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Article

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Everyone knows that the law changes and that Supreme Court opinions are an important mechanism of change. (This may be one of the few propositions so obvious that even law review editors are willing to accept without extensive footnoting.) But we know very little about *how* the law changes. Looking only at Supreme Court opinions, we might wonder whether the impact of opinions covers a spectrum or whether opinions fall into two distinct categories of significant but incremental changes on the one hand, and major breakthrough opinions on the other hand. Is there a "typical" Supreme Court opinion, in terms of impact—and if so, what kind of case is typical and how big is its impact? Surprisingly, little effort has been made to provide any systematic evidence about these questions.

How judicial opinions change the law and whether they should do so have received particular attention in the field of statutory interpretation. William Eskridge's path-breaking article, *Dynamic Statutory Interpretation*, is best known for its normative claim that statutory interpretation should dynamically adapt to current social values.[1] Eskridge pointed to the sources of stress between existing rules and changing condi-

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1. *See generally* William N. Eskridge, Jr., *Dynamic Statutory Interpretation*, 135 U. PA. L. REV. 1479 (1987) (arguing for a cautious model of dynamic statutory interpretation).

tions. "As society changes, adapts to the statute, and generates new variations of the problem which gave rise to the statute," he observed, "the unanticipated gaps and ambiguities proliferate."[2] Moreover, he added, "the legal and constitutional context of the statute may change."[3] Eskridge argued that his model "depicts what the Supreme Court typically does when it interprets statutes."[4] Although his primary focus has remained normative, Eskridge fleshed out his descriptive claim in his later work. He argues that the "dynamism introduced by the interpreter's perspective tends to be more pronounced over time, as her cultural and political framework diverges from that of the original drafters."[5] But "if that framework becomes irreconcilable with that of the drafters, statutory interpretation becomes a discontinuous process of rupture and dramatic political shifts."[6]

Eskridge's observations raise a host of issues about how statutory interpretation actually operates—issues relating to judicial methodology, cultural and political influences, and the pace of legal change. Eskridge's primary focus was on methods of statutory interpretation (originalist versus "dynamic"), but his work also raises intriguing issues about the dynamics of legal innovation in statutory cases.

Rather than focus on judges' interpretive techniques, this Article investigates the issues raised by Eskridge's contrasting use of the terms "typical" (to describe the Court's general methodology) and "rupture" (referring to the occasional paradigm shift). Some immediate questions come to mind: Is there such a thing as a "typical" interpretation case? How do the typical cases (however they are defined) relate to the extraordinary ones? Is there a continuum? Or is there a dichotomy, with two distinct classes of routine cases and blockbusters? More fundamentally, what kind of dynamic process is at work in statutory interpretation cases?

We all know that, as in the children's game, sometimes the Court takes "baby steps" and sometimes it takes "giant steps." But how often does it take each kind of step, and what dynamic

2. *Id.* at 1480.

3. *Id.*

4. *Id.* at 1482. As discussed later, the notion of "typicality" is problematic in this context. *See infra* Part III.B.

5. WILLIAM N. ESKRIDGE, JR., DYNAMIC STATUTORY INTERPRETATION 58 (1994).

6. *Id.* For a case study of this interpretative "rupture," see *id.* at 66.

drives the length of the steps? One way to get a handle on these questions is to examine citation frequencies. An opinion that takes a "baby step" will likely receive much less attention than one that takes a "giant step." It will be decisive in fewer future cases and will have to share the stage with other incremental rulings about the same issue, thereby diluting its influence. Because it involves routine application of what Thomas Kuhn called "normal science,"[7] an opinion that takes a baby step will also receive less attention from commentators. In contrast, an opinion that takes a "giant step" will set the analytic agenda for many later decisions. As a dramatic, paradigm-shifting legal innovation, the opinion will also be more likely to command the attention of commentators. Thus, the distribution of citation frequencies, while admittedly an imperfect indicator, should illuminate the dynamics of interpretation.

This Article uses citation data for the Supreme Court's 1984 and 1990 Terms to examine three models of the dynamics of interpretation.[8] Under the first model, the *random walk* model, the extent of an opinion's contribution to the law (and thereby its influence) is determined by a host of independent factors. These factors might include the subject matter, the parties' shaping of the issue, the identity of the Justice drafting the opinion, the amount of time since the statute was passed, the ideological salience of the issue, and so forth. This model produces a bell-shaped distribution of "step lengths," ranging from baby to giant steps.

Under the second model, the *bounded rationality* model, judges have bounded rationality and strong attachments to existing rules. This leads judges to take "baby steps" most of the time, but to occasionally take "giant steps" when continued adherence to an existing norm proves untenable. In empirical studies by various social scientists, this kind of model has produced frequency distributions that are roughly normal but have a characteristic known as "leptokurtosis." This model may well be what Eskridge had in mind; in any event, it was my own prediction about the data.

The third model, the *tectonic* model, stems from complexity theory (also known as chaos theory or fractal geometry). This type of model applies to many dynamic processes—for example,

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7. *See, e.g.*, THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS *passim* (1962).

8. The choice of these Terms and other methodological issues are discussed *infra* in Part II.A.

it fits the frequency distribution of earthquakes. The most important implication of this model is known as scaling: the same patterns reproduce themselves (though with increased magnification) at every level of magnitude.[9] Because earthquakes provide such a vivid analogy to legal change, I will refer to this as the tectonic model.

This Article uses citation data to explore statutory interpretation and tests three possible models. Part I discusses the use of citation frequencies as a measure and lays out more carefully the three models described above. Part II describes the methodology and presents the empirical data, including both quantitative analysis and some qualitative assessments. Finally, Part III presents conclusions and suggestions for further research.

I. PRIOR CITATION STUDIES AND POTENTIAL STATISTICAL MODELS

This Article is not the first, nor hopefully the last, to investigate the dynamics of statutory interpretation. This part discusses briefly previous studies of the topic and my reasons for adopting a different approach, before explaining the three models and their varying predictions.

A. INVESTIGATING THE DYNAMICS OF INTERPRETATION

Although the normative dimension of statutory interpretation has received the most attention, there have been some important empirical studies. These studies share a common technique. They focus on judicial methodology and examine the various sources of authority cited in judicial opinions. In a nutshell, the general conclusion of these studies is that courts rely on a range of authority, use an eclectic set of techniques, and vary somewhat over time in their use of specific sources such as legislative history.[10]

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9. These models are discussed in more detail *infra* in Part I.B.

10. The two leading works in this genre are probably Jane S. Schacter, *The Confounding Common Law Originalism in Recent Supreme Court Statutory Interpretation: Implications for the Legislative History Debate and Beyond*, 51 STAN. L. REV. 1 (1998) and Nicholas S. Zeppos, *The Use of Authority in Statutory Interpretation: An Empirical Analysis*, 70 TEX. L. REV. 1073 (1992). For a discussion of works dealing specifically with the use of legislative history by courts, see Adrian Vermeule, *The Cycles of Statutory Interpretation*, 68 U. CHI. L. REV. 149 (2001). In addition, of course, there are many excellent doctrinal analyses of recent opinions and historical studies of statutory inter-

This is invaluable information, but it has its limits. First, these studies essentially tell us what courts *say* about their decision making, rather than what they *do* when making decisions. Presumably, what courts say and what they do are related, but the strength of the connection is uncertain. Second, although these studies suggest that courts are often dynamic in the sense of consulting nonoriginalist sources, they reveal nothing about the magnitude of dynamism. Courts might exhibit a very sleepy form of dynamism, in which courts use nonoriginalist material only to justify tiny incremental steps toward changing the law "one case at a time." These studies cannot tell us whether statutory interpretation moves by glacial evolution, by fiery revolutions, or by some combination of the two. Just how dynamic is "dynamic" in this setting?

Although undoubtedly an imperfect indicator, citation frequency can help us get a handle on these questions about the pace of legal change. Clearly, a host of extraneous factors can influence the number of citations that an opinion receives. In general, however, citation impact is a plausible measure of the significance of an opinion, that is, of how far it "moves" the law. An opinion that contributes little new information about the law will not be very useful to later courts, nor will it usually be of much interest to commentators. Thus, citation frequency provides at least a rough measure of how significantly an opinion changes the law.

Although citation studies are a burgeoning area of scholarship, most studies by academics have (perhaps not surprisingly) focused on citations of academic works, often with the purpose of discovering which professor is the "fairest of them all."[11] A smaller body of work has investigated citations of cases, focusing largely on two issues. One strand of studies has focused on the "aging" of judicial authority, showing that judicial opinions generally have limited half-lives.[12] The other ma-

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pretation.

11. *See generally* Fred R. Shapiro, *The Most-Cited Law Review Articles*, 73 CAL. L. REV. 1540 (1985) (discussing the most-cited law review articles and their "objectively measured impact"); Fred R. Shapiro, *The Most-Cited Legal Scholars*, 29 J. LEGAL STUD. 409 (2000) (presenting data on the fifty "most-cited legal scholars of all time").

12. *See* Peter Clinch, *The Use of Authority: Citation Patterns in the English Courts*, 46 J. DOCUMENTATION 287, 303–08 (1990); William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 259 (1976); John Henry Merryman, *Toward a Theory of Citations: An Empirical Study of the Citation Practice of the California Supreme*

jor line of studies has focused on which judges are the most influential.[13] Only one article has apparently attempted to use the distribution of citation frequencies as a gauge of the dynamics of the legal process.[14]

Unlike many other kinds of empirical data that might be of interest, citation frequencies are readily available using current online search techniques. It is an old joke that social science research resembles a drunk looking for his keys under a light post simply because he can see better there, but there is something to the joke. Particularly for exploratory research, an imperfect but readily available source of information is especially valuable and has a genuine edge over a more nearly ideal but practically inaccessible source. At a minimum, this ready availability is a good enough reason to collect the data in the hopes of finding noteworthy patterns that will provide a springboard for future research.

As with any measure, using citation frequencies has its limitations. A recent study of judicial influence aptly explained that citations "are at best a crude and rough proxy for measuring influence."[15] Several of the data limitations discussed in that study are relevant here. "Super" precedents might be undercounted if they settle the law so effectively that no further cases are brought (or at least appealed). Correspondingly, an ambiguous precedent might be overcounted because lower courts are unsure of when it is relevant or what it means. Judges may also use overkill in citations, piling on multiple citations for the same basic point.[16] In addition to these defects, citation frequency will underestimate the boldness of some judicial interpretations if the statute is amended or repealed, thereby eliminating the decision's relevance. To some extent, these defects can be countered by considering citations in law

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Court in 1950, 1960, and 1970, 50 S. CAL. L. REV. 381, 423–27 (1977).

13. *E.g.*, Stephen Choi & Mitu Gulati, *A Tournament of Judges?*, 92 CAL. L. REV. 299 (2004); David Klein & Darby Morrisroe, *The Prestige and Influence of Individual Judges on the U.S. Courts of Appeals*, 28 J. LEGAL STUD. 371 (1999); Montgomery N. Kosma, *Measuring the Influence of Supreme Court Justices*, 27 J. LEGAL STUD. 333 (1998); William M. Landes et al., *Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges*, 27 J. LEGAL STUD. 271 (1998).

14. *See* David G. Post & Michael B. Eisen, *How Long is the Coastline of the Law? Thoughts on the Fractal Nature of Legal Systems*, 29 J. LEGAL STUD. 545 (2000) (discussed in more detail *infra* Part I.B.3).

15. Landes et al., *supra* note 13, at 271.

16. *See id.* at 273–75.

reviews as well as in cases: academics are likely to devote considerable attention to "super" precedents, are less prone to string citations, and are likely to be interested in Supreme Court decisions connected with a statutory amendment. Overall, despite their possible defects, citation frequencies provide the best available index of the significance of opinions in this study.

B. THREE MODELS OF INTERPRETATION

We cannot know in advance whether any significant patterns will exist in the data, nor can we ever be positive that we have correctly identified their causes even if we find such patterns. Before examining the data, however, it is helpful to have some working hypotheses. This part considers three plausible models of legal change and discusses the kind of statistical distribution associated with each one.

1. Model One: A Random Walk Through the U.S. Reports

One obvious possibility is that citation frequencies are more or less random, that is, they are the product of unrelated factors operating in different directions, which happen to balance out one way or another in a particular case. This model could be tied to the view that the Court typically aims for a particular level of "narrow and shallow" opinions.[17] Among the possible factors influencing citation counts might be the specific statutory language at issue, the quality of the parties' briefing, the frequency of litigation in the area, the opinion's author, the presence of dissent, subsequent legislative or administrative actions, the clarity of the opinion, and the economic impact of the decision, to name a few.

Trying to identify and measure these various factors is beyond the scope of this study. As it turns out, however, we may be able to identify this kind of randomness without specifying the causal links. A basic theorem of mathematical statistics links this form of randomness with the famous bell-shaped, normal distribution. More precisely, the central limit theorem states that "the sum of a large number of independent random variables will be approximately normally distributed almost regardless of their individual distributions; any random variable which can be regarded as the sum of a large number of

17. *See* Cass R. Sunstein, *Foreword: Leaving Things Undecided*, 110 HARV. L. REV. 4, 15–21 (1995).

small, independent contributions is thus likely to follow the normal distribution approximately."[18]

We could not expect an exact correspondence between citation data and the normal distribution, if only because the normal distribution requires an infinite domain in both directions while the number of citations to an opinion cannot be a negative number. In assessing deviations from normality, a few parameters are especially useful: *Central tendency* indicates that the mean, the median, and the mode of a normal distribution are the same; the *skew* parameter measures symmetry, which is zero for the normal distribution (a normal curve is symmetrical rather than skewed in either direction);[19] and *kurtosis* measures whether a curve is flattened out or unusually peaked, compared with the normal distribution.[20] Kurtosis for the normal distribution is sometimes given as three,[21] but the formula used by the software for this study gives the normal distribution a kurtosis of zero.

I will examine later whether the frequency distribution for citation counts has these characteristics. Note that in this model, as with traits like human height and weight, there is a clearly defined "typical case" and a continuum of increasingly rare deviations from the norm. Thus, although an NBA player might be unusually tall, it would make little sense to say that his height "ruptured" size expectations.

2. Model Two: Sticky Norms and Paradigm Shifts

Speaking of ruptures makes more sense in terms of the second model. In this model, for a variety of possible reasons, judicial behavior is "sticky." Judges are reluctant to deviate from existing norms, perhaps due to a belief in judicial restraint, and, hence, are usually prone to take only "baby steps." It is difficult to move judges far away from the status quo. When the status quo finally becomes untenable, however, judges are likely to flip to a new equilibrium well removed from the existing one. Thus, behavior is characterized by long bouts of "normal science" punctuated by occasional "paradigm shifts." Compared with a normal distribution, midrange changes are

18. M.G. BULMER, PRINCIPLES OF STATISTICS 109 (2d ed. corrected reprint, Dover 1979) (1967). For a sketch of one proof, see *id.* at 115–16.

19. *See id.* at 61–63.

20. *See id.* at 63–65.

21. *See id.* at 61–65, 111.

disfavored—usually only small changes will occur, but large changes will also be overrepresented compared with the normal curve.[22] This kind of decision making is closely associated with bounded human rationality, which leads individuals to use heuristics and rules of thumb that distort their responses to new information.[23]

There are several reasons to expect that this model would accurately capture statutory interpretation opinions. First, judges are presumably as prone to bounded rationality as anyone else. Thus, it would be surprising if their behavior did not show some signs of stickiness due to the use of heuristics, sticky norms, or "herding" effects. Second, since Supreme Court Justices face few, if any, penalties for errors, they may be under less pressure than other actors to conform their behavior to the theoretical standard of rational conduct. Third, studies have shown significant evidence of this kind of behavior in a variety of contexts, including stock market purchases,[24] congressional budgeting decisions,[25] and partisan voting margins.[26]

Like the random walk model, this model is associated with a characteristic statistical property called leptokurtosis; we expect sharper peaks and fatter tails than the bell curve.[27] The software used in this Article classifies any distribution with a kurtosis greater than zero as leptokurtic. Bryan Jones, a political scientist who has studied bounded rationality models, explains the implications of this statistical property:

> Leptokurtosis in output data has an important implication for decisionmaking. Change data from human institutions have, in comparison to the Gaussian [normal] distribution, an excess of cases in the central peak, an excess of cases in the tails of the distribution, but a paucity of cases in the "shoulders," the area between the central peak and the tails. The general substantive interpretation of these results is that change in human institutions tends to be quite conservative—

22. For a general discussion of this kind of behavioral model, see Dan M. Kahan, *Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem*, 67 U. CHI. L. REV. 607 (2000). For a discussion of whether this model is or is not likely to apply to judges, see Eric Talley, *Precedential Cascades: An Appraisal*, 73 S. CAL. L. REV. 87 (1999).

23. For an extensive discussion of how this idea applies in political science, see BRYAN D. JONES, POLITICS AND THE ARCHITECTURE OF CHOICE: BOUNDED RATIONALITY AND GOVERNANCE (2001).

24. *Id.* at 164–68.

25. *Id.* at 174–75.

26. *Id.* at 171–73.

27. *See id.* at 164–67.

> most cases clustered around a central peak—but is subject to occasional quite large punctuation (the tails). On the other hand, moderate change, as represented in the shoulders of the distribution, seems underrepresented—at least in comparison with the Gaussian. It would seem that a hypothetical decision maker would have to be prepared either for virtually no change or a very large change—he or she could not hope for moderate adjustments to changing circumstances.[28]

According to Jones, however, the scale of these effects should not be exaggerated. Distributions are generally not greatly removed from normal, so that political and economic institutions "are not wildly out of line with what theories of adaptive behavior predict" but the distribution still leaves room for "bounded rationality 'showing through.'"[29]

3. Model Three: Complexity Theory and Scaling Laws

The third model is developed in an innovative study of judicial citations by David Post and Michael Eisen.[30] They speculate that law may have the same branching properties that generate certain fractal geometric objects, because a legal issue can potentially sprout subissues, which in turn can sprout subsubissues, and that pattern continues.[31] Such fractal branching is associated with power law distributions, in which frequency varies as some power n of a basic parameter. Such distributions are "produced at the boundary between order and disorder, at the 'edge of chaos.'"[32] Power law distributions are "well nigh ubiquitous in a wide variety of physical, biological, and social systems."[33] Post and Eisen cite examples involving meteorology, demographics, biodiversity, and medicine, as well as the example I have chosen as emblematic, earthquake sizes.[34] Based on a very large sample of New York Court of Appeals cases and another sample of Seventh Circuit decisions, Post

28. *Id.* at 184.
29. *Id.* at 173.
30. Post & Eisen, *supra* note 14.
31. *Id.* at 552–58.
32. *Id.* at 568.
33. *Id.* at 569.
34. *Id.* at 569 n.37. For another recent example, see Pablo A. Marquet, *Of Predators, Prey, and Power Laws*, 295 SCIENCE 2229, 2229 (2002) (referring to the "vast number of biological power laws"). General background on power laws can be found in MANFRED SCHROEDER, FRACTALS, CHAOS, POWER LAWS: MINUTES FROM AN INFINITE PARADISE (1991). Some other applications of power laws to legal problems are discussed in Daniel A. Farber, *Probabilities Behaving Badly: Complexity Theory and Environmental Uncertainty*, 37 U.C. DAVIS L. REV. 145 (2003).

and Eisen find a good fit with their hypothesized power law (especially for the New York data).[35]

The earthquake example is especially evocative. Just as tectonic plates encounter frictions and develop stresses, which are then resolved by earthquakes, so the fabric of the law can easily be imagined as developing similar stresses and strains. Indeed, the fact that most of the Supreme Court's statutory cases involve conflicts between the circuits suggests a collision between opposing principles or rules of law, which the Court must then somehow resolve.[36]

Like the bounded rationality model, the tectonic model predicts a distribution more sharply peaked than the normal curve. It differs from the bounded rationality model in two significant respects. First, there is no expectation of producing anything that resembles a bell-shaped curve. Second, power laws have a crucial quality known as scaling. As Post and Eisen explain, fractal objects (which exemplify power laws) have no natural scale—any one section has the same structure (on a smaller scale) as the whole. "No matter how high the magnification, no matter how deep into the structure you look, it always looks exactly, dizzingly, the same."[37] More specifically, this means that there is only a quantitative, and not a qualitative, difference between "normal science" and "paradigm shifting," just as the mechanisms and form of a small trembler are the same as those of a major earthquake except for the degree of violence.

When geologists conduct seismic studies, they observe many small earthquakes and a few major earthquakes. This is not because of any fundamental difference between "normal" and "paradigm-shifting" seismic events. Rather, the same pattern holds even when distinguishing between tiny and merely small seismic events, or between large and gargantuan ones. Thus, in this model, paradigm shifts are just normal science "writ large."

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35. Post & Eisen, *supra* note 14, at 571–83.

36. I originally planned to tabulate which cases involved circuit conflicts and which involved some other basis for granting certiorari. I gave up on this idea fairly quickly, as it became clear that a large majority of cases involved circuit conflicts.

37. Post & Eisen, *supra* note 14, at 551; *see also id.* at 559, 569 (comparing the generation of legal argumentation with the "recursive process" of the physical and biological world).

II. THE EMPIRICAL STUDY

The empirical research was conducted in two phases. The first and somewhat more exploratory phase covered the U.S. Supreme Court's 1990 Term. Based on the findings in the first phase, the second phase was closer to the social science ideal, using hypotheses and tests determined in advance and employing a more rigorous and detailed method of data collection.

A. METHODOLOGY

Having first decided to undertake positive rather than normative research, I was then faced with the question of how to investigate dynamic interpretation empirically. An examination of the literature revealed that relatively little use had been made of the vast amount of data now available from electronic resources such as Westlaw and LexisNexis. Bryan Jones's work provided my initial inspiration, since it was not hard to put his work together with the legal literature on sticky norms and precedential cascades.[38] My initial working hypothesis was that citation frequencies would follow the random walk model, with modified normal distributions resembling Jones's findings, symmetrical and single-peaked but with some leptokurtosis.

The sample for this phase of the study consisted of cases from a single Supreme Court Term. To avoid the distorted comparison that would result from using cases from different years—an earlier case has had more time to accumulate citations than a later one—I focused on a single year. In choosing a particular year it was necessary to choose one early enough that cases had ample opportunity to accumulate citations to limit the effect of random variations in year-to-year citation rates for individual cases. On the other hand, a more recent year was necessary to reasonably represent the modern interpretative regime, rather than some earlier world such as the Warren Court. With these considerations in mind, I semirandomly chose the 1990 Term.

Cases decided in the 1990 Term are located in Volume 111 of the West Supreme Court Reporter. Volume 111 contains 231 cases. I excluded per curiam opinions (including summary reversals and remands) and cases falling within the Court's original jurisdiction, which left 117 appellate cases decided with full opinion. Because the dynamics of statutory interpreta-

38. *See* JONES, *supra* note 23.

tion is the focus of the study, I excluded any case that was partially constitutional or common law in nature, so that all cases in my study involved purely statutory interpretation.[39] I also eliminated cases that involved the interpretation of federal statutes but had begun in state court. An issue arising in state court might naturally garner additional citations in other state courts, which could lead to a bias because state decisions vastly outnumber federal decisions. This left me with sixty-five cases.[40]

I next set about finding how many times each case had been cited.[41] This process proved to be much easier than expected because West's KeyCite feature presents information about citations in different ways, such as whether the citation is by a court or a periodical, the citation date, which key number in the opinion is being cited, and whether the case is discussed, criticized, or merely cited without comment. KeyCite automatically generates citation counts in these various categories. As I began collecting the data, I noticed almost immediately that the numbers seemed to be quite scattered, with little apparent clustering around a central value. After gathering the total number of citations for all of the cases (including citations in other cases as well as secondary sources), I went back and obtained a separate count on citations in judicial opinions to investigate whether combining citations from different sources was affecting the results. The bulk of the noncase citations were from law reviews, but I did not tabulate them separately in this phase of the study.

Using QuattroPro, a simple spreadsheet program of the kind commonly packaged with word processing programs, I next set about analyzing the data, first finding averages, means, kurtosis, and skew figures. I then constructed frequency distributions and looked at various permutations such as log log and semi-log graphs. Finally, I experimented with fitting other curves to the data, such as exponential or Poisson

39. Note that I included cases involving interpretation of the federal procedural or evidentiary rules.

40. In most cases, the inclusion decision was easy to make, but there were a few tough calls. The most notable was *Coleman v. Thompson*, 501 U.S. 722 (1991), a habeas ruling which mentions the applicable federal statute but appears to be almost entirely based on a common law theory of equitable discretion. Because the statute seemed so incidental to the decision, I ultimately excluded it from the data set.

41. The search was conducted on February 2, 2002. The complete list of cases and citation counts can be found in appendix table A.

distributions, using regression analysis to test the goodness of fit.[42]

In looking at the figures on case versus total citations, I was surprised that some of the cases which were most familiar to me, such as *Johnson Controls*,[43] had very few citations in later opinions compared to the number of noncase (primarily law review) citations.[44] I then set about calculating the ratio of case to noncase citations. A regression of the number of case versus noncase citations for each opinion showed little correlation. Finally, I examined fifteen opinions more carefully. I took the ten opinions with the highest number of citations, and divided them into two groups (predominantly case versus predominantly noncase citations). For comparison purposes, I also read the five cases closest to the median number of total citations.

From this first phase, I got a sense of what data were available as well as some of the most readily usable methods for processing the data. I also formed some hypotheses about citation distributions. With this knowledge, I then set about the second phase of my research. This time, I was somewhat more systematic, using a random method to choose which Term to study, formalizing the coding to some extent, and formulating models in advance to be tested against the new data set.[45] Hav-

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42. For readers who are unfamiliar with regression analysis, Sage Publications, Inc. has published several helpful handbooks for social science students in its series "Quantitative Applications in the Social Sciences." *See, e.g.*, CHRISTOPHER H. ACHEN, INTERPRETING AND USING REGRESSION (Sage Univ. Papers, Quantitative Applications in the Soc. Sciences, Series No. 29, 1982); MICHAEL S. LEWIS-BECK, APPLIED REGRESSION: AN INTRODUCTION (Sage Univ. Papers, Quantitative Applications in the Soc. Sciences, Series No. 22, 1980); LARRY D. SCHROEDER ET AL., UNDERSTANDING REGRESSION ANALYSIS: AN INTRODUCTORY GUIDE (Sage Univ. Papers, Quantitative Applications in the Soc. Sciences, Series No. 57, 1986).

43. Int'l Union v. Johnson Controls, Inc., 499 U.S. 187 (1991) (holding that an employer could not exclude women of childbearing age from a job that involved potential risk of birth defects or miscarriage).

44. When I reran this query on August 25, 2004, I found 176 case cites, 803 law review cites, and 604 citations in other secondary sources.

45. I instructed my research assistant to choose a year between 1982 and 1995 at random (excluding 1990), which he did by drawing a slip of paper out of a hat. The chosen year was 1984. Following the standards above, he then classified the cases as either statutory or nonstatutory. There were approximately ten cases about which he was uncertain, so I made the decision. I later removed two cases he had classified as statutory but which seemed to me clearly constitutional in nature. He then collected a more detailed set of data, including separate counts for state and federal citations, law reviews, page lengths, and case descriptions. The searches were conducted on March 18, 21,

ing received this data, I again calculated means, medians, kurtosis and skews, set up frequency diagrams, and did log log regressions to test the third model. Thus, the second phase more or less tracked the first, except with a new data set, somewhat more care, and a greater degree of planning.

B. FINDINGS

The two Terms were rather unlike one another in some ways. The composition of the Court changed, with the departure of Justices Brennan, Burger, and Powell, and the addition of Justices Kennedy, Scalia, and Souter. There were more cases in 1984 than in 1990, which corresponds with the recent trend toward smaller Supreme Court caseloads.[46] Moreover, there was also a difference in judicial methodology between the two Terms: the Court was only one-third as likely to cite legislative history in 1990 as in 1984; the later Term was apparently more staunchly textualist than the earlier one.[47] Nevertheless, the citation patterns from the two Terms were strikingly similar.

1. The 1990 Term

The data for the 1990 Term are displayed in appendix table A. As can be seen from glancing at the data, there was a large range in terms of numbers of citations per case. Considering the total number of citations (including both case and noncase citations), the mean was 613, but the median was only 419. The standard deviation was 222, and both the leptokurtosis (3.08)[48] and the skew (1.84) were pronounced. On average, citations were evenly divided between case and noncase cites, with a mean of 276 noncase cites. The distribution for noncase cites was even more skewed, with a median of 160, a standard deviation of 322, and both high kurtosis (7.8) and skew (2.7). Figures 1 and 2 break out case and noncase citations, which is somewhat more enlightening.

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and 29, 2002. Eighty-six cases remained in the sample for the 1984 Term. A complete list of these cases can be found in appendix table B.

46. For statistics on the two Terms, see *The Supreme Court 1990 Term—Leading Cases*, 105 HARV. L. REV. 177, 419–26 (1991); *The Supreme Court 1984 Term—Leading Cases*, 99 HARV. L. REV. 120, 322–29 (1985).

47. See the table in Vermeule, *supra* note 10, at 189.

48. Recall that the formula used by this software makes zero the kurtosis of the normal curve.

Figure 1: Case Citations to Cases Decided in the 1990 Term

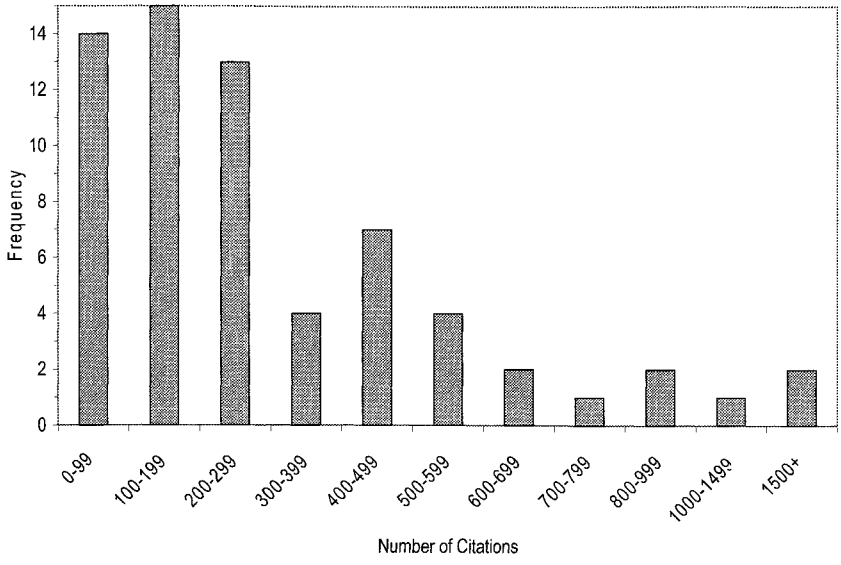


Figure 2: Noncase Citations to Cases Decided in the 1990 Term

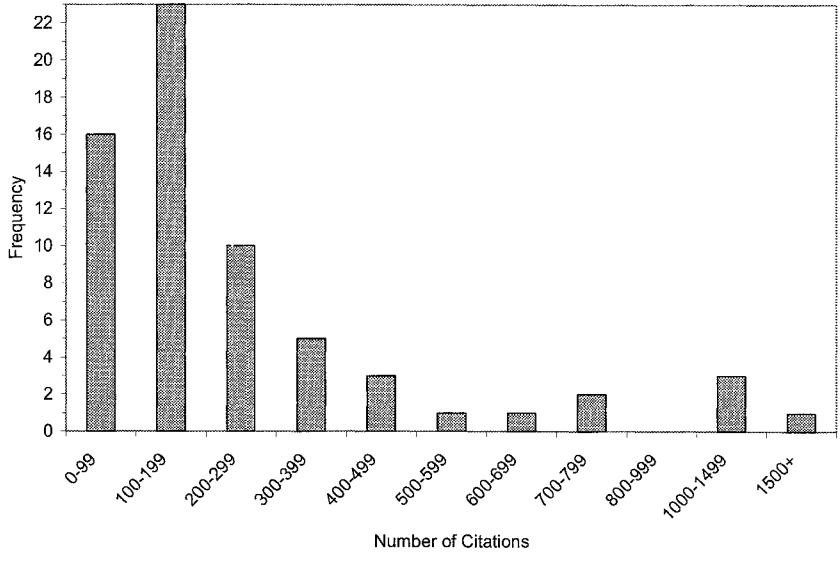


Figure 3: Log Log Plot of Noncase Citations to Cases Decided in the 1990 Term

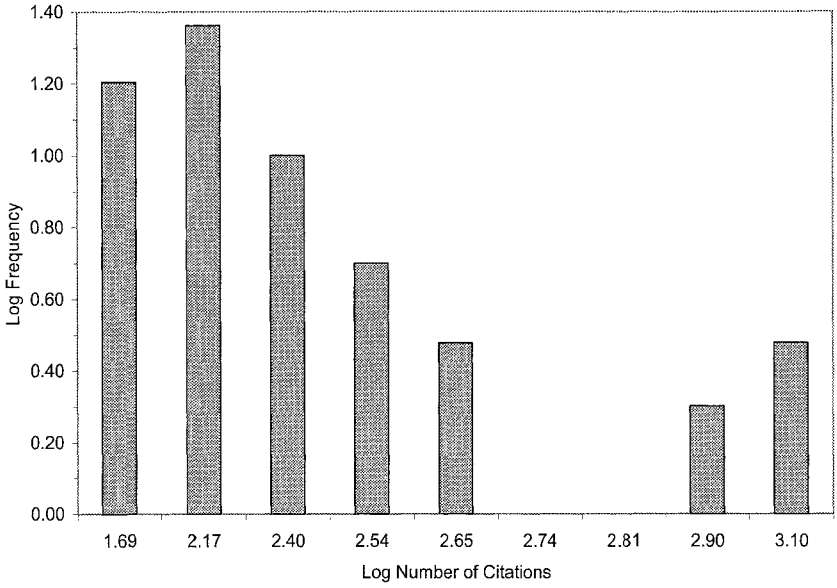
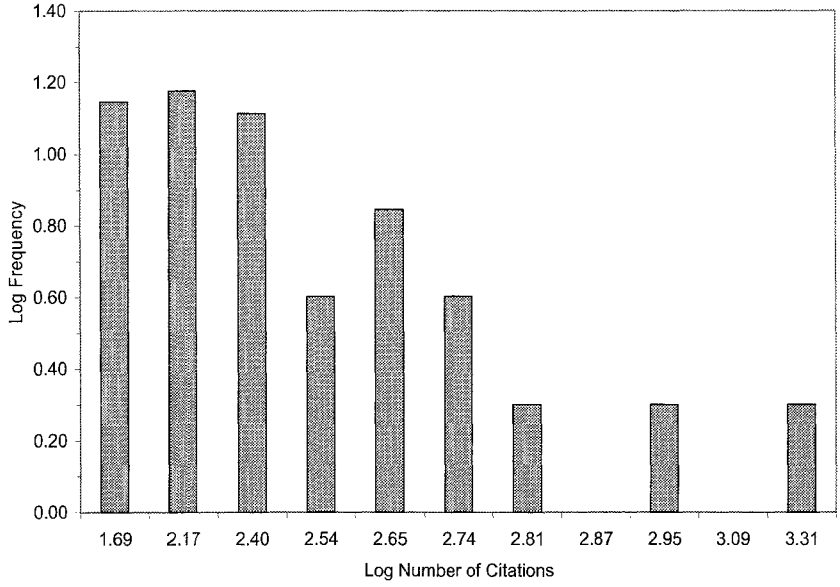


Figure 4: Log Log Plot of Case Citations to Cases Decided in the 1990 Term



Testing for a power law requires a log log plot.[49] The regression analysis indicates a close fit between the data and the models, with an R^2 of .83 for the noncase citations, and an almost identical R^2 for the regression with case citations. In both instances, the slope coefficient was about 1.2 and much larger than the estimate of standard error. As an inspection of the plots in figures 3 and 4 shows, the log log plots are much "better behaved" and closer to linear than in figures 1 and 2.

As mentioned earlier, the apparent divergences between case and noncase citations intrigued me, and the regression analyses confirmed my impressions. Although an increase in the number of case citations predicted a higher average number of noncase citations, almost none of the variance was explained ($R^2 = .07$).[50] When I divided the ten most cited cases into two groups, based on the proportion of judicial versus nonjudicial citations, the difference between the groups was striking. Of the five cases in this group that were most frequently cited by courts, all but one dealt with a procedural issue, and the exception dealt with Employee Retirement Income Security Act (ERISA) preemption.[51] The five cases most frequently cited in law reviews were much different.[52] All but one of the cases in-

49. More complete results for the regression analyses for the 1990 Term are in appendix table C. Using a single-tailed t-test, the coefficients are significant at $p < .01$. (A two-tailed test would not be appropriate because we know in advance that the coefficient is not positive; otherwise there would be far higher impact than lower impact cases, which seems unlikely.) For an explanation of the use of the t-statistic and a useful table, see SCHROEDER ET AL., *supra* note 42, at 46–49, 82–83.

50. Although weak, the positive relationship was genuine. The coefficient was significant at $p < .025$.

51. The five cases were FMC Corp. v. Holliday, 498 U.S. 52 (1990) (ERISA preemption); Irwin v. Dep't of Veterans Affairs, 498 U.S. 89 (1990) (involving the statute of limitations in a Title VII case against the federal government); Grogan v. Garner, 498 U.S. 279 (1991) (addressing the burden of proof in certain bankruptcy procedures; also the most highly cited statutory case of the 1990 Term); McCleskey v. Zant, 499 U.S. 467 (1991) (evaluating habeas procedure); Carnival Cruise Lines, Inc. v. Shute, 499 U.S. 585 (1991) (analyzing whether a forum selection clause violated a maritime statute).

52. The five cases were EEOC v. Arabian Am. Oil Co., 499 U.S. 244 (1991) (examining the application of Title VII on foreign soil); Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991) (applying statutory and constitutional requirements of originality in copyright case); Gilmer v. Interstate/Johnson Lane Corp., 500 U.S. 20 (1991) (evaluating the enforceability of an agreement to arbitrate a discrimination claim); Rust v. Sullivan, 500 U.S. 173 (1991) (dealing with an abortion counseling restriction); Gregory v. Ashcroft, 501 U.S. 452 (1991) (examining state sovereignty for interpretation of civil rights law).

volved discrimination law. The fifth case involved the statutory and constitutional requirement of originality in copyright law, an issue with strong implications for free speech. In short, the courts seemed most keenly interested in procedure, while the commentators were drawn to cases with quasi-constitutional overtones.

2. The 1984 Term

The shapes of the distributions in the more careful 1984 study were similar. For the total citations, the mean was 741, while the median was only 528. The standard deviation was quite large (712), and both the skew (1.8) and the leptokurtosis (2.9 on a scale with 0 for the normal curve) were pronounced. Figure 5 shows the distribution of citations in all judicial opinions. As figure 6 illustrates, the log log plot is once again much better behaved.

Figure 5: Judicial Citations to Cases Decided in the 1984 Term

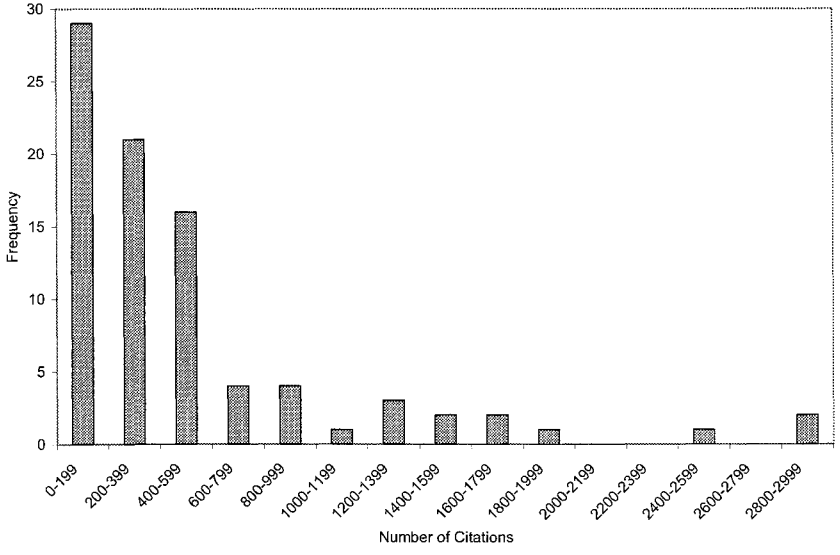
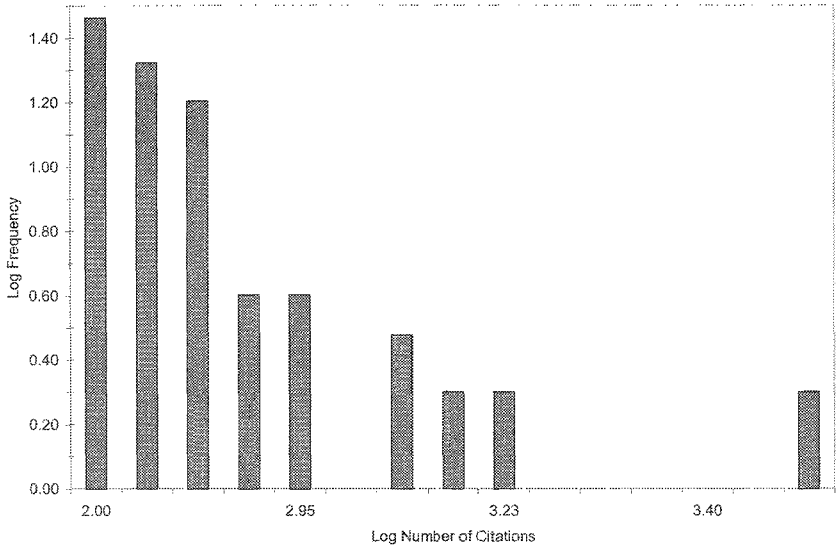


Figure 6: Log Log Plot of Judicial Citations to Cases Decided in the 1984 Term



More focused counts were also tabulated for the 1984 data, one of which tracked citations by federal appellate courts. Here, the mean was lower (153), but we have the familiar story in terms of kurtosis (11 in this instance) and skew (2.9). Again, the plots tell the tale. As figures 7 and 8 show, the ordinary plot for federal appellate citations is highly skewed and curved, while the log log plot approaches linear.[53] The regression results confirm this impression. The R^2 on the log log plot was .87, with a coefficient of -1.8 (significant at $p < .01$). Rather than relying on a "noncase" count as in the 1990 analysis, the analysis of the 1984 Term included a specific breakdown for citations in law reviews. Figures 9 and 10 show the relevant distributions. As figure 10 indicates, the log log regression again comes out quite well, with an R^2 of .83 and a coefficient of -1.6 (significant at $p < .01$).

53. Complete results from the regression analyses for the 1984 Term can be found in appendix table D.

Figure 7: Federal Appellate Court Citations to Cases Decided in the 1984 Term

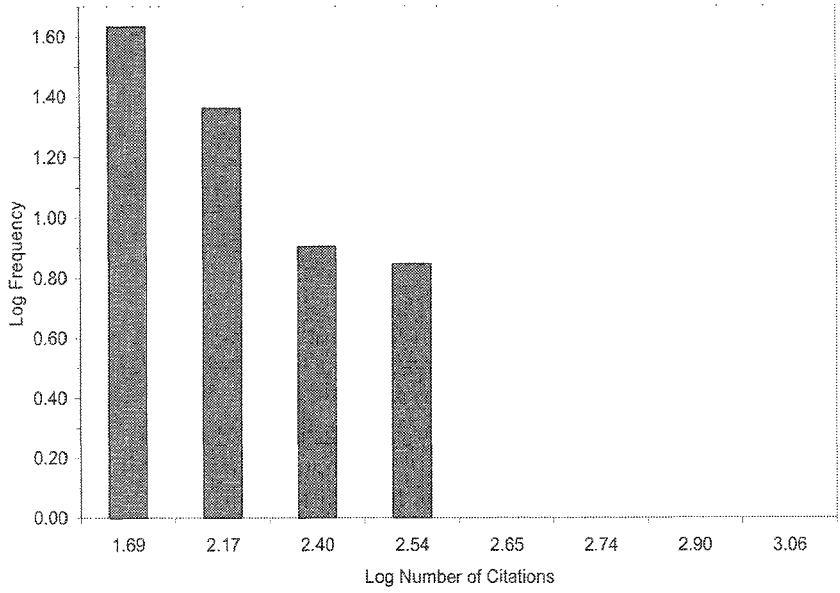


Figure 8: Log Log Plot of Federal Appellate Court Citations to Cases Decided in the 1984 Term

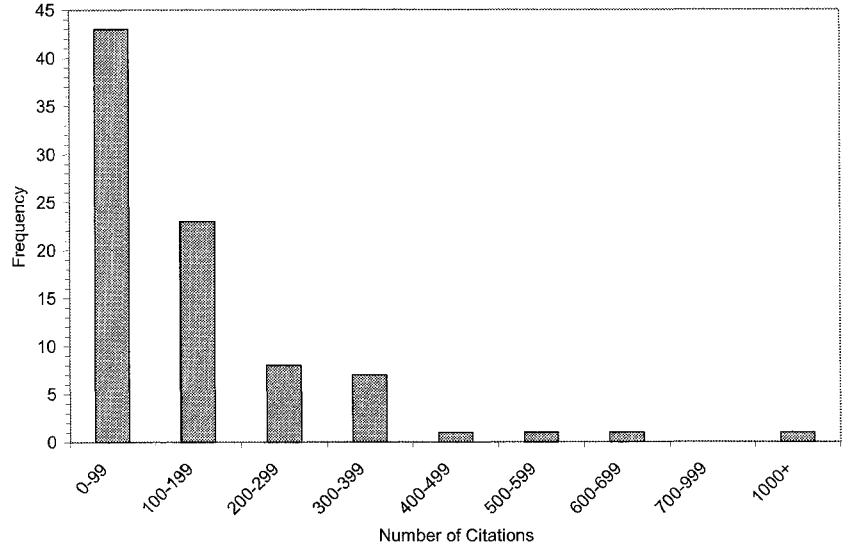


Figure 9: Law Review Citations to Cases Decided in the 1984 Term

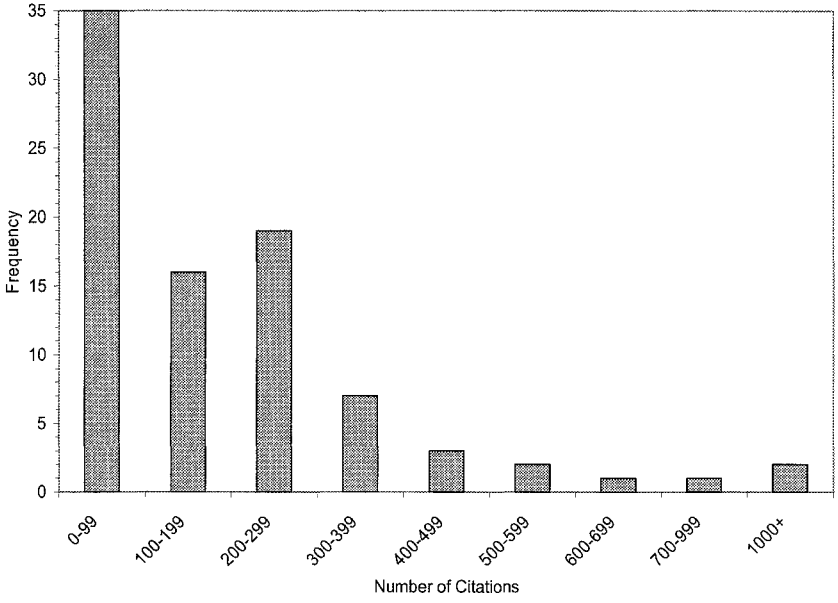
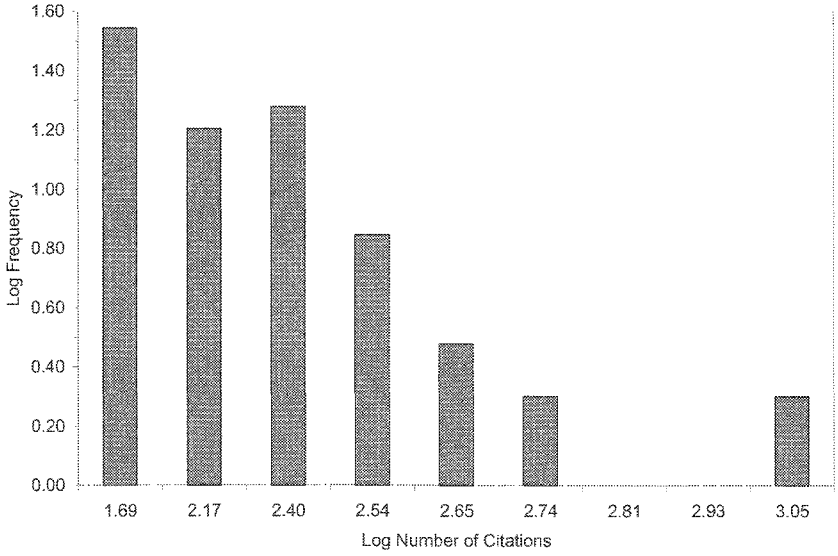


Figure 10: Log Log Plot of Law Review Citations to Cases Decided in the 1984 Term



As a check on the relationship between different forms of citation, I also ran a regression of federal court citations versus law review citations. The regression confirmed that the features of opinions that interest federal judges overlap only slightly with those that interest academics. The R^2 for the model was only .07, meaning that virtually none of the variance was explained. The coefficient was positive and significant ($p < .05$), suggesting that some small overlap of interests exists but that it is dwarfed by the other divergences.

Once again, an examination of the five most cited cases in each category was revealing. Of the five cases with the highest number of judicial cites, three dealt with procedural issues, one involved ERISA, and one involved an erroneous jury instruction regarding municipal liability under the Civil Rights Act of 1861.[54] Consistent with the 1990 Term, the list of cases most cited in law reviews was quite different. It contained a leading copyright case, a disability discrimination case, a case on arbitration of statutory claims, and a quasi-constitutional case on state sovereign immunity.[55] The fifth case dealt with an important issue in administrative law regarding judicial review of nonenforcement decisions by administrative agencies.[56] As in the 1990 Term, the only case on both lists from the 1984 Term dealt with arbitration of statutory claims.

III. IMPLICATIONS

What, if anything, does this all mean? Given the fact that only two Supreme Court Terms were studied and that the methodology was fairly crude, any conclusions have to be somewhat tentative. Nevertheless, in my view, the data provide

54. The five cases were United States v. Young, 470 U.S. 1 (1985) (applying the plain error rule); Metropolitan Life Ins. Co. v. Massachusetts, 471 U.S. 724 (1985) (involving ERISA preemption of a state statute; this case also came very close to the top five list for law reviews); City of Oklahoma City v. Tuttle, 471 U.S. 808 (1985) (questioning municipal liability for inadequate police training); Kentucky v. Graham, 473 U.S. 159 (1985) (determining appropriateness of attorney's fees); Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614 (1985) (holding that antitrust claims may be arbitrated; this is the only case on both lists).

55. In addition to *Mitsubishi*, the other cases were Alexander v. Choate, 469 U.S. 287 (1985) (involving a claim of discrimination based on disability); Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985) (concerning a copyright infringement claim); and Atascadero State Hosp. v. Scanlon, 473 U.S. 234 (1985) (evaluating a state's sovereign immunity in a Rehabilitation Act claim).

56. Heckler v. Chaney, 470 U.S. 821 (1985).

reasonable support for two conclusions. The first relates to the dynamics of statutory interpretation. Taken as a whole, the data seem most consistent with the tectonic model.[57] The second and somewhat firmer conclusion is that the idea of a typical statutory interpretation opinion is quite problematic. In particular, the opinions that are likely to come to a law professor's mind as typical are likely to be quite different from those that a judge or litigator would find typical. After discussing these conclusions, I close with a brief discussion of possible directions for further research.

A. TOWARD A THEORY OF TECTONIC STATUTORY INTERPRETATION

Earlier in this Article, I sketched three models of the dynamics of statutory interpretation. The first of these models, the random walk model, seems clearly inconsistent with the data. The random walk model implies a normal distribution of citation frequencies. The data for both years and for all categories of citations were not at all normally distributed, as can be seen visually from inspecting the various figures and statistically from the high skew and kurtosis numbers.

The second model, the bounded rationality model, cannot be rejected quite as confidently. This model predicts leptokurtosis, and while the data indeed display leptokurtosis, there can be too much of a good thing. The "boundedness" part of the model predicts leptokurtosis, but the "rationality" part of the model suggests that deviations from the normal distribution will not be too severe. Previous empirical support for this model has involved distribution much less skewed than found here.[58] On balance, despite my initial support for this model, the data do not support it.

This leaves the third model, the tectonic model, which performed very well and provided the best fit to the data. First, the high R^2 for each of the log log regressions shows that the model explains much of the variance in citation frequencies. Second, the coefficients for both years and for different categories of citations are strikingly similar, ranging between minus one and

57. Since only two other models were tested, however, it remains possible that some other model would be superior.

58. This becomes clear from comparing the charts presented by JONES, *supra* note 23, at 173, 175 and 178 with those presented in this Article. The charts presented by Jones are much closer to the "bell-shaped" idea of the normal distribution, although still significantly distorted.

minus two. (Basically, in each case, the number of cases N with a given number of citations per case C is given by a formula roughly of the form, $N = kC^{-1.5}$, where k is a constant that varies for each set of citations.) Indeed, Post and Eisen obtained similar coefficients for the data from the New York Court of Appeals and for their combined data set from the Seventh Circuit.[59] This suggests that the good fits are not merely happenstance, but instead reflect some underlying structural similarity between the various sets of data.

Because such a broad range of phenomena is subject to power laws of this kind, the existence of this law does not tell us much about the underlying mechanism. That mechanism might or might not take the form of the branching pattern discussed by Post and Eisen.[60] What we do know from the existence of such a power law, however, is that whatever mechanism exists covers a wide range of scales. In other words, the same basic mechanism should generate both tremors (opinions which add little to the law and gather only a few cites) and earthquakes (opinions which greatly shift the law and gather a high number of cites).

The seismic analogy would support more serious consideration of the idea that opinions are generated by stresses and fractures in the law, which are resolved in large or small ways by shifts on one side of the fault line or the other. These shifts, in turn, may generate stresses elsewhere, resulting in later seismic events involving related legal issues. It is common to speak of "shifts in the legal landscape." The tectonic model suggests that this analogy may be more exact, and that these shifts may actually resemble earthquakes in some quantitative way.

B. THE ELUSIVE "TYPICAL" OPINION

As we saw earlier, there is a tremendous spread among citation counts. Some Supreme Court opinions have been cited only a few dozen times; others have been cited one or two thousand times. The median opinion may have ten times as many cites as one kind but only a fifth as many as the other. In sum, the most typical attribute of any opinion, apparently, is to be atypical.

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59. Post & Eisen, *supra* note 14, at 572–73, 583.
60. *Id.* at 552–58.

Singling out particular opinions for study requires careful thinking about what to look for in an opinion. Taking the median opinion is probably the best we can do in terms of identifying what cases are representative of the whole set of statutory interpretation opinions. However, if we are interested in how major new law is made, rather than in seeing how the Court handles fairly routine cases, these median cases may give a misleading impression. New law is disproportionately made by a dozen or so cases at the high end of the statistical distribution, and a study of median or run-of-the-mill cases will exclude these blockbusters. Thus, if we are interested in the Court's methodology, the median cases may be more revealing; if we are interested in how statutory interpretation shifts, however, we might be more interested in the outliers.

Determining what cases to study is further complicated because case impact is not unitary. Probably the clearest finding of this study is that there are two almost completely independent dimensions of case impact. The characteristics that lead to citations by courts seem to be quite different from those that lead to citations by legal academics. Perhaps this should not be a surprise. We already know that courts and academics differ greatly in which secondary sources (such as law review articles) they cite.[61] It is, nonetheless, striking to see just how little correlation there is between judicial and academic citations of Supreme Court cases.

One might view this finding as simply another confirmation of the well-known (and apparently widening) chasm between the legal academy and the profession, but it would probably be a mistake to view the split as merely reflecting an "ivory tower" temperament among professors. The cases cited most heavily in law reviews involve issues of genuine social importance, even if they are not issues that give rise to extensive litigation. In the 1990 Term, the case most heavily cited by courts involved the burden of proof in certain bankruptcy proceedings. This issue is apparently important to bankruptcy judges and practitioners, as well as to a large numbers of people who are either bankruptcy petitioners or their creditors. But, in some sense, it does not have the same fundamental social significance as the discrimination cases that had the lion's

61. *See generally* Deborah Merritt & Melanie Putnam, *Judges and Scholars: Do Courts and Scholarly Journals Cite the Same Law Review Articles?*, 71 CHI.-KENT L. REV. 871 (1996) (comparing law review articles most frequently cited by judges to those most frequently cited by academics).

share of the attention in the law reviews. We should resist the temptation to dismiss the judicial citation figures as merely indicating the limited intellectual perspective of the profession or the law review citation figures as merely indicating distance from the real world of legal practice. Instead, we should view them as reflecting independent but equally significant dimensions of legal impact.

Academics who write about statutory interpretation probably need to be particularly careful because their ideas of typicality are likely to reflect one of these dimensions much more than the other. Thus, in selecting individual cases for analysis, it is important to consider opinions that have a dramatic impact on litigation and practice, as well as those that relate to important social issues. A useful convention might be to routinely report both judicial and law review citation figures whenever discussing a specific statutory interpretation opinion, or at least the ratio between the two figures.

C. DIRECTIONS FOR FUTURE RESEARCH

It is often much easier to generate new ideas for empirical research than to actually carry them out. With that caveat in mind, here are three ideas for extending the line of research presented in this Article.

The first idea is simply to solidify the methodology used in this paper. The methods could be made more rigorous by developing a more formal procedure for coding cases as statutory or nonstatutory. Moreover, it would be possible, though time consuming, to use KeyCite to distinguish between citations to the statutory and nonstatutory holdings of the same opinion. Also, two years of Supreme Court opinions are not really enough. Examining a greater number of years would provide greater confidence in the results. Perhaps more importantly, it should be possible to test some alternative models against the tectonic model, which again would provide a greater level of confidence about the conclusions. And, of course, the level of statistical sophistication could well be increased.

The second idea is to expand the analysis to include various characteristics of each opinion. Using multivariate regression, for example, it would be useful to know whether a particular Justice's work has greater impact on lower courts or on academics. It would also be useful to categorize the cases (for example, as procedural or substantive). Perhaps most intriguing, the citation impact analysis could be combined with previ-

ous work on the sources of authority in judicial opinions. Holding other variables constant, it would certainly be interesting to know whether textualist opinions tend to have greater or lesser impact than opinions relying on legislative history.

Third, longitudinal extensions of the study would shed more light on the mechanisms involved in citation impact. Cases may differ from each other primarily in their amount of immediate impact or in their staying power. Moreover, by examining cases which actually discuss rather than merely cite the opinion (another useful feature of KeyCite), one could probably get a better grip on the extent to which cases are cited because the holdings raise new issues as opposed to settling old ones. It would also be interesting to connect the citation information with the age of the statutory provision. Dynamic interpretation, in the sense of updating old statutes, might show up fairly clearly in the form of high impact opinions involving old statutes. It would certainly be useful to get some sense of how common such opinions really are and when they arise. It would also be useful to determine whether these cases arose because changing social or economic conditions have produced new types of litigation; because changing social values made old rules seem inappropriate; or because of changes elsewhere in the legal landscape.

In addition to these possible directions for formal empirical research, this Article also has some implications for the kinds of informal case studies that are more common among law professors. As we have seen, the idea of typicality seems to be quite problematic in this area, and legal scholars need to be sensitive to the issue of case selection. Scholars also probably need to make a special effort to include cases with high levels of judicial citations, even if those opinions are not on issues that legal academics consider "sexy."

CONCLUSION

The central findings of this study can be simply stated. The data are sharply at odds with the first model tested, that of a bell-shaped curve. The citation frequencies deviate greatly from the normal distribution. The data reflect leptokurtosis, the statistical attribute associated with the second model, that of bounded rationality. (This is also a model in which decisions mostly fall into two separate classes: small incremental changes and major ruptures of existing law.) Unlike the leading studies of bounded rationality, however, the data showed more

extreme deviations from normality, suggesting that something more than sticky norms or bounded rationality may be involved. The third model (tectonic statutory interpretation) provides a good fit for the data. Thus, although this study falls far short of "proving" the validity of the tectonic model, it seems to be the best working hypothesis.[62]

The tectonic model serves as an important addition to existing visions of statutory interpretation. Viewing appellate opinions as seismic events—large or small legal shifts that resolve stresses between conflicting legal forces while sometimes creating new stresses—may prove to be a fruitful perspective. If nothing else, it is a good reminder to expect the unexpected. If this model is correct, every now and then, just as with earthquakes, we can expect to run into legal shifts of extraordinary magnitude, far out of line with past year-to-year experience. The model suggests that these megacases are extraordinary in their impact, but not in the mechanisms that produce them. Much of legal scholarship is in essence a search for fruitful metaphors. The earthquake metaphor may turn out to be not only striking but quantitatively valid.

Another implication of this study is that we should be very cautious about the concept of the "typical" statutory interpretation case. The idea of a "typical" interpretation case is problematic in three ways. First, the diversity of Supreme Court rulings is surprisingly great. At the extremes, one case in the 1984 Term[63] had been cited only once by a later federal appeals court as of 2002, while another case[64] garnered over eleven hundred federal appellate citations during the same period. Second, opinions seem to have two, largely unrelated, types of significance. The amount of attention an opinion receives from lower federal courts has almost no correlation with the attention it receives in law reviews; an academic's impression of the "typical" opinion likely differs from that of a judge or lawyer. Third, averages are relatively meaningless because the distributions have such long right tails. Thus, at least if typicality is judged by citation impact, speaking of the "typical" interpretation case is somewhat like speaking of the "typical" nation-state, given

62. See *supra* Part III.A for further discussion.

63. First Nat'l Bank of Atlanta v. Bartow County Bd. of Tax Assessors, 470 U.S. 583 (1985) (upholding Georgia tax on bank shares as consistent with 31 U.S.C. § 3124 (a)).

64. United States v. Young, 470 U.S. 1 (1985) (applying the plain error rule).

the huge variations among nations on various different dimensions such as per capita income and population.[65]

Regardless of the ultimate validity of the conclusions reached in this study, citation impact figures are a valuable and largely untapped source of information about the dynamics of statutory interpretation, which cry out for further investigation. They could also help identify which individual cases are worth in-depth study. Legal scholars notoriously focus on normative matters—typically, what the courts should be doing in some area of the law. Important as those questions are, there is also much to be learned about how the judicial system actually operates.

The results reported in this Article are limited to a particular type of case in a particular Supreme Court Term, and no doubt much could be done to increase the methodological sophistication of the study. One might say that we are now in the position of casual explorers who have found paintings in the mouth of a cave. The real treasures are probably farther inside the cave, and with luck they will receive the attention of professional investigators. Even these tentative, preliminary results, however, provide tantalizing hints of future discoveries.

65. See *supra* Part III.B for a discussion of the typicality question.

APPENDIX TABLE A: STATUTORY INTERPRETATION CASES IN THE 1990 TERM

Citation	Case	Statute/Subject	Total Citations	Case Citations	Noncase Citations
498 U.S. 19	Miles v. Apex Marine Corp.	Jones Act (46 U.S.C. App. § 688)	723	448	275
498 U.S. 52	FMC Corp. v. Holliday	Employee Retirement Income Security Act of 1974 (29 U.S.C. § 1001)	1068	762	306
498 U.S. 73	Arcadia v. Ohio Power Co.	Federal Power Act (16 U.S.C. § 825q)	119	29	90
498 U.S. 89	Irwin v. Department of Veterans Affairs	Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e-16(c))	1447	1243	204
498 U.S. 103	Moskal v. United States	Criminal (18 U.S.C. § 2314)	360	224	136
498 U.S. 184	Demarest v. Manspeaker	Witness Fees (28 U.S.C. § 1821)	276	165	111
498 U.S. 192	Cheek v. United States	I.R.C. §§ 7201, 7203	840	468	372
498 U.S. 211	Mobil Oil Exploration v. United Distribution Cos.	Natural Gas Policy Act of 1978 (15 U.S.C. § 3301)	98	32	66
498 U.S. 269	FirsTier Mortgage Co. v. Investors Mortgage Insurance Co.	FED. R. APP. P. 4(a)(2)	142	104	38
498 U.S. 279	Grogan v. Garner	Bankruptcy (11 U.S.C. § 523(a))	2548	2392	156
498 U.S. 292	United States v. R. Enterprises, Inc.	FED. R. CRIM. P. 17(c)	244	105	139
498 U.S. 337	McDermott International, Inc. v. Wilander	Jones Act (46 U.S.C. App. § 688)	451	291	160
498 U.S. 395	Gozlon-Peretz v. United States	Anti-Drug Abuse Act of 1986 (21 U.S.C. § 841(b)(1)(A))	321	262	59
498 U.S. 439	Dennis v. Higgins	Civil Rights Act (42 U.S.C. § 1983)	348	157	191
498 U.S. 466	International Organization of Masters v. Brown	Labor-Management Reporting and Disclosure Act of 1959 § 401(c) (29 U.S.C. § 481(c))	39	16	23
498 U.S. 479	McNary v. Haitian Refugee Center, Inc.	Immigration Reform and Control Act of 1986 (8 U.S.C. § 1160(e))	359	222	137
498 U.S. 517	Air Courier Conference v. American Postal Workers Union	Private Express Statutes (18 U.S.C. §§ 1693–1699; 39 U.S.C. §§ 601–606)	201	87	114

498 U.S. 533	Business Guides, Inc. v. Chromatic Communications Enterprises, Inc.	FED. R. CIV. P. 11	632	401	231
499 U.S. 65	Air Line Pilots Ass'n, International v. O'Neill	Unions' Duty of Fair Representation	600	444	156
499 U.S. 83	West Virginia University Hospitals, Inc. v. Casey	Civil Rights Attorney's Fees Award Act of 1976 (42 U.S.C. § 1988)	935	471	464
499 U.S. 117	Norfolk & Western Railway Co. v. American Train Dispatchers' Ass'n	Interstate Commerce Act (49 U.S.C. § 11341(a))	254	161	93
499 U.S. 144	Martin v. OSHRC	Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*)	484	299	185
499 U.S. 160	United States v. Smith	Federal Employees Liability Reform and Tort Compensation Act of 1988 (28 U.S.C. § 2679(b)(i)); Federal Tort Claims Act (28 U.S.C. § 2680(k))	238	157	81
499 U.S. 187	International Union, UAW v. Johnson Controls, Inc.	Pregnancy Discrimination Act (42 U.S.C. § 2000e(k)); Title VII of the Civil Rights Act (42 U.S.C. § 2000e-2(e)(1))	924	152	772
499 U.S. 244	EEOC v. Arabian American Oil Co.	Title VII of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000e to 2000e-17)	1038	243	795
499 U.S. 315	United States v. Gaubert	Home Owners' Loan Act of 1933 (12 U.S.C. §§ 1461–1470)	790	614	176
499 U.S. 340	Feist Publication, Inc. v. Rural Television Service Co.	Copyright Act of 1976 (17 U.S.C. §§ 102(a)–102(b))	2327	605	1722
499 U.S. 365	City of Columbia v. Omni Outdoor Advertising, Inc.	Sherman Act (15 U.S.C. §§ 1, 2)	588	343	245
499 U.S. 432	Kay v. Ehrler	Civil Rights Attorney's Fees Award Act of 1976 (42 U.S.C. § 1988)	291	168	123
499 U.S. 467	McCleskey v. Zant	Abuse of the Writ of Habeas Corpus (28 U.S.C. § 2244(b))	2139	1673	466
499 U.S. 530	Eastern Airlines, Inc. v. Floyd	Warsaw Convention Article 17 (49 U.S.C. App. § 1502)	280	131	149
499 U.S. 554	Cottage Savings Ass'n v. Commissioner	I.R.C. § 1001(a)	358	57	301

499 U.S. 573	United States v. Centennial Savings Bank FSB	I.R.C. § 108(a)(1)(C)	194	50	144
499 U.S. 585	Carnival Cruise Lines, Inc. v. Shute	Forum Selection Clause (46 U.S.C. App. § 183c)	1072	548	524
499 U.S. 606	American Hospital Ass'n v. NLRB	Nation Labor Relations Act (29 U.S.C. § 159(b))	196	55	141
500 U.S. 1	Stevens v. Department of the Treasury	Age Discrimination in Employment Act of 1967 (29 U.S.C. § 633a(d))	119	62	57
500 U.S. 20	Gilmer v. Interstate/Johnson Lane Corp.	Age Discrimination in Employment Act of 1967 (29 U.S.C. § 621 *et seq.*)	2223	835	1388
500 U.S. 72	International Primate Protection League v. Administrators of Tulane Educational Fund	Removal Jurisdiction (28 U.S.C. § 1442(a)(1))	236	128	108
500 U.S. 90	Kamen v. Kemper Financial Services, Inc.	Investment Company Act of 1940 (15 U.S.C. § 80a-20(a))	486	235	251
500 U.S. 136	McCarthy v. Bronson	Confinement Conditions (28 U.S.C. § 636(b)(1)(B))	170	123	47
500 U.S. 173	Rust v. Sullivan	Public Health Service Act (42 U.S.C. §§ 300 to 300a-6)	1565	427	1138
500 U.S. 257	McCormick v. United States	Hobbs Act (18 U.S.C. § 1951)	166	75	91
500 U.S. 291	Farrey v. Sanderfoot	Bankruptcy (11 U.S.C. § 522(f)(1))	410	186	224
500 U.S. 305	Owen v. Owen	Bankruptcy (11 U.S.C. § 522(b))	415	235	180
500 U.S. 322	Summit Health, Ltd. v. Pinhas	Sherman Act (15 U.S.C. § 1)	323	128	195
500 U.S. 344	Braxton v. United States	United States Sentencing Guidelines § 1B1.2(a)	150	92	58
500 U.S. 453	Chapman v. United States	Criminal Sentencing (21 U.S.C. § 841(b)(1)(B)(v))	763	548	215
500 U.S. 478	Burns v. Reed	Civil Rights Act (42 U.S.C. § 1983)	723	504	219
500 U.S. 603	Exxon Corp. v. Central Gulf Lines, Inc.	Federal Maritime Lien Act (46 U.S.C. § 971)	117	57	60
500 U.S. 646	Clark v. Roemer	Voting Rights Act of 1965 (42 U.S.C. § 1973c)	109	54	55
501 U.S. 78	Johnson v. Home State Bank	Bankruptcy (11 U.S.C. § 101(5))	569	338	231
501 U.S. 89	Melkonyan v. Sullivan	Equal Access to Justice Act (28 U.S.C. § 2412(d)(1)(B))	534	479	55

501 U.S. 104	Astoria Federal Savings & Loan Ass'n v. Solimino	Age Discrimination in Employment Act of 1967 (29 U.S.C. §§ 626(d)(2), 633(b))	419	255	164
501 U.S. 115	Gollust v. Mendell	Securities and Exchange Act of 1934 § 16(b) (15 U.S.C. § 78p(b))	190	91	99
501 U.S. 129	Burns v. United States	FED. R. CRIM. P. 32(a)(1)	454	330	124
501 U.S. 157	Toibb v. Radloff	Bankruptcy (11 U.S.C. § 109(d))	507	232	275
501 U.S. 190	Litton Financial Printing Divisions v. NLRB	National Labor Relations Act (29 U.S.C. § 158(a)(1), (5))	364	232	132
501 U.S. 350	Lampf, Pleva, Lipkind, Prupis & Petigrow v. Gilbertson	Securities and Exchange Act of 1934 § 10(b) (15 U.S.C. § 78j(b)); SEC Rule 10b-5 (CFR § 240.10b-5)	1584	894	690
501 U.S. 380	Chisom v. Roemer	Voting Rights Act of 1965 (42 U.S.C. § 1973)	491	141	350
501 U.S. 419	Houston Lawyers' Ass'n v. Attorney General of Texas	Voting Rights Act of 1965 (42 U.S.C. § 1973)	149	47	102
501 U.S. 452	Gregory v. Ashcroft	Age Discrimination in Employment Act of 1967 (29 U.S.C. §§ 621–634)	1492	395	1097
501 U.S. 597	Wisconsin Public Intervenor v. Mortier	Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. §§ 136v, 136(aa))	658	286	372
501 U.S. 680	Pauley v. Bethenergy Mines, Inc.	Federal Coal Mine Health and Safety Act of 1969 (30 U.S.C. § 902(f))	316	185	131
501 U.S. 797	Ylst v. Nunnemaker	Habeas Exhaustion Requirement	581	529	52
501 U.S. 1083	Virginia Bankshares, Inc. v. Sandberg	Securities and Exchange Act of 1934 § 14(a) (15 U.S.C. § 78n(a))	668	244	424
Totals			39,875	21,946	17,929

APPENDIX TABLE B: STATUTORY INTERPRETATION CASES IN THE 1984 TERM

Citation	Case	Statute/Subject	Total Citations	Federal Appellate Citations	Law Review Citations
469 U.S. 38	Luce v. United States	F. R. EVID. 609(a)	805	179	117
469 U.S. 45	United States v. Abel	F. R. EVID. 403 & 608(b)	646	124	182
469 U.S. 57	United States v Powell	Criminal (21 U.S.C. § 843(b))	860	385	52
469 U.S. 70	Garcia v. United States	Criminal (18 U.S.C. § 2114)	515	148	163
469 U.S. 111	Trans World Airlines, Inc. v. Thurston	Age Discrimination in Employment Act of 1967 § 2(a) (29 U.S.C. § 623(f)(2))	1707	377	357
469 U.S. 131	Paulsen v. Commissioner	I.R.C. §§ 354(a)(1), 368(a)(1)(A)	200	5	34
469 U.S. 153	Mills Music, Inc. v. Snyder	Copyright (17 U.S.C. § 304(c))	174	20	77
469 U.S. 189	Park N'Fly, Inc. v. Dollar Park and Fly, Inc.	Trademark Act of 1946 (Lanhan Act) (15 U.S.C. §§ 1065, 1115(b))	814	142	270
469 U.S. 241	United States v. Boyle	I.R.C. § 6651(a)(1)	976	640	115
469 U.S. 256	Lawrence County v. Lead-Deadwood School District No. 40-1	Payment in Lieu of Taxes Act (31 U.S.C. § 6902(a))	141	22	66
469 U.S. 274	Ohio v. Kovacs	Bankruptcy (11 U.S.C. § 101(4)(b))	707	51	252
469 U.S. 287	Alexander v. Choate	Rehabilitation Act of 1973 (29 U.S.C. § 794)	1153	148	585
469 U.S. 310	Tiffany Fine Arts v. United States	I.R.C. §§ 7602, 7609	147	21	22
469 U.S. 464	Brandon v. Holt	Civil Rights Act (42 U.S.C. § 1983)	840	153	77
469 U.S. 490	NLRB v. Action Automotive, Inc.	National Labor Relations Act (29 U.S.C. §§ 158–159)	125	30	28
470 U.S. 1	United States v. Young	FED. R. CRIM. P. 52(b)	2021	1143	150
470 U.S. 39	United States v. Dann	Indian Claims Commission Act (25 U.S.C. § 70u(a))	68	14	32
470 U.S. 116	Chemical Manufacturers Ass'n v. Natural Resources Defense Council	Clean Water Act § 301(*l*) (33 U.S.C. § 1311(*l*)	488	134	197
470 U.S. 166	NAACP v. Hampton County Election Commission	Voting Rights Act of 1965 § 5 (42 U.S.C. § 1073c)	101	5	32

470 U.S. 184	Heckler v. Turner	Social Security Act (42 U.S.C. § 602(a))	143	46	24
470 U.S. 213	Dean Witter Reynolds Inc. v. Byrd	Federal Arbitration Act (9 U.S.C. §§ 1–14)	1780	219	461
470 U.S. 226	County of Oneida v. Oneida Indian Nation	Trade & Intercourse Act of 1790 (1 Stat. 329)	562	92	298
470 U.S. 373	Marrese v. American Academy of Orthopaedic Surgeons	Procedural Issues (15 U.S.C. § 1; 28 U.S.C. §§ 1292(b), 1738)	1059	263	191
470 U.S. 392	Air France v. Saks	Warsaw Convention Article 17 (49 U.S.C. App. § 1502)	435	43	213
470 U.S. 414	Herb's Welding, Inc. v. Gray	Longshoremen's and Harbor Worker's Compensation Act (33 U.S.C. §§ 902–903)	185	50	59
470 U.S. 451	National Railroad Passenger Corp. v. Atchison, Topeka & Santa Fe Railway Co.	Rail Passenger Service Act of 1970 (45 U.S.C. §§ 541, 561, 565)	232	49	59
470 U.S. 480	FEC v. National Conservative Political Action Committee	Presidential Election Campaign Fund Act (26 U.S.C. §§ 9901–9012); Federal Election Campaign Act of 1971 (2 U.S.C. § 437c(b)(1))	496	40	325
470 U.S. 583	First National Bank v. Bartow County Board of Tax Assessors	Tax (31 U.S.C. § 742)	55	1	7
470 U.S. 632	Bennett v. New Jersey	Elementary and Secondary Education Act (20 U.S.C. § 241)	242	59	47
470 U.S. 656	Bennett v. Kentucky Department of Education	Elementary and Secondary Education Act (20 U.S.C. §§ 241, 1234)	77	32	20
470 U.S. 729	Florida Power & Light Co. v. Lorion	Hobbs Act (28 U.S.C. §§ 2341–2342)	474	149	63
470 U.S. 768	Lindahl v. Office of Personnel Management	Federal Government Disability Retirement Program (5 U.S.C. §§ 7703, 8347)	429	243	71
470 U.S. 821	Heckler v. Chaney	Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 332, 334, 336); Administrative Procedure Act (5 U.S.C. §§ 701–706)	1488	371	638

470 U.S. 856	Ball v. United States	Criminal (18 U.S.C. § 922(h)(1); 18 U.S.C. App. § 1202(a)(1))	555	238	98
471 U.S. 34	Town of Hallie v. City of Eau Claire	Sherman Act (15 U.S.C. § 1)	707	101	272
471 U.S. 48	Southern Motor Carriers Rate Conference, Inc. v. United States	Sherman Act (15 U.S.C. § 1)	529	65	228
471 U.S. 84	United States v. Locke	Federal Land Policy and Management Act of 1976 (43 U.S.C. § 1744)	582	164	214
471 U.S. 159	CIA v. Sims	Freedom of Information Act (5 U.S.C. § 552)	164	43	53
471 U.S. 195	Kerr-McGee Corp. v. Navajo Tribe of Indians	Indian Reorganization Act of 1934 (24 U.S.C. §§ 461–479); Indian Mineral Leasing Act of 1938 (25 U.S.C. §§ 396a–396d)	128	11	89
471 U.S. 202	Allis-Chalmers Corp. v. Lueck	Labor Management Relations Act (29 U.S.C. § 185(a))	1845	354	252
471 U.S. 234	Webb v. Board of Education	Civil Rights Act (42 U.S.C. § 1983); Civil Rights Attorney's Fees Award Act of 1976 (42 U.S.C. § 1988)	310	57	56
471 U.S. 261	Wilson v. Garcia	Civil Rights Act (42 U.S.C. § 1983); New Mexico Tort Claims Act (N.M. STAT. ANN. § 41-4-15(A))	3297	846	354
471 U.S. 290	Tony & Susan Alamo Foundation v. Secretary of Labor	Fair Labor Standards Act (29 U.S.C. § 203(r))	431	48	232
471 U.S. 343	Commodity Futures Trading Commission v. Weintraub	Bankruptcy (11 U.S.C. §§ 761–766)	826	46	247
471 U.S. 359	Burlington School Committee v. Massachusetts Department of Education	Education of the Handicapped Act (20 U.S.C. § 1415(e)(2), (3))	702	164	119
471 U.S. 419	Liparota v. United States	Food Stamps Fraud (7 U.S.C. § 2024(b)(1))	671	187	285
471 U.S. 444	INS. v. Rios-Pineda	Immigration and Nationality Act § 244(a)(1) (8 U.S.C. § 1254(a)(1))	336	208	65

471 U.S. 524	Connecticut Department of Income Maintenance v. Heckler	Medicaid Act (42 U.S.C. § 1296d)	110	34	23
471 U.S. 539	Harper & Row Publishers, Inc. v. Nation Enterprises	Copyrights (17 U.S.C. § 107)	1886	134	1120
471 U.S. 681	Landreth Timber Co. v. Landreth	Securities Act of 1933 (15 U.S.C. § 77); Securities Exchange Act of 1934 (15 U.S.C. § 78)	437	91	50
471 U.S. 701	Gould v. Ruefenacht	Securities Act of 1933 (15 U.S.C. § 77); Securities Exchange Act of 1934 (15 U.S.C. § 78)	260	15	89
471 U.S. 707	Hillsborough County v. Automated Medical Laboratories, Inc.	Public Health Service Act § 351 (42 U.S.C. § 252(d))	959	109	375
471 U.S. 724	Metropolitan Life Insurance Co. v. Massachusetts	Employee Retirement Income Security Act of 1974 (29 U.S.C. § 1144(b)(2)); National Labor Relations Act (29 U.S.C. §§ 151–169); MASS. GEN. LAWS ch. 175, § 47B	1929	259	584
471 U.S. 759	Montana v. Blackfeet Tribe of Indians	Indian Mineral Leasing Act of 1938 (25 U.S.C. § 396)	258	49	129
471 U.S. 773	Garrett v. United States	Comprehensive Drug Abuse Prevention and Control Act of 1970 (21 U.S.C. § 848); U.S. CONST. amend V	758	266	169
471 U.S. 808	Oklahoma City v. Tuttle	Civil Rights Act (42 U.S.C. § 1983)	1962	328	246
471 U.S. 845	National Farmers Union Insurance Cos. v. Crow Tribe of Indians	Federal Question Jurisdiction (28 U.S.C. § 1331)	529	114	254
471 U.S. 858	Russell v. United States	Criminal (18 U.S.C. § 844(I))	204	83	60
472 U.S. 1	Schreiber v. Burlington Northern, Inc.	Securities Exchange Act of 1934 § 14(e) (15 U.S.C. § 78n(e))	540	40	235
472 U.S. 115	Atkins v. Parker	Food Stamp Act (7 U.S.C. § 2010(e)(10))	243	51	59
472 U.S. 159	Northeast Bancorp, Inc. v. Board of Governors of the Federal Reserve System	Bank Holding Company Act of 1956 (12 U.S.C. §§ 1841–1849)	309	25	184

472 U.S. 181	Lowe v. SEC	Investment Advisers Act of 1940 (15 U.S.C. § 80(b))	324	23	168
472 U.S. 237	Mountain States Telephone and Telegraph Co. v. Pueblo of Santa Ana	Pueblo Lands Act of 1924 § 17 (25 U.S.C. § 331)	221	58	65
472 U.S. 284	Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.	Sherman Act (15 U.S.C. § 1); Robinson-Patman Price Discrimination Act (15 U.S.C. § 13b)	1011	82	442
472 U.S. 299	Bateman Eichler, Hill Richards, Inc. v. Berner	Securities Exchange Act of 1934 § 10(b) (15 U.S.C. § 78j(b)); SEC Rule 10b-5 (CFR § 240.10b-5)	584	36	203
472 U.S. 353	Johnson v. Mayor of Baltimore	Age Discrimination in Employment Act of 1967 (29 U.S.C. §§ 621–634)	148	21	43
472 U.S. 400	Western Air Lines, Inc. v. Criswell	Age Discrimination in Employment Act of 1967 (29 U.S.C. §§ 612–634)	553	69	243
472 U.S. 424	Richardson-Merrell Inc. v. Koller	Civil Procedure (28 U.S.C. § 1291)	528	187	124
472 U.S. 559	Central States v. Central Transport, Inc.	Employee Retirement Income Security Act of 1974 (29 U.S.C. § 1001 *et seq.*)	377	92	77
472 U.S. 585	Aspen Skiing Co. v. Aspen Highlands Skiing Corp.	Sherman Act (15 U.S.C. § 2)	982	128	443
472 U.S. 648	Cornelius v. Nutt	Civil Service Reform Act of 1978 (5 U.S.C. § 7701(c)(2)(a))	156	67	31
472 U.S. 675	United States v. Albertini	Criminal (18 U.S.C. § 1382)	527	108	242
472 U.S. 713	United States v. National Bank of Commerce	I.R.C. §§ 6331–6332	720	146	83
472 U.S. 846	Jean v. Nelson	Immigration and Nationality Act (8 U.S.C. §§ 1182(d)(5)(A), 1225(b)); Administrative Procedure Act (5 U.S.C. §§ 552, 553)	619	136	254
473 U.S. 1	Marek v. Chesny	Civil Rights Attorney's Fees Award Act of 1976 (42 U.S.C. § 1988); Offer of Judgment (FED. R. CIV. P. 68; 42 U.S.C. § 1983)	819	117	283

473 U.S. 52	United States v. Shearer	Federal Tort Claims Act (28 U.S.C. § 2680(h))	348	127	90
473 U.S. 61	NLRB v. International Longshoremen's Ass'n	National Labor Relations Act (29 U.S.C. §§ 158(b)(4)(B), 158(e))	97	18	39
473 U.S. 95	Pattern Makers' League of North America v. NLRB	National Labor Relations Act (29 U.S.C. § 158(b)(1)(A))	351	45	126
473 U.S. 134	Massachusetts Mutual Life Insurance Co. v. Russell	Employee Retirement Income Security Act of 1974 (29 U.S.C. § 1109(a))	1774	296	361
473 U.S. 159	Kentucky Bureau of State Police v. Graham	Civil Rights Act (42 U.S.C. § 1983); Civil Rights Attorney's Fees Award Act of 1976 (42 U.S.C. § 1988)	3031	506	190
473 U.S. 207	Dowling v. United States	National Stolen Property Act (18 U.S.C. § 2314)	355	76	177
473 U.S. 234	Atascadero State Hospital v. Scanlon	Rehabilitation Act of 1973 § 504 (29 U.S.C. § 794)	1918	307	823
473 U.S. 479	Sedima, S.P.R.L. v. Imrex Co.	Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1964(c))	2833	480	392
473 U.S. 568	Thomas v. Union Carbide Agricultural Products Co.	Federal Insecticide, Fungicide, and Rodentcide Act (7 U.S.C. § 136a(c)(1)(D)(ii))	811	104	330
473 U.S. 614	Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc.	Federal Arbitration Act (9 U.S.C. §§ 4, 201); Convention on the Recognition and Enforcement of Foreign Arbitral Awards (21 U.S.T. 2517 [9 U.S.C. §§ 201–208]); Sherman Act (15 U.S.C. § 1 *et seq.*)	2776	308	1107
473 U.S. 716	Carchman v. Nash	Interstate Agreement on Detainers (N.J. STAT. ANN. § 2A:159A-1 *et seq.*)	283	63	21
Totals			63,758	13,128	17,782

APPENDIX TABLE C:
REGRESSION ANALYSES FOR 1990 TERM

Case Citations (Log Log)	
X Coefficient	-1.10**
	(0.16)
Constant	3.56
	(0.21)
R^2	0.83
df	10
N	12

Noncase Citations (Log Log)	
X Coefficient	-1.28**
	(0.19)
Constant	3.9
	(0.23)
R^2	0.83
df	10
N	12

Case versus Noncase Citations	
X Coefficient	0.23*
	(0.10)
Constant	199.65
	(315.44)
R^2	0.07
df	63
N	65

Note: Standard errors in parentheses
** $p < .01$
* $p < .025$

APPENDIX TABLE D:
REGRESSION ANALYSES FOR 1984 TERM

Federal Appellate Citations (Log Log)	
X Coefficient	-1.84**
	(0.27)
Constant	5.38
	(0.26)
R^2	0.87
df	7
N	9

Law Review Citations (Log Log)	
X Coefficient	-1.56**
	(0.26)
Constant	4.78
	(0.25)
R^2	0.83
df	7
N	9

Federal Appellate Citations versus Law Review Citations	
X Coefficient	0.30*
	(0.12)
Constant	160.43
	(204.53)
R^2	0.07
df	84
N	86

Note: Standard errors in parentheses
** $p < .01$
* $p < .05$