

THE PAST, PRESENT, AND FUTURE OF EMPIRICAL LEGAL SCHOLARSHIP: JUDICIAL DECISION MAKING AND THE NEW EMPIRICISM

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Over the last century, empirical legal scholarship has joined the ranks of the mainstream within the legal academy. In this article, Professor Heise traces the history of legal empiricism and discusses its growing role within the legal academy. First, the article traces legal empiricism through the twentieth century from the legal empiricism movement of the early twentieth century, to post-World War II efforts to revive legal empiricism, including the Chicago Jury Project and large-scale foundational support for empirical legal research, through current support for legal empirical research from both the law schools and other research centers. The article then discusses several factors which have influenced the recent growth in legal empirical research including: the increasing breadth and maturity of legal scholarship overall, an increase in collaborative research by law professors, a growing number of available datasets and sophisticated computational tools for statistical analysis, and an increasing call for empirical research from the bench. Next, the article uses empirical judicial decision-making literature to illustrate current trends in empirical legal research, including the two predominant research models of behaviorism and attitudinalism, and developing research in the areas of the legal, public choice, and institutionalism models for explaining judicial decision making. Finally, the article discusses some of the inherent limitations of current research methodologies and available databases, but concludes that structural limitations aside, empirical legal scholarship has arrived as a research genre and will continue to flourish.

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I. INTRODUCTION

Given its pedigree and history, why has it taken so long for empirical legal scholarship to stabilize its position as a recognized research genre? After all, its arrival was predicted as far back as the early twentieth century when Oliver Wendell Holmes opined about the future influence of the “man of statistics” on the law.¹ Although history proved Holmes’s prediction correct, empirical legal scholarship’s journey was long and tortuous; its path littered with the carcasses of earlier failed starts. While empirical legal scholarship’s journey into the legal academy’s mainstream is far from complete, its position has achieved something approaching stability. Indeed, I argue that what we see today is unlikely to be another in a long line of false starts.²

My discussion consists of four parts. In Part II, I summarize the development of empirical legal scholarship during the twentieth century. This historical context is important as it provides a baseline for comparisons between today’s empirical legal scholarship and its predecessors. Moreover, important changes in legal education, particularly as it pertains to legal scholarship and scholars, develop additional distinctions. Part III considers evidence for my argument that a new empiricism is emerging. In Part IV, I consider three reasons for its emergence. First, theoretical developments in a number of traditional areas achieved critical thresholds of maturation. Once a particular line of theoretical research matures, important questions that would benefit from (indeed, require) empirical testing emerge with greater clarity. Second, more and new statistical techniques are applied to legal questions with increasing frequency. Third, barriers to conducting both primary and secondary analyses have fallen remarkably in recent years. Data and greater computational power are more readily available to researchers. Moreover, computer hardware and software developments make sophisticated empirical work relatively routine. Finally, in Part V, I consider how scholarly developments in one specific research area—judicial decision making—reflect important trends in empirical legal scholarship as a whole: its past, present, and future.

A. *Definitions*

Before I turn to my argument, two prefatory points require attention. First, some definitions are in order.³ For purposes of this Article,

1. OLIVER WENDELL HOLMES, *The Path of the Law*, in COLLECTED LEGAL PAPERS 187 (1921).

2. *But cf.* JOHN H. SCHLEGEL, AMERICAN LEGAL REALISM AND EMPIRICAL SOCIAL SCIENCE 256 (1995).

3. The definitions that follow borrow from, but expand upon, definitions articulated earlier by Professor Schuck. See Peter H. Schuck, *Why Don't Law Professors Do More Empirical Research?*, 39 J. LEGAL EDUC. 323, 323 (1989).

when I speak of empirical legal scholarship I refer only to the subset of empirical legal scholarship that uses statistical techniques and analyses. By statistical techniques and analyses I mean studies that employ data (including systematically coded judicial opinions) that facilitate descriptions of or inferences to a larger sample or population as well as replication by other scholars.⁴ Admittedly, my narrow definition of empirical legal scholarship excludes a rich array of legal scholarship that plausibly can be construed as empirical.⁵ My narrow definition, however, has the advantage of focusing on one of the more visible and distinct types of empirical legal scholarship and sets it apart from its more traditional theoretical and doctrinal counterparts.

Second, any argument (such as mine) suggesting that too little legal scholarship is empirical begs one important question: Too little compared to what? Admittedly, a wholly satisfactory response to this question eludes. Although an optimal level of empirical legal scholarship is not readily obvious, a few factors suggest that more than the current level is desirable. One such factor is that a growing number of legal scholars are calling for more empirical legal scholarship.⁶ Although commentators recognize the increased need (“demand”) for empirical work, the production of such work (“supply”) has not yet responded adequately.⁷ In one brief survey, an overwhelming majority of law professors sampled agreed that there is a lack or shortage of empirical research in legal scholarship.⁸

4. See *id.*

5. For criticism of my intentionally “narrow” definition of empirical legal scholarship, see Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. (forthcoming 2002) [hereinafter Epstein & King, *The Rules*].

6. RICHARD A. POSNER, *OVERCOMING LAW* 210 (1995) [hereinafter POSNER, *OVERCOMING*]; Derek C. Bok, *A Flawed System of Law Practice and Training*, 33 J. LEGAL EDUC. 570, 581–82 (1983); Lawrence M. Friedman, *The Law and Society Movement*, 38 STAN. L. REV. 763, 779–80 (1986); Richard A. Posner, *Against Constitutional Theory*, 73 N.Y.U. L. REV. 1, 3 (1998) [hereinafter Posner, *Against*]; Richard A. Posner, *Madison Lecture: Against Constitutional Theory*, 73 N.Y.U. L. REV. 1 (1998); Richard A. Posner, *The Summary Jury Trial and Other Methods of Alternative Dispute Resolution: Some Cautionary Observations*, 53 U. CHI. L. REV. 366 (1986); Schuck, *supra* note 3, at 323; Bryant G. Garth, *Book Review*, 45 J. LEGAL EDUC. 606, 606 n.1 (1995) (reviewing JOHN H. SCHLEGEL, *AMERICAN LEGAL REALISM AND EMPIRICAL SOCIAL SCIENCE* (1995)) [hereinafter Garth, *Book Review*].

7. See, e.g., Bryant G. Garth, *Observations on an Uncomfortable Relationship: Civil Procedure and Empirical Research*, 49 ALA. L. REV. 103, 105 (1997) [hereinafter Garth, *Observations*]. For one general critique (and related responses) of the existing supply of empirical legal scholarship, see Frank Cross, Michael Heise & Greogry C. Sisk, *Above the Rules: A Response to Epstein and King*, 69 U. CHI. L. REV. (forthcoming 2002); Lee Epstein & Gary King, *Empirical Research and the Goals of Legal Scholarship: A Response*, 69 U. CHI. L. REV. (forthcoming 2002) [hereinafter Epstein & King, *Empirical Research*]; Epstein & King, *The Rules*, *supra* note 5; Jack Goldsmith & Adrian Vermeule, *Empirical Methodology and Legal Scholarship*, 69 U. CHI. L. REV. (forthcoming 2002) [hereinafter Goldsmith & Vermeule, *Empirical Methodology*]; Richard L. Revesz, *A Defense of Empirical Legal Scholarship*, 69 U. CHI. L. REV. (forthcoming 2002).

8. Craig Allen Nard, *Empirical Legal Scholarship: Reestablishing a Dialogue Between the Academy and Profession*, 30 WAKE FOREST L. REV. 347, 362 tbl.1 (1995). Professor Nard’s study involved a brief and informal telephone survey of forty “randomly selected” law professors from twenty different

II. A BRIEF HISTORY OF EMPIRICAL LEGAL RESEARCH

A series of prior, periodic spurts of empirical legal scholarship provide some historic context for the recent reemergence of legal empiricism, or what Professor Jim Lindgren has labeled “the new empiricism.”⁹

At the turn of the twentieth century, legal scholarship was emerging as a discrete field, heavily influenced by the increasing professionalization of law. The emergence of the modern American law school model also influenced (and was influenced by) the legal profession and legal scholarship. American law schools and their culture matured in a manner generally consistent with a model articulated by then-Dean Langdell at the Harvard Law School and promoted by, among others, Professor James Barr Ames. The case method model was quickly disseminated and remains enormously influential. Indeed, Professor Schlegel analogizes the spreading influence of the “Langdellian case law” method to colonization.¹⁰ Notably, during the initial forging of the modern American law school model, delineating and maintaining the boundary between legal science and all other academic disciplines was so vital to the professional identity of the law professor, that there was precious little room for or interest in anything resembling empirical legal scholarship.¹¹

The legal realism movement provided the first significant and visible forum for the intersection between applied social science and legal scholarship. Concurrent with the development of legal realism, critical events were unfolding outside law schools that, in time, enormously influenced empirical legal research. Prominent among these events was the emergence of the social sciences as discrete fields of study and the development of related methodologies.¹² As a movement, however, legal realism, including its empirical vein developed largely by such professors as Underhill Moore, Charles Clark, and William Douglas, came and went. Whatever influence the Realists may have exerted at that time, looking back it is clear that they are “distant relatives” to those presently engaged in empirical legal scholarship.¹³

It is important to note that neither early empirical legal scholarship nor the legal realism movement was confined to New Haven and the Yale Law School. For example, spilling over from a nasty fight over the Deanship at Columbia Law School in 1928, was the eventual establishment of the Institute of Law at Johns Hopkins University. The Institute

law schools. Consequently, relatively little can be safely inferred from his findings. *Id.* at 361 nn.70–71.

9. James Lindgren, panel presentation at the American Association of Law Schools Annual Meeting, Joint Program of Sections on Law and Social Sciences and Scholarship (Jan. 6, 2001).

10. SCHLEGEL, *supra* note 2, at 26. For a comprehensive scholarly treatment of the historical development of empirical legal scholarship, see *id.*

11. *Id.* at 37.

12. For an excellent description of the emergence of the social sciences and their influence on legal scholarship, see *id.*

13. See generally *id.*

was formed as a nonteaching research institute whose principal mission included empirical legal research. Notably, Johns Hopkins University did not then—nor does it now—have a formal law school. Ironically, by leveraging preexisting academic departments and focusing a core group of faculty on legal issues, the Johns Hopkins Institute model was far ahead of its time. Indeed, the Institute may have been too far ahead of its time. Owing largely to a lack of stable funding and organizational focus, the Institute folded in 1933.¹⁴

The practicing Bar also helped spark interest in legal empiricism. Ironically, it was here that some missteps took place. In *Muller v. Oregon*,¹⁵ where the Court upheld an Oregon statute prohibiting women from working in factories more than ten hours per day, soon-to-be Justice Brandeis entered into the record an array of social science evidence purporting to establish “the inherent difference between the two sexes.”¹⁶ Commentators described the early role of social science in law as akin to “the parlor in the Victorian home in which the girl and her suitor can get together—but not get together too much.”¹⁷ Despite a few glaring mistakes,¹⁸ Justice Holmes correctly predicted the influence and utility of an empirical perspective for law in the late nineteenth century.

Following the Realists’ demise, a demise no doubt hastened by the Depression, four factors contributed to the next coherent surge in empirical legal studies that followed World War II. First, under the able stewardship of Dean Edward Levi, the University of Chicago Law School successfully secured a sizable foundation grant to pursue a program exploring the intersections of law and behavioral sciences. The Chicago Jury Project,¹⁹ launched as a program endeavor, undertook the first systematic large-scale empirical study of the jury system. The project was an immediate success, culminating in the publication of *The American Jury*.²⁰ Another notable success was the intellectual foundation put into place that eventually blossomed into the Chicago School of Law and Economics.²¹

Second, the creation of the Walter E. Meyer Research Institute of Law supported an array of path breaking research. Rather than focus on a single program or a single law school, Meyer funds contributed to numerous important scholarly advances. Notable examples include now-

14. *Id.* at 15–20.

15. 208 U.S. 412 (1908).

16. *Id.* at 423. See generally Marion E. Doro, *The Brandeis Brief*, 11 VAND. L. REV. 783 (1958).

17. David Riesman, *Some Observations on Law and Psychology*, 19 U. CHI. L. REV. 30, 32 (1951).

18. See, e.g., *Buck v. Bell*, 274 U.S. 200 (1927) (upholding involuntary sterilization procedures for “mental defectives”).

19. For a brief description, see Stephan Landsman, *The History and Objectives of the Civil Jury System*, in VERDICT: ASSESSING THE CIVIL JURY SYSTEM 22, 50–51 (Robert E. Litan ed., 1993).

20. HARRY KALVEN, JR. & HANS ZEISEL, *THE AMERICAN JURY* (1966).

21. See ANTHONY T. KRONMAN, *THE LOST LAWYER: FAILING IDEALS OF THE LEGAL PROFESSION* 166 (1993).

Judge Guido Calabresi's *The Costs of Accidents*²² and Professor Walter Gellhorn's *Ombudsmen and Others*.²³

Third, financial support from foundations—notably the Russell Sage and the National Science Foundations—reached a critical mass. The Russell Sage Foundation's programmatic interest broadened to include law and the social sciences and helped establish the Center for the Study of Law and Society²⁴ at the University of California-Berkeley School of Law and similar programs at law schools at Wisconsin, Northwestern, Stanford, Harvard, and Pennsylvania. In 1967 the National Science Foundation initiated a concentration in law and social sciences.²⁵

Fourth, the development of the Law and Society Association flowed from the deployment of resources from both the Russell Sage and the National Science Foundations. Although the editorial focus of the *Law & Society Review* has ebbed and flowed over time, it remains one of the leading academic outlets for empirical legal research.

While these post-War developments were sufficient to ensure that empirical legal research did not suffer the same fate that befell its predecessor, legal realism, a *tradition* of empirical legal scholarship had “not caught on, not taken hold,” at least in the law schools.²⁶ It is from this history, notable for the absence of a firmly rooted tradition of empirical legal scholarship, that the present new empiricism movement emerges.

III. EVIDENCE OF AN EMERGING NEW EMPIRICISM

A quick glance at the current corpus of legal scholarship will convince most readers that empirical research's presence within the academic literature is marginal, at best. Consequently, Professor Schuck's observation that the two main forms of legal scholarship—theoretical and doctrinal—account for “almost the entire corpus of legal scholarship”²⁷ remains largely accurate, particularly if one views legal scholarship in its entirety. Thus, the legacy of past failures to develop and sustain a tradition of empirical legal scholarship largely endures.

More recent trends in legal scholarship, however, point in a different direction. While empirical legal scholarship remains the overwhelming exception to a general rule favoring nonempirical research, evidence suggests that the production of empirical legal scholarship is on the rise.

22. GUIDO CALABRESI, *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970).

23. WALTER GELLHORN, *OMBUDSMEN AND OTHERS: CITIZENS' PROTECTORS IN NINE COUNTRIES* (1966).

24. Now known as the Jurisprudence and Social Policy Program.

25. Nat'l Sci. Found., *NSF-SBE-SES-Law and Social Science* (Oct. 8, 2001), at <http://www.nsf.gov/sbe/ses/law/start.htm>.

26. SCHLEGEL, *supra* note 2, at 252.

27. Schuck, *supra* note 3, at 329.

This trend is particularly clear if one reviews legal scholarship published during the past decade.²⁸

Traditional law reviews are beginning to publish more empirical work, despite editors who are frequently just a few years removed from college and typically lack any advanced graduate-level training. Also, faculty-edited and peer-reviewed journals, such as the *Journal of Legal Studies*, *Journal of Law and Economics*, *Journal of Law, Economics & Organization*, and *Law & Society Review*, already secure in their first-tier status, continue to gain in prestige.²⁹ Even cyberspace has responded. The Social Science Research Network's (SSRN) Legal Scholarship Network (LSN), a major disseminator of legal (and other) scholarship, includes a title dedicated to empirical legal research.³⁰

In addition to subsidizing their law reviews, law schools support empirical legal research in other ways as well. Research centers and programs (formal and informal) focusing on empirical legal studies are beginning to appear at such leading law schools as Chicago, Harvard, Northwestern, Wisconsin, Cornell, and Illinois, to name just a few. Conferences that either focus on or include empirical work are becoming less the exception and more the norm.³¹ Periodically, faculty appointment committees have made conscious efforts to seek out empiricists (typically in the lateral market).³² The number of courses in empirical methods offered to law students is increasing. Presently, approximately twenty or so law schools offer such courses. I am inclined to believe that within five years the number of such courses will easily double. In ten or twenty years such courses may be ubiquitous in law schools.

Nonlaw school resources also contribute to the growth in empirical legal scholarship. The National Academy of Sciences' Law and Society Program and the National Institute of Justice are two examples of significant foundation support that frequently invests in the development and maintenance of datasets germane to legal questions.

Although evidence of increased empirical legal research cuts across numerous (indeed, most) areas of legal scholarship and doctrines, its de-

28. My impression is shared by others. See, e.g., Nard, *supra* note 8, at 361 n.68. For evidence that doctrinal works' relative share is slipping, see William M. Landes & Richard A. Posner, *Heavily Cited Articles in Law*, 71 CHI-KENT L. REV. 825, 830 tbl.1 (1996); see also Robert C. Ellickson, *Trends in Legal Scholarship: A Statistical Study*, 29 J. LEGAL STUDIES 517 (2000) (noting that legal scholars are more inclined to produce quantitative work).

29. For example, the *Journal of Legal Studies*, a faculty-edited, peer-reviewed journal published by the University of Chicago, is one of the most cited and prestigious journals among law professors. See Colleen M. Cullen & S. Randall Kalberg, *Chicago-Kent Law Review Faculty Scholarship Survey*, 70 CHI-KENT L. REV. 1445, 1453 (1995).

30. The Experimental and Empirical Studies title is edited by Professor Jennifer Arlen at the University of Southern California Law School.

31. The University of Illinois College of Law's Empirical and Experimental Methods in Law conference is one obvious example.

32. For a general discussion of the lateral market for law professors, see Theodore Eisenberg & Martin T. Wells, *Inbreeding in Law School Hiring: Assessing the Performance of Faculty Hired From Within*, 29 J. LEGAL STUD. 369 (2000).

velopment within particular areas is uneven. To take one easy example, empirical legal scholarship is comparatively more advanced in antitrust and securities areas than in the constitutional law and family law areas.³³

What explains this differential growth? First, the uneven development of empirical scholarship across the legal landscape reflects some unevenness in various fields' overall intellectual development and maturity. Those fields that are comparatively more mature are, on balance, stronger candidates for empirical work. (One notable exception is constitutional law, a field far more developed—perhaps overdeveloped—theoretically than it is empirically.) Second, the availability of data is similarly uneven. While helpful data are far more plentiful in, for example, the antitrust and securities areas, data are far less available in other areas of legal scholarship.³⁴ The development of data is a time intensive and therefore expensive task.³⁵ Yet, the availability of germane data resides at the heart of empirical legal scholarship.

IV. AN EXPLANATION FOR THE (RE-) EMERGENCE OF A NEW EMPIRICISM

I have written elsewhere about the reasons why empirical legal scholarship is comparatively less developed in the literature than its theoretical and doctrinal counterparts.³⁶ This Article focuses on the flip side of that argument: reasons explaining the existence of the relatively little empirical legal scholarship that *has* emerged. The amount and sophistication of such research has increased dramatically. Three broad groups of factors independently and collectively fuel this increase. One group involves the nature of legal scholarship itself, specifically its development. A second group relates to the people conducting such research. Finally, a third group includes some practical developments independent of legal scholarship, *per se*, that nonetheless influence empirical legal scholarship.

33. Although I am mindful of many examples—too numerous to mention—that weaken my point, these counter-examples remain the exception and not the rule and, therefore, do not obliterate my point.

34. The torts area provides one useful example. For years, legal scholars have bemoaned the paucity of helpful data germane to questions about our tort system in particular and civil justice in general. *See, e.g.*, Michael J. Saks, *Do We Really Know Anything About the Behavior of the Tort Litigation System—And Why Not?*, 140 U. PA. L. REV. 1147 (1992). However, the recent release of two related datasets has improved the situation considerably. *See infra* note 48 and accompanying text.

35. When I refer to data development I refer to it in broad terms and include such tasks as its gathering, cleaning, and coding.

36. *See, e.g.*, Michael Heise, *The Importance of Being Empirical*, 26 PEPP. L. REV. 807 (1999); Michael Heise, *The Future of Civil Justice Reform and Empirical Legal Scholarship: A Reply*, 51 CASE W. RES. L. REV. 251 (2000); *see also* Schuck, *supra* note 3, at 330–33; James J. White, *Phoebe's Lament*, 98 MICH. L. REV. 2773 (2000).

A. Legal Scholarship's Development

As specific lines of theoretical or doctrinal research mature, the potential contribution of empirical or experimental work increases. Many of the legal theories and doctrines considered in the law reviews (and elsewhere) rest—and some precariously so—upon key empirical assumptions. Theoretical and doctrinal progress helps uncover and make increasingly clear key empirical assumptions. To be sure, different areas of legal scholarship develop at different rates. Once these key assumptions are identified and transformed into hypotheses, however, they then become amenable to the rigors of empirical testing. Notwithstanding data limitations, the list of legal research questions that would benefit from empirical analysis staggers and continues to grow. In part, this is true because numbers can often tell us what words cannot.³⁷

The sheer increase in the volume of legal scholarship as well as the breadth of issues considered by legal scholars are additional factors that fuel more empirical research possibilities. An ever-increasing number of law reviews enables greater volume and more opportunities for legal scholars. An increasing number of outlets for legal scholarship increases the likelihood that a wider array of scholarship genres—such as empirical legal scholarship—will reach publication. The ample terrain of work now covered by law reviews overlaps in varying degrees with other distinct, traditional academic disciplines, especially such well-established social sciences as economics and political science. Notably, scholarly work in many of the social sciences is far more quantitative than traditional legal scholarship. To the extent that legal scholars continue to extend their work into other disciplines, it is likely that some of this work will be empirical.

The explosion in the law and economics literature provides one timely example. After over forty years of development and penetration into many different areas of the law, many scholars now recommend exploring the possible application of the behavioral sciences, particularly those that permit empirical assessments of core economic assumptions—such as the rationality of human behavior—upon which most classical law and economics rests.³⁸

Finally, prestige enhancement also spurs greater empirical legal scholarship. The increasingly interdisciplinary nature of legal scholarship points toward law schools' further integration into the larger university

37. Richard K. Neumann, Jr., *Women in Legal Education: What the Statistics Show*, 50 J. LEGAL EDUC. 313, 313 (2000).

38. See, e.g., BEHAVIORAL LAW AND ECONOMICS (Cass R. Sunstein ed., 2000); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051 (2000) (calling for more realistic assumptions regarding human behavior).

community.³⁹ If this trend continues, it becomes even more important for legal scholars to incorporate broader methodologies if, for no other reason, to shore up law professors' sometimes precarious stature and reputation within the broader academy.⁴⁰

B. *Changes in Those Who Produce Legal Scholarship*

For better or worse (or, more precisely, for better *and* worse), law professors generate most legal scholarship.⁴¹ Most law professors' formal post-graduate educational training took place in law rather than graduate schools. With legal scholarship dominated by theoretical and doctrinal work and with most professors receiving their training in law schools, that such a closed loop is prone to self-replication should surprise few. Changes in the educational background and training of individuals seeking to enter the legal academy, however, are beginning to pry open this closed loop.

One discernible emerging trend in recent law faculty hiring is an increase in law faculty candidates possessing multiple graduate degrees (e.g., J.D./Ph.D.)⁴² or, even less common, a graduate but *not* a law degree. Changes in the pool of faculty candidates will eventually influence the composition of the professorate. Law professors with graduate training beyond law school, that is, those equipped with training in quantitative methods and comfortable using them, are more inclined to pursue empirical research projects.

Of course, law professors with traditional training also participate in empirical research projects. Even those who lack formal training in the "exotica of empirical science" are more than capable of developing a

39. See generally Richard A. Posner, *The Decline of Law as an Autonomous Discipline: 1962–1987*, 100 HARV. L. REV. 761 (1987) (arguing that law schools' traditional autonomous posture within the academy is being eroded by other disciplines' increase in the law as well as legal scholars' increasing interest in other areas).

40. See Schuck, *supra* note 3, at 329 (describing legal scholars' intellectual stature at the university level as "precarious").

41. It is axiomatic that important contributions to legal scholarship have emerged from scholars not associated with, formally or informally, any law school.

42. See generally Graham C. Lilly, *Law Schools Without Lawyers? Winds of Change in Legal Education*, 81 VA. L. REV. 1421, 1428, 1440 (1995). Also, in a recent study of law faculty hiring, Professors Merritt and Reskin note that a law faculty candidate can enhance her chances of teaching at an "elite" law school by possessing a "doctoral degree in a field other than law." Deborah Jones Merritt & Barbara F. Reskin, *Sex, Race, and Credentials: The Truth About Affirmative Action in Law Faculty Hiring*, 97 COLUM. L. REV. 199, 240 (1997) [hereinafter *Merritt Study*]. It is also plausible to assume that the same pattern might prevail at nonelite law schools as well. However, because the *Merritt Study* employs logistic regression, all that can be properly inferred is the independent influence of a law faculty candidate's possession of a doctoral degree, typically a Ph.D., on law faculty hiring. Because some law school faculties, notably those at the elite law schools, include faculty with a Ph.D. but not a J.D., we cannot draw any proper inferences about any possible interactive effect. *Id.* at 240 tbl.4. That is to say, the *Merritt Study* did not generate and analyze a new variable designed to capture the potential independent interaction of a law faculty candidate possessing both a J.D. and a Ph.D.

working understanding of the critical methods and techniques.⁴³ In addition, collaborative work between and among law professors and counterparts from departments other than law appears to be increasing. Although running against a traditional law professor norm of pursuing legal research projects by themselves, a drive toward increased collaboration among law professors and colleagues both in and out of the legal academy appears to be gaining momentum.⁴⁴

C. Practical Points

Although seemingly mundane, a few practical points also contribute to an increase in empirical legal scholarship. A growing number of datasets developed specifically with legal scholarship in mind or that bear on important legal questions are one such point. Although it is important to emphasize that such datasets remain scarce from a relative and absolute perspective, it is encouraging that this situation appears to be improving, however slowly.

The development of data is critical, since without data, empirical research is not possible. Unfortunately, data gathering⁴⁵ is frequently labor-intensive and time-consuming and, consequently, often quite expensive. While literally billions of research dollars in the United States are directed towards all sorts of research projects, only a minute sliver of this research pie flows into legal research projects of any kind, let alone empirical ones.⁴⁶ Such research funding is crucial in the development of new datasets, the backbone of our knowledge base. As Professor Freidman notes, relative to some of their academic counterparts, legal scholars too often resemble “beggars fighting for a handful of coins.”⁴⁷

However, there are signs of change. Increasingly, new datasets are developed with the needs of legal researchers in mind. Recent examples include two datasets released in 1992 and 1996, respectively, that focus on civil justice issues and involve samples of the nation’s seventy-five most populous counties.⁴⁸ These data provide a critical empirical dimen-

43. See David L. Faigman, *To Have and Not Have: Assessing the Value of Social Science to the Law as Science and Policy*, 38 EMORY L.J. 1005, 1014 (1989) (making the same point regarding judges who lack such training).

44. Mounting anecdotal evidence suggests that the trend of noncollaborative legal scholarship—while certainly still the norm—is eroding. See, e.g., Schuck, *supra* note 3, at 332 n.37 (noting that seven percent of law review articles in 1960 had multiple authors, compared to seventeen percent in 1985).

45. When I speak of data gathering, I refer broadly to all aspects incident to identifying, gathering, coding, cleaning, etc., of data.

46. See Friedman, *supra* note 6, at 779 (noting that what one well-known source of federal research funding, the National Science Foundation, spends annually on legal research would not sustain high energy physics research “for one day”).

47. *Id.* Of course, many scholars financially dependent upon external funding are understandable and justifiably envious of law faculty’s reliance on internal (or hard) funding.

48. BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, STUDY NO. 6587, CIVIL JUSTICE SURVEY OF STATE COURTS, 1992 (1996); BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, STUDY NO. 2883, CIVIL JUSTICE SURVEY OF STATE COURTS, 1992 (1996).

sion to an array of legal and policy questions that bear on civil litigation and justice reform.⁴⁹ Indeed, the scholarship spawned by these data has already been noted for its important contributions.⁵⁰

Another important, related development is the emergence of multi-user datasets. Traditionally, datasets were developed almost exclusively with a fixed set of research questions in mind. In contrast, as Professor Epstein notes, the idea behind multiuser datasets is that they might be structured in a manner to assist multiple users pursuing an array of research questions.⁵¹ Most of these datasets are developed by social scientists (rather than law professors) and, consequently, these datasets are pointed toward social, economic, and political research questions.⁵² Nevertheless, some of these datasets bear on important legal issues.⁵³

A few recently developed multiuser datasets directly address legal scholars and their research needs. Notable examples include Professor Harold Spaeth and Jeffrey Segal's U.S. Supreme Court Judicial Database.⁵⁴ Another example of this trend involves a database project, launched by Professor Songer, that addresses the comparatively ignored courts of appeals.⁵⁵

Along with a greater supply of data, barriers to their availability and use continue to fall. Today, access to datasets is almost ubiquitous, at least for researchers with academic appointments and access to the

49. See, e.g., Theodore Eisenberg et al., *The Predictability of Punitive Damages*, 26 J. LEGAL STUD. 623 (1997) (exploring punitive damages); Michael Heise, *Justice Delayed?: An Empirical Analysis of Civil Case Disposition Time*, 51 CASE W. RES. L. REV. 813 (2000) (examining determinants of civil case disposition time).

50. See A. Mitchell Polinsky, *Are Punitive Damages Really Insignificant, Predictable, and Rationale? A Comment on Eisenberg et al.*, 26 J. LEGAL STUD. 663, 663 (1997) (noting that Eisenberg et al.'s empirical studies are among "the most ambitious . . . undertaken to date" and that they will deservedly "receive considerable attention in popular and academic circles").

51. Lee Epstein, *Social Science, the Courts, and the Law*, 83 JUDICATURE 224, 225 (2000) [hereinafter Epstein, *Social Science*].

52. *Id.* at 224.

53. The General Social Survey (GSS) is one prominent example. For a description, see Robert L. Young, *Punishment at All Costs: On Religion, Convicting the Innocent, and Supporting the Death Penalty*, 9 WM. & MARY BILL RTS. J. 237, 241-42 n.22 (citing JAMES A. DAVIS & TOM W. SMITH, GENERAL SOCIAL SURVEYS, 1972-1996, available at <http://www.icpsr.umich.edu/GSS99/codebook/cappun.htm> (last visited Jan. 21, 2002)).

54. For a complete description, see Harold J. Spaeth, *United States Supreme Court Judicial Database, 1953-1997 Terms*, ICPSR 9422, available at <http://www.icpsr.umich.edu> (last visited Jan. 21, 2002); Harold J. Spaeth, *Expanded United States Supreme Court Judicial Database, 1946-1968 Terms*, ICPSR 6557, available at <http://www.icpsr.umich.edu> (last visited Jan. 21, 2002). Notably, the development of the Supreme Court databases benefited from funding support from, among others, the National Science Foundation.

55. Tracey E. George & Reginald S. Sheehan, *Circuit Breaker: Deciphering Courts of Appeals Decisions Using the U.S. Courts of Appeals Data Base*, 83 JUDICATURE 240, 245 (2000) ("While studies of judicial decision making in the U.S. Supreme Court abound, the limited availability of data has always constrained our ability to conduct similar studies in the courts of appeals."). For a full description of the dataset, see Donald R. Singer, *United States Courts of Appeals Database Phase 1, 1925-1988*, ICPSR 2086, available at <http://www.icpsr.umich.edu> (last visited Jan. 21, 2002).

Internet.⁵⁶ In addition, developments in computer hardware and software have dramatically increased researchers' access to the necessary computational power. Desktop (even most laptop) computers now possess computational capacities that are more than ample to perform functions that less than one generation earlier required large, expensive mainframe computers. Fully exploiting exploding computation capacity of computers, software developers have made available statistical software programs for personal computers that can manage many of the most sophisticated analyses. In addition, more recent versions of popular statistical software programs (e.g., SPSS, SAS, MINITAB) are presented in exceptionally accessible, user-friendly formats.

Encouragement from leading academics and judges is another practical point stimulating empirical legal research. For example, one generation following Justice Holmes's musing about the future of the "man of statistics,"⁵⁷ Roscoe Pound urged legal scholars to complement scholarship on doctrinal and theoretical law with studies of "the law in action."⁵⁸ Legal realists, including Professors Charles E. Clark, William O. Douglas, and Underhill Moore, attempted but largely failed to elevate empirical legal scholarship's standing within the legal academy.⁵⁹ Judge Posner, as well as Professors Schuck, Bok, Friedman, and Sunstein to name only a few, are among the more prominent legal academics presently urging less neglect of empirical legal scholarship.⁶⁰

Calls from the bench for empirical work are particularly notable. Unlike academics, judges must reach decisions in real cases. Increasingly, litigants introduce statistical information into evidence. Many judges display some frustration when drawn into such cases that borrow from unfamiliar research traditions.⁶¹ Another point of frustration for judges is that they are frequently asked to resolve essentially empirical questions that lack an empirical research base or, rest on research that is

56. The leading archive for social and political datasets is the Inter-University Consortium for Political and Social Research (ICPSR) at the University of Michigan. During the past years the ICPSR has increasingly made large quantities of data and supporting documents available on-line.

57. HOLMES, *supra* note 1.

58. Roscoe Pound, *Law in Books and Law in Action*, 44 AM. L. REV. 12 (1910).

59. Possible reasons for the Legal Realists' failure are discussed in SCHLEGEL, *supra* note 2, at 211. On a related point, Professor Schlegel argues that among the core group of legal realists, Professor Underhill Moore's contribution to empirical legal scholarship has thus far failed to receive its due recognition. See John Henry Schlegel, *American Legal Realism and Empirical Social Science: The Singular Case of Underhill Moore*, 29 BUFF. L. REV. 195 (1980) [hereinafter Schlegel, *Moore*]. I share Professor Schlegel's bewilderment on this point as I, too, deem Professor Moore's contribution important and curiously underappreciated.

60. See generally WILLIAM MEADOW & CASS R. SUNSTEIN, STATISTICS, NOT EXPERTS, (U. Chi., John M. Olin Law & Economics Working Paper No. 109, 2000), available at <http://www.law.uchicago.edu/Lawecon/workingpapers.html> (last visited Jan. 21, 2002); POSNER, OVERCOMING, *supra* note 6, at 210; Bok, *supra* note 6; Friedman, *supra* note 6; Posner, *Against*, *supra* note 6, at 3; Schuck, *supra* note 3.

61. See, e.g., *Craig v. Boren*, 429 U.S. 190, 204 (1976) ("It is unrealistic to expect either members of the judiciary or state officials to be well versed in the rigors of experimental or statistical technique."). *But cf.* Faigman, *supra* note 43, at 1081.

underdeveloped, inconclusive, or both. These concerns have led to the need and desire for legal empirical research that judges can draw from in making their decisions.

The Supreme Court's opinion in *United States v. Leon*⁶² illustrates the Court's struggle where some probative research exists. In *Leon*, the Court confronted a question about whether the creation of a good-faith exception to the exclusionary rule would have a deleterious effect on deterring unconstitutional police conduct.⁶³ The question was at the core of what the Court was asked to adjudicate. After reviewing the relevant empirical scholarship, the Court noted that the weight of the scholarly evidence was inconclusive.⁶⁴ Faced with both empirical uncertainty and the need to reach a conclusion, the Court proceeded to advance a guess about the possible effects of an exclusionary rule exception.⁶⁵ In his concurrence, Justice Blackmun opined that the strength of the Court's decision in *Leon* is only as strong as the empirical assumptions upon which the opinion rests.⁶⁶ If the data indicate something different in the future, Justice Blackmun argues that the Court should revisit the matter.⁶⁷

V. EMPIRICAL JUDICIAL DECISION-MAKING SCHOLARSHIP AS A CASE STUDY⁶⁸

The empirical strain of judicial decision-making literature contains two main parts. One part focuses on studies of judicial decisions. A second considers how judges use empirical evidence when reaching their decisions. For reasons of economy I will confine my discussion to the former.

A growing literature seeks to systematically examine judges and their legal decisions. Given the often critical role judges play in our constitutional, political, economic, and social lives, it is axiomatic that we need to better understand how and why judges reach the decisions they do in the course of discharging their judicial roles. An examination of the judicial decision-making literature illustrates many of the larger themes flowing from the growing development of empirical legal research as a distinct research genre.

62. 468 U.S. 897 (1984).

63. *Id.*

64. *See id.* at 907 n.6.

65. *Id.* at 918-21.

66. *Id.* at 928 (Blackmun, J., concurring).

67. *Id.*

68. Insofar as this is an article about empirical legal scholarship, I am acutely aware of and duly note, with no small irony, the disquieting fact that the evidence upon which my thesis rests is a case study. Notwithstanding my partiality toward empirical legal scholarship, I concluded that this particular occasion was neither optimal nor appropriate for a full-blown empirical study of empirical legal scholarship. Such a study, however, should be undertaken.

A. *Judicial Decision-making Theory*

The legal realism movement represents one of the early formal inquiries into judicial decision making rooted in an identifiable, coherent theory. Although, as Professor Schauer points out, there are many “versions of Legal Realism, and equally many interpretations of the Legal Realist tradition,” most agree that the realists endeavored to pierce through the superficial and identify what they thought to be the “real” factors that explain judges’ decisions.⁶⁹

Drawing partly from the work of legal realists before them, two distinct, though related, models have dominated judicial decision-making research literature for much of the past two decades: behavioralism and attitudinalism.⁷⁰ Between these two, attitudinal models have received more empirical support and have come to dominant in the literature. The empirical support for attitudinal models, however, is far from conclusive and recent research has sought other potential theories that, when combined with attitudinal models, form more sophisticated, nuanced, and accurate predictions about judicial behavior. The legal, public choice, and institutional models are among the more prominent emerging models. A brief description of each follows.

1. *Behavioralism*

Behavioralism models emphasize the role of judges’ social background or personal attributes on judicial decisions.⁷¹ Norman Dorsen characterizes the thrust of the model, which dominated early empirical judicial decision-making studies.

We must never forget that the boy is father to the man, that the seeds of the fully mature person are long embedded in his character. One need not embrace Freudian psychology to conclude that early experience and training will be reflected in later actions and decisions, and that flexibility and open-mindedness are themselves the products of what has gone before.⁷²

69. Frederick Schauer, *Incentives, Reputation, and the Inglorious Determinants of Judicial Behavior*, 68 U. CIN. L. REV. 615, 619 (2000). See generally AMERICAN LEGAL REALISM (William W. Fisher, III et al. eds., 1993); LAURA KALMAN, *LEGAL REALISM AT YALE, 1927–1960* (1986); WILFRID E. RUMBLE, JR., *AMERICAN LEGAL REALISM: SKEPTICISM, REFORM, AND THE JUDICIAL PROCESS* (1968); SCHLEGEL, *supra* note 2.

70. See Schauer, *supra* note 69, at 620–21.

71. See HENRY R. GLICK, *COURTS, POLITICS, AND JUSTICE* 313 (3d ed. 1993); Norman Dorsen, *A Change in Judicial Philosophy?*, NAT’L L.J., Feb. 18, 1985, at 13; Neal C. Tate & Roger Handberg, *Time Binding and Theory Building in Personal Attribute Models of Supreme Court Voting Behavior, 1916–88*, 35 AM. J. POL. SCI. 460, 460–61 & n.2 (1991); see also Paul D. Carrington, *Of Law and the River*, 34 J. LEGAL EDUC. 222, 227 (1984); S. Sidney Ulmer, *Are Social Background Models Time-Bound?*, 80 AM. POL. SCI. REV. 957, 957 (1986).

72. Dorsen, *supra* note 71, at 13; see also Ulmer, *supra* note 71, at 957 (calling Dorsen’s comment “about as concise a statement of the social background theory as could be penned”).

Thus far, empirical tests of behavioralism models have been largely disappointing, leading scholars to question whether the theory remains viable.⁷³ “Mixed results” is the phrase researchers most commonly select to describe prior attempts to connect social or experiential attributes of judges to their voting behavior.⁷⁴ Despite the model’s clear prediction or relevance, in general, race and sex possess little explanatory value for ju-

73. See, e.g., Jon Gottschall, *Carter's Judicial Appointments: The Influence of Affirmative Action and Merit Selection on Voting on the U.S. Courts of Appeals*, 67 JUDICATURE 165, 171–73 (1983) (finding relative similarity between President Carter’s male and female appointees to the courts of appeals and, with the exception of criminal cases, minimal variances between black and white judges, even in racial discrimination cases); John Gruhl et al., *Women as Policymakers: The Case of Trial Judges*, 25 AM. J. POL. SCI. 308, 319–20 (1981) (finding few significant differences in the conviction rates of male and female judges, although finding female judges more likely to sentence female convicts to prison); Herbert M. Kritzer & Thomas M. Uhlman, *Sisterhood in the Courtroom: Sex of Judge and Defendant in Criminal Case Disposition*, SOC. SCI. J., Apr. 1977, at 77, 86 (concluding that female judges “behave no differently than their male colleagues” in study of sentencing); Gregory C. Sisk et al., *Charting the Influences on the Judicial Mind: An Empirical Study of Judicial Reasoning*, 73 N.Y.U. L. REV. 1377, 1451–59 (1998) (finding neither gender nor race as a significant explanatory variable for judicial outcomes); Cassia Spohn, *The Sentencing Decisions of Black and White Judges: Expected and Unexpected Similarities*, 24 LAW & SOC’Y REV. 1197, 1211–14 (1990) (finding “remarkable similarities” in sentencing decisions of black and white judges and concluding that judicial race has little predictive power); Thomas M. Uhlman, *Black Elite Decision Making: The Case of Trial Judges*, 22 AM. J. POL. SCI. 884, 891–94 (1978) (finding no important differences between black and white judges in criminal conviction rates and sentencing); Thomas G. Walker & Deborah J. Barrow, *The Diversification of the Federal Bench: Policy and Process Ramifications*, 47 J. POL. 596, 613–15 (1985) (finding marked similarity in decision-making records between black and white federal district judges in several fields and few differences between male and female judges, with the exception of a tendency of female judges to rule in favor of government entities); Susan Welch et al., *Do Black Judges Make a Difference?*, 32 AM. J. POL. SCI. 126, 131–35 (1988) (finding little impact of black judges in overall criminal sentencing severity, but some evidence of more equal treatment by black judges of white and black defendants in decisions to incarcerate); see also Peter J. Van Koppen & Jan Ten Kate, *Individual Differences in Judicial Behavior: Personal Characteristics and Private Law Decision-Making*, 18 LAW & SOC’Y REV. 225, 225–41 (1984) (finding that Dutch judicial decisions in civil cases are only moderately influenced by the personality characteristics of the judge, measured by psychological tests through a questionnaire to judges participating in a simulation). But see Sue Davis et al., *Voting Behavior and Gender on the U.S. Court of Appeals*, 77 JUDICATURE 129, 131–32 (1993) (noting that female judges were more supportive of plaintiffs in employment discrimination cases); Walker & Barrow, *supra*, at 604–11 (finding female judges more deferential than male judges to positions taken by the government in personal rights and economic regulation cases). See generally JEFFREY A. SEGAL & HAROLD J. SPAETH, *THE SUPREME COURT AND THE ATTITUDINAL MODEL* 231–34 (1993) (concluding that the empirical evidence supports little relationship between social background factors and judicial attitudes); Orley Ashenfelter et al., *Politics and the Judiciary: The Influence of Judicial Background on Case Outcomes*, 24 J. LEGAL STUD. 257, 281 (1995) (concluding, in context of federal district court outcomes in civil rights cases, “that individual judge characteristics cannot be assumed to influence substantially the mass of cases”); Gerard S. Gryski & Eleanor C. Main, *Social Backgrounds as Predictors of Votes on State Courts’ Last Resort: The Case of Sex Discrimination*, 39 W. POL. Q. 528, 528–29, 536 (1986) (describing the criticism of social background theory but concluding that the theory remains viable with significant limitations).

74. See Davis et al., *supra* note 73, at 130 (describing prior empirical research on behavior of women decision makers, including judges, as producing “mixed results”); Sheldon Goldman, *Voting Behavior on the United States Courts of Appeals Revisited*, 69 AM. POL. SCI. REV. 491, 496 (1975) (describing a multitude of prior studies on relationship of background variables to judicial voting behavior as having “mixed” results); Gruhl et al., *supra* note 73, at 311, 318 (describing studies using the judges’ sex as an independent variable as yielding “mixed results”); Tate & Handberg, *supra* note 71, at 470 (describing results of prior studies on the influence of prior judicial experience as “mixed”); Ulmer, *supra* note 71, at 947 (describing prior research on social background influences upon judicial decision making as producing “mixed results”).

dicial decision making.⁷⁵ Similarly, prior judicial experience has seldom been found significant⁷⁶ and, even on those occasions where it has correlated with judicial behavior, has remained a weak influence.⁷⁷ While some studies have found prior criminal prosecution experience to be influential, the influence has pointed in somewhat inconsistent directions.⁷⁸ Consequently, Dan Bowen's pronouncement thirty years ago about the efficacy of behavioralism judicial decision-making models still holds force today: "A final inescapable conclusion about the explanatory power of the sociological background characteristics of [judges] is that they are generally not very helpful."⁷⁹

Still, behavioralism as a theory has enjoyed at least occasional success. Certain studies have produced intriguing results in discrete contexts that cannot be dismissed. For example, one study found that fe-

75. See, e.g., Davis et al., *supra* note 73 (finding no significant differences between male and female judges in search and seizure and obscenity cases, when controlling for party of appointing president, although finding female judges more liberal in employment discrimination cases); Gottschall, *supra* note 73, at 171-73 (finding relative similarity between President Carter's male and female appointees to the courts of appeals and, with the exception of criminal cases, minimal variances between black and white judges, even in racial discrimination cases); Gruhl et al., *supra* note 73, at 319-20 (finding few significant differences in the conviction rates of male and female judges, although finding female judges more likely to sentence female convicts to prison); Kritzer & Uhlman, *supra* note 73, at 86 (concluding that female judges "behave no differently than their male colleagues" in study of sentencing); Spohn, *supra* note 73, at 1211-14 (finding "remarkable similarities" in sentencing decisions of black and white judges and concluding that judicial race has little predictive power); Uhlman, *supra* note 73, at 891-94 (finding no important differences between black and white judges in criminal conviction rates and sentencing); Walker & Barrow, *supra* note 73, at 613-15 (finding marked similarity in decision-making records between black and white federal district judges in several fields and few differences between male and female judges, with the exception of a tendency of female judges to rule in favor of government entities); Welch et al., *supra* note 73, at 131-35 (finding little impact of black judges in overall criminal sentencing severity, but some evidence of more equal treatment by black judges of white and black defendants in decisions to incarcerate).

76. J. WOODFORD HOWARD, JR., COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM 182-83 (1981) (finding in a study of circuit judges' votes across multiple fields that prior judicial experience was significant only on the discrete issue of civil rights); Ashenfelter et al., *supra* note 73, at 277-81 (finding in study of federal district judges that prior judgeship was not a significant factor in explaining decisions); Gryski & Main, *supra* note 73, at 532 (finding that prior career characteristics of judges were "not useful predictors of state high court judicial behavior in sex discrimination cases").

77. Tate & Handberg, *supra* note 71, at 470.

78. For example, prosecutorial experience has been associated with more conservative behavior in civil liberties cases, *id.* at 473-75, but with more a liberal or favorable response to racial equal protection claims. Theodore Eisenberg & Sheri Lynn Johnson, *The Effects of Intent: Do We Know How Legal Standards Work?*, 76 CORNELL L. REV. 1151, 1190 (1991); see also Stuart S. Nagel, *Judicial Backgrounds and Criminal Cases*, 53 J. CRIM. L. CRIMINOLOGY & POLICE SCI., 333, 336 (1962) (finding in early study that former prosecutors were significantly more likely to vote against defense in criminal cases, based on comparison of percentages of rulings for defendants above court average by each attribute group).

79. Dan Bowen, *The Explanation of Voting Behavior from Sociological Characteristics of Judges* (unpublished Ph.D. dissertation, Yale University, 1965), quoted in S. Sidney Ulmer, *Social Background as an Indicator to the Votes of Supreme Court Justices in Criminal Cases: 1947-1956 Terms*, 17 AM. J. POL. SCI. 622, 622 (1973); see also HOWARD, *supra* note 76, at 182 (finding, in study of decisions by circuit judges in multiple fields, that "[n]o single background characteristic was a strong determinant of voting outcomes across the board"); Gryski & Main, *supra* note 73, at 528 (acknowledging that social background factors "have not proven to be particularly effective means by which to explain judicial behavior").

male judges were more deferential than their male counterparts to positions taken by the government in personal rights and economic regulations' cases,⁸⁰ and another found that women judges were more supportive of claimants in employment discrimination cases.⁸¹ Another study found a pronounced variance in voting by black and white federal appellate judges in criminal cases,⁸² although several studies found little or no difference in adjudication of criminal cases by black and white judges.⁸³ A recent study of federal district court judges noted that a judge's prior work as a criminal defense lawyer emerged as predictive in terms of that judge's assessment of the constitutionality of the U.S. Sentencing Guidelines.⁸⁴ Although findings of significant association between basic background variables and judicial behavior have been fairly isolated and rarely replicated in other contexts, they do exist.

2. *Attitudinalism*

Attitudinal models of judicial decision making—perhaps the dominant model today—differ in slight but critical ways from behavioralist models. While acknowledging some degree of influence by socioeconomic background variables, attitudinalists understand the presentation of these variables differently than behaviorists. Where behavioralist models generally presume that a judge's background characteristics directly influence judicial decisions, attitudinal models generally ascribe the consequences of a judge's background as formative on his or her ideology (typically reflected, however crudely, in the political party affiliation of the appointing officer). It is a judge's ideology—a variable not dictated by socioeconomic background—that influences judges' decisions. As a variable, one critical difference distinguishing a judge's ideology from socioeconomic background is that the former involves a deliberate adoption of values or attitudes whereas the latter does not.⁸⁵ As Jeffrey Segal and Harold Spaeth explain:

80. Walker & Barrow, *supra* note 73, at 604–11.

81. Davis et al., *supra* note 73, at 131–32. *But see* Gryski & Main, *supra* note 73, at 531–32, 536 (finding sex not to be a significant influence in study of state high court judges in sex discrimination cases, although number of female judges was too small for reliable conclusions).

82. *See* Gottschall, *supra* note 73, at 171–73.

83. *See* Walker & Barrow, *supra* note 73, at 613–15 (finding that “black and white [federal district] judges displayed markedly similar decision-making records” in multiple legal fields, including criminal law and procedure). Studies of trial judges have consistently found little or no difference between black and white judges in adjudication of criminal cases, including conviction rates and sentencing severity. *See, e.g.*, Spohn, *supra* note 73, at 1211–14; Uhlman, *supra* note 73, at 891–94; Welch et al., *supra* note 73, at 131–35.

84. Sisk et al., *supra* note 73, at 1470–73.

85. *See* Ulmer, *supra* note 71, at 961 (stating that, unlike other experiential variables, party choice is “a surrogate for the aggregate of attitudes” that other experiences produce); *see also* AMERICAN COURT SYSTEMS 382 (Sheldon Goldman & Austin Sarat eds., 2d ed. 1989) (stating that party and appointment by a particular president are “likely reasonably accurate surrogates for attitudes and values”).

[T]wo of the most important variables—partisanship and appointing president—are probably best considered surrogates for judicial attitudes, not causes of them—and, as such, are at least potentially independent of social background. Thus they are useful for predicting attitudes, but are of less help in explaining them. For instance, President Reagan nominated Antonin Scalia [to the United States Supreme Court] because Scalia is a staunch conservative; Scalia is not a staunch conservative because he was nominated by Reagan. Similarly, among political elites, ideology might influence party identification at least as much as party identification influences ideology.⁸⁶

Thus, as professors Jeffrey Segal and Harold Spaeth note, partisanship and the political party of the appointing president (for Article III judges) are best approached as proxies for judicial attitudes, and *not* causes of them.⁸⁷

In contrast to the sporadic findings of significant correlations on other background variables, studies frequently (but not invariably)⁸⁸ have found political party identification to be a significant predictor of judicial voting in ideologically divisive cases.⁸⁹ Affiliation with the Democratic party corresponds to more liberal patterns of voting behavior by judges,⁹⁰ as does appointment to the federal bench by a Democratic president.⁹¹ Indeed, the already voluminous public and scholarly commentary on the courts' role in the 2000 presidential election⁹² has highlighted the potential link between judges' ideology and decisions.⁹³

86. SEGAL & SPAETH, *supra* note 73, at 232; *see also* Ulmer, *supra* note 71, at 961 (stating that “[i]t may not be strictly logical . . . to argue that party ‘causes’ or influences judicial [behavior] because party choice is ‘a surrogate for the aggregate of attitudes’ possessed by the judge”).

87. SEGAL & SPAETH, *supra* note 73, at 232. An emerging dispute surrounding the use of the political party of the appointing president as a proxy for judicial ideology warrants brief discussion. For arguments that such a proxy is not suitable, see Epstein & King, *Empirical Research*, *supra* note 7; Epstein & King, *The Rules*, *supra* note 5. For arguments to the contrary see, e.g., Cross et al., *supra* note 7.

88. *See* HOWARD, *supra* note 76, at 182–83, 186 (finding, in a study of circuit judge decisions across multiple fields that party identification was the weakest indicator on votes, and concluding that “the predictive power of political indicators was negligible and indirect”); Ashenfelter et al., *supra* note 73, at 281 (concluding in study of district court decisions “that we cannot find that Republican judges differ from Democratic judges in their treatment of civil rights cases”).

89. *See, e.g.*, C. K. ROWLAND & ROBERT A. CARP, POLITICS AND JUDGMENT IN FEDERAL DISTRICT COURTS 24–57 (1996); Jilda M. Aliotta, *Combining Judges' Attributes and Case Characteristics: An Alternative Approach to Explaining Supreme Court Decisionmaking*, 71 JUDICATURE 277, 278, 280 (1988); Goldman, *supra* note 74, at 496–506; Gottschall, *supra* note 73, at 169–71; Jon Gottschall, *Reagan's Appointments to the U.S. Courts of Appeals: The Continuation of a Judicial Revolution*, 70 JUDICATURE 48, 51–54 (1986) [hereinafter Gottschall, *Reagan*]; Gryski & Main, *supra* note 73, at 531, 534; Stuart S. Nagel, *Political Party Affiliation and Judges' Decisions*, 55 AM. POL. SCI. REV. 843, 845 (1961). *See generally* AMERICAN COURT SYSTEMS, *supra* note 85, at 382.

90. ROWLAND & CARP, *supra* note 89, at 30; Gryski & Main, *supra* note 73, at 534.

91. ROWLAND & CARP, *supra* note 89, at 46; Gottschall, *Reagan*, *supra* note 89, at 51; Gottschall, *supra* note 73, at 169–71.

92. *See, e.g.*, Symposium, *Bush v. Gore*, 68 U. CHI. L. REV. (2001).

93. *See, e.g.*, David Von Drehle et al., *Anxious Moments in the Final Stretch; High Court Stepped in and Wrote Stirring Finish*, WASH. POST, Feb. 3, 2001, at A1.

However, the influence of ideology should not be overstated. The most comprehensive study of federal district court judges to date found relatively little difference between Democratic- and Republican-affiliated judges overall.⁹⁴ Moreover, as of 1986, partisan-correlated behavior by federal judges was declining.⁹⁵ In addition, research design issues in many studies may over emphasize the role of ideology as a predictor of judicial decisions. The focus of prior studies on outcomes in published opinions over lengthy periods of time may skew the results toward greater partisan influence. “[W]hen attention shifts from aggregate patterns of case outcomes to individual, case-specific decisions, the effects of political influences are less apparent.”⁹⁶ Thus, precisely when lack of comparability is reduced by holding to a case-specific scenario, political affiliation as a predictor declines.⁹⁷ Moreover, as is generally true with much judicial decision-making literature, many of the studies finding ideology as an influential variable focus on the Supreme Court or, to a lesser extent, federal courts of appeal. Whether any findings of significance in these settings might hold for judges at the trial court level is unclear.⁹⁸ A few reasons suggest that a judge’s ideology, if it plays a

94. ROWLAND & CARP, *supra* note 89, at 34 (finding a difference of 10–13% between Democratic and Republican cases for all types of cases). However, there were significantly higher partisan voting differences in certain areas, such as race discrimination and religion. *Id.* at 40 (finding difference between Democratic and Republican judges of 28% on race discrimination cases and 24% on religion cases); *id.* at 48–50 (finding some dramatic voting differences between Carter and Reagan appointed judges on such issues as race (60%) and right-to-privacy (33%)); *see also* Gottschall, *Reagan*, *supra* note 89, at 53 (finding, in study of court of appeals judges, that when looking at results in the universe of both unanimous and nonunanimous cases, the margin of difference between appointees of Democratic and Republican presidents was 20% in civil rights and liberties cases and 10% in economic cases).

95. ROWLAND & CARP, *supra* note 89, at 56. At least one study of judicial behavior post-1986 has confirmed the decline of partisan variance among federal judges. *See* Ronald Stidham et al., *The Voting Behavior of President Clinton’s Judicial Appointees*, 80 JUDICATURE 16, 19–20 (1996) (concluding that Clinton’s appointees have demonstrated moderate decisional tendencies, and finding small differences in “liberal” voting rates, generally under 10% across categories of cases, for both district and court of appeals judges).

96. ROWLAND & CARP, *supra* note 89, at 14.

97. This is especially true when most such studies rely on published opinions which, particularly at the federal district court level, are an unrepresentative sample of peculiarly controversial cases. *See id.* at 16 (stating that less than five percent of district court decisions are published and that “published decisions tend to be policy judgments with greater political consequences than their unpublished counterparts”). *See generally* Susan M. Olson, *Studying Federal District Courts Through Published Cases: A Research Note*, 15 JUST. SYS. J. 782 (1992). When unpublished decisions are examined, partisan differences fade considerably, although this may be at least partially attributable to the routine, precedent-bound nature of such cases that leaves less room for expression of political proclivities by judges. ROWLAND & CARP, *supra* note 89, at 121–35; Ashenfelter et al., *supra* note 76, at 258–60, 281 (finding no partisan difference in district court rulings in the day-to-day docket). *But see* ROWLAND & CARP, *supra* note 89, at 21 (reporting other studies finding that differences in partisan voting by district judges between published and unpublished opinions were negligible). *See generally* Andrew P. Morris, *Developing a Framework for Empirical Research on the Common Law: General Principles and Case Studies of the Decline of Employment-at-Will*, 45 CASE W. RES. L. REV. 999, 1038–47 (1995) (summarizing literature on unpublished decisions and their role in empirical work).

98. In at least one study of the federal district court judges, ideology did not emerge as a statistically significant predictor of whether a judge would rule the U.S. Sentencing Commission constitutional or not. *See* Sisk et al., *supra* note 73, at 1466.

role at all, is more likely to be present in the hard, close cases that appellate courts—especially the Supreme Court—typically hear. Thus, a selection effect might skew findings of ideology's importance at the appellate level where no corresponding finding emerges at the trial court level. In any event, most of those persuaded by the efficacy of the attitudinal models recognize their limitations.

3. *Emerging Alternative Models*

Behavioral and attitudinal models' shortcomings have fueled the development of more sophisticated and comprehensive judicial decision-making models. Scholars are increasingly exploring the potential application of legal, public choice, and institutionalism theories to judicial decision making.⁹⁹ Emerging theoretical work has prompted the development of new models seeking to explain judicial decision making.

a. Legal Model

Professors C. K. Rowland and Robert A. Carp, who have conducted the most comprehensive empirical study of federal district judges to date, recently called for a new approach which “accommodate[s] political and jurisprudential influences without assuming away the judicial reasoning process.”¹⁰⁰ While not retreating to a formalistic legal model, they urge researchers to take more seriously both the legal dimension and the judge's role orientation as judicial officer.¹⁰¹ In addition, they suggest it is time for a revival of interest in the actual judgment process, as reflected in judges' explanation of their reasoning.

“Legal” models of judicial behavior insist on the primacy of legal doctrine and rule application in determining judicial outcomes.¹⁰² One

99. See, e.g., ROWLAND & CARP, *supra* note 89, at 136 (legal); Sisk, Heise & Morriss, *supra* note 73, at 1391–92 (public choice); Howard Gillman, *The New Institutionalism, Part I: More and Less Than Strategy: Some Advantages to Interpretive Institutionalism in the Analysis of Judicial Politics*, 7(1) LAW & CTS. 6 (1997) (institutionalism); Lee Epstein & Jack Knight, *The New Institutionalism, Part II*, 7(2) LAW & CTS. 4 (1997) (rational choice).

100. ROWLAND & CARP, *supra* note 89, at 136. They observe that, at least in terms of self-perception, “many trial judges appear to be motivated primarily by their role orientation—that is, their ‘secondary’ perceptions of what a judge should do—and not by their personal preferences.” *Id.* at 190 n.2. “A role orientation is a psychological construct which is the combination of the occupant's perception of the role expectations of significant others and his or her own norms and expectations of proper behavior for a judge.” James L. Gibson, *Judges' Role Orientations, Attitudes, and Decisions: An Interactive Model*, 72 AM. POL. SCI. REV. 911, 917 (1978). Gibson found that a judge's role orientation acts as an intervening variable, such that a judge's belief about the legitimacy of allowing nonlegal criteria to influence decisions does indeed affect “the relationship between attitudes and behavior.” *Id.* at 922; see also AMERICAN COURT SYSTEMS, *supra* note 85, at 437 (explaining that “the judge's concept of role can inhibit the full flowering of political attitudes and values” in the exercise of judicial discretion).

101. See ROWLAND & CARP, *supra* note 89, at 150–73 (proposing new model of trial court judgment as a special case of “social judgment” within the context of a legal system that, while allowing discretion, also places meaningful constraints on judges' decision-making authority).

102. For a brief description, see Schauer, *supra* note 69, at 617.

potentially fruitful variable involves a measure of a judge's adherence to precedent. Legalists suggest that judges adhere to precedent, in part, to promote "legal stability and continuity."¹⁰³ Economic analysis also could play a role. That is, judges might be inclined to adhere to precedent because a refusal to do so dilutes the practice of decision by precedent and, thus, undermines the precedential value of their own decisions.¹⁰⁴ Regardless of the reason, some scholars are finding already that precedent helps explain judicial decisions independent of a judge's background or ideology.¹⁰⁵ As a subspecies of the legal model, or perhaps as a theory that works within the interstices between models, some scholars posit an aspirational theory toward principled or classical judging. While acknowledging the empirical evidence of extralegal influences on judges, these scholars refuse to abandon the ideal of neutrality and independence in the judiciary.¹⁰⁶ As Professor Kent Greenawalt has written, "the traditional model posits as a desirable aspiration an ideal that legal decision not depend on the personality of the judge. The aspiration is not fully achievable even if all judges are intelligent, well-trained, and conscientious, but it is worth striving for."¹⁰⁷ Indeed, these scholars, many of whom both engage in empirical research and write about legal doctrine and theory, suggest that "[g]reater awareness of the powerful influences of personal background and attitudes may encourage greater self-conscious impartiality and objectivity among judges."¹⁰⁸ Moreover, from this perspective, examining the results of empirical studies of judicial decision making serves to highlight the need to constrain judicial discretion with law. Analogizing "the law" to "ropes binding a judicial Houdini," Professor Frank Cross notes that evaluation of the results of empirical research may help us "understand which brand of rope and which type of knot are the most effective and inescapable."¹⁰⁹

103. Glick, *supra* note 71, at 295.

104. William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 272-73 (1976) (analyzing reasons that explain why judges follow precedent).

105. See, e.g., Sisk et al., *supra* note 73, at 1496. But cf. Mark A. Cohen, *Explaining Judicial Behavior or What's "Unconstitutional" About the Sentencing Commission?*, 7 J.L. ECON. & ORG. 183, 190-97 (1991). For an effort to reconcile the Sisk, Heise, and Morriss study with the Cohen study, see Sisk et al., *supra* note 73, at 1496-97.

106. See, e.g., Gregory C. Sisk, *Judges Are Human, Too*, 83 JUDICATURE 178, 211 (2000) (describing empirical studies of judicial decision making as "a sobering splash in the face with cold reality for those of us who retain an aspirational faith in principled judging"); Michael E. Solimine & Susan E. Wheatley, *Rethinking Feminist Judging*, 70 IND. L.J. 891, 910 (1995) (stating that despite "the fact that the real world makes classical judging an aspiration but not always a reality, that model should remain a goal").

107. KENT GREENAWALT, *PRIVATE CONSCIENCES AND PUBLIC REASONS* 142 (1995).

108. Sisk, *supra* note 106, at 211.

109. Frank B. Cross, *Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance*, 92 NW. U. L. REV. 251, 326 (1997).

b. Public Choice

The application of public choice theory (or at least some variant thereof) to judicial behavior and decisions has lurked in the academic literature for many years.¹¹⁰ Public choice theory has recently gained increased prominence in the judicial decision-making literature, partly through a provocative article by Judge Posner.¹¹¹ In it, Judge Posner injects a dose of realism into the study of judicial decision making. He posits that judges are “rational, and they pursue instrumental and consumption goals of the same general kind and in the same general way that private persons do.”¹¹² Posner identifies such variables as leisure time and reputation for inclusion in a judicial utility curve.

Professor Schauer notes that Judge Posner’s article “shift[s] our thinking about judges away from the mélange of glorification, celebration, and adoration that pervades much of popular and almost all of academic thinking about the judiciary and towards a more realistic analysis of judicial incentives and judicial behavior.”¹¹³ Such a focus on a “candid look at judicial motivation”¹¹⁴ generally is consistent with a broad interpretation of the public choice model. Indeed, some early empirical work on whether such variables as promotion potential affects judicial decision making has already emerged that suggests its relevance.¹¹⁵

Public choice theory thus suggests that empirical research into judicial decision-making needs to take into account not only the sociological background variables, whose influence the institutional structure of the federal judiciary may magnify, but also the legal context and reasoning of the opinions through which judges express their views. Further, the insti-

110. See, e.g., WALTER F. MURPHY, *ELEMENTS OF JUDICIAL STRATEGY* (1964); William N. Eskridge, Jr., *Overriding Supreme Court Statutory Interpretation Decisions*, 101 *YALE L.J.* 331 (1991); William N. Eskridge, Jr., *Reneging on History?: Playing the Court/Congress/President Civil Rights Game*, 79 *CAL. L. REV.* 613 (1991); Jack Knight & Lee Epstein, *On the Struggle for Judicial Supremacy*, 30 *LAW & SOC’Y REV.* 87 (1996); Forrest Maltzman & Paul J. Wahlbeck, *May It Please the Chief? Opinion Assignments in the Rehnquist Court*, 40 *AM. J. POL. SCI.* 421 (1996); Forrest Maltzman & Paul J. Wahlbeck, *Strategic Policy Considerations and Voting Fluidity on the Burger Court*, 90 *AM. POL. SCI. REV.* 581 (1996); McNollgast, *Politics and Courts: A Positive Theory of Judicial Doctrine and the Rule of Law*, 68 *S. CAL. L. REV.* 1631 (1995); Erin O’Hara, *Social Constraint or Implicit Collusion?: Toward a Game Theoretic Analysis of Stare Decisis*, 24 *SETON HALL L. REV.* 736 (1993); Pablo T. Spiller & Rafael Gely, *Congressional Control or Judicial Independence: The Determinants of US Supreme Court Labor-Relation Decisions*, 23 *RAND J. ECON.* 463 (1992); Maxwell L. Stearns, *Standing Back from the Forest: Justiciability and Social Choice*, 83 *CAL. L. REV.* 1309 (1995). But cf. Lynn A. Stout, *Judges as Altruistic Hierarchs*, UCLA School of Law Research Paper No. 01-16, available at <http://papers.ssrn.com/abstract=287458> (last visited Nov. 9, 2001).

111. Richard A. Posner, *What Do Judges Maximize? (The Same Thing Everybody Else Does)*, 3 *SUP. CT. ECON. REV.* 1, 1 (1993) [hereinafter Posner, *What Do Judges Maximize*].

112. *Id.* at 39.

113. Schauer, *supra* note 69, at 615. Indeed, Professor Schauer goes on to argue that such research should be empirical, though he recognizes that such work “will not be easy.” *Id.* at 636.

114. *Id.* at 625.

115. See, e.g., Cohen, *supra* note 105; Sisk et al., *supra* note 73. As Professor Schauer notes, promotion potential is likely at its strongest at the trial and intermediate appellate court levels (excluding, of course, the U.S. Supreme Court). See Schauer, *supra* note 69, at 631–33.

tutional structure, which provides judges with their independence from the influence of more usual public choice factors, also “frees them to develop whatever theories of statutory construction and constitutional interpretation, wise or foolish, deferential or mischievous, that captures their fancy.”¹¹⁶ It thus creates the space in which the variation necessary for empirical analysis can arise.

Theorists initially balked at applying public choice theory to judges’ behavior in deciding cases largely because:

The structure of the “independent” judiciary is designed to remove judges from the day-to-day pressures and temptations of ordinary political office, and with some qualifications it achieves that end. It is a strategy that recognizes the forces of self-interest, regards them as potentially destructive, and then takes *successful* institutional steps to counteract certain known and obvious risks.¹¹⁷

Consequently, while public choice theory suggests examining legislators’ votes within the context of campaign contributions from special interest groups, similar candidates for empirical research of judicial behavior are not immediately obvious. Although public choice theory’s power to explain judicial decisions has proven limited,¹¹⁸ the theory predicts that certain variables—such as promotion potential—are likely to be important. Of course, promotion potential within the context of the federal judiciary is complicated. Because the institutional structure of the judiciary prevents easily measured personal gains,¹¹⁹ “ambitious judges could seek to maximize their ‘influence’ and ‘prestige,’ which are normally achieved by excellence in argument and writing.”¹²⁰ Although federal judges are secure in their present positions, they may also seek career advancement within the judiciary.¹²¹

c. Institutionalism

Law and court scholars have recently added yet another potential new twist to the judicial decision-making scholarship. A long-standing

116. Richard A. Epstein, *The Independence of Judges: The Uses and Limitations of Public Choice Theory*, 1990 BYU L. REV. 827, 851.

117. *Id.* at 831–32.

118. See, e.g., Posner, *What Do Judges Maximize*, *supra* note 111, at 1, 2 (“The economic analyst has a model of how criminals and contract parties, injurers and accident victims, parents and spouses—even legislators, and executive officials such as prosecutors—act, but falters when asked to produce a model of how judges act.”); Edward L. Rubin, *The New Legal Process, the Synthesis of Discourse, and the Microanalysis of Institutions*, 109 HARV. L. REV. 1393, 1399–1400 (1996) (“[N]o stable [public choice] theory has emerged to explain the behavior of judges because most American judges, regardless of their substantive decisions, are insulated from monetary rewards or punishments, guaranteed of their position, and unable to affect their own jurisdiction in any direct fashion.”).

119. One obvious example involves judicial salaries, which are regulated by the U.S. Constitution. U.S. CONST. art. III, § 1 (“The Judges . . . shall . . . receive for their Services a Compensation, which shall not be diminished during their Continuance in Office.”).

120. Epstein, *supra* note 116, at 838.

121. For purposes of discussion, I assume that promotion potential does not influence U.S. Supreme Court Justices.

focus on how institutions are influenced by judges' personal characteristics is giving way to increased attention to how judges are influenced by the institutional characteristics within which they operate.¹²² Recent work approaches courts as institutions rather than mere platforms for the display of judges' individual attitudes or characteristics.¹²³ Indeed, according to Professor Gillman, the institutionalist approach has already progressed to the point where three discernible "camps" have already formed: rational choice,¹²⁴ sociological, and historical.¹²⁵

A brief description of the rational (or strategic) choice camp illustrates the general themes advanced by the institutional approach. According to Professors Epstein and Knight, judicial decisions are best understood as exercises of strategic behavior.¹²⁶ Therefore, in attempting to influence policies, judges face a complicated set of intersecting strategic relations, including those among other judges, the court, and other relevant institutions.¹²⁷

B. Methodology

Complementing advancements in judicial decision-making theory are developments in research designs used by scholars. Two broad research designs dominated past empirical work on judicial decision making and each strikes a slightly different balance among the competing research design goals of generalizability, comparability, and authenticity.¹²⁸

Even the more developed research designs confront important limitations. Selection effect is one such limit.¹²⁹ Many studies are confined to a universe of written and published decisions. The focus on such decisions, along with an emphasis on appellate courts,¹³⁰ reduces the generalizability of the findings. In the tort law area, for example, only ap-

122. Gillman, *supra* note 99, at 6.

123. *Id.*

124. Rational choice has also been referred to as the "strategic approach" or "strategic rationality." See Epstein & Knight, *supra* note 99.

125. Gillman, *supra* note 99, at 6.

126. Epstein & Knight, *supra* note 99, at 4.

127. For a more complete explanation of the strategic choice camp, see *id.*; LEE EPSTEIN & JACK KNIGHT, *THE CHOICES JUSTICES MAKE* (1998) (analyzing decision making by U.S. Supreme Court Justices).

128. One obvious point bears noting: Not all agree that empirical studies of judicial decision making are helpful or informative. Indeed, this line of research has attracted prominent—and vociferous—criticism. Indeed, some of the criticism has emerged from the subjects of empirical research. See, e.g., Harry T. Edwards, *Collegiality and Decision Making on the D.C. Circuit*, 84 VA. L. REV. 1335 (1998) (seeking to "debunk the myth that ideology is a principal determinant in decision making on the United States Court of Appeals for the D.C. Circuit"). But cf. Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 VA. L. REV. 1717, 1718–19 (1997) (an empirical study arguing that ideology influences judicial decisions in the environmental law area on the D.C. Circuit); Richard L. Revesz, *Ideology, Collegiality, and the D.C. Circuit: A Reply to Chief Judge Harry T. Edwards*, 85 VA. L. REV. 805 (1999).

129. See George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

130. Ashenfelter et al., *supra* note 73, at 258.

proximately four percent of all cases filed reach a judge or jury for disposition.¹³¹ Of the four percent that result in bench or jury verdicts, many do not result in a published judicial opinion.¹³² Finally, even within the universe of “published” opinions, not all are “officially” published and thus fail to appear in familiar legal reporter series.¹³³

Even though only an exceedingly small percentage of cases filed eventually culminate in a written, published judicial opinion, these cases exert a disproportionate—albeit indirect—amount of influence. One important function served by written published judicial opinions is to shape future litigants’ expectations and predictions about what might happen to their case should it proceed to trial. Moreover, these expectations and predictions in turn influence the nuanced decisional analyses used to determine whether to even initiate, let alone litigate, potential legal claims.¹³⁴

Another methodological limitation is that most empirical studies of judicial behavior, especially the early ones, examined sample groups of judges and series of unrelated cases in general areas of the law and frequently involved little more than case studies deploying data descriptively. For example, scholars examined background variable influences upon judicial behavior by looking at the propensity of judges to vote for plaintiffs in civil rights cases or for defendants in criminal cases.¹³⁵ Similarly, other studies focused on comparisons of the voting records of different groups of federal judges, such as judges appointed by a particular president or judges appointed by presidents of a particular political party. This analysis was applied to a large sample of different cases, often by labeling case outcomes as “liberal” or “conservative.”¹³⁶

131. BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, NCJ-153177, SPECIAL REPORT: TORT CASES IN LARGE COUNTIES 5 (1995).

132. I use the term “judicial opinion” loosely in this context. Courts generate an array of official work product (e.g., judicial orders, memorandum, judgments, opinions).

133. Morriss, *supra* note 97, at 1038 n.152; see also William L. Reynolds & William M. Richman, *An Evaluation of Limited Publication in the United States Courts of Appeals: The Price of Reform*, 48 U. CHI. L. REV. 573 (1981) (noting a decline in the rate of published appellate court opinions).

134. Peter Schuck, *Mapping the Debate on Jury Reform*, in VERDICT: ASSESSING THE CIVIL JURY SYSTEM 306, 307 (Robert E. Litan ed., 1993) [hereinafter Schuck, *Mapping*]; see also Priest & Klein, *supra* note 129, at 1 (“address[ing] the relationship between litigated disputes and disputes settled before or during litigation”).

135. E.g., Davis et al., *supra* note 73, at 130–31 (reviewing votes of all federal court of appeals judges from 1981–90 in employment discrimination, criminal procedure, and obscenity cases); Sheldon Goldman, *Voting Behavior on the U.S. Courts of Appeals Revisited*, 69 AM. POL. SCI. REV. 491, 492 (1975) (reviewing decisions by court of appeals judges in multiple issue areas, including criminal procedure, civil liberties, labor, and government fiscal); Gryski & Main, *supra* note 73, at 529, 536 (reviewing state high court rulings in sex discrimination cases from 1971–81); Nagel, *supra* note 78, at 333 (reviewing criminal cases decisions during 1955 involving 313 state and federal supreme court judges listed in a directory).

136. E.g., HOWARD, *supra* note 76, at xix, 173–88 (reviewing 4941 decisions by 35 judges of the Second, Fifth, and District of Columbia Circuits, from 1960–79, in such categories as civil rights, criminal, and labor, with certain outcomes labeled as liberal or conservative); ROWLAND & CARP, *supra* note 89, at 18 (reviewing 45,826 published opinions issued by 1500 district court judges from 1933–1987, categorized into 26 case types with a liberal/conservative dimension); Gottschall, *Carter, supra*

Studies employing a longitudinal research design benefit from examining judicial behavior over a period of time and in the context of a large number of cases. An important limitation to these longitudinal judicial decision-making studies, however, pivots on the shared assumption that different cases over a period of years are sufficiently similar that the results are both comparable and generalizable.¹³⁷ Such an assumption is a practical necessity given the nature of judges' workloads. Simply put, most general jurisdiction Article III judges work on cases involving an array of different issues.

However, this practical reality generates problems involving comparability. A study of votes by judges for defendants in criminal cases can lead to meaningful results only if we assume that criminal cases as a category are sufficiently similar in nature that the frequency of a judge's vote for a defendant reflects a general judicial attitude rather than individualized resolution of the unique facts in each particular case.¹³⁸ Conse-

note 73, at 167–68 (reviewing all court of appeals decisions in criminal procedure, racial discrimination, and sex discrimination cases over a two-year period, labeling votes in favor of claims by criminally accused and discrimination claimants as liberal); Gottschall, *Reagan*, *supra* note 89, at 51 (reviewing all court of appeals decisions in multiple general fields, including criminal and racial or sexual discrimination, during a year-and-a-half period, with certain outcomes assigned a liberal label).

137. See Van Koppen & Ten Kate, *supra* note 73, at 226 (“The problem in working with actual decisions is to ensure that the different cases heard by different judges are comparable on all relevant dimensions.”). See generally John M. Conley & William M. O’Barr, *Fundamentals of Jurisprudence: An Ethnography of Judicial Decision Making in Informal Courts*, 66 N.C. L. REV. 467, 472–73 (1988) (discussing alternative problems of incomparability among cases or unrealistic simulation in empirical research of judicial decision making). Conley and O’Barr also criticize prior quantitative studies as inadequate to “answer the question of what caused the result in a particular case,” *id.* at 473, and adduce the limitations of a priori judgments by researchers in selecting the variables to be evaluated in a study. *Id.* at 474–75. They propose an alternative method of observing judges as they make decisions and then evaluating judicial statements of reasoning in a group workshop discussion applying conversational analysis. *Id.* at 475–79. However, the Conley-O’Barr method cultivates its own weaknesses, such as the absence of quantification, the difficulty in replication by other researchers, and heavy dependence on the subjective interpretations of the workshop participants.

138. See Aliotta, *supra* note 89, at 277 (observing that “[b]oth studies of judicial attributes and judicial attitudes are concerned with judges’ voting propensities over a large number of cases,” such that “the facts or legal principles involved in particular cases are not considered relevant”); Gottschall, *supra* note 73, at 169 n.13 (observing that “lower federal court judges decide different cases in different settings and their votes are not directly comparable” and thus “generalizations from such quantitative data” about the relative attitudes of lower court judges “must be assessed cautiously”). Even when the study focuses upon U.S. Supreme Court decisions, thereby including generally the same set of judges hearing the same cases, for example, SEGAL & SPAETH, *supra* note 73, at 217; Tate & Handberg, *supra* note 71, at 473; Ulmer, *supra* note 71, the incomparability problem persists through the assumption that a justice’s resolution of one discrete case in a field, such as criminal law, provides evidence of an attitude on that subject rather than anomalous facts, circumstances, or legal doctrinal implications of that individual case. Moreover, because the number of Justices included in a study of the Supreme Court is small, such studies may produce poignantly detailed descriptions of the attributes, experiences, attitudes, philosophy, and predilections of a small, atypical collection of individual human beings, thereby adding little knowledge about the general subject of judicial decision making. In other words, detailed studies of Supreme Court Justices may come dangerously close to biography rather than social science.

Some researchers have attempted to compensate for the incomparability of aggregate votes in different cases by incorporating certain fact-pattern or other case-specific characteristics to the analysis. See, e.g., SEGAL & SPAETH, *supra* note 73, at 216–21, 229–31 (in a study of Supreme Court rulings in search and seizure cases, combining derived attitude values for the Justices and twelve fact-based fac-

quently, assumptions about comparability and generalizability—sometimes necessary due to research design issues—often strain credibility.

Work in this area, however, advanced by exploring alternative research designs, partly to adjust for the comparability problem. Experimental methods were explored to help control for case types and relax the strain on the comparability and generalizability assumptions generated by longitudinal studies using real cases. These alternative methodologies employ simulated cases. Whatever gains might be realized for comparability purposes, however, are off-set by losses in authenticity. Experimental research designs that use similar—though simulated—cases fail to mirror the real world of adjudication and judicial decision making. As John Conley and William O’Barr comment: “[E]xperiments involve simulation. One can never claim with certainty to have captured all the elements of a real case, nor can one be sure that subjects will respond to stimuli in the same way as they would in the courtroom.”¹³⁹

For example, Peter Van Koppen and Jen Ten Kate conducted a simulation of the judicial decision-making task by submitting nine written case problems to Dutch judges, along with questionnaires on role conceptions and personality.¹⁴⁰ They acknowledged the limitations of their research design: “Our simulation was . . . unlike actual cases in the brevity of the written material [one page summaries of facts] and in the fact that our judges, like judges in self-report studies, knew that the fate of actual litigants did not depend on their decisions.”¹⁴¹ In addition, the facts as provided in the hypothetical problems were undisputed, whereas “the factual situations of actual cases [are] more complex and ambiguous.”¹⁴²

To compound problems, scholars using both types of research designs too often focus on the outcome and ignore the judicial decisions

tors, such as justification for the search, place of intrusion, etc., as independent variables, resulted in greater prediction rate, although concluding that Justices’ attitudes are more important than facts of the case in predicting votes); Aliotta, *supra* note 89, at 279–80 (devising case characteristic variables for equal protection cases, such as whether the case involved race, fundamental rights, or education, or was brought as a class action). While this is an important refinement of prior research techniques, the case characteristics chosen remain those the researcher deems important (based in part on prior research or content analysis of opinions) and cannot fully account for the multidimensional aspects of each individual case. Moreover, even while incorporating case characteristics into the analysis, these studies continue to focus upon general outcome votes, e.g., in favor of or against a civil rights or an equal protection claim as the dependent variable. See, e.g., SEGAL & SPAETH, *supra* note 73, at 242–55; Aliotta, *supra* note 89, at 278. The divergent paths toward the same result, that is, the judges’ reasoning, are not explored.

139. Conley & O’Barr, *supra* note 137, at 474–75.

140. Van Koppen & Ten Kate, *supra* note 73, at 226–27. Van Koppen and Ten Kate explain that Dutch civil cases generally do proceed with exchange of written documents, such that presentation of written protocols was a legitimate simulation of the tasks that face trial judges in that nation. *Id.* at 227.

141. *Id.*

142. *Id.* at 240.

themselves, especially judges' reasoning processes.¹⁴³ In longitudinal studies, researchers typically measure general outcomes in broadly defined types of cases,¹⁴⁴ leaving the process of judicial analysis in the individual case unexamined. In an experimental study, in addition to the unreality of the situation and the need to rely upon unrepresentative volunteers, the participating judges are unlikely to devote the substantial time, deliberation, and exposure to critique attendant to preparation of a full-scale written opinion explaining resolution of a legal problem.¹⁴⁵ In either situation, as Rowland and Carp note, past empirical studies "focus attention exclusively on aggregate 'vote' outcomes rather than on the individual judgment processes that engendered those outcomes."¹⁴⁶

Accordingly, prior longitudinal studies are well complemented by a case study involving presentation of a single, identical legal problem to a large sample of judges, with an examination of the results in light of background and other independent variables. Likewise, while experimental simulations and other self-reporting surveys of judicial actors substantially add to our knowledge, a confirmation test of decision-making behavior must take place in the context of a real case, demanding meaningful judicial attention to a genuine controversy. Ideally, this model and authentic controversy scenario would also include judicial presentation of reasons for the decisions, in the form of written opinions, which would provide richer data for analysis and may reveal influences that have been submerged at the general outcome level. Regrettably, in the judicial decision-making area, natural (or even quasi-natural) experiments are exceedingly rare.¹⁴⁷

Greater availability of germane data also assists scholars and fuels judicial decision-making research. Empirical analyses of judicial decision making, broadly construed, emerged as far back as 1925 when then-Professor Felix Frankfurter and various collaborators published a series of law review articles that included descriptive presentation of data on Supreme Court decisions.¹⁴⁸ In 1950, the *Harvard Law Review* initiated

143. Of course, qualitative and quantitative analyses of judicial reasoning in judicial opinions are restricted to those cases in which a judge writes an opinion and expresses his or her reasons in a coherent manner.

144. See Goldman, *supra* note 135, at 492 (explaining that outcomes in general issue areas were examined in "basic political terms of who wins and who loses and by implication what political values are seemingly being fostered").

145. See Van Koppen & Ten Kate, *supra* note 73, at 227 (explaining that they asked the participating judges "for their decisions but did not ask them to follow the common procedure in actual cases of providing justifications for the decisions reached").

146. ROWLAND & CARP, *supra* note 89, at 149.

147. For an example of one, see Sisk et al., *supra* note 73, Part II.B.3.

148. See, e.g., Felix Frankfurter & James M. Landis, *The Business of the Supreme Court of the United States—A Study in the Federal Judicial System*, 38 HARV. L. REV. 1005 (1925) (Part I: The Period Prior to the Civil War); Felix Frankfurter, *The Business of the Supreme Court of the United States—A Study in the Federal Judicial System*, 39 HARV. L. REV. 35 (1926) (Part II: From the Civil War to the Circuit Courts of Appeals Act).

its annual tradition of statistically summarizing Supreme Court terms.¹⁴⁹ At the same time, political scientists staked their professional claim to the judicial decision-making terrain.¹⁵⁰

Until the 1980s, however, most of the empirical work on judicial decision making used discrete datasets typically designed for a limited and fixed set of research questions. A relatively new development is the emergence of “multiuser” datasets. The idea behind this movement is to develop large datasets that bear on a wide range of potential research questions.¹⁵¹

The first example of this trend was Professor Harold Spaeth and Jeffrey Segal’s U.S. Supreme Court Judicial Database.¹⁵² More than two decades ago Professor Spaeth persuaded the National Science Foundation to fund the development of a database on U.S. Supreme Court decisions since 1953. The initial project, completed in the late 1980s, has been updated annually and backdated to include the Vinson Court era decisions (1946–1952). According to many scholars: “There is little doubt that today his U.S. Supreme Court Judicial Data Base is the greatest single resource of data on the Court; there are virtually no social-scientific projects on the Court that fail to draw on it.”¹⁵³

Although it is understandable why the federal courts of appeals and, to an even greater degree, district courts, are comparatively less studied than the U.S. Supreme Court, reasons justifying this focus are less clear. After all, lower federal courts perform the bulk of federal judicial work and, for all practical purposes, serve as the court of last resort for most citizens. A database project, launched by Professor Songer, addresses the comparatively underexamined courts of appeals.¹⁵⁴ The Court of Appeals Data Base differs in important ways from the U.S. Supreme Court database. Most importantly, the court of appeals database relies on sampling. Phase I includes 15325 cases from 1925 through 1988. Phase II includes all court of appeals cases (approximately 4000) that were subsequently reviewed by the U.S. Supreme Court. (These cases are also included in Spaeth and Segal’s U.S. Supreme Court database.) Phase III includes 2880 cases from 1989 through 1996.

An analogous argument can be made on behalf of the need for greater scholarly attention to state supreme courts. State court settings supply a unique benefit with variation in how judges are selected as well

149. Note, *The Supreme Court, 1949 Term*, 64 HARV. L. REV. 114 (1950).

150. An early example is Professor Pritchett’s influential empirical study of dissents on the U.S. Supreme Court. C. Herman Pritchett, *Divisions of Opinion Among Justices of the U.S. Supreme Court, 1939–1941*, 35 AM. POL. SCI. REV. 890 (1941).

151. Epstein, *Social Science*, *supra* note 51, at 225.

152. For a complete description, see *supra* note 54.

153. See, e.g., Epstein, *Social Science*, *supra* note 51, at 225.

154. George & Sheehan, *supra* note 55, at 245 (“While studies of judicial decision making in the U.S. Supreme Court abound, the limited availability of data has always constrained our ability to conduct similar studies in the courts of appeals.”). For a full description of the dataset, see Singer, *supra* note 55.

as comparative possibilities between and among states and legal rules. Following the pattern forged by the data bases on the federal courts, the State Supreme Court Data Project received a grant in 1997 to construct a systematic, longitudinal database of state supreme court decisions.¹⁵⁵ Specifically, the researchers seek to code 14000 cases gathered from all fifty states.

VI. CONCLUSION: TOWARD A NEW EMPIRICISM?

To be sure, after singing the praises of empirical legal scholarship I remain mindful of its limitations. Data, research design, and statistical methods frequently enforce limits on what can be properly inferred from the results of empirical studies. While reasonable scholars can—and do—differ on the precise application of necessary rules of inference, strong consensus exists on the more general and important point that empirical work needs to adhere to appropriate scholarly rules and norms.¹⁵⁶ Moreover, much—particularly the complex and nuanced—eludes precise quantification. The empirical perspective remains, after all, only a tool. Notwithstanding these inherent and structural limitations, empirical methodologies are well-positioned to enhance and complement traditional legal scholarship.

The growing empirical literature on judicial decision making illustrates this point. Initial work explored behaviorist and attitudinalist models. As the theories developed and matured, critical empirical assumptions garnered increasing scholarly attention. At the same time, the limitations of behavioral and attitudinal models have ushered in a new set of competing theories seeking a more accurate description of judicial decisions. Many of these new models, particularly rational choice and institutionalism, already benefit from substantial empirical work in other fields.

After much promise and previous false starts, it looks as though empirical legal scholarship has arrived as a research genre. The emerging new empiricism is noted for its contribution to areas where theoretical and doctrinal work has matured, its deployment of new and increasingly sophisticated statistical tools, and greater access to data and computational power. Even more important is that these attributes distinguish new empiricists from their predecessor fellow travelers and fuel optimism about legal empiricism's durability. Whether the emerging new empiricism will survive the test of time better than previous versions remains to be seen. The reasons for optimism discussed in this paper

155. For a complete description, see Paul Brace, *State Supreme Court Data Project* (Oct. 8, 2001), at <http://www.rafirice.edu/~pbrace/statecourt>.

156. See Epstein & King, *Empirical Research* *supra* note 7; Epstein & King, *The Rules*, *supra* note 5 (criticizing legal scholarship for failing to adhere to rules of inference); see also Cross et al., *supra* note 7 (criticizing the particulars of Epstein and King's critique yet agreeing with their overall thesis); Goldsmith & Vermeule, *supra* note 7 (same); Revesz, *supra* note 7 (same).

suggest that legal empiricism's current incarnation will not merely survive; it will flourish.