Legal Research and Its Discontents: A Bibliographic Essay on Critical Approaches to Legal Research [2021-6]

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Legal Research and Its Discontents: 
A Bibliographic Essay on Critical Approaches to Legal Research*

Nicholas Mignanelli**

What is Critical Legal Research? What is “critical” about critical legal information literacy? What is a critical law librarian, and what must one do to be one? This bibliographic essay attempts to answer these questions in the course of providing a comprehensive introduction to the history, literature, and practices found at the intersection of critical legal theory and legal research.

“It seems to me that the real political task in a society such as ours is to criticize the workings of institutions, which appear to be both neutral and independent; to criticize and attack them in such a manner that the political violence which has always exercised itself obscurely through them will be unmasked, so that one can fight against them.” —Michel Foucault

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Introduction: A Primer on Critical Legal Theory

“No, you won’t fool the children of the revolution.” —T. Rex

¶1 In recent years, library scholars have used critical theory to reevaluate the concepts that lie at the heart of their field. In law librarianship, however, the practice of applying the insights of critical legal theory to the legal research process is more than three decades old. The law librarians and legal scholars undertaking this work—what Nicholas Stump calls “Critical Legal Research” (CLR)—seek to expose how external power structures shape the organization of legal information and embed biases in the tools of legal information retrieval. Adherents of CLR (critical law librarians) develop and deploy methods and strategies designed to contend with the limitations that these power structures set on legal innovation, law reform, and, ultimately, human freedom.

¶2 But to gain a deeper sense of the essence of CLR, we must first discuss critical legal theory itself. Only when we have some basic understanding of critical legal theory can we begin to appreciate the potential CLR has as a powerful toolbox for the dissidents, reformers, and rebels laboring at the margins of our legal system. Stump defines critical legal theory as “a diverse and inclusive canon of literature or ideas” that has its “theoretical underpinnings” in “such foundational movements as legal realism, neo-Marxism, post-structuralism, and deconstruction.” Critical legal theory is a phenomenon that has taken place in several waves, the first of which was the advent of the critical legal studies (CLS) movement in the late 1970s.

¶3 Founded at a conference held at the University of Wisconsin–Madison in 1977, CLS “continued as an organized force only until the late 1980s.” Members of the CLS

4. The earliest example is Steven M. Barkan’s Deconstructing Legal Research: A Law Librarian’s Commentary on Critical Legal Studies, 79 LAW LIBR. J. 617 (1987).
6. For suggesting that “contending with” these limitations is a more realistic goal than “transcending” them, I am grateful to Yasmin Sokkar Harker, Student Liaison Librarian and Associate Law Library Professor at the City University of New York School of Law. Email from Yasmin Sokkar Harker to author (Sept. 27, 2019) (edits to program proposal in attachment) (on file with author).
7. Stump, supra note 5, at 600.
movement (crits) have long resisted attempts to define it. Writing at its zenith, two prominent crits described CLS in these broad terms: “The CLS movement has been generally concerned with the relationship of legal scholarship and practice to the struggle to create a more humane, egalitarian and democratic society.”9 Historically speaking, however, CLS can be understood, simultaneously, and somewhat paradoxically, as (1) a successor to legal realism,10 (2) the arrival of 1960s counterculture and left-wing activism on the law school campus,11 and (3) the adaptation of neo-Marxism, poststructuralism, and deconstructionism—among other 20th-century continental philosophies—to American law and legal theory.12

¶4 Duncan Kennedy opines that CLS initially had “two aspects,” namely a “scholarly literature” and “a network of people who were thinking of themselves as activists in law school politics.”13 While CLS is “not a theory” but a “literature produced by this network of people,” this literature has certain identifiable themes.14 Perhaps the most prominent of these themes are the indeterminacy of legal doctrine, law as politics, the myth of legal reasoning, and the reification of legal categories.15 CLS literature is, of course, far more divergent and complex than the following summary might suggest, but on these four themes hang all the incarnations of critical legal theory.16

¶5 The principle of indeterminacy holds that “the existing body of legal doctrines—statutes, administrative regulations, and court decisions—permits a judge to justify any result she desires in any particular case.”17 In short, “the idea is that a competent adjudicator can square a decision in favor of either side in any given lawsuit with the existing

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11. Duncan Kennedy is reported to have once described CLS as “a ragtag band of leftover '60s people and young people with nostalgia for the great events of 15 years ago.” See Terry Eastland, Radicals in the Law Schools, WALL ST. J., Jan. 10, 1986, at 16.
12. See John Henry Schlegel, Critical Legal Studies, in The Oxford Companion to American Law 202–03 (Kermit L. Hall ed., 2002) (“CLS scholars drew from an extremely diverse range of intellectual sources, including classic European Marxism, the neo-Marxism of Antonio Gramsci and György Lukács, the existential Marxism of Jean-Paul Sartre, the revived critical theory of Jürgen Habermas and Herbert Marcuse, the structuralism of Claude Levi-Strauss and Ferdinand de Saussure, the post-structuralism of Michel Foucault, the deconstructionism of Jacques Derrida, the anti-foundationalism of Thomas Kuhn and Richard Rorty, and the historical scholarship of E. P. Thompson.”).
14. Id.
15. These are the major CLS themes identified by Barkan in Deconstructing Legal Research, supra note 4, at 625–34.
16. “[These themes] are sufficiently general . . . to fall within the area of convergence mentioned by Gordon.” Id. at 619 n.8 (citing Robert W. Gordon, New Developments in Legal Theory, in The Politics of Law: A Progressive Critique 281, 282 (David Kairys ed. 1982) (“Yet for all the diversity in background of this collection of [CLS scholars], and the perpetual sharp conflicts over issues of methods within, there is an amazing amount of convergence in the work of this group.”)).
body of legal rules.”\textsuperscript{18} This is because “[a] wide variety of interpretations, distinctions, and justifications are available; and judges have the authority and power to choose the issues they will address, and to ignore constitutional provisions, statutes, precedents, evidence, and legal arguments.”\textsuperscript{19} Consequently, legal decisions “are riddled with inconsistencies and contradictions of which we do not approve, but about which we can do very little.”\textsuperscript{20} Crits expose these inconsistencies and contradictions through irreverent deconstruction (“trashing”).\textsuperscript{21}

\textsection{6} Because legal doctrine is indeterminate, “law is simply politics by other means,”\textsuperscript{22} and “[t]he ultimate basis for a decision is a social and political judgment incorporating a variety of factors, including the context of the case, the parties, and the substance of the issues.”\textsuperscript{23} “Indeed, even the facts relevant to a particular controversy . . . are not capable of determination by any distantly legal or nonpolitical methodology.”\textsuperscript{24} Because law is politics, legal decisions are “not based on, or determined by, legal reasoning.”\textsuperscript{25}

\textsection{7} Therefore, legal reasoning is a myth and a process of mystification, a mask for the actual bases of legal decisions. While “[d]ecisions are predicated upon a complex mixture of social, political, intuitional, experiential, and personal factors . . . they are expressed and justified, and largely perceived by judges themselves, in terms of ‘facts’ that have been objectively determined and ‘law’ that has been objectively and rationally ‘found’ and ‘applied’.”\textsuperscript{26} Therefore, \textit{stare decisis} merely “provides and serves to disguise enormous discretion,” and precedents “support rather than determine the principles and outcomes adopted by judges.”\textsuperscript{27} Put in practical terms, “[p]ublished opinions . . . record the language judges must use to legitimize their decisions, but the real reasons for decisions are not expressed.”\textsuperscript{28}

\textsection{8} For crits, the empty language of legal reasoning leads to the reification of legal categories, the process through which “we draw an abstraction from a concrete milieu and then mistake the abstraction for the concrete.”\textsuperscript{29} Of course, “[i]t is impossible to think about the legal system without some categorical scheme,” but “all such schemes

\begin{itemize}
  \item 18. \textit{Id.}
  \item 21. For an explanation of this method, see Mark Kelman, \textit{Trashing}, 36 STAN. L. REV. 293 (1984).
  \item 22. Kairys, \textit{supra} note 19, at 17.
  \item 23. David Kairys, \textit{Law and Politics}, 52 GEO. WASH. L. REV. 243, 247 (1984). Kairys goes on to explain that [t]his does not mean that all outcomes in a case are equally likely, that law is just a game, or that precedent or the enactment of a statute mandating or prohibiting something is meaningless. All outcomes are not equally likely, but it is only the social context in a particular situation that makes one outcome more likely than another. A legal sounding rationale can be made for almost every result. But in certain contexts one rationale will seem more reasonable or more “right” than others because the values in that particular context support that result. \textit{Id.}
  \item 24. Kairys, \textit{supra} note 19, at 17.
  \item 25. Kairys, \textit{supra} note 23, at 247.
  \item 27. Kairys, \textit{supra} note 19, at 15.
  \item 28. Barkan, \textit{supra} note 4, at 630.
\end{itemize}
are lies” and soon take on “a life of their own.” This happens when lawyers and judges “take both the existing structure and the myriad particular categorizations for granted” and “deploy their efforts at reasoning new situations into the category that will lead to the outcomes they desire.” Thus, “categories are perceived as being built by history, human nature, and economic law, when in reality they are created and perpetuated by society’s dominant interests.”

By the middle of the 1980s, CLS began to face sharp criticism from the right and left alike. Conservative legal scholars pointed out that—even if the movement’s critique of law and society were valid—CLS had failed to articulate a coherent alternative, rendering most CLS thought irrelevant. It was criticism from the left, however, that brought about the next two waves of critical legal theory. While they agreed with much of the CLS critique of American law, feminist legal scholars and critical legal scholars of color sought to use CLS insights to address the unique problems facing women and racial minorities, respectively. Previously, these problems had been neglected by a movement that was, heretofore, largely made up of “white male[s] with some interest in 60s style radical politics or radical sentiment of one kind or another.”

The next wave of critical legal theory, feminist legal theory, arose when feminist scholars within CLS came to believe that the movement was ultimately, in the words of Carrie Menkel-Meadow, “a male-constructed, privileged place in which domination and oppression can be described and imagined but not fully experienced.” These scholars united to give a voice to those who had experienced “being dominated, not just . . . thinking about domination.” Working to “pull feminism out of its marginal position,” they organized their own conference and founded their own school of thought. Feminist legal theory built on CLS themes, using CLS insights to tackle issues

31. *Id.* at 216.
35. Clark, *supra* note 13, at 56.
37. *Id.*
38. *Id.* at 63.
such as child custody, divorce, employment, the family, pornography, rape, reproduction, and sexual harassment. Yet feminist legal theorists also broke new methodological ground, conceptualizing an array of models to explain how the legal system subordinates women and pioneering new techniques—such as unmasking, contextual reasoning, and consciousness raising through narrative—to expose how sexism is embedded in law. Somewhat later, gay and lesbian scholars used these methods to advocate for their own plight.

Critical legal scholars of color, too, found themselves dissatisfied with CLS. Writing in 1987, Richard Delgado asserted that, while the movement’s “negative program contains much that is useful for minorities,” several trends actually threatened to do harm to people of color. These trends included the critique of legal rights and rules, the rejection of incremental change, idealism, and false-consciousness analysis. Furthermore, the underdeveloped positive program advanced by crits (“a

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47. For example, equal treatment feminism, cultural feminism, dominance theory, critical race feminism, lesbian feminism, ecofeminism, pragmatic feminism, and postmodern feminism. See generally FEMINIST LEGAL THEORY: A PRIMER 11–39 (Nancy Levit & Robert R.M. Verchick eds., 2d ed. 2016).
48. Id. at 41–46.
52. Id. at 303–07.
53. Id. at 307–08.
54. Id. at 308–09.
55. Id. at 309–12.
Utopia in which true community would prevail”) did not incorporate a process for establishing social equality and ensuring the permanent elimination of racism.56

¶12 Coming to realize that “CLS [did] not provide what minorities seek,”57 critical scholars of color soon founded a movement of their own: Critical Race Theory (CRT).58 In 1989, critical race theorists held their first conference “at a convent outside Madison, Wisconsin.”59 Rooted in the writings of Harvard Law Professor Derrick Bell,60 CRT holds that “racism is ordinary” and not an aberration; that racial minorities have only made gains when their interests have converged with the interests of the white elite (“dominant society”); that race is socially constructed; that dominant society “racializes different minority groups at different times”; that identity is intersectional and nonessential (i.e., each individual “has potentially conflicting, overlapping identities, loyalties, and allegiances”); and that people of color have “unique perspectives” that can be used to “assess law’s master narratives” through “legal storytelling.”61

¶13 Much like its predecessor CLS, CRT has had its share of passionate critics. These critics have charged, among other things, that CRT methods reinforce racial stereotypes,62 that CRT precepts are largely untestable,63 and that CRT-inspired speech policies harm the individuals they are intended to protect.64 In spite of these claims, CRT has been profoundly influential, not only shaping the discourses of several other disciplines65 but

56. Id. at 312–14.
57. Id. at 322.
60. For a representative collection of Bell’s scholarship, see The Derrick Bell Reader (Richard Delgado & Jean Stefancic eds., 2005).
61. Delgado & Stefancic, supra note 59, at 8–11.
63. See, e.g., Alex Kozinski, Bending the Law, N.Y. Times, Nov. 2, 1997, at 46 (reviewing Farber & Sherry, supra note 62).
65. See Delgado & Stefancic, supra note 59, at xvii (“Critical race theory has exploded from a narrow subspecialty of jurisprudence chiefly of interest to academic lawyers into a literature read in departments of education, cultural studies, English, sociology, comparative literature, political science, history, and anthropology around the country.”).
fostering several submovements (e.g., Critical Race Feminism,66 LatCrit,67 Tribal Crit,68 Asian American Jurisprudence,69 Queer Crit,70 Critical White Studies,71 and ClassCrit72).

¶14 Although CLS, feminist legal theory, and CRT differ in fundamental ways, they are united in their critical analyses of American law and their desire to aid the marginalized.73 As we will discover in the following bibliography, CLR is ultimately the offspring of all three waves of critical legal theory. CLR came into existence when various proponents of critical legal theory turned their attention to legal information, contemplating new approaches to the legal research process that would permit advocates for the marginalized to challenge society’s dominant interests and the structures that uphold them.

Annotated Bibliography

¶15 The following annotated bibliography is an attempt to curate the body of literature that comprises CLR. The bibliography is organized chronologically to show how important concepts and practices have developed over time. Like all bibliographies, this one is incomplete and imperfect, but the author has done his best to collect the key writings that have formed the movement.


72. For a foundational text, see Athena D. Mutua, Introducing ClassCrits: From Class Blindness to a Critical Legal Analysis of Economic Inequality, 56 BUFF. L. REV. 859 (2008).

73. I hasten to add that adherents of CLS were divided over this second proposition. See, e.g., Peter Gabel & Duncan Kennedy, Roll Over Beethoven, 36 STAN. L. REV. 1, 26–28 (1984).
Foundations

¶16 A bibliography that placed a broader construction on the heading “foundations” would surely include works by Michel Foucault, Jacques Derrida, and several neo-Marxist thinkers. However, the author has limited this section of the bibliography to works that directly precipitated the advent of CLR and made it possible to approach legal research with a critical eye.


In his deconstruction of Blackstone’s Commentaries on the Laws of England, Kennedy contends that Blackstone’s taxonomy of the English legal system is an attempt to “naturalize” and “legitimate the legal status quo of the England of [Blackstone’s] day.” Kennedy seeks to expose the fundamental contradiction at the heart of the text (“that relations with others are both necessary to and incompatible with our freedom”) and how mechanisms of denial have served to obscure this contradiction—which now lies at the heart of Anglo-American law. Of particular interest to law librarians are Kennedy’s comments about categorical schemes.


Part critique and part utopian vision, Kennedy’s polemical essay contains no mention of legal information, legal research, law libraries, or law librarians, yet his drive to criticize all aspects of legal education sets the stage for a critical analysis of the legal research process.


In what is perhaps the earliest example of a critical analysis of an arrangement of legal information, Frug uses reader-response criticism to expose how the fourth edition of Contracts: Cases and Comments alienates female readers and emboldens chauvinist readers by furthering an ideology that privileges men and masculinity over women and femininity. Frug’s description of how the authors have adopted a “contrived” and “authoritarian” neutrality by refusing to “admit that their casebook has a point of view” and “offer[ing] readers no information about what is left unsaid in their casebook” remains highly relevant as we continue to assess how the choices made in the process of organizing legal information shape the perceptions of legal researchers.

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74. Kennedy, supra note 30, at 211.
75. Id. at 213.
76. Id. at 214–16.

Berring theorizes that the myth of the common law—initially threatened by the proliferation of comprehensive case reporting in the late 19th century—has been sustained by West's American Digest System. By classifying all cases into subjects using topics and key numbers, the West Digest System not only "lent . . . structural coherence" to American law but became "the skeleton upon which the rest of the system was built."79 Accordingly, "practitioners and researchers [have] internalized the West structure."80 Berring predicts that "the ability to search without an imposed structure [i.e., keyword searching] will nakedly expose the myth of the common law and the beauty of the seamless web to the general legal world."81 Of course, Berring could not anticipate the remarkable resilience of this structure, nor the ways in which developers would embed the digest system in new legal research technologies.

**The Canon**

¶17 As CLS and feminist legal theory came to the forefront of scholarly discourse in American legal education, law librarians began to wonder how the ideas advanced by these movements might apply to their own field. The earliest attempt by law librarians to publicly engage with critical legal theory took place on July 8, 1986, at the 79th Annual Meeting of the American Association of Law Libraries (AALL) in Washington, DC.82 There, Joyce Saltalamacchia (then the director of the law library at NYU School of Law) moderated a panel entitled “Critical Legal Studies: Out of Harvard and Into the Streets.”83 This panel featured Michael Davis (a law professor at Cleveland–Marshall College of Law), Patricia Williams (then a law professor at CUNY School of Law), and Steven M. Barkan (then associate law librarian at the University of Texas School of Law).84

¶18 Davis, whose role it was to give attendees an introduction to CLS, concluded his remarks by lamenting, “[W]hat [CLS] poses for librarians is almost frightening to think about, so I won’t address that at all.”85 Ironically, Barkan, the final panelist to speak, ended the program with an elaborate discussion about the implications CLS has for legal research.86 Speaking to the law librarians assembled in the room that day, Barkan ended his remarks with a call to action: “I’m calling on all of you to start looking

80. *Id.*
81. *Id.* at 26.
83. *Id.*
84. *Id.*
85. *Id.*
86. *Id.*
at these issues.” The next year, Barkan’s comments were published as a groundbreaking article in *Law Library Journal*.

¶19 In 1988, Virginia Wise (then a reference librarian at the University of Michigan) published an article in *Legal Reference Services Quarterly* discussing how law librarians could better support CLS scholars. In 1989, the preeminent critical race theorist Richard Delgado and Jean Stefancic, a librarian turned CRT scholar, published a critique of the self-replicating tendency of traditional legal research tools. Stefancic and Delgado went on to publish several additional articles expounding upon their thesis and examining whether changes in technology had resolved or exacerbated the “triple helix dilemma” they identified. In 1992, Jill Anne Farmer (then a librarian at Akin, Gump, Strauss, Hauer & Feld LLP) won the AALL/LexisNexis Call for Papers for her article “A Poststructuralist Analysis of the Legal Research Process.” In 2006, Spencer L. Simons (then director of the law library at the University of Houston) published an article in the *Journal of Legal Education* arguing that legal research and writing instructors should expose their students to the indeterminacy of law. Taken together, these articles might be said to form a CLR canon: a body of literature that exemplifies CLR and serves as the basis for all subsequent critical analyses of the legal research process.


In what Richard Danner calls “an example of the very best scholarship in our field,” Barkan uses CLS insights to deconstruct the legal research process. He finds that “deconstruction conflicts with the notion that legal research is a search for preexisting, findable law”; that legal information is indeterminate “[i]f the meanings of legal texts are created as much by researchers as by the institutions that produce them”; that “[t]he search for the...”

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87. *Id.*


96. *Id.*
ratio decidendi, the rule of the case, leads nowhere”;\textsuperscript{97} and that legal research reifies “fact situations to fit them into predetermined and reified schemes.”\textsuperscript{98} This reification happens through a process of “bibliographic determinism” in which “legal resources can reinforce and reify dominant ideologies, can narrow perspectives, and can make contingent results seem inevitable.”\textsuperscript{99} “Key numbers, indexes, annotations, footnotes, and cross-references,” Barkan writes, “set the limits of inquiry.”\textsuperscript{100} He concludes by setting out to domesticate CLS. Barkan admits that “[w]hen the CLS arguments against legal doctrine and legal reasoning are carried to their logical conclusions, there can be no legal research.”\textsuperscript{101} However, Barkan asserts that in forcing “us to analyze the ways research tools and practices can influence the application and development of the law,”\textsuperscript{102} CLS insights can lead to the development of “[a]n enlightened understanding of legal research . . . that might help improve the way legal thinkers respond to social problems.”\textsuperscript{103} Barkan’s article remains highly relevant. In one prescient passage, he wonders whether artificial intelligence will “reify categorical schemes even more, permitting us to find only what artificial intelligence will show us.”\textsuperscript{104}


Wise recounts how, in the first several years of its existence, CLS posed special problems for law librarianship. Law librarians struggled not only to identify and collect CLS literature but also to assist crits with their scholarship (which often took an unconventional form and relied on obscure nonlegal materials). Wise provides “several constructive steps one can take to enhance one’s ability to deal with this new trend in legal scholarship.”\textsuperscript{105} She concludes by encouraging her colleagues to “[w]elcome the opportunity to deal with a nontraditional style of scholarship . . . [and] shake off the shackles of [the] \textit{Uniform System of Citation} [to] be part of a counter-hegemonic enclave.”\textsuperscript{106}


In this widely cited and republished article, Delgado and Stefancic theorize that “the Library of Congress subject heading system, the Index to Legal Periodicals, and the West Digest System . . . function like DNA.”\textsuperscript{107} By this the authors mean that these “systems function rather like molecular biology’s double helix: [t]hey replicate preexisting ideas,

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{97} Id. at 630.
\item \textsuperscript{98} Id. at 632.
\item \textsuperscript{99} Id.
\item \textsuperscript{100} Id.
\item \textsuperscript{101} Id. at 635.
\item \textsuperscript{102} Id. at 637.
\item \textsuperscript{103} Id. at 636.
\item \textsuperscript{104} Id. at 636.
\item \textsuperscript{105} Wise, supra note 89, at 17.
\item \textsuperscript{106} Id. at 18.
\item \textsuperscript{107} Delgado & Stefancic, supra note 90, at 208.
\end{enumerate}
\end{footnotesize}
thoughts, and approaches.” To contend with this “triple helix dilemma,” Delgado and Stefancic urge that “[r]eform now will require disaggregation of the current dichotomous classification scheme, creation of a more complex one, and reorganization of the relevant cases and statutes accordingly,” but that “[w]ord-based computer searches solve only part of the problem” because “computerized research can ‘freeze’ law by limiting the search to cases containing particular words or expressions.” Instead, they suggest looking to “divergent individuals” and closely examining legal categories for greater insight into “the very conceptual framework we have been wielding in scrutinizing and interpreting our societal order.” Delgado and Stefancic assert that the latter approach will allow researchers to “turn that system on its side and ask what is missing.”

Barkan, Steven M. “Response to Schanck: On the Need for Critical Law Librarianship, or Are We All Legal Realists Now?” *Law Library Journal* 82, no. 1 (Winter 1990): 23–35. Barkan’s deconstruction of the legal research process was not uncontroversial. In, as Danner puts it, “an occasionally acerbic response to Barkan’s article, Peter C. Schanck challenged the notions that the digest and other research tools play a role in lawyers’ thinking about the law.” Responding to Schanck’s contentions that “[m]ost lawyers suffer under no illusions about the law’s ‘seamless web’ or perfect coherence” and that legal research tools “have had little or no impact on either the content of our law or our understanding of the legal system,” Barkan argues that “most lawyers operate within the parameters set by others” and that “[m]any legal decisions cannot be made apart from their economic, social, historical, and political contexts, and are often dependent upon business, scientific, medical, psychological, and technological information.” Accordingly, Barkan concludes by suggesting that “[l]aw libraries should make relevant secondary, interdisciplinary, and nonlegal resources readily accessible to the legal profession” because “[i]t is only when all types of relevant, and necessary, information are of acceptable quality and are equally accessible to all participants in the legal process that we will be able to consider our research systems satisfactory.”

108. *Id.* at 217.
109. *Id.* at 220–21.
110. *Id.* at 222–23 (Delgado and Stefancic define “divergent individuals” as “thinkers . . . whose life experiences have differed markedly from those of their contemporaries” and whose ideas “offer the possibility of legal transformation and growth.”).
111. *Id.* at 224.
112. *Id.*
116. *Id.* at 34.
117. *Id.* at 35.

Stefancic and Delgado assess two movements that were on the verge of transforming legal scholarship in the early 1990s: outsider jurisprudence (CLS, feminist legal theory, and CRT) and the electronic revolution (the digitization of legal information). After describing each in some detail, they speculate whether these movements will converge to accelerate law reform or cancel each other out. On one hand, they theorize that the shortcomings of keyword searching and the high cost of computer-assisted research might hinder law reform. On the other hand, they suggest that computerization might allow for the advent of a ‘cut and paste’ approach to opinion writing that would increase the influence of outsiders by making “arguments and lines of cases for opposing viewpoints . . . readily available.”

Stefancic and Delgado conclude that “[t]he question is still open.” In retrospect, no convergence of the two movements ever took place, but nor did these movements necessarily cancel each other out.


Stefancic reiterates many of the points made in her 1991 article with Delgado but tailors them to law librarianship. She encourages law librarians to support the acceleration of law reform by fostering the convergence of outsider scholarship and the electronic revolution. She suggests that law librarians can do this by “study[ing] the concepts and language of feminist and minority jurisprudence” in order to “provide better access through free-text searching of electronic databases”; “be[ing] aware when subject headings do not fit the materials they index, and then bring[ing] those discrepancies to the attention of catalogers, editors and indexers”; “becom[ing] informed about trends and writers of new critical scholarship” in order to “make intelligent decisions about collection development”; “construct[ing] bibliographies”; becom[ing] research liaisons to feminist and minority legal scholars”; and even “participat[ing] in the new scholarship [them]selves.”


Farmer uses poststructuralism to criticize the legal research process. She defines poststructuralism as an “analytical shift” from the “literary (or cultural) product” as “work” (“a closed entity with a definite meaning”) to the “literary (or cultural) product” as “text” (“ongoing dialogue”). In applying poststructuralism to legal research, she agrees with previous scholars that classification systems have a self-replicating tendency but adds that “patterns of citation inclusion, omission, and emphasis create a canon of accepted thought

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119. *Id.* at 858.
that should be analyzed.”\textsuperscript{122} She concludes by suggesting that law librarians can “help alleviate some of the conceptual lock on legal information” by (1) helping patrons “understand that what they are able to find is not equivalent to a whole universe of information or even a random subset, but rather to that particular universe found economically, politically, and/or personally expedient or essential to publishers, editors, and librarians” and (2) “go[ing] beyond the usual collection policies to acquire nonlegal material that reflects on social, political, and cultural theory.”\textsuperscript{123}


Although not necessarily written from a critical perspective—Simons is careful to note that his understanding of indeterminacy is less radical than the version put forward by crits—this article contains excellent advice about how to create course materials that incorporate indeterminacy so as “to disabuse law students of the notion that the syllogistic process, properly applied, necessarily yields the ‘right answer.’”\textsuperscript{124}


Delgado and Stefancic reassess the triple helix dilemma for the computer age. They find that “[c]omputer-assisted legal research may in fact impede the search for new legal ideas, slow the pace of law reform, and make the legal system less, not more, just.”\textsuperscript{125} This is because “computer searching can mire the researcher in a sea of facts. It can suppress browsing and analogical reasoning, while giving the impression that one is freer, more creative than one really is.”\textsuperscript{126} To overcome “the straitjacket of conventional categories [that] now limits the questions one may ask the computer and the searches one may devise,”\textsuperscript{127} Delgado and Stefancic propose what Stump later calls “unplugged brainstorming.”\textsuperscript{128} They describe the practice this way: “spend[ing] time with the computer shut down, mulling over what an ideal legal world would look like from the client’s perspective . . . thinking ‘outside the box,’ reinventing, modifying, flipping, and radically transforming legal doctrines and theories imaginatively and in brainstorming sessions with other reformist lawyers.”\textsuperscript{129}

Recent Developments

\%20 In the last decade, CLR has experienced a renaissance. Several authors have attempted to revitalize the practices prescribed in the above articles, while others have

\begin{footnotesize}
\begin{enumerate}
\item[122.] Id. at 401.
\item[123.] Id. at 403.
\item[124.] Simons, \textit{supra} note 93, at 357.
\item[125.] Delgado & Stefancic, \textit{Why Do We Ask the Same Questions?}, \textit{supra} note 91, at 310, \%8.
\item[126.] Id. at 318, \%28.
\item[127.] Id.
\item[128.] Stump, \textit{supra} note 5, at 576.
\item[129.] Delgado & Stefancic, \textit{Why Do We Ask the Same Questions?}, \textit{supra} note 91, at 328, \%50.
\end{enumerate}
\end{footnotesize}
engaged with critical legal theory, critical information theory, and critical librarianship
to create a novel approach to legal information pedagogy: critical legal information
literacy. Other authors—though not writing in the critical tradition per se—have con-
tributed invaluable insights about the power structures that underlie emerging legal
research technologies.

Wheeler, Ronald. “Does WestlawNext Really Change Everything? The Implications of
WestlawNext on Legal Research.” Law Library Journal 103, no. 3 (Summer 2011):
359–77.

In this assessment of WestlawNext (the version of Westlaw first introduced in 2010 and
later succeeded by Westlaw Edge), Wheeler criticizes Thomson Reuters’s use of crowd-
sourcing and its potential to conceal “unpopular or less used tidbits of legal information.”

Wheeler speculates that this might “limit the possibilities of legal writing, [] limit the reach
of creative thinking about the law, [] narrow the range of alternative legal perceptions, []
[and] close the door to the unknown.”

Sokkar Harker, Y asmin. “Critical Legal Information Literacy: Legal Information as a
Social Construct.” In Information Literacy and Social Justice: Radical Professional

Sokkar Harker proposes using critical information literacy to forge a critical pedagogy for
legal research instructors in which legal information is conceptualized as “a social construct
produced and published by people,” namely access providers, organizers, and creators. By
using this framework as a basis for discussing the nature of legal information, legal research
instructors can “encourage students to develop a critical consciousness about legal informa-
tion and help them realize their potential to advocate for justice and change current legal
systems.”

Krishnaswami, Julie. “Critical Information Theory: A New Foundation for Teaching
Regulatory Research.” In The Boulder Statements on Legal Research Education:
The Intersection of Intellectual and Practical Skills, edited by Susan Nevelow Mart,

In this contribution to Susan Nevelow Mart’s anthology of perspectives on the Boulder
Statements on Legal Research Education, Krishnaswami proposes that legal research

130. Ronald Wheeler, Does WestlawNext Really Change Everything? The Implications of
131. Id. at 369, ¶ 29.
132. Y asmin Sokkar Harker, Critical Legal Information Literacy: Legal Information as a Social
Construct, in Information Literacy and Social Justice: Radical Professional Praxis 205, 209
(Lua Gregory & Shana Higgins eds., 2013).
133. Id. at 216.
134. For more on the Boulder Statements, see Boulder Conferences on Legal Information:
Scholarship and Teaching, WILLIAM A. WISE LAW LIBRARY AT THE UNIVERSITY OF COLORADO LAW
instructors should use critical information theory—a discipline that explores the relationship between culture and information—as a basis for teaching regulatory research. Specifically, she suggests that “[t]eaching students how to research regulations in the context of the complexities surrounding rulemaking, the behaviors of agency actors and stakeholders, and access to regulatory information, will push students to see stories, perspectives, actors, and relationships otherwise obscured, thereby helping them construct novel arguments.”


Stump unifies and synthesizes the methods and strategies found in previous articles, describing them as “a more targeted utilization of commercial and non-commercial legal resources, an increased practitioner reliance upon a wide range of theoretical materials (i.e., as potential touchstones for innovation), and the cultivation of synergistic brainstorming sessions involving grassroots activists and other diverse constituents.” Examining them in more detail, he renders these methods and strategies as “[i]nternaliz[ing] [c]ritical [i]nsights,” “[c]oncept-[b]ased [r]esearch,” “[a]lternative [l]egal [r]esearch, [l]egal [s]cholarly and [m]ultidisciplinary [r]esearch, and [u]nplugging and [b]rainstorming [s]essions.”

Having provided readers with a thorough introduction to CLR, he applies CLR methods and strategies to the dilemma of mountaintop removal mining and its devastating impact on Appalachia, finding that feminist and ecofeminist theories might provide a basis for meaningful law reform.


In this blog post, Baker reflects on the critical librarianship (#critlib) movement and its importance to academic librarians. She suggests that “[c]ritical librarianship is involved when discussing bias in machine learning.”

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136. Stump, supra note 5, at 574–75.
137. Id. at 618–23.

Sokkar Harker reconsiders the relationship between critical information literacy and legal information in light of the ACRL Framework adopted in 2016. She writes that this framework “can be used as a tool for educators to promote critical information literacy in the legal research classroom.” To accomplish this, she suggests that legal research instructors use “two specific frames [from the ACRL Framework]: Frame 1, *Authority Is Constructed and Contextual*; and Frame 3, *Information Has Value*.” She concludes that “[a]lthough the ACRL Framework is not perfect, it is a good starting point for incorporating critical information literacy and social justice into legal education and the law library.”


Stump returns to the subject of CLR, defining it as “a proceduralist-based school that aims to effect change via radical approaches to legal research and analysis.” He summarizes the “[c]ore CLR practices” as “(1) the deconstruction of the commercial legal research regime, which facilitates the unpacking of unjust doctrine, (2) a newfound practitioner reliance upon critically based theoretical resources for doctrinal reconstruction, and (3) the incorporation of grassroots activists into progressive reform initiatives.” This article focuses on the third core practice, a modification of the “unplugged brainstorming” method first put forward by Delgado and Stefancic in their 2007 article and further developed by Stump in his 2015 article. In this regard, Stump proposes “the cultivation of non-hegemonic reform alliances,” that is to say “the incorporation of more marginalized parties, such as grassroots activists, community organizers, and the portion of citizenry most affected by the legal scheme at issue.” Stump suggests that engaging with these individuals in “synergistic collaborations” would create “a collective, grassroots approach to legal research and analysis” that “might indeed assist in catalyzing novel socio-legal reform.” As an application of this method, he suggests incorporating Appalachian civil disobedients in the legal struggle to end mountaintop removal mining.

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140. Id. at 47.
141. Id. at 59.
143. Id.
144. Id. at 88–89.
145. Id. at 90–91.

Nevelow Mart compares search results across six legal databases and finds that “[t]here is hardly any overlap in the cases that appear in the top ten results returned by each database.”146 This “remarkable testament to the variability of human problem solving”147 demonstrates that the human-made algorithm underlying any given database is shaped by subjective choices. These “choices become the biases and assumptions that are built into systems.”148 She emphasizes that because “every algorithm and database interface is a completely human construct, and every search is a completely human construct, the researcher must view the search process as a human interaction, moderated by technology, and not as a technological interaction.”149 Mart concludes by calling on readers “to request more accountability from database providers and for database providers to proactively think of algorithmic accountability as a way to improve research results for their users.”150


In this summation of her study, Nevelow Mart reiterates that “the human element in algorithms matters a lot” and that “every database has a point of view, offering unique responses to a legal problem that no other database provides.”151


In this blog post, Lamdan and Sokkar Harker call attention to the participation of LexisNexis in U.S. Immigration and Customs Enforcement’s extreme vetting surveillance system, an AI-powered system that would have “determine[d] and evaluate[d] an applicant’s probability of becoming a positively contributing member of society, as well as their ability to contribute to national interests and . . . whether an applicant intends to commit criminal or terrorist acts after entering the United States.”152 Experts feared that such a program would perpetuate discrimination. The authors urge law librarians to “grappl[e] with how to

147. Id.
148. Id. at 388, ¶ 2.
149. Id. at 398, ¶ 16.
150. Id. at 420, ¶ 58.
react when our major database providers engage in massive surveillance projects with the government." Lamdan and Sokkar Harker argue that critical information literacy obliges librarians to “investigate the source of LexisNexis data” and “to understand and build awareness about the products we provide to the public.” On the advice of AALL’s general counsel, this post was removed from the RIPS Law Librarian Blog. Shortly thereafter, Joe Hodnicki republished it on his Law Librarian Blog.


Baker reacts to the removal of Lamdan and Sokkar Harker’s post from the RIPS Law Librarian Blog, lamenting that the law librarian’s lack of status and academic freedom “precludes us from fully engaging in conversations surrounding controversial issues because we lack the institutional support to do so.”


In this law librarian–initiated #critlib Twitter chat, participants considered the ethical dimensions of library and librarian relationships with vendors. The above blog posts by Lamdan and Sokkar Harker and Baker, respectively, served as the suggested readings for this exchange.


In this article, Baker discusses the use of AI in the context of legal research, expressing concern that premature disruption (a phenomenon in which “technologies replace human workers before the technology is truly ready to perform at the level of the replaced humans”) in legal research might interfere with legal creativity. She argues that librarians need to teach patrons about the limitations and ethical implications of AI-powered legal research tools.

153. Wayback Machine-Archived Post, supra note 152.
154. Id.
155. Original Post, supra note 152.
156. But see supra note 152.

Lamdan considers the ethical dimensions of buying and using legal research services from vendors that build and maintain government surveillance systems. She urges lawyers to consider several ABA Model Rules of Professional Responsibility and how they apply to this situation. She concludes that “[i]f legal research products are engaged in unethical practices, or in practices that fail to comply with professional responsibility rules, lawyers should condemn those practices.” Accordingly, Lamdan suggests that lawyers should consider divesting from vendors that engage in these practices and switch to alternative legal research services.


Allison has composed an extensive guide to researching critical legal theory. Although designed for the Harvard Law community, it contains explanations of key concepts and movements—as well as countless citations to books and articles—that make it useful to all researchers in this area. Of particular interest is a section on “Bias, Neutrality, and ‘Othering’ in Libraries and Library Collections” in which Allison explains that “[i]t is a common misconception that libraries and library catalogs are neutral and unbiased. They are not.”


Lo reassesses the dilemma of bias in the Library of Congress Subject Headings (LCSH) system. After explaining the inner workings of the system and the importance of indexing to the legal research process, she discusses the ways in which “the LCSH reifies the biases of [its] authors and catalogers.” She then uses the recent controversy surrounding the proposed discontinuation of the subject heading “Illegal Alien” as a case study of this phenomenon. She concludes by proposing several ways in which librarians can work to improve the LCSH. Suggestions include “transform[ing] reference interviews into an opportunity for engagement and critical thought about how classification and cataloging may ingrain biases,” making changes to the headings found in the institutional catalogs of individual libraries, and “work[ing] together at a consortium level to create an alternate thesaurus to work in parallel with LCSH.”


162. *Id.* at 193.

163. *Id.* at 195.

Inspired by Lauren Smith and Michael Hanson’s article “Communities of Praxis: Transforming Access to Information for Equity,” Allison discusses how law librarians, specifically those who are involved in providing a research consultation, can critically assess their professional practices in order to better promote equitable information access.


Nayyer, Rodriguez, and Sutherland discuss the problem of algorithmic bias, the responses of academics and the American Bar Association to it, and how it might manifest itself in the justice system due to the incomplete nature of legal data and the presence of undesirable underlying patterns in that data. They suggest that legal information professional organizations should add to preexisting duties of competence and supervision an “expectation to prevent, minimize, or qualify AI applications to enable libraries to maintain high standards of ethical responsibility.”


Reflecting on a German newspaper article by Alexandra Kemmerer of the Max Planck Institute for Comparative Law and International Law, Allison discusses the concept of a “canon” as a tool of power (including some scholars and excluding others, often arbitrarily or on the basis of race and sex). She calls on librarians to “commit [them]selves to thinking more about ‘the canon,’ for whom it works, and who might benefit from its dismantling.”


Stump explores how the CLR framework might be employed by radical-cause lawyers to address the intertwined crises of climate change, the COVID-19 global pandemic, and

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164. Lauren Smith & Michael Hanson, *Communities of Praxis: Transforming Access to Information for Equity*, 76 Serials Libr. 42 (2019).


racial state violence by helping to drive a paradigm shift away from the white patriarchal capitalism that he identifies as their ultimate cause.


Mignanelli explores the way certain tendencies in “AI-powered legal research,” specifically concealment of the research process and entrenchment of the biases of society’s dominant interests, threaten legal innovation. To mitigate this risk, he suggests reenvisioning Stump’s CLR synthesis as a framework for “obstruct[ing] the ability of emerging technologies to close the legal imagination and transform the law into a monolith.”167 This framework includes deconstructing the algorithm through critical pedagogy and algorithmic activism, looking beyond to secondary legal and nonlegal sources through the creation of “new transgressive and archeological bibliographies,” and unplugged brainstorming that makes “[t]hinking, not briefing software . . . the bridge from research to writing.”168


In this symposium, several critical law librarians and critical legal information scholars—namely Wheeler, Stump, Sokkar Harker, Lo, Krishnaswami, and Mignanelli—reflect on the continuing relevance of Delgado and Stefancic’s “triple helix dilemma.” Delgado and Stefancic reply with a Rodrigo chronicle positing a “desire-based theory of legal categorization.”169

Guide to Methods and Strategies

21 Having surveyed the literature, it seems appropriate to flesh out CLR methods and strategies in order to make them more accessible for practical and pedagogical purposes. Yet these methods and strategies are, in Stump’s words, only “starting points” because “critical research, as an inherently creative process, by its very nature resists a formulaic application.”170 What follows, then, is an attempt to collect the existing techniques under the broad headings of “greater reliance on secondary sources,” “contextualizing,” “unplugged brainstorming,” and “law library activism.”

Greater Reliance on Secondary Sources

22 In his 1990 response to Schanck, Barkan recommends that “[l]aw libraries should make relevant secondary, interdisciplinary, and nonlegal resources readily accessible to the legal profession.”171 In their 1989 article, Delgado and Stefancic advise

168. Id. at 342, ¶ 43; 343, ¶ 45.
169. Delgado & Stefancic, Rodrigo’s Reappraisal, supra note 91, at 59.
170. Stump, supra note 5, at 618.
171. Barkan, supra note 115, at 35.
reform-minded lawyers to look to “divergent individuals”: legal thinkers “whose life experiences have differed markedly from those of their contemporaries” (e.g., Derrick Bell).172 In 1993, Farmer pushed Barkan’s recommendation further, encouraging law librarians to “go beyond the usual collection policies to acquire nonlegal materials that reflect on social, political, and cultural theory.”173 Writing in 2015, Stump rendered this strategy as “mining legal scholarly and related cross- and multidisciplinary resources.”174 In his 2020 article, Mignanelli suggests that law librarians can “stir creativity in the researcher” by “creating, publishing, and disseminating new transgressive and archaeological bibliographies that, approaching a particular legal issue, juxtapose a wide range of cases, statutes, regulations, and legislative history materials with secondary sources, related scholarship (both legal and non-legal), news articles (both historical and contemporary), literary and artistic works, editorials and opinion pieces, first-person narratives, and even social media posts.”175

Contextualizing

¶23 In their 1989 article, Delgado and Stefancic write that examining legal categories for the “outline of the structure of traditional thought” will provide “a glimpse of the very conceptual framework we have been wielding in scrutinizing and interpreting our societal order.”176 This insight into the conceptual framework will then enable researchers to “turn that system on its side and ask what is missing.”177 Writing in her 1993 article, Farmer opines that law librarians should assist their patrons in understanding that “what they are able to find is not equivalent to a whole universe of information or even a random subset, but rather to the particular universe found economically, politically, and/or personally expedient or essential to publishers, editors, and librarians.”178 To this end, Farmer suggests that law librarians should “make every attempt to encourage ‘concept’ searching on online databases so that users can approach the material from other than conventional perspectives.”179

¶24 In her 2013 article, Sokkar Harker uses the lens of critical information literacy to propose that legal research instructors teach legal information as “a social construct produced and published by people” (i.e., access providers, organizers, and creators).180 In her article published the next year, Krishnaswami similarly uses critical information theory to reassess how regulatory research is taught.181 She suggests that instructors should situate administrative law research “in the context of the complexities surrounding rulemaking, the behaviors of agency actors and stakeholders, and access to

172. Delgado & Stefancic, supra note 90, at 223.
173. Farmer, supra note 92, at 403.
174. Stump, supra note 5, at 620.
175. Mignanelli, supra note 167, at 343, ¶ 43.
176. Delgado & Stefancic, supra note 90, at 224.
177. Id.
178. Farmer, supra note 92, at 402.
179. Id. at 403.
180. Sokkar Harker, supra note 132, at 209.
181. See Krishnaswami, supra note 135.
regulatory information” in order to “push students to see stories, perspectives, actors, and relationships otherwise obscured, thereby helping them construct novel arguments.”

¶25 In his 2015 article, Stump comments that “[a] researcher ought to internalize the central, critical analysis of the research process” and “cultivate concept-based legal research methodologies, as opposed to purely fact-based methods, to locate such ‘controlling’ legal categories that will serve as starting points for the critical interrogation of the existing legal framework at issue.” In support of this vision, Lo proposes that law librarians should “transform reference interviews into an opportunity for engagement and critical thought about how classification and cataloging may ingrain biases.” Likewise, Mignanelli urges law librarians to teach their patrons that “all technologies are created by human beings with their own biases and that there is a power differential between the entities that create and shape these technologies and the individuals who use and/or rely on them.”

Unplugged Brainstorming

¶26 In their 2007 article, Delgado and Stefancic write that “[l]awyers interested in representing clients who (unlike corporations) do not find a ready-made body of developed law in their favor need to spend time with the computer shut down, mulling over what an ideal legal world would look like from the client’s perspective.” They go on to prescribe “thinking ‘outside the box,’ reinventing, modifying, flipping, and radically transforming legal doctrines and theories imaginatively and in brainstorming sessions with other reformist lawyers.” Building on this proposal, Stump writes in his 2015 article that once “resource-gathering methods have been exhausted . . . the critical researcher should . . . consider unplugging” and engaging in “[b]rainstorming sessions with diverse perspectives.” In his 2017 article, Stump reformulates brainstorming as “the cultivation of non-hegemonic reform alliances” through “the incorporation of more marginalized parties, such as grassroots activists, community organizers, and the portion of citizenry most affected by the legal scheme at issue.” Stump suggests that holding “synergistic collaborations” with these stakeholders will create “a collective, grassroots approach to legal research and analysis” that “might indeed assist in catalyzing novel socio-legal reform.”

182. Id. at 202.
183. Stump, supra note 5, at 618–19.
184. Lo, supra note 161, at 193.
185. Mignanelli, supra note 167, at 342, ¶ 41.
186. Delgado & Stefancic, Why Do We Ask the Same Questions?, supra note 91, at 328, ¶ 50.
187. Id.
188. Stump, supra note 5, at 621–22.
189. Stump, supra note 142, at 89.
190. Id. at 90–91.
Law Library Activism

27 Although there is no coherent line of literature on activism, there are several instances in which critical law librarians use or propose using activism as a means of contending with the inequities created by vendor practices or categorical schemes. Perhaps the most notable example is Lamdan and Sokkar Harker publicly challenging LexisNexis’s involvement in ICE’s attempt to create an extreme vetting surveillance system,191 as well as Lamdan’s suggestion that attorneys should divest from vendors that assist with government surveillance.192 Additional examples are Lo’s proposals that individual libraries should unilaterally change the problematic headings found in their catalogs and “work together at a consortium level to create an alternate thesaurus to work in parallel with LCSH.”193 Emerging technologies, too, have prompted calls for action. For instance, Nevelow Mart has encouraged law librarians “to request more accountability from database providers” regarding algorithmic bias,194 and Mignanelli has called on AALL to “make the demand for algorithmic transparency one of its major objectives moving forward.”195

Conclusion: A Reflection on the Demise of (Law) Library Neutrality

“Against that positivism which stops before phenomena, saying ‘there are only facts,’ I should say: no, it is precisely facts that do not exist, only interpretations. . . .”
—Friedrich Nietzsche196

28 A certain cognitive dissonance underlies all that has been recounted, annotated, and analyzed in the pages above. That cognitive dissonance is this: research and librarianship—especially legal research and law librarianship—is grounded in positivism, while critical legal theory rejects positivism wholesale.197 Whereas the positivist sees “a deterministic world that is discoverable, describable, and predictable” through the scientific method, adherents to the philosophies at the heart of critical legal theory “[reject] ‘master narratives’ and foundational claims that purport to be based on science, objectivity, neutrality, and scholarly disinterestedness.”198 For them, these narratives and claims are little more than “ideological expressions of particular discourses embodying normative interests and legitimating historically specific relations of power.”199

191. See Lamdan & Sokkar Harker, supra note 152.
194. Nevelow Mart, supra note 146, at 420, ¶ 58.
196. The Portable Nietzsche 458 (Walter Kaufman ed., trans., 1954) (originally published as Aphorism 481 in Friedrich Nietzsche, Notes (1887)).
197. Barkan first identified this tension in his 1987 article. His solution was to attempt to “domesticate” CLS. See Barkan, supra note 4, at 634–37.
198. Farmer, supra note 92, at 392.
199. Id.
¶29 The tension between these perspectives can be disorienting for the law librarian, a figure whose role has long been defined by facilitating the methodological search for preexisting answers to legal problems. Indeed, there is a direct correlation between the development of law librarianship and the transformation of law into a “science.” Christopher Columbus Langdell’s comment that “[t]he Library is to us what a laboratory is to the chemist or the physicist”200 was, after all, not merely metaphorical.201

¶30 Although law librarianship has a special relationship with positivism, all of modern librarianship is largely a positivist enterprise.202 In our time, the most contentious feature of the library’s positivist orientation has been its central commitment to neutrality.203 In the last several years, library neutrality has been variously denounced as “polite oppression,”204 “a kind of privilege,”205 and a “form of moral relativism.”206 But the greatest flaw of library neutrality is actually its impossibility. Library neutrality is impossible because, as Foucault theorized, “all power involves knowledge, and all knowledge, power.”207 Therefore, “the knowledge that people acquire, produce, and share is fraught with or complicated by power, and power is not neutral, because it implies an imbalance and an interest.”208 Consequently, “no knowledge can be neutral” because “it is bound up with power.”209

¶31 Critical law librarians will need to accept the impossibility of neutrality and, in doing so, seek a new professional mode of being. What might this look like? How might critical law librarians reconceptualize the process of legal research and their role in it? Not, this author hopes, by merely substituting the old myth of library neutrality for our own ideological preferences. Rather, it would be preferable to reframe the legal research universe as “a labyrinth of texts that contains the possibilities for new arrangements”

203. Id. at 412 (“The ideal of neutrality represents another facet of the library that is structured by the positivist outlook.”).
208. Id.
209. Id.
where the researcher can mine databases, peruse stacks, and examine categorical schemes “for connections and patterns, and ultimately, the creation of new patterns.”210 In this way, the objective of legal research will be for us “the creation of new knowledge possible at its most fundamental level.”211

¶32 What, then, of the role of the CLR-aligned librarian? It seems we must become genealogists of the law.212 This will entail a newfound focus on exposing our patrons to the power structures and processes that shape legal information, as well as the biases embedded in the artifacts of law. This role might seem dissatisfying for those who would prefer to chain law librarianship to a new master narrative. Yet the role of genealogist is more challenging and rewarding, for it requires us to be comfortable with the existential angst of uncertainty in order to guide our patrons toward inventing new visions and reenvisioning the socio-legal order of the world around us.213

210. Radford, supra note 202, at 419.
211. Id.
212. Here, I mean “genealogist” in the sense articulated by Foucault, who “intended the term ‘genealogy’ to evoke Nietzsche’s genealogy of morals, particularly with its suggestion of complex, mundane, inglorious origins—in no way part of any grand scheme of progressive history.” For Foucault, “[t]he point of a genealogical analysis is to show that a given system of thought . . . was the result of contingent turns of history, not the outcome of rationally inevitable trends.” Michel Foucault, Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/foucault/#ArchGene [https://perma.cc/4NLB-FS2A].
213. This is, of course, the author’s own Foucauldian approach to addressing the tension between critical legal theory and law librarianship. Other approaches—perhaps neo-Marxist or deconstructionist in outlook—are also possible.
Academic Law Libraries’ New Frontier—
The Post-truth Cognitive Bias Challenge and
Calls for Behavioral and Structural Reforms*

Kwanghyuk Yoo**

This article highlights the functional vulnerability of academic law libraries to the post-truth challenge and suggests both behavioral and structural reforms to combat that effect. These reforms include moving librarians into the role of information activists and using blockchain applications for enhanced integrated library system design.

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Introduction: A New Challenge Surging

¶1 The post-truth phenomenon has captured modern times as part of a growing international trend. The Oxford Dictionaries selected “post-truth” as 2016’s word of the year and defined it as “relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.”1 The post-truth concept is not amenable to easy interpretation or comprehension. Although the post-truth concept does not exist in a vacuum, it is more clearly manifested through vigorous interaction with a variety of sociopolitical contexts, such as the 2016 U.K. Brexit vote and the 2016 U.S. presidential election.2

¶2 The post-truth discussion points to two concepts: disinformation and misinformation. The distinction between them is somewhat debated. Nicole Cooke defines misinformation as incomplete and vague information which the sender still believes to be true and accurate; disinformation, she writes, refers to the dissemination of deliberately false information borne of malicious or ill intent.3 Dictionary.com, which named “misinformation” its word of the year for 2018, defines misinformation as “false information that is spread, regardless of whether there is intent to mislead.” It describes disinformation as “deliberately misleading or biased information; manipulated narrative or facts; propaganda.”4 Hence, disinformation carries with it the deliberate intent to spread information known to be incorrect. By contrast, misinformation is not manifestly intended to create falsity though having the potential to result in the inaccurate conceptualization due to the lack of the adequate verification process serving to counterbalance the imperfection.

¶3 The post-truth phenomenon rapidly predominating in the modern society has caused an increasing number of challenges, including many for law libraries. For example, it implicitly creates cognitive biases and distorts information seekers’ reasoning and decision-making processes. It also disrupts with no perceptible or cognizable allusion to the mechanics of how it functions. Two of its most powerful disruptions have been to the mainstays of democracy: freedom of information, the right to access information held by public bodies5; and freedom of the press, as guaranteed by the First

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2. Id. at 1.
Amendment. The discourse on the post-truth challenge gives particular salience to two facts. First, the post-truth phenomenon can direct the press to erroneously and aberrantly perform its essential function as an information provider or disseminator. Second, it can lead the press to malfunction, frustrate, or undermine its functional leverage for political purposes to the detriment of people’s rights to know. Recent international cases represent how the post-truth phenomenon takes the form of threats to journalism generally and political persecution of individual journalists specifically. With this in mind, this article first argues that the fundamental right of freedom of information is best guaranteed in a society in which the democratization of information is fully established and the press reasonably and duly functions to maximize information accessibility for public citizens. Therefore, the article articulates the contours of the post-truth challenge, which impinges on or distorts the positive and vital role of the press as a watchdog safeguarding and promoting freedom of information. It calls attention to the notion that freedom of information may not necessarily coincide with freedom of the press, although both freedoms are conceptually deemed coterminous in general. However, the post-truth challenges have significantly impeded the role of the press to the detriment of the democratization of information. The article illustrates how the post-truth phenomenon destabilizes the freedom of the press by egregiously decrying or stigmatizing the press as orienting itself astray.

Furthermore, the article claims that media bias can act as the enemy within and exacerbate the post-truth challenge, which in turn misguides the information behavior of citizens and further dislodges rational persons from their ordinary strategic orbits of information retrieval, analysis, and reasoning process.

The article next suggests academic law libraries be subject to behavioral and structural reforms to enable them to rectify growing cognitive bias challenges in the organization and retrieval of legal information. It first captures the evolving role of law libraries as called for by a current socio-scientific climate confronted with inevitable challenges to information credibility and accuracy. In light of behavioral reform, the article argues that law librarians should reframe their role as information activists. In turn, it contends the significance of structural reform by recommending that law libraries should adopt and implement functionally enhanced integrated library systems (ILS).

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as an optimal institutional design for the information retrieval and sharing process. In particular, it proposes the well-defined information architecture based on blockchain platforms whose functionality is properly designed, coordinated, and supervised by law libraries. The article concludes with guidance for a future course of action.

The Conceptual Interface Between Freedom of Information and Freedom of the Press

§6 Freedom of information was identified by the United Nations as a fundamental right in 1946. Article 19 of the Universal Declaration of Human Rights of 1948 further recognizes this right, stating that freedom of expression encompasses the freedom “to seek, receive and impart information and ideas through any media and regardless of frontiers.”

§7 The public’s right of access to knowledge and information can be facilitated and promoted by freedom of the press. Indeed, communication often acts as a catalyst for the development of civil society, and the full exercise of free expression enables all parts of society to exchange views and find solutions to social, economic, and political problems. Therefore, free media plays a critical role in building consensus and sharing information, both essential elements to democratic decision making and social development. According to the Commissioner of Human Rights for the Council of Europe, “[f]ree, independent and pluralistic media based on freedom of information and expression” forms the necessary basis or point of departure for any operating democracy.

The media does not operate in a vacuum. Free media may play a positive agenda-setting role by arousing public attention to human respect and thereby fostering a social environment accommodating deference to fundamental rights. Even further, free media can play an agenda-building role and thus have a broad range of constructive influence on the public policymaking process. The agenda-building perspective

7. G.A. Res. 59 (I) (Dec. 14, 1946) (stating that freedom of information is an integral part of the fundamental right of freedom of expression).
10. See generally Lutz Erbring, Edie N. Goldenberg & Arthur H. Miller, Front-Page News and Real-World Cues: A New Look at Agenda-Setting by the Media, 24 AM. J. POL. SCI. 16 (1980); David L. Protes et al., Uncovering Rape: The Watchdog Press and the Limits of Agenda Setting, 49 PUB. OP. Q. 19 (1985). In the context of political science, the term “agenda” is generally construed as meaning “a general set of political controversies that will be viewed as falling within the range of legitimate concerns meriting the attention of the polity.” Roger W. Cobb & Charles D. Elder, The Politics of Agenda-Building: An Alternative Perspective for Modern Democratic Theory, 33 J. POL. 892, 905 (1971).
stresses “the importance of the environing social processes” and “inextricable and mutually interdependent relation between the concerns generated in the social environment and the vitality of the governmental process.”12 In this agenda-building framework, free media is more deeply involved in “the development and formulation of public-policy issues” and contributes to redressing derogation from human rights by holding governments accountable.13

¶8 Work to enhance freedom of information has been supported and endorsed by subsequent international mandates across the United Nations. In particular, amid the growing recognition of the importance of press freedoms for democracy and development, in 1993 the United Nations General Assembly proclaimed May 3 as “World Press Freedom Day.”14

¶9 Classic freedom of the press, however, does not always comply with the internationally recognized fundamental right of freedom of information. Although press freedom generally gives the media the right to publish and distribute without restrictions, its products are apt to be by nature hierarchical, biased, or noninteractive. Thus, press freedom in and of itself does not always ensure the public’s full accessibility to information. Published information is distributed through its own platforms, and territorial and linguistic factors further limit worldwide information availability.

¶10 Although the media can promote democracy and good governance in certain of its practices, it remains vulnerable to the decision-making bias inherent in the process of obtaining, creating, producing, and distributing information.15 Media bias may not stand out as an obstacle to the promotion of freedom of the press, but it can work to the detriment of the public’s right of access to knowledge and information.

The Post-truth Phenomenon as a Significant Impediment to Information Democratization

¶11 Most scholars argue that a certain level of information is crucial to “citizens’ performance of their civic duties.”16 Conventional hegemonic rivalry between ruling class and subjugated citizen class was more often than not over territory, personal liberty, and pursuit of habeas corpus, whereas confrontation between citizens and elites in modern times marks a tug-of-war contest over public information or knowledge. Thus, citizens have often had limited access to important public information. By contrast,

12. Id. at 911.
13. Id. at 912; see also COUN. OF EUR., supra note 9 (“Instances of torture, discrimination, corruption or misuse of power many times have come to light because of the work of investigative journalists.”).
15. The media’s contribution to democracy is evident given that the media can play a critical role in “elevating issues to the systemic agenda and increasing their chances of receiving consideration on institutional agenda,” and “act as opinion leaders in bringing publicity to a particular issue.” Cobb & Elder, supra note 10, at 909.
elites have long monopolized a vast majority of information resources and controlled public knowledge.\textsuperscript{17} ¶

Traditional understanding of the relationship between democracy and information addresses three issues: (1) to what extent citizen responsibility for political information is a necessary, or even an important, component of democratic government; (2) who bears the responsibility for originating and circulating political information; and (3) whether citizens will—or even can—handle an increased responsibility for political information.\textsuperscript{18} In the digital information era, where the public can exercise substantial direct control over content by engaging in “the full range of involvement that the internet facilitates,” information democratization may be better defined as “the increasing involvement of private citizens in the creation, distribution, exhibition, and curation of civically relevant information.”\textsuperscript{19}

The notion of democratization of information is predicated heavily on the ubiquitous access to ideas, opinions, and knowledge; the free exchange thereof; and decentralized editorial control.\textsuperscript{20} The democratization of information allows citizens to enjoy the full-fledged freedom of information by retrieving and obtaining all kinds of information, including contents that otherwise would have been censored by the media, pursuant to its predefined or biased standards such as the policy of “giving views weight equal to their popularity.”\textsuperscript{21}

The era of digital information or digital commons has seen the mass production and rapid dissemination of myriad information. The surge of digital information poses two major controversial issues: how to effectively guarantee free and fair use of information and how to enhance the credibility and trustworthiness of information. The second issue in particular boils down to the recognition and conceptualization of fabricated information, which certainly includes disinformation but not necessarily misinformation. Vast amounts of information today go viral without first being duly vetted or confirmed.\textsuperscript{22} This section investigates the perils of unscreened false information and its far-reaching influence on law librarianship amid the growing challenge of the post-truth phenomenon. Thus, it is a discourse on the question of how the post-truth phenomenon shapes information-seeking behavior in the era of the digital commons. Recognizing that the wide-ranging spectrum of a post-truth phenomenon may not be amenable to easy analysis, this section provides insight into the post-truth controversy and its implication for reshaping the role of law librarians.

As noted in the introduction, misinformation and disinformation are not always uniformly defined, making the line between these two concepts sometimes

\textsuperscript{17} Id.
\textsuperscript{18} Id. at 145–46.
\textsuperscript{19} Id. at 146–47.
\textsuperscript{21} Id. at 101 (noting that the policy of “giving views weight equal to their popularity seems to counter democratization with the tyranny of the majority”).
\textsuperscript{22} Cooke, supra note 3, at 211.
blurry. Both misinformation and disinformation may fortify the post-truth phenomenon by “prohibit[ing] collective knowledge and understanding” and “prioritizing and promoting biased, misleading, or false agendas and opinions.”\textsuperscript{23} In addition, the post-truth effect often does more than only produce confusion. Even fact-checking, when predicated upon misinformation/disinformation, tends to overshadow the credibility of information based on genuine facts or evidence that is emotionally less tempting or not compelling enough to alter the existing personal belief bias. This, in turn, quickly and erroneously stigmatizes such objective information as another form of fake news.\textsuperscript{24}

\textsection{16} The negative effect of misinformation and disinformation on citizens’ information behavior is enhanced in that each can disrupt the personal information retrieval and analysis process by creating either type I errors or type II errors. A type I error, also known as a “false positive” finding, refers to the rejection of a true null hypothesis. A type II error, a “false negative” finding, denotes the rejection of a true alternative hypothesis. In other words, a type I error involves falsely inferring the existence or reality of something that is not real or does not exist. By contrast, a type II error involves falsely inferring the absence or nonexistence of something that is real or does exist. Misleading information or authority induces both types of errors, particularly due to human’s inherent vulnerability to cognitive bias and propaganda. These two concepts link contextually and normatively to the post-truth phenomenon. A thorough consideration of such complementing concepts serves to elaborate and clarify the meaning of the post-truth challenge and, more important, to answer the question as to why it occurs.\textsuperscript{25}

\textsection{17} In the quest to link the post-truth phenomenon, cognitive bias, and propaganda, it should be first noted that the post-truth concept is of a normative nature. Thus, the post-truth phenomenon is not just about uttering a falsehood or claiming that truth does not exist. It represents misinformed or ill-advised resistance to deferring to scientific truth, evidential standards, and rational thinking. It is human nature to eschew and streamline sophisticated knowledge and information organization processes when making decisions although people might still experience, to a greater or lesser degree, a decision-making disorder in everyday lives, for example by vacillating between disparate ideas or opinions. This “psychological inflexibility tendency” makes people more vulnerable to cognitive bias when engaging in information behavior. The history of human evolution marks cognitive bias connoting a psychological state wherein one reacts against “unexpected or uncomfortable truths.”\textsuperscript{26} Humans’ preference to avoid complexity and seek simplicity often leads them to reach erroneous conclusions, which are not simply mindless mistakes explained by lack of information or scientific literacy.\textsuperscript{27}

\begin{thebibliography}{99}
\bibitem{23} Id. at 214.
\bibitem{24} Id. at 212.
\bibitem{25} McIntyre, supra note 1, at 13.
\bibitem{26} Id. at 35.
\bibitem{27} Sara E. Gorman & Jack M. Gorman, Denying to the Grave: Why We Ignore the Facts That Will Save Us 186 (2017).
\end{thebibliography}
¶18 Personal experience and a bevy of information sources also shape information behavior.28 Thus, “as the number of information items increase—or as the amount of available time decreases—people resort to simpler and less reliable rules for making choices to shorten their search time.”29 Furthermore, human nature leads people to opt for selective information seeking, namely selective exposure to information.30 Selective exposure refers to humans’ propensity to “seek information that is congruent with their prior knowledge, beliefs, and opinions, and to avoid exposure to information that conflicts with those internal states.”31

¶19 Most contemporary theories on cognitive bias have built mainly on J.C. Wason’s concept of confirmation bias: that is, the mechanism whereby people interpret information as credible and trustworthy when “it confirms their preexisting beliefs.”32 Two of the most important cognitive biases are the backfire effect and the Dunning-Kruger effect. The backfire effect refers to the “psychological phenomenon where the presentation of true information that conflicts with someone’s mistaken beliefs causes them to hold those beliefs even more strongly.”33 By comparison, the Dunning-Kruger effect is the “psychological phenomenon where our lack of ability causes us to vastly overestimate our actual skill.”34 Those biases together elucidate how our post-truth political beliefs entice us to eschew fact or evidence-based rationality.35 Additionally, the conceptual contours of cognitive bias are specifically articulated by the so-called availability heuristic, denoting a mental shortcut that allows people to assess the likelihood of risks, evaluate and solve problems, and make judgments promptly and efficiently based on immediate examples that come to their minds.36 Altogether, it seems evident that cognitive bias serves as the precursor for the post-truth phenomenon from an interconceptual perspective.

¶20 Inherent cognitive biases make us susceptible to manipulation and exploitation by governments or organizations for the propagandistic use of information, “especially when they can discredit all other sources of information.”37 For example, the media at the forefront of a political agenda may employ our inherent cognitive biases to propagandize falsehoods or falsify objective facts, which then lead us to abandon evidential standards and internalize post-truth beliefs. Thus, “the media can sometimes be a culprit in fostering scientific misunderstandings and myths.”38 But it is ironic that one ostensible defense of the media in response to criticism may be predicated on cognitive

30. Id. at 115.
31. Id.
32. McIntyre, supra note 1, at 44–45.
33. Id. at 173.
34. Id.
35. Id. at 48.
36. Gorman & Gorman, supra note 27, at 185.
37. McIntyre, supra note 1, at 62.
38. Gorman & Gorman, supra note 27, at 176.
biases. The media may argue that they simply present what people are interested in learning or having their beliefs confirmed by.39 This justification, however, may be far from coherent and merely forms a farfetched and outrageous argument as far as fake news is concerned. Fake news is not merely misleading or false news; it is disinformation that is deliberately created with an ideological or other purposeful motive.40 In this light, it can be said that fake news has a conceptual analogy to propaganda. Indeed, propaganda does not purport to convince someone of something untrue, but it aims to “build allegiance” and “assert political dominance.”41 Propaganda has served as “a means to exploit and strengthen a flawed ideology,” which is perceived as the post-truth phenomenon.42 Likewise, the social media generating fake news facilitates the post-truth encroachment or predominance by diverting our attention to unscientific, non-objective, and distorted information, thereby thwarting our rational approach when engaging in information behavior. In sum, both fake news and propaganda serve as tools to infuse our minds with flawed ideologies and reinforce our post-truth beliefs. Furthermore, it is cognitive bias that drives and effectuates fake news and propaganda.

Human nature is inherently vulnerable to an external stimulus like yellow journalism as generally understood as characterized as being provocative, sensational, incendiary, appealing to one’s sentiment, or triggering empathy. Hence, in human nature, people are susceptible to an unconscious but steady ideological manipulation or contamination, and prone to easily and readily bear repugnance to less asserted and lucid but objective facts and information, which will lead us to circumvent the complex process of scientific, rational thinking in our daily lives.

A Proposed Behavioral Reform: Reshaping the Role of Academic Law Libraries as Information Activists

21 By mobilizing cognitive biases and generating alternative unconfirmed facts or information, the post-truth effect obfuscates and suppresses information that citizens of a democracy should know and prioritize.43 Arguably, then, the post-truth phenomenon creates a new paradigm to shape the roles and virtues of law librarians at the forefront of robust initiatives to enhance public information literacy and safeguard freedom of information.44 Thus, law librarians serving as information consumers, providers, and interpreters must make competent, intelligent, persistent, and proactive efforts to effectively safeguard the public and the local community from being led astray

39. Id. at 176–77.
40. McIntyre, supra note 1, at 112.
41. Id. at 113, 116.
42. Id. at 113.
43. Cooke, supra note 3, at 212.
44. Jamie J. Baker, 2018: A Legal Research Odyssey: Artificial Intelligence as Disruptor, 110 LAW LIBR. J. 5, 30, 2018 LAW LIBR. J. 1, ¶ 87 (arguing “law librarians are on the front lines of teaching legal research tools [and] as . . . law librarians consider the fate of law libraries in the Information Age and beyond, it is imperative that [they] continue to assess and instruct on information quality”). Id. at 30, ¶¶ 87, 89.
by inaccurate, misleading, or erroneous information. The best-qualified librarians in the age of post-truth prevalence, then, are those who think and evaluate through a critical lens. Critical thinking or reasoning defies blind acceptance of information or servile conformity and obedience to conventional ideas and alternative facts, without reasonable doubts as to trustworthiness and credibility of such information or ideas. In the process of critical thinking, law librarians are called upon to consistently impugn the authenticity and credibility of information presented before themselves, consume and evaluate information with a skeptical eye, and remain on high alert to misinformation or disinformation.

Law librarians should reframe their role as inclusive of promoting critical information literacy, which facilitates users’ abilities to purposefully seek, locate, and use appropriate information and to engage in more thoughtful dialogues and learning processes. Critical information literacy provides “an overarching, self-referential, and comprehensive framework” for robust interaction with individuals, ideas, and information in participatory and collaborative digital environments. Thus, critical information literacy asks information users to “consider the underlying power structures that shape information.” It is quite telling that the new mission for law librarians lies in “developing a critical practice of librarianship—a theoretically informed praxis.” This philosophical evolution calls on law librarians to anticipate and respond vigilantly to changes in the information environment to more proactively and benevolently intervene in user information-seeking behavior. Such an approach resists complacency in law librarianship practices by expanding librarians’ role beyond value-neutral information providers.

It is worth reiterating that the age of massive digitization is marked by the ubiquity of, and unrestricted access to, an abundance of information. As expectations for digital access today in a wide range of private and public sectors have already reached “the point where only digital information will satisfy the vast majority of user needs,” law libraries are called on to “digitize extensively and to a level of quality that supports a wide variety of actual and potential uses” and strenuously preserve digital information.

This digital information environment asks people to interact more vigorously with others than ever before on broader contact points throughout the robust information-seeking process. The consequences of such interactions are arguably in no wise

46. Cooke, supra note 3, at 216.
47. Id. at 217–18. See generally Elmborg, supra note 45.
49. Cooke, supra note 3, at 218.
50. Elmborg, supra note 45, at 198.
51. Id.
desirable or positive in every case but rather seem oftentimes problematic. In the past, cognitive biases were ameliorated by zealous efforts to exchange information that helped correct false information, refine weak ideology, and reinforce ungrounded information. However, in today’s media deluge, information exchange itself may not be enough to counter information manipulation or inaccuracy concerns and stimulate the dissemination of unvarnished, undistorted, and genuine facts. The free flow of information exposes citizens to the growing risk of misinformation or disinformation that results from flawed or biased ideologies, thoughts, or viewpoints delivered by individuals, governments, social media platforms, and the like. The accumulation of information risks beyond the ordinary level of information literacy and discernment may hamper the reasonably informed decision-making process that could drive sound social change and foster well-functioning democracy. Such risks could be eliminated, or at least mitigated, by the fair and free media when it duly performs the agenda-building function to exert positive influences on society and the public policymaking process. The agenda-building perspective countenances ordered but widespread social change or innovation, departing from the existing situation if necessary. In the agenda-building framework, information, even the information reflective of prevailing social rules or public order and customs, is not taken at face value, but the validity and legitimacy of the source of information is subject to continuous evaluation and verification against evolving standards or new relevant information available in society. Consequently, social innovation on the continuum of information development may facilitate “to break society’s logjams, to prevent ossification in the political system, [and] to prompt and justify major innovations in social policy and economic organization.” Inasmuch as media bias may to a greater or lesser degree exist in the real world, it is imperative that society has the efficacious regulatory mechanism to properly detect and address the intrusive impact of post-truth. It should be noted that post-truth may create normative concerns when it “amounts to a form of ideological supremacy, whereby its practitioners are trying to compel someone to believe in something whether there is good evidence for it or not.”

All in all, it seems axiomatic that a close look at the contextual, normative link between cognitive bias, propaganda, and the post-truth phenomenon warrants the imposition of comprehensive accountability on individuals, governments, and organizations, including social media, for their neglect in playing a proactive role to address the ever exacerbating post-truth phenomenon. Thus, the new paradigm of redressing the post-truth concern envisions the so-called umbrella liability framework. In addition to taking any necessary individual and mutual responsibility for the malaise of post-truth phenomenon, each of three entities is required to maintain a fair and balanced

53. McIntyre, supra note 1, at 58.
55. Id. at 913.
57. McIntyre, supra note 1, at 13.
approach in engaging in a wide range of information practices. This tripartite collaboration may effectively solve this normative post-truth puzzle. Notably, this sociocultural mandate for cooperation among these sectors particularly highlights the more proactive role of law librarians in combating misinformation and disinformation, which prevents a variety of user groups from fulfilling their respective information needs. Indeed, the importance of the vigorous engagement of law librarians in countering the predominating post-truth phenomenon cannot be emphasized enough, since they perform their outreach role at the forefront, interacting directly with people by assisting them in satisfying their intellectual curiosity. Like individuals, states, and organizations that are involved in the dynamic play of the post-truth effect, law librarians fight misinformation and disinformation on the integrated battlefield. With the recognition of the danger of a premature conclusion, it can be said that should law librarians strive to align the values of critical literacy with their more mundane work, one may anticipate a sound sociocultural climate disallowing the encroachment of misinformation or disinformation on the ordinary course of people's intellectual processes, although the post-truth evils may not be able to be fully eradicated forthwith.

A Proposed Structural Reform:
Designing Blockchain–Platform Integrated Library Systems

¶26 In today’s data-driven economy, disruptive innovations of the information organization system and process constantly challenge functional and structural aspects of traditional information retrieval frameworks established long ago in the library context. Almost inevitably, these innovations will also reshape the existing intermediary role of librarians as information providers and distributors. The rapid technological advance propels libraries to reassess the hackneyed system and process to respond quickly and effectively to the new needs of the fast-evolving digital ecology. Amid all this change, what structural reforms might law libraries make to correct imperfections of conventional library information retrieval systems? As discussed in preceding sections, the burgeoning post-truth phenomenon accentuates these system imperfections by increasing information seekers’ vulnerability to cognitive biases resulting from unwarranted and ill-founded internal consensus or external factors such as information manipulation by media and individual providers. This section discusses the far-reaching functional clout of blockchain technology. It illustrates how blockchain technology offers one solution for libraries seeking structural reform.

¶27 Blockchain is a decentralized and distributed record—or “ledger”—of data or transactions stored in a highly secure, verifiable, and permanent way using various cryptographic techniques. An array of parties in a blockchain can read and write transactions to the database. Transactions that pass get hashed—in other words, assigned a digital fingerprint that identifies the transactions. Those validated

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58. Baker, supra note 44, at 13, ¶ 31 (emphasizing the increasing significant impact of the digital revolution on legal practice).
transactions then get grouped into a block, which is assigned its own hash. That hash becomes the first hash of the next block of transactions, linking them in a chain. Thus, blockchain has a built-in consensus mechanism in which multiple parties interact with one another in a trusted network.59

¶28 Emerging blockchain technology is likely to facilitate a paradigm shift in the role and functions of academic libraries by enabling direct and transparent sharing of information among individual users in the same block, without third-party intervention, thus ensuring a certain confidence level in the information circulated. In the midst of the technological evolution impacting the pattern of institutional information organization, blockchain will dramatically reshape the functional and spatiotemporal status of libraries.

¶29 With this recognition, this section provides a pioneer suggestion of a new conceptual and procedural modality for the implementation of improved information retrieval and sharing systems. Streamlining and decentralizing the mechanism of information retrieval and sharing will serve to achieve genuine freedom of information. This section avers that a blockchain-based knowledge-sharing platform will be able to effectively rectify human cognitive biases resulting from the functional failure of traditional library systems to eliminate misinformation and disinformation, and further resuscitate information democratization. It then highlights that the blockchain system will effect the reshaping of the role of an academic library, beyond information provider and distributor, to include system designer, coordinator, and manager.

Blockchain Mechanism in Detail

¶30 As briefly noted above, blockchain is a decentralized and distributed record—or ledger—of data or transactions that are stored in a highly secure, verifiable, and permanent way using various cryptographic techniques. A blockchain is a continuously growing list of records, combined in “blocks” and then “chained” to each other using cryptography.

¶31 In blockchain, data entered onto the blockchain are “hashed,” getting a unique digital signature. Data is shared, verified, and validated on a peer-to-peer basis. Validated data gets grouped into a string of data, the block, and gets a unique signature. This signature becomes part of the data of the next block. As illustrated in figure 1,60 the data in block A is linked to block B by adding the signature of block A to the data of block B. The signature of block B is now partially based on the signature of block A because it is included in the string of data in block B.


60. This graphic is based on Jimi S., How Does Blockchain Work in 7 Steps—A Clear and Simple Explanation, GOOD AUDIENCE (May 6, 2018), https://blog.goodaudience.com/blockchain-for-beginners-what-is-blockchain-519db8c6677a [https://perma.cc/72HC-DBMQ]. The graphic was mutatis mutandis reformulated to streamline illustrating the blockchain mechanism.
What happens when data is altered? As shown in figure 2, the new signature of block 1 (S1a) does not match the signature previously added to block 2 (S1). Block 1 and block 2 are now not considered chained to each other.

How could data alteration be successful? As shown in figure 3, the new signature S2a of block 2 still does not match the signature S2 in block 3. Altering a single block requires a new signature for every block that comes after it. A single bad actor will never succeed unless he has more computational power than the rest of the network.

As such, a blockchain is a decentralized, distributed, and secured architecture of trust. Four key natures of blockchain are as follows:

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61. Id.
62. Id.
Blockchain is decentralized. No single entity controls the network; it is maintained by multiple parties.

Blockchain is distributed. Digital records are shared with and updated by all participants at any time based on a built-in, proof-of-work consensus mechanism.

Blockchain is secured. It is driven by a blend of proven cryptographic technology, making it hard to tamper with the records.

Blockchain is immutable. Information, once added to a blockchain, is time-stamped and cannot easily be modified.

For these peculiar characteristics, blockchain is often called a trust machine. It is highly resilient and resistant to external threats or malicious attacks, such as unauthorized information manipulation.63

Blockchain Types and the Degree of Decentralization

Generally, blockchains are categorized according to multiple criteria. Blockchains are divided into permissionless or permissioned blockchain by platform accessibility. Permissionless blockchain is open to everyone without any restriction in accessibility. By contrast, permissioned blockchain imposes restrictions on who can read, write, or validate data/transactions on the platform.64 Thus, the permissioned blockchain restricts access depending on the specificity of the platform.

Blockchains can also be classified by platform management and user authentication, in other words, by the level of anonymity of the participants.65 Public blockchain is the most decentralized type of blockchain. Public blockchain does not allow a single entity to manage the platform or to be given special privilege on any transactional

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64. Id. at 8.
65. Id. at 8–9.
decision. Public blockchain is a completely trustless platform and relies on consensus, not any trusted party, in validating the transaction. Therefore, public blockchain is vulnerable to a “51 percent attack,” which occurs when an individual entity or a group of like-minded entities holding more than half of the computational power maliciously attempts to take control of the blockchain and thereby exert influence on the decision-making process to the detriment of network integrity.66 Most public blockchains are permissionless. Ethereum is typical of a permissioned public blockchain.67 On the contrary, private blockchains are operated on platforms controlled by a single entity, which is highly trusted by others.68 The verification process is carried out by a very small number of authorized nodes, such as computers or servers.69 Thus, the private blockchain is the least decentralized form of blockchain. As validators are already known to one another in the private blockchain, any faulty nodes are relatively easy to fix, and the risk of a 51 percent attack that may arise from minor collusion among a group of entities in the same blockchain network does not exist.70 The consortium (federated) blockchain occupies the middle ground. It is “a type of private blockchain that operates under the leadership of a group rather than a single entity and in which participants are identified.”71 The consortium blockchain is a “partially decentralized platform” and generally a permissioned blockchain.72 Therefore, a few selected and predetermined nodes control the consensus process, and access to the platform is limited to participants with permission.73

Blockchain Application Controversy Over Functional Reliability and Validity

§38 Notwithstanding the mushrooming potential of blockchain technology in a wide range of areas, general views remain divided regarding its reliability and functional validity when applied to the library information process. One may argue that decentralized blockchain mechanisms deviate from third-party authority and make it lengthy and costly to implement and maintain as standard information platforms in academic law libraries.74 Skeptical perspectives point to the notion that blockchain is neither the only nor best means to achieving data integrity, security, transparency, and durable preservation even in the data-driven era.75

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67. GANNE, supra note 63, at 10 (noting that in permissioned public blockchain, transactions are validated based on the participants' stake, that is, "how many coins he/she has and for how long").
68. Id.
69. Id.
70. Id.
71. Id at 11.
72. Id.
73. Id.
74. Smith, supra note 59, at 31.
75. Id.
§39 Besides, the potential pitfall of a 51 percent attack underlying the blockchain consensus mechanism may continue to make viable cases for skepticism. In blockchain, a single entity, or a group of multiple entities with a common interest, that gains control over more than half of the verifying parties can rewrite the blockchain and rig transactions. This systemic drawback may undermine the guaranteed security and offset the efficiency of information processing that blockchain can bring positively into the library. The 51 percent attack is also problematic in that it compromises the principle of majority rule by buttressing biases toward distorted information. Theoretically, an individual entity can move forward to maneuver information-processing mechanisms by enticing other participants in the same blockchain network to engage in a concerted practice favoring particular information. Such an ambitious entity can lead a majority of other participants astray by creating *ex ante* cognitive bias anew or infusing *ex post* cognitive bias into their conceptual mentality. It follows that interrupting biases to that effect may have an adverse effect on an entity's conceptual mechanism; this effect may culminate in dismantling the existing collective conceptual frameworks. Thus, the interrupting biases can facilitate a group's conceptual deviation from warranted information and concerted reliance on unverified information. Such being the case, the structural shortcomings of a 51 percent attack may undermine blockchain utility and functionality inspiring the innovative information-processing platform design and make blockchain vulnerable to internal cognitive bias challenges by a particular entity intending to manipulate blockchain consensus mechanisms in order to give particular salience to, or impugn and demur at, the validity and accuracy of particular information. A perceived corollary to arbitrary manipulation is allegedly a significant impediment to freedom of information selection. The 51 percent attack flaw appears to create the same concerns as Habermas's consensus theory of truth. According to this theory, a warrantedly assertible statement is deemed true because its validity is supported by the best argument in the current scientific debate. This view of truth by consensus involves a too objectivistic decision-making process and excludes further consideration of a context of theoretical discourse. Thus, truth by consensus should be complemented by the notion of authenticity, which is “a willingness to stand by one's theoretical views not only in the face of an adverse common opinion but also in the face of one's contingent inability to articulate them as the best argument.” The statement authentically asserted may or may not be subsequently accepted as more valid than the former best argument. That said, everything claimed to be authenticated might not necessarily turn out to be true.

§40 The potential perils of blockchain flaws may counterintuitively boil down to another argument that blockchain technology, though integrated into the library

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76. Id. at 32.
78. Id.
79. Id.
80. Id.
context to a greater or lesser degree, would not transform the traditional role of academic libraries. Indeed, libraries work at the intersection of information and people. A sequence of professional judgment in practice defines what librarians perform and how libraries operate. \footnote{Smith, supra note 59, at 33.} This may be more so these days because, as well articulated in the emerging discipline of digital humanities, information literacy could result in a high degree of achievement with the proper use of digital resources, as well as constant reflection on their application.

\footnote{Id. at 31.}

\section*{Artificial Intelligence Application in ILS Design and Blockchain Complementarity}

\footnote{Sherry Xin Chen & Mary Ann Neary, Artificial Intelligence: Legal Research and Law Librarians, AALL Spectrum, May–June 2017, at 16, 17.}

\footnote{Id. at 18.}

42 A variety of industries have embraced artificial intelligence (AI) applications for the data-processing efficiency, which are likely to carry more weight with information retrieval and sharing matters when implemented in blockchain-based further secured platforms.  

\footnote{Nancy B. Talley, Imagining the Use of Intelligent Agents and Artificial Intelligence in Academic Law Libraries, 108 LAW LIBR. J. 383, 384, 2016 LAW LIBR. J. 19, ¶ 2 (defining agent technology as "a software entity which functions continuously and autonomously in a particular environment, often inhibited by other agents and processes").}

41 Notwithstanding the foregoing plausible arguments, blockchain is being touted as the new panacea to effectively maintain data security and transparency. It should be noted that blockchain technology can be directly applied to the peer-review process, to a wide variety of information retrieval and sharing settings, and for chain of custody for digital repositories. \footnote{Id. at 18.}
AI-based intelligent agent systems currently used in the LIS context have limited functions by turning only to “automated reasoning or logical searching, to assist library patrons.” Nevertheless, those agents have fulfilled the needs of diverse users by helping “achieve the best outcome or, when there is uncertainty, the best expected outcome.”

§43 It is noteworthy that AI systems are based on cognitive computing: that is, machine learning analyzing repeated searches and refining them to meet the user’s demands more closely. Law librarians can play a role in helping AI applications retrieve optimal results by identifying systemic defects, filling the loopholes, and fine-tuning the process. Furthermore, full-fledged librarians with a current awareness of AI mechanisms may contribute to rectifying a “false sense of accuracy” created by users lacking a proper technical understanding required for database searching. Nonetheless, there remain perceived limitations as to the implementation of AI-driven legal automation, given that AI employs machine-learning algorithms coterminous with human learning, analytical reasoning, and decision-making processes and, therefore, is not completely free from cognitive biases. Hence, the imperfections of AI systems boil down to the fact that even those benefits that can be reaped from an optimal AI application may or may not countervail the implied pitfalls resulting from the complexity of AI technology as well as its opacity and uncertainty.

§44 Blockchain technology can effectively counterbalance the underlying imperfections of AI systems. Blockchain’s decentralized consensus mechanism may offer a glimpse into the inner workings of AI by having all the information undergo verification by network participants, which allows them to evaluate and correct possible mistakes created by AI systems by means of consensus making. Thus, participants autonomously verify information and determine its validity, accuracy, authenticity, and authority. This verification process is regulated by the institution charged with the system oversight. Theoretically, blockchain can serve as a well-defined “information architecture,” that is, “the process of designing, implementing and evaluating information spaces that are humanly and socially acceptable to their intended stakeholders.”

Another version of the definition sets out more elaborate and multidimensional aspects:

- The structural design of shared information environments
- The synthesis of organization, labeling, search, and navigation systems within digital, physical, and cross-channel ecosystems

89. Id. at 388, ¶ 8.
90. Id. at 387, ¶ 7.
91. Chen & Neary, supra note 83, at 18–19.
92. Id. at 19 (noting that law librarians who train/instruct law students/new practitioners can be an integral part of the AI system construction, implementation, and evaluation team).
93. Id. at 20.
94. Id.
95. Id. (noting that “[t]echnology, especially AI technology, can be deceptive because its inner workings are invisible to the naked eye”).
• The art and science of shaping information products and experiences to support usability, findability, and understanding
• An emerging discipline and community of practice focused on bringing principles of design and architecture to the digital landscape

§45 Given these definitions, blockchain can be a better alternative to contemporary ILS platforms as information retrieval and sharing tools, which are “essential as basic building blocks for a system that will organize as much of . . . recorded information as possible.” Thus, its unique decentralized design can serve to effectively revamp the present flawed system that might be easily compromised by potential information biases that could occur as a consequence of human system operation tasks. Blockchain may streamline the sophisticated information-processing system by facilitating direct and diversified participation from parties in the process.

Four Takeaways for Optimum ILS Design by Means of Blockchain Application

§46 Underlining its functional excellence and practical usability, blockchain serves to open a new frontier of information retrieval and sharing processes in the LIS context. It will bring an innovative ILS platform as a structural and functional upheaval into the information-processing arena. The foregoing discourse on blockchain application in the LIS context suggests the following four takeaways.

Compulsory Proof of Work Ensuring Enhanced Procedural Transparency and Efficiency, and Guaranteeing Information Validity and Authenticity

§47 In the blockchain ILS, only information that properly undergoes the internal verification process can survive as qualified information for retrieval and sharing among parties in the networks. This system enables ILS users to autonomously and collectively ensure the procedural transparency and efficiency of the verification process by requiring an individual entity proposing new information to file proof of work that shows how he or she has already assessed and evaluated that information. Every proof submitted is circulated among all parties and archived for future reference. Information whose objectivity, validity, and authenticity are not predicated upon supporting evidence will not be able to retain complete verification and will eventually be disqualified.

97. Id. at 41 (quoting what is defined by Rosenfeld, Morville, and Arango who argue that it is not possible to provide “a few words that succinctly capture the essence and expanse of the field of information architecture”).
98. Id. at 98.
99. Id. at 151–52 (arguing that “[a]s the tools became automated, though, the task of design was taken on by people who understood computers but often had little or no knowledge of the contents of the records that would make up the system”).
Constructing an ILS Platform Based on Blockchain Technology

Depending on the degree of security and accessibility, blockchains are generally divided into two categories: public blockchain and private blockchain. In a public (generally permissionless) blockchain, anyone in the public domain can access all the data or blocks contained in the blockchain. By contrast, in the case of private (generally permissioned) blockchain, transactions or blocks are only made accessible to members of the blockchain or to parties who are granted full or partial access. Academic libraries may opt to build in-house ILS platforms in the form of either public or private blockchain, or both. The institutions can establish public blockchain-embedded ILS platforms to make all the information publicly accessible. Or they can alternatively invent ILS platforms partaking of private blockchain for information qualified for restricted access and distribution due to copyright and other security concerns. In addition to designing a private or public blockchain ILS model for an individual institution, multiple institutions can further innovate the ILS design by establishing partnerships under a consortium blockchain model. Figure 4 shows how institutional collaboration works on the blockchain platform.

Figure 4
Comparison Between Traditional and Blockchain ILS Models

In designing the interinstitutional ILS platform, an important issue may arise as to how to address technical interoperability issues. The following four scenarios can be considered.

In the first scenario, partnered institutions interact with each other on the same blockchain. As shown in figure 5, this case obviates the need to consider interoperability issues. Institutions can directly exchange data on the platform pursuant to its governing rules relative to transactions, for example, the policy, process, and rules of an interlibrary loan system.100

In the second scenario, institutions interact with each other on two different platforms built on the same blockchain technology. As figure 6 shows, institutions are

100. Gianne, supra note 63, at 36.
required to ensure technical interoperability because they still operate on different platforms, though not on different blockchains. Platforms need to prove compatible with each other without any technical restriction when interacting on the same blockchain.\footnote{Id. at 37.}

\section{In the third scenario, institutions interact with each other on different platforms, with each being based on different blockchain technologies. As figure 7 demonstrates, institutions need to verify the interoperability between two different platforms. Given the potential discrepancy in connectivity and compatibility between different blockchain technologies, it is inter-ledger interoperability, not intra-ledger interoperability, that need be verified and ensured.\footnote{Id. at 38.}}

\section{In the fourth scenario, institutions remain off-chain and interact only on the blockchain-based interface platform. This platform allows information to be exchanged}
or transferred from one system to another. As figure 8 shows, when users request specific information, their institution can extract a pool of relevant information from the platform and then users can retrieve specific authorized information from that pool.

¶54 As such, a blockchain-based integrated system can advance technical interactions between institutions. Blockchain can even facilitate cross-border partnerships by integrating a variety of national-level platforms into a comprehensive platform at the global level. How to surmount technical barriers in terms of interoperability would still remain a critical issue in designing and formulating the overarching blockchain platform.

103. *Id.*
104. *Id.*
The Utility of a Blockchain-Based ILS Model

¶55 Blockchain confers a number of benefits on institutions and users. Blockchain can facilitate the inter- or intra-institution flow of information. It can innovate traditional information retrieval and sharing processes by mobilizing digitized and automated systems. Blockchain can also enhance institutional collaboration and streamline and improve a series of processes for the benefit of end information users. Intellectual property–related issues can be solved efficiently and transparently in the blockchain platform, where information is required to be verified and authenticated. Furthermore, with such a transparent and automated system employed, blockchain can significantly reduce a variety of direct and overhead costs, including “verification, assessment, networking, processing, coordination, transportation and logistics as well as financial intermediation and exchange rate costs.”

A New Perspective on Reconceptualizing a Library’s Role as a System Designer, Coordinator, and Manager

¶56 Applying blockchain for ILS implementation will reshape the role of academic libraries. In the mainstream LIS landscape, libraries work mainly as information providers and distributors. A functional shift due to the introduction of an innovative ILS platform connotes that libraries may be required to engage in information processing as designers, coordinators, and managers of blockchain systems.

¶57 System design is inevitable for the retrieval of organized information because it determines how information is acquired, compiled, evaluated, and displayed. The contours of system design are articulated based on robust interaction between technical functionality and users’ information behavior. Therefore, what makes or mars the system would be the degree to which it can effectively protect procedural transparency and information credibility and accuracy from the potential threat of biases. Remarkably, blockchain may solve this systemic puzzle. Implementing machine-learning ILS will be a groundbreaking paradigm shift to eliminate cognitive or computational biases. Decentralized consensus mechanisms embed information retrieval and sharing processes into secured networks of relationships that mediate hierarchical information categories as well as procedural systems that encapsulate conceptual engineering.

The evolving role of academic libraries boils down to designing, coordinating, and regulating the blockchain ILS to ensure its optimal functionality and architecture. In their highlighted role, libraries will be directed to address the potential pitfall of consensus mechanisms marked by the 51 percent attack. Thus, they will need to prevent those mechanisms from being abusively operated in ways to mislead or frustrate information retrieval and sharing processes by creating more biases and uncertainty.

105. Id. at xi.
106. Joudrey & Taylor, supra note 96, at 152.
A Way Forward

¶58 The normative moments that define the function of ILS have already arrived when it comes to initial interaction with technological advances.\(^{108}\) The demands of the times call for academic libraries to embrace cutting-edge technologies that make patrons and users better off in their information-seeking endeavors.

¶59 The significant overtone of innovative blockchain application may materialize in progressive initiatives to embrace disruptive technologies to proactively accommodate the diverse needs of information seekers in the fast-paced LIS digital ecology. The most fundamental step to renovating the contemporary ILS in the academic setting is to facilitate competitive intelligence in streamlined information retrieval and sharing processes and information management systems.\(^{109}\) A well-ordered, blockchain-integrated ILS will improve information retrieval and sharing processes through autonomous and compelling verification that captures potential cognitive biases and effectively evaluates and disseminates qualifying information. It will lead to enhanced information literacy by increasing the productivity and efficiency of users’ information behavior.

Concluding Thoughts: Exploring a New Frontier for Academic Law Libraries

¶60 The first step in expanding the functional horizon of law libraries to accommodate the fast-evolving LIS environment in the digital era may be to clarify the concept of democratization of information. Next is to make certain that the core values democratization of information manifestly or implicitly represents are treated with paramount gravity and respect in our cultural understanding of library information systems. The democratization of information is not an elusive goal and should not be construed as existing in a vacuum. The normative significance of information democratization can be elicited, and its conceptual clarity can be secured, to an appreciable degree in that it defines freedom of information by shaping the normative landscape where freedom of information can remain firmly entrenched and guaranteed in the course of human information-seeking behavior. Nonetheless, the emerging post-truth challenge has threatened to put the democratization of information at risk. The insidious and wide-ranging post-truth effects implicate cognitive biases as a significant impediment to democratization of information. While cognitive bias, in and of itself, is not amenable to easy analysis or discussion, by all accounts its far-reaching importance in the LIS context, particularly in the profession of academic law librarianship, seems evident. With this recognition, this article offers the trenchant practical suggestion for prospective initiatives to rectify the growing peril of cognitive bias and resuscitate a genuine degree of democratization of information. In essence, law libraries are called

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108. Baker, supra note 44, at 19, ¶ 50 (stressing the necessity of considering “the notion of premature disruption, whereby technologies replace human workers before the technology is truly ready to perform at the level of the replaced humans”).

on to move forward seeking vigorous recourse to behavioral and structural remedies as effective corrective measures to gratify the demands of the digital times.

§61 Law libraries need to reshape their role as information activists in their endeavors to afford prompt, adequate, and effective protection to information-seeking users from a surge of misinformation/disinformation threats and cognitive bias attenuating information analysis and logical reasoning ability. Thus, law librarians need to engage in in-depth critical thinking and make multidimensional value judgments on the validity, objectivity, authenticity, and accuracy of information. A new call for behavioral reform as such should not be interpreted as requiring librarians either to promote or facilitate rigorous censorship over information, for instance by withholding or restricting certain unfavorable or undesirable information, or to derogate from core values of neutrality and impartiality in their role. Instead, librarians must proactively unveil the disguised color of information and thereby properly guide users not to take at face value information before them.

§62 On another note, it is imperative that law libraries take progressive actions to structurally revamp ILS platforms with a view to optimizing information retrieval and sharing processes. Blockchain technology mediates systemic evolution based on its unique decentralized consensus mechanisms. In essence, this mechanism is driven by voluntary verification of information in place by each party in the network. The procedural transparency and validity of consensus mechanisms are warranted by autonomous and continued proof-of-work processes, which lead to enhanced information accuracy, objectivity, and credibility as disqualified information is timely screened out after being carefully vetted. While the blockchain-platform ILS is as highly innovative as an algorithm-driven system and is vested with autonomous regulatory authority, its functional integrity does not always remain intact and secured. The unilateral arbitrary maneuver of the decision-making process of taking control of a majority of verifying parties would remain a potential challenge unless there is assurance that the operation of the ILS platform goes duly under the surveillance and oversight of libraries. This fact creates an intuitive implication that the blockchain application for ameliorated ILS calls for the evolving role of libraries as system designers, coordinators, and managers.
Keeping Up with New Legal Titles*

Compiled by Susan Azyndar** and Susan David deMaine***

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* The works reviewed in this issue were published in 2020 and 2021. If you would like to write a review for “Keeping Up with New Legal Titles,” please send an email to sdemaine@iu.edu and sazyndar@nd.edu.

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In a time when so many lawyers and law students are working from home, technology in law is more important than ever, driving even the most Luddite of us to embrace the future. In the same vein, law library patrons may not be visiting the physical library as much, instead turning to virtual media such as e-books and podcasts. Two podcasts stand at the crossroads of tech and virtual: The Digital Edge and Kennedy-Mighell Report. I recommend both to law librarians of 2021 and beyond.

The Digital Edge is a Legal Talk Network monthly podcast hosted by Sharon D. Nelson and Jim Calloway. Nelson is president of Sensei Enterprises, a digital forensics, information technology, and cybersecurity firm. Calloway speaks regularly on legal technology issues, Internet research, law office management, and legal ethics; he also directs the Oklahoma Bar Association’s Management Assistance Program. Their episodes feature legal authors, speakers, and technologists discussing law and technology.

Nelson and Calloway have more than 150 episodes under their belts. Discussions range from new tech gadgets for lawyers, as in “’Tis the Season: Tech Toys for the Holidays 2020,” to needed advice on novel tech niches, as discussed on the episode featuring David Notowitz, founder and lead forensic expert at the National Center for Audio and Video Forensics. Every episode is well-produced, and most feature expert guests.

Kennedy-Mighell Report, hosted by Dennis Kennedy and Tom Mighell, offers more than 250 episodes that focus on emerging and best practices for existing Internet technology for lawyers. Kennedy, named Technolawyer of the Year and a Top 100 Global Legal Technology Leader by London’s CityTech, applies digital technology to law practice. Mighell is vice president of delivery at Contoural, Inc., where he helps firms improve their records management and e-discovery practice with the use of computing technology.

Kennedy and Mighell’s friendly rapport as they share practice tips make their podcast seem more like a water cooler conversation among colleagues. Most recently, the podcast has focused on collaboration tools currently skyrocketing in use due to the coronavirus pandemic. Listening to only two episodes produced a list of software and apps that could make my job in law librarianship more efficient. Kennedy and Mighell do not just list new tech to research but tell listeners about the good, the bad, and the ugly of each. It is obvious from their honest reviews that they do not praise only those who sponsor their podcast.
Both podcasts offer knowledge on technology trends that librarians may need to include when choosing collections, adding media capabilities, and making recommendations to faculty and student patrons. *The Digital Edge* is better suited for a quick lesson on what's new, whereas *Kennedy-Mighell Report* gives in-depth analysis of tech tools based on shared experiences.

Both podcasts are available for free on the Legal Talk Network website or via Apple, Stitcher, Spotify, and Google Podcasts. I recommend Legal Talk Network as it provides complete transcripts of the episodes, making it most suitable for all users. The transcripts also provide links to any tools, software, or related discussion points, making it an organized resource that does a lot of the work for you. I recommend adding both podcasts to your professional playlists.


Reviewed by Joe Noel*

The American Civil Liberties Union has been a leading advocate of the rights and liberties guaranteed by the U.S. Constitution for the past hundred years. Its work has been so influential, in fact, that it is difficult to overstate the impact ACLU lawyers have had and the many ways they have shaped our society during this time. Securing many of the rights that we now take for granted required years of work and strategizing from some of the greatest legal minds in our country’s history. Despite the legal work, however, these battles for rights did not start or end in a courtroom. They have played out across a century in the lives of Americans, and many of these rights continue to be cherished, celebrated, and disputed to this day. It is with this full view of history in mind that the husband-and-wife editorial team of Michael Chabot and Ayelet Waldman collaborated with the ACLU to create *Fight of the Century: Writers Reflect on 100 Years of Landmark ACLU Cases*. This book brings together well-known, popular writers, ranging from Neil Gaiman to Ann Patchett, to look back at the ACLU’s work over the past century.

This collection of essays is not meant as a comprehensive history of the ACLU. It is instead an episodic and personal look at many of the most influential cases that the ACLU has been a part of, whether as lead counsel or through other assistance. In total, the book covers 40 cases (or in three instances, groups of related cases), each described in eloquent prose by a different well-known author. Each writer takes an individual approach. Some writers focus on the details of the case and the litigants, some focus on the impact, and many approach the issues through the prism of their own lives and experiences. All of the writers understand the legal issues, though very few of them are lawyers. This nonlegal perspective serves as one of the book’s main strengths. Instead of getting caught up in the procedural minutiae and legalese, as many of us in the field sometimes do, these authors emphasize the impact and real-world importance of the

* © Joe Noel, 2021. Head of Access Services and Instruction Coordinator, Tarlton Law Library, The University of Texas School of Law, Austin, Texas.
material they are discussing. They provide context, themes, and connections not often found in legal opinions. These are, after all, stories about the rights of people, and it is fitting that they be told by a diverse selection of writers outside the legal field who have personally witnessed and felt the ramifications of these legal battles.

¶10 The cases are presented chronologically and include a range of issues. They include some of the ACLU's earliest work, including *Stromberg v. California,*¹ which laid the groundwork for future First Amendment political expression cases, all the way up to the recent case of *ACLU v. Department of Defense*² regarding anti-protest measures by the government. (This litigation had not reached its conclusion as of the book's publication but has since been settled by the parties.) The writers chose cases they are passionate about, representing a cross section of the ACLU's work over the past century. The book includes all the cases a knowledgeable legal reader would expect, like *Brown v. Board of Education*³ and *Roe v. Wade,*⁴ as well as lesser-known yet consequential cases like *Gregory v. City of Chicago,*⁵ which included an influential concurrence discussing the “heckler's veto” (p.109).

¶11 The clear strength of *Fight of the Century* is the selection of the writers. The editors have chosen an insightful and skilled group who present their unique observations through various styles. This unique approach provides the bonus of introducing legal readers to notable novelists, poets, and even children's writers. My favorite essay is Anthony Doerr's on *Kitzmiller v. Dover Area School District,*⁶ which involved the Establishment Clause of the First Amendment and the teaching of creationism. Doerr weaves a story about one of the opposing litigants and evolution so as to highlight our shared humanity.

¶12 One of the most forceful and persuasive essays in the book comes from Scott Turow, who argues against the ACLU's position on campaign spending and the First Amendment. The book benefits greatly from this impassioned dissent. It would have been beneficial if *Fight of the Century* had included a few more of these critiques, though it is certainly understandable that the editors did not choose to do so given that the book was created in collaboration with the ACLU and is intended as a celebration of its work.

¶13 *Fight of the Century* is well worth reading and particularly relevant to our current moment in history. Although this book is intended for a general audience and does not include any footnotes or citations, it would likely be appropriate for higher education libraries. It may be useful as required reading in a traditional classroom or in a more informal setting like a seminar or a book club. The book would also fit well as a general interest book in an academic law library.

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¹ 283 U.S. 359 (1931).
⁴ 410 U.S. 113 (1973).

Reviewed by Barbara Schneider*

¶14 Judith Flanders, the author of *A Place for Everything*, is a social historian, a senior research fellow at Buckingham University in the United Kingdom, and the author of books on the Victorian period. She is a generalist and not a librarian, but she has written a historical survey that speaks to what librarians do.

¶15 *A Place for Everything* is a history of the organization of knowledge. Specifically, it is a history of how the world came to use the alphabet as a tool for organizing information. Rejecting other forms of organizing, the “hierarchical, categorical, geographical, [and] chronological,” Flanders argues that alphabetical organization “is as close as we can get to a universally accessible, nonelitist form of sorting” (p.235). Organizing information alphabetically neutralizes the material, giving no particular importance to any one bit or byte of data. By contrast, an example of ordering hierarchically might be the earliest student lists at some American colleges showing students ranked by their families’ social status.

¶16 The book itself, however, is organized roughly chronologically. In chapters designated with words beginning with the letters A through I and then skipping to Y, Flanders traces the long, slow ascendancy of using the alphabet as an organizing tool. Flanders first draws attention to the primacy of memorization in ancient cultures that depended on oral communication, negating any need for alphabetized lists. Early ordering using the letters of the alphabet put all items beginning with the same letter together in one list. Using third- and fourth-letter alphabetical order had to be explained in the 11th century by Papias the Lombard, perhaps the first Western lexicographer. According to Flanders, while Papias clearly felt the need to carefully explain what he was doing, any scribes copying his lexicography ignored his instructions and perhaps did not understand them.

¶17 *A Place for Everything* considers its subject broadly. While the narrative might veer off course a bit, the meandering uncovers interesting tidbits. In a consideration of why text became segmented and searchable, Flanders states that the “appearance of secular, in addition to ecclesiastical, material was important: by the thirteenth century reading was no longer necessarily, or primarily, a form of devotion or meditation” (p.83). The development of tables of contents, indexes, chapters, sections, and paragraph breaks has a history of its own. Readers gained the ability to use tools for searching for information that we, as librarians, today take for granted. Asking why we read teases out the history.

¶18 In addition to being a history of ideas, Flanders’s book recounts the role material culture played in this story. Technological advances made it easier to alphabetize. One example Flanders overlooks is Sir James Murray and the Scriptorium he used to organize alphabetically the millions of quotations sent to him on slips of paper as he

* © Barbara Schneider, 2021. Retired Head Law Librarian, Berkshire Law Library, Pittsfield, Massachusetts.
compiled the *Oxford English Dictionary*. But without advances in the manufacturing of paper and the development of pigeonhole-style desks popular in offices in 19th century England, which Flanders does talk about, we might not have the *O.E.D.*

¶19 When Flanders refers to the literature of the law and the necessity of searching case law or personal data, she focuses on the United Kingdom and, tangentially, Europe. She entirely leaves out developments in the United States. Alphabetical indexes in West’s Regional Reporters, West’s American Digests, and other digests arranged alphabetically that serve as subject indexes to case law in America complement Flanders’s argument about the rise of alphabetization as an organizing tool.

¶20 We are, however, at a point in history when Flanders’s story might be a swan song. In a digital world, alphabetical organization as a method for locating information is often insufficient at best. Keyword searching in Westlaw Edge, Lexis+, and other databases has largely taken the place of using alphabetically-organized digests. It would be a different book that examines how searching for individual letters in digital databases as they appear in specific words might be an extension of alphabetical sorting.

¶21 Where would this book find a home in the collections of a law library? *A Place for Everything* might have a place on the shelf in our offices with other professional material. Together with books like *The Invention of Legal Research* by Joseph L. Gerken and *The Syllabi: Genesis of the National Reporter System*, Flanders’s book can serve as a reference to tell us how we got to where we are today. In that sense, it gives us a lens to understand how and why we organize the literature of the law. Recommended for academic law libraries.


Reviewed by Matthew E. Flyntz*

¶22 *Mine! How the Hidden Rules of Ownership Control Our Lives* opens by telling a familiar story. A passenger on a flight reclines his or her seat; the passenger seated behind gets upset. Mayhem ensues. We all have opinions on the ethics of seat reclining, but the authors ask the reader to consider this scenario from a property rights perspective. Who is entitled to that sliver of space? Both passengers would insist, “It’s mine!” The authors use this story as a framing device to introduce the main thesis of the book—that many of the stories we tell ourselves about property, including “finders, keepers,” “first come, first served,” and “you reap what you sow,” are dead wrong. Ownership is “actually the result of choices that governments, businesses, and others are making about how to control the scarce resources we all want” (p.17).

¶23 The authors dedicate a chapter to each of these ownership stories—“first come, first served,” “possession is nine-tenths of the law,” “you reap what you sow,” “my home is my castle,” “our bodies, our selves,” and “the meek shall inherit the earth”—and explore how the law inverts, or at least complicates, these old adages through

real-world illustrations. For example, in the “first come, first served” chapter, the authors discuss “line-standing companies,” which pay standees to wait in line for things like Supreme Court oral arguments and iPhone launches on behalf of wealthy users who do not want to wait. At the last minute, before the Supreme Court or Apple store opens for business, the customer swaps places with the standee. In this case, it is quite literally “last come, first served.”

While “first come, first served” is an appealingly simple rule, the authors rightly note that we need to somehow answer the ageless question of who was first. Did the person in the middle of the line come first? Or did the wealthy customer who paid someone else to stand in line come first? In an older example some will remember from property class, did Post, the hunter who first started chasing the fox, come first? Or was it Pierson, the hunter who first captured the fox? The authors demonstrate that behind these simple adages lie a variety of policy, moral, business, and political considerations to which we are often blind.

The authors claim that by exploring the truth underlying these old adages, along with the tools that governments and businesses use to exert ownership rights, readers will be better prepared to face future ownership battles. Many of these battles, such as issues arising out of climate change, migration, digital privacy rights, and so on, have much higher stakes than airline seats or even foxes. And after reading this book, I certainly understand more clearly how ownership works in our society.

This is a truly fascinating book, and on a personal level, I would recommend it to anyone interested in these concepts. It is written in a jovial, engaging tone reminiscent of Freakonomics. Indeed, in the introduction, Heller and Salzman suggest that this book is to property ownership what Freakonomics is to microeconomics. The authors demonstrate the clear communication skills and sense of humor that have made them such popular law professors at Columbia and UCLA, respectively. That said, this book is written with the lay audience in mind and is not likely to add much value to the scholarly conversation despite its utility to many readers. For that reason, I do not think this is an essential purchase for most law libraries, but it is a worthwhile extra.


Reviewed by Ashley Evans Stewart

All over the world, incarcerated men and women are creating and staging theatrical productions, ranging from very simple performances for others within the prison to elaborate productions with costumes, props, and public audiences. In *Prison Theater and the Global Crisis of Incarceration*, Ashley E. Lucas examines some of these programs and how they are used to reframe the narrative surrounding incarceration and to provide positive experiences and skills to the incarcerated participants. Incarcerated people are an underrepresented and often forgotten segment of society,
and the daily struggles of incarceration are isolating, demeaning, and depressing. Theater allows them the opportunity to inhabit roles and circumstances beyond their prison cells, and the performances and practices often become a transformative space for the participants, providing them the freedom to express emotions and have experiences not usually allowed within the walls of the prison.

¶28 Lucas has a personal connection to this topic as a professor of theater and drama, director of a prison theater program, and daughter of a formerly incarcerated father. Her unique background allows her to write about this subject from a variety of perspectives: theater critic, teacher, researcher, traveler, audience member, and family member. She draws on both her professional expertise and her personal interactions with the penal system to analyze the creative, technical, and institutional aspects of prison theater. The book is thus a combination of theater analysis, social commentary, and practical advice.

¶29 The text is organized into two main parts. Part 1 consists of four chapters highlighting some of the ways prison theater transforms the lives of the incarcerated individuals who participate, by providing opportunities for community building, professionalization, social change, and hope. Each chapter explores examples of individual theater programs, participants, and outcomes throughout the world. Each chapter draws on Lucas’s personal observations and interviews with incarcerated theater members, prison staff, and audience members.

¶30 Part 1 opens with a discussion of theater as a strategy for community building. The shared experiences and interactions that occur in theater groups allow incarcerated individuals the time and space to build positive relationships not only with each other but also with prison staff, volunteers, and the public audiences who come to watch their performances. The focus then shifts to theater as a strategy for professionalization. Depending on how elaborate the production is, prison theater provides opportunities for the participants to gain practical skills in a variety of areas, including lighting design, audio/music production, budgeting, advertising, public speaking, conflict management, delegation, negotiation, and time management.

¶31 Lucas gives special consideration to theater programs in South African prisons and how they are used as tools for social change. Many performances address the HIV/AIDS crisis in Africa and ongoing issues of racism and oppression, bringing much needed attention and scrutiny to these topics. Lucas also highlights how theater is used as a strategy for hope. Theater allows space for the participants to express feelings, be vulnerable, use their imaginations, and envision a future outside prison. It provides a unique chance for the incarcerated participants to give something back to their communities and brings individuals from both inside and outside the prison closer.

¶32 Part 2 consists of four individual case studies written by contributing authors. Lucas explains that these case studies are included as a means of providing space for other voices and perspectives. The programs discussed include a group of fathers performing a play for their children, a production of *The Life of Jesus Christ* at Louisiana’s infamous Angola Prison, a theater group in Scotland’s largest and most notorious
prison, and Clean Break Theater Company’s goal of correcting the representational landscape and narrative surrounding incarcerated women.

Prison Theater and the Global Crisis of Incarceration provides a unique look inside prisons from the perspective of a theater professional. Much of the book focuses on the art, creativity, and personal growth of the performers, but it also explores institutional challenges and the negative impacts of the penal system on incarcerated people and their families. It would be useful to those starting or participating in similar theater programs or for those researching education and reform activities in prisons. This book would be a good fit for an academic law library collection, especially one that maintains a focus on prisons, rehabilitation, and social justice.


Reviewed by Cynthia W. Bassett

From the Arab Spring to the Hong Kong protests and finally the 2021 storming of the U.S. Capitol, it is undeniable that using social media to connect like-minded people and amplify political messages has changed the modern political landscape. Social media, and data regarding citizens’ engagement with it, provide a transformative opportunity to discern how citizens encounter and discuss political questions—if researchers can access the data.

Social Media and Democracy illuminates the empirical social science research done to date to tease apart the effects social media has had on representative democracies. It is a collection of essays by academic social scientists researching the intersection of social media and democracy from a variety of angles. Essays examine correcting, regulating, and critically evaluating misinformation; the use of bots to spread propaganda; filter bubbles and their role in political polarization; and online hate speech. Several solutions to issues exacerbated by social media are evaluated, including an argument for amending Section 230 of the Communications Decency Act7 and an admonition for more transparency among platform providers. But this book does not purport to answer all the questions. Instead, it compares social media with historical media and evaluates whether the policy solutions that worked in the past will still work, whether historical legal precedents still apply or how they might be distinguished, and what reforms might be needed for the future.

The strength of this book, and what sets it apart from others in the field, is its focus on the social science research already done on the topic and the research still needed. In the essay titled “Misinformation, Disinformation, and Online Propaganda,” the authors provide background on how the research was performed and the major


research findings in each of the areas, as well as the areas and questions still needing empirical study. Each essay is followed immediately by a list of information sources (linked in the open access version of the book) so that users can immediately track resources for independent evaluation. While at first blush this focus on empirical social science might seem tangential to the work and research needs of law students and faculty, the policy connection to law and democracy makes it useful in understanding an intersectional area of empirical research.

¶37 Because law and policy are the focus of the book, essays provide helpful background on the governing laws along with how and why they have changed. For example, the essay on “Facts and Where to Find Them: Empirical Research on Internet Platforms and Content Moderation” gives a thorough but easily understandable background on the policy priorities at play in intermediary liability laws governing the legal responsibility carriers and hosts, like ISPs and search engines, have for users’ speech. The essay then situates the policy goals within statutes like the U.S.’s Digital Millennium Copyright Act.8

¶38 A major theme of the book is the need for transparency in platform management of user data and content. Platforms must navigate the tension between the needs of various constituencies. Law enforcement and policymakers fear that social media is being used to plan and enact events dangerous to individuals and institutions; they have a clear interest in obtaining data to prevent harmful events. Similarly, researchers wish to understand user interactions with social media and want more access to data about platforms monitoring and suppressing content. In contrast, users fear their freedoms of speech and association may be curtailed by autocratic regimes if platforms are allowed or required to turn over user data. Media platforms are sensitive to the damage that can be done by relinquishing a user’s information, as releasing data leads to questions about user privacy and ethical concerns as to how researchers use the data. Trying to navigate this precarious line, social media platforms have voluntarily released some data in recent years to provide more insight into their monitoring practices, but more is needed if all stakeholders are to contribute to choices about use and governance of these platforms.

¶39 Social Media and Democracy is currently available open access, but it would also be an inexpensive and worthwhile print addition to an academic law library’s collection. It is part of the Social Science Research Council’s Anxieties of Democracy series, which seeks to explore whether and how democracies can address large, widespread problems, such as income inequality, climate change, and (in the title at hand) effects of social media on national political conversations. Overall, Social Media and Democracy is easy to read and understand. This title would be useful for a researcher studying First Amendment rights, antitrust, administrative law, and the intersection of the law and the media. It would also be helpful to a practicing attorney working on policy and legislation in this area.


*Reviewed by Judy C. Janes*

¶40 Mark Tushnet’s latest book, *Taking Back the Constitution: Activist Judges and the Next Age of American Law*, discusses the constitutional history of the U.S. Supreme Court from the 1930s to the present, characterizing most decisions, especially those since the 1980s, as demonstrating a conservative leaning. The book was written before the death of Justice Ruth Bader Ginsburg and the subsequent appointment of Justice Amy Coney Barrett, yet Tushnet focuses on the Court’s past as well as present conservative bent. He highlights a host of cases to support his thesis that the Justices have shaped the conservative legal landscape. Most of Tushnet’s case summaries are discussed in layperson’s language, free of legal jargon. The book is readable and interesting to the average reader.

¶41 The book begins with a discussion entitled “Where We Are Now.” In this discussion, Tushnet develops the notion that Republican control of Congress and the presidency has resulted in a constitutional system dominated by conservative principles and implemented by conservative, Republican justices. Relying on the significant impact of judicial appointments in establishing the constitutional order, he demonstrates how conservatism plays out in the Court’s decisions. Using Chief Justice John Roberts’s metaphor—that the Justices are like umpires, calling balls and strikes—Tushnet is quick to confirm the analogy and to opine further that, as in baseball, the umpire sets the tone of the game. This might be an oversimplification if we subscribe to the principle that, for the most part, Justices do not have political agendas but are guided by a deeper commitment to uphold the Constitution.

¶42 Tushnet continues with “Where the Court Might Take Us.” He uses various high-profile cases to support his theory that the Court continues to advance a conservative agenda, for example, how the census counts population to establish districts for representation. Tushnet looks at several cases that suggest that leaving noncitizens and prisoners out of the census count would diminish the chances of Democratic candidates getting elected.

¶43 Tushnet further worries about the effect of the Court’s conservative agenda in support of capital punishment, property rights, and spending. With property rights, for example, he notes the changes that have occurred since the Rehnquist Court supported the public’s need to usurp private property for public use. He believes the more conservative Court will opt in favor of protecting private property owners from alleged overreaching and regulatory taking. Tushnet also raises the issue of capital punishment, noting that Anthony Kennedy’s retirement in 2018 extinguished what had been a growing hope that the Court might be open to an attack on the death penalty. Tushnet repeatedly demonstrates the conservative persuasion of the Court.

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¶44 Tushnet then moves his discussion to “Progressive Alternatives—The Short and Long Run.” Since the book was written prior to Joseph Biden's presidential victory, it addresses issues about the obstacles to progressive reforms with a conservative Court along with a Republican president and Congress. The question Tushnet tackles is how liberals advance new constitutional orders in the current conservative climate of the Court. It is interesting that Tushnet turns to unleashing the power of state courts, assigning them the job of promoting progressive agendas. Suggesting state courts can gain ground in such areas as funding for public education, governmental searches, privacy, and more, he demonstrates that with a progressive state judiciary there can be more liberal outcomes. It would be interesting to know how Tushnet would write this section if he had known the outcome of the 2020 election.

¶45 Tushnet speaks briefly about judicial term limits and court packing, identifying them as short-term means to enable progressive changes, but he does so with caution. Tushnet acknowledges the problems we would encounter with even greater polarization of our political parties, and looks at game theory as it applies to them using such “hardball” tactics (p.223).

¶46 The last part of the book discusses the concept of popular constitutionalism—the power of private citizens to determine and assert their rights under the constitution—as opposed to judicial supremacy in constitutional interpretation. Here is where Tushnet offers a plan to promote his progressive agenda. He sees popular constitutionalism as the means whereby private citizens hold the power to self-govern and improve the quality of government. An example of popular constitutionalism at work is the rise of labor unions in the 20th century as they perfected the right to organize and strike, a right that the courts had said did not exist.

¶47 In summary, Tushnet presents a thought-provoking discussion of the power and persuasion of the U.S. Supreme Court in its current conservative iteration. The reader is left with thoughts and ideas about how progressives can engage with judicial conservatism. The book is recommended for general academic and law school libraries.


Reviewed by Natasha Marie Landon*

¶48 It is undeniable that librarianship is undergoing radical change. To remain relevant, libraries must adapt and innovate to meet advances in technology and evolving user needs. But what does it mean to be adaptive or innovative, and how can library leadership help foster these qualities? Bringing together a wonderfully diverse set of international library leaders, Bold Minds: Library Leadership in a Time of Disruption challenges common fears about the future of the library and contemplates how best to bring librarianship into a new era.

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49 Organized into 4 broad-ranging sections, each of the book’s 12 chapters takes a firm position on an issue related to an aspect of library leadership, with the intention of combating a particular provocation such as “[l]ibraries and librarians are stuck in the past” (p.xxii). The first section of the book examines current library leadership practices and the obstacles libraries—across sectors and across the globe—face when trying to enact real cultural or organizational change. The second section continues the discussion on organizational awareness by providing case studies and best practices for library innovation, which leads nicely into the third section, in which the focus shifts to the effects a change in a library’s leadership approach can have on user and stakeholder engagement. This analysis reflects a larger shift in the central functions of libraries, which continue to become more user-centric and service-driven. The final section addresses the future of the profession and advocates for innovation, risk taking, flexibility, and forward thinking.

50 Since the book is about libraries generally, it is worth noting that a law librarian authored chapter 9. In this chapter, Shaunna Mireau, a former law firm librarian and the 2019–2021 president of the Canadian Association of Law Libraries, proposes that the corporate library serve as a “mothership,” or a central hub, that is essential to the success of the business (p.161). To achieve this status, the library must develop a high profile and an esteemed reputation. The bulk of the chapter outlines just how a library can reach these heights and, believe me, the road to becoming indispensable contains some surprising revelations. For example, instead of acting modest and downplaying one’s role to seem more agreeable, Mireau advises librarians to take credit for their work. Doing so, she says, demonstrates responsibility and is more likely to improve the library’s status.

51 Although the entire book contains enlightening passages, Bold Minds truly culminates in its final chapter, in which Rebecca Davies encourages ambitious librarians to expand the scope of their leadership roles to endeavors outside the library. Davies, who served as the pro-vice-chancellor/chief operating officer of Aberystwyth University in Wales, provides a framework for how to navigate this complex “blurring of identities” while still championing our work as librarians (p.229). Her words are confrontational and force the reader to consider: “Am I putting myself out there? Am I forming meaningful interdepartmental and cross-hierarchical relationships? Am I afraid to say yes?” By encouraging this kind of self-reflection, Davies’s chapter serves as a powerful call to action and an appropriate note on which to end a satisfyingly provocative book.

52 Tragedy often sparks innovation, which makes this work particularly timely. Woven throughout the chapters is the theme of resilience. Bold Minds’ contributing authors never could have anticipated the onset of COVID-19 or how it has tested the limits of our collections, our services, our conceptualization of the library, and even our sanity. To ensure not only the survival but also the flourishing of our profession, librarians and library leadership alike must demonstrate resilience. And although the pandemic has further compounded uncertainties surrounding the future of libraries and the role of librarians, it also provides the opportunity to dare taking risks and acting boldly.
 ¶53 Although *Bold Minds* does not center on law librarianship, the takeaways the authors impart are transferable across sectors. Each chapter offers something new to glean, as each author speaks from personal experience and provides unique insights into library leadership and the book’s central provocations. Among law libraries, however, it may be most appropriate for academic law libraries.
Legal Research and Its Discontents: A Bibliographic Essay on Critical Approaches to Legal Research [2021-6]
Nicholas Mignanelli 101

Academic Law Libraries' New Frontier—The Posttruth Cognitive Bias Challenge and Calls for Behavioral and Structural Reforms [2021-7]
Kwanghyuk Yoo 129