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The Importance of Being Empirical

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The Importance of Being Empirical

Michael Heise*

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I. INTRODUCTION

In a recent informative article on the exclusionary rule published in the *Iowa Law Review* (the Pepperdine Study), Professors L. Timothy Perrin, H. Mitchell Caldwell, Carol A. Chase, and Ronald W. Fagan explored certain aspects of the rule's effects and costs, particularly as they relate to police conduct. The topic explored in their paper is interesting and, due to recent events, timely. Its timeliness stems from the conflation of two distinct but related trends. One trend is increased public dissatisfaction with consequences of the exclusionary rule's application. Another is increased public criticism of judges. Both of these trends converged in events following a recent exclusionary rule decision by Federal District Court Judge Baer, Jr.² Not surprisingly, the Pepperdine Study begins with a brief recounting of those events, which quickly have become a fixture in judicial folklore.³

That a single anecdote commands such attention should surprise few. Assertions unconnected to an empirical basis fill law review articles (and judicial opinions).⁴ Anecdotal evidence is comparatively simple and transparent, requiring little expertise to generate the expected reaction.⁵ Regrettably, however, scholars possess few, if any, mechanisms to assess anecdotal evidence for truthfulness, typicality, or frequency.⁶ Lacking such mechanisms, anecdotal evidence supplies a risky foundation upon which to form generalizations applicable to a larger population. Yet, the influence of some anecdotes, including the Judge Baer

^{1.} See L. Timothy Perrin et al., If It's Broken, Fix It: Moving Beyond the Exclusionary Rule, 83 IOWA L. REV. 669, 674-78 (1998).

^{2.} See United States v. Bayless, 913 F. Supp. 232 (S.D.N.Y. 1996), vacated, 921 F. Supp. 211 (S.D.N.Y. 1996).

^{3.} See Perrin et al., supra note 1, at 671-72. Judge Baer originally ruled 80 pounds of cocaine and heroin found by police officers inadmissible due to the absence of reasonable suspicion necessary to stop the defendant's car and conduct a warrantless search. See Bayless, 913 F. Supp. at 242-43. Judge Baer's decision attracted intense public criticism. Judge Baer subsequently reversed himself. See Bayless, 921 F. Supp. at 217. The judge's decisions prompted commentary from, among others, the American Bar Association, President Clinton, and Speaker Gingrich. See Ian Fisher, Gingrich Asks [for] Judge's Ouster for Ruling Out Drug Evidence, N.Y. TIMES, Mar. 7, 1996, at B4 (noting that Speaker Gingrich sent a letter to President Clinton asking him to seek Judge Baer's resignation); Allison Mitchell, Clinton Pressing Judge to Relent, N.Y. TIMES, Mar. 22, 1996, at A1 (reporting President Clinton's spokesperson, Michael D. McCurry, as stating that President Clinton regrets Judge Baer's decision and is contemplating asking for his resignation); Press Release from the ABA, ABA House of Delegates Votes to Support Judges Against Unwarranted Attacks, (visited Feb. 10, 1998) https://www.abanet.org/media/feb98/judnash.html.

^{4.} See Richard A. Posner, The Summary Jury Trial and Other Methods of Alternative Dispute Resolution: Some Cautionary Observations, 53 U. CHI. L. REV. 366, 367 (1986) [hereinafter Posner, Summary].

^{5.} See David A. Hyman, Lies, Damned Lies, and Narrative, 73 IND. L.J. 797, 800-01 (1998).

^{6.} See id. at 801 n.16; see also 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, 1159-61 (1992) (discussing problems associated with the use of anecdotal evidence).

incident, on courts and legislatures is legion. Thus, for an empirical study such as Pepperdine's to begin with a prominent anecdote is ironic because data-not anecdotes-inform this study.

The Pepperdine Study warrants attention not only for what it says about the exclusionary rule but also for how it says it. I leave to others to comment more directly on the study's findings, specific contributions to our understanding of the exclusionary rule, as well as the usefulness of the authors' proposed civil administrative remedy. My comments, in contrast, dwell on how the authors marshal their evidence and advance their argument. Specifically, I focus on the authors' deployment of data and statistical analyses—rather than theory or anecdotes—to advance their thesis. The Pepperdine Law Review's generous invitation to comment on the Pepperdine Study provides an appropriate opportunity to consider—albeit briefly—the decidedly small but growing subset of legal scholarship that is empirical, take stock of this particular research genre as well as the Pepperdine Study's contribution to it, and articulate a normative argument in favor of increased empirical legal research.⁸

To place the Pepperdine Study into some context, Part II considers the practical and structural factors that work against the production of empirical scholarship by law professors. Despite important impediments, important empirical legal scholarship continues to emerge and at an increasingly rapid rate. Part III describes three broad types of empirical legal scholarship and argues that increased attention to it will enhance and complement legal scholarship as a whole. In Part IV the Pepperdine Study is discussed within the context of the small but growing corpus of empirical legal research.

^{7.} For a comprehensive and recent analysis of anecdotal evidence see generally Hyman, *supra* note 5 (describing the influence of anecdotal evidence and a narrative on patient-dumping legislation).

^{8.} I acknowledge from the outset, with no small irony, my normative argument in favor of empirical legal scholarship. Moreover, Iremain cognizant that parts of my analysis rely upon little more than anecdotal or impressionistic evidence borne largely out of my experiences as a law professor. Although I remain quite partial toward empirical legal scholarship, I concluded that this particular occasion—a comment upon the work of colleagues—was neither optimal nor appropriate for a full-blown empirical study of empirical legal scholarship. Such a study, however, should be undertaken.

^{9.} See infra notes 12-94 and accompanying text.

^{10.} See infra notes 95-132 and accompanying text.

^{11.} See infra notes 133-68 and accompanying text.

II. WHY MORE LEGAL SCHOLARSHIP IS NOT EMPIRICAL

For better or worse (or, more precisely, for better and worse), law professors produce most legal scholarship. ¹² Formal post-graduate educational training for most American law professors took place in law rather than graduate schools. Despite a discernible increase in law faculty hiring of candidates with multiple graduate degrees (e.g., J.D./Ph.D.), ¹³ law professors possessing either law and graduate degrees or, even less common, law professors possessing a graduate but not a law degree, remain the clear exception and not the rule. As I argue below, both of these factors—that law professors generate much of the legal scholarship and that most law professors lack formal non-legal graduate school training—fuel the relative dearth of empirical legal research.

A. The (Relative) Dearth of Empirical Legal Scholarship

Before I develop my argument, three prefatory points require attention. First, some definitions are in order. ¹⁴ For purposes of this Article, 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. ¹⁵ Admittedly, my narrow definition of empirical legal scholarship excludes a rich array of legal scholarship that can plausibly be construed as empirical. However, my narrow definition has the advantage of focusing on one of the more visible and distinct types of empirical legal scholarship and more clearly off-setting it from its more traditional theoretical and doctrinal

^{12.} It is axiomatic that important contributions to legal scholarship have emerged from scholars not associated with, formally or informally, any law school.

^{13.} See Graham C. Lilly, Law Schools Without Lawyers? Winds of Change in Legal Education, 81 VA. L. REV. 1421, 1428-29, 1440-41 (1995). Also, in a recent study of law faculty hiring, Professors Merritt and Reskin noted that law faculty candidates can enhance their chances of teaching at an "elite" law school by possessing a "doctoral degree in a field other than law." See 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). It is also plausible to assume that the same pattern might also prevail at a non-elite law school as well. However, because the Merritt Study employs logistic regression, all that can properly be inferred is the independent influence of a law faculty candidate's possession of a doctoral degree, typically the Ph.D., on law faculty hiring. See id. Because some law school faculties, notably those at the elite law schools, include faculty with Ph.D.'s but not J.D.'s, we cannot draw any proper inferences about any possible interactive effect. See id. at 240 tbl.4. That is to say, the Merritt Study does not generate and analyze a new variable designed to capture the potential independent interaction of a law faculty candidate possessing both the J.D. and the Ph.D. See id.

^{14.} The definitions that follow borrow from and 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, 323-24 (1989) [hereinafter Schuck, Why].

^{15.} See id.

counterparts.

Second, my argument that legal scholarship can be enhanced by more attention to empirical research is not new.¹⁶ The argument benefits from "a long and distinguished pedigree."¹⁷ Indeed, such calls for increased attention to empirical legal scholarship date back at least as far as the close of the last century when Justice Holmes opined about the future influence of "the man of statistics" on the law.¹⁸ One generation later, Roscoe Pound urged legal scholars to complement scholarship on doctrinal and theoretical law with studies of "the law in action."¹⁹ Legal Realists, including Professors Charles E. Clark, William O. Douglas, and Underhill Moore, attempted but in large measure failed in their efforts to elevate empirical legal scholarship's stature within the legal academy.²⁰ Among the more prominent legal academics currently urging less neglect of empirical legal scholarship are Judge Posner and Professors Schuck, Bok, and Friedman, to name only a few.²¹

^{16.} Indeed, many have urged this point. See, e.g., RICHARD A. POSNER, OVERCOMING LAW 210 (1995) [hereinafter POSNER, OVERCOMING LAW]; 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]; Schuck, Why, supra note 14, at 323. In the interests of full disclosure I include myself among those who urge more empirical legal scholarship. Moreover, much—but not all—of my scholarship is empirical. See, e.g., 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, 1385-92 (1998) (Michael Heise, co-author); Michael Heise, Equal Educational Opportunity, Hollow Victories, and the Demise of School Finance Equity Theory: An Empirical Perspective, 32 GA. L. REV. 543, 545-49 (1998) [hereinafter Heise, Equal]; Michael Heise, Assessing the Efficacy of School Desegregation, 46 SYRACUSE L. REV. 1093, 1113 (1996); Michael Heise, The Courts vs. Educational Standards, 120 PUB. INTEREST 55, 61-62 (1995); Michael Heise, State Constitutional Lititgation, Educational Finance, and Legal Impact: An Empirical Analysis, 63 U. CIN. L. REV. 1735, 1750-51 (1995) [hereinafter Heise, State].

^{17.} See Schuck, Why, supra note 14, at 324.

^{18.} See OLIVER WENDELL HOLMES, The Path of the Law, in COLLECTED LEGAL PAPERS 187 (1920).

^{19.} See Roscoe Pound, Law in Books and Law in Action, 44 AMER. L. REV. 12, 15 (1910).

^{20.} Possible reasons for the Legal Realists' failure are discussed in JOHN H. SCHLEGEL, AMERICAN LEGAL REALISM AND EMPIRICAL SOCIAL SCIENCE (1995) [hereinafter SCHLEGEL, AMERICAN]. 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 H. Schlegel, American Legal Realism and Empirical Social Science: The Singular Case of Underhill Moore, 29 BUFF. L. REV. 195, 200-01 (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.

^{21.} See POSNER, OVERCOMING LAW, supra note 16, at 210 (1995); Bok, supra note 16, at 581-82; Posner, Against, supra note 16, at 3; Schuck, Why, supra note 14; Friedman, supra note 16, at 768-69.

Third, any argument (such as mine) 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 it remains far from clear what empirical legal scholarship's appropriate or optimal production level might be, a few factors suggest that more scholarship is desirable. One such factor is that a growing number of legal scholars increasingly call for more empirical legal scholarship.²² Although commentators recognize the increased need ("demand") for empirical work, the production of such work ("supply") has not yet responded adequately.²³ 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.²⁴

Another factor is that the amount of theoretical and doctrinal scholarship that presently fills many law review pages overwhelms the amount of empirical scholarship. A quick glance at the current production of legal scholarship will convince most readers that an empirical research presence within the academic literature is marginal, at best. While Professor Schuck's earlier observation that the two main forms of legal scholarship—theoretical and doctrinal—account for "almost the entire corpus of legal scholarship" remains largely accurate, it is especially accurate if one views legal scholarship in its entirety.

However, more recent trends in legal scholarship point in a different direction. Although empirical legal scholarship remains the overwhelming exception to a general rule favoring non-empirical research, evidence suggests that the production of empirical legal scholarship is on the rise. This trend is particularly clear if one reviews only legal scholarship published during the past decade. ²⁶ Thus, the role of empirical legal research, inside and outside American law schools, grows, though in a somewhat halting manner. ²⁷

^{22.} See POSNER, OVERCOMING LAW, supra note 16, at 210; Bok, supra note 16, at 581-82; Posner, Against, supra note 16, at 3; Friedman, supra note 16, at 763-64; Schuck, Why, supra note 14, at 323; Bryant G. Garth, 45 J. LEGAL EDUC. 606, 606 n.1 (1995) (reviewing SCHLEGEL, AMERICAN, supra note 20) [hereinafter Garth, Book Review].

^{23.} 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].

^{24.} See Craig A. 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 was a brief and informal telephone survey of 40 "randomly selected" law professors from 20 different law schools. See id. at 361 nn.70 & 71. Given the limits of Professor Nard's study, any conclusions or inferences drawn should be done with extreme caution.

^{25.} See Schuck, Why, supra note 14, at 329.

^{26.} My impression is shared by others. See, e.g., Nard, supra note 24, at 361 n.68. For evidence that doctrinal works' relative share is slipping, see for example William M. Landes & Richard A. Posner, Heavily Cited Articles in Law, 71 CHI-KENT L. REV. 825, 830 tbl.1 (1996).

^{27.} See Garth, Observations, supra note 23, at 104. The Federal Judicial Center, established in 1967, fueled some early empirical work. See Russell Wheeler, Empirical Research and the Politics of Judicial Administration: Creating the Federal Judicial Center, 51 LAW & CONTEMP. PROBS. 31 (1988).

B. Some Consequences of This Dearth

The dearth of empirically-moored legal scholarship has consequences, including some that law professors should not take lightly. 28 Some commentators argue that legal scholarship's weak empirical mooring undermines efforts to make the legal system more accessible and efficient for people.²⁹ Others suggest that an increase in empirical legal scholarship will help ease the growing rift separating legal scholarship from the legal profession. 30 Courts, including the United States Supreme Court, have used social science evidence for decades.³¹ Its use by litigants has become almost routine. Yet, in a few opinions the Justices appear to lament the absence of helpful empirical research and almost invite research efforts.³² The legal academy, if it was so inclined, could become even more relevant to the judiciary and Bar by producing more empirical research. Less dire and more narrowly predicted consequences which flow from a relative dearth of empirical legal scholarship include the potential for collateral harm to other legal scholarship genres, especially the more favored theoretical. The development of good theories is made even more difficult without the benefit of good data.³³ Likewise, the lack of an empirical footing poses a threat to legal theory's persuasiveness and influence.34

^{28.} See, e.g., Bok, supra note 16, at 582 (arguing that law professors (and, presumably, university presidents) ignore important empirical needs of our legal scholarship "at our own peril").

^{29.} See, e.g., id. at 581.

^{30.} See Nard, supra note 24, at 348, 368. For a robust discussion about the growing separation of legal scholarship and the legal profession, see, e.g., Harry T. Edwards, The Growing Disjunction Between Legal Education and the Legal Profession, 91 MICH. L. REV. 34, 34 (1992); Harry T. Edwards, The Role of Legal Education in Shaping the Legal Profession, 38 J. LEGAL EDUC. 285, 291 (1988); Harry H. Wellington, Challenges to Legal Education: The "Two Cultures" Phenomenon, 37 J. LEGAL EDUC. 327, 327 (1987). For a dissenting view see POSNER, OVERCOMING LAW, supra note 16, at 91-108 (criticizing Judge Edwards' critique of legal scholarship).

^{31.} See Michael Rustad & Thomas Koenig, The Supreme Court and Junk Social Science: Selective Distortion in Amicus Briefs, 72 N.C. L. REV. 91, 93 n.4 (1993); John Monahan & Laurens Walker, Social Authority: Obtaining, Evaluating, and Establishing Social Science in Law, 134 U. PA. L. REV. 477, 477 (1986).

^{32.} See, e.g., Chandler v. Florida, 449 U.S. 560, 578 (1981). "Whatever may be the 'mischievous potentialities [of broadcast coverage] for intruding upon the detached atmosphere which should always surround the judicial process,' at present no one has been able to present empirical data sufficient to establish that the mere presence of the broadcast media inherently has an adverse effect...." See id. (quoting Estes v. Texas, 381 U.S. 532, 587 (1965)).

^{33.} See Bok, supra note 16, at 581.

^{34.} See Posner, Against, supra note 16, at 3.

Another argument for more empirical legal scholarship stems from theoretical scholarship's propensity for the normative.³⁵ It is at least hoped that empirical scholarship can more easily separate the normative from the descriptive and better maintain neutrality. Of course, this remains just a hope. It is perhaps unavoidable that research questions are posed for a reason and that "all measurement is lightly or heavily scented with the values of those whose hands who are on the switch."³⁶ However, empirical legal scholars, or at least the best of them, endeavor to approach their research questions objectively and their methodology of empirical choice facilitates as much objectivity as is humanly possible. It is certainly true that statistics can "lie" and perhaps even do so badly.³⁷ It is naive, though however regrettable, to assume the contrary. Although purportedly "value free" empirical analyses can be generated to support almost any particular viewpoint,³⁸ empirical methodologies, conventions, and norms make such efforts decidedly more difficult to mask. This is particularly true for a community of scholars that values and practices honorable peer-review and replication of work.³⁹

Even if my argument that too little empirical legal scholarship is being produced persuades, it does not necessarily follow that law professors should adjust their research agendas to address this need. Perhaps this need is better met by political scientists, economists, or others not formally associated with law faculties and more likely fluent in empirical research methodologies. Of course, the need for increased empirical legal scholarship is important enough not to be overly concerned about who actually does or does not do the work. However, when fingers begin pointing they typically do so first at law professors.

Common sense suggests that law professors should respond to the need for more empirical legal scholarship. Some scholars bluntly assert that if empirical legal research is to go forward legal scholars "must" help organize and participate in it, albeit with the aid, where necessary of interested scholars from other disciplines. Posner suggests that "in any sensible division of responsibilities among branches of the legal profession the task of conducting detailed empirical

^{35.} See id.

^{36.} See Friedman, supra note 16, at 780.

^{37.} As Mark Twain once noted: "There are three kinds of lies: lies, damned lies and statistics." MARK TWAIN'S AUTOBIOGRAPHY 246 (1924), reprinted in THE OXFORD DICTIONARY OF QUOTATIONS 187 (3rd ed. 1979) (Mark Twain attributed the quote to Benjamin Disraeli).

^{38.} See Hyman, supra note 5, at 846; see also R.H. Coase, How Should Economists Choose?, in ESSAYS ON ECONOMICS AND ECONOMISTS 15, 27 (1994) ("[I]f you torture the data enough, nature will always confess."); James P. Scanlan, The Perils of Provocative Statistics, 102 PUB. INTEREST 3 (1991).

^{39.} Almost all academics, as well as a surprisingly large number of law professors, find the absence of blind peer-review at most law reviews, certainly the student-edited ones, almost scandalous. The labor-economic dimensions to this debate are considered elsewhere. For a conference devoted to the state of law reviews as well as discussions about the peer-reviewed versus student-edited debate, see Law Review Conference, 47 STAN. L. REV. 1117 (1995); and also Monahan & Walker, supra note 31, at 500 n.75.

^{40.} See, e.g., Bok, supra note 16, at 582 ("Law professors cannot stand idly by and expect others to investigate their problems.").

inquiries into the presuppositions of legal doctrines and rules would be assigned to the law schools."⁴¹ To the extent that legal theory generates research questions and hypotheses amenable to empirical testing, those law professors generating legal theories are certainly well-positioned and informed to pursue the related empirical dimension.

Calls for more empirical data arrive at about the same time that commentators both inside and outside the legal academy note that trends in legal education point toward law schools' further integration with the larger university community. ⁴² Presumably, law faculty who are engaged in empirical research activities—as are many faculty in other academic departments and schools—will be better positioned should legal education and scholarship continue to become more "university-like," as predicted. Moreover, if predictions that law schools will integrate further into the general academic and university community come true, the importance of incorporating broader methodologies into legal scholarship becomes greater if, for no other reason, than to shore up its intellectual stature and reputation among the broader community of scholars. ⁴³

C. Reasons for This Dearth

Despite evidence that law professors recognize the need for more empirical legal scholarship, relatively little emerges from the nation's law schools. Various factors help explain this paradox and many fall loosely into two broad groups. Both groups of factors relate directly to law professors' incentive structure. One group pivots on the preferences of many individual law professors. Another group of factors relates more to the particular, and potentially idiosyncratic, norms and customs that shape many American law schools and faculties. Of course, the two groups of factors frequently interact and influence each other simultaneously. Both groups of factors combine to help form a relatively well shaped incentive structure that remains largely skewed against empirical research and thereby disinclines

^{41.} POSNER, OVERCOMING LAW, supra note 16, at 210.

^{42.} See generally Richard A. Posner, The Decline of Law as an Autonomous Discipline: 1962-1987, 100 HARV. L. REV. 761 (1987) (arguing that law is increasingly becoming interdisciplinary); see also Richard A. Posner, Legal Scholarship Today, 45 STAN. L. REV. 1647, 1650 (1993) (noting that law's earlier autonomous posture within the academy is being eroded by other disciplines' increasing interest in the law). This trend is particularly evident at the nation's elite law schools.

^{43.} Professor Schuck describes legal scholars' intellectual stature at the university level as already precarious. See Schuck, Why, supra note 14, at 329. Contributing mightily to any university's wariness about law school academic stature is the absence of blind peer-review in the law review article selection process. See supra note 39 and accompanying text.

1. It Is Hard Work

Professor Friedman makes a crucial point bluntly and plainly: "Empirical research is hard work." Such a statement is not meant to imply, however, that non-empirical research is easy. Rather, the point is simply that empirical research projects typically force legal scholars to confront a unique set of obstacles, many of which stem from law schools' general and traditional orientation away from empirical research. For example, law schools' current orientation and structure reduce access to the tools necessary to complete empirical projects and, as a result, contribute to such projects' overall degree of difficulty and increase the necessary investment of time for their successful completion. 46

Many worthwhile empirical projects require access to data, specialized computer systems and software, ⁴⁷ as well as greater interaction with like-minded colleagues who are usually found in other university schools and departments. Although most law libraries comfortably serve the needs of scholars pursuing theoretical and doctrinal legal research projects, law libraries typically do not collect the full range of social scientific periodicals usually found in a general, research university library. Consequently, empirical research projects usually dislodge law professors from law libraries, or their offices, typically conveniently located nearby. Additionally, many law professors "have never done any research outside the familiar confines of our libraries." Of course, access to necessary library and research materials is easily overcome. However, my point is not that law faculties somehow go without what they need (although some assuredly do). Rather, my smaller point is that those law professors pursuing empirical projects in many instances confront structural barriers to crucial resources that do not encumber their more theoretically or doctrinally inclined colleagues.

^{44.} As Professor Schuck remarks, "rational academics will not do empirical research unless the academy rewards them for their special time, trouble, and risk." Schuck, Why, supra note 14, at 333.

^{45.} See Friedman, supra note 16, at 774.

^{46.} Though it is vexingly difficult to generalize, Professor Schuck notes that empirical work can be "very time-consuming," as earlier empirical scholars found. See Schuck, Why, supra note 14, at 332 (remarking that the median duration of empirical studies conducted by Legal Realists at Yale Law School was five years (citing Schlegel, Moore supra note 20)).

^{47.} Over the past few decades, however, most sophisticated statistical software packages—SPSS and SAS being the most prominent in the social sciences—have become accessible to desktop (even laptop) computer systems. Earlier generations of scholars were far more tethered to mainframe computer systems, typically housed in centralized university computer centers.

^{48.} See David P. Bryden, Scholarship About Scholarship, 63 U. COLO. L. REV. 641, 645 (1992).

2. Lack of Training

Even if law professors enjoyed a level of convenience regarding access to the necessary research tools to conduct empirical research projects commensurate with that enjoyed by scholars pursuing theoretical or doctrinal legal research, additional barriers exist. Perhaps most important is the fact that most law professors do not possess the requisite training or background that most sophisticated statistical work requires. Fewer still possess the inclination and energy to acquire, update, or retool their research skills or analytical repertoire. Empirical research projects, particularly those that employ higher-level statistical techniques, require more than the traditional legal reasoning and analytical skills that law schools impart to their students and law faculties. If today only a small number of law schools offer a single course in statistics or research design prequired staples in many graduate social science programs—even fewer did so years ago when many of today's law professors, almost—but not—all of whom used to be law students, do not possess the necessary skills to conduct empirical research should surprise few.

To offset this gap in expertise, law professors could collaborate with other scholars who possess experience and expertise in empirical research. Collaboration is a well-established norm in most academic disciplines, especially in the social and hard sciences. ⁵¹ Curiously, however, norms surrounding many legal scholars—in stark contrast to other academic research as well as the Pepperdine Study—do not emphasize collaboration. Despite a tradition of scholarly collaboration in many other academic disciplines, law professors typically conduct their legal scholarship themselves. ⁵²

University planning might be another culprit dampening collaboration. For example, law schools usually benefit from their own building or buildings, further

^{49.} Results from Professor Nard's telephone survey identified law professors' lack of training as the single most important barrier to increased empirical scholarship. See Nard, supra note 24, at 362 th 2

^{50.} Moreover, many of such courses or seminars that are presented focus on explaining the role of social sciences (including statistics) in law or litigation. That is to say, they descriptively present statistics. In contrast, fewer courses, only a handful come to mind, actually engage in teaching law students how to do even elementary statistical analyses.

^{51.} Notably, the Pepperdine Study's fourth author, Professor Fagan, holds an appointment in Pepperdine University's Sociology Department. See Perrin et al., supra note 1, at 669. Moreover, I take the author's attribution to suggest that Dr. Fagan's particular contribution to the project focused on the study's technical and statistical aspects. See id.

^{52.} Mounting anecdotal evidence suggests that the trend of non-collaborative legal scholarship—while certainly still the norm—is eroding. See, e.g., Schuck, Why, supra note 14, at 332 n.37.

exacerbating a law professors' sense of isolation from colleagues found elsewhere throughout the university and further blunts any collaborative impulses. Although collaborative research does inject certain costs for such narrow, though critical, purposes as promotion and tenure, other academic disciplines appear to have discovered reasonable mechanisms to discern and assess individual contributions to collaborative efforts. Moreover, the potential benefits that arise from collaboration, particularly when it involves scholars from different disciplines, strike me as sufficiently attractive as to overcome the related costs.

3. Exposure to Falsification Through Replication

Empirical research is far more amenable to falsification through subsequent efforts by others at replication, thereby making it a slightly riskier genre. Clearly, much of the theoretical work that fills law reviews involves scholars commenting upon, challenging, chiding, debunking, or disagreeing with prior work.⁵³ But at one level, it is more difficult to falsify or disprove a theory than it is to falsify or challenge results from empirical work. Theorists can certainly persuade readers that one theory is better than another. This, however, is something quite different from empirically corroborating or casting doubt over a theory's efficacy or a study's results or conclusions. In this regard, numbers provide less shelter than words. Consequently, legal theorists can advance their theoretical work and sleep nights with greater comfort knowing that they will not wake up the next morning to find their work challenged in a subsequent article by a scholar who cannot, for example, replicate the original findings. That is, empirical work stands much more exposed to the challenge of falsifiability by further, subsequent research. Paradoxically, the amenability to falsification is one of empirical scholarship's strengths.⁵⁴ The greater persuasiveness of objectively disprovable hypotheses is "intuitively obvious."55 Moreover, even the prospect of external empirical checks on one's work fuels a certain level of humility that is sometimes absent in nonempirical work.

A recent colloquy published in the *Stanford Law Review* illustrates the benefits that flow from replication of empirical research. Three separate articles by Professors Cassell and Fowles (as co-authors) and Donohue combine to present one of the more important empirical discussions about the effects of the Supreme Court's *Miranda*⁵⁶ decision on law enforcement. The lead article presents results

^{53.} For evidence that law professors might write to, for, and about each other, see, e.g., Richard Delgado, Rodrigo's Book of Manners: How to Conduct a Conversation on Race-Standing, Imperial Scholarship, and Beyond, 86 GEO. L.J. 1051, 1056 (1998) (reviewing DANIEL A. FARBER & SUZANNA SHERRY, BEYOND ALL REASON: THE RADICAL ASSAULT ON TRUTH IN AMERICAN LAW (1997)).

^{54.} See David L. Faigman, To Have and Have Not: Assessing the Value of Social Science to the Law as Science and Policy, 38 EMORY L.J. 1005, 1018 (1989).

^{55.} See Jonathan R. Macey, Law and the Social Sciences, 21 HARV, J.L. & PUB. POL'Y 171, 173 (1997).

^{56.} Miranda v. Arizona, 384 U.S. 436 (1966).

for and interpretation of a sophisticated empirical legal impact study.⁵⁷ A commentary article follows and presents results from an independent re-analysis of the lead article's data.⁵⁸ In the third article of the three-part colloquy, Professors Cassel and Fowles comment on Professors Donohue's article in a brief, insightful rejoinder.⁵⁹ The efforts at replicating empirical research and the robust discussion that ensues substantially strengthens readers' understanding of the underlying research questions and further clarifies avenues for future research. This colloquy aptly illustrates how efforts to replicate and falsify scholarship can generate enormous benefits to the scholarly enterprise and our knowledge bases. Despite such benefits, however, the risks such efforts pose for professional embarrassment serve as yet another disincentive for law professors to pursue such work.⁶⁰

4. Lack of Prestige

Many current leading scholars agree that empirical legal scholarship garners less prestige than its more theoretical counterpart.⁶¹ Although many will quibble on how best to define or operationalize the elusive concept of prestige, few quarrel with its presence and influence within the legal academy.⁶² Thus, in order "to get the richest rewards available within the modern legal academic community a professor has to do 'theory'."⁶³ The reason for this is not entirely clear, but the legal academy's tradition of favoring theoretical and, to a lesser extent, doctrinal legal scholarship surely is one factor contributing to the relative lack of empirical

^{57.} See Paul G. Cassell & Richard Fowles, Handcuffing the Cops? A Thirty-Year Perspective on Miranda's Harmful Effects on Law Enforcement, 50 STAN. L. REV. 1055, 1060 (1998).

^{58.} See John J. Donohue III, Did Miranda Diminish Police Effectiveness?, 50 STAN. L. REV. 1147, 1149 n.11 (1998).

^{59.} See Paul G. Cassell and Richard Fowles, Falling Clearance Rates After Miranda: Coincidence or Consequence, 50 STAN. L. REV. 1181, 1181 (1998).

^{60.} At least one commentator has noted that "[t]he best test of certainty we have is good science—the science of publication, replication, and verification, the science of consensus and peer review." PETER HUBER, GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM 228 (1991).

^{61.} See, e.g., Friedman, supra note 16, at 766 (arguing that empirical work is "less honored" than theoretical); Posner, Against, supra note 16, at 10 (arguing that legal theorists reap the "richest rewards available within the modern legal academic community").

^{62.} Indeed, prestige, like water, appears to permeate all quarters of the legal academy that are not assiduously designed to guard against it, seal it off, and blunt its impact. See, e.g., Merritt & Reskin, supra note 13, at 240 tbl.4 (arguing that law faculty candidate's opportunities for employment at a top law school are enhanced by possessing a J.D. degree from an "elite" (read: prestigious) law school); Ronald J. Krotozynski, Jr., Commentary –Legal Scholarship at the Crossroads: On Farce, Tragedy, and Redemption, 77 Tex. L. Rev. 321, 329-31 (1998) (discussing the role of prestige on the law review article selection process).

^{63.} Posner, Against, supra note 16, at 10.

legal scholarship.⁶⁴ Also, the failure of early, notable empirically sensitive projects to ignite a tradition of empirical legal scholarship and carve out a place of stature for empirical research further solidified theoretical and doctrinal's domination over law schools' scholarly tradition.⁶⁵

5. Lack of Internal Institutional Incentives

Just as risky as generalizations about legal scholarship, or even well-defined sub-groups of legal scholarship⁶⁶ are generalizations about law schools themselves. Law schools vary just as law professors and legal scholarship vary. The existence of important and sometimes enormous variations, however, does not preclude appropriately caveated generalizations. After all, certain aspects of legal education still link most American law schools. One such generalization is that many-perhaps even most-law schools possess incentive structures that were erected in eras that favored theoretical and doctrinal scholarship over empirical.⁶⁷ The current internal incentive structure confronting many law professors interacts with the prestige variable, discussed above.⁶⁸ That is to say, one reason that law schools' internal incentive structures are not more favorable toward empirical research is partly a function of the relative lack of prestige accorded to it within the legal academy. One commentator suggests that even those law professors who possess the requisite skills and are provided with the necessary resources would hesitate before venturing into empirical research projects, unless they perceived "unique rewards at the top of the empirical mountain." 69

The promotion and tenure process serves as one crucial piece of an amorphous internal institutional incentive structure that influences many law professors, particularly the untenured ones. Given the magnitude of the personal and professional stakes involved in the promotion and tenure process, it is far from surprising that so few tenure-track law professors are inclined to engage in activities that might reduce their prospects for success. With a well-worn path to

^{64.} See Schuck, Why, supra note 14, at 330 (arguing that tradition is the "most obvious" reason for a general neglect of empirical research by legal scholars); see also Clark Byse, Legal Scholarship, Legal Realism and the Law Teacher's Intellectual Schizophrenia, 13 J. LEGAL EDUC. 9, 16-18 (1988).

^{65.} One obvious example and one obvious counter-example exist. The legal realists, especially those based at Yale Law School, are frequently cited as a failed effort to ignite sustained interest in empirical legal scholarship. See, e.g., SCHLEGEL, AMERICAN, supra note 20; LAURA KALMAN, LEGAL REALISM AT YALE (1986). The obvious counter-example is the law and economics movement-more specifically, its small but growing empirical vein-spawned at the University of Chicago Law School. See, e.g., ANTHONY T. KRONMAN, THE LOST LAWYER: FAILING IDEALS OF THE LEGAL PROFESSION 166 (1993) (noting that "[I]aw and economics is today a permanent, institutionalized feature of American legal education.").

^{66.} See Bryden, supra note 48, at 641 (proposing ways to enrich legal scholarship).

^{67.} See, e.g., Posner, Summary, supra note 4, at 367-68 n.4 (noting that the methods and organization of legal education are "inhospitable" to empirical research).

^{68.} See supra Part II.C.4.

^{69.} See Bryden, supra note 48, at 645-46.

tenure already cleared by a tradition of theoretical and doctrinal scholarly production and productivity, those who veer off this path and onto the less traveled path of empirical scholarly production assume some level of additional risk. As previously discussed, empirical legal scholarship presently lacks the same level of prestige afforded to other genres, particularly theoretical. Also, senior faculty members are comparatively less familiar with empirical projects and, as a result, might feel less comfortable assessing them. Another factor increasing risk for empirical projects within the tenure context is that frequently empirical projects require substantial investments of time, which endures as among scholars' most precious commodities.

Compounding the risk posed by a potentially significant investment of time is uncertainty. Specifically, somewhat peculiar to empirical work is that, ex ante, researchers frequently do not know what the data might say until after the data have been gathered, coded, and analyzed.⁷³ As Professor Schuck notes, until analysis begins a researcher frequently does not know whether "one will make important new findings or 'merely' confirm what everybody, in retrospect, 'already knows.'"⁷⁴

Finally, few success stories exist that might serve as possible role models for younger law faculty. Because "law schools have not made empirical research a major part of the teaching or scholarly mission," success stories involving empirical research projects either at the institutional or individual level are difficult, although not impossible, to identify. Although many law professors have achieved great individual success through their empirical legal scholarship, "most law professors are advised that it is dangerous to invest too much in sociolegal research, and most follow that advice." Individually, each factor reduces law professors' incentive to conduct empirical work, especially during their pre-tenure period. Cumulatively, the factors' potential drag on tenure and other professional prospects might persuade some law professors that the risks posed by empirical legal scholarship outweigh its benefits.

Paradoxically, the relative dearth of empirical legal scholarship generates one critical strategic advantage for young, untenured legal scholars. The underdevelop-

^{70.} At least they perceive some additional level of risk. For example, Professor Nard's telephone survey revealed that, overall, 30% of those law professors surveyed felt that empirical legal scholarship was not well received in the promotion and tenure process. See Nard, supra note 24, at 362 tbl.2.

^{71.} See supra Part II.C.4.

^{72.} See Schuck, Why, supra note 14, at 332.

^{73.} See id. at 331.

^{74.} See id.

^{75.} See Garth, Book Review, supra note 22, at 607 (reviewing SCHLEGEL, AMERICAN, supra note 20).

^{76.} See id.

ment in the field creates far greater opportunities for making an original contribution to legal scholarship.⁷⁷ Given the abundance of thinking and writing in many areas of the law, such as constitutional law, it becomes increasingly difficult to find an underexamined scholarly corner of law to say something new. In contrast, the list of legal research questions that would benefit from empirical analysis already staggers and continues to grow.

6. Lack of External Institutional Incentives

Empirical legal scholarship lacks sustained and consistent external funding support. Unlike many of the social sciences, and even more unlike the hard and physical sciences, law school funding is largely internal and frequently tuition-driven. Put slightly differently, law school funding does not, as a general rule, pivot on the faculty's ability to secure external grant funding from either private or public sources. While literally billions of dollars are spent on research in this country for all sorts of research projects, only a minute amount flows into legal research projects of any kind, let alone empirical studies. Relative to some of their academic counterparts, legal scholars resemble "beggars fighting for a handful of coins."

Obvious and some less obvious consequences flow from the absence of any meaningful external financial support for empirical legal research projects. The relatively small amount of external financial support for empirical legal research projects is yet another reason not to pursue such research. Moreover, the output of those willing to pursue a small slice of the research funding pie will be small. One less obvious consequence stemming from a lack of external financial support is the harm to data gathering. Because data gathering, which resides at the heart of much empirical work, is both a time-consuming and labor-intensive enterprise, it is also frequently expensive. Data production's relatively high costs and the relatively low investment in empirical legal research create a scarcity of data and datasets relevant to legal scholars. Without the benefit of data, even the less time-sensitive secondary analyses cannot proceed. The full extent of the harms to empirical research set into motion by underinvestment in data is difficult to gauge.

Two recent examples underscore how investment in and development of data can increase our understanding of crucial legal issues. One dataset, the Civil

^{77.} See Bryden, supra note 48, at 646-47 (noting a lack of innovative teaching materials).

^{78.} See Friedman, supra note 16, at 779 (noting that what one well-known source of federal funding, within the National Science Foundation, spends annually on legal research would not sustain high energy physics research "for one day").

^{79.} See id. Of course, many scholars who depend upon external funds envy law faculty's reliance on internal funds.

^{80.} When I speak of data gathering, I refer broadly to all aspects relating to the identifying, gathering, cleaning, coding, etc., of data.

Justice Survey of State Courts, 1992,⁸¹ consists of two separate samples of forty-five of the nation's seventy-five most populous counties.⁸² The data sampled approximately one-third of the more than 248 million people reported in the 1990 U.S. population.⁸³ The dataset, the first large-scale source of such data of its kind, included a general civil case sample as well as a civil jury trial data sample.⁸⁴ Data in the general civil case sample included tort, contract, and property cases from the sampled counties.⁸⁵ The smaller, more detailed jury trial sample included such information as prevailing party, disposition time, and amount of damages awarded, if any.⁸⁶ As a result, this rich source of data supplies a crucial empirical dimension to an array of key research questions that remain the subject of intense, on-going theoretical and public debates.⁸⁷ Indeed, one commentator has already noted the important scholarship spawned by these data.⁸⁸

A second example involves a grant to RAND for a report on the implementation of the Civil Justice Reform Act of 1990.89 Under the federal legislation, ten

^{81.} BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, NCJ-154346, SPECIAL REPORT: CIVIL JUSTICE SURVEY OF STATE COURTS, 1992: CIVIL JURY CASES AND VERDICTS IN LARGE COUNTIES (1995) [hereinafter, CIVIL JURY CASES AND VERDICTS IN LARGE COUNTIES]; BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, NCJ-153177, SPECIAL REPORT: CIVIL JUSTICE SURVEY OF STATE COURTS, 1992: TORT CASES IN LARGE COUNTIES (1995) [hereinafter, TORT CASES IN LARGE COUNTIES]. The data is the product of Civil Trial Court Network which is a collaborative effort of the National Center for State Courts and the U.S. Bureau of Justice Statistics. See Theodore Eisenberg et al., Litigation Outcomes in State and Federal Courts: A Statistical Portrait, 19 SEATTLE U. L. REV. 433, 434 (1996) [hereinafter Eisenberg et al., Outcomes].

^{82.} See Eisenberg et al., Outcomes, supra note 81, at 434 (citing TORT CASES IN LARGE COUNTIES, supra note 81).

^{83.} See id. (citing Bureau of the Census, U.S. Dep't of Commerce, County and City Data Book 18 (1994)).

^{84.} See id. (citing CIVIL JURY CASES AND VERDICTS IN LARGE COUNTIES, supra note 81).

^{85.} See id. at 434-35.

⁸⁶ See id

^{87.} One recent example involves questions surrounding punitive damages in tort cases, a frequent subject of civil justice reform efforts at both the state and local levels. An entire volume of a recent JOURNAL OF LEGAL STUDIES focused on tort reform issues. See 26 J. LEGAL STUD. (1997). This particular volume included two articles that debated the appropriate conclusions to be drawn from analyses of data from the CIVIL JUSTICE SURVEY OF STATE COURTS, 1992. See Theodore Eisenberg et al., The Predictability of Punitive Damages, 26 J. LEGAL STUD. 623 (1997) [hereinafter Eisenberg et al., Predictability] (interpreting the data as indicating that punitive damages are awarded within a broad but predictable range); A. Mitchell Polinsky, Are Punitive Damages Really Insignificant, Predictable, and Rationale? A Comment on Eisenberg et al., 26 J. LEGAL STUD. 663 (1997) (rejecting Eisenberg's interpretation of the data and arguing instead that the study reflects the arbitrary nature of punitive damage awards).

^{88.} See Polinsky, supra note 87, at 663-64 (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").

^{89. 28} U.S.C. §§ 471-82 (1994 & Supp. 1998).

district courts, denoted "pilot" district courts, were required to implement a plan that incorporated various aspects of case management principles the Act deemed desirable. The legislation also included an evaluation component. The Administrative Office of the U.S. Courts selected RAND to perform the evaluation of the ten pilot districts. The result, one commentator noted, was "probably the single biggest investment in empirical research about civil justice in the United States history." The study shed important new light on whether and, if so, how, the newly enacted Civil Justice Reform Act achieved its stated goals of making our court system more just, speedy, and inexpensive. Results from the pilot study have already made a significant contribution to the scholarly literature.

Both examples of externally-funded empirical legal research projects illustrate a two-fold point. The development and production of data germane to legal scholarship remain a distinctly rare event. The two recent examples described above form a small oasis amid a vast, arid intellectual landscape void of much-needed data. Also, although these two examples are quite new, they have already generated important scholarly contributions. Future legal scholarship will assuredly benefit from these rich sources of data.

III. NULLIUS IN VERBA:95 EMERGING TYPES OF EMPIRICAL LEGAL SCHOLARSHIP

Having just argued about the relative dearth of empirical legal scholarship and identified reasons for its neglect, it remains important to note that empirical legal research is on the rise. I now turn to describing emerging trends in the little empirical work that exists. Much of the existing empirical legal scholarship falls loosely into one or more of three broad categories: judicial opinion coding or case content analysis, descriptive, and inferential. 97

^{90.} See James S. Kakalik et al., Just, Speedy, and Inexpensive? An Evaluation of Judicial Case Management Under the Civil Justice Reform Act, 49 ALA. L. REV. 17, 17-18 (1997).

^{91.} See id. at 18.

^{92.} Garth, Observations, supra note 23, at 103. The \$4.5 million grant to RAND for its study and report in terms of magnitude compares to the \$1.2 million grant to Civil Litigation Research Project at the University of Wisconsin during the late 1970s. See id. at n.3.

^{93.} See Kakalik et al., supra note 90, at 17-18.

^{94.} See generally Symposium, Evaluation of the Civil Justice Reform Act, 49 ALA. L. REV. 1 (1997) (focusing on RAND's empirical evaluation of the Civil Justice Reform Act). It is important to note, however, that many scholars have criticized the RAND study. See, e.g., Nard, supra note 24, at 361 n.68; Bryant G. Garth, Two Worlds of Civil Discovery: From Studies of Cost and Delay to the Markets in Legal Services and Legal Reform, 39 B.C. L. REV. 597 (1998) (commenting that the RAND Study is not useful in analyzing the market of high stakes litigation).

^{95.} Nullius in verba (or "trust not words") is the Royal Society of London's motto. See Steve Jones, The Set Within the Skull, N.Y. REV. BOOKS, Nov. 6, 1997, at 13, available in 1997 WL 18693830.

^{96.} See supra notes 26-27 and accompanying text.

^{97.} Again, it is important to recall the narrow definition of empirical legal scholarship used in this article. See supra notes 26-27 and accompanying text.

One major type of empirical legal scholarship seeks to characterize judicial opinions on the basis of their content. That is, judicial opinion content is analyzed and coded for subsequent analyses. This type of research benefits from certain advantages. The supply of raw data—case law—is significant, perhaps inexhaustible, and constantly increasing. Content analysis also benefits from "the natural laboratory provided by the heterogeneous development of the common law" in fifty separate jurisdictions, each possessing its own legal characteristics. In addition, changes in common law rules have the potential to impact important aspects of modern life. Efforts to study these changes can provide important clues about an array of common law areas. Finally, knowing more about the possible consequences of changing common law rules would assist legislatures and courts considering implementing such a change.

Notwithstanding the important benefits of content analysis, some factors limit its usefulness and development as a methodology. One principal problem is that the methodology relies in crucial ways on the subjective determinations of what judicial opinions say and mean by the researcher engaging in content analysis and coding. Various protocols can be employed to ensure greater internal validation and consistency. But the integrity of content analysis rests upon the dual propositions that a consensus exists on how reasonable people would characterize any particular case and that case characterizations will remain stable over time.

In addition, judicial opinion characterization necessarily relies upon a narrow slice of our judicial system that may or may not closely resemble the entire legal universe. For example, tort law only comprises just over approximately three percent of all cases filed that reach a judge or jury for disposition. ¹⁰⁴ Of this three percent that results in bench or jury verdicts, some exist as unpublished opinions. ¹⁰⁵ Finally, even within the universe of published opinions, not all are officially

^{98.} See supra notes 26-27 and accompanying text.

^{99.} See Andrew P. Morriss, 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, 1001 (1995).

^{100.} See id. at 1001-02.

^{101.} See id. at 1002.

^{102.} See id.

^{103.} See, e.g., Peter H. Schuck & E. Donald Elliot, To the Chevron Station: An Empirical Study of Federal Administrative Law, 1990 DUKE L.J. 984, 993-94 n.33 (1991) (discussing the methods used in the study to ensure accuracy).

^{104.} See TORT CASES IN LARGE COUNTIES, supra note 81, at 5.

^{105.} I use the term "judicial opinion" loosely in this context. Courts generate an array of official workproduct (e.g., judicial orders, memorandum, judgments, opinions).

published and wind up in familiar legal reporter series. ¹⁰⁶ Of course, even though the percentage of cases filed that eventually wind up going to trial and culminating in a written, published judicial opinion is exceedingly small, it yields a disproportionate amount of importance and influence—albeit indirectly. An important function of written published judicial opinions is to shape future litigants' expectations and predictions about what might happen if their case should proceed to trial. Moreover, these expectations and predictions in turn influence the nuanced decisional analyses about whether to even initiate, let alone litigate, potential legal claims. ¹⁰⁷

Numerous factors make content analysis difficult. Regrettably, not all legal opinions are well written or clear. In addition, changes to common law rules are frequently unannounced or hidden. Although on occasion courts expressly change or make new law, more frequently courts characterize such changes "simply as the application of existing precedent to slightly different factual circumstances." The many fonts of common law changes inject additional complications in content analysis. Moreover, the common law itself, borne out of its numerous and evolving sources, is iterative. 109

Despite these and other difficulties, important examples of this methodology exist and influence the legal literature. Notable examples include efforts to analyze such topics as constitutional torts, 110 employment-at-will, 111 and education law. 112 Professor Morriss recently set forth a helpful framework designed to inject more coherence and structure into researchers' efforts to solve the vexingly complicated problem of dating common law changes through analysis of judicial opinions. 113

A second discernible type of empirical legal scholarship, and perhaps the most common, includes scholarship that uses data descriptively. One or more variables of interest can be described and presented according to the many properties they possess. These properties can convey crucial information not readily discernible from content analysis of judicial opinions, including the following: means, medians, modes, rates, proportions, and frequency counts. Although these properties possess intrinsic value for the information they convey, also beneficial

^{106.} See Morriss, supra note 99, at 1038-39 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. 573-74 (1981) (noting a decline in the rate of published appellate court opinions).

^{107.} See Peter H. Schuck, Mapping the Debate on Jury Reform, in VERDICT: ASSESSING THE CIVIL JURY SYSTEM 307 (Robert E. Litan ed., 1993) [hereinafter Schuck, Mapping]; see also George L. Priest & Benjamin Klien, The Selection of Disputes for Litigation, 13 J. LEGAL STUD. 1 (1984).

^{108.} See Morriss, supra note 99, at 1002.

^{109.} See id.

^{110.} See, e.g., Theodore Eisenberg & Stewart J. Schwab, The Reality of Constitutional Tort Litigation, 72 CORNELL L. REV. 641 (1987).

^{111.} See, e.g., Morriss, supra note 99, 1004-20.

^{112.} See, e.g., MICHAEL A. REBELL & ARTHUR R. BLOCK, EDUCATIONAL POLICY MAKING AND THE COURTS (1982); Heise, State, supra note 16; Heise, Equal, supra note 16.

^{113.} See Morriss, supra note 99.

is that they contribute to an empirical foundation upon which further, frequently even more sophisticated, empirical work can build. Unlike the content analysis type, discussed above, empirical research that employs descriptive statistics frequently involves data-gathering from sources generally not housed in many law school library collections or, more accurately, law reporter series.¹¹⁴

Numerical evidence presented descriptively frequently is offered to illustrate how two things (or variables) might differ or relate. An example of the former includes Tables 1¹¹⁵ and 2¹¹⁶ in the Pepperdine Study. These Tables, which report data generated by a survey instrument, illustrate attitudinal differences between and among different groups of respondents on issues relating to the threat of evidentiary suppression. Descriptive analysis can also illustrate how two variables relate to one another. For example, the legal validity of certain employment tests can be examined partly by plotting employees' test scores with their job performance scores. A correlation coefficient can provide a numerical expression of the relation between an employer's test and employees' performance and, by implication, the test's validity. 118

A third type of empirical legal scholarship includes studies that use statistics inferentially. In certain instances researchers may wish to advance generalizations relevant to a general population yet base the generalizations on data drawn from a sample of cases, or subjects from the object population. Crucial to such research is that the underlying sample is drawn from the object population in a random, non-biased manner. Inferential statistical techniques used within the context of a well-structured research design permit inferences regarding selected attributes about a population based solely on statistical manipulation of a random sample from that population. Moreover, inferential statistics facilitate determinations about whether random chance alone can explain certain observable results. A few examples of this genre illustrate its properties as well as their analytical power.

For example, a defendant in a capital murder trial introduced evidence of potential racial bias in the government's administration of the death penalty.¹¹⁹

^{114.} Admittedly, our conceptions of law school libraries, their collections, and uses continue to evolve, particularly as new technologies are deployed. Due to existing information technology, especially the World Wide Web, along with long-standing inter-library loan policies, the traditional "four walls" of a law school library have become increasingly less relevant. See generally Michael Heise, Closing One Gap But Creating Another?: A Response to Dean Perritt and Comments on the Internet, Law Schools, and Legal Education, 33 IND. L. REV. (forthcoming 1999).

^{115.} See Perrin et al., supra note 1, at 721.

^{116.} See id.

^{117.} See id.

^{118.} For a visual display of this example, see DAVID W. BARNES & JOHN M. CONLEY, STATISTICAL EVIDENCE IN LITIGATION 28 (1986) (Exhibit 1.11(a)).

^{119.} See McCleskey v. Kemp, 481 U.S. 279 (1987).

Evidence proffered in briefs prominently featured an exhaustively detailed empirical study of the death penalty led by Professor David Baldus. The Baldus Study examined more than 200 independent variables and concluded that, among other things, defendants charged with killing white victims were 4.3 times more likely to receive a death sentence than similar defendants who killed African-Americans. Both the District Court and the U.S. Supreme Court noted the Baldus Study's validity in their respective efforts to assess whether the death penalty's application violated the Equal Protection Clause of the Fourteenth Amendment.

Whether requirements imposed upon law enforcement officials by the Supreme Court's decision in *Miranda v. Arizona*¹²⁶ have generated any social costs is the subject of important, recent empirical work. ¹²⁷ Specifically, legal scholars examine *Miranda*'s potential contribution to a decline in clearance rates for "composite groupings of violent and property crimes." A study conducted by Paul G. Cassell employed an interrupted time-series model, analyzed 46 years of data, and concluded that *Miranda* generates important social costs by "hampering the ability of the police to solve crimes." Moreover, subsequent re-analysis of the data offers general, though not total corroboration. ¹³⁰

Civil law-particularly tort law and tort reform efforts-has also spawned important empirical legal scholarship recently. Professor Eisenberg performed sophisticated statistical analysis on a sample of punitive damage awards testing for, among other properties, their predictability and relation to the underlying compensatory damage award. Findings from his study provide critical insight into heated public and scholarly debates about tort reform in general and punitive award caps in particular. ¹³²

^{120.} See David Baldus et al., Equal Justice and the Death Penalty (1990).

^{121.} See id. at 340-69.

^{122.} See McCleskey, 481 U.S. at 287.

^{123.} See McCleskey v. Kemp, 580 F. Supp. 338, 352 (1984).

^{124.} See McCleskey, 481 U.S. at 286-87.

^{125.} The U.S. Supreme Court noted that although the Baldus Study was valid, the petitioner's claims failed under applicable law. See id. at 292 n.7, 318-19.

^{126. 384} U.S. 436 (1966).

^{127.} See, e.g., Paul G. Cassell, Miranda's Social Costs: An Empirical Reassessment, 90 Nw. U. L. REV. 387 (1996) [hereinafter Cassell, Reassessment]; Cassell & Fowles, supra note 57; Donohue, supra note 58.

^{128.} See Cassell & Fowles, supra note 57, at 1060.

^{129.} See id. at 1132.

¹³Q. See Donohue, supra note 58, at 1169-72, 73-74 tbls.I & II.

^{131.} See Eisenberg et al., Predictability, supra note 87. In his response article, Professor Polinsky takes issue with Professor Eisenberg's interpretation of the results but not the analyses or methodology. See Polinsky, supra note 87, at 664 ("For purposes of this comment, I will assume that their methodology is appropriate and that their empirical results are correct.").

^{132.} See, e.g., BMW of North America, Inc. v. Gore, 517 U.S. 559 (1996); Eisenberg et al., Predictability, supra note 87, at 623-24; John Jeffries, A Comment on the Constitutionality of Punitive Damages, 72 VA. L. REV. 139, 139 (1986); Editorial, Trial Lawyers' Triumph, WASH. POST, Mar. 19,

IV. THE PEPPERDINE STUDY

This background, developed in Parts II¹³³ and III¹³⁴ above, helps create a context by which the Pepperdine Study can be placed and assessed for its methodological contributions. The Pepperdine Study is an example of the second type of empirical legal scholarship¹³⁵ as it largely descriptively summarizes original data generated by a survey instrument. The general subject considered-the costs and benefits of the exclusionary rule-is important not only to the legal research literature but also because of the exclusionary rule's practical consequences for many individuals and our criminal justice system. A former Chief Justice to the Supreme Court, advancing the argument that deterrence of police misconduct is the only justification for the exclusionary rule, bemoaned the absence of an empirical basis supporting the rule's sole justification. 136 Thus, the authors of the Pepperdine Study persuasively make the easy case for why more knowledge about the exclusionary rule's actual effects would assist in analyzing it. 137 The authors also review the relevant literature, with particular and extensive emphasis on existing empirical studies.¹³⁸ Their discussion makes clear how their study advances existing research and identifies the particular research void it seeks to fill. 139

Having carefully identified and operationalized their research question into a testable hypothesis amenable to empirical analysis, the authors take equal care to lower readers' expectations. Such an effort is warranted for a number of reasons, some of which fall wholly outside the researchers' control. One set of reasons stems from the nature of empirical research generally. Those who have undertaken empirical research projects or studied them with appropriate care are frequently among those most likely to appreciate this research genre's limitations. It is difficult to over-emphasize the limited incremental nature of well-crafted empirical research contributions to our knowledge base. The authors of the Pepperdine Study appropriately evidence a keen awareness of the modest scope of their research project when they write: "We creep toward the goal of a better

^{1996,} available in 1996 WL 3069750.

^{133.} See supra notes 12-92 and accompanying text.

^{134.} See supra notes 94-131 and accompanying text.

^{135.} See supra notes 113-17 and accompanying text.

^{136.} See Bivens v. Six Unknown Named Agents, 403 U.S. 388, 416 (1971) (Burger, C.J., dissenting) (acknowledging the absence of data in support of the exclusionary rule).

^{137.} See Perrin et al., supra note 1, at 711-36.

^{138.} See id. at 711-12.

^{139.} See id. at 678-710.

^{140.} See id. at 711-12.

means of enforcing Fourth Amendment rights."141

Another set of reasons that justify caution and modesty stem from conditions peculiar to exclusionary rule impact research. Notwithstanding the Pepperdine Study's helpful contribution, whether the exclusionary rule deters illegal police conduct, there remains a vexingly complicated research question and one that thrusts researchers into murky areas inhabited by well-guarded human motivations within a complex social model.¹⁴² Complicating an already complex inquiry is a paucity of helpful data.¹⁴³ Indeed, the lack of relevant, germane, and helpful data surely contributed to the authors' decision to generate, gather, and code original data. Any one of these reasons help ensure that additions to our knowledge base will emerge in a gradual and incremental fashion. Cumulatively, these factors pose significant challenges to research efforts, such as the one undertaken by the authors of the Pepperdine Study.¹⁴⁴

As the Pepperdine Study makes clear, precious little is known about whether, and if so how, the exclusionary rule works in practice, particularly how it influences police conduct, legal and otherwise. What is known, more often than not, derives from impressionistic or anecdotal reports or evidence. Leven more dramatic, what little empirical work that exists is limited methodologically as well as by such technical issues as sampling and research design. The exclusionary rule's thin current knowledge base about its effects is all the more surprising given the important consequences that flow from the rule's application.

Although the Pepperdine Study seeks to achieve two distinct goals, only one goal, "to determine what effect the exclusionary rule has had on police conduct," is the particular focus of the study's empirical component. ¹⁴⁷ In many respects the Pepperdine Study broadly achieves what it sets out to accomplish. The Study sheds new light on an important legal question from an empirical perspective, generates new knowledge and data, and, more fundamentally, "build[s] on what has come before." ¹⁴⁸

Despite the Pepperdine Study's general contribution to its field, important issues limit the contribution's scope and extent. Specifically, research design and methodological and technical issues blunt the Pepperdine Study's findings. The authors use a survey instrument to generate original data which they treat

^{141.} See id. at 678-79.

^{142.} See id. (citing Dallin H. Oaks, Studying the Exclusionary Rule in Search and Seizure, 37 U. CHI. L. REV. 665, 716 (1970)). As the authors of the Pepperdine Study note, Oaks concluded that a full, satisfactory inquiry is impossible. See id. at 678.

^{143.} See id.

^{144.} See id. at 711 n.366 (discussing more hurdles for empirical research on the exclusionary rule).

^{145.} See id. at 711.

^{146.} See id.

^{147.} See id. at 678. The Pepperdine Study's other goal is to "examine whether other remedies are capable of deterring and compensating for police misconduct so as to achieve maximum benefit with the least cost." See id.

^{148.} See id. at 678.

descriptively.¹⁴⁹ Given that so little is known about the possible effects of the exclusionary rule on police conduct, the study's use of descriptive rather than inferential statistics is not surprising.¹⁵⁰ Although inferential statistics frequently are poised to offer more probative insights than their descriptive counterparts they impose more rigorous burdens on the researcher and study design. Nevertheless, helpful descriptive work, such as the Pepperdine Study, contributes to an intellectual foundation upon which future inferential work might rely.

Research designs that use a survey instrument as a source of data are the subject of extensive debates that fall well outside the scope of this Article.¹⁵¹ Suffice it to say, however, self-reported survey data possess certain benefits as well as impose consequential costs. One such cost is that people have been known to lie in their responses to survey questions. Indeed, comments to a pilot version of the survey instrument are at the very least suggestive that this possibility might adversely affect the data generated by the Pepperdine Study, particularly questions designed to ferret out law enforcement officials' truthfulness. 152 Notwithstanding the standard pledges of complete anonymity to respondents along with protocols designed to ensure anonymity, it is not unreasonable to harbor some doubts about the veracity of responses to survey questions not offered under oath concerning the respondent's truthfulness. 153 It simply stands to reason that law enforcement officials capable of committing perjury are likewise capable of responding untruthfully to survey questions. 154 And if the officials were not at least capable of committing perjury then little reason exists to have included such questions in the survey.

In addition to questions surrounding data reliability, another aspect that limits the utility of data gathered through surveys is that survey instruments, at least the instrument used in the Pepperdine Study, gather data on what people say they have done, do, or will do. Whether and, if so, to what degree what people say they do comports with what they actually do is far from certain. In a perfect world, one with unlimited research budget independent third-party researchers would gather

^{149.} See id. at 713-19.

^{150.} See id. at 678-79 (acknowledging the limited empirical data previously gathered).

^{151.} The debates are rich. See, e.g., Eleanor Singer, Editor's Introduction, 51 PUB. OPINION Q. s1-s3 (1987); Tom W. Smith, The Art of Asking Questions, 51 PUB. OPINION Q. s95-s108 (1987); Robert M. Groves, Research on Survey Data Quality, 51 PUB. OPINION Q. s156-s172 (1987).

^{152.} The Pepperdine Study's authors note that the law enforcement officials they dealt with were "understandably sensitive about even the suggestion that their officers might occasionally misrepresent what happened during a search or an interview. Accordingly, we eliminated four questions that asked the respondents about their own truthfulness." See Perrin et al., supra note 1, at 718.

^{153.} See id. at 725-27.

^{154.} See id. at 677, 725 (discussing the loss of police integrity as a cost of the exclusionary rule and the possible effects of police perjury on the survey).

data on what police officers actually do, rather than rely on self-reports. What people do and what people say they do are two different questions. Consequently, data on these questions differ in important respects.

Two other potential problems to the research design and survey methodology used in the Pepperdine Study stem from how the respondents reacted to the instrument as well as their reaction to being the subject of a study. First, the survey instrument itself might disturb the very information the researchers seek to measure. 155 Second, just knowing that they are participating in a study might be enough to alter information gathered from respondents.¹⁵⁶ It is far from clear whether either problem is present in the Pepperdine Study, but both are serious problems and the authors suggest that the former problem-instrument reactivity-arose. 157 Specifically, the authors noted respondents' intense and unanimous reactions to questions concerning police perjury on a pilot survey instrument. 158 Respondents candidly implied that they would be unable to answer such questions honestly, notwithstanding assurances of confidentiality from the researchers. 159 Accordingly, the researchers' eliminated four items from the final survey instrument addressing respondents' own truthfulness. 160 The final survey retained more broadly phrased questions addressing the respondents' knowledge of periurious conduct by others. 161 Yet the researchers' discussion of the results of these questions reveals unease with data reliability. 162

Finally, issues involving the Pepperdine Study's sample size and response rates further limit the force and generalizability of its findings. The sample size, essentially restricted to law enforcement officers working in Ventura County, California, ¹⁶³ makes the Pepperdine Study more closely resemble an extensive case study. Implications that can be properly drawn from data from law enforcement officials from a single county pivot largely on the representativeness of Ventura County law enforcement. ¹⁶⁴ Paradoxically, the authors' review of prior empirical

^{155.} See Paul E. Specter, Research Designs 25 (1981).

^{156.} See id. at 27. This problem, commonly referred to as the Hawthorne Effect, is named after well-known studies of Western Electric worker productivity during the 1930s. See id; see also FRITZ J. ROETHLISBERGER & WILLIAM J. DICKSON, MANAGEMENT AND THE WORKER (1939).

^{157.} See Perrin et al., supra note 1, at 711-12.

^{158.} See id. at 718.

^{159.} See id.

^{160.} See id.

^{161.} See id. Whether law enforcement officials would candidly report even this information is not assured, particularly in light of their responses to self reports.

^{162.} See id. at 725 ("Based upon the preliminary responses we received to our questions about police perjury, it was not surprising that the participants in the study were reluctant to acknowledge the existence of police deception or perjury in their agency.").

^{163.} See id. at 713. I say "essentially" only because the Pepperdine Study also incorporates 55 responses from law enforcement officials from agencies located outside of Ventura County and "throughout" California. See id. In addition, the Study also includes 80 responses from first-year law students at Pepperdine University School of Law. See id. The bulk of the respondents, 411, work in Ventura County, California. See id.

^{164.} The authors discuss the implications of this point briefly. See id. at 712-13.

scholarship reveals a key factor that casts some doubt on their own study. Specifically, an earlier study endeavors to contrast evidentiary suppression motions in two jurisdictions, Washington, D.C. and Chicago. The Pepperdine Study reports that the starkly different results stem from the existence of "important differences in the criminal justice systems of the two cities, differences so striking that meaningful comparisons could not be made." However, the same or different characteristics that distinguished the criminal justice systems in Washington, D.C. and Chicago during the 1960s and 1970s might also distinguish Ventura County from other American jurisdictions. If so, generalizations from the Ventura County data should only be drawn with extraordinary care, if at all.

Although questions exist about the potential representativeness of the data drawn from largely Ventura County law enforcement officials to their counterparts working elsewhere, response rates also cast some doubt over the respondents' representativeness of Ventura County law enforcement officials. ¹⁶⁷ Simply put, low response rates hamstring the Pepperdine Study. The authors reveal response rates to their survey ranging from a high of forty-two percent to a low of twenty percent. ¹⁶⁸ Although no bright line exists, when fewer than one-half of those surveyed respond, one has to begin to wonder whether the characteristics and incentives of those who elected to participate systematically differ from the majority of those who declined to respond. If no such differences exist then the low response rate should not inject bias into the sample. If such differences exist then the specter of bias arises. And bias would threaten to undermine the very heart of the study—the quality of its data. The problem, of course, is that one simply cannot tell. And it is the researcher who shoulders the burden of removing this doubt.

V. CONCLUSION

Where empirical questions lurk, data warrant at least as much respect as that accorded opinion and words. ¹⁶⁹ The Pepperdine Study and its authors deserve praise for endeavoring to empirically test questions relating to the exclusionary rule

^{165.} See id. at 695 (citing Dallin H. Oaks, Studying the Exclusionary Rule in Search and Seizure, 37 U. CHI. L. REV 665, 687 (1970)).

^{166.} See id. at 696.

^{167.} Again, most respondents work in Ventura County, California. See supra note 163.

^{168.} See Perrin et al., supra note 1, at 713. The 20 percent response rate for the "the other officers" group is particularly troublesome. See id. at 713 n.379. So much so as to perhaps render this data unreliable, especially to fulfill the desired role as a comparative baseline.

^{169.} Professor Donohue takes an even stronger position. See Donohue, supra note 58, at 1169 ("Data warrants greater respect than opinion and verbiage.").

that are frequently shrouded by complicated human motivation.¹⁷⁰ That the authors approached this important legal question from an empirical perspective is by itself notable, particularly given the current state of legal scholarship which remains dominated by theoretical and doctrinal work. Theoretical and doctrinal scholarship's dominant position in the legal literature is not surprising, especially given the particular demands empirical research places upon scholars and the institutional and other incentive structures many law professors confront.

The authors of the Pepperdine Study, of course, overcame these obstacles and resisted incentives to avoid empirical research. Our legal literature would be enriched if more academics, particularly law professors, became more engaged in empirical legal research and produced more of it. Increased production of empirical scholarship would enhance and supplement the legal literature as well as our understanding of crucial legal questions. Empirical work sheds important light on old legal issues and identifies and speaks to issues that the more traditional theoretical and doctrinal genres cannot reach. While the authors correctly note their study "nibble[s] around the edges" of their research question, ¹⁷¹ such nibbles are to be expected. In most instances advancements in knowledge creep incrementally, and often, in painstakingly slow fashion. Moreover, such nibbles constitute the bulk of empirical research.

It is within this tradition that the Pepperdine Study contributes to the research literature. In addition to illustrating empirical legal scholarship's comparative advantages for questions concerning the exclusionary rule's impacts on law enforcement conduct, however, the Pepperdine Study also illustrates many of the challenges that confront much empirical research. These challenges include those relating to research design, methodology, and response rates. Accordingly, the Pepperdine Study's findings and generalizations drawn from them should be approached with due caution. That said, the Pepperdine Study is among the best such studies of a vexingly difficult research question.

^{170.} See Perrin et al., supra note 1, at 755.

^{171.} See id. (quoting Dallin H. Oaks, Studying the Exclusionary Rule in Search and Seizure, 37 U. CHI. L. REV. 665, 715 (1970)).