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Research in the Wild: CALR and the Role of Informal Apprenticeship in Attorney Training

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Much recent scholarship has posited that computer-assisted legal research will fundamentally alter the manner in which practicing attorneys conduct legal research, resulting in an overall change to the legal system itself. Ms. Lihosit argues that, while we have been undergoing a major transformation in the format of legal materials, and the influence of the West digest system is waning, there will not be a resultant restructuring of the legal system. After a brief overview of American legal history, provided to show that apprenticeship training has always been present in the American legal system in some form, the article uses the author's study of practicing attorneys and law firm librarians to provide an alternative model of how attorneys conduct research.

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Introduction

¶1 A great deal of literature has been written over the last two decades arguing in one way or another that not only will computer-assisted legal research (CALR) drastically alter the nature of legal research, but also that CALR may fundamentally change the legal system itself.¹ This change has been described as a restructuring or transformation of the law,² a “paradigm shift,”³ and even a “collapse of the structure of the legal research universe.”⁴ Certainly we are experiencing (or have already experienced) a shift in reliance from print to online materials—indeed, many print tools have been completely replaced by online materials—and CALR has the potential to create a new paradigm for legal research: one that is, in short, based on computer code rather than on any controlling legal principles and policies. However, I do not believe this will fundamentally alter the way attorneys think or do research, nor will it alter the legal system itself, because neither of these paradigms is the one used by practicing attorneys.

¶2 In this article I present a model of how practicing attorneys learn about and conduct research that can serve as an alternative to the model that assumes that attorneys research in roughly the same way they were taught in law school. Specifically, my research did not support assumptions about attorney research that privilege the West digest system, or believe the digest system plays an important role in helping attorneys determine the controlling legal concepts and principles in the cases they handle. Instead, the model I discovered in my study is one where attorneys develop their knowledge base from distributed social networks, what I call the present-day manifestation of the apprenticeship system, rather than from any individual and controlled textual source such as the digest. The research tools attorneys use depend on what the other attorneys in their networks use. Therefore, while the specific format of materials and the techniques of research may change over time, those changes are filtered through that network of attorneys. This network itself adapts to changes in external conditions, thus acting to mediate the rate of change, and subsequently lessening the impact that those changes will have on how attorneys do their research.

¶3 The article first examines how this purported crisis is described in the current literature by taking a close look at the reasons given for it. It then provides a brief overview of the history of the American legal educational system to show that not only has that system undergone multiple changes, throughout which there has been concern about the proper way to prepare an attorney for practice, but that until relatively recently some type of formal apprenticeship period has always

1. Carol M. Bast & Ransford C. Pyle, *Legal Research in the Computer Age: A Paradigm Shift?*, 93 LAW LIBR. J. 285, 2001 LAW LIBR. J. 13.

2. F. Allan Hanson, *From Key Numbers to Keywords: How Automation Has Transformed the Law*, 94 LAW LIBR. J. 563, 2002 LAW LIBR. J. 36; Robert C. Berring, *Legal Research and Legal Concepts: Where Form Molds Substance*, 75 CAL. L. REV. 15, 26–27 (1987); see also M. ETHAN KATSH, *LAW IN A DIGITAL WORLD* (1995).

3. Bast & Pyle, *supra* note 1; see also Robert C. Berring, *Full-Text Databases and Legal Research: Backing into the Future*, 1 HIGH TECH. L.J. 27, 38 (1986).

4. Robert C. Berring, *Collapse of the Structure of the Legal Research Universe: The Imperative of Digital Information*, 69 WASH. L. REV. 9 (1994).

existed. Finally, I present the results of a small study, based on a series of ethnographic interviews I conducted with practicing attorneys and law firm librarians within the San Diego area. These show that even though a formal apprenticeship period is no longer required for attorneys in the United States, the information networks that exist among attorneys constitute a sort of informal apprenticeship system, and that this system continues to do the work that others have assumed was being done by the digest system.

Arguments Regarding a Crisis in Legal Research

¶4 Over the past decade or so, a number of authors have written about a “crisis” in legal research, one they believe is negatively impacting the ability of lawyers to research thoroughly, and may even have an impact on the legal system itself. Three main reasons are often cited for why we are experiencing this crisis: 1) CALR encourages a more fact-based, rather than principle- or concept-based method of research; 2) CALR stifles new ideas and creativity; and 3) CALR allows for (and even encourages) a rapidly increasing pool of citable authority, which in turn will weaken our system of precedent.

CALR Encourages Fact-Based Research

¶5 It has been argued that CALR encourages a more fact-based method of research, with the most effective online searches being those that use facts, particularly unique terms.⁵ This results in less time being spent by researchers on developing an understanding of the underlying legal principles and policies, thus putting them in danger of missing these principles altogether.

¶6 In 1985, a study was published by Blair and Maron which tested the recall and precision capabilities of the Storage and Information Retrieval System (STAIRS), a full-text document retrieval software being used by a law firm to store and to provide access to just under 40,000 litigation documents related to one of its cases. Paralegals conducted terms and connectors searches based on fifty-one different information requests submitted by the attorneys litigating the case. The search results were submitted to the attorneys and then rerun with modifications until the attorneys believed that 75% of the relevant documents had been retrieved. Based on sampling estimates, Blair and Maron estimated that, on average, the individual searches generated only 20% of the relevant documents.⁶ The authors postulated that recall was so poor because full-text retrieval requires users to be able to create queries containing the exact words and phrases as they are used in the relevant documents. “Stated succinctly, it is impossibly difficult for users to predict the

5. Bast & Pyle, *supra* note 1, at 297–98, ¶¶ 47–48.

6. David C. Blair & M.E. Maron, *An Evaluation of Retrieval Effectiveness for a Full-Text Document-Retrieval System*, 28 COMM. OF THE ACM 289, 295 (1985).

exact words, word combinations, and phrases that are used by all (or most) relevant documents and only (or primarily) by those documents”⁷

¶7 Despite the age of the Blair and Maron study, conducted at a time when CALR was still in its infancy, the 20% recall rate from it is still frequently cited as evidence of the limitations of full-text retrieval systems.⁸ For example, Carol Bast and Ransford Pyle stated in a 2001 article that researchers using print sources such as the West digest analyze the facts of their case within the framework of “traditional legal principles”⁹ and will apply those principles to their facts, thereby familiarizing themselves with the “traditional organization of the area of law and how a relevant case fits into that pattern.”¹⁰ In contrast, they feared that an online researcher might bypass the controlling legal principles or policy issues altogether and thereby remain at the “factual level.”¹¹ Whether using Westlaw, LexisNexis, or the Internet, “the researcher is generally more successful using uncommon, unambiguous, and infrequently used words.”¹²

¶8 Other authors have also argued that the print digest is better suited to helping users identify the controlling legal principles and rules and that online terms and connectors searching is more suited to finding cases with specific fact patterns.¹³ In *The Universe of Thinkable Thoughts: Literary Warrant and West’s Key Number System*,¹⁴ Daniel Dabney discusses how the West digest system helps

7. *Id.* at 295 (emphasis omitted). See also Daniel P. Dabney, *The Curse of Thamus: An Analysis of Full-Text Legal Document Retrieval*, 78 LAW LIBR. J. 5, 19 (1986) (analyzing the results of the Blair and Maron study, and expanding on the problems that ambiguous words cause CALR designers and users, by giving an example of a terms and connectors search for DES (diethylstilbestrol), which would not only retrieve cases discussing the drug, but also cases that somehow concern the city of “Des Moines”). It should be noted that without the benefit of computer-assisted full-text searching, it would be extremely difficult to locate cases discussing the drug, since the index to *West’s California Digest* does not list any entries for terms as specific as Diethylstilbestrol. Diethylstilbestrol would appear between “Die, Right to” and “Digital Communication” in *West’s California Digest 2d*, Descriptive-Word index CJ-DQ, Vol. 46 (2002 & Supp. 2009).

8. See, e.g., Bast & Pyle, *supra* note 1 at 293, ¶ 29; Berring, *supra* note 3 at 43–46; Richard Delgado & Jean Stefancic, *Why Do We Ask the Same Questions? The Triple Helix Dilemma Revisited*, 99 LAW LIBR. J. 307, 315 n.48, 2007 LAW LIBR. J. 18, ¶ 21 n.48; Ian Gallacher, *Forty-Two: The Hitchhiker’s Guide to Teaching Legal Research to the Google Generation*, 39 AKRON L. REV. 151, 185 (2006); Paul Hellyer, *Assessing the Influence of Computer-Assisted Legal Research: A Study of California Supreme Court Opinions*, 97 LAW LIBR. J. 285, 288–89, 2005 LAW LIBR. J. 16, ¶ 12; George L. Paul & Jason R. Baron, *Information Inflation: Can the Legal System Adapt?*, 13 RICH. J. L. & TECH. 10, ¶ 40 (2007), <http://law.richmond.edu/jolt/v13i3/article10.pdf>; Molly Warner Lien, *Technocentrism and the Soul of the Common Law Lawyer*, 48 AM. U. L. REV. 85, 101 (1998).

9. Bast & Pyle, *supra* note 1, at 288, ¶ 10.

10. *Id.* at 297, ¶ 47.

11. *Id.* at 298, ¶ 48; see generally Barbara Bintliff, *From Creativity to Computerese: Thinking Like a Lawyer in the Computer Age*, 88 LAW LIBR. J. 338 (1996).

12. Bast & Pyle, *supra* note 1, at 296, ¶ 41; see also Daniel Dabney, *The Universe of Thinkable Thoughts: Literary Warrant and West’s Key Number System*, 99 LAW LIBR. J. 229, 236, 2006 LAW LIBR. J. 14, ¶ 35 (“To the extent that the ideas of interest to lawyers can be reasonably associated with individual words, these systems excel. But to the extent that there is a gulf between the individual words and the ideas of interest to the searcher, free-text systems are limited.”).

13. See Lee F. Peoples, *The Death of the Digest and the Pitfalls of Electronic Research: What Is the Modern Legal Researcher to Do?*, 97 LAW LIBR. J. 661, 2005 LAW LIBR. J. 41, for a review of articles making this argument.

14. Dabney, *supra* note 12.

researchers “ask the right questions”¹⁵ when looking for case law. He gives an example of a researcher trying to find cases dealing with land ownership rights of an underwater object. The headings in the digest could alert the researcher that the issue of whether or not the waters in which the object is located are navigable is of importance, something that the researcher would not necessarily be aware of, should she be searching in a full-text database.¹⁶

CALR Stifles Creativity

¶9 This supposed fixation on specific facts leads to a second stated reason for the crisis, which is that CALR stifles new ideas and creativity in legal argument. In *Technocentrism and the Soul of the Common Law Lawyer*,¹⁷ Molly Lien voiced this concern and questioned what impact CALR will have on

the intellectual richness, flexibility, and justness of the common law. Does excessive reliance on the use of technology overly emphasize rules and certainty at the expense of other goals and qualities we value in lawyering and the legal system: creativity, justice, equity, compassion, and the ability to discover our common fundamental values?¹⁸

She argues that the Langdellian method of research and teaching does not train students to deal with conflicting authorities¹⁹ and that CALR exacerbates this problem. She fears that lawyers will mindlessly apply the rules they find through CALR to their fact situations without taking into consideration the context in which they were created, thus losing touch with the art of persuasion. As an example, Lien says that had the Supreme Court in *Brown v. Board of Education*²⁰ decided to simply follow the rule of precedent with mechanical precision, we would still have forced segregation today.²¹ She worries that CALR makes it too easy for attorneys to bypass those overarching principles of justice and fairness, and instead focus their energies on finding that “kernel of phraseology” in the mass of cases available to them to support their “often incorrect preconceived notions.”²²

¶10 Dabney also takes issue with those who view full-text online searching as a tool that would free the researcher from the conservative effects of literary warrant, the principle West follows when creating headings for the digest system. He explains that indexers do not create headings for subjects that should exist or that may exist in the near future, but only for ideas that are already present in case law. Thus, “[c]ertain ideas are absent from the indexing scheme because there are few documents that contain them. In turn, their absence from the scheme may make them less accessible and thus less likely to appear in new documents.”²³ This has the effect of slowing the rate at which new ideas or concepts are added to the indexing scheme. Dabney does not, however, attribute this “conservative bias in the Key

15. *Id.* at 235–36, ¶ 30.

16. *Id.*

17. Lien, *supra* note 8.

18. *Id.* at 131–32.

19. *Id.* at 96–97.

20. 347 U.S. 483 (1954).

21. Lien, *supra* note 8, at 128–29.

22. *Id.* at 89.

23. Dabney, *supra* note 12, at 242, ¶ 60.

Number System” necessarily to the indexers, but to the fact that our system of precedent is based on materials from the past and “is inherently backward looking.” So the system is not to blame for this “conservative bias”; rather the “law itself” is the cause of it.²⁴ And just as the key number system limits the types of searches that can be done, free-text online searching would impose its own limitations.²⁵

CALR Weakens Our System of Precedent

¶11 A third reason sometimes given for the crisis is actually inconsistent with the one outlined above. According to this argument, the sheer number of cases that are added to the pool of citable authority every year, in addition to the way in which they can be accessed by full-text retrieval systems, will weaken our system of precedent.²⁶ In *From Key Numbers to Keywords: How Automation Has Transformed the Law*,²⁷ Allan Hanson discusses how CALR encouraged the unrestricted publication of case law by U.S. courts. The advent of LexisNexis and Westlaw in the 1970s and 1980s was seen as a fix to the uncontrolled growth of case law being issued by our courts, since cases could be published online rather than having to be printed.²⁸ While CALR may not have originally been responsible for the situation of burgeoning case law, it has been seen as exacerbating the situation. Hanson argues that the larger the pool of citable cases grows, the less precedential value each one holds. As this growing body of case law is applied inconsistently by the courts, it becomes easier for attorneys on both sides to locate cases that support their particular viewpoints, which will then cause even more inconsistent decisions to be issued by the courts.²⁹ Thus, CALR is presented not just as a challenge to research and scholarship, but as a metaphysical threat that negatively impacts our ability to reason and even, perhaps, to administer justice.

¶12 In summary, the arguments that there is a crisis caused by CALR stem from the replacement of the digest system with a system based on computer code, or in other words, the replacement of a system perceived as providing a structure that leads researchers to the controlling principles and policies they need to find with one that does not. As I shall demonstrate, however, these fears are predicated on a misunderstanding of how lawyers actually conduct research: in a fashion that is shaped by a contemporary and official apprenticeship system. Before discussing this, however, it is useful to briefly review the history of the American legal education system to show that the concerns voiced above are not necessarily new.

24. *Id.* at 243, ¶ 65.

25. “To the extent that the ideas of interest to lawyers can be reliably associated with individual words, those systems excel. But to the extent that there is a gulf between the individual words and the ideas of interest to the searcher, free-text systems are limited.” *Id.* at 237, ¶ 35.

26. Berring, *supra* note 4, at 27–29.

27. Hanson, *supra* note 2.

28. *Id.* at 573, ¶¶ 26–28.

29. *Id.* at 582, ¶ 53.

Historical Development of Legal Education in the United States

¶13 A short overview of the historical development of our system of legal education shows four things related to legal research and practice. First of all, while the technology being used today to organize and retrieve legal materials is different from that used in earlier days, the concerns about the proper way to teach future attorneys to “think like a lawyer”³⁰—to be able to locate, and more importantly, understand the overarching legal concepts and principles and apply them to the facts at hand, rather than just mechanically applying a set of rules—are not peculiar to the present. Second, the formal method by which attorneys have been trained to practice law has been constantly remaking itself. Third, until the recent past, with the advent of the Langdellian model of education, that training has included some sort of formal apprenticeship period. Lastly, while the Langdellian method has come under repeated heated attacks for not teaching attorneys the utilitarian skills they need for practice, it has survived to this day as the standard teaching method in American law schools. One reason for this is that law schools have not had to be the main source of that utilitarian knowledge; rather, that knowledge has come from the apprenticeship system, whether a formal one or the informal network of attorneys that exists today.

English Roots

¶14 Beginning with the legal system’s English roots in the twelfth century, attorney education for those who wished to practice in the common law courts consisted mainly of apprenticeship, observation of court actions, and self-study, at times supplemented by lectures, readings, and moot court experience provided at the Inns of Court.³¹ The first real attempt to involve universities in the study of law did not occur until 1758, when the Chair of English Law was established at Oxford University, with William Blackstone as its first occupant.³² Just as many today are concerned that lawyers are missing the controlling legal principles, Blackstone stated in his *Commentaries* that

while apprenticeship instills the ability to be “more dextrous in the mechanical part of the business,” it ignores “first principles upon which a rule of practise is based,” with the result that the “least variation from established precedents will totally distract and bewilder” a lawyer trained in that matter.³³

Thus, we see here an early example of the perennial anxiety regarding the efficacy of attorney training. Drawing on principles of natural law, Blackstone saw within the body of common law a set of rational, consistent principles.³⁴ Prior to Blackstone’s influence, the common law was not seen as “a fit area for study”; rather, it was perceived more as a trade, with legal books being compared to “plumbers’ tools” of the time.³⁵

30. Bintliff, *supra* note 11, at 351.

31. R. Dale Gibson, *Legal Education—Past and Future*, 6 MANITOBA L.J. 21, 21–23 (1974).

32. *Id.* at 23.

33. *Id.* at 23–24 (quoting WILLIAM BLACKSTONE, 1 COMMENTARIES *31–32).

34. Berring, *supra* note 2, at 16–17.

35. *Id.* at 16 (quoting GRANT GILMORE, *THE AGES OF AMERICAN LAW* 3 (1977)).

¶15 Following Oxford's lead, London University also began teaching the common law to attorneys in training, leading the Inns of Court, which had fallen into disuse, to start up again.³⁶ It has been said that the return of the Inns was responsible for the stagnation of common law training at the universities in England, with the practical training of attorneys again left to the apprentice program.³⁷

Early History in the United States

¶16 It was this system of legal training for admission into practice that was imported into the United States during colonial times. The colonies, however, were quick to adapt this system to fit their local culture, and the rapidly changing nature of legal education reflected the pre-revolutionary spirit of the times.³⁸ During the seventeenth and eighteenth centuries, while each colony had its own individual "legal culture," one shared aspect was that bar associations played a very prominent role in training. This regulation of training, along with the lack of guilds in other professions within the colonies, has been credited with giving attorneys a prominent and respected role that their English counterparts lacked.³⁹ By the time of the Revolutionary War, apprenticeship was a requirement for legal practice in all the colonies save Virginia.⁴⁰ Soon thereafter, the hold that bar associations had over entrance into the legal profession began to wane, and by the mid-nineteenth century a definite period of apprenticeship was required in only a minority of states.⁴¹ Until the Revolutionary War, the education of attorneys consisted only of apprenticeships and self-study.⁴² Professorships of law were established at universities and colleges after the war, beginning with the College of William and Mary in 1779,⁴³ and private law schools also sprang up after the war. The law curriculum was constantly changing, though, at times requiring a college education before admittance, at other times resembling something one would expect at a trade school.⁴⁴

¶17 The first private law schools, such as Litchfield (established in 1784), were not affiliated with universities, and the instructors were practicing attorneys.⁴⁵ It was not until the early 1800s that they were absorbed by established colleges and universities.⁴⁶ However, perhaps in part due to the strongly antiaristocratic sentiments felt during the period of Jacksonian democracy, not much progress in the

36. Gibson, *supra* note 31, at 24.

37. *Id.* In 1729, legislation set the period of apprenticeship at five years. Robert Stevens, *Two Cheers for 1870: The American Law School*, in *LAW IN AMERICAN HISTORY* 405, 411 (Donald Fleming & Bernard Bailyn eds., 1971).

38. Stevens, *supra* note 37, at 407–16.

39. *Id.* at 409.

40. *Id.* at 412–13.

41. *Id.* at 417.

42. *Id.* at 412; see also Paul D. Carrington, *The Revolutionary Idea of University Legal Education*, 31 *WM. & MARY L. REV.* 527, 532 (1990).

43. For a detailed chronology of the creation of law professorships at universities throughout the country, see Carrington, *supra* note 42.

44. Stevens, *supra* note 37, at 414–23.

45. Frequently, these private law schools were outgrowths of attorneys' offices in which legal instruction was being given. Curtis E.A. Karnow, *Rhetoric of Academe*, 41 *U.S.F. L. REV.* 135, 137–39 (2006).

46. Stevens, *supra* note 37, at 415.

method of legal education occurred until the second half of the nineteenth century, when universities and colleges began to experience a “revival” of legal teaching.⁴⁷

¶18 With Christopher Columbus Langdell’s appointment as dean of Harvard Law School, the study of law became more standardized⁴⁸ and from that point on something that might be called a “strictly academic legal professional” could be said to exist.⁴⁹ Langdell’s method viewed law as a science, with consistent legal principles embedded in the body of existing case law, which could then be taught to students using the Socratic method.⁵⁰ This model would become the traditional manner in which law has been taught to students up through the present day.⁵¹

Backlash Against the Langdellian Model

¶19 In response to the Langdellian model of teaching, in which judges are seen as deciding their cases via a “scientific, deductive process,” the school of legal realism, which flourished in the 1930s and 1940s, developed its own model of the law, one rooted in the principle of indeterminacy.⁵² The legal realists believed that because the body of existing case law is composed of often contradictory rules, the judicial opinions that rely on that body of case law will be similarly contradictory and inconsistent. And because the rules themselves are written with such ambiguous terms such as “reasonable” or “fair value,” they can be interpreted to produce whatever outcome is desired by the particular judge deciding the case. Therefore, it is not a “scientific, deductive process” that controls judicial decision making, but the individual beliefs and morals of the judges themselves.⁵³

¶20 This philosophy can be seen as a response to changing times—a shift away from the scientific, Darwinian ethos that was popular at the turn of the century. Legal realists saw the practical applications of their beliefs to require that attorneys focus more on social issues than on black letter law, since the former was what really controlled judicial decision making.⁵⁴ It has been argued that legal realism made possible the Supreme Court’s decision in *Brown v. Board of Education*,⁵⁵ in which the Court declined to follow the clear precedent of *Plessy v. Ferguson*,⁵⁶ and instead relied on policy arguments and sociological studies in coming to its decision to end racial segregation in schools.⁵⁷

¶21 Under the influence of the legal realists in the 1920s and ’30s, Langdell’s case method model of legal training came under attack.⁵⁸ During this period some

47. *Id.* at 424–30.

48. *Id.* at 426–27.

49. Karnow, *supra* note 45, at 138.

50. Lien, *supra* note 8, at 95.

51. Jason M. Dolin, *Opportunity Lost: How Law School Disappoints Law Students, the Public, and the Legal Profession*, 44 CAL. W. L. REV. 219, 222 (2007).

52. John Hasnas, *Back to the Future: From Critical Legal Studies Forward to Legal Realism, or How Not to Miss the Point of the Indeterminacy Argument*, 45 DUKE L.J. 84, 85–88 (1995).

53. *Id.* at 87–89.

54. *Id.* at 89–90.

55. 347 U.S. 483 (1954).

56. 163 U.S. 537 (1896).

57. Hasnas, *supra* note 52, at 91–92; Lien, *supra* note 8, at 128–29.

58. Susan Katcher, *Legal Training in the United States: A Brief History*, 24 WIS. INT’L L.J. 335, 367 (2006).

schools attempted to incorporate the social sciences into legal coursework,⁵⁹ publishers of casebooks included materials other than cases,⁶⁰ and law schools began to offer seminars⁶¹ and clinical programs.⁶² All in all, however, while the idea of law as a science may have been diminished, and there were some additions to the law school curriculum, the Langdellian method continued to be the standard method of instruction.⁶³

¶22 In the 1980s, a more assertive form of legal realism appeared in the form of the critical legal studies (CLS) movement.⁶⁴ Its followers argued that both case law and legislation are bereft of any set of determinate legal principles, giving judges a huge amount of discretion “to ignore constitutional provisions, statutes, precedents, evidence, and . . . legal arguments” to come to whatever outcome they desire.⁶⁵ Furthermore, CLS proponents argued that the “legal reasoning” that judges use to reach their decisions does not consist of some sort of coherent methodology, rather “every case can be seen as a case of first impression; every case can be distinguished from another.”⁶⁶ They also argued that legal categories are nothing more than a “social construction”⁶⁷ and are used to “mask the incoherence and indeterminacy of legal doctrine,”⁶⁸ providing “the law student, the teacher and the practitioner a false sense of the orderliness of legal thought, of our practices and of our reasons for those practices.”⁶⁹ Again, a movement that at first glance might appear to be capable of shaking the foundations of legal training to its core, while it did continue the work of the legal realists to further erode the Langdellian model of “law as a science,” did not significantly affect the basic method of law school instruction.

¶23 While the Langdellian method came under heated attack throughout the twentieth century, it has managed to survive, albeit with modifications, as the dominant teaching model in American law schools. Although, as its critics have argued, the case method may have failed to adequately teach attorneys practical skills,⁷⁰ law schools have continued to use it because of its success in teaching cog-

59. Stevens, *supra* note 37, at 470–93; legal realism proponents argued that rather than study “abstract rules of law,” attorneys would be better off studying prevalent sociological trends, which would allow them to fashion arguments persuasive to the judges hearing their cases. Hasnas, *supra* note 52, at 89–90.

60. Stevens, *supra* note 37, at 483.

61. *Id.* at 484.

62. *Id.* at 491.

63. Katcher, *supra* note 58, at 368.

64. Hasnas, *supra* note 52, at 85.

65. Steven M. Barkan, *Deconstructing Legal Research: A Law Librarian's Commentary on Critical Legal Studies*, 79 LAW LIBR. J. 617, 626 (1987) (quoting David Kairys, *Legal Reasoning, in THE POLITICS OF LAW: A PROGRESSIVE CRITIQUE* 11, 13 (David Kairys ed., 1982)).

66. *Id.* at 629 (citing Girardeau A. Spann, *Deconstructing the Legislative Veto*, 68 MINN. L. REV. 473, 529 (1984)).

67. *Id.* at 631 (quoting Duncan Kennedy, *The Structure of Blackstone's Commentaries*, 28 BUFF. L. REV. 209, 215 (1979)).

68. *Id.* See also Jerry L. Anderson, *Law School Enters the Matrix: Teaching Critical Legal Studies*, 54 J. LEGAL EDUC. 201 (2004).

69. Barkan, *supra* note 65, at 631 (quoting Kennedy, *supra* note 67, at 215).

70. This lack was highlighted again in a recent report from the Carnegie Foundation for the Advancement of Teaching. WILLIAM M. SULLIVAN ET AL., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* (2007).

nitive skills. I would argue that law schools in fact have never been the main source of training from which attorneys have learned to practice—that role has been left to the apprenticeship system, whether the formal one used in previous centuries, or the informal networks of attorneys that exist today.

¶24 The authors discussed in the first section, who are concerned that the waning influence of the West digest system will herald a drastic transformation in the manner in which attorneys research and learn to research, assume that the West digest system (which is based on the Langdellian model) is responsible for teaching future attorneys how to research, and is also what attorneys use when they conduct research. What I hope to show below is that even if students do not learn practical skills in law school, they can and do learn them through attorney networks.

The First Year of Law School, Carried into Eternity: Some Existing Accounts of How Attorneys Conduct Their Research

¶25 At this point, it is worth examining existing assumptions about how attorneys learn to and actually perform legal research. There is a shortage of recent, detailed studies of this topic,⁷¹ and what does exist tends to focus on law students.⁷² Coupled with this scarcity is an assumption that when attorneys do research, they use the model taught to them in their legal research and writing classes, which involves identifying rules suggested by the fact situation at hand and then searching for those rules of law in case law to see how they have been applied.⁷³ As discussed above, the West digest system is seen as being well suited to this process, while CALR is seen as circumventing it, allowing researchers to search for cases that are factually similar to their own, without first gaining an understanding of the underlying legal rules.⁷⁴

¶26 Literature does exist, however, that discusses how the manner in which legal research is taught differs from the way in which research is taught in other disciplines. It has been observed more than once that training in legal research focuses on instructing law students (or lawyers) on what the law is, or how to use a particular legal research tool, and that little time is spent looking at how reliable the tool may be, or how the entities responsible for producing the tools may have influenced it. In short, the critical examination usually performed by researchers in other fields of study is missing.⁷⁵ “[W]hat the law schools and lawyers call legal research is not research at all as the term is understood by physical and social scientists”; rather it

71. Some detailed older studies exist, including Morris L. Cohen, *Research Habits of Lawyers*, 9 JURIMETRICS J. 183 (1968); Tamara S. Eisenschitz & Rebecca L. Walsh, *Lawyers' Attitudes to Information*, 26 THE LAW LIBRARIAN 446 (1995). The ABA regularly conducts a survey assessing the use of technology in legal research done by attorneys, but it is more statistical in nature and does not delve deeply in the question of how attorneys actually go about doing their research. See, e.g., CATHERINE SANDERS REACH ET AL., 2008 ABA LEGAL TECHNOLOGY SURVEY REPORT (2008).

72. See, e.g., Peoples, *supra* note 13.

73. Bintliff, *supra* note 11, at 339.

74. *Id.* at 345–47.

75. Robert C. Berring, *Legal Information and the Search for Cognitive Authority*, 88 CAL. L. REV. 1673, 1678, 1681 (2000).

is more akin to “a clerical, mechanical task of compilation.”⁷⁶ While this may seem an unduly harsh assessment of the situation, it should be noted that the main tools to index and update the enormous body of American case law for the last century have been in the hands of publishing companies,⁷⁷ and that the training that law students receive in using legal databases such as LexisNexis and Westlaw often comes from the vendors themselves.⁷⁸

¶27 Not only has it been posited that research is *taught* differently in law than in other disciplines, but it has also been suggested that it is *conducted* differently than other types of research. Looking at legal research from a critical legal studies viewpoint, Steven M. Barkan argued that the “categorical scheme[s]”⁷⁹ created by legal research tools such as the West digest not only shape the way that attorneys and judges approach their cases,⁸⁰ but they are also “used to mask the incoherence and indeterminacy of legal doctrine.”⁸¹ Barkan summarized the CLS position as follows:

If legal rules and doctrine (whether from cases or statutes) are indeterminate, and if a distinctive form of legal reasoning does not exist, then there is no reason to search for precedents or statutes in the law library. At best, legal research becomes no more than an activity to retrieve stylized rationalizations to support decisions made for other reasons.⁸²

Barkan argues that researchers suffer from an overly simplistic view of how to conduct legal research, based on Langdell’s notion of law as a science, seeing it as nothing more than “a search for published ‘authorities.’”⁸³

¶28 In a critique of Barkan’s article, Peter Schanck presents a different view of how attorneys do research.⁸⁴ He argues that Barkan’s depiction of the way legal research textbook authors describe the research process and the way in which attorneys actually do research is too simple.⁸⁵ Schanck contends that the authors of legal research textbooks, such as *How to Find the Law*, present legal research as a basic, mechanical, and formalistic process of finding persuasive and mandatory authorities and then applying them to the facts at hand, because to teach a first-year law student anything more would do nothing more than addle them.⁸⁶ Schanck does not agree with Barkan and Berring that the West digest system has done so much to affect the research methods of practitioners. He argues that attorneys do not rely on the key number system as their primary method of doing their

76. James Huffman, *Is the Law Graduate Prepared to Do Research?*, 26 J. LEGAL EDUC. 520, 520 (1974).

77. Robert Berring, *On Not Throwing Out the Baby: Planning the Future of Legal Information*, 83 CAL. L. REV. 615, 618–20 (1995).

78. Shawn G. Nevers, *Candy, Points, and Highlighters: Why Librarians, Not Vendors, Should Teach CALR to First-Year Students*, 99 LAW LIBR. J. 757, 759, 2007 LAW LIBR. J. 46, ¶ 7.

79. Barkan, *supra* note 65, at 631.

80. *Id.* at 630.

81. *Id.* at 631.

82. *Id.* at 634.

83. *Id.* at 636.

84. Peter C. Schanck, *Taking Up Barkan’s Challenge: Looking at the Judicial Process and Legal Research*, 82 LAW LIBR. J. 1 (1990).

85. *Id.* at 12–14.

86. *Id.* at 14.

research; rather, they use an assortment of annotated codes, legal encyclopedias, treaties, loose-leaf services, etc. And when they do use the digest, he believes that the manner in which they do so, quickly scanning through case annotations while paying little attention to the subject headings—in short, using it as a shortcut rather than as an index—also serves to reduce its impact on the way they do research.⁸⁷ Indeed, Berring has also written about how surprised he was that only a small number of attorneys actually understood the key number system.⁸⁸

¶29 As stated above, while literature exists on how students are taught to do research in law schools, little recent study has been done on how attorneys do their research when practicing. Instead, the prevailing assumption seems to be that attorneys use the research model taught in their legal research and writing classes and that perhaps even the Langdellian model plays a large role in the process. Bintliff argues that the whole concept of “thinking like a lawyer” is being altered by CALR. According to her, “thinking like a lawyer” is like the Socratic teaching method, which involves “identifying rules suggested by our facts at hand, then search[ing] for those rules of law in other cases to see how they have been applied.”⁸⁹ She views the West digest system as well suited to this process, allowing researchers to search the key number system using “a combination of legal terminology and major ‘fact words.’”⁹⁰ Bast and Pyle also see the digest as a product of the Langdellian method, with the result that the “major digest classifications—property, contracts, torts, and crimes—are the subject matter of introductory law school courses.”⁹¹ Thus, the digest serves both as a teaching tool and as the main case-finding tool used by attorneys.

¶30 The literature discussing how attorneys research and learn to do research in practice is based on an assumption that they do so using the same sort of model that is used to train law students, one that assumes that the West digest plays an important role. In the next section, I hope to show that this is not the case at all.

¶31 Based on the results of a small study I conducted of attorneys and law firm librarians in the San Diego area, I believe the authors who think that CALR will fundamentally alter the way attorneys practice or do research, and consequently transform our legal system, overstate the dangers. This is not because they are wrong in saying that the influence of the West digest system, as it is taught in many first-year research and writing courses, is waning—I wholeheartedly agree that it is—but because there are other normalizing forces at work.

¶32 While the Langdellian method of instruction may have constituted the basis for training law students over the last century to “think like lawyers,” it, along with the West digest system, is not what practicing attorneys rely on when researching their cases. Rather, because most of an attorney’s quotidian practice is far removed from the Langdellian model, and because the way in which they learn is through a

87. *Id.* at 17–19.

88. Berring, *supra* note 75, at 1694. By the time Berring’s article was published in 2000, legal research using online databases was the norm. It would be interesting to conduct a study of attorneys who practiced in the pre-LexisNexis/Westlaw days to see how they used the West digest system.

89. Bintliff, *supra* note 11, at 340.

90. *Id.* at 342.

91. Bast & Pyle, *supra* note 1, at 287.

network of other attorneys, any changes that occur in the manner in which they do research and practice will be filtered through that network. Furthermore, because the method used to research and practice is dependent on this network, it is highly variable and adaptable to external conditions. For example, changes in the format of materials will be filtered through this network before they affect the research habits of new attorneys. For this reason, while the materials and methods used by attorneys to conduct research may go through major changes, the impact those changes will have on attorney practice will be softened, allowing for a more gradual transition.

Law in the Wild: Results of Attorney Research Habits Study

Description of the Study

¶33 From March 2006 through February 2008, I conducted a series of interviews with fifteen attorneys practicing in the San Diego area.⁹² The sample breakdown was nine attorneys who worked at large firms (seventy-five or more attorneys), three who were at small firms (three to five attorneys), and three independent contractors at a nonprofit law firm, operating under contract with the California Administrative Office of the Courts, which handled only criminal appeals. With the exception of three of the large firm attorneys, who had been practicing for less than one year, all the attorneys had at least three years of practice experience.

¶34 I decided to conduct interviews rather than administer survey questions, because I wanted to make sure that any misconceptions that my subjects may have held about the legal research process would not cloud the results of the study. Indeed, there were quite a few occasions when my follow-up questions revealed that what I had in mind was not quite what my interviewee had in mind. I also hoped that open-ended questions calling for a descriptive narrative would lead my research in directions that I might not have thought of originally. Because of the small size of my sample, I present it as the basis for the development of a possible alternative model of how attorneys learn to practice and actually conduct research, rather than as a definitive study.

Study Findings

Initial Research Steps

¶35 All the attorneys I interviewed stated that if they were researching an unfamiliar area of law, they would start by consulting with an appropriate secondary source, such as a practice guide, a legal treatise, or an encyclopedia, or a document repository,⁹³ in order to become familiar with what one termed the “legal landscape” in which their issues lay. Similarly, they would use the same method when beginning to look for controlling case law. In addition to practice guides and treatises,

92. All the data from the study given here is taken from tape-recordings, notes, and transcripts on file with the author.

93. See *infra* ¶ 40.

tises, annotated codes and even jury instructions were listed as good sources for finding “starter cases.” After key cases were identified using one or more of these sources, the attorneys would then read those cases to see what sources were cited in them. They also might look for more cases by Shepardizing or KeyCiting their starter cases. One attorney said that one of her favored methods for finding cases was to do a Focus search within these Shepard’s results.

Use of the West Digest

¶136 While the attorneys I interviewed did not use the print version of the West digest (except perhaps during the first few months at their first job), and only four had occasionally used the West Key Number Digest Outline (the online version of browsing the digest), they were all loosely using this tool, or the LexisNexis equivalent of it, by checking the hyperlinked headnotes found in the cases they retrieved using Westlaw or LexisNexis.⁹⁴ Two of these four complained that they found searching through the West key numbers time-consuming, and that when using this method their searches retrieved a large number of irrelevant cases. A third attorney said she searched the online version of the digest only rarely, when desperately looking for any cases on an obscure topic. While a fourth attorney found the online version of the digest helpful, he said that he would never use it as a first step, since his issue would frequently be indexed under several divergent key numbers. He felt that he needed a firmer grounding in the subject matter to be able to determine which key numbers he retrieved were on point. One attorney (who used neither the print digest nor the online version of the digest) stated that he feared that searching using either method would cause him to miss important cases because he did not feel he was knowledgeable enough about the West key number system to search it effectively.

¶137 Most of the attorneys I interviewed, though, would use Westlaw’s Custom Digest or LexisNexis’s headnote topics or “More Like This Headnote” as tools to scan through the available cases. They believed that at the point they accessed these tools they possessed enough expertise in the subject area to be able to judge the quality of their search results. All the attorneys interviewed saw LexisNexis and Westlaw as very useful systems, and they seemed to understand the limitations of natural language and terms and connectors searching. The manner in which they arrived at their terms and connectors searches—consulting with secondary sources, in-house documents, or other attorneys to gain knowledge of an unfamiliar area of law in order to identify the proper keywords to use in their online searches—indicates that they used online searching for case law not so much to identify the “controlling legal principles and concepts,” as has been feared by those writing about legal research, but more as a way to find support for their already-formulated arguments.

¶138 As would be expected, all the attorneys I spoke with who had been practicing for more than one year (twelve out of fifteen) said that as their experience level increased, the amount of time they needed to spend reading through secondary

94. This is the “Custom Digest” in Westlaw and the “Searching by Topic or Headnote” function in LexisNexis.

materials to identify the key issues decreased. While it could be said that, in a sense, attorneys are conducting research in the manner in which librarians want them to—by starting with secondary sources and using them to gain an understanding of the controlling concepts and issues before launching into a search for case law in a full-text database—it is important to note that secondary sources are only one of the sources they use, and one that is used less frequently as their experience level increases. Rather, their use of secondary sources is usually supplemented with, or even over time replaced by, consultation with in-house document repositories or more experienced attorneys who are part of their informal networks.

Attorney Networks

¶39 In addition to consulting secondary sources, all the attorneys I interviewed had at some point looked to other attorneys for guidance. The three small-firm attorneys I spoke with all said that if they were unsure of the issues they were researching, they might consult with the more experienced attorneys within their firms to ensure that they had not missed something. Two of these attorneys worked in offices that were located within a building that leased several of its floors to small law offices, and these attorneys would also consult with attorneys in separate firms, especially for questions about basic procedural issues, such as those dealing with the preparation of standard discovery instruments or motions. One of these attorneys stated that he had contacted former opposing counsel on a couple of occasions (during a completely separate action, of course) because he had been impressed with his opponent's expertise and had gotten to know him favorably during the prior adversarial proceedings. The third small-firm attorney I spoke with worked in a firm that handled only lemon law cases. She said that because the body of law dealing with this topic is small and discrete, and also because the community of lemon law lawyers is small, everyone within the community would keep the others apprised of developments in this area, usually by e-mail.

¶40 In the large firms (seventy-five or more attorneys), a supervising attorney might be consulted, and often there is a brief bank⁹⁵ or some type of repository for past filings or memoranda that can be consulted. Of the nine large-firm attorneys I spoke with, seven said that they would regularly send out e-mails to their entire practice group (or the entire firm) if they were stuck on an issue or procedural question.

¶41 Asking research questions via e-mail was also the method used by the three attorneys who worked for the nonprofit agency as independent contractors (who did not have the benefit of being able to walk down the hall to ask one of their colleagues a question). They all belonged to an organization called the California

95. Many of the large firms had some sort of system that allowed for document sharing among attorneys. This varied from nothing more than a shared drive that all attorneys could access, to a system such as AnswerBase, a fully-integrated system first developed for the large multinational firm Morrison & Foerster, LLP. AnswerBase is intended to serve as a "one-stop shopping" information source that provides attorneys access to primary law, secondary resources, and court documents and legal memoranda related to all past cases handled by the firm. Morrison & Foerster, Answerbase at Morrison & Foerster, <http://www.mofo.com/AnswerBase> (last visited Jan. 25, 2009).

Appellate Defense Counsel (CADC),⁹⁶ which provides its members with a brief bank. More importantly, members can post messages to a mailing list, where they can ask procedural questions, such as what color paper to use for the cover page of their briefs, or substantive questions, such as if anyone knew of an authority they could cite for a particular position. Thus, all the attorneys I interviewed had as a resource a network of attorneys whom they could consult should they be faced with an issue in an unfamiliar area of law.

Experience

¶42 When it came to the extent and manner in which the attorneys I interviewed would rely on their colleagues, the individual's level of experience was a strongly determinative factor. When asked how they believed that their research abilities and methods had changed over the years, the attorneys I talked with responded almost unanimously that they are now able to conduct their research much faster. Their familiarity with the areas of law in which they practice allows them to spot the issues that needed to be researched more quickly, without having to consult multiple secondary sources or read through a large number of cases. Because of their experience, they often already know the key terms necessary to do a terms and connectors search in one of the online databases.

¶43 Asked to reflect back to their first job or clerking experience, they recalled not only consulting with more senior attorneys but also spending a great deal of time reading through legal encyclopedias, treatises, and practice guides. They also spent a large amount of time reading the cases that were cited to in those resources, and, if they worked for a firm, they would generally do all this research before consulting with a senior attorney, in part because they did not want to appear to lack competence. As their experience level increased, they would be able to identify the issues more quickly, without having to slog through a pile of cases, and the nature of the questions they would ask of other attorneys became more focused. As novice attorneys, they were concerned about correctly identifying and missing issues; later on, they would consult with other attorneys not so much for help identifying the issues, but more to save time and see if someone else had already found supporting authority for a particular issue, thus obviating the need to look for case law.

¶44 My interviews also showed that many attorneys tend to practice only in specific subject areas. The three small-firm attorneys I talked with all practiced in firms that dealt with only one or two subject areas, and many of the large-firm attorneys were put into practice groups after a year or two of practice in the firm. This limitation to specific fields of law allows attorneys to develop expertise, and thus simplifies the research process as they gain experience.

96. California Appellate Defense Counsel, <http://www.cadc.net> (last visited Feb. 15, 2009).

Overview and Analysis of Study Results

¶45 Three interrelated principles held true during my interviews no matter whom I talked with. First, none of the attorneys I interviewed would start researching an issue by doing a full-text (terms and connectors or natural language) search in either LexisNexis or Westlaw, unless they were either already very familiar with the area of law concerning that issue, or until after they had consulted some sort of secondary source, in-house document repository, or a more experienced colleague to gain some familiarity with the subject area and to be able to identify key terms to be used in their online searches. Second, none of the attorneys I interviewed would search the West digest system the way it was taught to them in law school.⁹⁷ Third, all of them had a network of attorneys with whom they would at one time or another consult if they needed help. The extent to which they relied on this network was a function of how experienced they were themselves and how accessible other attorneys were to them.

¶46 The results of my study paint a picture of attorneys conducting research and developing their legal arguments not by extracting controlling legal principles from case law through a process akin to the Socratic method, but in a rather synthetic manner: they consult secondary sources, in-house documents, and other attorneys in order to acquaint themselves with unfamiliar areas of law and to locate key cases and key terminology that can be used later to do a terms and connectors search in a full-text database. As the experience level of attorneys increases, they can eliminate steps or perform them more efficiently. Coupled with this is the strong tendency of attorneys (especially those working in law firms) to specialize in no more than a few subject areas, making it easier to become more experienced.

¶47 I believe my results indicate that today's attorneys are no more in danger of missing the "controlling legal principles or policy issues" than they were before online databases became a standard tool for legal research. While it may be true that most attorneys do not use the West digest system in the "traditional way," i.e., by using the print digest or by using Key Search in Westlaw to methodically work down through the subcategories, and it may be true that many attorneys can now conduct most (if not all) of their research using online resources, the West digest system is just one of the many tools that an attorney may use. Attorneys are still learning to do research and to practice in the "traditional" manner, by using whatever tools are available to them, and, more importantly, by receiving on-the-job training and by being able to tap into the knowledge of their more experienced colleagues. In short, they are still being trained through the present-day manifestation of the long-standing apprenticeship system, and what I hope my study shows is that what they learn through this system is rather removed from what they learn

97. By this I mean using the print version of the West digest volumes, looking up possible subject headings in the Descriptive Word Index and then narrowing down to an appropriate key number. In fact, during my first few interviews, I discovered that when I asked the question, "Do you ever use the West digest system when doing research?" many of the attorneys interpreted this to mean "Do you ever use the headnotes found at the beginning of cases retrieved from LexisNexis and Westlaw to find other cases?"

in law school. While the increase in clinical programs being offered and the shift to a more practice-oriented approach in first-year research and writing courses⁹⁸ are helping better prepare future attorneys for actual practice, the research techniques and knowledge that they will learn about from the attorneys in their networks consists of practical, utilitarian knowledge garnered through experience and not recirculated knowledge acquired in law school classes.

Conclusion

¶48 A formal period of apprenticeship is not required before entering practice today, but the spirit of the apprenticeship system exists in the guise of clinical work, summer clerkships, internships, and, perhaps most importantly, in the network of attorneys that fledgling lawyers, and even experienced ones, regularly consult. Colleagues within a firm, other attorneys working in the same building, contacts one has made (even former opposing counsel) can all be considered part of that network. One could even argue that the apprenticeship system has been improved upon and bolstered over the centuries with the development of e-mail and listserv technology, in addition to in-house brief banks and general brief collections such as the one available via Westlaw (CourtDocs). The attorney's training is no longer dependent on the teaching abilities of a mentor, but can be shaped by the expertise of attorneys throughout the country and even around the world.

¶49 Furthermore, today's "plumbers' tools," consisting of practice guides, form-books, and other secondary sources available in both electronic and print format, are so plentiful and of such high quality that it can be argued that they can act as stand-ins for an overseeing attorney, especially for those attorneys (no matter what their experience level) who do not have the benefits of working in a firm.

¶50 Much concern has been expressed that CALR will transform the way attorneys learn to and actually do research, and that this will in turn result in a change in our very legal system. The brief history of American legal education presented here shows that the system used to prepare attorneys for practice has continually changed, reflecting the political and social climate of the times, progressing from the British system of apprenticeship, to the development of independent private law schools staffed with practicing attorneys, to the Langdellian model of education, upon which the West digest system was based. The Langdellian method of instruction has itself come under heated attack by both the legal realists and the critical legal studies proponents, with subsequent modifications of the educational system occurring during the time periods following those attacks. However, throughout all the changes, the apprenticeship system of training has existed, either explicitly, or through the informal modes of communication that were articulated by the attorneys in my study.

¶51 Regardless of what controlling model of legal thinking is taught in law schools, or what formal models of research are being transmitted through law school pedagogy, lawyers will continue to gather their utilitarian knowledge from

98. Sullivan, *supra* note 70, at 91–96.

their colleagues, as they always have. Therefore, any shifts in research paradigms used by law schools that may be caused by CALR should not radically transform the way in which attorneys research in practice.

¶52 It is because this system acts to mediate (and consequently slow down) the rate of change that may occur in the format of legal materials, in the techniques used by attorneys to conduct their research, or in the prevailing ideologies of law schools, that the current shift from a print-based research system centered around the West digest to one based on CALR will not fundamentally alter attorney practice, at least not for a substantial period of time.

¶53 Using the results of the small sample of attorneys I interviewed, I have tried to present a model of how attorneys conduct their research in practice. Further studies may help us understand how much this stability in the system is a result of the 'drag' produced by informal networks. It may be that the conservative effect caused by this supplementary training system is not uniform, and that different aspects of the law are affected to greater or lesser degrees by these informal apprenticeships.

¶54 Further research aside, though, one thing is clear: even should the West digest system be relegated to the "dustbins of history," and the ways of research continue to evolve based on the continuing shift from print to online materials, the pace of change will be ameliorated as attorneys continue to learn the process of legal research under the governing paradigm used by their network of attorneys.