Cornerstones of Law Libraries for an Era of Digital-Plus*

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Law librarians would be well served by sharing a vision for the future of legal information, one that is informed by the methods of multiple disciplines and that will promote democratic ideals. This shared vision could guide us as we continue to lay the cornerstones for law libraries in a “digital-plus” era.

Introduction

1 Legal scholarship and education are becoming increasingly interdisciplinary in the early twenty-first century, and law librarians are crucial players in supporting this move toward interdisciplinary research and teaching. At a time of shrinking budgets and an ever-growing amount of published material in our field, we are expected by our colleagues and patrons to support the exciting scholarship occurring at the intersections between law and myriad other fields. As legal scholars, we draw upon familiar fields such as history, literature, philosophy, economics, and business. Today, we also increasingly draw upon an array of less-familiar fields, like statistics, sociology, computer science, neuroscience, and many others. The result is a broadening and, in some cases, improvement of the methods that legal scholars bring to problems we work on.

2 Interdisciplinary scholarship can serve another, important purpose for law librarians. It can point us to related fields, the methods of which may help us as we seek to plan for an uncertain future. We ought to consider in particular what we can learn from the architect’s design charrette process;¹ the computer scientist’s standards-making process; and the social scientist’s rigor in listening to how their subjects interact with one another and the world around them. The methods honed by practitioners of these other disciplines can help to support the great strengths of law librarians as teachers, organizers of information, and collaborators as we seek to chart the future.

3 The insights to be gleaned from other disciplines are more important than ever as law librarians are grappling with many rapid changes wrought by a shifting technological landscape. The most challenging of these changes is the range of expectations that our patrons have with respect to how they find and interact with information. In this new environment—one in which information is available both

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in digital and analog formats, and where the field of law is growing more international (as well as more interdisciplinary) in its scope—more and more is expected of law libraries in multiple dimensions.²

¶4 As we grapple with these changes, we are concurrently setting in place the cornerstones of law libraries for the hybrid era of print and digital materials relating to the law, an era that we might call “digital-plus.”³ As we build this new, shared foundation, law librarians would be well-served by sharing a global vision for the future of legal information that will promote democracy and other shared values. This global vision would help to inform decisions both about those things that we can do on our own and those areas where we will need to partner with governments, companies, technologists, and our patrons. An interdisciplinary approach will help us to get there.

Context

A Perfect Storm

¶5 We find ourselves in a time of profound changes to information, the profession of law, and law students’ modes of learning. These changes add up to a perfect storm for libraries and librarians. As law librarians, we face enormous opportunities and equally enormous challenges.⁴ It is an important time to look forward and to describe what we hope the future will hold.

¶6 The amount of information related to the law and legal scholarship published around the world is rising each year.⁵ So, too, is the cost of access to this information.⁶ Legal information is available in a growing number of formats, mostly as a result of the digital revolution. Publishers now include individuals (through blogs, personal web sites, and social networks) and universities (through

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institutional repositories in addition to their traditional presses) as well as governments and companies that have traditionally provided legal publications.

§7 At the same time, the field of law is itself changing. Research and teaching are becoming more international and more interdisciplinary. Clinical education continues to grow rapidly at many schools. Several law schools have revamped the traditional first-year curriculum that has been in place for a century. New tasks are being asked of all librarians. These include providing support for empirical research, becoming more involved in new forms of teaching and publication, and taking on the job of curating materials in a fast-expanding range of digital formats.

§8 Perhaps most importantly, patterns of information use by our students, faculty, and practitioners of law are in a state of flux. Many faculty and students report that the vast majority of their needs are met by online databases, such as LexisNexis, Westlaw, and HeinOnline. In contrast, others report that they cannot find what they need in online databases and that they need more support than ever before to perform their research.

§9 At the same time, the practice of law itself is changing. These changes affect both the shape of the firms in which lawyers work and the kinds of practice they undertake. Enormous law firms with offices dotted across the globe—Linklaters, Freshfields, Clifford Chance, Skadden Arps, Baker & McKenzie, Allen & Overy, Latham & Watkins—and annual revenues in the billions of dollars are altering the way that legal service is provided. Law firms of all sizes face competitive threats from information technology services, accounting firms, and other nonlawyers. The way that law firms recruit and train their lawyers is changing as budgets, even in the biggest firms, shrink and as competition intensifies. The types of skills that lawyers will need in order to succeed in this competitive new environment include what Ben W. Heineman has called “the broadest kind of leadership.”

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7. One might argue that strictly speaking, the act of placing faculty scholarship in an institutional repository is not “publishing” that information. From the perspective of libraries, however, the placement of articles into public online spaces such as repositories may well serve at least three key functions: providing access to the work; providing metadata about the work; and preserving the work, at least for some period of time.


10. I suspect that anyone who has taught a first-year basic legal research course will have experienced this phenomenon. See also Kathryn Hensiak, Stephanie Burke, & Donna Nixon, Assessing Information Literacy Among First-Year Law Students: A Survey to Measure Research Experiences and Perceptions, 96 LAW LIBR. J. 867, 2004 LAW LIBR. J. 54 (reporting dismal results from a survey of law students).


Firms and young lawyers themselves report that law schools are not meeting the needs of the lawyers that they are sending into the profession.¹⁴

The rate of change in virtually every aspect of both publishing generally, and legal publishing specifically, is unusually high. Today, we measure developments in the information business in terms of months, years, and decades, rather than in terms of centuries, as we did in the past. Hundreds of years passed between the invention of movable type in China and Gutenberg’s press in Germany; it was centuries later before many people could afford to own printed Bibles or the other offerings of the modern publishing industry. In contrast, Moore’s Law—the claim that computer processing speed would double every eighteen months—has held up remarkably well over the past five decades.¹⁵ The invention of the personal computer has ushered in today’s world of near-ubiquitous digital information. The information and technology landscapes are constantly being fundamentally altered—by all of us, by how we use information and how we use technologies.

These changes are taking place at the same time that the global economy has proven especially volatile, particularly during the tailspin induced by the credit crunch in the second half of 2008. There is no end in sight to the shrinking of budgets, staff, and space in libraries.¹⁶ No library is immune from these pressures; even in the few cases where library budgets remain stable, the prices for materials continue to rise.¹⁷

In this context, law librarians have no choice but to collaborate. “No serious library can go it alone . . . .”¹⁸ On a global basis, law librarians need to work together to envision what we want the information ecosystem in law to look like over time. Some of the change underway ought to be embraced; some of it ought to be resisted. We need a plan to work together to make our positive vision of the future come to pass. This collaboration must be not just within, but across countries. And the collaboration must include nonlibrarians, whose work can have a positive impact on the legal information ecosystem. That collaboration means borrowing insights and methods from other disciplines, as well as working directly with technology providers and others who are actively shaping the information environ-

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¹⁶ There is robust debate as to whether or not law schools in particular are keeping up with these changes. See, e.g., Posting of Paul Lippe to AmLaw Daily, Welcome to the Future: Time for Law School 4.0, http://amlawdaily.typepad.com/amlawdaily/2009/06/school.html (June 22, 2009, 14:31), and the many comments it elicited.
ment. A great deal—not just for the study and practice of law, but for society at large—turns on whether or not we can be successful.

The Digital-Plus Age: Multiple Media Formats

¶13 The law library of 2010 is not entirely digital. Nor, in all likelihood, will the law library ever be entirely digital. Our future will be a hybrid of yesterday’s predominantly print-based world and tomorrow’s primarily digital world.

¶14 Our information environment, now and in the foreseeable future, is best described as a world of “digital-plus.” The central idea is that new works are, and will continue to be, created and stored in digital formats as a default. The dominant mode of information creation and access will continue its shift from analog to digital. Students and faculty will access almost all legal information, at least as a starting point, through digital means.

¶15 But print and other analog formats will not disappear. Some users will continue to print out materials (whether on a personal printer or through a more elaborate print-on-demand system) to read them, to carry them around, and to mark them up by hand. Others will use printed copies of books in the practice of law as a starting point to begin their research, as they have in the past. Others will want to access rare and unique materials found in special collections—to touch the paper, to smell the must, to examine the handwriting in the margins, and more. The paper-based format can facilitate access to legal information in ways that remain critical.

¶16 Print will also continue to play a key role in the preservation of legal materials. As librarians, we emphasize the need to take precautions to print out backup copies of born-digital materials and store them in a safe place for the long-term to mitigate the risk of data rot. There is a strong case to be made for printed books in their current format as a central part of libraries for the future.

¶17 For now, therefore, law libraries need to collect and provide access to both print and digital materials. Many monographs and current serials are still only available in printed format. Many materials will always remain in printed form, such as manuscripts in our archives, printed texts held in special collections, and books held as objects of study. The originals of unique and rare materials will continue to require labor-intensive (and loving) physical care. We may digitize these works to enable broader access and for the purpose of helping to preserve them. But

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meanwhile, major library systems will continue their role as stewards (rather than “collectors”) of such materials.

¶18 New legal materials, in contrast, are largely born digital. Libraries need to make this new knowledge available for researchers, both present and future. New data sets—unorganized or minimally structured raw data—are principally digital in format. These data sets are becoming increasingly relevant, especially in interdisciplinary legal scholarship. Primary sources—blogs, visual images, sound recordings, web sites—are also increasingly coming under the purview of library collections. These digital materials have not in the past been included in library collection policies. We will need to expand our orientation beyond text to encompass audio and video files better than we do currently.

¶19 The shift to primary materials that are predominantly born digital brings with it a series of problems. Consider the challenge to law libraries of collecting the e-mails of prominent figures in law. We run the risk today of preserving far less, not more, of the historical record because of the way the information is created, stored, and typically discarded before it is copied or given to libraries for safekeeping. Many libraries are hard at work figuring out how to preserve the e-mails of key figures for posterity, despite the multiplicity of e-mail clients, the change in e-mail formats that are bound to come, and the many formats that attachments and embedded or linked files may take. This challenge—of keeping up with new data formats and fast-changing information usage patterns—is likely to increase, not decrease, over time, if the recent past is any guide.

Shifting Patterns of Information Use

¶20 User practices for accessing and using legal information are just as unstable as information formats are today. As a result, the skills required for teaching, research, and publication in this new information ecosystem are likewise in flux.

¶21 Comfort levels with technology vary greatly within the legal community—and within user populations that individual law libraries serve. In law schools, students expect to access information on public search engines, and sometimes via mobile devices, as part of their daily life. Most law students feel very comfortable in digital information environments. The same is true for the junior associates in

23. Consider the Web Archiving pilot project at Harvard University, known as the WAX initiative, Office for Information Systems, Harvard University Library, Overview: Web Archive Collections Service (WAX), http://hul.harvard.edu/ois/systems/wax (last visited Feb. 3, 2010).


25. See Andreas Paepcke et al., Interoperability for Digital Libraries Worldwide, COMM. OF THE ACM, Apr. 1998, at 33, for an early discussion of the kinds of interoperability that will be necessary to make a sustainable digital ecosystem for library information succeed.

26. The observations in this section about usage patterns are drawn from data collected as part of the Digital Natives research project at the Berkman Center for Internet & Society at Harvard University as well as from personal observations of the author in focus groups and teaching interactions with students at Harvard Law School. Findings from this work have been included in a book by the author and Urs Gasser, JOHN PALFREY & URS GASSER, BORN DIGITAL: UNDERSTANDING THE FIRST GENERATION OF DIGITAL NATIVES (2008). There is far more work to be done, by those using social scientific and educational research methods, with respect to understanding these usage patterns.
law firms. This familiarity with technology, however, can lead to overconfidence in their ability to perform research. Despite high comfort levels with searching for information in the digital realm, students require more research instruction, not less, as they need to unlearn certain behaviors—like trying to adapt simple keyword searches learned through Google searching to the more complex research engines we rely on in legal scholarship and practice.

¶22 For established lawyers—whether practitioners or faculty members—there is a wide discrepancy in behavior and preferences in how to access information. Scholars are publishing their work in various formats including online open access formats and blogs as well as the more traditional monographs and peer-reviewed journals. Students and teachers alike need new and often different forms of support from librarians.

¶23 The bottom line for law librarians with respect to these changing usage patterns is that we have to stay in close touch with users as they adapt and adapt with them. The skills required for librarians in virtually every role are changing quickly, with greater emphasis on the use of new technologies. The point is not to give in to every whim of every user; after all, the Google-search practice of digital natives translates poorly into searching in Westlaw and LexisNexis most of the time. The point is that we have to figure out which information-seeking practices to reinforce and which to correct during a period of rapid change in user behavior. Never before have law librarians been more necessary than during this period of transition.

**Vision**

The Legal Information Ecosystem in Five to Ten Years

¶24 At this moment of instability, lawyers and librarians should work together to describe—and then work toward making real—a positive vision of the future of legal information in a digital age. This vision should describe a stable, open ecosystem with an emphasis on widespread, global access to essential legal information at a low cost. This essential legal information should include both primary law and the secondary materials that help to place the raw data of law into useful context for both lawyers and nonlawyers. This vision is a necessary precursor to laying the cornerstones of the next iteration of law libraries.

¶25 The rationale for the pursuit of this vision is straightforward—and it is not new. Our goal should be to realize a core tenet of the American Association of Law Libraries’ Ethical Principles: to provide open and effective access to information for all individuals. Our aim should be to ensure that we take advantage of the potential of the digital era to improve access to legal information for legal scholars and practitioners, as well as scholars in other disciplines, international audiences, and the general public.


In its simplest form, the key aspects of this legal information ecosystem are threefold. First, we need to ensure the creation of materials that contain or describe legal information. Second, we should focus on the provision of access to these materials to our patrons. And third, we need to consider the need for reliable preservation over time of these materials. Law libraries have a role to play in each of these three areas. So, too, do people and institutions with whom partnership is essential.

A National Perspective

As we envision the legal information ecosystem of five to ten years from now, it may be easiest to begin with a single, national perspective, and then to build a global vision from there. Start with the primary law of a jurisdiction, such as the United States, and then imagine how it might work on a systemic level.

In the case of statutes, for instance, imagine a future in which staff members employed in legislatures draft a bill for consideration, just as they do today. The members of the legislature consider this new bill and, ultimately, enact a version of it into law. By way of example, imagine that this new law relates to the liability of Internet intermediaries for defamation. This new law is born digital: it is created in a digital format by the person who drafts it at the legislature. The new statute is then printed by the official printer, for the purposes both of access (for those without digital access) and for preservation (with a copy placed in the National Archives and redundant copies salted away in dark storage somewhere for safe-keeping). In our near-term future, one might imagine considering the official version to be a certified digital version of this new law. The printed copies are useful derivatives of this official, digital version.

The role of librarians with respect to this new law relating to online liability is to provide access to our users. We might catalog this law in various ways, including citing to it in online guides and bringing it to the attention of those teaching and researching in this field. But our job would not, in this new world, be to “collect” or to “preserve” such information, as we have in the past. That job would fall to the publisher: in this case, the United States Congress or the individual state that passed the law. Some law libraries ought to agree to keep redundant copies, in multiple formats (such as various archival print and digital formats), to help ensure preservation and long-term access. We would also likely pay for digital access to services that include such information in a convenient, editorially enhanced format for our users—such as Westlaw, LexisNexis, or Bloomberg. But our job as law librarians, with respect to this primary law, would not be to collect and to preserve it, other than as a matter of redundancy.

There are, of course, problems embedded here already. It is no simple thing to say, today, that a digital version of a law is in fact authenticated. AALL issued a careful, thorough State-by-State Report on Authentication of Online Legal Resources in 2007. This report found that, though many states were putting their primary law online and in some cases calling it official, these laws were not capable

of being adequately authenticated. Questions, too, have arisen about discarding print materials even after these materials have been digitized by official bodies. This issue is substantial. AALL and others in the library community deserve a great deal of credit for focusing on it and making progress in resolving it, but much work remains to be done.

Another key problem lurking here is who will be responsible for providing access to the repositories of this information—and who will fund them? The work of the Legal Information Institute (LII) at Cornell and entrepreneurs like Carl Malamud of PublicResource.org is crucial to this process, since they are constantly pushing the states to make more information available in open formats online. States need to take more responsibility than they do today for what they publish, but they might profitably partner with the likes of LII and Malamud more closely than they do today. These efforts toward coordinated provision of access to primary law ought to form part of our shared design for the future.

A second example, from the perspective of many legal systems, is case law. Imagine that a judge writes an opinion in a matter that calls on him to consider the new law relating to online defamation. Once again, the opinion is born digital—on the judge’s laptop, or, more likely, on a clerk’s laptop. That opinion is hosted by the court itself in a stable, open, digital repository and posted online as promptly as possible after it is issued. A version of that opinion is printed out and put in some number of locations for preservation, including law libraries that agree to participate. The digital version is deemed to be the definitive version—and also search-able, sortable, reusable, not subject to copyright, and linked to the online digital versions of the relevant statutes on defamation. Law school libraries pay for access to these materials through vendors such as LexisNexis and Westlaw and provide access directly through the Internet to the court repositories.

Once again, the problems with the realization of this future ecosystem involve the relevant format, the process of authentication, and the acceptance of responsibility for preserving the information. Consider the PACER system, an online system that provides access to important U.S. court records. Users today pay for this service on a per-page basis. Technologists like Steve Schultze at Princeton and librarians such as Paul Lomio and Erika Wayne at Stanford have been working to free these government works from their paywall-protected system. This effort

30. Id. at 65.
31. See SCHONFELD & HOUSEWRIGHT, WHAT TO WITHDRAW, supra note 21.
32. See Katie Fortney, Ending Copyright Claims in State Primary Legal Materials: Toward an Open Source Legal System, 102 LAW LIBR. J. 59, 62, 64–65, 2010 LAW LIBR. J. 3, ¶¶ 10, 15–16 (discussing the successful campaign by PublicResource.org to end Oregon’s claim of copyright in its statutes).
33. Consider the lively debate prompted by a blog post published by Thomson Reuters and video of Robert Berring, professor of law at Boalt Hall School of Law at the University of California-Berkeley, about whether government and volunteer efforts to provide online primary law are likely to be sustainable. See Berring on Free Legal Information, Posting of John Shaughnessy to Legal Current, http://legalcurrent.com/2009/10/29/berring-on-free-legal-information (Oct. 29, 2009).
35. See, e.g., Petition to Improve PACER, http://www.thepetitionsite.com/1/improve-PACER (last visited Feb. 18, 2010); Stephen Schultz, Open Access to Government Documents, presentation at the
to revamp the PACER system is a worthy and important cause. But courts should
do this on their own. These systems should be modernized, made usable to the
general public, and then opened. Courts should take more responsibility for pro-
viding free, open, public access to, and preservation of, the materials they publish.

¶34 Consider the analogous process with respect to secondary materials in law,
such as scholarly journal articles. A law professor or law librarian writes an article
that comments on this new law and the corresponding case. He publishes it in the
Journal of Law. The law school publishing the Journal of Law agrees to preserve the
work in an on-campus, open-access repository (or another repository, to which it
contributes), but also by printing it out and submitting it to ten locations for
preservation. Law school libraries pay for access through HeinOnline, LexisNexis,
and Westlaw, and by providing online access through the Internet directly to the
repository. Users might access the articles by coming across the online repository
versions through search engines such as Baidu (in China) or Google (pretty much
everywhere else) or through the proprietary systems to which we also provide
access.

¶35 The shape of the future legal information ecosystem is a bit trickier when
it comes to monographs. These, too, are generally created as digital works, in
Microsoft Word or otherwise. Some of these monographs may be published in the
traditional manner, by a trade press or an academic press, and will exist in print.
Libraries will no doubt continue to acquire them. Others may exist primarily in
digital formats and be available as print-on-demand (through, for instance, an
Espresso Book Machine developed by On Demand Books or through a service
marketed by Amazon or by Kirtas36) for those who prefer to read them in that
format. Publishers and vendors will likely have more control over monographs
than primary law. Issues of preservation are different when it comes to this set of
materials. We as law librarians are likely to continue to acquire and collect mono-
graphs published about the law and related disciplines, but we ought to collaborate
more closely than in the past to acquire and share the growing number of titles
from the world’s many jurisdictions.

¶36 This same process of defining the ecosystem for legal information—in
terms of creation, access, and preservation—should cover materials in our image
archives, manuscript collections, historical collections, data sets, and other formats.
Much would turn on whether the materials are in or out of copyright as we decide
where they fit in this picture.


¶37 This simple narrative of the future concerns only a single jurisdiction, but the study and practice of law is increasingly international in scope. We need to create new platforms and systems for legal information that are interoperable, meaning that they can work across jurisdictions.

An International Perspective

¶38 As we look ahead five or ten years, we ought to envision a legal information ecosystem that is global in scope. While many countries publish their primary law in multiple formats—including digitally—this information is rarely published in a stable enough way for collection development librarians to rely upon it. Efforts such as the World Digital Library have sought to pull together key primary legal materials from jurisdictions around the world. But outside of a very few places, a citizen cannot open a web browser, search for a topic, statute, or judicial opinion, and access the current state of the law. Even in places where the law is published online, it is often too hard to navigate for average users, it is rarely maintained in a consistent and reliable fashion over time, and it is commonly provided out of context.

¶39 One key switch that we ought to make is to commit to declaring the digital version as the official version of primary law anywhere in the world. It would be published online, and mirrored in various secondary locations. This process of mirroring offers a simple way for libraries and governments to cooperate; libraries in one jurisdiction could agree to back up the law of another jurisdiction’s government to prevent the record of that law from disappearing during times of upheaval. The law should be made available directly by the body that created it in this stable, open version—on which policy-makers need to agree, if possible at a global level. Those in law schools should in turn provide direct access through the Internet to these global repositories and continue to pay for access to these materials through proprietary systems that add context and connections that help experts make their way through this ecosystem (such as LexisNexis, Westlaw, and local variants around the world).

¶40 The goal should be that basic legal materials—statutes, case law, policies, regulations, and so forth—are provided free to everyone online by the country that enacted them. Those outside of government can then build applications (such as search engines, social networks, and so forth) to sort and to improve access to those materials. Citizens should be given a means to help create the metadata that will assist others in finding particular items within this online commons.

¶41 There is an essential role here for technical services librarians in making this metadata work for users and in building connections to traditional catalogs. Together we can help to build links between laws, ideas, and works of scholarship in ways that we never have before. Think, for example, of a new, open citator, a system by which we can work together to link a statute, the case law, the article that

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critiques it, the treatise that comments on it, the foreign law that copies it, the treaties that drive it. We help by pointing one another to changing information. We discuss it in public, in the “talk” or “discuss” modes we see in Wikipedia and other online communities. We can show updates and share playlists together as laws change, as case law builds out, and as scholarship develops. In addition to making the data freely available online, the presumption should be that the data is publicly available, with APIs (application programming interfaces) open for systems to interconnect, subject to no intellectual property restrictions, and maintained by each country that publishes them.

¶ 42 Several stumbling blocks stand between where we are today and the accomplishment of this vision for universal access to legal information. The first is the cost: for many countries, the cost of publishing legal material in this simple, open format may seem prohibitive, given competing obligations. However, the process of online publication of new laws in a standardized format should be no greater, and in fact may be less, than the current mode of publishing legal materials in print formats, for those countries that do so. After all, printing, shipping, storage, and other aspects of traditional publishing add costs that are avoided in most forms of digital distribution, once the start-up costs of changes to publishing processes are absorbed.

¶ 43 A second problem is copyright. In some cases the intellectual property rules relating to primary law are clear. In the United States, for instance, the federal law itself is by statute not subject to copyright. Other systems are not so clear, but should be made so, if we are to realize this vision of broadly accessible primary legal material.

¶ 44 A more fundamental problem is that the leaders of some countries may not wish for their citizens to have greater access to legal information. The rule of law is not universal around the world, nor is the norm of publishing all relevant rules and decisions handed down by courts or legislative and administrative bodies. In many instances, governments take steps to obscure, rather than to render transparent, political and other information online. The notion that all citizens—of any race, gender, class, or relative power within the system—might have equal access online to the set of rules that govern their activities (not to mention the ability to comment on those rules publicly) may seem too radical to be embraced.

¶ 45 There are technical stumbling blocks as well. Data should be made accessible in standardized online formats and allow users not just to view them but also to build upon them. A common Extensible Markup Language (XML) schema, for instance, would allow for presentation and searching of basic legal materials on a wide range of devices, from personal computers to mobile devices. The standards

39. See generally Fortney, supra note 31 (discussing the question of copyright in state legal materials).
40. See OpenNet Initiative, http://www.opennet.net (last visited Feb. 18, 2010), for a global survey of technical Internet filtering practices, listing more than three dozen nations that censor the information that citizens can see on the Internet.
41. Examples of this sort of schema can be found at Office of Justice Programs, U.S. Dep’t of Justice, Justice Standards Clearinghouse, http://www.it.ojp.gov/default.aspx?area=implementation Assistance&page=1017 (last visited Feb. 18, 2010).
we adopt should be open, with the risk of patent-related roadblocks eliminated to the greatest extent possible. We need to coordinate our technical efforts to make this ambitious initiative of rendering primary and secondary legal materials more broadly available to the world in digital format successful.\footnote{42}

\textbf{Evaluating This Vision of Legal Information}

\footnote{46} There are good and bad parts to any vision that we might conjure up of the future for legal information. And the process of getting through the transition period is bound to be hard. But if we succeed together, this new, open ecosystem will, on balance, be good for societies around the world. It will promote access to knowledge. It will offer greater access to information to more people, in ways that will strengthen systems of governance. It will promote the rule of law. It will support our ability to ensure that justice is carried out through formal legal channels and informal avenues of human interaction. It will enable our teachers to teach more effectively, our scholars to perform better research, and our students to learn more. We stand to benefit, too, in terms of cross-cultural understanding. And it may well have ancillary benefits to the environment.\footnote{43}

\footnote{47} The importance of citizens being able to access the law that governs their behavior is obvious. The law needs to be available broadly to enable people to be good citizens. In many jurisdictions, ignorance of the law is no excuse for wrongdoing. Yet it is hard to hold someone responsible for breaking a law that is too hard to look up or to understand. In democratic regimes at least, we believe that robust debate about the law is important to the functioning of the rule of law. In common law jurisdictions, we embrace the adversary system as a means of refining what the law in fact means. The rule of law establishes necessary bedrock in a system of gov-

\footnote{42. History ought to be our guide, in terms of what to strive for and what to avoid in processes to develop technical standards. There is a rich technical literature about standards processes. Consider, for instance, the series of books called \textit{The Standards Edge}. See The Bolin Group, About the Standards Edge Series, \url{http://www.thebolingroup.com/standards_series.html} (last visited Feb. 18, 2010). One example from the library world is the MARC standard. Library of Congress, MARC Standards, \url{http://www.loc.gov/marc} (last visited Feb. 18, 2010).

\footnote{43. Listen to one law student, on a blog, commenting on the Durham Statement on Open Access to Legal Scholarship:

\textit{This is an interesting proposal. DePaul’s legal writing department strongly focuses on book research—I just got full access to Westlaw and Lexis yesterday—and here, electronic-only access is being presented as the future. I’m of two minds here. I prefer book research to electronic—I was raised poking around in library stacks, I’m much better at it, and I think I will probably stick with it for the most part. On the other hand, it’s pretty appalling with how many resources are wasted to maintain law libraries. My law school is directly across the street from John Marshall, which I visited for a networking event the other week. And it was strange to realize that these two law school [sic] are across the street from each other and have identical collections of digests, statutes, etc. spanning multiple floors. And we are both just a few blocks from the county legal library. That’s a lot of space, a lot of money, a lot of employees, a lot of paper, a lot of electricity, etc. And let’s be honest—a lot of those resources are also available electronically. Do we need print copies?} Durham Statement on Open Access to Legal Scholarship, posting to Truly Educated, \url{http://trulyeducated.blogspot.com/2009/03/durham-statement-on-open-access-to.html} (Mar. 12, 2009). For more information on the Durham Statement, see \textit{infra} note 50.}
ernance in which human rights and democracies are to flourish. For each of these reasons, it is essential that citizens are able to access the primary law that governs their behavior.

¶48 There are also real concerns to be addressed along the way. The absence of an agreed-upon stable, open, digital format is one. The change in the economics of law publishing is another: there is real value provided by publishers of legal material, as well as those who provide search and other services that make data more useful.

¶49 We worry about the decline of browsing through the stacks, falling rates of young people reading books the old-fashioned way, the potential loss of annotations in a digital world, and the shrinking of contemplative spaces. We fear network effects, vertical integration, and the concentration of power into the hands of too few private publishers. We fear leasing information rather than buying it—and then letting law students fall off a cliff the moment they graduate, without adequate preparation for their future work and without access to expensive proprietary systems on which they have come to rely. And it is not enough merely to make information available in the public domain; it needs to be accessible, in a timely and understandable fashion, to those who need it.44

¶50 Each of these issues is real. Each of these issues must be addressed. But they are not all the result of this emerging system; there are other factors, such as changes in publishing models and social norms among youth. It is important to pry apart cause and effect. A positive vision of our future ought to take into account these concerns and make corrections for as many of them as we can.

¶51 Information technologies today make possible a much more open system of supporting the creation, access, and preservation of legal information worldwide than we have previously understood. The benefits for human rights and democracy of realizing this vision would repay the investment many times over. As the historic architect and urban planner Daniel Burnham is believed to have said, we should “make no little plans.”45

Design

Examples of Cornerstones of Law Libraries in the Digital-Plus Era

¶52 It does not suffice merely to describe a positive vision of the future, no matter how attractive. We have to bring it about, through coordinated actions, large and small. No one institution can do that alone; we have to collaborate. Each library needs to do its own part, but we need to coordinate our efforts better than ever, whether explicitly or implicitly. And those of us working in law libraries also need to determine how best to build upon existing partnerships with other institutions, in the private and public sector, and to create new ones in the years to come.

As we translate this vision of a legal information ecosystem into a series of things that we ought to do, we have to accept the fact that the ecosystem that is emerging for legal information is extremely complex. There is no single, key institution or person that can bring about all this change—there are many who must play a role if we are to realize such a vision. The challenge for leaders in the library world is to define what role we might play in the shaping of this ecosystem. We need also to identify the measures that may be undertaken by individuals, as librarians, teachers, scholars, and students; or institutionally, as libraries, schools, publishers, and governments; and how these measures interoperate with one another.

We ought to think like architects of this complex new ecosystem. We are, today, laying cornerstones for our libraries in this hybrid, digital-plus age, whether we think of it that way or not. Cornerstones are those elements of a building’s foundation around which other elements are oriented. From the cornerstones, we can build the rest of what we want to see in our future libraries. We should put these cornerstones in place with a view toward the legal information ecosystem that we intend to build together.

Before we fix cornerstones in place, we need to design our virtual systems for accessing information as carefully as we have designed the physical buildings that we have erected to house our collections. In part that means coming up with an information architecture that is as robust as the architectural designs for classical library buildings. In part it means determining where our own efforts toward digitization, creation of guides to specific topics, and contributions of metadata fit within the broader effort to develop this legal information ecosystem. And in part it means continually using our own library web sites more effectively.

The first cornerstone is alignment with the goals of the institutions we are part of, whether schools, firms, or agencies. Libraries must perceive our primary function as serving communities rather than building collections. These communities have needs and goals, present and future. The professional librarian has a crucial role to play in translating the work that we do in libraries into a key driver of achieving the institution’s broader goals. For big research libraries at universities, these goals are ordinarily teaching, learning, and scholarship. Libraries and librarians can be important drivers of these core institutional goals. We need to be committed to ongoing realignment as institutional goals shift over time, while bearing in mind the long-term obligations that libraries collectively take on to preserve the record of scholarship and information in a field. Alignment—for better and for

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46. This idea of defining the “foundation” of a law library in terms other than a base for the literal physical housing for the library is not novel. See Frank B. Gilbert, Duties of the Law Librarian, 2 AM. L. SCH. REV. 85, 86 (1907) (“The foundation of every law library is in the statutes and the judicial decisions.”).


48. It is instructive to read the architectural criticism of recent library building projects and to imagine the types of (constructive) criticism of a virtual architecture. See, e.g., ADA LOUISE HUXTABLE, Libraries in London and Paris, in ON ARCHITECTURE 71 (2008).
worse—also means cost-sensitivity, which can create obvious tension with other goals.

¶57 A second cornerstone of our libraries needs to be a system for understanding the changing ways in which users are learning—accessing information, performing research, creating new information, and remixing old information. We need a system that will help us to alter the design of our own systems over time, as our goals and the needs of our users change. Surveys, focus groups, interviews, sharing of data across institutions and fields: there are many ways to achieve this understanding. Social scientists and computer scientists who study learning processes and human-machine interaction can help us enormously. But if we fail to listen carefully to the changes in our user base, we risk failing to invest in the right new systems and services in a fast-changing environment.

¶58 A third cornerstone is a system to coordinate the digitization of legal materials. It is one thing to digitize all primary law as it is enacted and to digitize the work from each of our collections, which we ought to do where we can. It is quite another to establish a coordinated system of integrating these works so that they can be found by our collective users. Commitments to publish the scholarship of our own community members in ways that promote wide access and further innovation fall in this same category. The open access mandates that some schools have enacted—where faculty agree to make their work available in open access repositories—is one such approach.49 Universities that are publishers need to take responsibility for the archiving of these works as well as providing access. Collective open access initiatives (such as the Durham Statement, to which a few dozen law librarians have added their names) are another way to set in place this cornerstone.50 Computer scientists think in terms of establishing redundant systems; if we rely upon digitally formatted works for the long-term, we need to establish highly reliable and redundant systems of preservation, too.

¶59 A fourth cornerstone is to agree to put our collection policies in writing and to share them with others publicly. The policies should describe what materials we collect, at what levels, and in what formats. The Cornell Law Library’s online collection development policy is an excellent example.51 Most institutions that collect materials extensively have established such a policy, but they are too rarely made to interoperate. A common system of publication of these policies could help to describe the areas in which we need to collaborate and areas where there is substantial overlap.52 We need to establish systems for visualizing all these policies...
together and acting accordingly in the broader public interest, even as our immediate parochial interests may push us in other directions. If we do our jobs well, we will be able to demonstrate that collective action, over time, is in the self-interest of each of our respective institutions. We should be collaborating to build a common, shared collection of legal materials, with appropriate redundancy, not competing on the size of individual collections.\textsuperscript{53}

§60 A fifth cornerstone involves making our own systems more efficient using back-office technology improvements. There is constant pressure in this environment to do more with less. Those who can streamline processes and redesign them for an increasingly digital environment will be well-positioned to meet these new challenges. The increased use of macros in technical services and the redesign of workflows for electronic resource selection, acquisition, cataloging, and provision are examples of the work that needs to be done. More difficult and costly is a process to make information technology systems interoperate effectively within and across libraries’ systems. These back-office improvements are a necessary, though not sufficient, precursor to greater collaboration.

§61 A sixth cornerstone must be our process of developing our human resources. Librarians need to be change agents who listen and respond, all the while having a backbone. Librarians need to be given support for experimentation and even play in the digital world, to understand and engage with it better. Librarians should write more code, have greater access to the code that runs on their own workstations, and dig deeper into the culture of information access that our users are increasingly a part of—for good and for ill.\textsuperscript{54} And as times change, librarians need to embrace a culture of accountability grounded in measurement of service-oriented results.\textsuperscript{55} This form of accountability is the best way to ensure continued relevance and alignment with institutional goals—as well as funding and support from our users.

§62 Each law library is laying cornerstones for its own future. There are many more than these six that are important; these six are meant as suggestions, as provocations, as part of a process of articulating a full series of building blocks. And that is just the point: we need a better mechanism for sharing our efforts to define and build toward this future, and to do so together, internationally.

Connecting across Libraries and Other Institutions

§63 No single person or institution can shape the legal information ecosystem alone. To build a next-generation legal information system, we have to work
together—to conquer the problem of libraries collecting and operating separately.\textsuperscript{56} Cooperation is essential. The cooperation should be among libraries and librarians, but with private sector institutions and governments actively involved as well. Most of these ideas about what we ought to do together are not new; many of them have been or are being tried. We need to build from the strength of those experiments that have worked well and do so according to a common plan.

\textsuperscript{¶}\textsuperscript{64} The central idea should be radical collaboration.\textsuperscript{57} Instead of competing on the size of our collections, as too many statistics-counting exercises prompt us to do, we should be measuring our success on how well we provide services to our own communities as well as how extensively and effectively we participate in the creation of this new legal information ecosystem.

\textsuperscript{¶}\textsuperscript{65} An example of collaboration that has worked well, and should be expanded, is interlibrary loan. It is an enormous success. It stands for the proposition that we work and think as members of a system, not as isolated institutions. The next iterations of interlibrary loan—modeled, for instance, on the sharing system Borrow Direct, which joins a series of libraries in the northeast United States\textsuperscript{58}—could be even more important and successful in the hybrid era into which we are hurtling. Law libraries can and should embrace processes like Borrow Direct, even though the start-up costs of participating may be substantial. The recent announcement of an exploratory arrangement between Columbia and Cornell—styled as 2CUL—is in much this same spirit.\textsuperscript{59} In the process, we need to figure out how to share information resources beyond materials in the collection (such as study guides and metadata) more effectively between institutions. Librarians are good at this type of collaboration; there is a strong track record of working together over time through effective professional organizations like AALL and consortia such as NELLCO, LIPA, and LLMC.

\textsuperscript{¶}\textsuperscript{66} There are systemic challenges that will need to be addressed through collaborative processes. For instance, we need to resolve any ambiguities relating to archival standards for born-digital materials. We need systems for co-developing digital resources and digital infrastructure together, using common standards, schemas, and so forth (each keeping some materials; making it known that we have them; digitizing them to share them in a shared commons, or at least a connected series of repositories). We need to find ways in which libraries and individuals can support the common development of reliable primary legal materials. We need to develop coordinated approaches to dealing with enormous private-sector efforts, like the Google Book Search project, that will help to shape our future whether we


\textsuperscript{57.} James Neal, the director of the Columbia University Library, has used the term “radical collaboration” to describe a shared effort between Cornell and Columbia libraries. Columbia and Cornell Libraries Announce ‘Radical’ Partnership, posting of Jennifer Howard to Wired Campus, http://chronicle.com/blogPost/ColumbiaCornell-Libraries/8627 (Oct. 28, 2009).


like it or not. And we need reliable mechanisms for anticipating, evaluating, and responding to the issues that are bound to arise and will threaten the future that we seek to put into being.

**Next Steps**

§67 Historic and global change is underway in the interrelated businesses of law, libraries, and information. Some parts of this change offer huge opportunities to advance our collective mission as law libraries. Other aspects of this change are downright threatening. Our common goal should be to seize the opportunities while mitigating the threats associated with the challenges. We need to articulate these common goals and to rally around them.

§68 We have moved out of an era where it is enough to focus on a single institution and how it functions, into an era in which we must contemplate a complex, systemic whole. This problem of systemic complexity is not unique to the library field—this is one of the major trends in globalization and modernity in the twenty-first century. The fields of finance, government, corporate social responsibility, and many others have been grappling with similar shifts, from concerns about a single state or firm to concerns about how complex systems operate and are governed. This fundamental change is another reason for law librarians to become yet more interdisciplinary in our mode of thinking and acting.

§69 We need to pause in our efforts to build the future legal information ecosystem to think like architects. We need to ensure that we are working from a blueprint that is at once shared, desirable, and sustainable. This job of designing for the future is an essential and urgent task. Before we erect a physical building to house a physical collection, we undertake a long and careful planning process. We need to take even more care in designing for the virtual environment in which to store legal information because of the complexity and the novelty involved. The connections between our collections and our services across libraries need to be more explicit than ever before, as we will need to rely upon one another more than in the past. Our law libraries—and the broad system of legal information in which they are situated—need to be designed not just to weather the perfect storm in which we find ourselves today, but to be as solid and reliable as the physical buildings that have traditionally held our collections.

§70 Our next step should be a process akin to a design charrette. We ought to learn from architects about how they collaborate on designs of complex systems, to conceive together of a system of legal information that we would like to bring about over the next five to ten years. This process should include a broad group of stakeholders, including librarians, technologists, publishers, practitioners of law, and teachers of law.

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This process should enable law libraries to establish a clear, shared vision for legal information on a global basis. We are today actively laying the cornerstones that will guide us in building this future. But we should not be building without a design in place. Such a design will ensure that our efforts will have a solid foundation. And only then can we ensure that we are building together through radical collaboration, not working at cross-purposes. In the process, we can bring about a bright future for law libraries, as well as for our patrons and society at large.