2009

The Decline and Fall of the Dominant Paradigm: Trustworthiness of Case Reports in the Digital Age

William R. Mills
New York Law School

Follow this and additional works at: http://digitalcommons.nyls.edu/fac_articles_chapters

Part of the Legal Writing and Research Commons

Recommended Citation
WILLIAM R. MILLS

The Decline and Fall of the Dominant Paradigm: Trustworthiness of Case Reports in the Digital Age

Tests of the authenticity of law reports are not uniform in all jurisdictions, nor do they always remain the same in any one jurisdiction. . . . [T]he only test of authenticity, applicable to all reports, is whether the courts will allow to be cited as authority the reported judgments which they contain.

I. INTRODUCTION

It is axiomatic that our American common law, based in the principle of precedent and the rule of stare decisis, relies on accurate case reports published in authentic sources. But when citing American court opinions as legal authority, authors, for the past century or more, have given little thought to the accuracy of the case reports or the authenticity of the sources wherein the reports were found. This remains true in the digital age, when authors doing research are increasingly likely to have relied on the Internet as their primary or sole source of case law.

Of course modern authors still face technical citation issues, which require them to choose from among various parallel case law sources in constructing their citations. These issues are resolved by reference to citation manuals, which guide the author in choosing the most reliable and authentic source. It is unlikely, however, that many legal authors pay much attention to the underlying systems that support the dissemination of accurate case reports through authentic sources. Modern authors who have discovered case law on the Internet routinely translate their citations into the style demanded by the citation manual, without stopping to consider the possibility that the source specified in the manual might differ from the Internet source that they actually consulted.

The ease with which legal authors cite American case reports, and authors' abiding confidence in the accuracy and authenticity of their sources, are not a matter of happenstance. Accurate and authentic reporting of modern American case law rests almost entirely on an excellent and universal system that was developed at the end of the nineteenth century. The system was developed not by the courts or by governments, but rather by private enterprise. It is, of course, the National Reporter System and its Key Number digests, originated by the West Publishing Company.

This essay proceeds from the proposition that during its heyday the West system attained the status of a paradigm, a universally accepted framework for working with American case law. West's paradigm did far more than just facilitate researchers' efforts in finding and citing case law. It defined the very categories of case law, thus affecting the way that lawyers approached legal issues. It served as a medium unsurpassed in preserving the law and in guaranteeing the authenticity of case reports that lawyers consulted. And, it was also used by the courts to exclude entire classes

1. Frederick C. Hicks, Materials and Methods of Legal Research 113 (3d ed. 1942).


3. This essay focuses exclusively on case law and issues involving research in this kind of law, court opinions, and case reports. Case law is by far the largest corpus of information that legal researchers are expected to peruse, and thus presents the greatest research challenge. Much of what is presented here can also be applied to research in other categories of legal information.
of court opinions from the body of precedential authority. West's paradigm thus exerted a dominant influence on the law itself.

This essay chronicles the twilight of West's paradigm. It asserts that the West system has ceased to exert a dominant influence on case law research, and on the way that lawyers think about the law. As the prevailing medium of case law authenticity, West is under unrelenting assault in the digital age. The demise of the West paradigm can be attributed, in large measure, to factors that flow directly from the computerization of American law and the rise of the Internet. This essay identifies these factors, and explains how they have contributed to the demise of the paradigm.

This essay further observes that there has been no new Internet-based paradigm waiting in the wings to succeed West's system. To the extent that the legal profession had once relied upon West's print-based paradigm to guarantee the trustworthiness of case reports cited by legal authors, that guarantee has now been irrevocably compromised. The American legal profession must look to new ways of assuring the trustworthiness of case reports in the digital age.

II. THE DOMINANT PARADIGM

The National Reporter System, based in the fixed medium of print, has stood for more than a century as the paramount system for authors to use in citing American case law authority. Courts, governments, and citation manuals have all embraced West's system as the preferred source for accurate case reports from authentic case reporters. Indeed, the National Reporter System and the Key Number digests stood for more than just the accepted source for citing case authority; they served for decades as the preeminent method for finding American case law.

The level of acceptance that West attained within the profession of law and among legal authors over the course of a century can be said to have raised the West system to the level of a paradigm. Discerning commentators have found fault with this paradigm, arguing that West's Key Number system artificially constrained the "universe of thinkable thoughts" available to those researching the law. Others have

5. See Mersky & Dunn, supra note 2, at 69–70.
6. In pertinent context, the Oxford English Dictionary defines a paradigm as "[a] conceptual or methodological model underlying the theories and practices of a science or discipline at a particular time; (hence) a generally accepted world view." OXFORD ENGLISH DICTIONARY (2008), http://dictionary. oed.com/cgi/entry/50170955?single=1&query_type=word&queryword=paradigm&first=1&max_to_show=10. For an analysis that highlights the concept of a paradigm within the context of legal research systems, see Carol M. Bast & Ransford C. Pyle, Legal Research in the Computer Age: A Paradigm Shift, 93 LAW LTR. J. 285, 286–89 (2001).
defended the conceptual searching methods that were the hallmark of West's paradigm. 8

Putting aside arguments about the merits of this system, it is inarguable that the dominant paradigm was founded in West's print court reports. 9 From the late nineteenth century, West's case reporter series delivered court opinions in a reliably permanent print medium. The company worked in concert with the courts to ensure that its reports were accurately rendered into permanent editions of bound volumes. 10

The series of the National Reporter System, cloth bound in beige with red and black spine labels adorned with gold leaf lettering, delivered a sense of comfort and familiarity to the law library; they also stood for unquestioned quality and trustworthiness.

West's Key Number digests enabled a legal researcher with a relevant case to discover other court opinions on the same points of law, thus allowing the author to synthesize a legal argument from established case law. The company employed teams of professional editors to write case synopses and headnotes, and assign topical Key Numbers for its digests that were compiled into permanent bound editions. 11

The researcher's ability to move from a known case to other cases on relevant points of law in a fixed medium was logical and straightforward. While not perfect, the system was doubtless efficient and closed. As the years passed most courts embraced it, and the citation manuals of the legal profession endorsed it. The paradigm was complete.

And thus it remained for some time, until the very moment when computers made their first appearance in law libraries in the early 1970s. From this earliest moment, West's paradigm was put in jeopardy because full-text searchable computer databases presented an entirely different system for finding cases. No longer was case law research reliant on the classified scheme of the Key Number digests. Instead researchers could discover relevant cases by combining words and phrases using Boolean operators—this was the original method that computer services offered for performing full-text searches of their databases. It proved very popular. Boolean searching was followed some years later by an alternative, "natural language searching," which used algorithms to retrieve cases that were statistically likely to be relevant, based on the words entered in search statements devised by the researcher. Natural language searching proved even more popular than Boolean searching.

In contrast to West's digest system, which was defined by a finite and controlled subject thesaurus, both Boolean and natural language methods of searching offered

---


9. As George S. Grossman writes, "The systematization involved in the West key-number system may be largely responsible for rendering the common law manageable enough to survive in the United States." Grossman, supra note 4, at 79; see also Mersky & Dunn, supra note 2, at 69–72.


11. Id.
computer-based researchers virtually infinite options for fashioning their searches. Researchers' success in finding relevant cases was related to their skill in making assumptions about the words judges would use to describe relevant points of law and translating those assumptions into properly structured search statements. The complexity of the search statements, and the number of searches that could be run with legitimate hopes of retrieving more relevant cases, were limited only by time and the budget. This is in marked distinction to West's paradigm, which worked to channel the researcher's attention to cases indexed within a narrow range of Key Numbers.

An astute commentator might observe that the computer arrived in the law library of the early 1970s just in the nick of time. The Key Number digest system had already begun to sag under its own weight. The volume of published case law was growing rapidly. What is more, many areas of case law were evolving and becoming more complex, with cases referring, with increasing frequency, to concepts from other disciplines. The Analysis of American Law, upon which West built its topic and Key Number system, was confined to topics associated with domestic law. Although the system had the capacity to evolve through the addition of new topics and Key Numbers, the reclassification of existing topics, and the renaming of existing topics to conform to contemporary usage, this had always been a very deliberate process. The lassitude of change in West's paradigm was attributable to more than just editorial conservatism or sloth. The fixed medium of print bears much of the blame. The process of setting new topics and Key Numbers into type, compiling them into supplementary pamphlets, mailing them out to subscribers, and then following up with recompiled bound volumes was inherently slow. A researcher's task of translating outdated topics and Key Numbers into their modern counterparts, using translation tables rendered in print, was cumbersome. It is not surprising that researchers should have readily embraced computer-based methods that were quicker, simpler, and nimbler.

The arrival of the computer in the law library of the 1970s coincided with the appearance of another novelty in American law: unpublished opinions from federal and appellate courts. Initially, the courts made effective use of the dominant paradigm to suppress opinions that they found unworthy of conveying precedent. Since unpublished opinions were not assigned West headnotes, topics, or Key Numbers, these opinions could not be found through the digests. Additionally, even if an unpublished opinion was discovered through some extraneous means, its absence from the print confines of the National Reporter System presented a barrier to any.

---

12. It remains so to this day, and while one may debate the merits of restricting the Key Number digests to exclusively American legal topics, one cannot reasonably assert that the system by itself is adequate to meet the needs of the modern researcher. See Dabney, supra note 8.

13. See Berring, Full-Text Databases and Legal Research, supra note 7, at 35–36.

14. See Mersey & Donn, supra note 2, at 87, 103–04.
THE DECLINE AND FALL OF THE DOMINANT PARADIGM

author who might wish to cite it for authority. As the opinion fell outside of the paradigm, its very existence was tenuous.

Although an opinion's absence from the National Reporter System was certainly an impediment to citation, it did not stand as an absolute bar. Citation manuals and customs did recognize certain other citable sources of published case law in print, such as looseleaf services 15 and legal newspapers. 16 These publications were the domains of the specialist and the local practitioner, respectively. On occasion, a specialist researcher might make effective use of topical services to find useful cases outside of the West system. Similarly, a skilled practitioner might occasionally come upon a useful case reported in a local legal newspaper, though the research tools available for accomplishing this feat were very limited.

Case law research undertaken in print sources outside the West paradigm was problematic, as were the reports of cases found there. Opinions not published in the National Reporter System, while technically citable, were of questionable value. They generally occupied the lower echelons of the precedential hierarchy, and were met with skepticism by many judges. Of equal importance was the fact that research outside the West paradigm was less economical than within it. While topical looseleaf services could doubtless be used to find case law, these publications were better suited to research in the administrative arenas for which they had been devised. 17 Looseleaf services were intricate and difficult to navigate. Their indexes, tables, and finding aids were noncumulative. Their updating systems were arcane. Legal newspapers and other local practitioners' publications were even less well suited to systematic case law research. Until the advent of the Current Law Index in 1980 there existed no comprehensive subject index for such literature. 18 Nor could a researcher find classified digests or other research tools that offered access to cases reported in these sources. In sum, lawyers had little motivation to put much effort into combing these esoteric print sources in pursuit of case law of dubious authority.

The advent of computer assisted legal research, 19 however, brought with it the possibility of dramatic change in case law research. If cases not found in West's print volumes could be loaded into computer databases of case law, the difficulties inherent in discovering unpublished cases would evaporate. Cases from outside the National Reporter System could then be found using full-text search methods identical to those used in finding published case law. Furthermore, in computer databases there would be no inherent reason to distinguish between published and unpublished cases. A word search in a consolidated database would retrieve relevant cases from both

16. Id. R. 16.5, at 141.
within and outside of the West paradigm. And this is, in fact, what ultimately transpired.

It is important to remember that the first computer assisted legal research system marketed to American lawyers was not Westlaw but Lexis, which was introduced in April 1973. At its inception, the primary objectives of Lexis's developers were to replicate in their databases the case libraries of the National Reporter System, and to promote full-text database searching as an alternative to the Key Number digest system. Lexis, however, being independent of the West paradigm, saw no bar to also including in its databases cases that had been excluded from the West system. Indeed, the inclusion of unpublished opinions in its databases provided a marketing advantage for Lexis in its early competition with West.

Two years later, in April 1975, the West Publishing Company launched Westlaw. At its inception, Westlaw represented nothing more than a computerized accessory to the dominant paradigm. Although it employed a full-text search engine, Westlaw was not capable of searching the full texts of cases because its databases did not contain the cases themselves. Rather, Westlaw could search only the text of West's editorially created headnotes. Having retrieved pertinent headnotes using Westlaw's full-text search engine, the researcher was then expected to head to the library to read the court opinions associated with these headnotes in West's print reports. This process replicated the method that lawyers had used for decades in working with the Key Number digests. Instead of relying on topics and Key Numbers, the researcher could use a full-text search engine to retrieve relevant-looking headnotes. But the researcher's ultimate task of discovering case law by reading court opinions was still mediated by the West editors, through their headnotes, just as had always been the case in the West paradigm.

This first incarnation of Westlaw was not well received, especially among researchers who had already experienced Lexis's ability to directly search the full text of case reports. What was more, the original Westlaw databases were limited exclusively to the cases found in the print volumes of the National Reporter System. The absence of unreported opinions initially put Westlaw at a further competitive disadvantage to Lexis, its market rival. Despite West's overwhelming market position in print case law research, and despite the unquestioned dominance of West's paradigm, the infant Westlaw was something of a flop. In retrospect, Westlaw's originators might be forgiven for their shortsightedness in creating a computer-assisted case law research system of such limited utility. They were after all, working

20. Id. at 553. Harrington’s essay provides a first-hand account of the early years of Lexis and Westlaw. Id. at 552–53.
22. Harrington, supra note 19, at 553.
THE DECLINE AND FALL OF THE DOMINANT PARADIGM

from a print-based model that had yielded decades of abundant success. They had managed to construct a computerized system that replicated the processes that lawyers had long used in performing case law research in print, while preserving the established universe of cases within which their paradigm had functioned.

But it was not enough, and by 1978 West had transformed Westlaw into a system capable of full-text searching databases of West case reports, equivalent in this respect to Lexis. At some point soon thereafter, West began loading into Westlaw cases that had not been published, nor that they ever planned to publish, in the print volumes of the National Reporter System. In taking these steps, West headed down the road that led to the demise of the company’s dominant paradigm.

Still, the dominant paradigm did not die in 1978, or anytime soon after; it remained viable for another twenty-five years or more. One can point to various factors that assured its survival into the new millennium. Important among these factors was the continuing power and influence of the West Publishing Company in the institutions of American law. “Forever associated with the practice of law” was a motto the company had adopted in its earliest days. West’s motto had not been chosen casually. From the turn of the twentieth century forward the company marketed a premium line of quality products to a growing client base of increasing affluence. Its success, however, could be traced to more than just the quality of its products. West knew the legal market, and knew how to serve it well. Over decades the company had garnered tremendous reservoirs of good will among lawyers, judges, academics, government bureaucrats, court administrators, and law librarians. Just as these decision-makers could be counted on to renew their West subscriptions year in and year out, they could also be relied upon to provide a sympathetic reception to the corporate agenda that West pursued in support of its dominant paradigm. The West Publishing Company remained adept in wielding this influence, at least until 1996 when the business was sold to the Thomson Corporation, a Canadian-based conglomerate.

Through the end of the twentieth century West’s corporate influence received a warm embrace from a profession whose conservatism could be described, uncharitably,

26. Id. at 512 & n.294. The date at which West began this practice is difficult to identify precisely. It likely began with cases from different courts at different times. Unpublished opinions from federal district courts began appearing in the mid-1980s. Id. at 512 & n.294.
28. Through the mid-1990s, West kept a very good reputation among law librarians for both its business practices and its corporate generosity. West could always be counted on to host a lavish reception at the Annual Meeting of the American Association of Law Libraries. And stories were common of tenured West salesmen retiring as millionaires.
29. Press Release, American Association of Law Libraries, AAAL Comments on Thomson’s Acquisition of West (Mar. 6, 1996) (on file with New York Law School Law Review) (setting forth Thomson’s Acquisition of West and AAAL’s position on this acquisition).
as inbred. The conservatism of the American legal profession cannot be overlooked as a factor in the survival of West's dominant paradigm. Resistance to change had long been manifest in the pages of The Bluebook, whose editors have published six editions since 1976. Bluebook scholarship, initially put forward as something of a joke, soon became an exacting and exhaustive discipline. Bluebook scholars excoriated their citation manual for its reluctance to acknowledge citations from the electronic sources that had become increasingly popular among legal researchers.

Meanwhile, parallel to and flowing from the writings of Bluebook scholars, there arose a new movement that championed citation reform. This movement was sparked, at least in part, by West's triumph in litigation that enjoined other electronic publishers from using West's system of case citations, on the ground that West's internal pagination is part of an arrangement of cases protected by copyright law. The citation reform movement proceeded from the dual principles that published law belongs to the people, and that reports of court opinions cannot be copyrighted. Citation reformers lobbied bar associations and court administrators to adopt new public domain citation systems that would be both medium-neutral and publisher-neutral. The ideal was that legal researchers should be free to choose any convenient medium in which to find case reports, and that authors should be free to cite these reports in any medium independent of the publisher from which they should issue. Where Bluebook scholars were theoreticians, citation reformers were crusaders. They had the dominant paradigm fixed in their sights, and they meant to bring it

30. A more charitable view is that during this period the vast majority of practicing lawyers remained comfortable with West's reporters and digests, which continued to provide a reliable method for finding and citing case law that was fixed in print.
35. West Pub'g Co. v. Mead Data Cent. Inc., 799 F.2d 1219 (8th Cir. 1986).
down. West harbored no illusions about this, and put up staunch opposition to the reformers’ proposals in the “citation wars” of the mid-1990s.38

It was West’s position that ultimately carried the day. Although a number of state court systems responded to the reformers’ calls by promulgating their own public domain citation systems, these were by and large the smaller states. None of the largest states’ court systems altered their citation practices, nor did the federal courts. If a publisher-neutral citation system were ever to make a dent in the West paradigm, such a system would have to be universal, as was West’s, but this did not come to pass. Over time, The Bluebook welcomed into its tables the new citation forms from states that had adopted their own systems, but these forms never became part of a national public domain system for citing case authority. Professional authors researching and writing about national topics of law were still obliged to turn to West.39

No doubt the single most important factor responsible for preserving the dominant paradigm through the 1980s and the 1990s was the comfortable duopoly held by Lexis and Westlaw during that period. In 1986, West had prevailed over Mead Data Central, Lexis’s parent company, in litigation at the circuit court level that secured for West a copyright interest in the paginated arrangement of the cases in its National Reporter System.40 Rather than appeal the case to the U.S. Supreme Court, Lexis entered into a license agreement with Westlaw that gave Lexis unrestricted use of West’s pagination system.41 With this agreement in place, Lexis and Westlaw proceeded to thoroughly dominate the American market for computer assisted legal research over the next twenty years.42

The Lexis-Westlaw duopoly sustained the dominant paradigm by faithfully carrying forward West’s closed system of case reporting. During this period, Lexis and Westlaw continued to develop their comprehensive case law databases. Locked as they were in keen competition, each system took pains to include every single case that could be found on the competitor’s system, with the result that both systems reported nearly identical sets of court opinions. Legal researchers using either system now enjoyed the option of retrieving case law through the use of powerful engines of

39. See Ian Gallacher, Cite Unseen: How Neutral Citation and America’s Law Schools Can Cure Our Strange Devotion to Bibliographical Orthodoxy and the Construction of Open and Equal Access to the Law, 70 Alb. L. Rev. 491 (2007).
40. West Pub’g Co., 799 F.2d at 1241.
41. See Peter Tottom, Matthew Bender v. West Publishing, 13 Berkeley High Tech. L.J. 83, 92–93 (1998). The terms of this licensing agreement have never been disclosed. All other publishers that wish to use National Reporter System citations as a method of accessing cases in their products must approach West to negotiate an equivalent license.
full-text searching, as an alternative to the previous system that had been mediated by the classified categories of the Key Number digests. Moreover, researchers could easily discover cases that fell outside of the body of published authority that was the National Reporter System, since both Lexis and Westlaw were routinely adding such cases to their databases.

The National Reporter System, however, remained in place, embedded in a single citation system now used by both Lexis and Westlaw,43 and it continued to function as a determinant to case authority. Courts continued to exercise control over the authority of their case law by choosing which opinions would be released to Lexis and Westlaw, and which would appear in print. Cases not released to Lexis or Westlaw were unlikely to be discoverable by researchers because of the near-total dominance of these two computer systems. Certain other cases were released by the courts to Lexis and Westlaw with the directive that they not be published in the National Reporter System. Both Lexis and Westlaw complied, carefully labeling each of these cases as “not for publication.” West also refrained from compiling headnotes or topical Key Numbers for many of these cases, thus preventing researchers from finding them through the digest system.44 Although unpublished opinions were now discoverable by computer, they continued to languish in the nether regions of legal authority, just as they had in pre-computer days. Thus, the dominant paradigm endured.

Another measure of the endurance of the West paradigm during the decades of the Lexis-Westlaw duopoly was the trust that the legal profession placed in the authenticity and accuracy of the case reports found on the two systems. In its early years, West strove to build lawyers' trust in the company's case reports, which bore no government’s imprimatur. Through the twentieth century West cultivated this confidence, and it remained unchallenged. One searches legal periodical literature in vain for a single account of a transcription inaccuracy discovered in a West case report. When Lexis appeared on the scene in the early 1970s it became the lucky inheritor of West’s trove of confidence. Like West, Mead Data Central was a private firm, and the case reports found on Lexis were no more official than the ones found in the National Reporter System. Yet, no one ever questioned the accuracy or the authenticity of Lexis's product. Moreover, later that decade when West began offering electronic versions of its National Reporter System cases, no one ever raised doubts about the fidelity with which these reports had been transformed from print into electronic form.

43. Although both Lexis and Westlaw also provide electronic citations to all cases found on their own systems, The Bluebook permits use of these citations only when the case is unavailable in a traditional printed source. See The Bluebook, supra note 15, R. 18, at 151; Mersky & Dunn, supra note 2, at 587–89.

44. An exception was federal circuit court cases designated “not for publication.” For these cases, West did continue to provide full editorial treatment, and in 2001 West introduced Federal Appendix, a new print unit of the National Reporter System that published these unpublished cases. Thus came the mountain to Mohammed. See Brian P. Brooks, Publishing Unpublished Opinions, 5 Green Bag 2d 259 (2002).
One can point to ample reasons that justify lawyers' unquestioning confidence in the electronic databases of case reports marketed by Lexis and Westlaw. Both companies were run by lawyers, and both worked with the courts to edit the case reports that they loaded into their systems. Case reporting was the cornerstone of both companies' business, and the companies were in spirited competition with one another. Neither Lexis nor Westlaw could afford even the mildest challenge to the integrity of their case law products, and both were fortunate enough to have technology on their side. Just as West had harnessed the print technology of the late nineteenth century to produce perfectly rendered court opinions efficiently and economically, Lexis and Westlaw employed the computer technology of the late twentieth century to render court opinions flawlessly in electronic form.

Yet, it is worthy of note that the practices and processes through which Lexis and Westlaw created their databases were never subjected to serious critical analysis by a profession that prides itself on critical thinking. Instead, the legal profession was content to welcome the advent of computer assisted legal research with a warm and naive embrace. Legal researchers rejoiced over the new full-text search and retrieval systems that liberated them from the strictures of the Key Number digest system. Lawyers everywhere celebrated the arrival of new electronic databases that gave them instant access to libraries of case law that had previously been excluded by the courts from print editions. No one questioned the accuracy of the cases found online. To doubt the trustworthiness of case law found on Lexis and Westlaw was to subvert the paradigm that had served the law so well and for so long.

III. THE RISE OF THE INTERNET

The birth of the Internet is a story that has been told many times, and from many different points of view. It is not within the scope of this essay to tell that story again. It is sufficient to observe that the Internet, from its earliest incarnation in the mid-1990s, provided an excellent medium for the public dissemination of law, especially case law, the propagation of which had, up until that time, been tightly controlled by the courts and the two companies that supported the dominant paradigm. Lexis and Westlaw, the dominant players in the realm of computer assisted legal research, quickly established their presence on the Internet through the launch of subscription websites. These websites were designed to mirror researchers' experience of full-text retrieval systems that had previously been accessed over phone lines using proprietary software programs.

From its inception, the Internet exerted a strong democratizing effect upon the spread of legal information. Among the earliest web participants were law schools

45. See Harrington, supra note 19, at 547-52.

46. Lawyers remained content to follow the pragmatic test articulated by Frederick Hicks in 1942. See Hicks, supra note 1.

whose parent universities had been present at the Internet's birth. These institutions hosted websites that posted case reports from local courts. Soon enough, the courts had launched websites of their own to deliver these documents. The dot-com boom of the late 1990s saw the launch of numerous commercial websites that were created to deliver case law and other types of legal information to a market of practicing lawyers. The strongest of these entrepreneurial websites survived the burst of the dot-com bubble. Some of the dot-com survivors strove to market their databases of case law on a national level, in direct competition with Lexis and Westlaw. One of these, loislaw.com, was later acquired by the Wolters Kluwer conglomerate. Another, findlaw.com, was acquired by Thomson, the conglomerate parent of West. Some others, including VersusLaw.com and fastcase.com follow the subscription database model of the major players. Still others, including PreCydent.com, justia.com, and plol.org (the Public Library of Law), have adopted "open source" models that rely on advertising and other revenue streams for their support.

Beyond these general sources, which strive to duplicate Lexis's and Westlaw's plenary databases of cases and other primary law in whole or in part, the Internet offers a host of specialized sources of case law. Researchers who once toiled in the topical looseleafs of Commerce Clearing House, Inc. (CCH) and the Bureau of National Affairs, Inc. (BNA) can now search for topical case law in these and other publishers' subscription websites using full-text search engines, as well as traditional subject indexes and familiar finding aids. Nor are lawyers confined to the subscription websites that issue from conventional print publishers. On the modern Internet a lawyer has access to a vast array of law-related websites and blogs covering every conceivable subject of legal interest. Not every one of these websites or blogs can be counted on to be infallibly dependable or accurate, but nearly all of them offer access to topical case law, either by including court opinions on their own sites or by linking to case reports on other websites.

Meanwhile the government has entered the Internet fray, producing free websites with content that duplicates large portions of many of the databases that Lexis and Westlaw sell to their subscribers. THOMAS and GPO Access are examples of Internet initiatives offering free public access to full-text databases of law-related

49. As is true of most other Internet resources, these sites are constantly changing, evolving, waxing, and waning. See George H. Pike, Evaluating Free Online Legal Information (Sept. 1, 2008), http://www.allbusiness.com/africa/975537-1.html.
THE DECLINE AND FALL OF THE DOMINANT PARADIGM

government documents. In the realm of case law, the United States Supreme Court maintains a website that offers full-text searchable PDF files of opinions back to 2005, and a wealth of other documents related to the court.53 The Supreme Court's website merely provides a prominent example. Nearly every judicial administration, federal and state, now hosts a website on which a researcher can expect to find recent opinions posted.

Another government Internet initiative that has undermined the West paradigm is PACER,54 a service run by the Administrative Office of the United States Court, that offers public access to opinions and other documents filed in the dockets of federal appellate, district, and bankruptcy courts. This website was designed not as a legal research system, but rather an electronic equivalent to the court clerk's office. At present, the PACER website has no full-text searching capability,55 nor is it absolutely free. Its use charges are, however, nominal, and are negligible in comparison to Lexis and Westlaw charges. By no means a sophisticated research tool, PACER nonetheless holds obvious utility as a supplement to other Internet research sources that lie outside of the West paradigm. It is unique as a government-produced website in providing access to case law from across the entire federal judicial system in a single, consolidated source. It does not function as an archive of much depth,56 but it is very current; opinions become available concurrently with being filed on the local courts' electronic docket systems. In gauging PACER's value, however, an astute observer could point to one additional shortcoming of some significance: PACER does not deliver official case reports, or at least not in the sense in which that term had been understood inside of the dominant paradigm.

The loading of unpublished opinions onto Lexis and Westlaw, followed by the rapid increase in their availability in other Internet sources, led to calls for their greater acceptance into the body of legal precedent. The status of unpublished opinions, and the courts' attendant no-publish and no-cite rules stood at the center of a debate that raged for several years in the pages of American law reviews and journals.57 This debate has not yet subsided completely,58 and practices surrounding unpublished opinions still vary from jurisdiction to jurisdiction. At the federal level,

55. There has been at least one call, however, for the judiciary to create a version of PACER that is full-text searchable. See Hillel Y. Levin, Making the Law: Unpublication in the District Courts, VILL. L. REV. (forthcoming), available at http://ssrn.com/abstract=1006101.
56. PACER retains all documents that are loaded into its system, but the system generally does not yield cases dating from before 1998. Its archival coverage of any particular court's opinions is a function of when that court joined the PACER system.
a big blow was struck in favor of the lowly unpublished opinion in 2006, with the adoption of Federal Rules of Appellate Procedure Rule 32.1. Under this rule judges of every federal court, both appellate and district, must allow lawyers to cite unpublished opinions issued on or after January 1, 2007. A federal court may not instruct lawyers that the citation of unpublished opinions is discouraged, nor may the court forbid lawyers to cite unpublished opinions when a published opinion addresses the same issue. Thus, for purposes of research into federal law, at least, unpublished opinions have entered the mainstream.

Several years earlier Congress had set the stage for broader availability of unpublished opinions by mandating, in the E-Government Act of 2002 that all federal courts set up and maintain websites to provide access to the substance of all their written opinions, whether or not the opinions had been designated for publication. While the broader ramifications of this provision and of Rule 32.1 are still under analysis, at least one consequence is quite clear: the only acceptable legal research tools of the twenty-first century will be the ones that give access to all cases released by the courts, irrespective of their designation for publication in the print volumes of the National Reporter System.

The various Internet innovations and developments described above have overwhelmed the dominant paradigm. Modern lawyers are presented with a rich variety of alternative methods for researching case law. Of course, legal researchers have always employed arrays of different research tools in pursuit of case law, but today’s Internet-based methods are far more powerful, simpler to use, and generally deliver instantaneous results. The Internet’s case law tools are also more economical to use than Lexis and Westlaw, while often delivering equivalent results, at least in searches for case law of recent vintage. Meanwhile, West’s continuing practice of refraining from producing headnotes, digest topics, and Key Numbers for many cases that courts have designated as “not for publication” is limiting this ancient research system’s scope, and thus its effectiveness. The National Reporter System once stood alone as the standard of completeness in the realm of American case law precedent. Now it represents an ever more incomplete corpus that continues to decline in overall value.

But the eclipse of the West paradigm does not end with the Internet’s powerful new case retrieval tools or with the assimilation of unpublished court opinions into the body of legal authority. An even more profound paradigm shift can be discerned in the way that lawyers in the digital age are choosing their search strategies, and in


61. See sources cited supra note 58.
62. Beyond classified digests, other examples from pre-computer days include legal encyclopedias, Shepard’s Citations, indexes to law review articles, and looseleaf services.
The decline and fall of the dominant paradigm

How they are now approaching research questions. Generally, this shift can be
categorized as a declining familiarity among legal researchers with editorially
mediated indexes, accompanied by a growing resistance within this community to
the use of classified schemes and subject indexes. The key reason behind this shift
is easy to identify. It is the pervasive use by lawyers of Internet keyword search
engines such as Google, not just in their research endeavors, but also in daily life.
Who can doubt that legal researchers who casually use Google to browse movie
reviews and shop for holiday gifts would be attracted to Google-style search engines,
or to Google itself, as a way of finding case law? What legal educator can be truly
surprised when Google-era law students, who in their undergraduate institutions
were never required to produce a research paper using indexed print sources, are
daunted by their first experiences with the West Key Number digest system?

Once upon a time, it was argued persuasively that the West paradigm controlled
the very way that lawyers thought about the law by encouraging them to fit every
legal issue into the rigid conceptual framework of the Key Number digest system,
and by normalizing the language of court opinions through the case headnotes that
West editors wrote. To the extent that West once exercised such control, its power
has now waned considerably. In the digital age, the keyword search engine is king,
and keyword searching is neither rigid nor normalized, but utterly free form.

In 2007, West introduced Westlaw WebPlus, its own keyword Internet search engine,
which, although linked from Westlaw's website, stands as an independent method
for researching law related issues. Offered as a competitor to Google and to other
law-oriented search engines, WebPlus claims to deliver "legally focused" web results
from conventional keyword searches. A wry observer might describe the launch of
WebPlus, which is currently provided free of charge, as West's hammering another
nail into the coffin of its once dominant paradigm.

IV. The current status of case reporting

One must not lose sight of the fact that today West remains the foremost player
in the field of legal publishing, both in print and electronic form. Although it no
longer supports a dominant paradigm for researching and thinking about American

63. See Sanford N. Greenberg, Legal Research Training: Preparing Students for a Rapidly Changing Research
64. Berring, Full-Text Databases and Legal Research, supra note 7, at 33–34.
65. Whether keyword searching on the Internet is conducive to efficient or effective case law research is an
entirely different question, which is outside the scope of this essay.
66. For an animated demonstration, see http://westapps.west.thomson.com/westlaw/advantage/webplus/
firm/demo.html (last visited Sept. 26, 2008); for an evaluative comparison with another law-oriented
keyword Internet search engine, see http://outofthejungle.blogspot.com/2008/01/head-to-head-
67. A more sober view is that the development of WebPlus was a business decision that West felt compelled
to make in order to maintain Westlaw as a viable information product in the digital age.
68. See generally Arewa, supra note 42 (indicating the prominence of West in current legal research).
case law, West continues to publish all of the units of the National Reporter System and the Key Number digests. The company also produces the best available computer assisted legal research system, Westlaw, which West continues to improve through the addition of new content and features of great value to researchers. Lexis remains in place as well, as a very close competitor. Together, West and Lexis still stand as the systems of choice for professional legal research. Both are unsurpassed in their comprehensive coverage of case law, and in the power and sophistication of the finding-tools that they provide.

The National Reporter System also persists as the standard for case law citation. In all American jurisdictions, and in all but a very few instances, The Bluebook rules designate the West print edition of court reports as the preferred citation source. This nearly universal rule of preference is founded not just in blind tradition or lawyers' conservatism. It is also based in West's well-earned reputation as an implicitly trusted source of authentic and accurate case reports. And, most notably, it is based in the legal profession's reliance on the technology of print as the established medium for recording, duplicating, disseminating, and preserving legal precedent.

Print has served the profession very well in these crucial roles for many decades, and the profession is unlikely to abandon its preference for print technology, unless and until it is presented with a superior technology that can similarly support trustworthy reports of court opinions.

Yet, in major practical respects the legal community has already abandoned print technology in case reporting. To an overwhelming degree, when today's lawyers research case law they do so through the use of electronic databases on the Internet, and the case reports they retrieve may appear in different electronic versions. The version retrieved may depend on the date the court opinion was added to the database or on the database from which the opinion was retrieved. The court opinions that legal researchers find on computers must ultimately be rendered, under The Bluebook rules, as citations to print sources, most of which are case reports in West's National Reporter System. To what extent should we expect that lawyers who retrieve case reports from Internet sources will verify the fidelity of those documents to the print versions before citing them? Given the implicit trust that lawyers have placed in Westlaw and Lexis, it appears most unlikely that this will happen very often. Moreover, lawyers' practice of citing cases found on Westlaw or Lexis as though they had been verified in print sources can certainly be justified on the grounds that Westlaw and Lexis are established sources that present electronic renderings of case

69. *Id.* at 827–28.

70. See *The Bluebook*, supra note 15, at 193–242 tbl.1. Even for states that have adopted public domain citation formats, *The Bluebook* simply notes the existence of the format in that state, providing a citation example and citing to the local court rule, while continuing to express a preference for the pertinent West regional reporter edition. See, e.g., *id.* at 211 tbl.1 (Louisiana); *id.* at 217 tbl.1 (Montana); *id.* at 225 tbl.1 (North Dakota).


THE DECLINE AND FALL OF THE DOMINANT PARADIGM

reports that are demonstrably identical to the print versions found in the National Reporter System.

Indeed, it is a practice long established among legal authors to give official citations to cases that the authors actually discovered and read in unofficial case reporters. The practice dates far back into pre-computer days when it was accomplished with the help of star pagination and translation tables. In essence, the author is tricking the reader into thinking that the author consulted an official source of the law, when in fact the author consulted a more convenient unofficial source. This was a benign deception so long as the unofficial report could be counted on to be identical to the official one, and this was always the case, or at least for as long as West's dominant paradigm endured.

However, it is not necessarily the case anymore. The very nature of the information found in a computer database is different from that in a fixed medium such as a book. Information on computer databases can be easily and anonymously altered in ways that the database users cannot possibly detect. All it takes is the action of a person with sufficient technical acumen, such as a credentialed system administrator, or a hacker. Furthermore, in contrast to a book's defacement, the single act of corrupting a case report in an online source works to corrupt that case report everywhere and to everyone who accesses that source. As previously discussed, it is not reasonable to expect that the conglomerated corporate interests behind Westlaw or Lexis might fail to guard the absolute accuracy of the case law databases that sit at the heart of their systems. And no reports of corruption or inaccuracies in Westlaw or Lexis have surfaced. But what of cases found on other Internet sites?

The answer is that no equivalent guarantees of trustworthiness currently extend to cases found on Internet sites other than the ones produced by Lexis and Westlaw. The cases on websites from outside the West paradigm derive from a variety of sources and are compiled and issued through a variety of processes that are not generally identifiable or subject to scrutiny. The security of this information is an issue that up until now has remained unaddressed by a profession that for so long dwelled within the comfort of the dominant paradigm. One might expect the government that creates the law to have stepped in to ensure its accurate transmission through vastly popular Internet websites, but the government has not assumed this role on any large scale. Official case reports remain alive in many jurisdictions through the medium of print editions, but the official case reporting system has never taken root on the Internet. Courts continue to point to print editions as the exclusive sources for authentic versions of their opinions, and they are generally unwilling to stand behind the accuracy of these opinions as rendered on the Internet, even on the websites that the courts themselves produce.

73. PRICE & BITNER, supra note 2, at 94–95, 130–33.

74. See Peter W. Martin, Neutral Citation, Court Web Sites, and Access to Authoritative Case Law, 99 LAW LIBR. J. 329, 342–43, 362–63 (2007).

75. It is interesting to note that PACER's FAQ page includes an entry for "[w]hat if the information I retrieve on PACER is incorrect?" The entirety of PACER's answer to this important and frequently asked question reads as follows, "[i]f there is a discrepancy found with case information, notify the
Perhaps this situation was satisfactory to support case law research during the
dominion of the West paradigm, but it certainly is not satisfactory now that the
paradigm has passed away. This unsatisfactory situation has not gone unrecognized
in the legal community. In March 2007, the American Association of Law Libraries
issued a state-by-state report on the authentication of online legal resources. This
excellent report scrupulously details the practices of state governments in producing
electronic versions of their primary case law. It paints a bleak picture of the current
situation. Among the key findings set out in the report are that "[s]tates have not
acknowledged important needs of citizens and law researchers seeking government
information; they have not been sufficiently deliberate in their policies and
practices," and that "[n]o state's online primary legal resources are authenticated or
afford ready authentication by standard methods." Beyond its generally gloomy
findings, the report also identifies specific methods of digital authentication that
states could employ to remedy the current situation. More than just a call to arms,
this report could also serve as a road map for states to use in creating systems for
producing trustworthy electronic case reports to meet the demands of the legal
profession in the digital age.

V. CONCLUSION

The foundation of trust that underpins our system of case law reporting has now
been undermined. Cases posted to many mainstream Internet legal research sources,
other than Lexis or Westlaw, appear with no strong guarantee of accuracy or
authenticity. Scrupulous legal researchers who wish to independently verify the
accuracy of the case reports they cite from Internet sources are met with the burden
of comparing the electronic reports against print versions, which are the only ones
that courts deem to be official. On a large scale, this burden can prove insurmountable.
Furthermore, readers of modern legal literature, when encountering citations from
the National Reporter System, have good reason to harbor doubt that the authors
who wrote those citations actually consulted the editions that they cited. Moreover,
if the authors did not actually consult the National Reporter System, or its established

PACER Service Center. PACER will contact the court administrator so the problem can be pinpointed
is left to wonder how the user was expected to have identified the discrepancy in the first place.

76. RICHARD J. MATTHEWS & MARY ALICE BAISH, AM. ASS'N OF LAw LBRANRS, STATE-BY-STATE
REPORT ON AUTHENTICATION OF ONLINE LEGAL RESOURCES (2007).

77. Id. at 55.

78. Id. at 65.

79. Id. at 8. The report defines an authentic legal resource as "one whose content has been verified by a
government entity to be complete and unaltered when compared to the version approved or published by
the content originator." This definition "contemplates encryption-based authentication, especially
digital signatures and public key infrastructure." Id.

80. The phrase is borrowed, along with so many good ideas, from Bob Berring. See Robert C. Berring,
Losing the Law: A Call to Arms, 10 Green Bag 2d 279 (2007).
electronic counterparts Lexis or Westlaw, then there is no assurance that the sources they did consult were reliably accurate.

In the digital age, the foundation of trust in our case law reporting system, and in legal citation generally, must be rebuilt. Such a rebuilding effort cannot succeed by utilizing the technology of printed books. Today's legal researchers are increasingly abandoning print sources in favor of their Internet-based counterparts. The rebuilding of trust in the case reporting system must take place in the realm of digital technology. It must focus on implementing digital safeguards within the process of dissemination of case law databases to better ensure the accuracy and security of information found in those databases.

While court systems and other government entities will obviously play major roles in this rebuilding effort, the legal profession would be naive to expect the government alone to accomplish this work. The government, after all, has never succeeded in creating an efficient case reporting system that served the needs of lawyers nationwide.\textsuperscript{81} Rather, the rebuilding of the American case reporting system for the digital age must be an effort undertaken jointly by government, professional groups, and private enterprise.\textsuperscript{82} The corporate proprietors of Westlaw and Lexis, as the inheritors of the West paradigm, ought not to resist this effort, but instead join in to facilitate its speedy success. Cooperation among all parties is essential, and private enterprise would be an ultimate beneficiary. The companies that market databases of case reports to lawyers have nothing to lose and much to gain from an improved system that bolsters the trustworthiness of these products.

\textsuperscript{81} In the pre-computer era, governments largely ceded this task to West.

\textsuperscript{82} One can point to at least one sign that this effort is already underway. In February 2008, the Uniform Law Commission announced that it has approved the creation of a new Study Committee on Online Authentication of Legal Materials to investigate the issues and discuss the feasibility of a uniform law or model act on digital authentication. Am. Ass'n of Law Libraries, National Conference of Commissioners on Uniform State Laws Study Committee on Investigative Online Authentication, http://www.aallnet.org/summit/nccusl.asp (last visited Oct. 25, 2008).