THE LAW SCHOOL PERFORMANCE AND LAW SCHOOL EXPERIENCES OF WOMEN AND MEN 14 (1996) (asserting that the LSAT predicts lower first-year grades among women than men and that first-year performance data showing lower grades among women demonstrates the LSAT's validity); LINDA F. WIGHTMAN & DAVID G. MULLER, LAW SCHOOL ADMISSION COUNCIL, AN ANALYSIS OF DIFFERENTIAL VALIDITY AND DIFFERENTIAL PREDICTION FOR BLACK, MEXICAN AMERICAN, HISPANIC, AND WHITE LAW SCHOOL STUDENTS 1 (1990) ("The validity data do not support the concern that the LSAT score or the traditional combination of LSAT score and undergraduate grade-point average are less valid for any of the minority groups than they are for the white group.").

92. *See* THE LSAT, *supra* note 91, at 16.

93. *See id.*

94. *See* WIGHTMAN & MULLER, *supra* note 91, at 1-20 (describing the statistical methods used to determine the validity of the LSAT).

95. The LSAC is a "client organization" of the Educational Testing Service (ETS). Kaye, *supra* note 89, at 433 n.9 (quoting A. NAIRN, THE REIGN OF ETS, THE CORPORATION THAT MAKES UP MINDS: THE RALPH NADER REPORT ON THE EDUCATIONAL TESTING SERVICE (1980)).

student out of law school or determine which law school she attends.[96]

C. The Scientific Value of the LSAT: Partial Truths

Admissions officers have been aware for many years that at least a few psychometric experts insist that use of the LSAT in admissions unfairly disadvantages African-Americans, Latinos and Native Americans,[97] and doubly disadvantages women of Color, given the existence of both race and gender disadvantage in testing.[98] At various points since its first administration in 1948, the LSAT's usefulness and validity have been challenged.[99] The arguments made against the LSAT are complex. For the purposes of this Article it suffices to state that some argue that the LSAT is an inaccurate measure of legal ability—that the test does not measure what it purports to measure, or measures aptitude less effectively than is appropriate given the purposes for which LSAT scores are used.[100]

Even as LSAC continues to defend the validity of the LSAT as to all students, its own correlation studies do not refute the notion that the LSAT may overstate the ability of high-scorers, and more importantly, understate the ability of low-scorers who are disproportionately racial minorities.[101] Since the spring of 1979 LSDAS has issued "cautionary policies" in response to "growing concern about overreliance and other possible abuses by those who

96. Most law schools require applicants to submit LSAT scores and subscribe to the Law School Data Assembly Service, which standardizes undergraduate academic records. *See* LAW SCHOOL DATA ASSEMBLY SERVICE, LSAT/LSDAS REGISTRATION AND INFORMATION BOOK 17 (1998-99).

97. *See* Robert L. Williams & Horace Mitchell, *The Testing Game*, *in* BLACK PSYCHOLOGY 193-205 (Reginald L. Jones ed., 1991); David M. White, *Culturally Biased Testing and Predictive Invalidity: Putting Them on the Record*, 14 HARV. C.R.-C.L. L. REV. 89 (1979); Kaye, *supra* note 89, at 433-53; *see also* CHARLES MURRAY & RICHARD J. HERRNSTEIN, THE BELL CURVE: INTELLIGENCE AND CLASS STRUCTURE IN AMERICAN LIFE (1994) (arguing that Blacks have significantly less cognitive ability than Whites); ALEXANDER THOMAS & SAMUEL SILLEN, RACISM AND PSYCHIATRY 1-44 (1972) (presenting an historical perspective on the entanglement of intellectual ability measurements with social determinism and racism).

98. *See* WIGHTMAN & MULLER, *supra* note 91, at 11; Katherine Connor & Ellen J. Vargyas, *The Legal Implications of Gender Bias in Standardized Testing*, 7 BERKELEY WOMEN'S L.J. 13, 14-37, 17 n.13, 19 nn.19-21 (1992).

99. *See* WIGHTMAN & MULLER, *supra* note 91, at 1-3; Kaye, *supra* note 89, at 432; *see also* Leslie G. Espinoza, *The LSAT: Narratives and Bias*, 1 AM. U.J. GENDER & L. 121 (1993) (discussing bias in testing and disclosure laws).

100. *See* Kaye, *supra* note 89, at 436.

101. *See id.* at 443-46.

use standardized test results in allocating scarce educational opportunities and resources."[102]

One of the latest challenges to the validity of the LSAT was made in a petition for rehearing en banc in *Hopwood*. Using evidence provided in the trial record concerning the entering classes of 1986-88, psychometrist Martin Shapiro argued that the TI "could reliably predict less than 10% of the variation in first-year grades for African-American students—whatever its validity for white students."[103] Dr. Shapiro was a witness for the Thurgood Marshall Legal Society, a student group at the University of Texas Law School that was a proposed intervenor in *Hopwood*.[104] Ultimately, Shapiro's argument was not brought before the court, however, as the Legal Defense Fund's petition for intervention was rejected on procedural grounds.[105] As explained in Part III, the significance of the court's failure to hear Shapiro's testimony cannot be overstated. It may have greatly influenced the outcome in the case.

III. The *Hopwood* Court's Disregard of Perspectives and Precedent Inconsistent with Determinism

The *Hopwood* court's focus upon the TI affects its analysis in many ways. This Part emphasizes those that are most consequential to the outcome reached by the court. The first section of this Part considers the *Hopwood* opinion's cursory treatment of historical issues.[106] The second section discusses the meaning of the Fifth Circuit's failure to contemplate the significance of two categories of case law to its perception of the TI and its constitutional review of the University of Texas' affirmative action program.[107] This law concerns 1) the obligation of judges to consider expert sci-

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102. THE LSAT, *supra* note 91, at 26. The gist of the cautionary policy is captured in the following summary statement. "[W]hile LSAT scores serve a useful purpose in the admissions process, they do not measure, nor are they intended to measure, all the elements important to success at individual institutions. LSAT scores must be examined in relation to the total range of information available about a prospective law student." *Id.*

103. Petition for Rehearing En Banc for the Thurgood Marshall Legal Society at 4, Hopwood v. Texas, 78 F.3d 932 (5th Cir. 1996) (No. 94-50569). Dr. Shapiro's statement appears as an appendix to this Article.

104. *See id.* at 8.

105. Interview with Penda Hair, Esq., Staff Attorney and Director of the Washington, D.C. Office, NAACP Legal Defense Fund, Inc. (July 26, 1996); *see also infra* notes 178-181 and accompanying text (explaining the court's rationale for denying admission into evidence of Shapiro's expert testimony).

106. *See infra* text accompanying notes 110-137.

107. *See infra* text accompanying notes 138-157.

entific testimony in cases where such evidence is credible and can assist in resolution of disputes[108] and 2) validation of ability tests that restrict access of protected classes to employment and educational opportunities.[109]

A. Undervaluation of Past Discrimination and Historical Perspective

The *Hopwood* court's treatment of historical issues is of singular import: the Supreme Court's antidiscrimination jurisprudence has been predicated almost entirely upon this country's history of race-based discrimination.[110] It is because of this compelling history of discrimination that previous courts have sanctioned race-conscious governmental programs designed to remedy the effects of that history that normally are presumptively unconstitutional.[111] Given the prominence of historical considerations to the Court's equal protection doctrine, the *Hopwood* court's superficial analysis of Texas' racial history represents a serious misinterpretation of the stakes at issue in the University of Texas case.

Paradoxically, the Fifth Circuit's perfunctory approach to the history of discrimination against African-Americans and Latinos seems to have been based upon the court's awareness of the magnitude and duration of that history (at least as to the former group).[112] The court essentially argues that the historical wrongs

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108. *See infra* text accompanying notes 158-190.

109. *See infra* text accompanying notes 139-157.

110. *See, e.g.*, Regents of the Univ. of Cal. v. Bakke, 438 U.S. 265, 326-79 (1978) (Brennan, Marshall, White and Blackmun, JJ., plurality) (justifying the medical school's affirmative action program on the basis of the nation's history of slavery, segregation and legislative history of efforts to remedy racial discrimination); *see also* ALFRED H. KELLY ET AL., 2 THE AMERICAN CONSTITUTION 581-611 (7th ed. 1991) (describing how antidiscrimination law developed in the twentieth century on the theory of ensuring equal rights for former slaves and their progeny, including judicial endorsement of affirmative action policies as a means of compensating victims for historical effects of discrimination); Gewirtz, *supra* note 18, at 731-35 (explaining that the "prevailing interpretation" of the Equal Protection Clause is consistent with the corrective conception of justice in which the purpose of antidiscrimination laws is to remedy specific instances of historical discrimination).

111. *See* Gewirtz, *supra* note 18, at 731-36; *see also* GERTRUDE EZORSKY, RACISM AND JUSTICE: THE CASE FOR AFFIRMATIVE ACTION 28-50 (1991). For a discussion of other rationales in support of affirmative action programs, see Brest & Oshige, *supra* note 25, at 862-72.

112. The court denies that there is a cognizable history of discrimination against Mexican-Americans based on the fact that this group was never subjected to de jure segregation. *See* Hopwood v. Texas, 78 F.3d 932, 955 n.50 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

against African-Americans have been too pervasive to justify an affirmative action program like the one employed by the University of Texas Law School.[113] Rather than grappling with the relevant history, the court proclaims that no "logical stopping point" could be placed upon such programs given the universal history of de jure segregation in Texas and other southern states.[114] Claims for race-based preferences in admissions would be based on "sheer speculation" if the region's general history of segregation served as the evidentiary yardstick measuring which students deserve affirmative action remedies.[115] Because of its intuition that *some* minority applicants would not be able to make "valid" claims of entitlement to affirmative action remedies, then, the court discounts ways in which past educational discrimination may have affected *other* pools of minority applicants to the law school. While explicitly admitting that past discrimination may have affected the educational achievement of at least some minority students who might apply to the university,[116] the *Hopwood* court chose to diminish the significance of the entire group's educational history.

Given the court's intuitive approach to assessing the significance of history, the *Hopwood* opinion never considers the relevance per se of past discrimination in education to African-American and Latino applicant pools. Which is to say, it does not adhere to the standard mode of reasoning about alleged discrimination under the constitutional standard.[117] Rather, the bulk of

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113. *See id.* at 950-51.

114. *Id.* at 950. Citing *Wygant v. Board of Education*, 476 U.S. 275 (1986), the court explained its position on the expansiveness of the university's history-based rationale for affirmative action in law school admissions in this way:

> If a state can "remedy" the present effects of past discrimination in its primary and secondary schools, it also would be allowed to award broad-based preferences in hiring, government contracts, licensing, and any other state activity that in some way is affected by the educational attainment of the applicants. This very argument was made in *Croson* and rejected.

Id.

115. *Id.* at 950-53.

116. *See, e.g., id.* at 951 ("No one disputes that in the past, Texas state actors have discriminated against some minorities in public schools. In this sense, some lingering effects of such discrimination is not 'societal,' . . . ."); *id.* at 954 ("No one disputes that Texas has a history of racial discrimination in education."); *see also id.* at 947 n.31 ("We recognize that the use of some factors such as economic or educational background of one's parents may be somewhat correlated with race.").

117. In contrast to the *Hopwood* court's emphasis on causation and cursory analysis of the significance of historical discrimination to Black and Latino law school applicants, the Supreme Court has tended to focus more on the nature and extent of historic discrimination and its present effects in affirming or overturning lower courts' findings of liability and determinations about the proper scope of remedies in race discrimination cases. *See, e.g.*, City of Richmond v. J.A. Croson

the opinion's discussion of history posits a strict causation theory of remediation; within this paradigm, the pivotal historical question for the court is whether Texas' elementary and secondary schools, the University of Texas system at large, or the law school by itself is the relevant discriminator.[118] Citing *Wygant v. Board of Education*[119] and *City of Richmond v. J.A. Croson Co.*[120] as authority,[121] the court finds that the law school itself is the relevant unit of comparison.[122]

Having established the law school as the relevant discriminator, the court swiftly discounts the significance of *Sweatt v. Painter*[123]—the most important precedent to *Brown v. Board of Education*.[124] Emphasizing the "intangibles" of legal education—"those qualities which are incapable of objective measurement but which make for greatness in a law school"[125]—the Court held in *Sweatt* that the University of Texas must admit African-Americans to its flagship law school on the same terms as Whites.[126] Thus, *Sweatt* stands for the proposition that policies reserving prestigious professional schools for Whites, while relegating Blacks to inferior schools, are unacceptable as a matter of law.

Co., 488 U.S. 469 (1988) (plurality opinion) (finding set-aside program unconstitutional where state could not demonstrate that certain groups of beneficiaries had experienced discrimination in local industry); Wygant v. Jackson Bd. of Educ., 476 U.S. 267 (1986) (plurality opinion) (finding preferential treatment against layoffs unconstitutional where state actor's rationale insufficiently related to present effects of past discrimination and less intrusive remedy for achieving higher rates of Black employment had not been adopted); *see also* Griggs v. Duke Power Co., 401 U.S. 424 (1976) (finding facially neutral tests having disparate impact on employment opportunities for Blacks unconstitutional where test was not significantly related to job performance and White employees historically had been favored by company).

118. *See Hopwood*, 78 F.3d at 949-52.

119. 476 U.S. 267, 277-78 (1986) (plurality opinion) (striking down the practice of protecting minority workers from layoff based in part on the theory that evidence of discrimination was not strong enough to warrant remedial action).

120. 488 U.S. 469, 500 (1989) (striking down the set-aside program based upon the notion that evidentiary findings did not provide the city with a strong basis in evidence for remedial action).

121. *See Hopwood*, 78 F.3d at 950.

122. *See id.* at 950-52. In a footnote, the court subsumed language from *Bakke*, 438 U.S. 265 (1978), suggesting that a more general showing is sufficient. *See id.* at 949 n.39.

123. 339 U.S. 629 (1950); *see also Hopwood*, 78 F.3d at 953 (discussing *Sweatt*, 339 U.S. 629).

124. 347 U.S. 483 (1954) (outlawing segregation in elementary and secondary public education).

125. *Sweatt*, 339 U.S. at 634. Among the intangibles to which the Court referred were the "reputation of the faculty, experience of the administration, position and influence of the alumni, standing in the community, traditions and prestige." *Id.*

126. *See id.* at 635-36.

The *Hopwood* court simply chose not to grapple with the implications of *Sweatt*—groundbreaking precedent less than fifty years old. Given the record developed below, however, its rejection of evidence suggesting that the law school environment remains suffused with the effects of *Sweatt*-era discrimination seems erroneous.[127]

At the same time that it downplays the significance of *Sweatt*, the court draws upon the state's history of past discrimination in concluding that the law school's affirmative action program is "boundless" in nature because "benefits are conferred on students who attended out-of-state or private schools."[128] In arguing that out-of-state students could not have experienced discrimination at the state's hand and therefore are logically not entitled to a remedy,[129] the court impliedly admits that minority students who are residents of Texas might have valid claims of past discrimination and may be entitled to a remedy. The court does not reason about the deserts of this group of applicants, however.

Instead it moves on to another consideration that is external to and beyond the control of these students who admittedly might deserve a remedy for past discrimination. Without acknowledging the counter-majoritarian difficulty inherent in its proposition, the court argues, in any event, that the law school's affirmative action program could only be legal if mandated by the state legislature.[130]

In this way, the Fifth Circuit posits an acontextualized analysis of history that ignores the intergenerational effects of discrimination in education and elsewhere on minority applicant pools. In contrast to their prominence in the court's opinion when the "cold numbers" are at issue, minority students per se—their educational achievements and professional ambitions, the discrimination that they may have encountered—are peripheral to the *Hopwood* court's historical analysis.

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127. *See Hopwood*, 78 F.3d at 952-55 (rejecting district court's finding that law school's poor reputation in minority communities, perceived hostile environment, and underrepresentation of minorities constitutes past effects of *Sweatt*-era discrimination).

128. *Id.* at 951, 955 n.50.

129. *See id.* at 955 n.50.

130. *See id.* at 951-52. To be legal, the Texas state legislature "would have to find that past segregation has present effects; it would have to determine the magnitude of those present effects; and it would need to limit carefully the 'plus' given to applicants to remedy that harm." *Id.* at 951. The court fails to consider that the majority White state legislature has little incentive to act on behalf of African-American and Latino applicants to the law school. On the counter-majoritarian function of judicial review, see JOHN HART ELY, *Facilitating the Representation of Minorities*, *in* DEMOCRACY AND DISTRUST 135-79 (1980).

How might the student's histories have been treated more appropriately in the court's analysis? Before taking the drastic step of holding that race could never be taken into account by admissions officials at the University of Texas,[131] the court might have left the door open for officials to construct a race-conscious remedy not "boundless" in nature.[132] The sweeping nature of the court's holding in fact is inconsistent with its admission that race may correlate with students' socioeconomic status or educational backgrounds and that universities may take these facts into account in the admissions process.[133]

In fact, the court's admission about a possible relationship between constitutionally permissible factors and race suggests that the law school might construct an affirmative action program that could pass strict scrutiny if it placed *more* emphasis upon applicants' personal histories.[134] A sufficiently compelling and narrowly tailored compensatory program might be designed to address an individual's particular claim to redress for past discrimination. For instance, an affirmative action program might benefit an African-American applicant who was a resident of Texas, whose parents (and/or grandparents) were residents of Texas and attended segregated public schools—or no schools at all—in that state.[135] Such an applicant could not logically be understood to be unworthy of the mere opportunity for recompense (as opposed to a guarantee) that might be provided by the addition of points for historic discrimination to her TI scores. These extra points would increase the likelihood of that individual's admission to the law school, rather than guarantee her preferential admission to the university.

The *Hopwood* court's analysis precludes consideration of the particular claims to redress of minority applicants because it was

131. *See Hopwood*, 78 F.3d at 944, 955.

132. *Id.* at 951. "[B]oundless remedies [such as the law school's affirmative action policy] raise a constitutional concern beyond mere competence. In this situation, an inference is raised that the program was the result of racial social engineering rather [than] a desire to implement a remedy [to past discrimination]." *Id.*

133. *See id.* at 946-47.

134. *See id.* at 946 ("While the use of race per se is proscribed, state-supported schools may reasonably consider a host of factors - some of which may have some correlation with race - in making decisions."); *see also* note 116 *supra* and accompanying text.

135. *Cf.* Hopwood v. Texas, 861 F. Supp. 551, 554-57 (W.D. Tex. 1994) (beginning the opinion with a section providing "historical background" and elaborating on the significance of *Sweatt v. Painter*, 339 U.S. 629 (1950), and suggesting ways that past discrimination affects contemporary students' educational attainment).

predicated upon the general. That is, the particular historical claims of individual students were subsumed beneath the group's claim to redress.[136] Then the group claim was characterized both as insufficiently compelling to warrant special treatment, and as so common that remedial efforts to address the injury would be impractical.[137] This mode of analysis amounts to a denial of history.

B. Neglect of Case Law Concerning Validation of Ability Tests

Other than its cursory attention to students' personal histories, the single most problematic aspect of the *Hopwood* opinion is the way in which the court simultaneously privileged the "cold numbers," but refused to entertain a challenge to the credibility of those same numbers.[138] It seems unprincipled that a court so confident that African-American and Latino applicants' TIs show them to be less deserving of legal education than Whites would decline to consider evidence to the contrary.

The court's action is particularly questionable in light of the fact that case law exists, much of it Fifth Circuit law, that concerns validation of standardized measurements of ability. The precedent derives from education law as well as employment discrimination litigation.

1. Education Law

Federal courts have monitored the ways in which quantitative measures of ability have been used in public education since the late 1960s.[139] During this era, when school systems first began implementing the integration mandate of *Brown v. Board of Education*[140] en masse,[141] courts were asked to settle concerns about the use of putatively objective, but racial caste-perpetuating, ability tests.[142] Plaintiffs' concerns about testing and grouping were straightforward. When school systems tested, ranked and grouped

136. *See Hopwood*, 78 F.3d at 951-55 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

137. *See id.* at 950-55.

138. *See infra* notes 178-189 and accompanying text.

139. *See generally* JEANNIE OAKES, KEEPING TRACK 184-90 (1985) (discussing seminal cases on ability grouping).

140. 347 U.S. 483 (1954).

141. *See* GERALD N. ROSENBURG, THE HOLLOW HOPE: CAN COURTS BRING ABOUT SOCIAL CHANGE? 42-46 (1991).

142. *See* MARY FRANCES BERRY & JOHN W. BLASSINGAME, LONG MEMORY 281-82 (1982).

students into separate ability tracks based on standardized test performance, most African-American and/or low income students invariably were placed in the lowest of these ability groupings.[143]

J. Skelly Wright, a federal district court judge sitting in the District of Columbia, issued the seminal ruling striking down an ability grouping system.[144] Thereafter, the Fifth Circuit led the movement to enjoin ability grouping practices that resulted in segregated classrooms.[145] In these early cases, judges enjoined the use of certain standardized testing mechanisms for placement of students in ability groups on the grounds that these policies perpetuated segregation in what ostensibly were newly desegregated schools.[146] These judges thought it unfair that students who had been inadequately trained in segregated schools should be penalized by their new schools' testing and ability grouping policies.

As American society has traveled farther and farther in time away from the period of de jure segregation, litigants have developed more sophisticated approaches to explaining the ways in which testing and grouping systems may perpetuate the effects of historical discrimination in education. In recent years plaintiffs have advanced claims of racial discrimination based on disparate impact and test invalidity, as well as on constitutional grounds.[147]

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143. *See* OAKES, *supra* note 139, at 65-67.

144. *See* Hobson v. Hansen, 269 F. Supp. 401 (D.D.C. 1967) (striking down a tracking system as violative of the equal protection rights of poor and minority students).

145. *See, e.g.*, United States v. Gadsen County Sch. Dist., 572 F.2d 1049 (5th Cir. 1978) (enjoining use of an ability grouping system where the school board could not show that disproportionate placement of minorities in low tracks was not the result of past discrimination); *see also* McNeal v. Tate County Sch. Dist., 508 F.2d 1017 (5th Cir. 1975) (ruling that a school district may use any racially neutral method of classroom assignment, unless the effect of the method is racial segregation or greatly inhibits equality of education); Moses v. Washington Parish Sch. Bd., 456 F.2d 1285 (5th Cir. 1972) (affirming the district court's finding that assignment of students in classes based on standardized ability and achievement tests perpetuated segregated classrooms within the desegregated school); United States v. Sunflower County Sch. Dist., 430 F.2d 839 (5th Cir. 1970) (affirming a lower court's decision that a school which operated as a dual school system impermissibly used an achievement testing program in the assignment of students).

146. *See, e.g., McNeal*, 508 F.2d 1017 (holding that the "ability grouping system which resulted in racially segregated classrooms could not be used by [the] school district" which previously had racially segregated classrooms).

147. *See e.g.* Debra P. v. Turlington, 730 F.2d 1405, 1407-09 (11th Cir. 1981) (discussing experts' findings regarding instructional validity of competency exam); Simmons v. Hooks, 843 F. Supp. 1296, 1300-01 (E.D. Ark. 1994) (discussing expert opinion on reliability of the Peabody Picture Vocabulary Test); Anderson v. Banks, 520 F. Supp. 472, 485-92 (S.D. Ga. 1981) (discussing results of validation studies performed by experts on California Achievement Test), *appeal dismissed*, Johnson v. Sikes, 730 F.2d 644 (11th Cir. 1984).

Foreseeable disparate impact alone is insufficient to make out an equal protection claim; but together with compelling historical evidence, adverse impact accompanied by expert testimony indicating that the tests used for placement are invalid may substantiate an allegation of discrimination. In *Anderson v. Banks*,[148] for example, a federal court enjoined an ability grouping system in part on the basis of expert testimony suggesting that the school system's testing practices were invalid.[149]

This body of law on ability testing, both the older and the more recent cases, has a distinctly distributive focus. This precedent was created on the basis of courts' wariness of so many members of a constitutionally protected class ending up at the bottom of their academic classes. Awareness of the historic subjugation of African-Americans in public educational systems served to reinforce these courts' suspicions about caste-perpetuating educational policies and methodologies. Given this skepticism, these courts did not defer to the putative scientific validity of standardized tests. Rather, they became engaged with psychometric experts, asking for proof of tests' validity rather than assuming as much. In short, the courts that developed the law on ability testing in elementary and secondary education approached the issue from a critical perspective.

The higher education law that deals with testing, as exemplified in *Hopwood v. Texas*, is quite underdeveloped in comparison to the law on ability testing at the lower educational levels. The *Hopwood* court's deferential approach to the TI is particularly troubling in light of the Fifth Circuit's prominent role in the litigation which brought an end to unfair testing practices on the elementary and secondary levels. Even if the court ultimately had remained unconvinced that the TI misstated the legal aptitude of African-American and Latino students, the integrity of the judicial process would have been well served by allowing expert witnesses to submit evidence to the contrary.

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148. 520 F. Supp. at 485-92.

149. *See id.* at 480-98, 501; *see also* Larry P. v. Riles, 495 F. Supp. 926 (N.D. Cal. 1979) (enjoining use of invalidated IQ tests that resulted in the placement of Black students in "dead-end" classes), *aff'd in part, rev'd in part*, 793 F.2d 969 (9th Cir. 1981). Plaintiffs have prevailed in recent years on the theory that certain grouping practices perpetuate past discrimination. *See* Simmons v. Hooks, 843 F. Supp. 1296 (E.D. Ark. 1994). *But see* Quarles v. Oxford Mun. Separate Sch. Dist., 868 F.2d 750 (5th Cir. 1989) (holding that the school district's limited form of ability grouping was not discriminatory).

2. Employment Law

It substantiates the foregoing analysis to note that the validity of ability tests is routinely at issue in employment litigation.[150] The brief analysis of the law on employment testing that follows is provided to illuminate the discussion of the *Hopwood* opinion in two ways. First, together with the discussion above of the law on ability testing in education, it suggests the normalcy of judicial skepticism toward quantitative measures of ability. In so doing, the jurisprudence on testing in employment also suggests the abnormalcy and relative lack of sophistication of the *Hopwood* court's reasoning about the TI.

The jurisprudence on employment testing is even more well-developed than the law on ability testing in elementary and secondary education. Because the jurisprudence on ability testing in employment *always* turns on disparate impact analysis,[151] it is more immediately concerned with distributive justice than the law on educational testing. That is, while educational testing cases may involve disparate impact analysis, they usually also require proof that the present disparate effect of the educational practice at issue is a result of de jure segregation.[152] By contrast, the disparate impact theory of discrimination in employment testing is concerned solely with maldistributions of goods in contemporary society—adverse impacts that affect any protected class—women, the aged and racial minorities, including those never subjected to Jim Crow Laws.[153]

Moreover, because disparate impact analysis necessitates extensive and complex statistical evidence from plaintiffs and the employer,[154] it is presumed that the validity of ability tests must be statistically *proven* in employment law.[155] After disparate impact is proven, the burden of production shifts to employers to

150. *See* Michael Selmi, *Testing for Equality: Merit, Efficiency, and the Affirmative Action Debate*, 42 UCLA L. REV. 1251, 1253 n.9 (1995).

151. *See id.* at 1257-58. For the seminal cases establishing the disparate impact theory of employment discrimination, see *Albemarle Paper Co. v. Moody*, 422 U.S. 405, 425-35 (1975) and *Griggs v. Duke Power Co.*, 401 U.S. 424, 429-33 (1971).

152. *See supra* notes 144-149 and accompanying text.

153. *See* Selmi, *supra* note 150, at 1258.

154. *See id.* at 1257-58.

155. *See id.* at 1261-76 (explaining statistical conventions used in the validation process); *see also* Mark Kelman, *Concepts of Discrimination in "General Ability" Job Testing*, 104 HARV. L. REV. 1157, 1165-67, 1208-21 (explaining the requirement of test validity under Title VII and critiquing the claim that tests are highly valid).

prove that the test is *necessary*.[156] In this way, race-based differentials in ability test scores substantiate claims of discrimination and provide evidence to support the establishment of affirmative action plans in employment law.[157] By contrast, in *Hopwood* such differentials are deemed by both the plaintiffs and the presiding court to imply the intellectual inferiority of African-American and Latino students. These results are oppositional.

The divergence between the *Hopwood* court's approach to empirical evidence purporting to measure ability and that of the courts that have developed the jurisprudence on employment discrimination is striking. The contrast is intuitively inappropriate. While it is logical that courts handling different subject matter would approach matters of *law* differently, quantitative evidence raises questions of *fact*. It would seem that regardless of subject matter, courts would approach factual questions about test validity in a similar fashion: all courts should hear expert testimony about the validity of empirical evidence in cases where such data is relevant—whether employment litigation, cases on ability grouping in secondary education, or a higher education case such as *Hopwood*.

C. The Conventional Judicial Approach to Expert Scientific Testimony: Daubert v. Merrell Dow Pharmaceuticals

The Supreme Court has addressed the question of how the lower courts are to review scientific evidence proffered by expert witnesses. The landmark case is *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[158] a suit brought on behalf of children born with birth defects allegedly caused by Bendectin, a prescription drug made by Merrell Dow.[159] The consensus of the majority of scientists was that the drug did not cause defects.[160] The predominant perspective was countered by eight scientists, including a statistician who had found a correlation between Bendectin and birth defects.[161] The statistician found this correlation by reanalyzing the thirty-plus scientific studies that purported to show a lack of cor-

156. *See* Kelman, *supra* note 155, at 1166 n.23.

157. *See* Selmi, *supra* note 150, at 1258-60. Employers cannot use affirmative action plans to make up for discriminatory testing practices; however, firms may be held liable for invalid tests notwithstanding appropriate racial balances in the workplace resulting from affirmative action policies. *See* Connecticut v. Teal, 457 U.S. 440 (1982).

158. 509 U.S. 579 (1993).

159. *See id.* at 582.

160. *See id.*

161. *See id.* at 583.

relation between the drug and prenatal defects.[162] The district court, however, found the eight scientists' work inadmissible because it was unpublished and not subjected to peer review.[163]

The Court granted certiorari in *Daubert* to consider what standard should govern the admissibility of controverted scientific evidence.[164] Acknowledging that "there are no certainties in science,"[165] the Court adopted a flexible rule that allows courts to admit scientific opinions *if* they are demonstrably sound. These opinions are admissible even if held by a minority of scientists and if they espouse a novel point of view.[166] In other words, the Court held that the admissibility of scientific testimony or evidence depends on the basis of its validity (whether a scientific principle supports what it purports to show) and reliability (whether the principle yields consistent results).[167]

The significance of *Daubert* can only be appreciated fully in light of the law that it displaced. *Daubert* superseded the rule previously instituted by *Frye v. United States*,[168] which required that scientific testimony be admitted on the basis of "general acceptance" in the relevant field.[169] *Frye*'s "general acceptance" standard would deem the *Daubert* testimony inadmissible because only a minority of scientists held this view. By definition, the *Frye* standard made a predominant scientific viewpoint a proxy for a reliable and valid scientific perspective. Additionally, the *Frye* standard did not require a showing of validity and reliability at trial.[170] Consequently, one could argue that the *Frye* rule functioned to preserve the scientific status quo, or that the *Daubert* standard is less restrictive than the *Frye* standard as to the admissibility of novel evidence.[171] This argument is persuasive insofar as scientists engaged in peer review, the gatekeepers to admissi-

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162. *See id.* at 583 & n.2.

163. *See id.* at 584.

164. *See id.* at 585.

165. *Id.* at 590.

166. *See id.* at 597.

167. *See id.* at 590-92.

168. 293 F. 1013 (D.C. Cir. 1923).

169. *Id.* at 1014.

170. *See* Lawrence B. Ebert, Frye *After* Daubert: *The Role of Scientists in Admissibility Issues as Seen Through Analysis of the DNA Profiling Cases*, 1993 U. CHI. L. SCH. ROUNDTABLE 219, 224.

171. *See* G. Michael Fenner, *The* Daubert *Handbook: The Case, Its Essential Dilemma, and Its Progeny*, 29 CREIGHTON L. REV. 939, 952 (1996) ("*Daubert* made it possible for litigants to get in testimony from scientific experts who operate outside the mainstream.").

bility under the *Frye* standard,[172] would tend less often to accept as "good science" innovative, minority viewpoints than would the judges who are the final arbiters of admissibility under *Daubert*.[173] The reality that judges are lay persons in terms of scientific knowledge probably predisposes them to acceptance of novel scientific results.[174]

The fundamental difference between the *Frye* and *Daubert* rules is extraordinarily important to the arguments made in this Article. This is because the *Hopwood* court's uncritical acceptance of the TI relates directly to its failure to admit and consider the expert scientific testimony of Dr. Martin Shapiro. Recall that Shapiro, a psychometrist, was prepared to provide statistical evidence about the validity and reliability of the TI as it relates to African-American students attending the University of Texas Law School.[175] Without question, Shapiro's would have been a minority perspective on the validity and reliability of the LSAT. The prevailing position, officially held by the LSAC and law schools like the University of Texas that rely heavily upon the test in the admissions process, is that the LSAT is just as valid and reliable a predictor of performance among these groups as for Whites.[176] Of course, this perspective—the generally accepted scientific view about the LSAT's usefulness—is held by these institutions notwithstanding the indisputable reality that African-Americans and Latinos on average perform less well on the test than Whites and thus are systematically disadvantaged by its widespread use.[177] These circumstances would appear to have made Shapiro's proffer of evidence opposing the generally accepted view of the LSAT of obvious value to the *Hopwood* court's process of reasoning about an affirmative action policy. After all, the disparate racial impact

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172. *See* Ebert, *supra* note 170, at 224.

173. *See* Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579, 589-97 (1993); Ebert, *supra* note 170, at 224.

174. *See* Ebert, *supra* note 170, at 224; Edward J. Imwinkelried, *Evidence Law Visits Jurassic Park: The Far-Reaching Implications of the* Daubert *Court's Recognition of the Uncertainty of the Scientific Enterprise*, 81 IOWA L. REV. 55, 64 (1995). The *Daubert* ruling is not without controversy, however. Some disagree that it is an unqualified improvement over the *Frye* standard. *See, e.g.*, Ebert, *supra* note 170, at 222-23, 232-50 (arguing that the "general acceptance" concept enunciated in *Frye* should be a precondition to admissibility of scientific evidence and that it is superior to the more general standard enunciated in *Daubert*, 509 U.S. 579).

175. *See infra* notes 178-189 and accompanying text (explaining that Shapiro's expert testimony was denied admission into evidence); *infra* app.

176. *See supra* notes 91-94 and accompanying text.

177. *See supra* note 21 (listing the TI composites for Whites, African-Americans and Mexican-Americans); *supra* note 89 (stating that Latinos and African-Americans score, on average, 100 points lower than Whites).

of the University of Texas' reliance upon LSAT scores as a proxy for ability is one of the factors which necessitates the affirmative action policy.

Yet, Shapiro was not allowed to submit his expert opinion to the court.[178] According to the court, its decision to deny admission of this testimony was not made on the merits, but on procedural grounds, specifically the "law of the case" doctrine.[179] This rationale for disallowing Shapiro's testimony was predicated upon the district court's refusal to allow the Thurgood Marshall Legal Society to intervene in the case prior to the start of trial.[180] According to the Fifth Circuit panel, the district court's denial of intervention meant that the issue of the TI's validity already had been "implicitly addressed" by the lower court.[181]

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178. Shapiro's testimony was integral to the petition by the proposed plaintiff-intervenor for a rehearing en banc, as well as on its appeal of the district court's pre-trial denial of its intervention. Both of these petitions were made on grounds that the University of Texas could not present Shapiro's testimony because doing so would imply that the University was liable under Title VI.

> If allowed to participate as parties in this case, proposed intervenors would make essential arguments and introduce important evidence that the defendants cannot or will not advance. . . . [P]roposed intervenors' defense of the existing admissions program may cast doubt on the predictive value of the Texas Index . . . in selecting applicants. . . . [This argument] . . . is important to this case yet contrary to the defendants' institutional interests.

Petition for Rehearing at 7, *Hopwood* (citations omitted); *see also id.* at 4-8.

Proposed intervenors' appeal of both the district court's decision to deny pre-trial intervention and its petition for rehearing en banc were denied by the Fifth Circuit. *See id.* at 6; *see also* Hopwood v. Texas, 84 F.3d 720, 721 (5th Cir. 1996) (denying rehearing en banc).

In addition to making these appeals to the circuit court, proposed intervenors tried to present Shapiro's expert testimony to the district court by way of a declaration attached to a post-trial brief. *See* Petition for Rehearing, *Hopwood* (Declaration of Martin M. Shapiro). The district court declined, however, to consider this evidence. *See* Petition for Rehearing at 4 n.5, *Hopwood.*

Thus on several occasions the district and appellate courts had an opportunity to consider Shapiro's testimony, but declined to do so. As the proposed intervenors had suggested in their several appeals to the appellate court, absent the Fifth Circuit's ruling on their behalf, evidence concerning the TI's validity and reliability was never a part of the formal record and decision making process in *Hopwood v. Texas. See Hopwood*, 84 F.3d at 722. The University of Texas never defended its affirmative action program on grounds that it was necessitated by a discriminatory TI system. *See* Petition for Rehearing at 8, *Hopwood.* Nor did the University join the proposed intervenors in their petition to the Fifth Circuit for rehearing en banc of the panel's decision. *See Hopwood*, 84 F.3d at 722 (Politz, J., dissenting from denial of rehearing) ("For reasons that have been communicated to this court, and upon which we can only speculate, neither the plaintiffs nor the defendants have sought rehearing en banc.").

179. Petition for Rehearing at 6, *Hopwood.*

180. *See id.* at 5-6.

181. *Id.* at 6.

While admitting that such a determination was within the appeals court's discretion, I disagree with the panel's decision to reject Shapiro's testimony and find its rationale weak. The fact that this testimony was "implicitly" raised in prior motions to a lower court, as the panel argues, should not have absolved the court of appeals from its responsibility to rule on the merits concerning its admissibility under the law of the case doctrine.[182] Since the proposed intervenors filed contemporaneous appeals of district court opinions that only "implicitly addressed" Shapiro's testimony, the Fifth Circuit failed to rule on the merits of his expert opinion. Thus, the court's final determination on the admissibility of this testimony (the denial of rehearing en banc) seems to have reflected its profound conviction to discard Shapiro's proffer.[183]

The court's judgment not to admit Shapiro's testimony was inconsistent with the convention established in *Daubert*, as well as mistaken on prudential grounds. As an initial matter, it is important to note that the *Daubert* standard applies uniformly.[184] It is

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182. *Compare* Jansen v. City of Cincinnati, 904 F.2d 336, 341 (6th Cir. 1990) (noting that the city's representation of proposed intervenors' was adequate until the city responded to the motion for summary judgment and failed to raise the affirmative defense that the proposed intervenors wished to proffer), *with* Reid v. Rolling Fork Util. Dist., 979 F.2d 1084, 1086 (5th Cir. 1992) (stating that the law of the case doctrine does not apply when controlling authority has not made a contrary decision of law, or evidence at a subsequent trial was substantially different from a prior trial).

183. The judges who dissented from the full court's denial of rehearing en banc in *Hopwood* arrived at a similar, though more sweeping, conclusion:

> To decline to rehear a case of this magnitude . . . bespeaks an abdication of duty—the ducking of a tough question by judges who we know firsthand are made of sterner stuff . . . . By tenuously stringing together pieces and shards of recent Supreme Court opinions that have dealt with race . . . the panel creates a gossamer chain which it proffers as a justification for overruling *Bakke*. We are persuaded that this alone makes the instant case not just en banc-worthy but en banc mandatory.

Hopwood, 84 F.3d at 722 (Politz, King, Wiener, Benavides, Stewart, Parker and Dennis, JJ., dissenting from denial of rehearing en banc).

Given the apparent rigidity of the court's position regarding Shapiro's testimony, it would be unproductive to engage in a detailed analysis of the court's decision not to admit this testimony. A debate about whether the court's decision was justified as a matter of procedure would be inapposite to this Article's overall objective and this section's discussion of *Daubert*. This Article's skepticism about the *Hopwood* court's reasoning rests on a fundamental critique of unsubstantiated assumptions that it makes about the TI—a matter of substance to which procedural questions are incidental.

184. *Daubert* explains the scope and applicability of the Federal Rules of Evidence, which govern the admissibility of any evidence relevant to an action brought in federal court, which is defined as that which has "any tendency to make the existence of any fact that is of consequence to the determination of an action more probable or less probable than it would be without the evidence." *See*

applicable to all of the disparate areas of law to which scientific evidence is relevant, from criminal matters, to family law issues, to constitutional questions. The Court did not indicate that an exception or special rule might be formulated and applied in cases involving racial discrimination. Thus, any assumption that expert scientific testimony proffered in cases involving education and affirmative action policies may be treated differently from that proffered in other cases, including the cases concerning validation of ability tests in employment and elementary and secondary education discussed above,[185] is without merit.

The presentation and evaluation of Shapiro's viewpoint would have been significant to the court's decision making process for concrete reasons. Precisely because it is a minority point of view that stands in opposition to the generally accepted view of the LSAT's credibility, Shapiro's opinion would have been a wise consideration for the court. This is just the kind of testimony about which the *Daubert* majority theorizes and for which it does not preclude the possibility of admissibility.[186] Shapiro's evidence might have illuminated flaws in the design of the studies upon which the generally accepted perspective on the merits of the LSAT in the law school admissions process is predicated. His research attaches a different meaning to data revealing a racial gap in applicants' scores than do others who attest to the validity and reliability of the LSAT. Unlike those who hold the predominant view of the LSAT's merits in screening law school applicants, Shapiro does not simply note that African-Americans typically perform poorer on the test than do Whites and conclude that this racial difference is a "natural" result.[187] Instead, he finds it significant that while the LSAT may predict well the performance of Whites in the first year of law school, it is not a good predicator of

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Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 587 (1993) (quoting Rule 401, F.R. Evid.). In particular, *Daubert* interprets Rule 702 of the Federal Rules of Evidence, which pertains to the admissibility of any "scientific, technical, or other specialized knowledge" that "will assist the trier of fact to understand the evidence or to determine a fact in issue" in an action. *Id.* at 588 (quoting Rule 702 F.R. Evid.). Thus, *Daubert* applies to any subject matter or action over which a federal court asserts jurisdiction. For a discussion of the variety of matters encompassed in this category, see John Monahan, *Daubert and the Reference Manual: An Essay on the Future of Science in Law*, 82 VA. L. REV. 837, 846-47 (1996) (describing statistical inference, multiple regression analysis, epidemiology, toxicology, survey research, forensic analysis of DNA, and estimation of economic loss as areas that often are the subject of scientific expert testimony in federal court).

185. *See supra* notes 139-157 and accompanying text.

186. *See Daubert*, 509 U.S. at 594.

187. *See* Declaration of Martin Shapiro, at 9-18 (Discussing concept of test validity and invalidity of TI as applied to African-Americans).

performance for many Blacks.[188] In other words, Shapiro argues that there are at least some scenarios in which the test is invalid and unreliable for measuring the ability of these applicants.[189]

Considering the court's reasoning, its decision about the admissibility of Shapiro's testimony could have been determinative of the outcome of *Hopwood* insofar as Shapiro was able to cast doubt on the notion of "cold numbers." Consideration of Shapiro's viewpoint presumably would have undermined the court's tendency to view the TI as an infallible measurement of ability. The court's conception of science would have been less idealized and more consistent with the uncertainty and experimentation that are inherent in the scientific method.[190] Thus, Shapiro's testimony would have undermined the court's conclusion that the racial gap in TI scores was a material fact indicative of White and non-White applicants' just deserts in the law school admissions process. In turn, Shapiro's testimony would have made the court's analysis of the constitutional issues presented in *Hopwood* more focused and immeasurably more credible. Absent the obfuscating influence of the "cold numbers," the court's arguments for or against the law school's affirmative action program more likely would have turned on the constitutional issues: the concept of equal protection of the law and the merits and demerits of the rationales proffered by the state of Texas in support of its race-conscious law school admissions policy.

188.

> The witness' [Shapiro's] evaluation of statistics about the University of Texas Law School entering classes of 1986, 1987, and 1988 . . . indicated that the "Texas Index" calculation upon which the Law School largely based its admissions decisions could reliably predict less than 10% of the variation in first-year grades for African-American students—whatever its validity for White students.

Petition for Rehearing at 4, *Hopwood*.

189. *See id.* at 7. Professor Claude Steele recently conducted research similar to Shapiro's. Steele addresses the racial gap in performance on standardized tests in terms of overprediction or underperformance, concepts that describe the phenomenon of something other than skills deficits depressing performance. For Steele, stereotype threat helps to explain this underperformance. *See* Steele, *supra* note 53, at 613-29; Claude M. Steele & Joshua Aronson, *Stereotype Threat and the Intellectual Test Performance of African Americans*, 69 J. OF PERSONALITY & SOC. PSYCH. 797-811 (1995).

190. *See* Imwinkelried, *supra* note 174, at 59-61 (describing the popular conception of science as resting on an idealized assumption that the universe is governed by mechanical and inexorable laws discoverable by scientific investigation).

IV. The Instrumental Result of Deterministic Analysis

Ultimately, the salience of the racial differential in applicants' TIs to the *Hopwood* court and its failure to hear expert testimony that would have challenged this perspective affected the court's application of the law. In keeping with its narrow focus on the "cold numbers," the court's discussion of the constitutional issues involved in *Hopwood* seems not so much a response to the complexity of the legal issues and factual record. The opinion appears more like an instrumental argument oriented toward a specific result—the striking down of an admissions program that is perceived to be unfair to Whites who are denied admission to the University of Texas Law School despite superior numbers. In other words, the court's expectation that high-scoring White students deserve to fare well in the law school application process (and that lower-scoring students, including Blacks and Latinos, do not) seems to inform its application of the strict scrutiny test to the law school's affirmative action program.

A. The Court's Misconception of the Nature of Strict Scrutiny Review After Adarand Constructors, Inc. v. Pena:[191] *Still "Strict in Theory, Fatal in Fact"*[192]

That the concept of just deserts so informs the court's reasoning about the constitutional issues implies that the *Hopwood* court misapprehends the nature of its inquiry under the strict scrutiny standard, particularly in the post-*Adarand* era. Contrary to the court's apparent perception, the strict scrutiny standard is not an archetypal rule of law; that is, unlike most rules applicable in civil or criminal law, the concept of strict scrutiny does not necesssarily confer certain rights or responsibilities.[193] Instead, strict scrutiny is a rule designed by judges for judges that bespeaks a certain attitude or posture.[194] Thus, it is incorrect for strict scrutiny to be taken to imply a definite judgment about any hypothetical or real distribution of benefits and burdens: conclusions about the propriety of particular social arrangements are not embedded in the standard itself. Instead, judges are to use the standard as a *guide* in decision making.

And yet, the concept of strict scrutiny is ambiguous on its face, in my judgment, at least when compared to other standards

191. 515 U.S. 200 (1995).
192. *Id.* at 237.
193. *See* FLETCHER, *supra* note 18, at 124.
194. *See id.*

that judges must apply in making determinations about appropriate results in cases. For instance, the strict scrutiny standard is unlike the rule instituted in *Daubert*, which incorporates specific factors that a court should consider in making a determination whether scientific evidence is valid and reliable.[195] The court's inquiry under strict scrutiny review turns on two determinations: the importance of the governmental objective proffered by the state (whether it is compelling) and an estimation of whether the race-conscious policy that the state has chosen to achieve this purpose is necessary (sufficiently narrowly tailored to achieve the compelling objective).[196]

Insofar as determinations under the strict scrutiny standard are predicated upon the thoughts and values of the presiding judge, they are made without reference to any standardized or systemized criteria whatsoever. Such decision making implies much more subjectivity than criteria like "validity" and "reliability" established under *Daubert*.[197]

This view of strict scrutiny is not dependent on the strength of my arguments alone. The cases applying the standard to race-conscious programs characterized as benign in nature do not offer concrete guidance as to how these two prongs of the test are to be applied by the lower courts.[198] To the contrary, the Court's recent decisions mandating that affirmative action programs be subjected to strict scrutiny discourage courts from conceptualizing the inquiry as a substantive rule requiring the striking down of all race-conscious programs:[199] The Court itself acknowledges the com-

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195. *See* Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-94 (1993) (directing the lower court's ruling on the admissibility of scientific evidence to consider many variables, including whether the scientific technique can be tested; whether it can be falsified; whether it has been subjected to peer review or published; the technique's rate of error in producing results; whether standards for controlling the technique's operation exist and are maintained; and whether the technique is generally accepted in the relevant scientific community); FOSTER & HUBER, *supra* note 29, at 15.

196. *See* Korematsu v. United States, 323 U.S. 214 (1944) (upholding the governmental policy of interning Japanese-Americans on grounds that it was required for the compelling objective of military necessity).

197. However, "validity" and "reliability" are also socially constructed concepts subject to criticism (as argued in Parts II and III).

198. *See infra* notes 199-200 and accompanying text.

199. *See* Adarand Constructors, Inc., v. Pena, 515 U.S. 200, 237 (1995) ("[W]e wish to dispel the notion that strict scrutiny is 'strict in theory, but fatal in fact'. The unhappy persistence of both the practice and the lingering effects of racial discrimination . . . is an unfortunate reality, and government is not disqualified from acting in response to it."); *id.* at 2120 (Stevens, J., dissenting) (arguing against application of rigid strict scrutiny analysis to affirmative action programs on grounds that while invidious discrimination "is an engine of oppression," affirmative action

plexities involved in applying the strict scrutiny "formula" after *Adarand* and *Croson*.[200] It is apparent then that rigid application of the strict scrutiny standard to each and every racial classification in exactly the same way is inconsistent with both the letter and spirit of the law.

B. The Corrective Rationale

The Fifth Circuit's analysis of the corrective rationale for the University of Texas' affirmative action program is predicated upon assumptions contrary to the ambiguities and complexities inherent in strict scrutiny. Its approach stands in sharp contrast to the notion that *Adarand* and *Croson* do not provide concrete instructions for how to apply the strict scrutiny standard.[201] To the contrary, the court handles the issue of fit between the law school's objective in instituting the affirmative action program and the particular remedy established in *Hopwood* as if *Croson* and *Adarand* dictate the inexorable result of finding the policy unlawful.[202] In this way, the court treats the strict scrutiny standard as if it were a substantive rule.

This assumption is reflected, for instance, in the *Hopwood* court's uncomplicated application of *Croson* and *Adarand*, which involved employment issues[203] and federal contracting,[204] to the relevant factual scenario in *Hopwood*, which involved legal education.[205] The court proceeds as if there is no question that affirmative action in higher education should be treated in exactly the same manner as race-conscious practices are treated in the areas implicated in *Croson* and *Adarand*. It never suggests that a dis-

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policies "reflect the opposite impulse: a desire to foster equality in society"); City of Richmond v. J.A. Croson Co., 488 U.S. 469, 509 (1989).

200. Some scholars also have pointed out that it is unclear just how lower courts should apply the holdings of *Adarand* and *Croson* to various factual scenarios. *See, e.g.*, Jed Rubenfeld, *Affirmative Action*, 107 YALE L.J. 427, 432-44 (1997); Akhil Reed Amar & Neal Kumar Katyal, Bakke*'s Fate*, 43 UCLA L. REV. 1745, 1746-49, 1756-58, 1767-71 (1996); David A. Strauss, *Affirmative Action and the Public Interest*, 1995 SUP. CT. REV. 1, 2-14, 4 n.13. Other commentators have argued that the notion of applying strict scrutiny to affirmative action programs is simply wrong. *See, e.g.*, Brent E. Simmons, *Reconsidering Strict Scrutiny of Affirmative Action*, 2 MICH. J. RACE & L. 51 (1996) (arguing that the courts' application of the strict scrutiny standard to affirmative action programs has been inconsistent and has impeded legitimate governmental efforts to remedy discrimination).

201. The court acknowledges and then dismisses in a footnote the fact that *Adarand* gives no direction about how to apply its holding. *See* Hopwood v. Texas, 78 F.3d 932, 941 n.18 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

202. *See Hopwood*, 78 F.3d at 940-41, 944-45, 950-51.

203. *See Croson*, 488 U.S. at 469.

204. *See Adarand*, 515 U.S. at 204.

205. *See Hopwood*, 78 F.3d at 932.

tinction might be drawn between the way in which strict scrutiny is applied in these substantive areas even though the Supreme Court had not addressed the issue, directly or indirectly. The Court neither had overruled *Regents of University of California v. Bakke*[206] nor included a footnote in *Adarand* or *Croson* suggesting that the landmark case was in danger of being overruled prior to the Fifth Circuit's consideration of *Hopwood*.

The tone and choice of words used by the court in its analysis of the compensatory rationale for Texas' affirmative action program also reveals its view that "strict scrutiny" is substantive in nature.[207] The court goes well beyond emphasizing the "highly suspect" nature of racial classifications in traditional Supreme Court jurisprudence.[208] It stresses that "there is absolutely no doubt" that strict scrutiny is to be applied even to those racial classifications "characterized by their proponents as 'benign' or 'remedial.'"[209] This tone of certitude and uncompromising language appears so consistently in the opinion that the reader cannot fail to appreciate its meaning. The *Hopwood* court is suggesting that it knows exactly what strict scrutiny is and how to determine which interests are compelling and whether programs are narrowly tailored.[210]

The upshot of the court's assumptions about *Croson*, *Adarand* and the strict scrutiny standard, together with its convictions about the "cold numbers," is its rejection of the corrective rationale for the law school's affirmative action program. Yet, each of these assumptions is an abstraction which obscures the historical issues that underlie *Hopwood v. Texas*. The focus on these external matters clouds the court's ability to appreciate and review the historical evidence that it was obliged to evaluate in considering the propriety of compensatory remedies for African-American and Latino applicants to the University of Texas Law School.[211] Instead of thoughtfully addressing the core historical issues, the *Hopwood*

206. 438 U.S. 265 (1978) (upholding the use of race as a factor in considering the admission of applicants to schools of higher education).

207. *See Hopwood*, 78 F.3d at 940 ("[D]iscrimination based upon race is highly suspect.").

208. *See id.* at 940-41.

209. *Id.* at 940.

210. *See id.* at 940-41 (explicating Supreme Court precedent concerning race-conscious state action as if the concepts of "strict scrutiny," "narrow tailoring" and "compelling governmental interest" do not lend themselves to ambiguous interpretations in theory or in terms of practical application).

211. *See supra* notes 110-111 and accompanying text.

court de-emphasizes the nature and duration of past discrimination in Texas' educational system.[212]

Thus, its analysis of the corrective rationale for affirmative action at the law school is uncomplicated. Rather than addressing the historical issues, the court makes conclusory statements to the effect that there are no facts in the record to substantiate appellants' claims of present effects of past discrimination by the law school.[213] Having concluded that the historical record is inadequate, the court simply holds that the affirmative action program is not a compelling state interest under *Croson* and *Adarand*.[214]

The certainty with which the *Hopwood* court rejects the corrective rationale proffered by the state of Texas in defense of its affirmative action program is misplaced. The factual issues involved in this case were of national import and deserved careful, rather than cursory, consideration under the appropriate standard and applicable law.

C. The Diversity Rationale

Given its uncomplicated analysis of the law school's attempt to justify its admissions practices as a remedy for past discrimination, the court devotes most of its attention to whether Texas' affirmative action program can pass constitutional muster on the diversity rationale.[215] This part of the *Hopwood* opinion essentially consists of an attack on Justice Powell's opinion in *Bakke*,[216] as the court considers it the sole support in law for the diversity rationale for affirmative action.[217] Rebutting the legitimacy of Powell's unilaterally invented principle of justice, the court also squarely rejects the notion that diversity can serve as a rationale for affirmative action at the University of Texas.[218]

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212. *See supra* notes 110-135 and accompanying text.

213. *See* Hopwood v. Texas, 78 F.3d 932, 949 n.39, 952-54 (5th Cir. 1996); *but see* Hopwood v. Texas, 861 F. Supp. 551, 572-73 (W.D. Tex. 1994) (indicating that evidence presented at trial demonstrates lingering effects of past discrimination); *see also* note 127 *supra*.

214. *See* 78 F.3d at 950-51, 951 n.44, 955.

215. *See id.* at 941-48.

216. *See id.*

217. *See id.* at 945 ("In short, there has been no indication from the Supreme Court, other than Justice Powell's lonely opinion in *Bakke*, 438 U.S. 265 (1978), that the state's interest in diversity constitutes a compelling justification for governmental race-based discrimination.").

218. *See id.* at 944.

> We agree with the plaintiffs that any consideration of race . . . for the purpose of achieving a diverse student body is not a compelling interest . . . . Justice Powell's argument in *Bakke* garnered only his own vote and has

The court's reading of *Bakke* is problematic, however. While Justice Powell's opinion did champion diversity as a rationale for affirmative action, the holding of *Bakke* was narrower. Four justices joined the portion of Powell's opinion that held that race may be counted as a "plus" in the university admissions process.[219] These justices embraced affirmative action in higher education as a corrective measure for past discrimination.[220] Some passages of their opinion implied that these policies may be used to increase representation of minorities on college campuses, even without specific findings of past discrimination by governmental bodies, on the theory that such underrepresentation related intuitively to that history.

> [O]ur cases under Title VII . . . have held that . . . Congress may require or authorize preferential treatment for those likely disadvantaged by societal racial discrimination. Such legislation has been sustained even without . . . findings of intentional racial discrimination . . . . These decisions compel the conclusion that States also may adopt race-conscious programs designed to overcome substantial, chronic minority underrepresentation where there is reason to believe that the evil addressed is a product of past racial discrimination.[221]

Indeed, the opinion went so far as to invoke the notion of "disparate impact" in upholding the University of California's af-

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never represented the view of a majority of the Court in *Bakke* or any other case.

Id.

219. *See* Regents of the Univ. of Cal. v. Bakke, 438 U.S. 265, 326 (1978) (Brennan, White, Marshall and Blackmun, JJ., concurring in the judgment in part and dissenting in part) ("Mr. Justice Powell agrees that some uses of race in university admissions are permissible and, therefore, he joins with us to make five votes reversing the judgment below insofar as it prohibits . . . race-conscious programs in the future.").

220. *See id.* at 325 (stating that the "central meaning" of the opinion was that the government could take race into account to remedy disadvantages cast on minorities by past prejudice).

221. *Id.* at 366.

> [T]he presence or absence of past discrimination by universities or employers is largely irrelevant to resolving respondent's constitutional claims. The claims of those burdened by the race-conscious actions of a university or employer who has never been adjudged in violation of an antidiscrimination law are not any more or less entitled to deference than the claims of the burdened nonminority workers . . . [who] are innocent of past discrimination.

Id. at 365; *see also id.* at 367 n.40 ("[T]he State is [not] powerless to minimize the consequences of racial discrimination by voters when it is regularly practiced at the polls.") (quoting United Jewish Orgs. v. Carey, 430 U.S. 144, 167 (1977)); *Bakke*, 438 U.S. at 370-71 ("Davis clearly could conclude that the serious and persistent underrepresentation of minorities in medicine . . . is the result of . . . purposeful discrimination against minorities in education and in society generally, as well as in the medical profession.").

firmative action policy.[222] Thus, the votes of these four justices, plus that of Powell, who justified the policy on a diversity theory,[223] should be deemed to provide authority in support of the *general concept* of affirmative action.[224] *Bakke* should be read broadly as a statement that universities are not enjoined from taking race into account in admissions, rather than narrowly.

Even assuming, arguendo, that the *Hopwood* court is correct that only Justice Powell embraced the diversity rationale for affirmative action in *Bakke*,[225] its dismissal of diversity as a compelling interest is questionable. Language in *Wygant v. Board of Education*[226] squarely contradicts the court's assumption that diversity cannot be used to support affirmative action in education.[227] *Wygant* appears to carve out, in the educational context, a special exception to the jurisprudential norm, holding that past discrimination is the only legitimate rationale for race-conscious remedies.[228]

In any event, it seems clear enough that the prerogative lies with the Supreme Court, rather than with a single appellate panel, to decide whether to maintain or eliminate the legitimacy of the diversity rationale in the educational context. In taking it

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222. *Bakke*, 438 U.S. at 369.

> Properly construed, therefore, our prior cases unequivocally show that a state government may adopt race-conscious programs if the purpose of such programs is to remove the disparate racial impact its actions might otherwise have and if there is reason to believe that the disparate impact is itself the product of past discrimination, whether its own or that of society at large.

Id.

223. *See id.* at 311-12 ("[Attainment of a diverse student body] clearly is a constitutionally permissible goal for an institution of higher education . . . . The freedom of a university to make its own judgments as to education includes the selection of its student body.").

224. *See supra* notes 216-222 and accompanying text (discussing rationales for affirmative action and Justice Powell's views in particular).

225. *See* Hopwood v. Texas, 78 F.3d 932, 942 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996) ("Justice Powell's opinion has appeared to represent the 'swing vote,' and though, in significant part, . . . it was joined by no other Justice, it has played a prominent role in subsequent debates concerning the impact of *Bakke*.").

226. 476 U.S. 267 (1986).

227. *See id.* at 286 (O'Connor, J., concurring in part and in the judgment) ("[A]lthough its precise contours are uncertain, a state interest in the promotion of racial diversity has been found to be sufficiently 'compelling,' at least in the context of higher education . . . .").

228. For arguments that affirmative action is uniquely appropriate in educational environments, see Amar & Katyal, *supra* note 200; Brest & Oshige, *supra* note 25, at 862-65; and *An Evidentiary Framework for Diversity as a Compelling Interest in Higher Education*, 109 HARV. L. REV. 1357 (1996).

upon itself to disestablish the legitimacy of the diversity rationale and thus of *Bakke*, the Fifth Circuit created dubious precedent.[229]

V. Beyond Determinism: Toward a Mode of Analysis that Contemplates the Totality of Evidence About Social and Material Inequality

To be sure, a future court will revisit the Fifth Circuit's interpretation of *Bakke's* meaning. Against the backdrop of the previous discussion of the *Hopwood* court's putative overruling of *Bakke*, this Part suggests legal and policy implications of the *Hopwood* court's reasoning.

A. From Instrumental to Functional Judicial Reasoning About the Legality of Race-Conscious Remedies

A fundamental thesis of this Article has been the clouding influence of science, specifically the quantitative representations of ability represented by the TI. By analyzing the text of the *Hopwood* court's opinion against the backdrop of precedent, I have demonstrated ways in which the illusion of scientific certainty obfuscated historical and contemporary socioeconomic issues presented in this case.[230] I have also shown that the court overlooked the conventional judicial standard for considering scientific evidence because of its zeal for the TI.[231] The first section of this concluding part considers on a more abstract level why the type of scientific rationality relied upon by the Fifth Circuit is inappropriate for deciding the important issues raised in constitutional law cases such as *Hopwood*. In doing so, I explain how the mistakes of the *Hopwood* court should lead future courts to a more functional mode of reasoning about affirmative action in education.

A single observation illuminates why future courts should avoid the approach favored in *Hopwood*: The fundamental difference between science and law is that while rigid techniques are inherent in the scientific method and a search for accurate results is the objective of scientific inquiry,[232] the modes of reasoning typically used in law are varied and amorphous in nature, and the goal of legal inquiry is functional.[233] To be sure, lawyers aspire to con-

229. *See Hopwood*, 78 F.3d at 944.

230. *See supra* notes 137-157 and 191-228 and accompanying text.

231. *See supra* notes 158-185 and accompanying text.

232. *See* Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 593 (1993) (discussing methods and objectives of scientific inquiry).

233. *See* FLETCHER, *supra* note 18, at 192; FOSTER & HUBER, *supra* note 29, at 17.

sistency; the law gains legitimacy through adherence to certain conventions of interpretation and uniform application of rules.[234] Unlike scientists, however, lawyers invoke a range of concepts or modalities in reasoning about appropriate outcomes in cases.[235] Lawyers make arguments based conceptually on efficiency, utility, retribution, autonomy, equality, or the universal idiom of rights.[236] They formulate historical, textual, structural, doctrinal and prudential arguments to support certain outcomes over others.[237] These modes of reasoning are invoked in furtherance of *stare decisis*, but also in service of social and political change.[238]

Inconsistencies, or novel interpretations of old precepts, gain legitimacy by reference to a lawyer's or judge's search for justice.[239] Indeed, the pursuit and achievement of justice and just results is a transcendent value in the American legal system.[240] At the same time as justice is held as a transcendent value, it is commonly accepted that justice is relative: the extent to which an outcome is just is a function of prevailing standards and practices in moral theory and among presiding judges.[241] Thus, law is often a highly indeterminate enterprise.[242] In this important respect, law is quite unlike the scientific method. By concerning itself with the racial differences in applicants' TIs and assuming the validity of this index,[243] rather than reasoning about it from a critical perspective, the *Hopwood* court failed to appreciate or respect this reality.

It is incumbent upon future courts to develop a form of reasoning about affirmative action in higher education that is more nuanced than was the analytical approach relied upon by the *Hopwood* court. For the Fifth Circuit's opinion in this case amounts to a rigid application of the strict scrutiny standard to the adverse ruling against the University of Texas Law School's affirmative action program. It does not seem to be an intellectually

234. *Cf.* PHILIP BOBBITT, CONSTITUTIONAL INTERPRETATION 144-46 (1991) (arguing that although rules are applied to attempt to achieve justice, rules or principles are not needed to achieve justice).

235. *See id.* at 11-22.

236. *See* FLETCHER, *supra* note 18, at 192.

237. *See* BOBBITT, *supra* note 234, at 12-13.

238. *See id.* at 23-28, 122-40, 158.

239. *See id.* at 118-21, 146-49.

240. *See id.*

241. *See id.* at 168.

242. *See id.* at 31-42.

243. *See* Hopwood v. Texas, 78 F.3d 932, 935-38 (5th Cir. 1996), *cert. denied*, 116 S. Ct. 2580 (1996).

honest, thoughtful, or particularly rigorous engagement of the facts.

How might courts avoid the insufficiency of the *Hopwood* court's analysis? A more nuanced doctrinal approach requires, most of all, intellectual distance from the strict scrutiny standard, before attempting to apply it to the facts of specific cases.[244] This word formula—which appears nowhere in the Constitution—is much to blame for the collective of tortured opinions issued by courts over the last two decades that we generously term the "jurisprudence" on affirmative action.[245] It has come to overwhelm, if not strangle, analysis of cases involving race and race-conscious remedies.[246] The result has been to blind some courts to the real stakes at issue in cases involving affirmative action, in all their complexity.[247]

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244. *See* Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995) (holding that strict scrutiny should apply to all racial classifications); Metro Broad., Inc. v. Federal Communications Comm'n, 497 U.S. 547 (1990) (applying intermediate level scrutiny to preferences for broadcast licenses to minorities); Regents of the Univ. of Cal. v. Bakke, 438 U.S. 265 (1978) (establishing a category of benign racial discrimination); Korematsu v. United States, 323 U.S. 214 (1944) (establishing a strict scrutiny standard for review of racial classifications); *Hopwood*, 78 F.3d 932 (applying a strict scrutiny standard to a law school's affirmative action program).

245. For a seminal discussion of the extra-textual mediating principles applied in traditional equal protection jurisprudence to interpret degrees of means-end rationality, see Owen M. Fiss, *Groups and the Equal Protection Clause*, 5 PHIL. & PUB. AFFAIRS 107, 107-08, 111-15 (1976).

246. Professor Fiss elucidates the structural reasons why formulas may overwhelm constitutional analysis:

> The antidiscrimination principle seems to respond to an aspiration for a "mechanical jurisprudence" . . . by making the predicate of intervention appear technocratic. The antidiscrimination principle seems to ask no more of the judiciary than that it engage in what might at first seem to be the near mathematical task of determining whether there is . . . "overinclusiveness" or "underinclusiveness" or . . . the right "fit" between means and ends. The terms used have an attractively quantitative ring. They make the task of judicial judgment appear to involve as little discretion as when a salesman advises a customer whether a pair of shoes fit.

Id. at 120; *see also* Owen M. Fiss, *Objectivity and Interpretation*, 34 STAN. L. REV. 739 (1982) (discussing the "bounded objectivity" of law's disciplining rules and the dynamic relationship among text, reader and rules that produces interpretation).

247. *See, e.g.*, Coalition for Econ. Equity v. Wilson, 122 F.2d 692, 701-02 (9th Cir. 1997) (determining that Proposition 209 banning race and gender preferences is presumptively constitutional on theory that the strict scrutiny test as applied in Adarand Constructors v. Pena, 515 U.S. 200 (1995) and Richmond v. J.A. Croson Co., 488 U.S. 469 (1989), does not countenance inconsistency); Podberesky v. Kirwan, 38 F.3d 147, 153 (4th Cir. 1994), *cert. denied*, 514 U.S. 1128 (1993) (deemphasizing past discrimination and accusing district court of "restlessness in applying strict scrutiny standard" because of its failure to analyze scholarship program in terms of applicants "qualified" by standardized test scores); *id.* at 155-58 (finding underrepresentation and low retention rates of African-American students insufficient to satisfy strict scrutiny on theory that their academic underachieve-

Redirecting intellectual energies from the word formula to the real stakes requires a consideration of much more than the particular parties represented in any one case. For society at large is at stake in these cases: educational opportunity is at stake; the lives of individual students are at stake; the economic viability and social well-being of various groups of students are on the line, as is the health of the nation as a whole. Reviewing a case from this point of departure should *logically* lead to a consideration of the totality of evidence about social and material existence that is the backdrop in cases involving affirmative action in education. From this perspective it should be clear why demographic differences among all students affected by affirmative action policies (race, religion, parental income/occupation or geographic origin),[248] as well as their individuality (for instance, college major, career aspiration, unique characteristics or abilities) should be a part of a court's analytical calculus when reaching determinations about the various affirmative action programs.

Regardless of the observer's perspective on the purpose of judicial review or her political orientation, it is important to appreciate all of the interests at stake in these cases. Otherwise, like a public that rejects the verdict of a jury that deliberates hastily in a case of national interest, readers of an opinion written by a court seemingly indifferent to the claims of certain affected parties may doubt the integrity of the court's process of reasoning. Legitimacy is lost.

If judges can appreciate cases involving affirmative action in education in terms of the national values and concrete populations at stake in such cases, they necessarily will avoid the instrumental rationality that undermines the legitimacy of our legal system. Although the loss of instrumental reasoning will probably have an influence on the substantive outcome of the case, we should be less interested in outcomes than methodology. Regardless of the ultimate outcome in a case, it is important for a court to reason thoughtfully and work diligently to produce cogent opinions where affirmative action is at issue.

Of course, for some time now the legal literature has included discussions of the constitutional significance of competing values

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ment and failure results from economic factors unrelated to past discrimination).

248. The stress is on logic here since any consideration of race usually is viewed as aberrational or evil in the jurisprudence and academic writing on race, where Aristotelian symmetry is the goal. Removing ourselves mentally from the traditional legal jargon allows us to view demographic characteristics contextually, in terms of their actual salience in everyday life.

and interests.[249] Judges have been encouraged to divine the constitutional significance of competing values by turning to reason, tradition or neutral principles, for instance.[250] Judicial "interest balancing" was a particularly strong component of the analytical calculus in the school desegregation cases.[251]

I do not mean to suggest continued reliance upon the modalities of reasoning that have characterized judicial and academic discussion of difficult sociopolitical issues heretofore, however. Far too often, judges purporting to reason in these terms have sacrificed the vision of equality espoused by those who historically have existed on the margins of society.[252] Nowhere was this more apparent than in the school desegregation cases.[253]

It is now clear that commitment to interest balancing alone will not produce just results: substantive rules and interpretive constructs may inform and mediate a judge's intention to consider a multiplicity of interests such that doing so becomes vacuous, an empty academic exercise. For instance, the interest balancing principle that was common in jurisprudence during the heyday of school desegregation litigation was wedded to a corrective theory of justice that was often linked to inadequate remedies to obviously constitutionally impermissible conditions.[254] The narrow conception of causation embedded in the compensatory theory of justice enables significant restrictions on the scope and duration of remedial efforts.[255] This is a practical limitation of corrective jus-

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249. *See* ELY, *supra* note 130, at 43-72.

250. *See id.* at 54-68; Fiss, *supra* note 245, at 120-22.

251. Paul Gewirtz, *Remedies and Resistance*, 92 YALE L.J. 585, 609-28 (1983).

252. *See* Paul Brest, *Who Decides?*, 58 S. CAL. L. REV. 661, 666-70 (1985) (discussing the problem of judicial insensitivity to "interests and values" of important "subcultures" as demonstrated, for instance, in cases concerning indigence).

The traditional mode of reasoning about equal protection issues produces results consistent with the status quo because subjectivity inheres in it. Owen Fiss addresses this problem:

> The promise of value neutrality is only an illusion. On the explicit level, the court must determine whether the state end is legitimate, which classifications are suspect, which rights are fundamental, which legitimate state interests are compelling, and whether the occasion is a proper one for invoking the one-step-at-a-time defense. On the implicit level, the preferences of the judge enter the judicial process when he formulates the imaginable state purposes and chooses among them, and also when he decides whether the criterion is sufficiently ill-suited to warrant invalidation—whether the right degree of fit is present.

Fiss, *supra* note 245, at 121.

253. *See* DERRICK BELL, RACE, RACISM AND AMERICAN LAW 544-85 (3d ed. 1992).

254. *See* Gewirtz, *supra* note 251, at 599-601 (discussing costs and rights maximizing in balancing interests).

255. *See id.* at 589-99; Gewirtz, *supra* note 18, at 732-33, 734.

tice. A more fundamental flaw is structural in nature. While corrective justice may reach patently unequal policies and practices (e.g., state-mandated school segregation at the University of Texas Law School, i.e., *Sweatt v. Painter*), it does not necessarily challenge practices or policies that are subordinating but not intentionally discriminatory (e.g., "White flight").[256] The matter discussed here—the potentially discriminatory effect of the TI and the *Hopwood* court's uncritical acceptance of it nonetheless—falls into this second category of unjust conditions.

In other words, the predominant conception of justice fails to contemplate an inequality that has been characterized in this Article as being of immense import. It is because of this logical and moral lacuna that I suggest the embracing of a rationality that not only rejects instrumentalism methodologically, but which incorporates material and social conditions into applicable rules and norms.

This would be a functional interpretive scheme. Under it, race would not be viewed one-dimensionally—not simply in terms of a suspect class or as a category to which strict scrutiny is to be rigidly applied. Rather, courts would interpret the Equal Protection Clause concretely, in terms of the groups described above,[257] and with affirmative recognition of the distributional claims upon societal resources being made by various groups.[258] Functional analysis would require an inquiry as to facts that might mitigate the most stringent application of the strict scrutiny standard.

A judge employing this mode of reasoning might consider whether affirmative action in education is unique, as compared to a firm's race-conscious hiring practices, for instance. In the event that a principled distinction could or could not be made between employment and education law, the strict scrutiny standard would or would not be applied differently in these substantive areas. A Solomonic alternative might be the most judicious approach: the

256. *See* Gewirtz, *supra* note 18, at 731-33, 752-53 (promoting consideration of three elements—violation, linkage and limits—in constructing a remedy); Gewirtz, *supra* note 251, at 628-37 (examining the causes, effects and significance of White flight).

257. *But cf.* Fiss, *supra* note 245, at 129 (stating that the antidiscrimination principle's inability to recognize social groups explains much of the aversion to affirmative action).

258. *See* Brest, *supra* note 252, at 669-70; *see also* Cass R. Sunstein, *Naked Preferences and the Constitution*, 84 COLUM. L. REV. 1689 (1984) (arguing that the goal of modern constitutional doctrine is to prevent the distribution of resources or opportunities to groups on the basis of raw political power). Though informative, Sunstein's theory is too loyal to the political process theory to be consistent with the modality of reasoning advocated in this Article.

court could import some concepts and standards from the employment cases to the educational context, but not others. For example, a court might decide to require uniform application of certain standards for validation of ability testing that result in a racially disparate impact on educational and employment opportunities. On the other hand, a court might decide that it would be inappropriate to require identical standards of proof for claims brought under Title VII and Title VI.[259]

In any event, the functional approach should lead courts to consider empirical evidence about intellectual ability in a critical light and make historically-informed, contextual judgments about competing claims to educational access. The court that conceptualizes educational affirmative action cases in terms of the totality of available evidence about the social and material reality of affected students would be of an altogether different mindset than the court whose constitutional analysis is tripped up by racial differences in LSAT scores. The court focused on broad, societal issues is in a better position to avoid mechanical analysis when evaluating affirmative action policies in education.

B. Contesting the Meaning of Real Racial Differences in LSAT Scores

Hopwood also suggests that the real racial differences in admissions indexes between White and non-White applicants deserve careful consideration by advocates of educational opportunity. In my judgment, universities have been able to downplay their use of the "cold numbers" in admissions precisely because of affirmative action policies. Affirmative action has been used effectively to correct for the well-documented pattern showing that African-Americans and Latinos are systematically disadvantaged by use of admissions indexes that rely heavily upon the LSAT's assessment of ability.[260]

Thus, contrary to conventional wisdom, affirmative action may be viewed as a conservative approach to dealing with issues of social justice in education. For one could argue that a truly proac-

259. For a discussion of the implications of importing the disparate impact analysis used in employment discrimination cases brought under Title VII to education cases brought under Title VI, see *Teaching Inequality: The Problem of Public School Tracking*, 102 HARV. L. REV. 1318, 1334-41 (1989).

260. *See* Sturm & Guinier, *supra* note 26, at 956 ("[A]ffirmative action . . . supplements an underlying framework of selection that is implicitly arbitrary and exclusionary. It does not challenge the overall operation of a conventional and static selection process; instead, it creates exceptions to that process.").

tive approach to remedying race-based inequalities in education would require fundamental changes in policies and practices.[261] Truly equal opportunity might require reconstruction of testing and application procedures, for instance, rather than band-aids like policies that allow for admission of African-Americans and Latinos with lower test scores than Whites.

Ironically, then, the *Hopwood* decision may have helped to create a more radical factual landscape upon which to consider remedies for racial inequality in higher education in the future. The viability of the band-aid approach to remedying racial injustice in higher education has been predicated upon the legal and political viability of affirmative action programs. Since both the legal and political pendulums have swung decidedly against race-based affirmative action,[262] the stakes have been raised in the debate over access to education. Questions about race and standardized representations of ability may now be resolved on terms that beg socially transformative responses to racial inequality in education rather than band-aid approaches. Whereas the LSAC's cautionary policies previously have amounted to legalese with which the formulator of the LSAT protects itself from liability, *Hopwood* and the current political climate have set the stage for groups disparately impacted by the use of LSAT to demand true accountability from LSAC and law schools that rely upon the test in admissions. The validity of the LSAT for measuring the aptitude of minority law school applicants will be a pivotal issue in future preferential treatment cases.

In fact, the question is ripe for debate in the courts. Proponents of equal access can challenge the validity of the LSAT in an independent action under Title VI of the Civil Rights Act of 1964.[263] A statistician's testimony as to the invalidity of the LSAT

261. *Cf.* CORNEL WEST, RACE MATTERS 63-65 (1993) (describing affirmative action as a "compromise" measure rather than a "substantive redistributive measure[ ]"); Sturm & Guinier, *supra* note 26, at 956 (calling affirmative action an "incrementalist strategy of inclusion").

262. In addition to the situation in Texas, an anti-affirmative action legislative measure has been enacted by Californians. *See* Coalition for Econ. Equity v. Wilson, 110 F.3d 1431 (9th Cir. 1997) (holding that an initiative passed by the majority of California's voters banning governmental use of race- or sex-based preferences in employment and admissions is not unconstitutional); *see also* Podberesky v. Kirwan, 956 F.2d 52 (4th Cir. 1992), *cert. denied*, 514 U.S. 1128 (1993) (finding that the University of Maryland's scholarship program for African-Americans is an unconstitutional racial preference). Since passage of the California initiative, Black admissions to Berkeley and UCLA have dropped 80%, while admissions of Hispanics have dropped 50% and 32%, respectively. *See* Gwynne, *supra* note 7, at 48.

263. 42 U.S.C. § 2000d (1994) ("No person in the United States shall, on the

for members of a protected racial class can be used to defend a remedial affirmative action policy that works to correct for the disparate impact of its use upon African-American and Latino students.[264]

In the event of a legal challenge to the LSAT's disparate impact on some groups of racial minorities, it is important to distinguish how different schools interpret and use test scores in their admissions processes. A distinction should be made between use of the test to weed out those students altogether unable to succeed in law school, and use of the test to weed out lower from higher scorers among the students who can attain passing grades in law school.[265]

Additionally, courts should be pressed to reconcile the doctrinal inconsistency in the way race-based differentials in ability test scores are treated in employment and elementary and secondary education law, with the way they are treated in higher education law.[266] It is incumbent upon the courts to offer some principled basis for the dissimilar doctrinal approaches with respect to the two bodies of law. Alternatively, courts can approach the issue of ability testing in higher education in a manner consistent with the approach taken in these other areas.

C. The Design of Educational Admissions Programs: Toward Socially Responsible Usage of Quantitative Variables Signifying Ability

University administrators and other formulators of educational policy, rather than advocates, are in the best position to learn from *Hopwood*. These institutional gatekeepers should bear in mind that universities may be held liable under Title VI for relying upon quantitative criteria that disparately impact racial minorities in admissions. More importantly, they can attempt to make substantive changes in policy to ensure equal educational opportunity *before* being sued.

Most law schools could achieve fundamental change by developing admissions procedures that explicitly allow for substantial

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ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.").

264. *See supra* notes 187-189 and accompanying text.

265. *See* Simien, *supra* note 12, at 373-75; Sturm & Guinier, *supra* note 26, at 968-97.

266. *See supra* notes 139-157 and accompanying text (discussing education and employment discrimination case law addressing standardized measurements of ability).

consideration of non-quantifiable indicia of academic success. Since most admissions systems probably can be said to consist of two broad categories of applicants—presumptive admits and those who are not presumptive admits—most institutions already rely substantially upon factors other than the "cold numbers" in making admissions decisions.[267] Non-quantitative elements already are taken into consideration not only with respect to students of Color, but for all applicants.[268] Thus, this author only suggests that written policies reflect reality.

In any event, administrative convenience is an insufficient rationale for using admissions criteria that deny access to historically subordinated groups.[269] Even assuming that test scores are useful to some degree, it seems untenable that testing practices that perpetuate inequality should be as pervasive as they are in contemporary society. Thus, policy makers should generally reconsider the great extent to which standardized tests determine which students gain access to higher education, especially the law schools.

Conclusion

Moral reasoning requires courts to consider the nation's social problems and the social meaning of legal rulings in all their complexity. While it may seem easier in the short term to neglect nuance, such an analytical approach does not constitute a jurisprudence of integrity. Nowhere is judicious reasoning more important than when courts formulate rules that affect how educational resources are distributed, for schools are sites where the histories, perspectives and subjectivity of groups and individual students are made most meaningful. Given the significance of higher education to an individual's long-term prospects, it is crucial that courts scrutinize any process that threatens access to schooling for all. There should be no exception to this rule for conceptions of ability that are held out as scientific in nature. Standardized testing policies are not above the law.

Giving due consideration to the social context in which educational issues are adjudicated, then, let no other court follow the example of the Fifth Circuit in the *Hopwood* opinion. If dramatic

267. *See supra* notes 63-64 and accompanying text.

268. *See, e.g.*, Sturm & Guinier, *supra* note 26, at 988-1009 (discussing the salience of socioeconomic factors to the higher education admissions process); *see also supra* notes 63-65 and accompanying text.

269. *See* Craig v. Boren, 429 U.S. 190, 198 (1976).

change is to be mandated by a court, it is incumbent upon that court to privately formulate and then present to the public an opinion that thoroughly explains why a break with precedent is the appropriate outcome and preferred alternative among the many that the law allows. In this way, the legitimacy of the judicial process is more likely to be preserved and just results more likely to be achieved.

APPENDIX

In the United States District Court for the Western District of Texas

Austin Division

CHERYL J. HOPWOOD,
DOUGLAS W. CARVELL,
KENNETH R. ELLIOT,
and DAVID A. ROGERS,

Plaintiffs,

CIVIL NO. A-92-CA-563-SS

v.

STATE OF TEXAS,
UNIVERSITY OF
TEXAS BOARD
OF REGENTS;
et al.,

Defendants.

DECLARATION OF MARTIN M. SHAPIRO

MARTIN M. SHAPIRO, pursuant to penalty of perjury under 28 U.S.C. § 1746, does hereby state the following:

1. My name is Martin M. Shapiro. I am more than twenty-one years of age, and am under no legal disability of any kind. This declaration is given in connection with the above styled action.

2. I hold the position of Professor of Psychology at Emory University, Atlanta, Georgia. I have taught courses in statistics, experimental design, and psychological tests and measurements for approximately thirty-five years. I received a Ph.D. degree from Indiana University with concentrations in Psychology and Mathematics and have published statistical papers in learned journals and other books.

3. I have testified before legislative committees in New York, Wisconsin and California regarding the validity of the standardized admissions examinations currently used in colleges, graduate

schools and professional schools. I have served as a member of the New York State Advisory Committee for Bias in Standardized Testing, which was charged by the state legislature with the task of studying and submitting a report on possible racial/ethnic bias in standardized admissions examinations, including, inter alia, the Law School Admission Test.

4. I have testified as an expert witness in statistics and test validation in the United States District Courts in Arkansas, Florida, Georgia, Indiana, Kansas, New York, Tennessee, and Texas.

5. A copy of my Vita is attached to this declaration.

6. I have reviewed various documents describing the admissions procedures, the criteria employed, and the numerical results of the admission process at the University of Texas School of Law. In addition to my own education, training and experience in the areas of testing and statistics, I specifically relied upon the following documents for information regarding the admissions procedures and criteria utilized by the University of Texas School of Law:

Memorandum, dated December 15, 1987, to President William H. Cunningham and the Executive Officers of the University of Texas at Austin, from Dean Mark G. Yudof, Re: School of Law Admission Procedures. (Yudof Deposition Exhibit M-81),

Memorandum, dated October 3, 1991, to Mark Yudof, from-Mike Sharlot, Re: Minority admissions and credentials, 1983-91. (Yudof Deposition Exhibit M-86),

Memorandum, dated November 1, 1985, to Admissions Committee, from Mark G. Yudof, Re: Admission Standards and Procedures for 1986 Entering Class. (Johanson Deposition Exhibit MSO),

Memorandum with INDEX FORMULA SELECTION FORM FOR 1991-92 LSDAS REPORTS and INDEX FORMULA SELECTION FORM FOR 1992-93 LSDAS REPORTS attached, dated Thursday, May 18, 1992, to Admissions Committee, cc: Dean Yudof, from Stanley Johanson, Chairman, Admissions Committee, Re: Proposed Revisions of Texas Index Formula. (Johanson Deposition Exhibit M33),

Memorandum, dated June 8, 1992, from University of Texas School of Law (6882), to Law School Admission Services, with an attached Law School Admission Services

MEMORANDUM, dated May 8, 1991, to Law School Admissions Officers, from Robert Carr, Assistant Vice-president, Data Services, Subject: LSDAS Report Data - Index Calculations. (Pages labeled D00595 to D 00598), and Law School Admission Services

MEMORANDUM, dated May 17, 1991, to Law School Admissions officers, from Robert Carr, Assistant Vice-president, Data Services, Subject: LSDAS Report Data - Index Calculations. (Pages labeled D 00601 to D 00603).

7. I also have reviewed two Law School Admission Services regression analyses, discussed in §§ 16-25 and §§ 26-33, respectively, *infra*, pertaining to the differential validity of the admission procedures used at the University of Texas School of Law, University of Texas at Austin (hereinafter, referred to as the Law School). Subsequently, I additionally requested, through counsel for the Thurgood Marshall Legal Society and the Black Pre-Law Association, the raw data underlying the publicly available analyses, excluding any individual identifying information, but was informed that the Law School could not provide these data. Consequently, my observations and opinions, as contained in this declaration, necessarily will be based on analyses performed by others. Although I would have preferred to have carried out my own calculations and might have been able to have reached even more definitive conclusions based upon additional analyses of the raw data, I am fully confident that the inferences which I have drawn from the Law School Admission Services' published results are valid. I shall limit my observations and opinions to the validity of the admission procedures as they are applied to White and African American applicants. Specifically, I have concluded (1) that the regression analysis results obtained by the Law School Admission Services conclusively demonstrate that the selection criteria which the Law School has used to evaluate African American applicants were invalid, (2) that the Texas Index should not have been used as an initial sorting criterion for African American applicants, but (3) that the practice of reducing the numerical values of the Texas Index required of African American applicants had, at least some, ameliorative effect upon the invalid application of the Texas Index.

THE TEXAS INDEX

8. The Law School, like almost every college and professional school in the United States, uses a statistical technique for estimating the relationship between two or more measures (for example, the Law School Admission Test score, undergraduate grade-point average and first-year law school grade-point average) to develop criteria for making its preliminary admissions decisions. This statistical technique is called a "linear regression equation" and the equation is almost always of the following form:

PREDICTED FIRST-YEAR GRADE-POINT AVERAGE = (TEST WEIGHT) X (ADMISSIONS TEST SCORE) + (GRADE

WEIGHT) X (PREVIOUS GRADE-POINT AVERAGE) + CONSTANT.

By using a linear regression equation to analyze the relationship between first-year grade-point averages and (a) the Law School Admission Test score and (b) the undergraduate grade-point average for the group of students whom it admitted in a previous year, a law school develops a formula based upon which it predicts how well a prospective student is likely to do in the first year of law school if the school decides to admit him or her. The linear regression equation produces a formula that tells the school how much weight to give each measure (for instance, admission test score and undergraduate grade-point average).

9. The values of the weights used in evaluating applicants are determined by a least-squares method which minimizes the squared deviations between predicted first-year grades and actually observed first-year grades of students admitted in previous years. Mathematicians and statisticians, by generally accepted convention, define a "best-fitting" line as a regression equation derived by a least-squares method. That is, a regression equation is a mathematical method of obtaining the "best" estimate of the relationship between a set of variables in this case, the Law School Admission Test score, the undergraduate grade-point average and first-year law school grades. A "linear" regression equation describes the best-fitting straight line which portrays the relationship between two variables. A linear "multiple" regression equation for three variables describes the best-fitting three-dimensional plane which portrays the relationship between those three variables. The linear multiple-regression equation does, with exact precision and for any number of variables, what a person can do visually for two variables by drawing a line that seems to fit a small set of points on a graph produced by a limited number of observations. In the case of almost all law schools, the task of calculating the weights for the linear multiple-regression equation is performed by the Law School Admission Services, Inc., which provides each school with the values of the least-squares weights to be given the Law School Admission Test (LSAT), the Undergraduate Grade-Point Average (UGPA) and the CONSTANT.

10. The weights, as determined by the Law School Admission Services, Inc., are calculated without reference to race or ethnicity of the first-year students and the same set of weights is employed in calculating the predicted first-year grade-point average for each subsequent applicant. The relationships between the individual predictor variables (LSAT and UGPA) and the criterion variable

(actual first-year grade-point average) can be shown graphically, in which case the weight which serves as multiplier for either the LSAT or the UGPA is pictured as the slope of the regression line and the CONSTANT is portrayed as the intercept point at which the regression line crosses the vertical axis (ordinate) of the graph.

11. The Law School referred to its least-squares regression equation which predicted first-year performance as the Texas Index. To evaluate 1991 applicants, when LSAT scores ranged from 10 to 48 and the UGPA ranged from 0.00 to 4.33, the Law School assigned a weight of 1.00 to the LSAT, a weight of 10.00 to the UGPA and a weight of 0.00 to the CONSTANT. To evaluate 1992 applicants, the Law School assigned weights of 1.25, 10.00 and 0.00, respectively. That is, for each Fall, 1991 applicant, Texas Index = LSAT + (10)(UGPA). Similarly, for each Fall, 1992 applicant, Texas Index = (1.25)(LSAT) + (10)(UGPA). The Texas Index is described in the Memorandum previously identified as Johanson Deposition Exhibit M33, dated Thursday, May 18, 1992, and cited in § 6, *supra*.

12. Considering that the highest possible LSAT score is somewhat more than ten times the highest possible UGPA, the effect of these weightings is to attach somewhat more importance to the LSAT than the UGPA. See, Memorandum with INDEX FORMULA SELECTION FORM FOR 1991-92 LSDAS REPORTS and INDEX FORMULA SELECTION FORM FOR 1992-93 LSDAS REPORTS attached, dated Thursday, May 18, 1992, (Johanson Deposition Exhibit M33) cited in § 6, *supra*. The Law School estimated the weightings to be equivalent to placing approximately 55-65% importance on the LSAT and approximately 35-45% importance on the UGPA. (These percentages are only crude estimates. An accurate comparison of relative weights requires the calculation of standardized weights, also called beta-weights. The beta-weights were not contained in the documents and analyses available to me.)

13. As indicated in Johanson Deposition Exhibit M33, the equation, Texas Index = (1.25)(LSAT) + (10)(UGPA), potentially generated Texas Index values from 33 to 103 (for applicants submitting LSAT scores expressed in two-digit values) and from 140 to 223 (for applicants submitting LSAT scores expressed in three-digit values), and served as the sole basis for initially sorting the large number of applications into the three categories of presumptive acceptance, discretionary zone, and presumptive denial. (These terms, as used to describe the three categories into which applicants were initially sorted, are misleading because all three

categories were subject to a subsequent discretionary re-evaluation, as described in § 15, *infra*.)

14. In practice, the applications were first divided into separate sets based upon state residency and race/ethnicity. The values of the Texas Index required for initial assignment into the three categories differed for Texas residents and non-residents; likewise, the values of the Texas Index required for initial assignment into the three categories differed for African American/Mexican American and other applicants.

15. All applications were, to some greater or lesser extent, evaluated more thoroughly after the initial sorting and prior to a final decision, less extensive evaluation being given to applications with the highest and lowest Texas Indices within each residency and ethnic/race group and more extensive evaluation being given to applications with middling Texas Indices within each residency and ethnic/race group.

THE CONCEPT OF TEST VALIDATION

16. The Law School Admission Services, Inc., the publisher of the LSAT, has published a summary of the results from studies of the validity of regression equations predicting first-year law school grade-point averages based upon weightings of the LSAT and the UGPA at 167 participating law schools in the United States and Canada. Linda F. Wightman, Predictive Validity of the LSAT: A National Summary of the 1990-1992 Correlation Studies, Law School Admission Council Research Report 93-05, December 1993 (hereinafter, referred to as Predictive Validity). This document was introduced at trial as Plaintiff's Exhibit 136.

17. A correlation coefficient describes the degree of co-relationship between variables. The correlation coefficient is used to describe the co-relationship between the actual first-year grade-point average of each student and the predicted first-year grade-point average of each student, where the predicted average had been generated by the linear regression equation based upon the weighted LSAT and the weighted UGPA.

18. In describing the co-relationship between two variables, a positive correlation coefficient signifies that the two variables move concurrently in the same direction; for example, students who have higher predicted first-year grade-point averages also have higher actual first-year grade-point averages, or students who have higher LSAT scores also have higher actual grade-point averages in law school, or students who have higher UGPAs also have higher actual first-year grade-point averages in law school. Conversely, in describing the co-relationship between two vari-

ables, a negative correlation coefficient signifies that the two variable move in opposite directions; for example, higher predicted first-year grade-point averages are associated with lower actual first-year grade-point averages, or higher LSATs are associated with lower grades in the first year of law school or higher UGPAs are associated with lower grades in the first year of law school. However, positive or negative direction cannot be attributed to multiple correlation coefficients which describe the relationships among three or more variables because the component pair-wise relationships may not all be in the same direction. The direction of the co-relationship between any one of the individual predictor variables and the criterion variable can be ascertained from the positive or negative sign attributed to the regression weight associated with the particular predictor variable.

19. The greater the positive correlation between LSAT and actual first-year grades, UGPA and actual first-year grades, and predicted first-year grade-point average and actual first-year grades, the more valid are these predictors of first-year law school grades. For the weighted regression equation to be a valid admission tool, the predicted grade-point average must be positively correlated with the actual grade-point average, and furthermore, the two individual predictors, LSAT and UGPA, must be positively correlated with actual grade-point average.

20. It has been reported that the average correlation between predicted grade-point average and actual grade-point average at the participating law schools is +0.49. Predictive Validity, Table 2, at p. 10. The square of a correlation coefficient is equal to the proportion of variance in one of the variables which is accounted for by the other variable. Therefore, a correlation coefficient of 0.49 signifies that approximately 25% of the variance among actual first-year grade-point averages is accounted for by the regression equation which predicts first-year grade-point average.

21. Although an average correlation of +0.49 with first-year grades arguably is a reasonable correlation from which to infer that a regression equation is a valid admission tool at the average law school, the inference may not hold for any particular law school. "One observation of note from the data in Table 2 is that the range of correlation coefficients for any of the prediction models varies substantially from law school to law school." Predictive Validity, at p. 18.

22. An inquiry regarding the validity of the regression equation must be specific to any given school, in the instant case, the University of Texas School of Law. Furthermore, if sufficiently

large numbers of students exist within distinct racial/ethnic groups, it is required professional psychometric practice to investigate the validity of the regression equation for each of the separate racial/ethnic groups.

23. "The possibility that differential prediction exists in educational selection for selected groups should be investigated where there is prior evidence to suggest that positive results may be found and where sample sizes are adequate." Standards for Educational and Psychological Testing, American Psychological Association, Standard 8.10, at p. 53 (hereinafter, referred to as APA Standards).

24. "Differential prediction is a broad concept that includes the possibility that different prediction equations may be obtained for different demographic groups, for groups that differ in their prior experiences, or for groups that receive different treatments or are involved in different instructional programs." APA Standards, at p. 12.

25. "The accepted technical definition of predictive bias implies that no bias exists if the predictive relationship of two groups being compared can be adequately described by a common algorithm (e.g., regression line). In the simple regression analysis for selection using one predictor, selection bias is investigated by judging whether the regressions differ among identifiable groups in the population. If different regression slopes, intercepts, or standard errors of estimate are found among different groups, selection decisions will be biased when the same interpretation is made of a given score without regard to the group from which a person comes. Differing regression slopes or intercepts are taken to indicate that a test is differentially predictive for the groups at hand." APA Standards, at pp. 12-13. Predictive bias is an important form of selection procedure invalidity.

A VALIDITY STUDY OF THE TEXAS INDEX

26. The Law School Admission Services, Inc., the publisher of the LSAT, also has published a set of results from studies of the validity of regression equations predicting first-year law school grade-point average based upon weightings of the LSAT and the UGPA, separately for White students and for African American students, at 51 participating law schools covering the entering law school classes of 1986, 1987 and 1988. Linda F. Wightman and D. G. Muller, An Analysis of Differential Validity and Differential Prediction for Black, Mexican American, Hispanic, and White Law School Students, Law School Admission Council Research Report 93-03, June 1990 (hereinafter, referred to as Differential Validity).

This document was presented at trial as Plaintiffs' Exhibit 137. The results of the analyses are presented for each of the participating law schools. The University of Texas School of Law appeared to be coded as school number 49 and this identification was confirmed through counsel for the Thurgood Marshall Legal Society and the Black Pre-Law Association, by counsel for the Law School.

27. In their Executive Summary, the authors of this Predictive Validity study conclude that the regression equations are valid predictors. "The validity data do not support the concern that the LSAT score or the traditional combination of LSAT score and undergraduate grade-point average are less valid for any of the minority groups than they are for the White group." Predictive Validity, at p. 1. However, it shall be demonstrated, *infra*, that this conclusion is not applicable to the University of Texas School of Law, for which the use of the regression equation is invalid for the African American students.

28. The authors give the following basis for their conclusion:

"Separate regression systems are developed for each of the three minority groups and are compared with a regression system based on White students from the same institution to determine the reasonableness of using a single equation based on the combination of the two groups. If the slopes, intercepts, and prediction errors are the same for the two separate regression systems, the data can be combined and a single prediction equation can be used for the total group. The results of these tests show few significant differences in slopes between the two groups, but a substantial number of differences in standard errors of estimate and in intercepts. As was true for the earlier studies on this topic, the prediction bias that is a consequence of significantly different slopes and intercepts does not fit the traditional definition of prediction bias. That is, when differences in slope are observed, the differences tend to be greater for the White students than for minority students. Likewise, in the majority of cases, the intercept for White students is larger than the intercept for minority students."

Differential Validity, at p. 1. The crux of the authors' argument is that there are "few" statistically significant differences in slope and intercept, and that these few differences do not disfavor minority students. However, this conclusion is not applicable to the University of Texas School of Law, for which the use of the regression equation is invalid for the African American students.

29. The results of the analyses for the University of Texas School of Law reported in Differential Validity, using the regres-

sion model which predicts first-year grade-point average (FYA) based upon the LSAT and UGPA in combination with each other for each racial group separately, are as follows:

SOURCE	STATISTIC	WHITE	AFRICAN-AMERICAN
Table 2	Number of Students	1500	59
Table 6	Mean LSAT	39.6	31.2
Table 6	Mean UGPA	3.5	3.0
Table 6	Mean FYA (on a transformed scale)	52.0	36.6
Table 7	Correlation(r) LSAT with FYA	+0.24	+0.25
Table 7	Correlation(r) UGPA with FYA	+0.16	-0.23
Table 7	Multiple Corr(r) LSAT, UGPA with FYA	0.35	0.28*
Table 10	Regression Weight of LSAT	0.93	0.36
Table 10	Regression Weight of UGPA	+7.94	-3.35
Table 10	Intercept	-12.78	+35.39

*note that the African American multiple correlation coefficient equal to 0.28 is the result of a positive regression weight associated with LSAT and a negative regression weight associated with UGPA

30. An inspection of the statistics reproduced in § 29, *supra*, reveals that the multiple correlation between the first-year grade-point average predicted by the combination of LSAT and UGPA with the actual FYA is rather poor for African American students, 0.28. A multiple correlation of 0.28 corresponds to the finding that only 8% (0.28-squared) of the variance in the actual FYAs of African American students is accounted for by the multiple regression equation which predicts FYA from LSAT and UGPA.

31. Of even greater import, the multiple correlation coefficient of 0.28 for African American students is achieved only if the UGPA of each African American student is multiplied by a weight equal to -3.35. That is, for African American students, this small 8% predictability is achieved only if lower undergraduate grade-point averages are made to predict higher first-year averages in the Law School. It is not reasonable that the Law School, based on this regression equation, would select the African American applicants with the worst undergraduate grade-point averages over the African American applicants with the best undergraduate grade-point averages. "Validity is the most important consideration in

test evaluation. The concept refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores. Test validation is the process of accumulating evidence to support such inferences. A variety of inferences may be made from scores produced by a given test, and there are many ways of accumulating evidence to support any given inference. Validity, however, is a unitary concept. Although evidence may be accumulated in many ways, validity always refers to the degree to which that evidence supports the inferences that are made from the scores. The inferences regarding specific uses of a test are validated, not the test itself."

APA Standards, at p.9. Consequently, a selection procedure based upon a regression equation which would predict first-year grade point average equal to +35.39 + 0.36 LSAT - 3.35 UGPA can not be a valid selection procedure.

32. Furthermore, the regression equations for the White and African American students at the Law School have statistically significantly different slopes (regression weights) and intercepts. Differential Validity, Table 12, at p. 18. An admission process which applied the same Texas Index equation to all applicants would create predictive bias. *See* § 25, *supra*, for the technical definition of predictive bias.

33. The authors note, more generally, that the results of the tests of statistical significance "fail to confirm that the regression systems are identical for each group (minority and nonminority) at each school, [but that] the regressions estimated from the combined data are most similar to the ones that are most frequently used by the majority of law schools. Clearly, if data support the need to rely on separate regression systems, they easily could be produced when sample sizes are sufficiently large." Differential Validity, at p. 19.

PRACTICAL EFFECT OF LAW SCHOOL ADMISSION PROCESS

34. The professionally acceptable method of dealing with a finding of differential prediction is to use separate regression equations for the groups whose regression equations statistically significantly differ from each other in slope or intercept, as correctly suggested by the authors of Differential Validity, quoted in § 33, *supra*. However, the use of separate regression equations would not have been feasible at the University of Texas School of Law. The regression equation for the African American applicants would have required the absurd result that, everything else held constant, African American students with lower UGPAs be pre-

sumptively accepted over African American students with higher UGPAS.

35. The best, most valid, procedure would have been to eliminate the use of the Texas Index as an initial sorting criterion for the African American applicants and to proceed directly to the more extensive evaluation and review of the applications. Neither equation, Texas Index = (1.00)(LSAT) + (10)(UGPA) for the 1991 entering class or Texas Index = (1.25)(LSAT) + (10)(UGPA) for the 1992 entering class, had any predictive validity with respect to the African American applications. *See* § 25, *supra.*

36. Instead of eliminating the use of the Texas Index for African American applicants, the Law School lowered the required Texas Index values for the initial sorting of the African American applicants. The effect was to reduce the number of African American applicants who would have been invalidly presumptively denied admission.

37. Eliminating the use of the Texas Index for African American applicants would have had greater validity than lowering the required Texas Index values for African American applicants. However, lowering the required values did improve the validity of the admission process by reducing the number of presumptive denials. The lowering of the required Texas Index values for the African American applicants at least partially ameliorated the invalid preclusive effect of the Texas Index.

38. On the other hand, the least valid procedure would have been to initially sort all applicants by applying the same required Texas Index values to both White and African American applicants. The consequence of applying the same Texas Index requirements to both White and African American applicants would have been to eliminate almost all African American applicants, generally, and to eliminate many or all of the most qualified African American applicants, specifically.

I verify under penalty of perjury that the foregoing is true and correct.

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MARTIN M. SHAPIRO

Executed on this 3rd day of June, 1994.