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Introduction to Symposium: Empirical and Experimental Methods in Law

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INTRODUCTION

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I. INTRODUCTION

A little more than 100 years ago, Justice Oliver Wendell Holmes, Jr., famously said, "For the rational study of the law the black-letter man may be the man of the present, but the man of the future is the man of statistics and the master of economics."[1] The developments of legal scholarship over the last twenty-five years or so have amply borne out Justice Holmes's prophecy with respect to economics and the law. But they have not so clearly borne out his prophecy with respect to statistics. Empirical methods are still rare in legal scholarship: very few law professors buttress their arguments by appeal to tests of statistical significance or even with descriptive statistics. Similarly, courses in quantitative methods in the law are rare. The systematic organization of data and its presentation in revealing ways may be a routine part of many scholarly disciplines, but it is not yet a routine part of legal argumentation.

Still, there are signs that empirical and experimental methods are becoming more common in legal scholarship.[2] Empiricism is also a unifying theme of several of the increasingly influential interdisciplinary approaches to the study of law. We believed, therefore, that it would be useful to assemble a group of legal scholars with divergent interdiscipli-

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We owe special thanks to Dean Thomas M. Mengler of the University of Illinois College of Law and to Director Jack H. Knott of the Institute of Government and Public Affairs for their sponsorship of the symposium. The editors of the University of Illinois Law Review not only edited the articles in this volume and did all the work that entails, but they were also of invaluable assistance in organizing the symposium and in helping matters to run smoothly on April 13, 2001, the date on which the symposium was held in Champaign. We also are very, very grateful for the inestimable help—in many ways, not just for this symposium—of Sally Cook and Peggy Olsen of the University of Illinois College of Law.

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1. Oliver Wendell Holmes Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 469 (1897), *reprinted in* 78 B.U. L. REV. 699, 708 (1998). Had he been even more prescient, perhaps Holmes would have predicted that the man of the future study of law would often be a woman.

2. For statistical evidence of this assertion, see Robert C. Ellickson, *Trends in Legal Scholarship: A Statistical Study*, 29 J. LEGAL STUD. 517 (2000).

nary interests but with a common interest in empiricism.[3] In organizing the Symposium, we decided to have four panels focus on three topics. Our introductory panel would lay the groundwork for the panels to come by discussing the need for empiricism in the study of law. The resulting papers establish the propositions that empirical and experimental methods have already contributed a great deal to legal scholarship, that there is a good deal more that those methods could contribute to the scholarly understanding of the law, and that the techniques necessary to become adept at these methods are not so daunting that legal scholars should be hesitant to make them a routine part of their toolkits. In our second panel, we wanted to turn from the question of scholarly ends to the question of scholarly means, to focus on how to do empirical work. The papers presented explain and explore the various empirical and experimental techniques suitable for studying law.

We wanted the final panel to turn from the why and how questions to review the application of empirical methods to particular areas of the law. The resulting papers survey and criticize the use of empirical and experimental methods in diverse areas of private and public law. The authors also suggest how more experimental and empirical work would help to throw light on important doctrinal and other issues in their areas.

In the remainder of this brief introduction to the articles presented at the Symposium, we seek to give a flavor of these remarkably good and nuanced articles. We strongly urge a full reading of each of the articles to appreciate the broader arguments and subtleties that the authors make.

II. THE PROMISE OF EMPIRICAL AND EXPERIMENTAL METHODS IN LAW

Professor Shari Seidman Diamond, in *Empirical Life in Legal Waters: Clams, Dolphins & Plankton*, opened the Symposium with a provocative typology of the legal academic community and of judges and their attitudes towards empirical legal research. She posits three general species of legal researchers—clams, dolphins, and plankton—and three attitudes toward empirical work—doer, user, and critic. Professor Diamond first defines each of these types and then explores each of the nine possible combinations, such as clam-user and dolphin-critic. As an example of this typology, consider the dolphin-user. A "dolphin" is an "active inhabitant of its marine environment"[4] and within the legal academy,

3. Participants included those trained in the disciplines of history, economics, education, political science, psychology, and sociology. Their methods of gathering and analyzing data vary widely, from experiments to interviews to computer simulations, and from regression to correspondence analysis.

4. Shari Seidman Diamond, *Empirical Life in Legal Waters: Clams, Dolphins & Plankton*, 2002 U. ILL. L. REV. 803, 808. A "Clam" in Professor Diamond's typology is sedentary and depends on nourishment drifting to him or her through the ambient waters.

a dolphin would include the "movers and shakers of the legal academy[,] grounded in traditional legal scholarship [but using] empirical research to increase our understanding of the law and to add to the tools available to legal researchers."[5] In contrast, "plankton" passively ride the waves and are "too weak to swim against the current."[6] Their attitudes towards empirical research reflect the prevailing moods of the profession without being grounded in any fundamental principles.

Professor Diamond holds that the clam-user is becoming an increasingly common type in legal scholarship,[7] and she does not care for that type, feeling that their lack of judgment regarding the appropriate use of empirical research ultimately does harm to that style of research. Professor Diamond clearly admires and places great hope in the dolphin-doers and the dolphin-users for the future of empirical research.[8] She concludes her very stimulating piece with two predictions. "First, it is the species [clam, dolphin, plankton] rather than the activities [doer, user, critic] that will determine the future success of empirical research in the legal world."[9] And second, "the health of empirical scholarship in the legal academy will depend more on growth in the population of dolphin-*users* than of dolphin-*doers*."[10]

In *The Past, Present, and Future of Empirical Legal Scholarship: Judicial Decision Making and the New Empiricism*, Professor Michael Heise gives us a wonderfully complete history of empirical legal scholarship, an assessment of its current practices and its likely future trajectory, and an illuminating case study of how a particular area of legal scholarship has been affected by empirical research.

Heise finds the origins of empirical legal research in the legal realism movement of the early twentieth century,[11] but he also notes that empirical work declined with that movement. A revival occurred following World War II when, among other things, Dean Edward Levi of the University of Chicago Law School and his colleagues secured a very large foundation grant to explore the connections between law and the behavioral sciences.[12] While there was a quiescent period in empirical legal research from the 1960s to the 1980s, "evidence suggests that the production of empirical legal scholarship is on the rise,"[13] especially in the last decade.

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5. *Id.*
6. *Id.* at 813.
7. *Id.* at 811.
8. As examples of the dolphin-doers, she cites Phoebe Ellsworth, Richard Lempert, and Debby Merritt, and of the dolphin-users, Richard McAdams. *Id.* at 814–15.
9. *Id.* at 817.
10. *Id.*
11. Michael Heise, *The Past, Present, and Future of Empirical Legal Scholarship: Judicial Decision Making and the New Empiricism*, 2002 U. ILL L. REV. 819, 822.
12. *Id.* at 823.
13. *Id.* at 824.

Professor Heise believes that this increase in empirical legal scholarship will continue, and he cites three reasons: (1) empirical work follows from some discernible trends in legal scholarship (such as its increasing use of social science theories); (2) an increase in the accessibility of legally related data sets and the wider availability of personal computer-based statistical packages; and (3) encouragement for empirical work from the leading legal academics and judges.[14]

To illustrate the historical points as well as his predictions about the future, Heise gives a fascinating case study of the empirical literature that has sought to explain why judges decide cases in the way that they do. That literature began with behavioral and attitudinal hypotheses (the first holding that the socioeconomic backgrounds of judges explained their decisions; the latter holding that their ideology, combined with socioeconomic factors, was the principal explanatory variable).[15] Heise reports that neither of these hypotheses was borne out by the facts[16] and that this failure spurred the search for other theories (such as public choice and institutionalism), whose work is still being done and for which the results are not yet fully in.

In *Three Objections to the Use of Empiricism in Criminal Law and Procedure—and Three Answers*, Professor Tracey Meares advocates the use of empirical methods for the study of criminal law and procedure. She notes three objections that some criminal law theorists have raised to the use of empiricism in this field: that the data are flawed and the courts are unable to distinguish good from bad empirical work; that the public's deference to the criminal justice system—its perceived legitimacy—depends on our *not* knowing precisely how or how well it actually works (a "less information is better" claim); and that criminal law theory should concern itself with the articulation of rights and culpabilities that are not subject to empirical analysis. In each case, Meares provides an informed and compelling rebuttal: that there is good empiricism on criminal law and workable mechanisms to demonstrate its superiority to courts; that the "less information is better" argument is itself an empirical question, and a doubtful one given the value of governmental transparency to perceived legitimacy; and that even rights theorists should value empiricism because, among other reasons, the exact boundary of rights and duties often depends on factual judgments (such as the actual behaviour of "reasonable" persons).

Professor Tom Ulen, in *A Nobel Prize in Legal Science: Theory, Empirical Work, and the Scientific Method in the Study of Law*, tries to put the topic of the Symposium in the larger context of sweeping changes that appear to be occurring in legal scholarship and the legal academy. He observes that the increasing interdisciplinarity of legal scholarship

14. *Id.* at 826–32.
15. *Id.* at 832.
16. *Id.* at 834–35.

over the last twenty years—especially in its use of microeconomic theory to explain and critique legal rules and institutions—has and will bring in its train an explicit move toward more empirical and experimental work. Prior to the widespread use of economics in law, theorization in the law tended to be philosophical and, therefore, posed issues that are rarely resolvable by appeal to empirical tests. But the use of economic and other social scientific theories has also brought along, perhaps unintendedly and unanticipatedly, a commitment to the scientific method of resolving questions by appeal to empirical and experimental work. Ulen predicts that this implicit commitment to the scientific method will almost certainly cause legal scholars to seek to test their theoretical constructs against data so as to see the extent to which that empirical work supports their theories. In this sense and to the extent that empirical work becomes more common, the study of law will become more like other disciplines for which Nobel Prizes are awarded.

Professor Rachel Croson began the next panel with *Why and How to Experiment: Methodologies from Experimental Economics.* Professor Croson's paper is a wonderfully clear and practical guide on how to conduct laboratory experiments designed to throw light on legal topics: the "goal of this article is to . . . provide a guide to individuals who desire to intelligently conduct or consume experimental research, using selected examples from the literature in experimental law and economics to illustrate principles."[17] She cautions that these experiments are not quite the same as empirical reality, and that, instead, experimental results lie somewhere between theory and reality.[18] Croson discusses, following experimental economist Alvin Roth's typology, three types of experiments: (1) those designed to test theories; (2) those designed to address anomalies; and (3) those designed to inform policy debates.[19] She also shows, using examples drawn from the law-and-economics literature, the differences among experiments addressed at those different goals. The remainder of the paper elucidates very practical and important advice about how to structure, conduct, and evaluate experiments. This paper could hardly be more instructive and will certainly be a standard reference in experimental legal research.

The next paper was that of Professor Ted Eisenberg and Professor Kevin Clermont, *Plaintiphobia in the Appellate Courts: Civil Rights Really Do Differ from Negotiable Instruments.* Clermont and Eisenberg give a wonderful example of the insights into law that can come from careful empirical work—e.g., that in federal civil trials and appeals decided since 1988, "defendants succeed more than plaintiffs on appeal . . . Defendants that appeal their losses after trial obtain reversals at a 33%

17. Rachel Croson, *Why and How to Experiment: Methodologies from Experimental Economics*, 2002 U. ILL. L. REV. 921, 923–24.

18. *Id.* at 923.

19. *Id.* at 925–28.

rate, while losing plaintiffs succeed in only 12% of their appeals from trials."[20] The authors first explain the remarkable data set that they have assembled from records of the Administrative Office of the United States Courts (a data set that is disseminated through the Inter-university Consortium for Political and Social Research) that matches federal trial court and appellate court cases. They then use those data to follow up on their earlier studies[21] to derive important new results. Of those results, two are particularly striking: (1) that the affirmance rate on appeal (about 80%) is substantially stronger than previously thought (about 60%),[22] and (2) that the principal explanation for the striking difference between defendants' and plaintiffs' reversal rates on appeal in the federal courts (a difference that is particularly striking in civil rights and torts cases) is most likely due to misperceptions by the appellate bench about a plaintiff-bias at the trial court level.[23]

Professor Bernard Harcourt presented *Measured Interpretation: Introducing the Method of Correspondence Analysis to Legal Studies*. Harcourt notes that recently, many areas of legal scholarship have been deeply influenced by the techniques of literary interpretation—especially as that technique applies to the determination of the social meaning of behavior and behavior's regulation by law. This "interpretive turn," Harcourt notes, presents special problems of empirical verification because social meaning is such a soft concept. Nonetheless, Harcourt argues that empirical work to establish the importance of social meaning is important, however hard it may be to perform. To help in this work, Harcourt introduces a technique known as "correspondence analysis," which is common in Europe and Japan but virtually unknown in North America. Harcourt explains the technique, giving examples of its graphical results, and presents a fascinating case study. That case study seeks to examine the social meaning of guns and gun possession for youth and finds that the "symbolic realm of protection, danger, attraction, power, jail, action, belonging, and death"[24] is closely associated with the carrying of handguns by youth. Professor Harcourt uses the results of the case study to draw out the public policy implications of this correspondence analysis. For example, the analysis "suggests that antigang strategies are likely to be an effective way to address youth gun carrying."[25] Additionally, the findings may argue for the effectiveness of even broader policies, such as "a focus on youth conflict resolution, parental and school su-

20. Kevin Clermont & Theodore Eisenberg, *Plaintiphobia in the Appellate Courts: Civil Rights Really Do Differ from Negotiable Instruments*, 2002 U. ILL. L. REV. 947, 947.

21. Kevin Clermont & Theodore Eisenberg, *Appeal from Jury or Judge Trial: Defendants' Advantage*, 3 AM. L. & ECON. REV. 125 (2001); Kevin Clermont & Theodore Eisenberg, *Trial by Jury or Judge: Transcending Empiricism*, 77 CORNELL L. REV. 1124 (1992).

22. Clermont & Eisenberg, *supra* note 20, at 971.

23. *Id.*

24. Bernard Harcourt, *Measured Interpretation: Introducing the Method of Correspondence Analysis to Legal Studies*, 2002 U. ILL. L. REV. 979, 1015.

25. *Id.*

pervision, safety monitoring in schools and public areas, architectural redesign, practice based alternatives and counseling."[26]

The final paper of the morning sessions was Professor Randy Picker's *SimLaw 2011* in which he moves us from the present of empirical and experimental research to a very different and, he contends, highly likely future. Picker makes a case that an increasingly important form of legal research will be agent-based computer simulation. He playfully suggests that just as *SimCity 3000* and the *Sims* are the largest-selling computer programs, so, perhaps, the future will see *SimLaw 101* as a top seller among legal academics. There are three factors that, Picker argues, will make computer simulation an attractive alternative to the more traditional empirical and experimental methods. First, the "relative cost of using computer simulation is decreasing, so we should expect to see more of them."[27] Second, experimental methods are becoming ever harder and more expensive to conduct with human subjects because of greater state and federal regulation.[28] And third, while there appears to be an increase in the amount of data available for legal research, "important areas of data are still quite inaccessible and expensive to obtain."[29] As a result, "[e]verything pushes in favor of computer simulations."[30] The bulk of the paper reports on a simulation directed at showing how organized (as opposed to individual) decision making may overcome some of the alleged behavioral biases of individual decision making.[31]

III. APPLICATIONS OF EMPIRICAL AND EXPERIMENTAL METHODS TO PARTICULAR AREAS OF THE LAW

Certain fields of social science, especially sociology and psychology, routinely publish a form of scholarship known as the *review*. A "review" is a critical survey of empirical scholarship on some specific topic. Its purpose is to provide a comprehensive overview of some area of empirical inquiry within the discipline, to assess broadly what has been learned and what remains unknown. In a discipline where scholarship is routinely empirical and in which each article's contribution is incremental—for example, testing a theory with one more dataset or experiment—it makes sense on occasion to pause and take stock of where the individual research efforts are leading, to note advances where testing repeatedly

26. *Id.*

27. Randal Picker, *SimLaw 2011*, 2002 U. ILL. L. REV. 1019, 1020. One might argue that that same reduction would lead to an increase in the ability to do large, multiple-equation, closed-form models, but that, he suggests, is not likely.

28. *Id.*

29. *Id.*

30. *Id.*

31. To see the paper and the movies of the simulation, see http://www.law.uchicago.edu/Picker/IllinoisPaper. The movies are set up as .avi files, which can be viewed using Windows Media Player.

validates some aspect of a theory and to acknowledge limitations and call for new directions where testing repeatedly fails to validate a theory.

The situation in legal scholarship is different. On the one hand, almost every law review article is expected to provide a kind of "review," in the sense that student-edited law reviews prefer articles that lay out a comprehensive summary of the law the article addresses (even if other recent articles on the same subject have provided the same summary). Moreover, if an author articulates a new theory of some doctrine, student-edited law reviews frequently prefer that he set out and criticize every alternative theory that has come before, and this survey is also a kind of review. On the other hand, it is quite clear that legal scholarship does not *routinely* provide anything like the review of empirical literature that exists in many social sciences. In most legal fields, at least until recently, there has not been enough empirical literature to justify a review.

As we previously noted, however, there is an ongoing trend towards more empiricism in the study of law. We believe that, in many fields of law, there is now a sufficiently large body of empirical research to make it useful for law reviews to publish, on occasion, reviews of empirical scholarship. We are pleased to facilitate and perhaps formalize this trend by offering here a half dozen reviews of empirical scholarship on legal topics. In our view, each of these papers is an extremely valuable resource for understanding the state of empirical knowledge in the legal area surveyed, and especially for determining what future empirical projects would be useful in a given area.

In *Empirical Scholarship in Contract Law: Possibilities and Pitfalls*, Professor Russell Korobkin reviews empiricism in contracts scholarship. Korobkin focuses on law review publications that "explicitly apply empirical analysis to the study of contract law doctrine."[32] Not surprisingly perhaps, he finds only a modest amount of scholarship that qualifies for this category, specifically only twenty-seven articles in the fifteen-year period from 1985 to 2000. Korobkin is thus able to provide an interesting and insightful overview of the entire empirical literature on contract doctrine, categorizing the literature by its sources of data and by the purposes for which it is used. Korobkin then critiques the use of empiricism in the study of contract doctrine, illustrating "pitfalls" to be avoided by discussing the shortcomings in existing work. Korobkin concludes by pointing to one area in which, surprisingly, there is no empiricism, though it would be quite valuable: the effect of mandatory contract law rules on private behavior.

Professor Gary Schwartz reviews *Empiricism and Tort Law*. Schwartz notes that there are a great many empirical studies of the tort litigation system and that (contrary to the ordinary situation) some good

32. Russell Korobkin, *Empirical Scholarship in Contract Law: Possibilities and Pitfalls*, 2002 U. ILL. L. REV. 1033, 1064.

reviews of this literature already exist.[33] Schwartz addresses his review to two issues. First, he discusses a central matter that the existing reviews, and to some degree the existing empirical literature, has neglected: the degree to which tort law achieves its objectives, however defined. Economic theorists generally view the goal of tort law as the deterrence of inappropriately dangerous conduct, while corrective justice theorists generally view the goal as compensation of victims. Schwartz provides an overview of the existing empiricism on how well tort law does both. Schwartz then returns to the subject of the existing reviews—the tort litigation system—and offers a critique of their "reassuring view," which he finds to be as flawed in some instances as the "alarming view" these reviews oppose.

Professor Margaret Brinig reviews *Empirical Work in Family Law*. She first critiques the existing empirical literature. She describes many weaknesses in the data that researchers, including herself, use: most data are collected at the state level, though there are important variations within states; the causes and consequences of family outcomes like divorce are subtle, but much of the pertinent information is so private that it is not collected or is protected from disclosure; many effects of family decisions need to be measured in the long term, but the available data usually permit only short-term study; proving the connection between family law and behavior is difficult because we do not know how many people actually know the law. Brinig also notes the tendency of family law researchers to do work in fields in which they have a personal interest, raising questions about the impartiality of their analysis. The second part of Brinig's article reviews specific areas of family law research. She suggests that while some areas have been studied in great detail—such as the effect of no-fault law on divorce, the effect of divorce on family members, and the outcome of divorce settlement—there is a great need for additional empirical work on the nonfinancial and long term effects of divorce and a host of complex topics related to adoption.

Professor Cary Coglianese reviews *Empirical Analysis and Administrative Rulemaking*. He surveys the empirical literature on three key questions for administrative law scholars. First, what is the effect of the rulemaking process, especially of rules requiring cost-benefit analysis, on the rules administrative agencies promulgate? Coglianese identifies the crucial theoretical assumptions in the claim that the process improves the substantive rules, and points out which have been subject to empirical investigation. Second, what is the effect of judicial review on administrative agency rulemaking? Some administrative law scholars claim that ju-

33. *See, e.g.*, Marc Galanter, *Real World Torts: An Antidote to Anecdote*, 55 MD. L. REV. 1093 (1996); 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); Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377 (1994); *see also* DONALD N. DEWEES ET AL., EXPLORING THE DOMAIN OF ACCIDENT LAW: TAKING THE FACTS SERIOUSLY (1996).

dicial review deters agencies from making rules. Coglianese describes the empirical literature suggesting that the litigation rate against agencies is not as high as many claim and appears not to have slowed rulemaking, though it is difficult to get data by which one could test agency responses to particular judicial precedents. Third, does the "consensus-building" of *negotiated* rulemaking produce any advantages over conventional rulemaking? Coglianese reviews the empirical evidence that negotiated rulemaking takes approximately as much time and produces approximately as much litigation as conventional rulemaking, though other possible advantages have yet to be studied.

In addition to these four reviews of substantive legal areas, the last two articles provide a review of the empirical literature of a particular kind of interdisciplinary legal scholarship. Professor Thomas Ginsburg, in *Ways of Criticizing Public Choice: The Uses of Empiricism and Theory in Legal Scholarship*, provides a general evaluation of public choice theory, which, stated briefly, applies economic theory to politics. After describing the basic claims of public choice theory, Ginsburg reviews and critiques the empirical literature testing its claims. In particular, an impressive body of experimental and field research demonstrates that individuals cooperate in situations where game theory predicts that they would not cooperate. Ginsburg endorses the claim of this literature that at least some individuals are "conditional cooperators" and/or "willing punishers," rather than purely rational, selfish beings. Ginsburg goes beyond a mere review, however, and offers a synthesis of this new literature with public choice theory, finding that the theory remains useful after its necessary amendment, and concluding with a discussion of the interaction between empiricism and theory generally.

Finally, Professor Daniel Klerman reviews *Statistical and Economic Approaches to Legal History*. Klerman's article advocates a fascinating convergence of disciplines and methods. Klerman suggests that the study of legal history can benefit greatly from the use of economic theory and quantitative statistics. He first offers a survey of legal history scholarship to demonstrate how rarely legal historians currently use either economics or statistics. Klerman then reviews the limited literature that does combine these approaches, demonstrating their value for legal historians. Statistics help to measure more precisely the course of legal change, which in turn facilitates better tests of economic (or any other) theory that purport to explain the change.

IV. CONCLUSION

When we first talked about holding a Symposium about empirical and experimental methods in law, we strongly suspected that the topic would be one that would allow us to bring some of the most distinguished scholars in that field to Champaign. We greatly underestimated how stimulating the resulting papers would be and the marvelous intel-

lectual excitement that the group would have during their time at the University of Illinois College of Law. These fourteen papers testify to the vigor of empiricism in the study of the law. We are grateful to the authors for their efforts. And, as the dedication to this volume indicates, we are proud to offer this marvelous collection as a memorial to our friend and colleague, Professor Gary T. Schwartz.