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# The Most-Cited Law Review Articles

Fred R. Shapiro

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I present in this study a list of the most-cited law review articles of the last forty years. Such a project falls somewhere between historiography and parlor game, and I will not claim any more significance for it than is warranted. It is my hope, however, that by listing these articles I will draw attention to writings that, by virtue of their objectively measured impact, deserve to be called classics of legal scholarship.

## I

### RATIONALE OF CITATION ANALYSIS

Citation analysis has in recent decades emerged as a major tool in information science and the sociology of knowledge. At its root is the scholarly practice of supplying references for ideas and quotations in the form of footnotes<sup>1</sup> or citations. Although citations may be included for a variety of reasons,<sup>2</sup> an author's citations typically identify previous writings pertinent to the subject of the author's present publication.

A "citation index" is "a structured list of all the citations in a given collection of documents. Such lists are usually arranged so that the cited document is followed by the citing documents."<sup>3</sup> The basic function of citation indexing is to facilitate retrieval of related documents. Citation indexes can serve as powerful subject indexes because of the close subject relationship between citing and cited documents.

The first citation indexes were the Shepard's system of citators, a familiar research aid for lawyers. These date from 1873, when Frank Shepard began printing citations to Illinois cases on gummed paper to be pasted next to the report of the cited case. Shepard's Citations, Inc.<sup>4</sup> went on to publish indexes that list subsequent citations to state and federal judicial decisions, statutes, and other legal sources. Today the

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1. The historical origins of footnotes are obscure. The *Oxford English Dictionary's* earliest example of the term "footnote" is dated 1841, but I found an earlier usage of the word in an 1822 geographical treatise. See Shapiro, *Antedatings from Malte-Brun's Universal Geography (1822)*, 29 NOTES & QUERIES (n.s.) 232, 232 (1982).

2. See *infra* note 19 and accompanying text.

3. 5 ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE 16 (1971).

4. The company name is now Shepard's/McGraw-Hill, Inc.

Shepard's system also covers such diverse sources as administrative regulations, court rules, law review articles, American Law Institute *Restatements of the Law*, and patents and trademarks.

Since judicial citations have distinctive functions related to the doctrine of stare decisis, lawyers often employ Shepard's indexes for the special purpose of verifying the continuing authority of court decisions. They also use the citators, however, as research tools to collect sources relating to a particular subject. This application of the Shepard's system exemplifies the basic function of citation indexing described above.

Modern citation analysis, in fact, was directly inspired by the Shepard's example. In the early 1950's the Johns Hopkins Welch Medical Library Indexing Project began to study the prospects for machine generation of subject indexes to medical literature.<sup>5</sup> A 1953 symposium sponsored by the Project attracted the attention of William C. Adair, a former vice president of Shepard's Citations. Adair suggested that the Welch Project might use the citator principle of Shepard's as an indexing technique.<sup>6</sup>

Eugene Garfield, one of the members of the Welch Project, took up Adair's suggestion and began to explore the application of citation indexing to scientific literature. By 1961 he had compiled a *Genetics Citation Index* as a pilot study. This proved successful, and Garfield founded a firm, the Institute for Scientific Information, which commenced publication of a *Science Citation Index* as an ongoing enterprise. This index has become a basic tool of research in the natural sciences, and was followed in 1973 by a *Social Sciences Citation Index* and in 1978 by an *Arts and Humanities Citation Index*.<sup>7</sup> These indexes enumerate all articles from indexed journals which cite a given article. Like Shepard's publications, they can be used as subject indexes, in this case to the periodical literature of scholarly disciplines.

Information scientists and sociologists, led by Garfield himself, have developed other applications for citation analysis which go far beyond the basic indexing functions. Aided by computers, these "bibliometricians"<sup>8</sup> have studied the history and structure of science by mapping networks of authors, calculated the "half-life" (rate of obsolescence) of scientific literature, and otherwise analyzed the nature of scholarly communication. Journal rankings have been compiled by tabulating frequencies of citation. Finally, individual authors have been evaluated on

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5. See E. GARFIELD, CITATION INDEXING—ITS THEORY AND APPLICATION IN SCIENCE, TECHNOLOGY, AND HUMANITIES 6 (1979).

6. 5 ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE 19-20 (1971).

7. E. GARFIELD, *supra* note 5, at 6-18.

8. "Bibliometrics" may be defined as "studies which seek to quantify the processes of written communication." 12 ANN. REV. INFORMATION SCI. & TECH. 35 (1977).

the basis of counts of citations to their writings. This last application, although controversial, has proved attractive as a relatively objective tool for assessing scholarly productivity.<sup>9</sup>

In particular, sociologists of science, long frustrated by the difficulty of measuring the significance or "quality" of scientific work, have found citation counts helpful. Pioneering research was performed in 1957 by Kenneth E. Clark, who surveyed psychologists as to their estimation of which of their colleagues had contributed most significantly to the discipline. After comparing the resulting evaluations with eight indicators of "eminence," Clark found that the variable most highly correlated with the peer ratings was the total of citations to the individuals' publications.<sup>10</sup>

Jonathan R. Cole and Stephen Cole, writing in 1973 and making use of data from the *Science Citation Index*, concluded that "straight citation counts are highly correlated with virtually every refined measure of quality."<sup>11</sup> For example, they determined that the number of citations to scientists was correlated with the number of awards they received.<sup>12</sup> High citation counts were also shown to be correlated with winning the Nobel Prize,<sup>13</sup> a finding which has been confirmed by subsequent studies.<sup>14</sup>

The high degree of correlation between citation counts and judgments of scholars by their colleagues has also been confirmed by later research. Garfield, reviewing the literature in 1979, listed seven major studies linking citedness with "peer judgments, which are widely accepted as a valid way of ranking scientific performance."<sup>15</sup> More recently, Stephen J. Bensman compared reputational ratings of academic

9. Uses of citation analysis to evaluate individuals have ranged from compilation of lists of "most-cited" authors to reliance on citation data to guide decisions on academic tenure, promotion, and grant awards. For a general discussion of the applications of citation analysis, see White, *Bibliometrics: From Curiosity to Convention*, SPECIAL LIBRARIES, Winter 1985, at 35, 39-40.

10. See K. CLARK, AMERICA'S PSYCHOLOGISTS: A SURVEY OF A GROWING PROFESSION (1957).

11. J. COLE & S. COLE, SOCIAL STRATIFICATION IN SCIENCE 35 (1973).

12. Cole & Cole, *Scientific Output and Recognition: A Study in the Operation of the Reward System in Science*, 32 AM. SOC. REV. 377 (1967).

13. Cole & Cole, *Measuring the Quality of Sociological Research: Problems in the Use of the Science Citation Index*, 6 AM. SOC. 23, 23-24 (1971).

14. See, e.g., 3 E. GARFIELD, ESSAYS OF AN INFORMATION SCIENTIST 337-47 (1980).

15. E. GARFIELD, *supra* note 5, at 241. The seven studies are G. CARTER, PEER REVIEW, CITATIONS, AND BIOMEDICAL RESEARCH POLICY: NIH GRANTS TO MEDICAL SCHOOL FACULTY (1974); Bayer & Folger, *Some Correlates of a Citation Measure of Productivity in Science*, 39 SOC. EDUC. 381 (1966); Bernier, Gill & Hunt, *Measures of Excellence of Engineering and Science Departments: A Chemical Engineering Example*, 9 CHEMICAL ENGINEERING EDUC. 94 (1975); Garfield, *Citation Indexes for Studying Science*, 227 NATURE 669 (1970); Martino, *Citation Indexing for Research and Development Management*, 18 IEEE TRANSACTIONS ON ENGINEERING MGMT. 146 (1971); Sher & Garfield, *New Tools for Improving and Evaluating the Effectiveness of Research*, in RESEARCH PROGRAM EFFECTIVENESS 135 (M. Yovits, D. Gilford, R. Wilson, E. Stavelly & H.

departments reported in *An Assessment of Research-Doctorate Programs in the United States*<sup>16</sup> with total citation rates for the departments and found a correlation so high ( $r = .92$ ) as to justify asserting that "citations and peer ratings appear to be virtually the same measurement."<sup>17</sup> A 1983 survey stated, in summary, that "considerable evidence has been accumulated to suggest that citations do indeed provide an objective measure of what is variously termed 'productivity,' 'significance,' 'quality,' 'utility,' 'influence,' 'effectiveness,' or 'impact' of scientists and their scholarly products."<sup>18</sup>

Citation counts do, of course, have limitations. Some problems stem from ambiguous motivations of scholars in choosing to include particular references. Citations may be made for many reasons. Melvin Weinstock has listed fifteen specific motivations, such as paying homage to pioneers, giving credit for related work, providing background reading, and substantiating claims.<sup>19</sup> The most problematic of these reasons for citation are self-citations<sup>20</sup> and negative citations. Self-citations may inflate an author's citation total; negative citations—citations for the purpose of criticism—might result in a high total for a shoddy piece of scholarship.

Neither of these factors, however, should detract significantly from the utility of a list of very highly cited articles. It is quite improbable that an undeserving author could work his or her way onto a "most-cited" list through massive self-citation. Negative citation also is not a problem because an article engendering hundreds of critical comments would undoubtedly be an extremely important, albeit controversial, contribution.<sup>21</sup> In general, it may be assumed that, although the purposes underlying particular citations may be various and sometimes capricious, and all citations do not merit equal weight, large numbers of citations to a publication are strong evidence of its scholarly influence.

Another possible problem with citation counts is the phenomenon of "obliteration."<sup>22</sup> The work of some writers is so influential that it

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Lemer eds. 1966); Virgo, *A Statistical Procedure for Evaluating the Importance of Scientific Papers*, 47 LIBR. Q. 415 (1977).

16. AN ASSESSMENT OF RESEARCH-DOCTORATE PROGRAMS IN THE UNITED STATES (L. Jones, G. Lindzey & P. Coggeshall eds. 1982). This important study was jointly sponsored by the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

17. Bensman, *Journal Collection Management as a Cumulative Advantage Process*, 46 C. & RESEARCH LIBR. 13, 23 (1985).

18. Lawani & Bayer, *Validity of Citation Criteria for Assessing the Influence of Scientific Publications: New Evidence with Peer Assessment*, 34 J. AM. SOC'Y INFORMATION SCI. 59, 61 (1983).

19. 5 ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE 19 (1971).

20. See *supra* note 1.

21. An example of a highly cited article which is usually cited negatively is Jensen, *How Much Can We Boost IQ and Scholastic Achievement?*, 39 HARV. EDUC. REV. 1 (1969).

22. See generally R. MERTON, ON THE SHOULDERS OF GIANTS: A SHANDEAN POSTSCRIPT

becomes integrated into the common body of knowledge to the point that scholars no longer feel it necessary to cite it explicitly. In the words of Michael J. Moravcsik, "Anybody who cited Einstein's original paper when he writes  $E = mc^2$  would be laughed at."<sup>23</sup> It is difficult to say how often obliteration overtakes contributions to legal scholarship in the time period covered by my study. What appears obvious, however, is that any work so successful as to achieve this status would have already amassed a impressive citation total before becoming "obliterated," and would still rank near the top of the list.

Other distortions in citation rankings might result from limitations in the accuracy, coverage, or time frame of the source data. If, however, care is taken to describe the characteristics of the index used and to qualify conclusions in accordance with its idiosyncrasies, the rankings may fairly be taken as rough measures of scholarly impact.<sup>24</sup> Citation rankings should not, of course, be taken as measures of actual merit, since the "quality" they gauge is a socially defined quality reflecting the utility of the publication in question to other scholars rather than an absolute definition.

## II METHODOLOGY

It will come as a surprise to some readers that my source for compiling a list of the most-cited law review articles was *not* a computerized file. It is possible to obtain lists of citations to specific articles from the online database, Social Scisearch (corresponding to the printed *Social Sciences Citation Index* and including legal periodicals within its compass), or, for a limited coverage, the Lexis Law Review Library. However, neither of these systems can readily generate a *ranking* of the most-cited articles. The only possible source is *Shepard's Law Review Citations*, a unique unit of the Shepard's system which "Shepardizes"<sup>25</sup> law review articles.

*Shepard's Law Review Citations* began publication in 1968. It now consists of a bound volume, published in 1979, and supplements. My data derive from the bound volume and supplementation through the March 1985 advance sheet. *Shepard's* indexes citations to articles in

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218-19 (1965); R. MERTON, SOCIAL THEORY AND SOCIAL STRUCTURE 26-28, 35-38 (1968); 2 E. GARFIELD, ESSAYS OF AN INFORMATION SCIENTIST 396-98 (1977).

23. Moravcsik, *Measures of Scientific Growth*, 2 RESEARCH POL'Y 266 (1973).

24. "Impact" is probably the most accurate word to use to describe what citation counts measure, and I will use it throughout the remainder of this essay in preference to "influence" or "significance," which, although they denote concepts that are correlated with citedness, may claim too much.

25. The term "Shepardize" is the trademark property of Shepard's/McGraw-Hill, Inc., and is used here with reference to its publications only.

some 180 law reviews.<sup>26</sup> "Law review" is interpreted somewhat narrowly, excluding interdisciplinary journals such as *Journal of Criminal Law and Criminology*, *Journal of Law and Economics*, and *Journal of Legal Studies*. For each of the cited journals, coverage begins in 1947 (or later if the periodical commenced after that year).

The publications which *Shepard's* examines for citations to the articles it indexes include the same 180 cited journals, except that state bar journals are added and some topical periodicals are subtracted. In addition, citations to articles in federal and state case law are listed. Coverage begins in 1957 for each of the citing periodicals (unless it began publishing subsequently). In other words, *Shepard's* records citations since 1957 to articles published since 1947.

My methodology for this study consisted simply of counting the number of citations *in law reviews* to each covered article, and ranking the highest resultant totals. I excluded citations to articles in judicial opinions, since my interest was in scholarly impact rather than impact on case law or a hybrid measure derived from adding citations in articles and cases together.<sup>27</sup>

The boundaries of my data should now be plain. The articles on my "most-cited" list necessarily are restricted to the time period beginning in 1947. Pre-1947 articles, including such unquestioned "classics" as Samuel D. Warren and Louis D. Brandeis, *The Right to Privacy*;<sup>28</sup> James B. Thayer, *The Origin and Scope of the American Doctrine of Constitutional Law*;<sup>29</sup> Oliver Wendell Holmes, Jr., *The Path of the Law*;<sup>30</sup> Lon L. Fuller and William R. Perdue, *The Reliance Interest in Contract Damages* (pts. 1 & 2);<sup>31</sup> and W. Barton Leach, *Perpetuities in a Nutshell*;<sup>32</sup> are therefore regrettably excluded from the scope of the list.<sup>33</sup> Another

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26. Only citations to "leading articles" are indexed; other materials such as notes and comments, book reviews, and memorials are not covered. The limitation to leading articles also applies to the "citing" coverage. Telephone interview with official of Shepard's/McGraw-Hill (Apr. 17, 1985).

27. The influence of legal scholarship on judges is a fascinating and important topic in itself. Counts of citations to articles in cases, however, would tend to spotlight articles of parochial importance that repeatedly are cited by the courts of a particular state. For example, Calvert, "*No Evidence*" and "*Insufficient Evidence*" *Points of Error*, 38 TEX. L. REV. 361 (1960), has been cited 547 times by the courts of Texas, but not once by any other jurisdiction.

28. 4 HARV. L. REV. 193 (1890).

29. 7 HARV. L. REV. 129 (1893).

30. 10 HARV. L. REV. 457 (1897).

31. 46 YALE L.J. 52, 373 (1936-1937).

32. 51 HARV. L. REV. 638 (1938).

33. Robert C. Berring has ably collected these and other "greatest" American law review articles, defining his chronological boundary as pre-1965, in a recent anthology, GREAT AMERICAN LAW REVIEWS (R. Berring ed. 1984). His list, based on informed subjective judgment, is certainly the best available for the earlier period. In addition to the five mentioned in the text, Berring also includes, from oldest to newest: Pound, *Mechanical Jurisprudence*, 8 COLUM. L. REV. 605 (1908); Smith, *Legal Cause in Actions of Tort* (pts. 1-3), 25 HARV. L. REV. 103, 223, 303 (1911-1912);

exclusion is scholarship in interdisciplinary journals not covered by *Shepard's*. The most notable example is R.H. Coase, *The Problem of Social Cost*,<sup>34</sup> which without question would have qualified for the tabulation of most-cited articles if *Journal of Law and Economics* were indexed by *Shepard's*. Scholarship in book form is also excluded from the scope of this study.

Certain chronological limitations of the data might seem to bias the ranking. Older writings are apparently favored, since the totals are cumulative and a 1947 article has had much more time to be cited than a 1977 one. On the other hand, articles from 1947 to 1956 are disfavored in that their citations before 1957 are not included in *Shepard's*. Because of these considerations, I originally planned to compile separate lists for each decade—"most-cited articles of the 1950's," or "most-cited articles of the 1960's," and so on—rather than a single roster comparing apples with oranges. However, I found that the numbers on each decade list were closely parallel, i.e., the tenth-ranked article of the 1950's had almost exactly the same citation count as the tenth-ranked of the 1960's and the tenth-ranked of the 1970's. Apparently, the increasing volume of periodical literature, which has expanded the opportunities for citation, and the lack of 1947-56 citations, together have approximately offset the advantages of age. The result is to allow one "most-cited" list to be published without gross injustice. One unavoidable prejudice of this approach is that very recent articles, those published since about 1978, have not had enough time to be heavily cited and cannot be expected to appear on the list.

One area of omission in *Shepard's Law Review Citations* which it was necessary to rectify involved the annual Forewords to the Supreme Court issue of the *Harvard Law Review*. Although this is a prestigious series which often presents important scholarship, *Shepard's* lumps it together with notes, comments, book reviews and the like<sup>35</sup> and, for most

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Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16 (1913); Llewellyn, *A Realistic Jurisprudence—The Next Step*, 30 COLUM. L. REV. 431 (1930); Rodell, *Goodbye to Law Reviews*, 23 VA. L. REV. 38 (1936); Chafee, *Reflections on the Law of Copyright* (pts. 1 & 2), 45 COLUM. L. REV. 503, 719 (1945); Frankfurter, *Some Reflections on the Reading of Statutes*, 47 COLUM. L. REV. 527 (1947); Fuller, *The Case of the Speluncean Explorers*, 62 HARV. L. REV. 616 (1949); Tussman & tenBroek, *The Equal Protection of the Laws*, 37 CALIF. L. REV. 341 (1949); Hart, *The Power of Congress to Limit the Jurisdiction of the Federal Courts: An Exercise in Dialectic*, 66 HARV. L. REV. 1362 (1953); Currie, *Married Women's Contracts: A Study of Conflict-of-Laws Method*, 25 U. CHI. L. REV. 227 (1958); Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1 (1959); Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960); Prosser, *The Assault on the Citadel (Strict Liability to the Consumer)*, 69 YALE L. J. 1099 (1960); Bickel, *The Supreme Court, 1960 Term—Foreword: The Passive Virtues*, 75 HARV. L. REV. 40 (1961); Coons, *Approaches to Court Imposed Compromise—The Uses of Doubt and Reason*, 58 NW. U.L. REV. 750 (1964); Reich, *The New Property*, 73 YALE L.J. 733 (1964).

34. Coase, *supra* note 33.

35. See *supra* note 26.



years in the series, does not print a full list of citations. I have therefore checked the citation counts for each of the Forewords in the *Social Sciences Citation Index (SSCI)*, excluding citations in nonlegal periodicals.<sup>36</sup> Then, by sampling counts of other law review articles of the same years as the Forewords in the *SSCI* and comparing these with the *Shepard's* counts for the sample articles, I arrived at correction ratios. These ratios enabled me to estimate, from the *SSCI* count for each Foreword, what the Foreword's *Shepard's* count would have been had it been fully indexed like other law review articles. Using this method of estimation, I discovered that five of the Forewords had citation levels high enough to qualify for my list, including one whose count placed it in the first position.<sup>37</sup>

After these caveats, we are left with a list of the law review articles of the past forty years most cited by other law review articles.<sup>38</sup> This list

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36. The *SSCI* includes, as part of its coverage of journals in social science and related fields, over one hundred legal periodicals, and thus may be used as an alternative to *Shepard's* in obtaining citations to law review articles.

37. Since the coverage of the *SSCI* begins in 1966, I was not able to estimate the counts of Forewords before the mid-1960's. One Foreword from the 1950's, Hart, *The Supreme Court, 1958 Term—Foreword: The Time Chart of the Justices*, 73 HARV. L. REV. 84 (1959), does have a full citation list in *Shepard's* and qualifies for the most-cited list on the basis of its *Shepard's* count.

38. A breakdown of the most-cited articles by subject may be of interest, although many of them resist easy categorization, achieving great impact precisely because they cross law-school subject lines and create a new synthesis. Approximately 30 of the 50 may be characterized as constitutional law articles. Approximately six are primarily about tort law. I would assign four articles to civil procedure and three to jurisprudence, though many more have jurisprudential dimensions. Four relate to criminal law topics, counting Fourth Amendment discussions. Beyond these, we find one or two articles each treating property, conflict of laws, contracts, commercial law, corporations, antitrust, labor law, administrative law, and environmental law. Family law, evidence, taxation, patents, copyright, and international law do not appear. Presumably this distribution crudely reflects the volume of periodical literature in the different areas or, perhaps, the volume of literature in the most prestigious law reviews.

We may also examine the 50 articles for journal distribution. It is a fundamental theory of bibliometrics that "a combination of social and probabilistic mechanisms ensure that . . . nearly all documents of the highest quality, appear in a limited number of sources." E. GARFIELD, *supra* note 14, at 238. In the legal literature, Maru found that a small group of journals dominated periodical citations. His 1972 sample of 62,272 citations from 278 law reviews revealed that 50% of all citations were to 23 journals. Maru, *Measuring the Impact of Legal Periodicals*, 1976 AM. B. FOUND. RESEARCH J. 227, 233. 8.7% of citations were to the *Harvard Law Review*, and 18.3% to *Harvard Law Review*, *Yale Law Journal* or *Columbia Law Review*. *Id.* at 240.

My enumeration of the 50 most-cited law review articles of the last forty years is too small a sample to permit much in the way of meaningful journal comparisons. It is clear, however, that the *Harvard Law Review* and *Yale Law Journal* have strongly dominated the production of the most highly cited individual articles. Of the 50, 21 are from *Harvard Law Review* and 12 from *Yale Law Journal*, so that these two reviews account for fully two-thirds of the list. Other periodicals figuring in the list are: *California Law Review*, *Columbia Law Review*, *Minnesota Law Review*, *Stanford Law Review* and *University of Pennsylvania Law Review*, two each; *Indiana Law Journal*, *Law and Contemporary Problems*, *Michigan Law Review*, *New York University Law Review*, *Southwestern Law Journal*, *Texas Law Review* and *University of Chicago Law Review*, one each. (The presence of *Southwestern Law Journal*, ranked 40th in Maru's ordering of journals by number of times cited, Maru, *id.* at 234, and *Indiana Law Journal*, ranked 48th, Maru, *id.* at 235, indicates that law review

is printed here as Table I. The fifty most-cited articles appear in rank order of total citations, the number on the left being the straight citation count from *Shepard's Law Review Citations*.<sup>39</sup> The second number, in parentheses, is the count of citations after the 1979 *Shepard's* bound volume was published, recorded as a guide to the contemporary vitality of each article.<sup>40</sup> In Table II the same information is presented as a chronological list by year of publication, facilitating an historical view of the data.

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stratification is not so pronounced as to preclude the appearance of a high-impact contribution in a journal outside the "Top Twenty.") We may conjecture that the concentration of highly cited articles in a few journals is even more pronounced than the overall concentration of citations documented by Maru.

The academic affiliations of the authors on the list, based on affiliation at the time of publication and counting authors more than once if they have multiple articles included, is as follows: Harvard, fourteen; Yale, twelve; Berkeley and Stanford, four each; Columbia, two; Boston University, University of Chicago, University of Colorado, Duke, Hastings, University of Michigan, Oxford, University of Utah, Vanderbilt, and Washington University, one each. The co-authors Tussman and tenBroek are counted as one affiliation for Berkeley. Five nonacademics appear as authors of highly cited articles. William J. Brennan, Felix Frankfurter, Roger J. Traynor, and Henry J. Friendly constitute an impressive judicial contingent. Traynor and Friendly, two of the most eminent judges who were *not* members of the United States Supreme Court, both had second articles which narrowly missed the list of 50. Traynor, *The Ways and Means of Defective Products and Strict Liability*, 32 TENN. L. REV. 363 (1965); Friendly, "*Some Kind of Hearing*", 123 U. PA. L. REV. 1267 (1975). One coauthor, A. Douglas Melamed, was neither an academic nor a judge, but a member of the District of Columbia bar.

39. Citations in case law are excluded; *see supra* note 27 and accompanying text.

40. There are five exceptions where the two numbers are estimates based on the *Social Sciences Citation Index* citation count; these are signalled by an asterisk after the citation numbers.

TABLE I  
MOST-CITED LAW REVIEW ARTICLES  
RANK ORDER<sup>41</sup>

1.	600 (240)*	Gerald Gunther, <i>The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection</i> , 86 HARV. L. REV. 1 (1972). <sup>42</sup>
2.	572 (175)	Herbert Wechsler, <i>Toward Neutral Principles of Constitutional Law</i> , 73 HARV. L. REV. 1 (1959). <sup>43</sup>
3.	365 (81)	William L. Prosser, <i>The Assault upon the Citadel (Strict Liability to the Consumer)</i> , 69 YALE L.J. 1099 (1960). <sup>44</sup>
4.	337 (90)	Charles A. Reich, <i>The New Property</i> , 73 YALE L.J. 733 (1964).
5.	262 (152)	John Hart Ely, <i>The Wages of Crying Wolf: A Comment on Roe v. Wade</i> , 82 YALE L.J. 920 (1973).
6.	252 (69)	Joseph Tussman and Jacobus tenBroek, <i>The Equal Protection of the Laws</i> , 37 CALIF. L. REV. 341 (1949).
7.	250 (30)*	Archibald Cox, <i>The Supreme Court, 1965 Term—Foreword: Constitutional Adjudication and the Promotion of Human Rights</i> , 80 HARV. L. REV. 91 (1966).

41. The leftmost column of numbers is the ranking. The next column is the total of citations in *Shepard's Law Review Citations* through the March 1985 advance sheet, with citations in case law excluded. The rightmost column of numbers, in parentheses, is the total of citations in *Shepard's* after the publication of the 1979 bound volume. An asterisk indicates that a meaningful count from *Shepard's* is not available and that the two numbers are estimates based on the total of legal-periodical citations in the *Social Sciences Citation Index*. The relative position on the list of articles with asterisks must be regarded as approximate, since the gap between them and articles above and below is probably smaller than the margin of error in the estimation process.

42. This article is also first, by a wide margin, in Table III, which indicates contemporary vitality by ranking articles on the basis of post-1979 citations. I must note that the figure of 600 citations for Gunther's Foreword is, as explained *supra* notes 36-37 and accompanying text, an estimate based on its count in the *Social Sciences Citation Index*. The gap between this estimate of 600 and the definite count of 572 for the next-ranking article, Wechsler, *supra* note 33, is less than the margin of error in my estimation process. Strictly speaking, then, Wechsler's article may be considered to have an equal claim to the first position. However, since Gunther's article is accumulating additional citations at a faster rate than Wechsler's, I expect that the gap between the two numbers will have widened past the point of uncertainty by the time this study is published, and I feel justified in treating Gunther as number one and Wechsler as number two.

43. The most remarkable feature of *Toward Neutral Principles*, from a bibliometric standpoint, is its continuing vitality. The citation history of an article, if charted in terms of citations per year, almost always features a peak of citation frequency followed by decline. See Oppenheim, *Highly Cited Old Papers and the Reasons Why They Continue to be Cited*, 29 J. AM. SOC'Y INFORMATION SCI. 225, 225 (1978). Maru has found that 57% of all citations in legal periodicals are to materials five years old or less, 76% are to materials not over ten years old, and 91% are to materials not over twenty years old. Maru, *supra* note 38 at 247. A detailed investigation would be necessary to establish statistics for the peak and decline patterns of citation histories of legal articles, but one certainly would expect articles to have "peaked" in this sense within twenty years of their publication. Yet Table III, ranking articles based solely on post-1979 citations, shows that Wechsler's lecture, in the third decade after its appearance, is still amassing citations at a rate second only to that of Gunther's Foreword.

44. Robert C. Berring identifies *The Assault upon the Citadel* as having been "cited more than any other article in *Shepard's Law Review Citations*," GREAT AMERICAN LAW REVIEWS, *supra* note 33, at 26, apparently adding together citations in court decisions and citations in law reviews.

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| 8.  | 243 (101) | Frank I. Michelman, <i>Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law</i> , 80 HARV. L. REV. 1165 (1967).           |
| 9.  | 241 (73)  | William L. Prosser, <i>The Fall of the Citadel (Strict Liability to the Consumer)</i> , 50 MINN. L. REV. 791 (1966).   |
| 10. | 230 (55)* | Frank I. Michelman, <i>The Supreme Court, 1968 Term—Foreword: On Protecting the Poor Through the Fourteenth Amendment</i> , 83 HARV. L. REV. 7 (1969).               |
| 11. | 229 (163) | Abram Chayes, <i>The Role of the Judge in Public Law Litigation</i> , 89 HARV. L. REV. 1281 (1976). <sup>45</sup>  |
| 12. | 225 (40)* | Charles L. Black, Jr., <i>The Supreme Court, 1966 Term—Foreword: "State Action," Equal Protection, and California's Proposition 14</i> , 81 HARV. L. REV. 69 (1967). |
| 13. | 219 (54)  | William W. Van Alstyne, <i>The Demise of the Right-Privilege Distinction in Constitutional Law</i> , 81 HARV. L. REV. 1439 (1968).                                   |
| 14. | 191 (135) | Richard B. Stewart, <i>The Reformation of American Administrative Law</i> , 88 HARV. L. REV. 1667 (1975).  |
| 15. | 187 (56)  | H.L.A. Hart, <i>Positivism and the Separation of Law and Morals</i> , 71 HARV. L. REV. 593 (1958).   |
| 16. | 184 (85)  | John Hart Ely, <i>Legislative and Administrative Motivation in Constitutional Law</i> , 79 YALE L.J. 1205 (1970).  |
| 17. | 181 (41)  | Henry M. Hart, Jr., <i>The Relations Between State and Federal Law</i> , 54 COLUM. L. REV. 489 (1954).   |
| 18. | 177 (45)  | Joseph L. Sax, <i>Takings and the Police Power</i> , 74 YALE L.J. 36 (1964).   |
| 19. | 176 (52)  | Charles Fairman, <i>Does the Fourteenth Amendment Incorporate the Bill of Rights?—The Original Understanding</i> , 2 STAN. L. REV. 5 (1949).                         |
| 19. | 176 (112) | William J. Brennan, Jr., <i>State Constitutions and the Protection of Individual Rights</i> , 90 HARV. L. REV. 489 (1977).   |
| 21. | 174 (54)  | Lon L. Fuller, <i>Positivism and Fidelity to Law—A Reply to Professor Hart</i> , 71 HARV. L. REV. 630 (1958).  |
| 22. | 169 (84)  | Henry M. Hart, Jr., <i>The Power of Congress to Limit the Jurisdiction of Federal Courts: An Exercise in Dialectic</i> , 66 HARV. L. REV. 1362 (1953).               |
| 22. | 169 (91)  | Guido Calabresi and A. Douglas Melamed, <i>Property Rules, Liability Rules, and Inalienability: One View of the Cathedral</i> , 85 HARV. L. REV. 1089 (1972).        |
| 24. | 167 (58)  | Arthur A. Leff, <i>Unconscionability and the Code—The Emperor's New Clause</i> , 115 U. PA. L. REV. 485 (1967).  |
| 24. | 167 (127) | Robert H. Bork, <i>Neutral Principles and Some First Amendment Problems</i> , 47 IND. L.J. 1 (1971).   |
| 26. | 163 (38)  | Thomas I. Emerson, <i>Toward a General Theory of the First Amendment</i> , 72 YALE L.J. 877 (1963).  |
| 27. | 162 (60)  | Felix Frankfurter, <i>Some Reflections on the Reading of Statutes</i> , 47 COLUM. L. REV. 527 (1947).  |

45. This article was published in 1976 and therefore has a relatively short citation history, but it is already eleventh. It is third in Table III's ranking of citations since 1979, and year-by-year data from the *Social Sciences Citation Index* show that its citation rate has not yet begun to decline. Other high-ranking recent writings are Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667 (1975), fourteenth overall and fifth since 1979, and Brennan, *State Constitutions and the Protection of Individual Rights*, 90 HARV. L. REV. 489 (1977), nineteenth overall and eighth since 1979. The following articles have also placed among the fifty most-cited articles in a short time: Tribe, *Unraveling National League of Cities: The New Federalism and Affirmative Rights to Essential Government Services*, 90 HARV. L. REV. 1065 (1977); Grey, *Do We Have an Unwritten Constitution?*, 27 STAN. L. REV. 703 (1975); and Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976).

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| 27. | 162 | (36)  | Henry M. Hart, Jr., <i>The Aims of the Criminal Law</i> , 23 LAW & CONTEMP. PROBS. 401 (1958).   |
| 29. | 161 | (60)  | Alexander M. Bickel, <i>The Original Understanding and the Segregation Decision</i> , 69 HARV. L. REV. 1 (1955).   |
| 30. | 156 | (3)   | Henry M. Hart, Jr., <i>The Supreme Court, 1958 Term—Foreword: The Time Chart of the Justices</i> , 73 HARV. L. REV. 84 (1959).   |
| 31. | 153 | (50)  | Dallin H. Oaks, <i>Studying the Exclusionary Rule in Search and Seizure</i> , 37 U. CHI. L. REV. 665 (1970).   |
| 31. | 153 | (39)  | Joseph L. Sax, <i>The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention</i> , 68 MICH. L. REV. 471 (1970).                                    |
| 31. | 153 | (89)  | Anthony G. Amsterdam, <i>Perspectives on the Fourth Amendment</i> , 58 MINN. L. REV. 349 (1974).   |
| 34. | 150 | (48)  | William L. Prosser, <i>Privacy</i> , 48 CALIF. L. REV. 383 (1960).   |
| 35. | 148 | (25)  | Roger J. Traynor, <i>Is This Conflict Really Necessary?</i> , 37 TEX. L. REV. 657 (1959).  |
| 36. | 147 | (24)  | Harry Shulman, <i>Reason, Contract and Law in Labor Relations</i> , 68 HARV. L. REV. 999 (1955).   |
| 37. | 146 | (79)  | Lawrence H. Tribe, <i>Unraveling National League of Cities: The New Federalism and Affirmative Rights to Essential Government Services</i> , 90 HARV. L. REV. 1065 (1977). |
| 38. | 145 | (96)  | Harry H. Wellington, <i>Common Law Rules and Constitutional Double Standards: Some Notes on Adjudication</i> , 83 YALE L.J. 221 (1973).                                    |
| 39. | 144 | (24)  | Louis H. Pollak, <i>Racial Discrimination and Judicial Integrity: A Reply to Professor Wechsler</i> , 108 U. PA. L. REV. 1 (1959).   |
| 39. | 144 | (41)  | Henry J. Friendly, <i>In Praise of Erie—and of the New Federal Common Law</i> , 39 N.Y.U. L. REV. 383 (1964).  |
| 41. | 143 | (113) | Thomas C. Grey, <i>Do We Have an Unwritten Constitution?</i> , 27 STAN. L. REV. 703 (1975).  |
| 42. | 141 | (17)  | Joseph Goldstein, <i>Police Discretion Not to Invoke the Criminal Process: Low-Visibility Decisions in the Administration of Justice</i> , 69 YALE L.J. 543 (1960).        |
| 43. | 140 | (39)  | Guido Calabresi, <i>Some Thoughts on Risk Distribution and the Law of Torts</i> , 70 YALE L.J. 499 (1961).   |
| 43. | 140 | (85)* | Henry P. Monaghan, <i>The Supreme Court, 1974 Term—Foreword: Constitutional Common Law</i> , 89 HARV. L. REV. 1 (1975).  |
| 45. | 139 | (81)  | William L. Cary, <i>Federalism and Corporate Law: Reflection Upon Delaware</i> , 83 YALE L.J. 663 (1974).  |
| 46. | 137 | (27)  | Derek C. Bok, <i>Section 7 of the Clayton Act and the Merging of Law and Economics</i> , 74 HARV. L. REV. 226 (1960).  |
| 47. | 135 | (109) | Duncan Kennedy, <i>Form and Substance in Private Law Adjudication</i> , 89 HARV. L. REV. 1685 (1976).  |
| 48. | 134 | (32)  | Albert A. Ehrenzweig, <i>The Transient Rule of Personal Jurisdiction: The "Power" Myth and Forum Conveniens</i> , 65 YALE L.J. 289 (1956).                                 |
| 49. | 133 | (32)  | Sanford H. Kadish, <i>Methodology and Criteria in Due Process Adjudication—A Survey and Criticism</i> , 66 YALE L.J. 319 (1957).   |
| 49. | 133 | (38)  | John W. Wade, <i>Strict Tort Liability of Manufacturers</i> , 19 SW. L. REV. 5 (1965).   |

TABLE II  
MOST-CITED LAW REVIEW ARTICLES  
CHRONOLOGICAL ORDER<sup>46</sup>

1947	162	(60)	Frankfurter, <i>Some Reflections on the Reading of Statutes</i> , 47 COLUM. L. REV. 527.
1949	176	(52)	Fairman, <i>Does the Fourteenth Amendment Incorporate the Bill of Rights?—The Original Understanding</i> , 2 STAN. L. REV. 5.
	252	(69)	Tussman & tenBroek, <i>The Equal Protection of the Laws</i> , 37 CALIF. L. REV. 341.
1953	169	(84)	Hart, <i>The Power of Congress to Limit the Jurisdiction of the Federal Courts: An Exercise in Dialectic</i> , 66 HARV. L. REV. 1362.
1954	181	(41)	Hart, <i>The Relations Between State and Federal Law</i> , 54 COLUM. L. REV. 489.
1955	161	(60)	Bickel, <i>The Original Understanding and the Segregation Decision</i> , 69 HARV. L. REV. 1.
	147	(24)	Shulman, <i>Reason, Contract and Law in Labor Relations</i> , 68 HARV. L. REV. 999.
1956	134	(32)	Ehrenzweig, <i>The Transient Rule of Personal Jurisdiction: The "Power" Myth and Forum Conveniens</i> , 65 YALE L.J. 289.
1957	133	(32)	Kadish, <i>Methodology and Criteria in Due Process Adjudication—A Survey and Criticism</i> , 66 YALE L.J. 319.
1958	174	(54)	Fuller, <i>Positivism and Fidelity to Law—A Reply to Professor Hart</i> , 71 HARV. L. REV. 630.
	187	(56)	H.L.A. Hart, <i>Positivism and the Separation of Law and Morals</i> , 71 HARV. L. REV. 593.
	162	(36)	Hart, <i>The Aims of the Criminal Law</i> , 23 LAW & CONTEMP. PROBS. 401.
1959	156	(3)	Hart, <i>The Supreme Court, 1958 Term—Foreword: The Time Chart of the Justices</i> , 73 HARV. L. REV. 84.
	144	(24)	Pollak, <i>Racial Discrimination and Judicial Integrity: A Reply to Professor Wechsler</i> , 108 U. PA. L. REV. 1.
	148	(25)	Traynor, <i>Is This Conflict Really Necessary?</i> , 37 TEX. L. REV. 657.
	572	(175)	Wechsler, <i>Toward Neutral Principles of Constitutional Law</i> , 73 HARV. L. REV. 1.
1960	137	(27)	Bok, <i>Section 7 of the Clayton Act and the Merging of Law and Economics</i> , 74 HARV. L. REV. 226.
	141	(17)	Goldstein, <i>Police Discretion Not to Invoke the Criminal Process: Low-Visibility Decisions in the Administration of Justice</i> , 69 YALE L.J. 543.
	365	(81)	Prosser, <i>The Assault upon the Citadel (Strict Liability to the Consumer)</i> , 69 YALE L.J. 1099.
	150	(48)	Prosser, <i>Privacy</i> , 48 CALIF. L. REV. 383.
1961	140	(39)	Calabresi, <i>Some Thoughts on Risk Distribution and the Law of Torts</i> , 70 YALE L.J. 499.
1963	163	(38)	Einerson, <i>Toward a General Theory of the First Amendment</i> , 72 YALE L.J. 877.
1964	144	(41)	Friendly, <i>In Praise of Erie—and of the New Federal Common Law</i> , 39 N.Y.U. L. REV. 383.
	337	(90)	Reich, <i>The New Property</i> , 73 YALE L.J. 733.
	177	(45)	Sax, <i>Takings and the Police Power</i> , 74 YALE L.J. 36.
1965	133	(38)	Wade, <i>Strict Tort Liability of Manufacturers</i> , 19 SW. L.J. 5.

46. The leftmost column is the year of publication. See *supra* note 41 for explanation of other columns of numbers.

1966	250 (30)*	Cox, <i>The Supreme Court, 1965 Term—Foreword: Constitutional Adjudication and the Promotion of Human Rights</i> , 80 HARV. L. REV. 91.
	241 (73)	Prosser, <i>The Fall of the Citadel (Strict Liability to the Consumer)</i> , 50 MINN. L. REV. 791.
1967	225 (40)*	Black, <i>The Supreme Court, 1966 Term—Foreword: "State Action," Equal Protection, and California's Proposition 14</i> , 81 HARV. L. REV. 69.
	167 (58)	Leff, <i>Unconscionability and the Code—the Emperor's New Clause</i> , 115 U. PA. L. REV. 485.
	243 (101)	Michelman, <i>Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law</i> , 80 HARV. L. REV. 1165.
1968	219 (54)	Van Alstyne, <i>The Demise of the Right—Privilege Distinction in Constitutional Law</i> , 81 HARV. L. REV. 1439.
1969	230 (55)*	Michelman, <i>The Supreme Court, 1968 Term—Foreword: On Protecting the Poor Through the Fourteenth Amendment</i> , 83 HARV. L. REV. 7.
1970	184 (85)	Ely, <i>Legislative and Administrative Motivation in Constitutional Law</i> , 79 YALE L.J. 1205.
	153 (50)	Oaks, <i>Studying the Exclusionary Rule in Search and Seizure</i> , 37 U. CHI. L. REV. 665.
	153 (39)	Sax, <i>The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention</i> , 68 MICH. L. REV. 471.
1971	167 (127)	Bork, <i>Neutral Principles and Some First Amendment Problems</i> , 47 IND. L.J. 1.
1972	169 (91)	Calabresi & McLamed, <i>Property Rules, Liability Rules, and Inalienability: One View of the Cathedral</i> , 85 HARV. L. REV. 1089.
	600 (240)*	Gunther, <i>The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection</i> , 86 HARV. L. REV. 1.
1973	262 (152)	Ely, <i>The Wages of Crying Wolf: A Comment on Roe v. Wade</i> , 82 YALE L.J. 920.
	145 (96)	Wellington, <i>Common Law Rules and Constitutional Double Standards: Some Notes on Adjudication</i> , 83 YALE L.J. 221.
1974	153 (89)	Amsterdam, <i>Perspectives on the Fourth Amendment</i> , 58 MINN. L. REV. 349.
	139 (81)	Cary, <i>Federalism and Corporate Law: Reflections upon Delaware</i> , 83 YALE L.J. 663.
1975	143 (113)	Grey, <i>Do We Have an Unwritten Constitution?</i> , 27 STAN. L. REV. 703.
	140 (85)*	Monaghan, <i>The Supreme Court, 1974 Term—Foreword: Constitutional Common Law</i> , 89 HARV. L. REV. 1.
	191 (135)	Stewart, <i>The Reformation of American Administrative Law</i> , 88 HARV. L. REV. 1667.
1976	229 (163)	Chayes, <i>The Role of the Judge in Public Law Litigation</i> , 89 HARV. L. REV. 1281.
	135 (109)	Kennedy, <i>Form and Substance in Private Law Adjudication</i> , 89 HARV. L. REV. 1685.
1977	176 (112)	Breunan, <i>State Constitutions and the Protection of Individual Rights</i> , 90 HARV. L. REV. 489.
	146 (79)	Tribe, <i>Unraveling National League of Cities: The New Federalism and Affirmative Rights to Essential Government Services</i> , 90 HARV. L. REV. 1065.

TABLE III  
 MOST-CITED LAW REVIEW ARTICLES  
 SINCE 1979<sup>47</sup>

1.	240*	Gunther, <i>The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection</i> , 86 HARV. L. REV. 1 (1972).
2.	175	Wechsler, <i>Toward Neutral Principles of Constitutional Law</i> , 73 HARV. L. REV. 1 (1959).
3.	163	Chayes, <i>The Role of the Judge in Public Law Litigation</i> , 89 HARV. L. REV. 1281 (1976).
4.	152	Ely, <i>The Wages of Crying Wolf: A Comment on Roe v. Wade</i> , 82 YALE L.J. 920 (1973).
5.	135	Stewart, <i>The Reformation of American Administrative Law</i> , 88 HARV. L. REV. 1667 (1975).
6.	127	Bork, <i>Neutral Principles and Some First Amendment Problems</i> , 47 IND. L.J. 1 (1971).
7.	113	Grey, <i>Do We Have an Unwritten Constitution?</i> , 27 STAN. L. REV. 703 (1975).
8.	112	Brennan, <i>State Constitutions and the Protection of Individual Rights</i> , 90 HARV. L. REV. 489 (1977).
9.	109	Kennedy, <i>Form and Substance in Private Law Adjudication</i> , 89 HARV. L. REV. 1685 (1976).
10.	101	Michelman, <i>Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law</i> , 80 HARV. L. REV. 1165 (1967).

47. The leftmost column is the ranking. The second column is the total of citations in *Shepard's Law Review Citations* after the publication of the 1979 bound volume. See *supra* note 41 for explanation of asterisks.