REPLY

A REPLY TO CRITICS

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> I know that most men, including those at ease with problems of the greatest complexity, can seldom accept even the simplest and most obvious truth if it be such as would oblige them to admit the falsity of conclusions which they have delighted in explaining to colleagues, which they have proudly taught to others, and which they have woven, thread by thread, into the fabric of their lives.
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> — Leo Tolstoy[1]

> [I]t takes a theory to beat a theory.
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> — George J. Stigler[2]

INTRODUCTION

Although the public and academic reaction to *A Systemic Analysis of Affirmative Action in American Law Schools* (hereinafter *Systemic Analysis*)[3] has been predominantly favorable, many of my most sympathetic readers predicted a fierce reaction from what they often called "the affirmative action establishment." And although the four responses published in this issue are not the first outpourings of critical reaction, they are certainly the most concerted. When the *Stanford Law Review* editors sifted through the stack of prospective contributions to this issue, they specifically tried to select those that would offer the strongest critiques, bypassing several more sympathetic proposals. The distinguished authors whose responses have been selected have each focused on a different part of my article, and each suggests that he or she has found its Achilles heel, to be chewed upon over a combined 153 pages. Thinking about these critiques and trying to address them as thoroughly as possible has been both stimulating and consuming.

At the end of the day, however, the critiques in this volume are surprisingly toothless. Most of these contributors concede (and none dispute) the basic facts that frame *Systemic Analysis*: blacks are nearly two-and-a-half times more likely than whites not to graduate from law school, are four times more likely

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    2. George J. Stigler, *The Process and Progress of Economics*, in ECONOMICS 1981-1990: THE SVERIGES RIKSBANK (BANK OF SWEDEN) PRIZE IN ECONOMIC SCIENCES IN MEMORY OF ALFRED NOBEL, at 57, 67 (Karl-Göran Mäler ed., 1992), *available at* http://nobelprize.org/economics/laureates/1982/stigler-lecture.pdf.

    3. Richard H. Sander, *A Systemic Analysis of Affirmative Action in American Law Schools*, 57 STAN. L. REV. 367 (2004).

to fail the bar on their first attempt, and are six times more likely to fail after multiple attempts.[4] The overall lower average test scores and undergraduate grades of blacks obviously contribute to this gap—but no one disputes my finding that the black-white gap in graduation and bar passage is more than twice as large as can be explained by controlling for LSAT and undergraduate grade point average (UGPA) differences. None of these contributors offers any alternative explanation of this staggering black-white gap in graduation and bar passage, let alone a strategy for addressing it. If Stigler is right that it takes a theory to beat a theory, no one has even entered the arena. Since there is no debate that blacks' outcomes in graduation and bar passage are worse than could be possibly explained by blacks' entering credentials, we must face the fact that the legal education system is currently doing something that seriously harms blacks. Criticism and debate are important, but they must not obscure the overriding need to diagnose what we are doing wrong, and to implement solutions.

I have learned a great deal by thinking hard about the questions each of these contributors has raised. And I believe David Wilkins's article[5]—which I view as by far the strongest of these pieces—identifies several fundamental issues which merit long-term research and consideration. But none of these articles raises a serious challenge to the basic thesis of *Systemic Analysis*: large racial preferences, as currently practiced by American law schools, impose very large costs on blacks. Michele Dauber[6] is factually wrong on each of her principal claims. Ian Ayres and Richard Brooks[7] critique a straw man version of my theory and then construct an alternate test for the mismatch theory that is fatally compromised by methodological errors. David Chambers, Timothy Clydesdale, William Kidder, and Richard Lempert (Chambers et al.),[8] in their second attempt to mount a critique, make some valid points on the policy implications of my analysis but do not seriously address most of the article itself. Wilkins argues with great flair that my paper does not capture crucial benefits blacks gain from racial preferences, and validly identifies many relevant questions about which we know far too little, but marshals very little probative evidence supporting his arguments. I find the data that is available seriously undercuts his arguments.

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4. *See* Adam Liptak, *For Blacks in Law School, Can Less Be More?*, N.Y. TIMES, Feb. 13, 2005, § 4, at 3.

5. David B. Wilkins, *A Systematic Response to Systemic Disadvantage*, 57 STAN. L. REV. 1915 (2005).

6. Michele Landis Dauber, *The Big Muddy*, 57 STAN. L. REV. 1899 (2005).

7. Ian Ayres & Richard Brooks, *Does Affirmative Action Reduce the Number of Black Lawyers?*, 57 STAN. L. REV. 1807 (2005).

8. David L. Chambers et al., *The Real Impact of Eliminating Affirmative Action in American Law Schools: An Empirical Critique of Richard Sander's Study*, 57 STAN. L. REV. 1855 (2005).

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Before jumping into detailed responses to each of the four critiques, it seems useful to set forth in some detail my thinking about the mismatch hypothesis at the core of *Systemic Analysis*. A weakness of that article, perhaps, is that the central hypothesis is presented almost as an afterthought, as a way of explaining the data patterns I found. Clearly setting out the hypothesis, and comparing several alternative ways of evaluating it, is a helpful way of laying bare exactly what I and the critics are talking about and where we disagree.

I. REVISITING THE MISMATCH HYPOTHESIS

The premise of the mismatch theory is simple: if there is a very large disparity at a school between the entering credentials of the "median" student and the credentials of students receiving large preferences, then the credentials gap will hurt those the preferences are intended to help. A large number of those receiving large preferences will struggle academically, receive low grades, and actually learn less in some important sense than they would have at another school where their credentials were closer to the school median. The low grades will lower their graduation rates, bar passage rates, and prospects in the job market.

Although there is a good deal of research on the mismatch theory focusing on undergraduates, *Systemic Analysis* is unusual in examining a fairly self-contained segment of graduate education and using databases that are sufficiently broad to permit one to examine a number of possible mismatch effects across the whole spectrum of schools, from very elite schools to night schools.[9] At the same time, the data has serious limitations. The primary database available for studying graduation and bar passage outcomes is the Law School Admission Council's Bar Passage Study (LSAC-BPS).[10] Though the LSAC-BPS is a remarkable data set in many ways (sample size, breadth of schools covered, and breadth of both subjective and objective measurements taken of participants), it was weakened terribly by the LSAC's decision to destroy all information linking students to individual schools. One can only place individual students in one of six broad "clusters" of schools, with between seven and fifty schools per cluster and with the clusters loosely but sufficiently correlated with prestige to think of them as "tiers." As we shall see, treating these clusters as perfect measures of prestige, rather than as rough and heterogeneous proxies, leads more than one critic astray.

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9. See Sander, *supra* note 3, at 450-54 for a discussion of research on mismatch theory in the undergraduate context.

10. LINDA F. WIGHTMAN, LSAC NATIONAL LONGITUDINAL BAR PASSAGE STUDY (1998). The LSAC-BPS data itself is available on the Internet at Law School Admission Council, Bar Passage Study, http://bpsdata.lsac.org/ (last visited May 7, 2005) [hereinafter LSAC-BPS Data].

Even with the imperfect data currently available, there are several different ways of testing the mismatch theory for law students. Much of the emerging debate on the theory actually reflects differences in which methods scholars use and what assumptions they make with each method. In this Part, I examine each of these methods in turn to see whether a consistent underlying story emerges from the data.

A. *Comparing Whites and Blacks*

In most of *Systemic Analysis*, I evaluated the mismatch theory by comparing white and black experiences and outcomes in legal education. The analyses in Part II of the article showed that the vast majority of whites are admitted to law schools primarily on the basis of their quantifiable academic credentials (UGPA and LSAT), while blacks are admitted on essentially the same basis, but with a very large boost assigned to them based on race. These racial preferences for blacks have the effect of elevating them to much more elite schools, so that if we compare two students with similar credentials, one white and one black, the black student will usually be at a significantly more elite school than the white one, and the black student will usually have much lower credentials than most of his classmates.[11]

The premise of the white-black comparison is that three things are true when we compare white law students with black law students: First, blacks tend to perform about the same in law school as do whites with similar entering credentials and are about as likely to graduate and pass the bar as are whites with similar grades from the same schools. Second, racial preferences tend to place blacks at much more elite schools than whites with similar credentials, creating the "credentials gap" between blacks and their classmates. Third, this credentials gap causes blacks to get dramatically lower grades, on average, than do their white counterparts at less elite schools, and these low grades seriously undermine their chances of graduating and passing the bar.

The second of these three premises is easy to demonstrate and is, I think, generally undisputed.[12] The first premise is demonstrated by a series of regression analyses in *Systemic Analysis* (Tables 5.2, 5.6, and 6.1) which show blacks and whites having virtually identical outcomes when one controls for

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11. Within the much smaller National Survey of Law Student Performance ("National Survey"), it is possible to match students with individual schools. In the twenty schools for which we have complete data, black students had an index deficit relative to the average for their classmates of 120 points and a deficit relative to whites of 135 points (on the 1000-point scale used in *Systemic Analysis*). Kris Knaplund et al., 1995 National Survey of Law Student Performance CD-ROM [hereinafter 1995 National Survey Data]. Kris Knaplund, Kit Winter, and I collected this data in collaboration with twenty law schools on over four thousand first-year law students. The data includes LSAT, UGPA, first-semester grades, and responses to several dozen questions on student backgrounds and experiences at law school.

12. *See, e.g.*, *infra* note 15.

background characteristics. The third premise is demonstrated by (a) regressions that show the decisive role law school grades play in later outcomes and (b) the confirming, stark differences in graduation and bar passage outcomes between blacks and whites who had the same credentials going into law school.

Nearly all the criticism of the contested premises has focused on Table 5.2, which shows that blacks and whites with similar LSAT scores and UGPA levels get similar grades at any particular law school—in other words, I argue that the lower grades blacks receive in law school are due to preferences and the resulting credentials gap, not to underperformance by blacks. Ayres and Brooks and Chambers et al. both follow a critique originally developed by Jim Lindgren, observing that if one does not lump persons who listed no race on the survey form with whites, then the regression shows some underperformance by blacks.[13] But the alternative regression does not contradict my thesis. Any of these formulations shows that differences in background credentials explain nearly all of the differences in black-white performance at law school; the debate is whether the credentials gap explains 85%, 95%, or 100% of the gap.[14] A much larger study that I discovered after *Systemic Analysis* went to press found "very slight" underperformance by blacks (when controlling for preferences), measuring it at about one-eighth of a standard deviation.[15] I accept that figure as the best available estimate, and conclude that black underperformance could account for as much as 6-10% of the black-white difference in grades.[16] This suggests that 90-94% of the black-white gap in law school grades is due to differences in entering credentials—and nearly all of that gap is due to racial preferences in admissions.

In other words, the critiques establish the *possibility that a small portion* of the black-white differential in graduation rates and bar passage could be due to black underperformance in law school, which in turn could be due to such factors as stereotype threat, discrimination, forming study groups with other

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13. E-mail from James Lindgren, Professor of Law, Northwestern University School of Law, to Richard Sander, Professor of Law, UCLA School of Law (May 18, 2005) (on file with author).

14. As Lindgren notes, his "preliminary analyses suggest that this underperformance would account for only a small portion of the large effects that Sander's analysis points to in Table 5.2." *Id.* Note that what I call the "distribution effect" also affects how much of the black-white performance gap is due to racial preferences per se. *See infra*, Part IV.C.1.

15. Lisa C. Anthony & Mei Liu, Law Sch. Admission Council, LSAT Technical Report 00-02, Analysis of Differential Prediction of Law School Performance by Racial/Ethnic Subgroups Based on the 1996-1998 Entering Law School Classes 9 (2003). Note that the overall size of the black-white gap in median first-year grades is about two standard deviations. *See* Sander, *supra* note 3, at 434 fig.5.2.

16. There are, nonetheless, several other good explanations for the overprediction of black grades in Anthony and Liu's analysis: differences in college quality between whites and blacks (an idea I measure below), some degree of curvilinearity at the bottom of the grade distribution, or some measurement error affecting estimates of low-performing whites.

low-credential students, or a host of other possibilities. But the overwhelming reason why blacks are clustered at the bottom of their law school classes is the operation of racial preferences. None of the critics seems prepared to deal with this fact.

Nor do any of the critics deal with the implications of low grades. Even though the evidence is overwhelming that law school grades are the primary determinant of a student's chances of graduating and passing the bar, all of the critics neglect grades in explaining student outcomes (indeed, Ayres and Brooks construct an elaborate model of outcomes that entirely leaves out law school performance). None of the critics has directly addressed the logic of low grades and the mismatch effect.

B. *The Curvilinear Effect of Grades on Outcomes*

Although none of the critics points this out, the most significant analytic flaw I have found in *Systemic Analysis* is the reliance on linear models to demonstrate the relationship between credentials or grades and future outcomes. If one uses law school grades to separately predict graduation rates (e.g., Table 5.6 of *Systemic Analysis*) or bar passage of graduates (e.g., Table 6.1 of *Systemic Analysis*), the linear models provide a very good fit. But when one uses law school grades to predict who among the entire pool of first-year law students will both graduate *and* pass the bar, it is very obvious that the relationship is curved, not linear. In other words, differences in GPA at the lower end of the spectrum matter more than differences at the higher end.

Table 1 organizes the LSAC-BPS data on law student performance in a way that highlights this curvilinear relationship. For the six tiers in the LSAC-BPS data, it splits all students into twenty demideciles based on law school grades (e.g., the lowest 5% of the class is in demidecile 1, and the highest 5% are in demidecile 20). For simplicity, I excluded students who graduated but chose not to take a bar exam. The percentages in each column refer to the proportion of students in each grade segment who graduated and passed the bar on their first attempt.

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TABLE 1: PROPORTION OF 1991 COHORT GRADUATING AND PASSING THE BAR
ON FIRST ATTEMPT, BY TIER AND FIRST-YEAR LAW SCHOOL GPA DEMIDECILE

Demidecile	Tier					
	6 (low)	5	4	3	2	1 (high)
1 (low)	10%	10%	22%	27%	33%	59%
2	21%	36%	40%	51%	68%	74%
3	19%	42%	56%	67%	71%	81%
4	26%	48%	67%	77%	73%	84%
5	31%	54%	70%	84%	81%	85%
6	35%	58%	82%	83%	82%	90%
7	30%	72%	79%	88%	87%	96%
8	41%	73%	86%	85%	88%	95%
9	45%	88%	84%	91%	89%	96%
10	43%	81%	90%	94%	91%	99%
11	62%	85%	89%	94%	96%	98%
12	67%	90%	93%	95%	93%	98%
13	77%	92%	93%	93%	96%	97%
14	79%	92%	93%	96%	95%	98%
15	77%	87%	95%	94%	96%	100%
16	90%	88%	96%	97%	97%	98%
17	86%	89%	96%	98%	97%	96%
18	86%	94%	97%	97%	97%	98%
19	93%	94%	96%	96%	98%	98%
20 (high)	97%	95%	97%	98%	99%	100%

Source: LSAC-BPS Data, *supra* note 10, and author's calculations. Tier 6 denotes the
schools with the highest average credentials in the BPS; demidecile 20 indicates the
students with the highest grades. The table excludes students who graduated but never
took the bar.

The patterns are very striking. Within each tier of schools, the difference
between the first (bottom) demidecile and the second demidecile, in the
proportion of students who graduate and take the bar, is very large (an average
of 21 points). From the second to the third demidecile, the difference is smaller
but still quite large (nearly 8 points). From the third to the fourth demidecile,
the difference is still smaller (6.5 points). And so on. In the upper grade
reaches, a change in one demidecile improves one's chances of graduating and
passing the bar by only 1 or 2 points.

Although it takes a little reflection to realize this point, the curvilinear
pattern of this data is itself a very powerful demonstration of the problems
faced by "mismatched" students. Quite simply, at any law school the very
bottom of the class is a lousy place to be. Across all tiers, there is a huge
difference between the fortunes of students in the bottom tenth of their classes
and those just a little bit higher. The simple fact that the outcomes dramatically

worsen at the bottom of the class implies that something qualitatively different is happening in the education of those students that sharply worsens their outcomes.

The steep curvilinearity of outcomes at the bottom of the grade distribution also implies that any policy that substantially increases a student's likelihood of winding up in the bottom of his class is doing more harm than good. If we compare outcomes for students in the first demidecile of any tier with outcomes for students in the fourth demidecile of a school two tiers lower, the data shows the latter group of students have a substantially higher chance of becoming lawyers. This is a simple illustration, not a proof of specific effects, but it effectively conveys the reasons why even a partial reduction of the mismatch for black students could dramatically improve their long-term outcomes. Part II.D, *infra*, provides powerful complementary evidence on exactly this point.

C. *Black-on-Black Comparisons*

In the fall of 2002, when I first looked at the LSAC-BPS database with a view to studying racial preferences, I thought the most straightforward way to examine the effects of affirmative action was to compare the outcomes of blacks with similar credentials who were attending schools in different tiers. Using simple regression techniques, I found that, depending on exactly how the equation was specified, the effects of going to a more elite school seemed to be either mildly negative or neutral. I tentatively concluded that preferences were probably a minor part of the story behind the low rates of black graduation and bar passage, and went looking for other explanations. After trying out a few other possible hypotheses and finding little or no support for them, I set the project aside.

When I returned to these questions in the spring of 2003, I realized that I had made two fundamental errors in my analyses. First, I had overlooked the problem of "unobserved characteristics." It is well known that law applicants of all races choose to attend, by very large margins, the most elite school which will have them.[17] Thus, there was very likely something different between a black law student with an index of 600 attending a "Tier 1" school, and a black student with the same index attending a "Tier 3" school—some quality that led the Tier 1 admissions committee to admit the first student but not the second. I could only control for their LSAT and UGPA and, important as these characteristics were, it was pretty much certain that the Tier 1 student had some

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17. I have frequently had the opportunity to examine the annual "Matriculation Reports" from the LSAC, which are confidential but can be requested by any school's admissions office. These reports cover all the school's applicants and show which other schools accepted the applicant and where the applicant ultimately chose to go. My examination has revealed that these reports show very clearly that when applicants are choosing between schools more than a few places apart in the *U.S. News & World Report* rankings, they go to the more elite choice by enormous margins.

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other characteristic not in the LSAC-BPS data set—such as attendance at a stronger college, a degree in a more challenging major, or a pattern of strong academic improvement during college—that made him more likely to succeed than the facially similar Tier 3 student. This is often referred to as the problem of "unobserved characteristics."

This problem was well understood by Stacy Dale and Alan Krueger.[18] Dale, who had done some of the number crunching for William Bowen and Derek Bok in *The Shape of the River*,[19] recognized that some of the black-on-black comparisons made in that book incorporated this bias. Dale and Krueger realized that truly valid comparisons between students at schools of differing prestige required them to identify pairs of students who had both been admitted to the same schools. If two students are both admitted to Harvard and Boston College, but one decides to attend Harvard and the other decides to attend Boston College, it is much more reasonable to assume the two students really are academically comparable. This change in methodology dramatically shifts the analytical results. If one compares students controlling only for some of their entering credentials (the Bowen and Bok method), one finds that graduates of more elite schools see their earnings rise about eight percent for every hundred-point increase in their colleges' mean SAT scores.[20] But if one compares thousands of pairs of students who were admitted to the same sets of schools, but where one member of the pair went to a more elite school than the other, one finds that after these students enter the workforce, the more elite members of each pair tend to have lower earnings.[21]

Virtually every critique of the mismatch hypothesis advanced in *Systemic Analysis* has made use of crude black-on-black comparisons—with no correction of unobserved characteristics bias—to argue against the mismatch hypothesis. The lesson of Dale and Krueger is that such an approach is guaranteed to produce misleading results. In Part IV, *infra*, I present quantitative evidence to demonstrate this problem.

My second oversight was not recognizing at first the weakness of the LSAC-BPS "tier" variable for measuring eliteness. Linda Wightman, the LSAC official who created the tier variable, used a total of seven factors to create "clusters" of schools with similar characteristics.[22] The factors included school size, cost, selectivity, faculty/student ratio, minority percentage, median LSAT score, and median UGPA. Several of these correlate strongly with prestige, of

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18. Stacy Dale & Alan Krueger, *Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables*, 117 Q.J. ECON. 1491, 1492-93 (2002).

19. WILLIAM G. BOWEN & DEREK BOK, THE SHAPE OF THE RIVER xxxiii-xxxiv (1998).

20. Dale & Krueger, *supra* note 18, at 1507 tbl.III.

21. When using exact matches, Dale and Krueger found that earnings dropped about ten percent with every hundred-point increase in a college's mean SAT score. *Id.*

22. LINDA F. WIGHTMAN, USER'S GUIDE, LSAC NATIONAL LONGITUDINAL DATA FILE 15 (1999).

course, and the clustered tiers *as a whole* are a perfectly reasonable proxy for prestige, when one takes their limitations into account.[23] But as a method of selecting pairs of students to compare, assuming the clusters perfectly measure relative prestige is a methodological disaster. The two largest clusters of schools—Tiers 3 and 4 in my table—have between them nearly two-thirds of all law schools and law students, but heavily overlap in the credentials of their students. In other words, the more competitive of the Tier 4 schools are almost certainly more highly ranked than the least competitive of the Tier 3 schools. To belabor the point, many "Tier 4 students" actually attend more elite schools than some "Tier 3 students," even though Tier 3 as a whole is more elite.

D. *The "Second-Choice" Analysis: A Valid Way to Do Black-on-Black Comparisons*

Although they seem to have misinterpreted the implications of their own discovery, Ayres and Brooks uncovered the most important new data brought to light since the publication of *Systemic Analysis*. As they explain in their piece, the LSAC-BPS study asked entering law students in 1991 about their process of applying to and selecting law schools. Something like one-tenth of all students in the study reported that although they were admitted to their top-choice school, they passed up that school for geographic or financial reasons and attended a lower-choice school instead. I refer to these students as the "second-choice" sample.[24]

This represents an almost ideal way to test the mismatch theory within a pool of black students. The blacks who voluntarily chose to go to a lower-choice school should be students who were capitalizing on a smaller racial preference and should have credentials that put them closer to most of their classmates.[25] We do not face the general problem of unobserved characteristics, because these students were by definition strong enough to get into a more elite school. The data is not as ideal as the Dale-Krueger cases—since we cannot actually match pairs of students according to which school accepted them, nor can we measure exactly how much "prestige" the second-choice students passed up—but it is close.

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23. *See* Sander, *supra* note 3, at 416 tbl.3.2. That is why *Systemic Analysis* never treats "tier" as an exact measure of prestige, but as an approximate proxy; the only part of the article that relies on exact coefficients of prestige is Part VII, which uses a school-by-school hierarchical measure.

24. I selected for analysis only those students who answered not only the "second-choice" question, but also a series of related questions, in an internally consistent way, giving the second-choice measure a high degree of reliability. This restriction does not affect the underlying results.

25. The assumption here (that students passing up their first-choice school are generally going to a lower-ranked school instead) is borne out by the calculation in Table 2 of "Mean Index Points Above or Below Tier Mean", which shows that these students did indeed have credentials closer to the average of their classmates.

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The actual data on black second-choice students is summarized in Table 2, which compares them to all other blacks and to whites in the LSAC-BPS database.

TABLE 2: BLACKS PASSING UP THEIR "FIRST-CHOICE" SCHOOL COMPARED TO
WHITES AND ALL OTHER BLACKS IN THE LSAC-BPS DATABASE

Outcome	Whites	Blacks Passing Up First-Choice School	All Other Blacks
Percentage of Students Graduating	92.2%	89.5%	81.1%
Percentage of Graduates Passing the Bar on First Attempt	92.1%	80.3%	59.6%
Percentage of Graduates Eventually Passing Bar	96.8%	86.1%	77.1%
Percentage of Entering Cohort Becoming Lawyers	83.3%	69.0%	57.0%
Mean First-Year GPA (Adjusted)	0.15	-0.71	-1.02
Mean Index Points Above or Below Tier Mean	25	-93	-141
Mean Index	760	626	581
Number of Observations	21,805	171	1586

Source: LSAC-BPS Data, *supra* note 10, and author's calculations. The sample sizes indicated in the last row are maximums; some analyses are based on slightly smaller subsets since, for example, students who started law school but did not graduate would not be included in an analysis of the proportion of graduates who passed the bar.

These are stunning results. The black second-choice students have far higher graduation rates than other blacks. They are less than half as likely to fail the bar on their first attempt. On most measures, the black second-choice students have outcomes *closer to the white average than the black average*.

These figures are subject to an important qualification: the black second-choice students have somewhat higher average index scores than other blacks,[26] so we would expect them to have slightly better outcome statistics even if there were no mismatch effect. Table 3 statistically adjusts the two

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26. Logically, this is probably because, by definition, the black second-choice students have been admitted to at least two schools, making it likely that they are slightly stronger candidates, on average.

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black groups to approximate what their outcome rates would be if each group had the same overall index distribution.[27]

TABLE 3: BLACKS PASSING UP THEIR "FIRST-CHOICE" SCHOOL COMPARED TO WHITES AND ALL OTHER BLACKS IN THE LSAC-BPS DATABASE, ADJUSTED FOR INDEX DIFFERENCES

Outcome	Whites	Blacks Passing Up First-Choice School	All Other Blacks
Mean First-Year GPA	0.12	-0.42*	-0.63
Mean Final GPA[+]	0.06	-0.52*	-0.73
Percentage of Students Graduating	91.8%	93.2%*	86.2%
Percentage of Graduates Passing Bar on First Attempt	91.3%	88.5%**	70.5%
Percentage of Graduates Eventually Passing Bar	96.4%	90.4%	82.8%
Percentage of Entering Cohort Becoming Lawyers	82.5%	75.9%*	66.5%
Number of Observations	21,805	171	1586

Source: LSAC-BPS Data, *supra* note 10, and author's calculations. "+" indicates imputation using first-year GPA if final GPA was missing. "*" indicates difference between the two black groups significant at $p < .05$; "**" indicates difference between the two black groups significant at $p < .01$.

These results are even more striking. The black second-choice students are statistically indistinguishable from whites in their rates of graduating and passing the bar on the first attempt; they are closer to whites than to other blacks on the remaining two measures. Their outcomes are dramatically better than those of other blacks. The results would seem to be a nearly perfect demonstration of the mismatch effect.

Before declaring the mismatch hypothesis proven, however, it is worth considering some possible objections:

(1) *The sample size is comparatively small. Are these results trustworthy?* The small sample is indeed a weakness of this data. For example, the difference in graduation rates between the black second-choice students and the rest of the

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27. I used an analysis of covariance to create the adjusted means, and then logistic regressions controlling for index with dummies for two of the three comparison groups (using the black second-choice students as the omitted category) to determine which differences with "all other blacks" were statistically significant.

black students turns on the outcomes of a dozen of the 171 black second-choice students. But significance tests automatically adjust for sample size, and most of the improvements shown by the black second-choice students are statistically significant. It would be nice to have better data—and we should make concerted efforts to get it—but these results are quite strong and significant.

(2) *Is there something fundamentally different about the blacks who pass up their first-choice law school that makes them more likely to succeed, other than the diminished gap between their own credentials and those of their classmates?* Intuitively, we might think that these students would be *less* likely to succeed than their peers. Passing up a stronger school might imply a lack of confidence or a lack of resources. And indeed, the LSAC-BPS data does suggest that black second-choice students are somewhat less affluent and that they were relatively more concerned about cost, and less concerned about prestige, in choosing a law school. The black second-choice students do not appear to be different in any other systematic way that might advantage them. In particular, as suggested by the survey data summarized in Table 4, they do not appear to be more confident about their future academic performance or more driven to do well.[28]

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28. The evidence suggests that many of these students went to a lower-ranked school because that school offered them generous financial aid. Of course, anyone who works in law school admissions knows that schools often offer substantial scholarships to black students who are strong enough to get into a more elite school.

TABLE 4: COMPARING CHARACTERISTICS OF BLACK SECOND-CHOICE
STUDENTS WITH OTHER BLACK STUDENTS

Question	Blacks Passing Up First-Choice School	All Other Blacks
Parent Has Attended Law School	6%	7%
Parents' Income (While Respondent Was in High School) Was "Below Average"	36%	31%
Father Has a Graduate Degree	25%	29%
Mother Has a Graduate Degree	32%	28%
Following Factor Was "Very Important" in Choosing Which Law School to Attend:		
—Academic Reputation	67%	75%
—Cost	72%	48%
—Financial Aid Package	75%	46%
Expect to End Up in Top Ten Percent of Law School Class	37%	38%
"Very Concerned" About Getting Good Grades in Law School	89%	88%
Plan to Spend Over Thirteen Hours Per Week Studying in Law School	92%	90%
"Burning Desire to Be a Lawyer" Is Most Important Reason for Decision to Attend Law School	30%	30%
Believe They Experienced Discrimination During College	68%	64%
Believe They Experienced Discrimination During Law School Application Process	21%	21%

Source: Entering Student Questionnaire, *in* WIGHTMAN, USER'S GUIDE: LSAC
NATIONAL LONGITUDINAL DATA FILE app. B (1999), and author's calculations.

(3) *Are these results too good to be explained by the mismatch theory?
After all, the black second-choice students are still significantly mismatched
with their peers.* Even though the second-choice students only appear to close
about one-third of the academic index gap between blacks and other students in
the same tier of schools, and even though their median grades raise them from
around the tenth percentile to only around the twentieth percentile in their law
school classes, we see the black second-choice students close at least half of the
performance gap between blacks and whites. The explanation, I believe, lies in
the curvilinear relationship I described in Part II.B, *supra*. Small improvements

in class standing, when occurring near the bottom of the class, have disproportionately large effects upon outcomes.[29]

For the same reason, we would expect white second-choice students to derive very little benefit aside from an improvement in grades. If a typical white would be at the fiftieth percentile of her class, and going to a second-choice, slightly lower-tier school raises her grades to the sixtieth percentile, this would generally have little or no impact on her graduation and bar outcomes. This is exactly the pattern I find in the data: white second-choice students get about the same grade bump as black second-choice students, but with no discernible impact on long-term outcomes.

* * *

In sum, I believe the evidence for the mismatch hypothesis in legal education is much stronger as I write (in March 2005) than it was even a few months ago. What critics seem to consider the softest component in the white-black analysis—the comparison of black and white grade performance in Table 5.2 of *Systemic Analysis*—is confirmed by the much larger independent study by Lisa Anthony and Mei Liu.[30] The curvilinear patterns documented in this Part help us intuitively understand why large mismatches caused by preferences could have such devastating results for blacks. And the analysis of black second-choice students provides a confirmation of the mismatch that is, if anything, stronger than expected. The only method that doesn't produce consonant results—the comparison of blacks with other blacks across LSAC-BPS tiers without adjustment for unobserved differences—is easily the most methodologically suspect of the four approaches I've examined in Part I, and fails to show consistent mismatch effects because it is so heavily influenced by two weaknesses in the data: the problem of unobserved characteristics and the problem of overlapping prestige tiers. I would say that at this point, the burden of proof lies entirely on the critics to show with convincing methods and data that the mismatch hypothesis is wrong and that some alternative explanation can account for the terrible predicament facing black law students.

II. MICHELE DAUBER: THE ART OF UNINTENDED IRONY

Professor Dauber offers by far the fiercest of the four critiques, suggesting not only that *Systemic Analysis* is wrong, but that it actually represents a sort of academic hoax that should never have found its way into print in the first place.

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29. Consonant with this, strikingly few of the black second-choice students are in the bottom demidecile of their classes, compared to more than a fourth of other blacks. Note that these results provide support for an approach like the 4% solution, described at the end of *Systemic Analysis*, which limits preferences but does not eliminate them. *See* Sander, *supra* note 3, at 483.

30. *See* Anthony & Liu, *supra* note 15.

She draws an elaborate analogy between my work and the false discovery of cold fusion a generation ago, contrasting work that simply generates "heat" (*Systemic Analysis*) with work that generates "light" (her critique).[31] This is only the first of many instances of unintentional irony in her piece. Dauber's harsh rhetoric masks relatively soft criticisms, which I believe I address in full below. Rather than forcing me to defend weaknesses in the paper, her critiques invite me to highlight strengths of the work.

A. *Blacks in the Job Market*

Dauber's principal substantive criticism focuses on the job market analysis in Part VII of *Systemic Analysis*. She contends that my job market analyses are invalid because my regressions include all law graduates, not just blacks. In those regressions I examine the determinants of earnings for young lawyers a few years out of law school. The regressions, which control for over twenty other relevant influences, reveal that the three strongest predictors of earnings are geography, law school grades, and law school prestige—with grades coming in as a substantially stronger predictor than prestige.[32] A premise of affirmative action is that the career benefits of attending a more elite school far outweigh the academic disadvantages of competing for grades in a more challenging environment. My analysis, which is the first attempt to rigorously test this idea for lawyers, finds that the trade-off posed by preferences is generally a bad one.

The regressions in Part VII include lawyers of all races in the AJD sample for several good reasons. One of the central missions of the paper is to understand the trade-off between grades and prestige. Most of my empirical analysis focuses on how this trade-off plays out for blacks, but that is because the methodology of Parts III through VI relies on comparing a group that generally benefits from affirmative action (blacks) with a group that generally does not (whites).[33] The underlying trade-off, however, is relevant for students

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31. Dauber, *supra* note 6, at 1899, 1902.

32. Importantly, the relative importance of prestige varies across the spectrum of schools; there is a substantial earnings difference between the top ten schools and the next-highest tier, while there are negligible earnings differences across schools across the several lowest tiers (i.e., rank 100 and below). Nowhere, however, do the benefits of prestige for blacks appear to match, on average, the lower grades that result from racial preferences. Sander, *supra* note 3, at 464-65.

33. See the discussion in Part I.A., *supra*. I state the broader mission in the Introduction of *Systemic Analysis*:

> A student who gains admission to a more elite school on partly nonacademic grounds is likely to struggle more, whether that student is a beneficiary of a racial preference, an athlete, or a "legacy" admit. If the struggling leads to lower grades and less learning, then a variety of bad outcomes may result: higher attrition rates, lower pass rates on the bar, problems in the job market. The question is how large these effects are, and whether their consequences outweigh the benefits of greater prestige.

Sander, *supra* note 3, at 370.

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of all races, and a model that includes all students is appropriate. Additionally, a large sample is always preferable to a small one. A big sample reduces measurement error and increases the confidence one can attach to the results. Dauber is therefore wrong in one of her criticisms—that I chose the wrong sample for my argument. The regressions in Part VII are the right ones for the questions at hand.

Dauber raises an important question, however: do the patterns for all lawyers hold with equal force for blacks? What happens if we run the same regressions presented in Part VII of *Systemic Analysis* for the black subsample? Table 5, below, duplicates the results of Table 7.1 from *Systemic Analysis*, but breaks the sample into blacks (right-hand columns) and everyone else (left-hand columns).[34]

TABLE 5: SIMPLE REGRESSION OF EARNINGS FOR SECOND-YEAR ASSOCIATES
IN PRIVATE FIRMS

Independent Variable	Nonblacks			Blacks Only		
	Coefficient		t-Statistic	Coefficient		t-Statistic
	Raw	Standardized		Raw	Standardized	
Market Area	0.136	0.414	21.4	0.102	0.284	4.0
School Prestige	0.099	0.237	12.3	0.103	0.251	3.7
Law School GPA	0.459	0.333	17.9	0.626	0.469	7.0
Asian	0.010	0.006	0.3	N/A	N/A	N/A
Hispanic	0.005	0.003	0.2	N/A	N/A	N/A
Other	-0.031	-0.013	-0.7	N/A	N/A	N/A
Male	0.106	0.115	6.4	0.049	0.051	0.8
Model	N = 1659; Adjusted R^2 = .474			N = 119, Adjusted R^2 = .511		

Source: AJD Data, *infra* note 50.

In both of these regressions, "School Prestige" and "Law School GPA" are positive and very statistically significant. For nonblacks, law school GPA has a substantially higher standardized coefficient than school prestige—evidence that GPA plays a larger role in job outcomes. For blacks the difference is even more striking. While the black coefficient for school prestige is almost identical to the prestige coefficient for nonblacks, the law school GPA coefficient for the black sample is substantially higher than that of the nonblack sample—indeed,

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34. Of the three job market regressions presented in Part VII of *Systemic Analysis*, I chose Table 7.1 to replicate here for two reasons: first, it is the only one of the three that permits a straightforward comparison of a single GPA variable with a single "prestige" variable; and second, the large number of independent variables in Tables 7.3 and 7.4 erode the potential significance of the key variables in a model with a relatively small sample size. The other regressions (and additional analyses), along with further discussion, are posted at http://www1.law.ucla.edu/~sander/Data%20and%20Procedures/StanfordArt.htm [hereinafter Sander Website], and are on file with the *Stanford Law Review*.

despite the small sample size, this difference is statistically significant at a .06 level.[35] This suggests that law school performance may be of even greater relative importance for black lawyers in the job market than for others.[36]

It would not be surprising if the grades-prestige trade-off were more severe for blacks than for other new lawyers. After all, preferences more or less deliberately obscure for blacks the relationship between their academic strength and the prestige of the school they are attending. An employer may be pretty confident what level of ability a Georgetown degree signals for a white graduate, but be much less sure what it means for a black graduate, since most blacks graduating from Georgetown have presumably received a large admissions preference.[37]

Still, the evidence on this point—that blacks are hurt even more than others by low grades—is mixed. Other models using the AJD data generally show a higher GPA coefficient for blacks than for nonblacks, but given the small sample size, the differences are not statistically significant.[38] In some of these models, the coefficients for school prestige are also higher for blacks, though again not to a degree that is statistically significant. The AJD data set may be too small to resolve the question of whether mismatched black students are harmed even more than other mismatched students by low grades. What the data clearly suggest, however—and this is the key response to Dauber—is that the arguments in Part VII of *Systemic Analysis* apply with at least equal force to blacks. My observation in that work, that "[t]he grade-prestige patterns we see in the overall sample hold for the black subsample as well," may well have been an understatement.[39]

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35. This figure represents an averaging of the significance levels of the raw and standardized coefficients, which are significant at the .07 and .05 levels, respectively, under two-tailed tests—a conservative choice.

36. Note that although the t-statistics in the blacks-only regression are smaller, this is simply an artifact of smaller sample size and consequently higher measurement error—not a weaker relationship.

37. Indeed, though this is mere speculation, it may be that the growing use of preferences over the past thirty years has been a factor causing employers to pay more attention to grades and less attention to school brand name.

38. See other models posted at Sander Website, *supra* note 34. The higher measurement error that comes with smaller sample size is not a trivial issue. I would have been reluctant to argue in *Systemic Analysis* that grades tend to dominate school prestige had I been limited to the smaller, blacks-only sample. Moreover, the detailed comparison of coefficients I undertake after Table 7.4 in *Systemic Analysis* (pp. 464-65) would be less reliable with the smaller, blacks-only sample; the coefficients for the larger, full sample are necessarily far more precise.

39. Sander, *supra* note 3, at 466. It is unfortunate that Dauber assumes, despite the statements in my paper, that I had not run the regressions or that, if I had, they would contradict my thesis. As she was writing her piece, I promptly responded to all of her inquiries and made an open-ended offer to run any analyses she would find helpful. Even under the unusual circumstances of this controversy—or maybe especially because of them—it seems to me Dauber should have made some effort to verify her claims before publishing such extreme charges.

B. *Peer Review*

Dauber argues that it is a bad practice for law professors to publish empirical work in student-edited law reviews. In general, I think she has a valid point. I agree with her (and with the broader critiques on legal academia mounted by Lee Epstein and Gary King[40]) that the system of student-edited law reviews is in some ways archaic and that we would benefit from the development of more faculty-edited journals relying on peer review. Dauber is wrong, however, to suggest that my research could not have been published in any journal relying on peer review, or that it contains serious errors that a peer review process would have caught.

It is of course always difficult to prove a negative—especially without taking the awkward step of printing testimonials from social scientists who liked *Systemic Analysis*—but I think two bits of evidence can effectively refute Dauber's claim: (1) The first journal to accept *Systemic Analysis* was not *Stanford Law Review*, but *New York University Law Review*, which asked a faculty member with a Ph.D. in economics to read the article and review its methodology. That faculty member advised the journal to accept it for publication.[41] (2) A major university press—which of course relies on outside reviewers in evaluating books—has offered me a contract for a book on affirmative action (and an advance) on the strength of *Systemic Analysis*. In other words, *Systemic Analysis* has passed through a *series* of peer reviews.

It is worth noting that a peer review process is no guarantee that a work is methodologically competent.[42] And a key weakness of the peer review process is the tendency of academic journals to send articles to the obvious, established voices in a field. Articles that challenge existing orthodoxies thus often get unfriendly reviews from those representing establishment views, which can delay or prevent the publication of important work.

Law reviews—especially those as distinguished as the *Stanford Law Review*—still have a vital role to play in publishing works like *Systemic*

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40. Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1 (2002).

41. The *NYU Law Review* Articles Department can confirm these facts. Faculty reads are generally done anonymously, but in this case the reader sent me comments. Also, the *Stanford Law Review* editors circulated my submission to an academic economist to confirm that the quantitative techniques I used were appropriate.

42. A good example is Timothy Clydesdale, *A Forked River Runs Through Law School*, 29 LAW & SOC. INQUIRY 711 (2004), which used the LSAC-BPS dataset to examine some of the same issues explored in *Systemic Analysis*. Clydesdale ran a series of regressions that used a dependent variable (law school GPA) that is standardized by school, but independent variables (e.g., LSAT and UGPA) that are not, producing results that are nonsensical at best. (For a discussion of why the comparison of standardized data with unstandardized data is problematic, see Richard Sander, Polemics Without Data: A Response to the Chambers et al. Critique 9-13 (2005), *available at* http://www1.law.ucla.edu/~sander/Documents/CCKL%20Critique.pdf.) Presumably because Clydesdale did not make clear to readers his mixing of standardized and unstandardized data, his article survived *Law and Social Inquiry*'s peer review process and found its way into print—gross errors intact.

Analysis. A piece that seeks to examine an important public issue in some detail through a synthesis of many different methodologies would be inappropriate for a conventional social science journal, but is ideal for a law review. And I cannot, frankly, imagine any other journal that would have devoted the time and energy to a complex editing process that the Stanford editors devoted to *Systemic Analysis* and this follow-up response-reply series.

C. *Data Availability*

Dauber argues that empirical articles should make available the data on which they are based, so that other researchers can properly check and evaluate their findings. Again, I wholeheartedly agree with Dauber's general point. But in suggesting that I have somehow violated an established norm in this regard, Dauber is simply wrong and surely knows it. I posted three of the four major data sets on which *Systemic Analysis* relies in October 2004, three months before the article appeared, along with codebooks and programs I used to generate specific tables in the text. That level of accessibility is unusual in the social sciences, and even rarer in legal academia.

It is instructive to compare my practice with those of the two major works most similar to *Systemic Analysis*: *The Shape of the River*[43] and *The River Runs Through Law School*.[44] Bowen and Bok assembled truly extraordinary data sets for *The Shape of the River*, and had an understandable proprietary interest in them. At the time their book was published, none of their data was available to other scholars, and the data is not publicly available to this day. Researchers can apply to the Mellon Foundation for permission to study specific data sets, but the Foundation specifically excludes requests that simply seek to "recheck" Bowen and Bok's research,[45] and the application process is an arduous one that, according to some critics, excludes researchers who are critical of racial preference policies.[46]

Richard Lempert, David Chambers, and Terry Adams have been even more restrictive with the data they assembled for *The River Runs Through Law School*, their study of Michigan graduates. Their study was published in *Law and Social Inquiry* in 2000, and I was one of several academics asked by the journal to write a commentary on the work. When I asked Lempert at the time

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43. BOWEN & BOK, *supra* note 19.

44. Richard Lempert et al., *The River Runs Through Law School*, 25 LAW & SOC. INQUIRY 395 (2000).

45. *See* ANDREW W. MELLON FOUND., POLICIES CONCERNING THE COLLEGE AND BEYOND DATABASE 3 (1998) ("[P]roposals must go beyond a general desire to recheck results . . . .").

46. *See* Stephan Thernstrom & Abigail Thernstrom, *Racial Preferences in Higher Education: An Assessment of the Evidence*, *in* ONE AMERICA? POLITICAL LEADERSHIP, NATIONAL IDENTITY, AND THE DILEMMAS OF DIVERSITY 169, 174-77 (Stanley A. Renshon, ed. 2001).

for a copy of the data, he told me that it was unavailable because of the ongoing litigation involving the University of Michigan's admissions procedures (without explaining why data disclosure would not be particularly vital if their findings were being presented to the courts). After the 2003 Supreme Court decisions in *Grutter v. Bollinger*[47] and *Gratz v. Bollinger*,[48] I renewed my request for the data. Eighteen months later, after multiple negotiations and missed deadlines, I began to receive the data—but too late to incorporate into this Reply.[49]

I have, in contrast, made all of the data under my control available to anyone who wants it, and I did so months before my article ever appeared. The only data set I have not made publicly available is the "After the JD" (AJD) data, simply because it is not mine to share.[50] In the fall of 2003, the administrators of AJD decided (over my objections, expressed at the time) to restrict access to the data until the end of 2005, although they have put in place a process for interested users to apply for earlier access (in other words, a sort of temporary restriction analogous to the long-term restriction adopted by Bowen and Bok). In the meantime, the AJD data is of course available to all those involved in the project, including one of the contributors to this issue of the *Stanford Law Review* and several other strong supporters of affirmative action. Thus, while I agree with Dauber that stronger data-sharing protocols by scholars and journals are very desirable, her criticism of me on this score is misplaced.

D. *Replication*

Dauber's last criticism concerns the replication of analyses in *Systemic Analysis*. Dauber takes me to task for saying on several occasions that the key analyses in my article have been replicated by other scholars. Here again

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47. 539 U.S. 306 (2003).

48. 539 U.S. 244 (2003).

49. I of course realize, as Dauber perhaps does not, that providing data to other researchers for replication requires a substantial effort to organize and document data, and to make sure that identifying information is eliminated. Terry Adams, who has custody of the Michigan data set, has made great efforts to comply with my requests, and I appreciate his efforts very much. I attribute some fault, however, to David Chambers, who promised me in October 2004 that if I made intensive efforts to post my own data, he would reciprocate and provide the data by November 15, 2004 (the data actually started to arrive in March).

50. AJD is a study attempting to track roughly ten percent of those who became lawyers in the year 2000 through the first ten years of their careers. *See* Sander, *supra* note 3, at 456-57 & nn.246, 249. For more on the methods and the AJD sample, see RONIT DINOVITZER ET AL., AFTER THE JD: FIRST RESULTS OF A NATIONAL STUDY OF LEGAL CAREERS 89-90 (2004), *available at* http://www.nalpfoundation.org/webmodules/articles/anmviewer.asp?a=87&z=2 (last visited Nov. 22, 2004). Those who are interested in further information on the AJD data (hereinafter AJD Data) should contact Paula Patton, CEO and president of the NALP Foundation for Law Career Research and Education, at ppatton@nalpfoundation.org.

Dauber stumbles upon an allegation that is so wrong that it seems more like comic irony than serious criticism. For I cannot think of any social science work ever published that has been so thoroughly replicated in such a short period of time.

It is important to keep in mind what is meant by "replication": the "[r]epetition of an experiment or trial to obtain a consistent result."[51] In a social science context, it means that one researcher is able to confirm that another researcher has neither made up reported results nor made simple coding or arithmetic mistakes that invalidate his or her results.

The import of "replication" depends on context. If an astronomer announces the discovery of a new planet or comet, and another astronomer is able to replicate the observation, then that pretty much settles things: the new body's existence is generally accepted. In social science, "replication" has a more modest meaning: it means that the patterns described in data have been found by another researcher, but it does not mean that a particular author's interpretations of the broad social meaning of the data are also correct. Indeed, it would be meaningless to talk about a general description of social policy, like a theory of affirmative action, being "replicated." One could talk about an emerging consensus, but no general theory of social phenomena can be reduced to concrete and irrefutable proof. Similarly, replication does not imply that the individual performing the replication endorses either the particular methodology or the specific inferences drawn by the original author.

In late December 2004, I began to point out for a couple of reasons that most of the tables in *Systemic Analysis* had been replicated by other researchers. First, much of the criticism of the article was so extreme (either utterly dismissive or angrily critical) that many of those following the debate were getting the impression that I simply had my facts wrong. It was important to counter this impression. Second, I thought that a crucial part of fostering an intelligent debate about affirmative action in law schools was to focus the debate on the actual areas where responsible scholars disagreed.

So, what are the facts about the replication of results in *Systemic Analysis*? Ayres and Brooks replicated the basic analyses in Parts V and VI of *Systemic Analysis* and also the controversial Table 8.2.[52] James Lindgren of Northwestern replicated Table 5.2.[53] Edward Johnson at the U.S. Bureau of Labor Statistics has replicated many of the empirical results from the article and tested the effects of different methodological assumptions.[54] Ronit

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51. NEW SHORTER OXFORD ENGLISH DICTIONARY ON HISTORICAL PRINCIPLES 2551 (1993).

52. Ayres & Brooks, *supra* note 7, at 1808 n.4.

53. E-mail from James Lindgren, *supra* note 13.

54. E-mail from Edward Johnson, Economist, U.S. Bureau of Labor Statistics, to Richard Sander, Professor of Law, UCLA School of Law (May 26, 2005) (on file with author).

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Dinovitzer, the project manager of AJD and an assistant professor at the University of Toronto, has replicated the analysis reported in Table 7.3 of the article.[55] And a senior staff member at the *Stanford Law Review* (someone who in my view is quite a good econometrician[56]), using data I posted on my website or sent him directly, duplicated many of the analyses in my article (except those in Part VII).

Probably none of these individuals agrees with all of my methodological choices, and a few have found minor coding errors.[57] Based on my conversations with Johnson and Dinovitzer in particular, I believe they are independently developing very thoughtful critiques of *Systemic Analysis* based on their own analyses of the data, which will argue that the data supports in some instances a range of possible interpretations. But the statistics in *Systemic Analysis*, and the dimensions of the serious problems it documents, are accurate. This is why Adam Liptak, in his long analysis for the *New York Times*, concluded that "the basic numbers are not in serious dispute."[58] To persist in questioning the article on this basis is simply absurd.[59]

III. AYRES AND BROOKS: STARING PAST THE DATA

I was delighted when I heard that Ian Ayres and Richard Brooks were writing one of the responses in this issue; I know and respect both men, and I felt both of them would give the issues a fair and fresh examination. I was disappointed by their response. There are three major problems with Ayres and Brooks's piece: they mischaracterize and largely ignore my work, they develop a detailed empirical analysis using the LSAC-BPS data in inappropriate ways, and they misconstrue the profound implications of the data on blacks attending their second-choice schools.

A. *Making a Straw Man out of* Systemic Analysis

Ayres and Brooks replicated many of the analyses in my paper, but they spend little time discussing them. Their style of argument relies instead on making claims of the form, "If Sander is right, then X must be true. Since X is not true, Sander is wrong." The problem is that none of their "then X must be true" statements follows from my article. For example:

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55. E-mail from Ronit Dinovitzer, Assistant Professor of Sociology, University of Toronto, to Richard Sander, Professor of Law, UCLA School of Law (May 24, 2005) (on file with author).

56. *Stanford Law Review* policy precludes naming this staff member, who produced over the course of editing more insightful, substantive suggestions for the methodological discussions in the paper than any other single reader.

57. Corrections are posted at Sander Website, *supra* note 34.

58. Liptak, *supra* note 4.

59. Particularly since Dauber does not point out a single error in *Systemic Analysis*.

(1) Ayres and Brooks write:

> An . . . audacious claim of Sander is that, after controlling for a student's relative entering credentials, the probability at the moment of entering law school that a student will become a lawyer is *not* importantly determined by the student's race or *any* other factors. Sander's argument seems to be that if you know a student's LSAT and undergraduate GPA relative to those of her classmates at the moment she enters law school, you can make the best prediction possible (at that point) about her chances of ultimately graduating and becoming a lawyer.[60]

Such a claim would indeed be audacious—and wrong—but I never make it. Indeed, *Systemic Analysis* presents a variety of data showing that these credentials leave a great deal of variation in law school and bar performance unexplained.[61]

Ayres and Brooks are committing a sort of ecological fallacy: assuming that statements that apply to groups can be applied to individuals. A basic premise of *Systemic Analysis* is that, on the whole, when we account for differences in entering credentials, grades, and tier, group differences in the performance of blacks and whites cancel out. In other words, I argue that there is no systematic factor that substantially lowers black performance as a whole relative to white performance as a whole, when one takes entering credentials into account, other than the mismatch problem.[62] There is no question that a host of other factors matter on an individual level—study habits and reasons for attending law school, to name just two—but these do not vary across racial lines enough to matter significantly for the aggregate racial patterns.

Based on this mischaracterization of *Systemic Analysis*, Ayres and Brooks assume throughout their analysis that "academic index"—the weighted combination of a student's LSAT and UGPA scores—must be able to predict black-white differences accurately, even when their uses of it are plagued by serious selection bias. Any inaccurate prediction or nonsensical result becomes, in their framework, evidence against the mismatch theory.

(2) Ayres and Brooks reify the concept of "law school tier," used in my article, into a far more rigid construct than the data they rely on (from the LSAC-BPS) permits. As I noted in Part I, *supra*, the LSAC-BPS data groups students into six "clusters," using a cluster analysis that relies not only on measures of prestige but also on factors like a school's size, its cost, and whether it is public or private. As I note in *Systemic Analysis*, the six clusters "correspond roughly" to tiers of law school prestige, but they can only be used

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60. Ayres & Brooks, *supra* note 7, at 1810 (footnote omitted).

61. *See generally* Sander, *supra* note 3, at 418-25.

62. Gender is a possible exception (women make up a larger proportion of black than white law students), which is why I include it in my regressions, but the group effect of gender is small.

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validly as rough proxies.[63] Ayres and Brooks, however, treat the tiers as though (a) there were no overlap in school rankings across tiers, and (b) every school in each tier were identically elite. It is not just that both of these assumptions are obviously wrong. It is that the techniques Ayres and Brooks use are completely invalid if either assumption is wrong just a little bit.[64]

With these two very powerful but very flawed assumptions, Ayres and Brooks undertake a series of analyses and simulations. Here is an example of where their analysis leads:

> [W]hen we calculate the actual rates at which black and white students with the same index become lawyers, we find patterns that substantially diverge from Sander's predictions. For example, if we look at whites and blacks with (entering credential) indices between 600 and 620, we find that the median white attended Tier 3 law schools and that these whites had a 77.8% chance of becoming lawyers at Tier 3. But when blacks with the same entering index scores attended Tier 3 law schools, they had only a 55.0% chance of becoming lawyers. This disparity is inconsistent with Sander's theory. Moreover, when blacks with the same index score attended Tier 4 schools (that is, generally more elite schools), they had a higher probability—a 66.0% chance—of becoming lawyers.[65]

Let's examine the various types of selection bias in this paragraph.[66] Tier 3 comprises about fifty midrange private law schools, and Tier 4 comprises about fifty midrange public law schools. Although the Tier 4 schools are, on average, more elite than the Tier 3 schools,[67] the rankings of individual schools across the two tiers substantially overlap, and both tiers (which each include nearly a third of all law schools) range from schools with national reputations to much lower-status local schools. When Ayres and Brooks select all whites with index

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63. Sander, *supra* note 3, at 415. In the article, I use these tiers in two ways: first, to present general descriptive statistics to show that relatively elite schools exhibit patterns similar to those observed at relatively nonelite schools (e.g., in the use of preferences and in black performance), and second, as a rough control for prestige (in Tables 5.6 and 6.2) to show that grades tend to dominate prestige in predicting graduation and bar passage—a prediction which I then actually test and measure through comparisons of blacks and whites. If tiers perfectly measured prestige, Tables 5.6 and 6.2 would probably show a somewhat higher coefficient for prestige—making my point a little less resoundingly—but I can find no evidence that the conclusions I draw from those analyses would change.

64. Since March, when I wrote these words, Ayres and Brooks have acknowledged some of these problems in the text of their response, but they have not changed their data analysis of conclusions to correct them.

65. Ayres & Brooks, *supra* note 7, at 1818.

66. Incidentally, Ayres and Brooks are here offering an unrepresentative example. If one repeats their comparison for all possible students with similar credential matches attending different tiers, one finds a largely random mix of advantages, disadvantages, and neutral effects for blacks flowing from the "higher" tier school.

67. Note that Ayres and Brooks number their tiers oppositely from the way I do: for them, "Tier 1" refers the lowest-ranked schools, while for me "Tier 1" refers to the highest-ranked schools. For purposes of the current discussion only, I will adopt their system, which is why I here refer to Tier 4 schools as "more elite" than Tier 3 schools.

scores between 600 and 620, they are plausibly tending to select whites near the bottom of Tier 3.[68] But blacks in Tier 3 are just as plausibly from the more elite schools in that very large range (say, mostly from number 20 to number 70). If this is true—and it is certainly the most plausible assumption to make—then Ayres and Brooks are not finding evidence of the mismatch effect, but rather tending to confirm it.

Moreover, suppose Ayres and Brooks could identify whites and blacks with the same index score attending the same school. Then a second type of selection bias comes into play—the unobserved characteristics of each black and each white. Since we know that blacks generally receive very large racial preferences, and since students tend to go to the most elite school that accepts them, it is quite likely that when a black student and a white student are at schools of truly equivalent eliteness, the black student will have some unobserved weakness in her record (e.g., attendance at a very low-ranked college) or the white will have some unobserved strength (e.g., attendance at a very high-ranked college) that systematically biases the comparison of those pairs. A similar sort of problem occurs if one compares blacks with the same index scores attending schools in different tiers; even if one is correct in assuming that the higher-tier black is really going to a more elite school, the higher-tier black is quite likely to have unobserved characteristics that make him a stronger student than the lower-tier black.

All of these problems come into play with a comparison of Tier 3 and Tier 4 blacks. Since Tier 3 and Tier 4 are both very large tiers that almost completely overlap one another, there is no reason to think that the Tier 4 blacks in Ayres and Brooks's example are actually attending more elite schools than the Tier 3 blacks. And, if they are, they probably have, on average, unobserved characteristics that make them stronger students and better bets for long-term outcomes. In other words, the selection bias problems in Ayres and Brooks's methods are so severe that one can't use them to say anything meaningful about the mismatch effect.

I think most social scientists would discount Ayres and Brooks's analyses on the grounds I've just described—that all the indirect evidence points to a likely problem of selection bias, and that, when one has a more methodologically reasonable alternative that avoids selection bias (the white-on-black comparisons made in *Systemic Analysis*), one at least has a responsibility to reconcile the two sets of findings. Ayres and Brooks never do this—that is, they never try to explain how my regressions can show the results they do if their argument is right. But perhaps Ayres and Brooks would counter that (a) there is no direct empirical proof of selection bias in this data and (b)

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68. We know (from Table 3.2 in *Systemic Analysis*, or from direct computation with the data) that a white in Tier 3 with an index between 600 and 620 would be in the bottom 10% of all whites admitted to those schools, while a black with the same index would be in the top 40% of all blacks admitted to those schools.

maybe some similar bias contaminates my results. For a long time I would have had no crushing answer to these points. But now I think I do.

B. *Empirical Evidence on Selection Bias*

The LSAC-BPS is a tantalizing data source because, despite its rich data on law school experiences and performance, one can't identify which school a student went to, and because one knows so little about the student's academic background. I used my own, smaller National Survey) in *Systemic Analysis* when tying students to specific schools was important.[69] But I recently recalled that the National Survey also has additional background data on many participating students—in particular, their undergraduate college. I have this data for only about 2000 students at fifteen law schools, but that is a more than adequate sample with which to explore the problem of selection bias. By adjusting each student's UGPA to take into account the quality of his undergraduate institution and the severity of grading at that institution (producing something I call a "national grade"),[70] one can directly measure the distorting effect of this one important characteristic that is unobserved in the LSAC-BPS data.

So, what are the types of selection bias we would like to test?

(1) I argue that if one compares blacks from a lower-tier school with blacks from a higher-tier school who have identical UGPAs (or other academic indices), the higher-tier blacks will come from significantly stronger colleges.

(2) I argue that if one compares blacks with whites at the same school who have the same academic index, the whites will tend to come from significantly stronger colleges.

(3) The critics might argue that in my analysis, which treats blacks and whites with similar academic indices as substantially similar in other unobserved ways, it might be the case that either blacks have in fact much stronger backgrounds than facially similar whites, or that whites really have much stronger backgrounds than

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69. *See* Knaplund et al., *supra* note 11.

70. To make this adjustment, I use a technique I developed in 1990 for UCLA's admissions office. The LSAC provides data on the distribution of GPAs among students at College *X* who are applying to law school. The LSAC also provides the mean LSAT score of students in each GPA range. Taking advantage of the fact that LSAT and UGPA correlate almost perfectly when one is comparing large numbers of students in categorical ranges from the same college, one can use the LSAC data to compare someone who gets a 3.5 from College *X* with someone who gets a 3.7 from College *Y*. I call this adjusted UGPA a student's "national grade." Using this translation significantly improves the ability of UGPA to predict law school performance. I will be posting the algorithm used in computing the national grade, and the actual national grade values computed for students in the National Survey, at Sander Website, *supra* note 34.

facially similar blacks.[71] So, for my white-black comparisons to be unbiased, whites and blacks with similar academic indices should have relatively similar college backgrounds.

Table 6 shows the results of measuring these types of bias. In the first case, I used the academic index of black students to predict their "national grade," controlling for law school rank; I found a large positive coefficient associated with higher rank. In the second case, I used academic index (standardized within each school) to predict national grade (standardized within each school), controlling for race; I found blacks had significantly lower national grades than comparable whites. In the third case, I used academic index (unstandardized, comparing among all schools) to predict national grade, controlling for race; I found no statistically significant association between race and national grade.[72]

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71. Ayres and Brooks argue that I cannot raise the problem of unobserved characteristics, because if it was a problem then this type of bias would undermine my own argument. Ayres & Brooks, *supra* note 7, at 1821-22.

72. In the second and third analyses, I included only students who identified themselves as white or black, since those are the comparisons made by Ayres and Brooks and in much of *Systemic Analysis*.

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TABLE 6: MEASURING BIAS IN COMPARISONS OF STUDENT GROUPS

Type of Comparison	Direction of Bias I Predict	Actual Bias
High-Tier Blacks Compared to Lower-Tier Blacks with Similar Index Levels	High-tier blacks have stronger credentials.	Highly significant bias (p < .002) toward higher-tier blacks; a black student at a twentieth-ranked school has the equivalent of a 24-30 index-point advantage over a black student with the same academic index at a seventieth-ranked school.
Blacks and Whites at Same School with Similar Index Levels	Whites have stronger credentials.	Highly significant bias (p < .002) toward whites; among pairs of blacks and whites at the same law school with the same academic index, the typical white student's national grade gives him the equivalent of an index 25 to 31 points higher than the comparable black student.
Blacks and Whites with Similar Index Levels, Usually at Different Schools	Whites and blacks at the same index levels, but different schools, have roughly the same credentials.	No statistically significant difference between black students' and white students' national grades, when controlling for academic index.

Source: 1995 National Survey Data, *supra* note 11, and author's calculations.

This data makes empirically concrete what I think was theoretically obvious: one simply can't make the types of comparisons that Ayres and Brooks want to make without encountering very large, systematic selection bias. The bias is particularly severe when comparing blacks across different tiers of school—the type of comparison most utilized by Ayres and Brooks. The size of the bias is larger than the median index difference between black students in Tier 3 and black students in Tier 4.[73] And this bias-analysis data does not address at all the perhaps even larger bias introduced by Ayres and Brooks's treatment of tiers as internally homogeneous and monotonically increasing in eliteness from one tier to another. These serious biases make meaningless their findings that higher-tier blacks do as well as or better than lower-tier blacks—and consequently render meaningless the elaborate simulations they derive from these conclusions. In short, Ayres and Brooks's

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73. *See* Sander, *supra* note 3, at 416 tbl.3.2.

central methodology is simply too seriously flawed to yield meaningful insights on any of the subjects they address.

C. *Missing the "Second-Choice" Boat*

Ayres and Brooks do deserve considerable credit for noticing that the Entering Student Questionnaire administered as part of the LSAC-BPS asked students detailed questions about their law school application process. When I first learned of this in December 2004, I quickly ran comparisons of the black second-choice students with other groups and found the stunning patterns discussed in Part II, *supra*. Yet Ayres and Brooks are at best ambivalent about their own findings about the black second-choice students. How can this be?

Ayres and Brooks certainly understand why the black second-choice students provide a way of avoiding the problem of unobserved credentials (which plagues their principal black-on-black comparisons). Their discussion of Dale and Krueger makes it clear that they appreciate that the second-choice approach, though not perfect, avoids obvious sources of bias. Ayres and Brooks also understand that the black second-choice students outperform other blacks on every measurable criterion. To see how Ayres and Brooks nonetheless remain unconvinced by the second-choice evidence, we must reconstruct their methodology.

Ayres and Brooks's first decision was to compare the second-choice blacks not to all other blacks in the LSAC-BPS study, but only to blacks who reported applying to multiple schools, who were accepted by their first-choice school and at least one other school, and who decided to attend their first-choice school. They have a logical reason for drawing such a specific comparison group: those students most closely match the black second-choice students in the options they faced when choosing a school. However, choosing this control group makes it less likely that they will find support for the mismatch effect, for two reasons: First, the Ayres and Brooks comparison group reports higher socioeconomic status than the second-choice group, which may reduce the performance gap. Second (and more importantly), restricting the comparison group in this way reduces the sample size of the comparison group by two-thirds. Smaller sample size makes it more likely that real performance differences will not show up as statistically significant.

Ayres and Brooks then tested the impact of attending a second-choice school by running regressions where the dependent variable was each student's outcome (e.g., grades, graduation, or bar passage) and the independent variables were not only academic index and second-choice status, but also gender, tier, and the number of schools at which a student was accepted. Again, in principle adding these other variables in is reasonable, but there are not particularly compelling reasons to add at least the last two variables into the

model, and adding variables makes it more likely that the key variable of interest (second-choice status) will lose significance.[74]

Ayres and Brooks looked at how black second-choice students compared with other blacks on five measures: first-year GPA, cumulative three-year GPA, first-time bar passage rate, ultimate bar passage rate, and graduation rate. I have not been able to precisely duplicate Ayres and Brooks's results, but I worked closely with Ayres and Brooks to get as close as possible and Table 7 represents my best effort. With their methods, they (and I) get two results on the second-choice variable that are statistically significant: the black second-choice students have significantly better first-year grades, and they have a significantly higher chance of passing the bar on their first attempt.

TABLE 7: ALTERNATIVE COMPARISON GROUPS FOR SECOND-CHOICE ANALYSIS USING AYRES AND BROOKS'S REGRESSION CONTROLS AND METHODS

	Comparison Groups			
Outcome Variable	**All Other Blacks (n = 1691)**	**Accepted First Choice (n = 899)**	**Accepted First Choice/Accepted to More than One School (n = 488)**	**Blacks Passing Up First-Choice School (n = 172)**
Percentage to Pass First Bar	59.3%***	60.0%***	65.5%**	80.4%
Percentage to Pass Bar Ever	76.9%	77.3%	82.6%	86.2%
Percentage Graduated	81.0%	79.4%	84.0%	89.5%
Mean First-Year GPA	-1.01***	-1.00**	-1.03***	-0.71
Mean Final GPA[+]	-1.17**	-1.13*	-1.10**	-0.84

Source: LSAC-BPS Data, *supra* note 10, and author's calculations. "[+]" indicates imputation using first-year GPA if final GPA was missing. "*" indicates $p < .10$; "**" indicates $p < .05$; "***" indicates $p < .01$.

Even with the various model modifications introduced by Ayres and Brooks—all of which tend to reduce the force of the second-choice

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74. For example, if instead of using "Law School GPA" to predict performance on the bar, we used each of a student's individual course grades as an independent variable, it is quite possible that none of these variables would be statistically significant, since they would all "share" their explanatory power with all the other grade variables.

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comparison—the evidence for the mismatch theory is still overwhelming. Consider: (1) for every single outcome measure, black second-choice students have higher performance rates, sometimes by wide margins, than the Ayres and Brooks comparison group; (2) the higher rates are either very close to, or actually exceed, what one would predict from the mismatch theory; (3) the better performance of the black second-choice students in law school is only explicable if they are, in fact, attending less elite schools (the key assumption of this methodology); (4) two of the results have very large coefficients and are very statistically significant, despite the small sample size; (5) final GPA becomes statistically significant if we correct the measure for those blacks who dropped out of law school before graduating;[75] and (6) the final bar passage and graduation result becomes statistically significant if we combine those two measures into a single measure of who among the entering cohort eventually becomes an attorney.

Yet based on this evidence, Ayres and Brooks offer the tepid conclusion that "there is mixed support for a mismatch effect."[76] This is an astounding understatement. Ayres and Brooks's findings provide as much support for the mismatch theory as was conceivable going in, given the restrictive way they constructed their tests.

Let me be clear: I do not question Ayres and Brooks's good faith in constructing their alternate methodologies and sounding a generally negative tone about the mismatch theory even though the only valid evidence they produce strongly *supports* the mismatch theory. I think, rather, that their response provides an exceptionally good example of how even fair-minded researchers can look past the data when they have fastened too early upon the conclusions they think they should reach.

D. *An Alternate Theory?*

Near the end of their article, Ayres and Brooks make an attempt to answer my call for plausible alternative explanations for the very low black outcomes in law school grades, graduation, and bar passage. While acknowledging that they do not have a "compelling theory" to explain these outcomes, they suggest that "stereotype threat" may play a significant role, and that it is at least "an important place to start."[77]

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75. Final (three-year) law school GPA is not significant in the Ayres and Brooks model only because those students with the worst first-year grades (who are disproportionately "first-choice" students) tended to drop out, artificially elevating final GPA. If we impute the missing GPAs of those students (by using their first-year GPAs), then the first-choice/second-choice difference in final GPA becomes statistically significant.

76. Ayres and Brooks, *supra* note 7, at 1837.

77. *Id.* at 1839.

This idea is so underdeveloped that one cannot view it as a serious competing explanation of the tremendous crisis facing blacks in law school. Even as an exploratory hypothesis, it faces serious problems. In the first place, the research on stereotype threat has been almost entirely confined to laboratories. No one has ever demonstrated that stereotype threat has any effect on black performance on actual tests that matter. Second, measurements of stereotype threat generally show effects that are statistically significant but, in practical terms, very small.[78]

But much more importantly, the existence of stereotype threat is countered by each step of evidence in *Systemic Analysis*. Black underperformance in law school grades, when controlling for entering credentials, explains less than a tenth of the black-white gap in law school grades. Blacks graduate at the same rate as whites—when one controls for law school grades—and they pass the bar at the same rate as whites with the same grades and background characteristics. So what exactly is there for stereotype threat to explain?

IV. THE CHAMBERS ET AL. CRITIQUE: DÉJÀ VU ALL OVER AGAIN

A. *First Round*

The Chambers et al. critique is a second edition of a critique written in the fall of 2004 and very widely disseminated to academics, law school deans, and journalists. I wrote a detailed response in early January that I gave to Chambers and Lempert but did not widely distribute, pointing out a number of outright errors and other problems in their report.[79] Although Chambers et al. never made a formal retraction, they did remove nearly all of the material I found clearly incorrect, and their revised critique—the response published here—is more careful and more measured. Chambers et al. are at their strongest when discussing the consequences of eliminating racial preferences on the production of black lawyers, which is really a side issue in *Systemic Analysis.* Over the past several months, I have developed a set of simulation models aimed at examining the impact of several possible paths law school admissions might take if a consensus emerges that the mismatch effect is, indeed, real. The space constraints of this Reply prevent a full unrolling of these models, so I will not fully engage Chambers et al.'s own simulation arguments here. Instead, I examine below each of their critiques of the mismatch theory, and offer a few observations and some relevant data on the impact of race-neutral policies.

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78. *See* Amy Wax, *The Threat in the Air*, WALL ST. J., Apr. 13, 2004, at A20.

79. The original Chambers et al. critique, and my response, can be found at Sander Website, *supra* note 34.

B. *Arguments on the Mismatch Effect*

   1. *Black underperformance?*

   Chambers et al. offer three critiques of the mismatch theory. First, they argue that blacks do slightly underperform their credentials in law school.[80] I agree with this critique in part (see my discussion in Part I, *supra*), but Chambers et al. oddly miss the larger point: all of the available evidence (including the large systematic study by Anthony and Liu) indicates that at least ninety percent of the black-white grade gap is attributable to racial preferences, not black underperformance. To ignore this is to talk past the data.

   2. *Another black-on-black comparison*

   Chambers et al.'s second critique of the mismatch theory relies on a chart showing ultimate bar passage rates for blacks by tier and index category.[81] This analysis suffers from the fatal problems I have discussed twice earlier in this Reply,[82] except that Chambers et al.'s version is particularly weak. By trying to match blacks within very broad categories of school prestige and academic index, the Chambers et al. approach generates enormous selection bias problems—indeed, it pretty much maximizes those problems.

   3. *Grades and bar passage*

   Chambers et al.'s third critique argues that my evidence for the mismatch theory is weak because my regressions predicting graduation and bar passage rates (reported in Tables 5.6 and 6.1 of *Systemic Analysis*) are weak. Chambers et al. are arguing, in other words, that grades have only a weak bearing on graduation and bar passage, and that therefore I can't be right that black students' disproportionately low grades are substantially hurting their chances of becoming lawyers.

   I think that Chambers et al.'s arguments would strike most econometricians as misleading and uninformed.[83] Law school GPA is the dominant determinant of whether law students graduate and pass the bar, with tier playing an important but secondary role. I invite the reader to reexamine Table 2 in this Reply, which is summarized below. Sometimes misleading arguments can be effective simply because most readers cannot easily judge who is making sense. In this case, the patterns speak for themselves.

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   80. Chambers et al., *supra* note 8, at 1877-78.
   81. *Id.* at 1884 tbl.3.
   82. *See supra* Parts I.C and II.A-B.
   83. For a discussion of some of the mathematical issues, see Sander, *supra* note 42, at 2.

TABLE 8: A DISTILLED SUMMARY OF THE RELATIONSHIP OF LAW SCHOOL
GPA, LAW SCHOOL TIER, AND PERFORMANCE OUTCOMES

Tier	Proportion of Students Graduating and Passing the Bar on Their First Attempt, According to Class Rank	
	GPAs in Bottom Tenth	**GPAs in Top Half**
1 (high)	67%	98%
2	45%	96%
3	39%	96%
4	31%	95%
5	23%	89%
6 (low)	16%	82%

Source: LSAC-BPS Data, *supra* note 10, and author's calculations. In making these calculations, I omitted from the analyzed pool those law graduates who chose not to sit for a bar exam.

4. *The second-choice data*

Chambers et al. acknowledge that the second-choice data exists, but they dismiss it quickly, suggesting that Ayres and Brooks have effectively shown that the second-choice data "does not support" the mismatch theory.[84] As the reader by this time knows, I disagree. Chambers et al. seriously misstate Ayres and Brooks's findings. Perhaps this is because in an early draft Ayres and Brooks found that black second-choice students did not have significantly better first-year grades than black first-choice students. I was unable to replicate this finding and, working with Brooks, we traced the problem to a small coding error in Ayres and Brooks's program. Ayres and Brooks's published response agrees with my finding that the black second-choice students do have significantly better first-year grades than the black first-choice students. Chambers et al. point out that after reading Ayres and Brooks's response "in draft form, [they] performed [their] own analysis of the data and reached the same results."[85] Ayres and Brooks's findings have clearly changed. Additionally, in their current summary of Ayres and Brooks's *final* findings, Chambers et al. contend that the "final law school grades" of the black second-choice students are not higher than those of black students attending their first-choice schools.[86] This claim is dubious too. The debate is not about whether the second-choice blacks in the sample have higher final law school GPAs, on average (they clearly do), but whether the difference is statistically significant. The difference is only *not* significant if one fails to account for the larger

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84. Chambers et al., *supra* note 8, at 1887-88.

85. *Id.* at 1887 n.116.

86. *Id.* at 1888.

number of comparison blacks who drop out of law school before graduating (and consequently don't have final GPAs). Once again, it would seem wishful thinking is a substitute for careful, balanced analysis.

These four arguments are the sum total of Chambers et al.'s critique of the mismatch theory. None of them holds even a little water. Combined with their failure to offer any alternative explanation for the undisputedly poor outcomes for blacks, Chambers et al.'s opposition to the mismatch theory seems more token than real.

C. *Arguments on the Effects of Ending Preferences*

Most of the Chambers et al. critique does not focus on the mismatch theory, but on what would happen if all racial preferences were abolished. Before discussing their specific arguments, it is helpful to clear away some underbrush so that we can focus on the real points in dispute.

First, unlike the analyses in Parts II through VII of *Systemic Analysis*, which are all precise descriptions of how the current system operates and which I think no one has effectively challenged, I have never pretended that the projections in Part VIII of the paper are more than simulations and speculations about an unknowable future. The point of those projections is to dispute the conventional wisdom that eliminating preferences would catastrophically depress the production of new lawyers and to point out that racial preferences—via the mismatch effect—were very likely shrinking the pool of lawyers as much as or more than would result from the end of the preferences themselves.

The debate has indeed changed. As David Chambers observed in a joint appearance we made at the University of Michigan in January 2005:

> I think Sander has given/made an important service. If there is a decline in the number of black students who would be in law school if affirmative action is ended, it is nowhere near in the range of the 50 to 90% terms that were used by some of the parties in the *Grutter* and *Gratz* litigation. They picked up numbers that had been used as what would be the proportion, for example, of black students who would get into exactly the same law school that they applied to before, as opposed to get in somewhere, and that number of course was higher. So, I think Professor Sander has helped us create a more realistic discussion and a more realistic debate.[87]

Second, I have not advocated the complete abolition of racial preferences. I think abolition ought to be one of the options under consideration, and the thought experiment of what would happen if admissions became race-blind is always helpful as an analytic tool. But one certainly needs more research if one is going to eliminate preferences based purely on efficacy arguments.

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87. David L. Chambers, Remarks at Debate on Affirmative Action, University of Michigan Law School (Jan. 24, 2005) (author's transcription from tape on file with author).

1. *The credentials gap in a race-blind regime*

Chambers et al. argue that even in a race-blind regime, there would still be a large black-white credentials gap in individual law schools and that, consequently, the mismatch problem (if it exists) would still be significant. As evidence, they point out that law schools covered by bans on racial preferences in the late 1990s—e.g., Boalt Hall, UCLA, and the University of Texas—continued to show significant black-white disparities in entering credentials in the years after the bans went into effect. But this is a misleading analogy, for several reasons. The national law schools affected by California's Proposition 209 and *Hopwood v. Texas*[88] faced a uniquely difficult problem: they were enjoined from using racial preferences, but their direct competitors were not. Thus, underrepresented minority applicants accepted through a completely race-blind method at any of these schools would probably also be accepted by race-conscious Harvard, Yale, and Stanford. As a result, all three schools took extraordinary steps to maintain racial diversity. UCLA, for example, implemented the aggressive socioeconomic diversity program I have written about elsewhere.[89] Such efforts sought to admit some of the students who would have been admitted under the old race-conscious policies, thus necessarily perpetuating a significant credentials gap.

If Chambers et al.'s analogy to Texas and California law schools is inapt, their general point remains: if the distribution of black credentials is lower than the distribution of white credentials, then in any specific credential range, however narrow, average black credentials will tend to be lower than average white credentials. This is a reasonable statement; indeed, I noted this myself in cautioning readers about the interpretation of two of my tables in *Systemic Analysis*.[90] Figure 1 illustrates the intuition behind this claim.
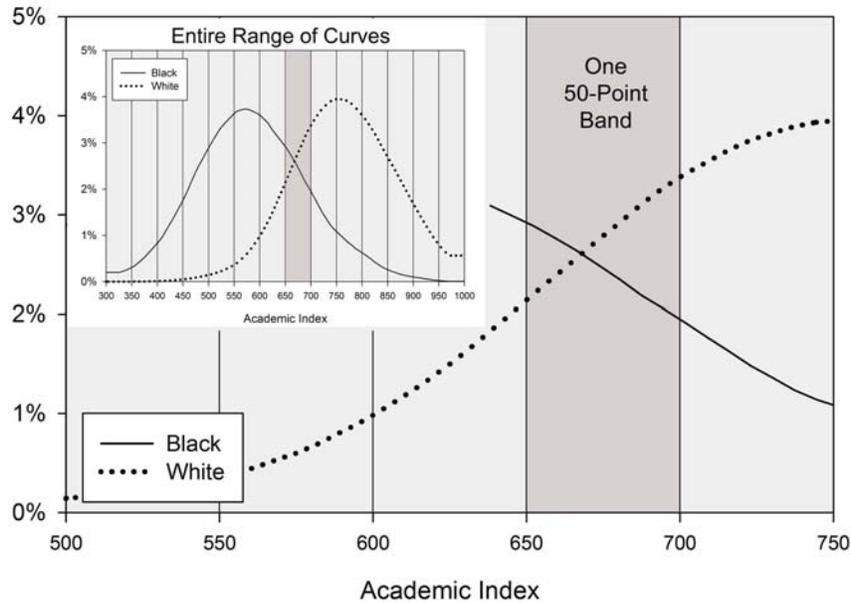
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88. 236 F.3d 256 (5th Cir. 2000).

89. *See* Richard H. Sander, *Experimenting with Class-Based Affirmative Action*, 47 J. LEGAL EDUC. 472 (1997).

90. Sander, *supra* note 3, at 446 n.214.

FIGURE 1: ILLUSTRATING THE "DISTRIBUTION EFFECT"[91]

Because the distribution of black credentials is lower (further to the left) than the white distribution, and because both distributions are normally distributed, if we admit students from any rigid band of scores, blacks within that band will have lower average scores than whites. To take an extreme example, consider the band of index scores from 650 to 700 in Figure 1.[92] Whites with scores in this band are more heavily represented at the top of the band (near 700), while blacks in this band are more heavily represented at the bottom. Thus, if a school admitted all students with scores between 650 and 700, the average index of admitted blacks would be somewhat lower than the average index of admitted whites.[93] A similar, though less dramatic, effect

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91. This figure is derived from calculations by the author from LSAC-BPS Data, *supra* note 10.

92. This is an extreme example because here the slope of the black distribution is curving steeply upward (more blacks are at the bottom of the range) while the white distribution is curving steeply downward (more whites are at the top of the range). Note that what is important for this analysis is not the relative number of whites and blacks in a particular range, but the degree to which blacks and whites in a given range are clustered at opposite ends of the range.

93. Chambers et al. offer an analogy of this type that assumes all Tier 3 schools in the LSAC-BPS data set have identical admissions processes. This wildly implausible assumption naturally produces something more analogous to a 200-point band for admissions—and thus inevitably shows a larger residual black-white gap.

exists in most of the other bands in Figure 1. For convenience, I will call this the "distribution effect."

The distribution effect is real—but is it important? Chambers et al. imply that the distribution effect is quite important, but they say nothing about its size, with good reason. Taking the example above, if we actually compute the mean index of all blacks and all whites with academic indices in the 650 to 700 range, we find a black-white gap of less than three points. Real-world admissions are a little more complicated, but in experiments with a variety of simulation methods using data on the actual law school applicant pool, I consistently found that under race-blind admissions, the average white-black credentials gap at any individual law school was between three and eight points on the 1000-point scale used in *Systemic Analysis*. The current gap at most schools, as measured by my article, was 170 points. So Chambers et al. are right: race-neutral admissions do not eliminate 100% of the credentials gap at individual schools, only about 95% to 98% of it.[94]

2. *The surge in white applicants*

Chambers et al. argue that Table 8.2 of *Systemic Analysis* conveys a far too rosy picture of the consequences of eliminating racial preferences because it is based on a simulation Linda Wightman conducted using 2001 application and admissions data. In fact, they point out, the number of law school applicants—especially white applicants—had risen by some thirty percent over the past three years, making the law school application process far more competitive; in this more competitive environment, more black applicants would be squeezed out in a race-blind process.

I have not had the leisure to check their calculations, but let us suppose for the sake of argument that their Table 1 is accurate. If we look over the past ten admissions cycles (1995 to 2004), we see that the 2001 estimates Wightman and I used are at the median for that period, and about three percentage points below the average. It is fair for Chambers et al. to point out that the numbers bounce around from year to year, but why is it reasonable to claim that we should use the highest figure of the past decade? Chambers et al. suggest that the late 1990s were an "aberration," with many would-be law students lured to Silicon Valley instead. But they present no evidence on this point, and one does not see analogous patterns in, for example, business or medical school applications.[95] It is more plausible that the recent spike in white applications

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94. Since 3/170 = 1.8%, and 8/170 = 4.7%, we would expect something like 2-5% of the current credentials gap to remain in a race-neutral regime. A detailed simulation is discussed at Sander Website, *supra* note 34; this simulation shows an average gap of 4.18 points per school, although there is considerable variation across individual schools. I will be posting more simulations later this summer.

95. According to the data in Chambers et al.'s Table 1, law school applications were 30% higher during the 2002-2004 admissions cycles than during the 1996-2001 admissions

reflects, like similar spikes in the late 1960s and late 1980s, sudden and well-publicized jumps in the starting salaries at big law firms. The much stronger historical pattern is for a steady increase in the relative size, strength, and competitiveness of the black applicant pool.

3. *The decline in enrollment at elite schools*

It is of course true that ending racial preferences in law admissions would substantially reduce black enrollments at elite law schools. This is a real and valid concern, as I noted in *Systemic Analysis*,[96] and it would clearly be a central concern in actual discussions aimed at addressing the mismatch effect. Unfortunately, many of the discussions of this point I have seen over the past few months make apocalyptic claims that the evidence simply does not support.

Chambers et al. strike a very commendable note by pointing out that the tendency of schools to take into account nonacademic factors to some degree will disparately benefit blacks applying to elite schools.[97] But they slip into the apocalyptic school in other respects. They simulate (in their Table 7) their projected distribution of black students across law school tiers. But their total (1295 students) is more than 600 students shy of the total number of blacks they project would start law school in a race-blind regime. This apparent error obviously understates the actual representation of blacks in the various law school tiers. Second, their projected 45% drop in first-year black enrollment assumes that substantial numbers of blacks will stay away from law school in a race-blind regime. But the best research on the effects of race-blind admissions on black applicant behavior finds no net change at all, at least for highly qualified applicants.[98]

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cycles. Comparing the same periods for medical schools, one finds an increase of less than 7% in first-time MCAT-takers. *See* Ass'n of Am. Med. Colls., MCAT: Characteristics of Examinees and Summary Data, *at* http://www.aamc.org/students/mcat/examineedata/pubs.htm (last visited May 20, 2005). And over the past four years, the number of students taking the GMAT (the admissions test for business schools) has steadily declined. *See* Graduate Mgmt. Admission Council, Current GMAT Volume, *at* http://www.gmac.com/gmac/ResearchandTrends/GMATStatistics/CurrentGMATVolume.htm (last visited May 20, 2005).

    96. Sander, *supra* note 3, at 483.

    97. Chambers et al. do not notice, however, that the same effect reduces the number of blacks excluded from law admissions as a whole by race-blind procedures, making their Wightman-style simulations too pessimistic.

    98. *See* DAVID CARD & ALAN B. KRUEGER, WOULD THE ELIMINATION OF AFFIRMATIVE ACTION AFFECT HIGHLY QUALIFIED MINORITY APPLICANTS? EVIDENCE FROM CALIFORNIA AND TEXAS 3 (Nat'l Bureau of Econ. Research, Working Paper No. 10366, 2004), *available at* http://papers.nber.org/papers/w10366.pdf.

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4. *The worsening mismatch effect*

Chambers et al. claim that, in estimating the enrollment of black law students and the production of black lawyers in a race-neutral world, I consistently err on the side of optimism. I strongly disagree. My assumption about the proportion of blacks who would be admitted in a race-blind regime is much closer to historical norms than Chambers et al.'s assumption. My assumptions about black applicant behavior in a race-neutral regime are supported by research; Chambers et al.'s are not. In one very important respect, Table 8.2 in *Systemic Analysis* probably understates the current mismatch problem, and the positive effects on blacks of moving to a race-neutral system. This is in my reliance on bar passage data from 1994. Because 1994 is the year when students in the LSAC-BPS generally graduated and took the bar, it is the only year for which we have a good national measure of the relative bar passage rates of whites and blacks. All of the findings about bar exam results in *Systemic Analysis*, and in much of the ensuing debate, are based on the 1994 numbers.

The current situation is much more severe. As Chambers et al. well know, 1994 was the historical high-water mark of national bar passage rates.[99] The first-time bar passage rate measured by the LSAC-BPS was about 88%; the total national rate in 1994-1995 was somewhat lower—82.3%—for a variety of reasons;[100] the rate has steadily fallen since then, to 74.7% in 2002-2003. If a sample in which the first-time bar passage rate is 88% produces a black first-time bar passage rate of about 61%, what is the passage rate going to be when the national rate is under 75%? My own guess is that only a third of black law students are now graduating and passing the bar on their first attempt, and significantly less than half of entering black law students now become lawyers. If this is true—and certainly we urgently need to find out what the real numbers are—then the estimates of the size of the mismatch effect in *Systemic Analysis* are modest indeed.

V. DAVID WILKINS AND THE LONG-TERM EFFECTS OF GRADES

While Dauber, Ayres and Brooks, and Chambers et al. all attempt to rebut particular findings of *Systemic Analysis*, David Wilkins takes a different approach. Even if every argument is true, he says, this still doesn't show that the costs to blacks of law school racial preferences outweigh the benefits, because I have not considered perhaps the single greatest benefit of affirmative action in law school: its role in building the long-term careers of black lawyers

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99. *See* William C. Kidder, *The Bar Examination and the Dream Deferred: A Critical Analysis of the MBE, Social Closure, and Racial and Ethnic Stratification*, 29 LAW & SOC. INQUIRY 547, 550, 552 fig.2 (2004).

100. These reasons are detailed at Sander, *supra* note 3, at 442 n.202.

and giving them a place in the most elite ranks of the profession and American society.

Wilkins is certainly right in one key respect: *Systemic Analysis* does not (and does not pretend to) consider *all* of the costs and benefits of racial preferences. I only wrote about a series of interlocking outcomes that are linked to the mismatch effect, and which can be quantified to an extent difficult with many other putative costs and benefits of the system. Many other harms (e.g., the stigma effects of preferences, the political costs, the fostering of stereotypes) and benefits (e.g., the increase in racial diversity at elite schools) are completely unaddressed. Wilkins's article is a thought-provoking effort to broaden the debate and to make sure an important arena is not overlooked.

I disagree with many of the claims Wilkins makes as he sets the stage for his argument. For example, I take exception to his assertion that my job market findings are the "linchpin" of my cost-benefit analysis. Wilkins minimizes the harm done to the 43% of blacks who start law school and never become lawyers (and the 20% of black lawyers who must try multiple times before passing the bar).[101] Wilkins makes a math error that leads him to understate by a factor of ten my estimate of how much the black bar would increase without racial preferences.[102] Wilkins also minimizes the significance of showing that in the entry-level legal job market, grades matter more than prestige. This finding, which refutes generations of conventional wisdom, is not based on "a single piece of evidence,"[103] as he suggests, but on the thousands of young lawyers who participated in AJD—a project that has provided by far the best data available on this issue.

Rather than debate these relatively minor points about the response, however, I would like here to engage Wilkins's central argument: good grades may help law school graduates get their first jobs out of law school, but within a few years no one will know or care how they did in school. As one's career

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101. The comparable numbers for whites are 17% (who never become lawyers) and 5% (lawyers who pass the bar after at least one failure). Wilkins does, however, make the important point that we need better data on blacks who fall by the wayside en route to the bar, to determine whether their legal educations (even if incomplete) help them in the other careers they end up pursuing and whether this benefit offsets the lost time and resources incurred in law school.

102. In Part VIII of *Systemic Analysis*, I point out that ending preferences would have reduced the number of entering black law students by an estimated 491 blacks (Wilkins gives the number 524, but it's unclear how he derives this). Wilkins points out that 29% of this cohort graduates and passes the bar, producing 142 (my number) or 152 (Wilkins's number) new lawyers. Wilkins, *supra* note 5, at 1942. He then compares this number with the number of net new black attorneys I estimate might be produced by a race-blind system (169), suggesting that ending preferences only produces a net increase of 17 attorneys (169 minus 152). *Id.* This is incorrect. The whole point of my analysis is to net the black lawyers lost in the admissions process against those gained through lower attrition. The total gain in new lawyers is 311, which becomes a net gain of 169 after accounting for the 142 would-be lawyers not admitted to law school.

103. *Id.* at 1918.

progresses, what matters in the various dimensions of career advancement—promotions, jumping to new jobs, landing clients, making contacts—is the prestige of one's law school pedigree, and the contacts and people skills one has accumulated during law school. Any reform that reduces the number of blacks going to elite schools will therefore harm the careers of many blacks and will directly cut into the numbers of blacks entering the legal profession's highest strata.

Wilkins is here advancing an extreme version of the "credentialing" theory of legal education. Law school is primarily about picking up the best possible brand name; secondarily, it is about mingling with other high-achieving students and influential guest speakers who will eventually be useful contacts. The actual learning process in law school (going to classes, getting good grades) is largely irrelevant, as Wilkins's opening anecdote proclaims.

I find this to be an amazingly cynical view of law school. If Wilkins is right, why have law school curricula at all? And why spend three years at school? Wouldn't it make more sense to have students pay $120,000 up front to spend perhaps six months on an intensive round of happy hours, on-campus interviews, guest lectures from powerful lawyers, workshops on how to select business suits and shake hands confidently, and study sessions on the proper use of alumni directories?

Of course, the fact that Wilkins's argument is cynical does not mean it is wrong. Indeed, he is no doubt right that law school transcripts per se matter very little after the first four or five years of one's legal career. But that seriously mischaracterizes the issue. Doing poorly in law school could be a significant long-term handicap for lawyers in two other ways. First, how much one learns in law school could actually influence how good a lawyer one becomes after law school. Second, poor performance in law school, by limiting the jobs one gets at the outset of one's career, could significantly narrow long-term opportunities. Wilkins discounts both possibilities. But if either mechanism is important, then the mismatch effect in law school could have a large, harmful, and long-term impact on the black bar entirely aside from its effect on blacks getting into the bar.

The evidence from *Systemic Analysis* certainly cuts against Wilkins's premises. Employers place enormous emphasis on grades in hiring—so much emphasis that the typical black law graduate in 2000 would have gotten a significantly better job had he been somehow able to bypass affirmative action in law school. Why do law firms care so much about grades? Surely it is not because they think that listing associates' GPAs will look good on their websites.[104] No, firms must care about high grades because they believe they

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104. It is worth noting in passing that firms do often consider the academic achievements of their lawyers (e.g., Order of the Coif, Phi Betta Kappa, and law review) to signal lawyer quality, and include these credentials in promotional literature. See, for example, the websites of individual lawyers at Munger, Tolles & Olsen, Los Angeles's most

are a strong indication of qualities that will make for a good lawyer: mastery of legal subjects, ability to think through legal problems clearly and write about them coherently, self-confidence in approaching difficult and complex legal issues, and so on. That's why so many employers would prefer an "A" student from a regional school over a "C" student from a national school.

Those who make hiring decisions are presumably more or less rational in their search for the best talent and the strongest human capital they can bring to their firm or office. They presumably believe that high GPAs actually measure skills relevant to success in the workplace and success in one's career. If all this is true, then it is also true that the mismatch effect substantially lowers the average skills black students would otherwise get in law school, and blacks start out their legal careers with a substantial (and gratuitous) disadvantage in their portfolio of legal skills.

Even if we assume away the skills problem, the mismatch effect creates a serious "path" problem for black attorneys. Wilkins may be right that when a lawyer looks for his second or third job, employers will care less about his law school GPA. But he is certainly wrong in claiming that these future employers will care most about the candidate's school pedigree. Future employers will— by a wide margin—most care about the candidate's job history and, in particular, his most recent job. It is very likely that by the third year out of law school, most of the long-term sorting of lawyers into the various strata of the profession is largely done. If a student with a terrible law school record but a relatively elite degree gets a lousy job, he is unlikely to be able to leapfrog into an elite job five or ten years later, just on the hope that interest in his law school transcript will have faded. It is very reasonable to assume that an initial low-status job will heavily influence one's long-term career; one ought to have good evidence if one wishes to discard this assumption.

What evidence does Wilkins offer for his argument? He pretty much exclusively relies on one type of evidence: he shows that black lawyers in elite jobs come disproportionately from elite schools. But what does this mean? Are these black students in the best jobs because they went to the best schools, or because they were talented enough to get into the best schools? Recall that because of the cascade effect, nearly all blacks are "mismatched" to a similar degree. Only the relatively small group of blacks going to second-choice schools are less affected. Consequently, blacks graduating from elite law schools are still, on average, the academically strongest of new black lawyers. If these elite graduates land a disproportionate number of the top jobs, is this because of qualities they possessed when they started law school, or because of what the particular law school they attended did for their abilities and career prospects?[105] Wilkins has no way of answering this question, and therefore this line of reasoning ends up going nowhere.[106]

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elite law firm, at http://www.mto.com/ (last visited May 7, 2005).

    105. To put it differently, Harvard takes the most talented blacks, but that doesn't make

A. *Empirical Tests of the Wilkins Thesis*

Thus far, I have argued against Wilkins in conventional law review style—that is, comparing our arguments through the lenses of logic and internal consistency. In the end, I believe such arguments are a distant second-best substitute for the scientific method. We should turn our arguments into hypotheses and try to test them with data.

Wilkins believes that even if my mismatch theory is correct and blacks are disadvantaged in the competition for their first jobs, these handicaps will prove to be only a short-term disadvantage; over the longer term, more prestigious degrees will serve blacks better than good grades. The best test of this argument would of course be an extension of the AJD study to lawyers eight, fifteen, or twenty-five years into their careers. Such data may someday be available, but it isn't now. We must therefore come up with feasible, though far less perfect ways of testing Wilkins's argument. Below I outline two such tests: data on black partners at elite firms and data from the U.S. Census Bureau on the long-term earnings of black lawyers generally.

B. *Promotion to Partnership at Elite Firms*

Wilkins is most passionate when he argues that without affirmative action, blacks will disappear from the national legal elite—which, of course, is most essentially represented in the nation's leading law firms. A reasonable inference from Wilkins's central thesis is that, although blacks may be disadvantaged by low grades in gaining entry into big firms, once they arrive, their careers will flourish, borne upward by their elite law school pedigree and the invaluable contacts they have made in law school. Thus, we would predict that blacks would progress from the ranks of associate into the ranks of partner at a rate at least as high as the rate for whites.

The actual facts are much more sobering. Although blacks make up nearly 5% of the associates at elite New York firms, they only make up 1% of the partners.[107] Specifically, the main offices of the New York firms in the "Am

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them the most talented blacks. If those blacks all went to UCLA, they'd still be the most talented blacks.

106. Wilkins's argument is also overstated. A large proportion of blacks at big firms come from less elite schools, and each black from a nonelite school who gets an elite job is leapfrogging other blacks who were presumably "stronger" when law schools chose their classes. That is, each nonelite black at an elite job is an example of the consequences of the mismatch effect at work.

107. In the *American Lawyer*'s list of the largest U.S. law firms for fiscal year 2001, twenty-two firms indicate their primary office is in New York. *The Am Law 100*, AM. LAW., July 2002, at 183. I used the *NALP Directory of Legal Employers* to count the number of partners at the New York office of each of those firms. Collectively, the firms listed twenty-four black partners and slightly over 2300 total partners, for a black partnership rate of just over one percent. *See generally* NAT'L ASS'N FOR LAW PLACEMENT, DIRECTORY OF LEGAL

Law 100"—a large part of the elite that concerns Wilkins—include *only two dozen* black partners. A recent study by the U.S. Equal Employment Opportunity Commission found even more dismal patterns nationally.[108] In a large sample of major law firms across the United States, the ratio of blacks (of both sexes) to white men among associates was approximately 1:8.5[109]—very close to the nearly 1:8 ratio of blacks to white males in the general population of young lawyers.[110] The ratio of black partners to white male partners, in contrast, was approximately 1:58.[111] Since large firms have been hiring black associates in substantial numbers for many years, this disparity in ratios suggests that a typical black associate in a large firm is about one-seventh as likely as a typical white male associate to be promoted to partner.[112]

Wilkins has written extensively about the challenges facing blacks in large law firms. Along with coauthor G. Mitu Gulati, Wilkins has dissected a dynamic in which black associates have disproportionate difficulty getting onto the "partnership track" at elite firms.[113] Blacks are less likely to get the plum assignments that let them acquire valuable skills and prove their mettle. They are less likely to get on the prime teams, or to be adopted for mentorship by the most influential partners. Why is this? It is possible that garden-variety discrimination plays some role, but it seems somewhat implausible that firms would use preferences to recruit black associates only to shun them once in the door. It seems more likely that the problem lies in concerns about the skill sets black associates are bringing with them—concerns that would logically arise from the much lower GPAs of starting black associates. As Wilkins himself has observed, "Black associates . . . are less likely to get good assignments early on because of subtle assumptions about their skills."[114] Such assumptions are inevitable—and tend to stigmatize all blacks in a firm—if many black associates are arriving with very weak law school records.

EMPLOYERS (2004).

108. U.S. EQUAL EMPLOYMENT OPPORTUNITY COMM'N, DIVERSITY IN LAW FIRMS (2003), *available at* http://www.eeoc.gov/stats/reports/diversitylaw/lawfirms.pdf.

109. *Id.* at 30 tbl.6.

110. The 1:8 ratio was calculated from the Public Use Microdata Sample for 2000 for lawyers under the age of 33. BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, CENSUS OF POPULATION AND HOUSING, 5-PERCENT PUBLIC USE MICRODATA SAMPLE (PUMS) FILES (1980, 1990 & 2000) [hereinafter PUMS Data].

111. *Id.* at 30 tbl.6.

112. The implied 1:7 disparity probably overstates the actual relative rate of promotion for black and whites, since it is comparing the "stock" of black and white partners, not the rate at which new partnerships are created. But my own research suggests that a direct comparison of cohort rates of promotion would show a nearly equal disparity.

113. For example, in David B. Wilkins & G. Mitu Gulati, *Why Are There So Few Black Lawyers in Corporate Law Firms?*, 84 CAL. L. REV. 493, 497 (1996), Wilkins and Gulati write, "[T]he fact that blacks have had little success breaking into the upper echelons of the elite bar is emblematic of a deeper and more intractable set of problems facing those interested in workplace integration."

114. Alan Jenkins, *Losing the Race*, AM. LAW., Oct. 2001, at 91, 95 (quoting Wilkins).

In other words, I think there is an internal tension in Wilkins's argument that the mismatch theory helps resolve. When he observes that whites rely on the sort of common heuristics grades provide about ability, and that "these common heuristics systematically disadvantage the career prospects of black lawyers,"[115] is he not agreeing that poor grades can have a harmful long-term impact on the ability of blacks to enter the legal elite?

C. *How Rank-and-File Black Lawyers Fare over the Long Term*

Much of Wilkins's discussion is focused on the black elite, but on its face his argument that a more elite degree is better than good grades should apply to all black law graduates. Recall Wilkins's key contentions: the prestige of one's degree stays with one throughout one's career, while law transcripts fade away; more elite educations produce a lifelong cache of valuable contacts; more eliteness produces better long-term opportunities. If this makes going to Harvard with a preference better than going to Cornell without one, presumably it makes going to Fordham with a preference better than going to Hofstra without one. Again, the analysis in Part VII of *Systemic Analysis* shows that this tends not to be true in the market for new lawyers, but Wilkins argues that it will surely be true over the long haul.

What testable hypotheses about the long-term fortunes of black lawyers follow from the Wilkins argument and my mismatch theory? If Wilkins is right, then the disadvantage of low grades affects one in the short term only; over time, black lawyers should prosper and enter local elites. Therefore, black lawyers will flourish, and black earnings should gradually converge over time with white earnings. In contrast, if the mismatch theory is correct, then black lawyers should be handicapped over the long term by low grades, because of (a) subtle concerns by other lawyers about competence, (b) actual lower skill levels of many black lawyers, and (c) the long-term "path" effects of starting out in a lower-status position because of one's grades. Employers engage in some degree of affirmative action in entry-level hiring of blacks, which masks to some degree the problem of low black grades.[116] But, over time, these differences will substantially disadvantage blacks, and will cause the black-white earnings gap to increase.

These predictions bear on black lawyers born after World War II—the first generation of black attorneys to graduate from college and attend law school in an era when affirmative action was taking hold. For attorneys born after 1950, law schools have very widely practiced aggressive racial preferences, and we would expect that the average "prestige" of black law degrees would be

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115. Wilkins, *supra* note 5, at 1926.
116. *See* Sander, *supra* note 3, at 454-68.

comparable to the average prestige of white law degrees from that point forward.[117]

By far the best source for data on lawyer incomes is the decennial census—in particular, the microdata extracts the U.S. Census Bureau compiles as a separate file. For 1980, 1990, and 2000, the data set known as the Public Use Microdata Sample (PUMS) provides dozens of demographic variables for roughly 5% of the U.S. population—including, of course, 5% of all attorneys.[118] This gives us a sample in 2000 of roughly 50,000 attorneys, including over 2000 black attorneys.

Table 9 shows the ratio of the median earnings of black lawyers to the median earnings of white lawyers for different age groups in the 1990 and 2000 censuses.

TABLE 9: MEDIAN EARNINGS OF BLACK ATTORNEYS BORN AFTER 1945 AS A PERCENTAGE OF MEDIAN EARNINGS OF WHITE ATTORNEYS BY AGE CATEGORY, 1990 AND 2000 CENSUS

Age Range	Ratio of Median Lawyer Earnings of Black Lawyers to White Lawyers	
	1990	2000
Under 30	89%	80%
30-34	77%	89%
35-39	69%	81%
40-44	71%	68%
45-49	N/A	74%
50-54	N/A	65%

Source: 1990 and 2000 samples, *in* PUMS Data, *supra* note 110. The measured variable is total person earnings.

The patterns for the two years vary in some significant ways, but both the 1990 and 2000 data tell a similar and very striking story: blacks start at out at something close to earnings parity with whites, but steadily lose ground as their careers progress. The data is entirely consistent with my account of the mismatch problem; the data is entirely inconsistent with Wilkins's story that the prestige of black law degrees will, over the long term, erase the disadvantages of doing poorly in law school.

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117. Note that if nearly all law schools admit similar proportions of blacks, but (as the mismatch theory predicts) black attrition is highest at the least elite schools, then blacks will have *higher* average "law school prestige" than whites. The data bears this out. If we exclude blacks at historically minority schools, the average law school rank of black lawyers in the AJD sample is significantly more elite than the average law school rank of white lawyers. Calculation by the author using AJD data. For more on the AJD database, *see* Sander, *supra* note 3, 457 & n.249.

118. *See* PUMS Data, *supra* note 110.

An obvious problem with Table 9 is that I am comparing age groups at a moment in time. It might be that the earnings of black lawyers born in the 1940s or 1950s have always been much lower than those of white lawyers of the same age, and that the table is simply freezing these cohort disparities at a moment in time. To take this possibility into account, Table 10 actually tracks a few cohorts over time.

TABLE 10: EARNINGS OVER TIME OF BLACK AND WHITE ATTORNEY COHORTS, 1980-2000

Birth Cohort	Group	Earnings in:		
		1979	1989	1999
1941-1945	Blacks	$55,223	$60,525	$53,000
	Whites	$80,512	$100,875	$89,000
	Ratio	0.69	0.60	0.60
1946-1950	Blacks	$52,060	$64,031	$62,000
	Whites	$57,960	$90,115	$95,000
	Ratio	0.90	0.71	0.65
1951-1955	Blacks	$22,149	$53,800	$65,000
	Whites	$27,611	$78,010	$88,000
	Ratio	0.80	0.69	0.74
1956-1960	Blacks	N/A	$47,748	$56,000
	Whites		$61,870	$82,000
	Ratio		0.77	0.68

Source: PUMS Data, *supra* note 110. All income figures are in 1999 dollars.

Table 10 confirms the same story: the earnings of black attorneys fall, relative to white attorneys, as their careers progress. Moreover, I find similar patterns when I examine only male attorneys in private practice, loosely controlling for other confounding patterns. This remains a relatively crude analysis, but at the very least, the data certainly fails to support any of the implications of Wilkins's argument. Fairly early in the careers of black attorneys, a white-black earnings gap opens up that tends to widen, not narrow, over time.

One might suspect that this is a general problem facing blacks in the labor force—that somehow, blacks encounter more discrimination or are somehow less "marketable" as they age. A thorough test of this hypothesis is beyond the scope of this Reply, but I selected a sample of occupations in which affirmative action in higher education is not likely to be a factor, and found a strikingly different pattern, presented in Table 11. In these occupations, the black-white earnings ratio is generally high and consistently quite stable across age cohorts.

A REPLY TO CRITICS

TABLE 11: BLACK-WHITE EARNINGS RATIOS, BY AGE COHORT, FOR A SAMPLE
OF OCCUPATIONS FROM THE 2000 CENSUS

Occupation	Black-White Ratio of Median Earnings Within Each Age Cohort					
	< 30	30-34	35-39	40-44	45-49	50-54
Computer Operators	1.06	0.92	0.98	0.94	0.92	1.00
Police Sheriffs	0.96	1.00	0.90	0.89	0.96	0.91
Retail Salespersons	0.86	0.78	0.85	0.83	0.89	0.94
Real Estate Salespersons	0.82	0.75	0.75	0.83	0.83	0.86
Parts Inspectors	0.76	0.77	0.77	0.72	0.75	0.87
Pharmacists	0.50	1.00	1.02	0.94	0.88	0.96

Source: 2000 samples, *in* PUMS Data, *supra* note 110. These calculations are based on
1999 earnings.

These examples are nothing more than a first rough exploration of an idea,
but I think the earnings patterns should give us pause. The long-term earnings
picture for black attorneys tells us that whatever handicaps blacks have at the
beginning of their careers do not seem to dissipate over time.

D. *The Opposite of Elite*

Wilkins is absolutely correct about the need for better data on a host of
issues: what happens to students who drop out of law school, what happens to
graduates who never pass the bar, how skills learned in law school and tested
on the bar do or do not translate into actual lawyer skills, the impact of first
legal jobs on subsequent careers, and so on. But pending the arrival of better
data, I think Wilkins is wrong about where the burden of persuasion lies.
Affirmative action in law schools has been sold on the long-standing premise
that school pedigree is an incredibly precious resource which must be shared
equally across racial lines. It has been claimed that only by the use of
aggressive preferences can we secure blacks a fair share of the nation's legal
elite. But there is no evidence that these claims are in fact true, and there is a
growing body of evidence that they are false. Nearly half of blacks entering
legal education are not becoming lawyers; those who do tend to be significantly
handicapped by the low grades that result from large preferences. For the large
majority of black graduates, the grade handicap outweighs the prestige boost
conferred by affirmative action.

Wilkins suggests that a highly dysfunctional system is justified because of the indispensable help it provides blacks at the very top—the Anthony Chases who make great contacts at Harvard and go on to big-time careers. But where is the statistical—as opposed to the anecdotal—evidence that blacks are helped by current policies in penetrating the real elites? Wilkins relies exclusively on statistics showing that the blacks doing best in the current system tend to come from the better schools, but as I pointed out earlier, this proves nothing since those individual blacks would probably be the most successful blacks under a race-neutral system as well. Looked at in the aggregate, there is no evidence that the current system is successful in securing blacks room at the top. Black partnership rates at elite firms are dismal; long-term black earnings fall steadily relative to whites. After thirty years of race-normed admissions at law schools, the policy should be able to point to more than a literal handful of elite blacks who have "made it." Even those who care only about a "black elite" should be dissatisfied with policies that have produced such puny results. The system has enormous problems, and Wilkins's argument, eloquent though it is, falls far short of giving it a reason to exist.

CONCLUSION: A RESEARCH AGENDA FOR THE MISMATCH DEBATE

I believe *Systemic Analysis* emerges from this issue not only unscathed, but far stronger. There seems to be no debate over the pattern of law school admissions, their essential similarity to those struck down in *Gratz*, the size of the racial preferences used, their prevalence throughout legal education, and the cascade effect that results. Ayres and Brooks and Chambers et al. confirm the dreadful facts about black performance in law school, and agree that the racial gaps in graduation and bar passage constitute a genuine crisis that the legal academy must address. There really seem to be only three issues in dispute.

(1) *The existence and importance of the mismatch effect.* Ayres and Brooks mount a genuine assault on the mismatch hypothesis, but they never confront the evidence I present, and their own evidence is rendered invalid by flaws in their methodology and the inappropriate use of their data. They also completely miss the significance of the data on black second-choice students, which in some ways is the most compelling evidence for the mismatch hypothesis yet produced. Chambers et al. do a little sniping at my mismatch analysis, but to no real effect.

(2) *The impact of low grades on black careers.* As I show in my response to Dauber (and in new material posted on my website), blacks are hurt even more by low grades in law school than are law graduates generally. No one thus far has offered any evidence that the regressions in Part VII do not accurately capture the previously underestimated importance of grades in the entry-level job market, and the consequent disadvantages blacks face. Wilkins argues that the adverse impact on blacks is short term, but he presents no systematic evidence on this point, and the data I have been able to find directly

undercuts the Wilkins thesis (though it is very consistent with the more nuanced story of black problems in big firms that Wilkins and Gulati have told in other contexts). Wilkins is right, however, that *Systemic Analysis* does not address many questions relevant to a complete assessment of law school racial preferences.

(3) *The impact of ending preferences on the number of black attorneys.* Chambers et al. argue that if you make the most apocalyptic assumptions possible, the number of black attorneys in a world without preferences would fall thirty to forty percent. The evidence I have seen since the publication of *Systemic Analysis*, on the other hand, suggests as many reasons for increasing my estimate of black lawyer production as for decreasing it. Chambers et al. and I fully agree on three points: estimates about the impact of removing preferences made during the *Grutter* litigation were overly pessimistic; any prediction is speculative, though it is useful to think about the possible range of effects; and the impact of completely ending preferences on black enrollments at elite (and even second-tier) schools should be a matter of real concern.

I think that most of the hardy readers who work their way through this exchange will come to much the same conclusions I've just outlined. But I suspect that strong affirmative action partisans will be unmoved. That's because these exchanges illustrate so well the point Tolstoy made long ago: it is hard for those with established positions to change them. If data is at all ambiguous and arguments are complex, it is easy (especially in the legal academy) to find what one wants to find. And of course, when distinguished scholars announce precisely opposite conclusions from an examination of the data, then those who follow the debate more casually—by far the largest audience—are left mystified.

How, then, do we move the debate forward? One solution may lie in the involvement of social scientists from other disciplines in this debate. Experts with fresh perspectives may have an easier time reaching consensus. But that hardly seems inevitable. A more dramatic approach is probably in order. I propose that the American Association of Law Schools appoint a special committee charged with investigating the effects of racial preferences on three specific outcomes: law school grades, law school graduation rates, and bar passage rates (both first time and ultimate). The committee should include a dozen experts with genuine social science expertise and diverse views about racial preferences generally, and *Systemic Analysis* in particular. This group should be charged with developing a database based on recent students (e.g., following matriculants who started law school in 2000) that would permit a proper test of mismatch effects. In particular, the committee should seek to create a database similar to that used by Dale and Krueger for undergraduates: one that matches students who were admitted to the same pair of law schools (e.g., a twentieth-ranked and fiftieth-ranked school) but made different choices about which one to attend. The committee should agree, before actually collecting data, about what sort of evidence would tend to show that racial

preferences were having a helpful or hurtful effect. The actual data collection would require cooperation from the Law School Admission Council (which can readily determine "matched pair" students) and a sample of law schools and states (for data on grades, graduation rates, and bar passage rates).

This general approach would have three big advantages. First, my conversations with others working on the mismatch issue (from a variety of perspectives) suggest that there is a broad consensus that the Dale-Krueger method provides the most reliable way of measuring mismatch effects.[119] Second, enough has changed over the decade since the LSAC-BPS cohort went to law school—falling bar passage rates, rising black credentials—that more recent data is badly needed. Third, locking a diverse group of scholars into a cohesive set of hypotheses before anyone can see the data is perhaps the best way to ensure that the data actually changes minds on all sides of the issue.

There seems to be no disagreement that black grades, graduation rates, and bar passage rates pose a genuine, urgent crisis for the legal academy. The mismatch theory is a compelling explanation, supported by increasingly overwhelming data. Those who argue against the mismatch theory have thus far been silent about alternative explanations or solutions. This is simply unacceptable. We in the legal academy have at the very least an obligation to do no harm, but we *are* doing harm. We have a profound obligation to understand why and to act on what we learn.

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119. It would be feasible with this richer data to explore the effects of "mismatches" of different sizes upon blacks (and upon the other major ethnic groups in law schools, including whites) and to measure the counterbalancing effect of eliteness with much more accuracy than the LSAC-BPS allows. It would also be useful, in this same process, to study the ameliorative effect of academic support programs offered at a range of law schools on short- and long-term outcomes.