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# Research in a Changing World of Law and Technology

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# **Articles**

Morris L. Cohen\*

Research in a Changing World of Law and Technology

#### I. Introduction

As a long-time friend and admirer of legal education at Dalhousie, it is an honor and a pleasure for me to offer the Read lecture this year. It is particularly warming to have Mrs. Read and the next two generations of Reads here today, since Dean Read was the strongest proponent of the law library's development during his deanship here.

One of the designated topics for these lectures has been legal education. With the dedication of the addition to the Weldon Building housing the restored Sir James Dunn Law Library, and the designation of a librarian, for the first time, as Read lecturer, it seemed fitting to focus this year on three sacred, but often neglected, totems of legal education — books, libraries and research. The central role of this holy trinity in North American law schools has been, at least since Langdell's time, affirmed and repeatedly reaffirmed in numerous addresses and reports. Under the pressure of financial constraints and budgetary competition, however, the reality of support and commitment has been often less affirming.

Reading John Willis's lively history of the Dalhousie Law School,<sup>1</sup> one is struck by the relative neglect of the library, Langdell's essential laboratory of legal science, and by the sad struggle of successive deans and faculties to build and maintain this institution's book collection, library staff, and the wherewithal for research. After years of difficulty and travail, a remarkably good library was developed under two outstanding librarians, Eunice Beeson and Christian L. Wiktor, only to suffer tragic loss by the disastrous fire of 1985.<sup>2</sup> But the restoration has

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<sup>1.</sup> A History of the Dalhousie Law School (Univ. of Toronto Press, 1980).

<sup>2.</sup> For an instructive history of the fire, see C. L. Wiktor & L. Vagionis, "The Fire at the

been amazing. Through the efforts of all concerned and the support of the legal profession and the friends and alumni of the law school, the collection has been largely reconstituted in a new modern facility. It is a building that is at once attractive, comfortably functional, and well-designed for the future of your books, your library, and your research.

But what of the future shape of legal research here and elsewhere? What is the future role of books and libraries in *your* research, and in legal research generally? Is the printed book, whose codex format has served us so well for over five hundred years, now on its way out? Are the new stacks of the Weldon addition an anachronistic mistake? Is the Sir James Dunn Law Library and others like it soon to be outmoded by computer terminals of infinite reach and capacity in every carrel, office, and home? I think the answer to these questions is *no!* Our future research will be served by books, libraries *and* computers. As Norbert Wiener, the father of cybernetics and one of the pioneers of the computer revolution said in his last book, *God and Golem*<sup>3</sup>:

Render unto man the things which are man's and unto the computer the things which are the computer's. This would seem the intelligent policy to adopt when we employ men and computers together in common undertakings. It is a policy as far removed from that of the gadget worshiper as it is from the man who sees only blasphemy and the degradation of man in the use of any mechanical adjuvants whatever to thoughts.

But the future information context in which our research will be carried on will be different from what we've known. As the pre-literate intellectual world was changed by writing and the pre-Gutenberg world was changed by the printing press,<sup>4</sup> so is our world being changed by the electronic revolution.

# II. The Technology of Research

We now realize that there is a technology of research as well as an epistemology, and that technology shapes not only the methodology of research, but may also affect its sources, its vocabulary, and its goals. Librarians have thought about these issues for some time. Now, scholars in various fields, including even a few in law, are studying the impact of information technology on their disciplines.

Dalhousie Law School Library", in Law Libraries in Canada, Essays to Honour Diana M. Priestly, edited by Joan N. Fraser (Carswell, 1988) at 171-187.

<sup>3.</sup> M.I.T. Press, 1964, at 73.

<sup>4.</sup> For a history of the changes wrought by printing, see E. L. Eisenstein, *The Printing Press as an Agent of Change*, 2 vols. (Cambridge University Press, 1979).

Almost 35 years ago, in 1955, an historic conference of legal scholars was held at the University of Michigan Law School on the aims and methods of legal research.<sup>5</sup> A distinguished group of participants including David Cavers, Harry Kalven, Karl Llewellyn, John Dawson and Charles Clark discussed a variety of weighty topics, including the social significance of legal problems, research for legislation and comparative legal research. Despite the word "methods" in the conference title, nary a word was spoken, nor a paper delivered, on what was then the technology of research — nothing on books or libraries, nor on classification or indexing, microforms or computers, or on media, hot or cool. These became live issues in the late 1950s and the 1960s, among librarians, communications theorists, and a few economists and sociologists,<sup>6</sup> but not among the best of our legal scholars.

It is hard to avoid the late Marshall McLuhan in considering these issues, despite his departure from this earthly medium. The history of law and of its relationship to the technologies of information do not, however, fit neatly into McLuhan's stages of development, nor into his dichotomies of alphabetic vs. electronic man, nor the individuality of linear print culture vs. the commonality of the electronic media and the global village.

The reliance of common-law development on the judicial record predates Gutenberg by several hundred years. We now seek to understand how our ancestral oral cultures became literate and what effect that change had on the shape and content of literature. We inherited the ancient Mediterranean law codes in a variety of media—the Assyrian, Babylonian, Hittite, and Eshunni on clay; the Greek and Egyptian on papyrus; the Hebrew and Roman on skins of parchment and vellum. God may have spoken to Moses on Sinai, but the message came down from the mountain incised on stone tablets. In those times, the oral and the written co-existed and reinforced each other, each producing glosses on the other. For example, the Tannaim, Hebrew legal scholars of the second century, were human libraries reciting the law on request by full text retrieval. At a time when written records were available, the librarian sometimes also served as the library. We may wonder whether in that case the medium affected the message.

<sup>5.</sup> Conference on aims and methods of legal research..., edited by Alfred F. Conard (Univ. of Michigan Law School, 1955).

F. Machlup, The Production and Distribution of Knowledge in the United States (Princeton Univ. Press, 1962); M. Greenberger, ed., Management and the Computer of the Future (M.I.T. Press, 1962); V. W. Clapp, The Future of the Research Library (Univ. of Illinois Press, 1964).
 J. K. Weber, "The Power of Judicial Records" (1988), 9 Journal of Legal History 180.

<sup>8. &</sup>quot;Tanna, Tannaim," 15 Encyclopedia Judaica (Jerusalem: Keter, 1972) 800.

As lawyers have been slow to accept each of the new media as it was developed, so we have been slow to consider their impact on the law itself. That study would be best made with the help of other disciplines, and lawyers have traditionally been somewhat insular in their thinking, to put it gently. Henry Finch, Sergeant-at-Law and barrister of Gray's Inn, however, urged prospective law students in 17th-century England to pursue a broad and varied course of study, stating: "the sparks of all sciences in the world are raked up in the ashes of the law . . ." That is a bizarre metaphor here on the site of the destruction of the old Dunn Law Library. In our time, as if responding to that statement and to Justice Holmes' dictum that "The life of the law has not been logic; it has been experience," the legal academy (prodded initially by the legal realists) has embraced a series of alien, that is, non-legal disciplines, the famous "Law and's" — law and psychology, sociology, psychiatry, philosophy, political science, anthropology, economics, and lately, law and literature.

But communications and communications theory have not, until recently, taken hold as a full-fledged "law and" school. There have been flirtations, a few articles, some work among the early Jurimetricians in the 1960's, 10 and now the developing interest in law and hermeneutics. In Europe a new school called *Autopoietic Law*<sup>11</sup> proposes a view of legal thinking, communication and research based on circular logical relationships within the legal system. The recent growth of legal semiotics as a field of serious inquiry offers another related dimension to the interface of law and communications. 12

With the recent publication of an interesting new book, *The Electronic Media and the Transformation of Law*<sup>13</sup> by Ethan Katsh of the University of Massachusetts at Amherst, attention is now focused directly on the potential impact of electronic media on the legal system and legal thinking. Speculative, imaginative, and sometimes romantic and poetic, Katsh's views of the future are not far-fetched. One must note with regret that, among lawyers, "poetic" is still used to denigrate not praise. Although I agree with only some of his assumptions and conclusions, I

<sup>9.</sup> Law, or a Discourse Thereof (London, 1678) 6.

<sup>10.</sup> See, for example, "Communication Sciences and Law: Reflections from the Jurimetrics Conference", edited by L. E. Allen & M. E. Caldwell (Bobbs-Merrill, 1965) and "Jurimetrics" (Winter, 1963), 28 Law and Contemporary Problems No. 1.

<sup>11.</sup> Autopoietic Law: A New Approach to Law and Society, edited by G. Teubner (Walter de Gruyter, 1988).

<sup>12.</sup> See, for example, Law and Semiotics, Vol. 1, ed. by R. Kevelson (Plenum Press, 1987); R. Kevelson, The Law as a System of Signs (Plenum Press, 1988).

<sup>13.</sup> Oxford Univ. Press, 1989.

commend his work to you, for opening an important area to further study and argument.

Katsh's thesis is that the law, as an institution relying heavily on the communication of information, has undergone significant changes as its media of communication changed throughout history. He traces such changes in the transition from oral cultures to those employing writing, from those based on manuscript to those aided by the printing press, and finally he predicts changes in the values, doctrines and processes of law resulting from the use of electronic media for the storage and transmission of information. His view is one of qualified optimism.

Katsh sees computerized legal research systems as accelerating the erosion of precedent and the frequency of legal change. Improved and more varied options for communication will, he suggests, promote alternative, faster and less costly methods of dispute resolution. Such enhanced means of communication will also broaden freedom of expression and expand rather than limit the effective exercise of individual rights. The new media will facilitate more and faster contact among people, reduce abstraction in legal relations, and increase group consciousness in law-making. As traditional legal concepts become outmoded, he sees law becoming more responsive to human needs. Katsh develops his thesis with lively examples from the effects of previous revolutions in human communication on earlier stages of law. Although not always convincing, his analogies are suggestive and provocative. I mention his work here not to review and debate his conclusions, but as background to my own comments on the future of books, libraries and research in what is undoubtedly a changing world of law and technology.

On virtually every occasion that I have been consulted in the planning of a new law school or law library building, the question is asked at the outset whether the new information technologies won't render large book storage facilities unnecessary. The expectation that computers will make obsolete books stacks, libraries as we know them, and even books themselves, is in part a function of the exaggerated claims and unrealistic speculations of some computer publicists, journalists hungry for the sensational, and, regrettably, a few ill-advised librarians. It is tempting to position oneself among the angels of progress in the vanguard of the brave new world of technological utopia. In a time of high building costs and real estate values, that temptation is often enhanced by weighty fiscal considerations.

My favorite (or perhaps least favorite) example of such computer overselling is a 1967 New York Times newspaper story<sup>14</sup> reporting a

<sup>14.</sup> New York Times, July 10, 1967, p. 6, col. 2-3.

computer system to be established in Geneva for world-wide legal research. The article quoted the former president of the American Bar Association as promising: "We will put all the law in the world in one computer right here in Geneva ... Once it is operating ... any lawyer who wants to know the law in other countries about parking meters, human rights, transfer of real estate or other problems will only have to submit a coded number, and the computer will find the texts he wants and give him photographed copies." Twenty two years later, we are nowhere near that magic law computer. The most accurate part of the story was the statement that "the method of financing has not yet been worked out."

Technological development tends to excite and stimulate the expectations of users and the public beyond the likely pace of practical applications. As one informed legal expert noted recently: "If it takes three keystrokes to achieve something, the end user wants to achieve it with one keystroke. Or perhaps without a keyboard at all." Similarly, one can speculate about the computer of the future, as described by that writer, being a simple organic microchip implanted in the human brain, with electrochemical impulses passing from the brain to the microchip and back to form the input and output connections. But that development is not an immediate prospect — a lag in technology that I find gratifying. 17

#### III. The Future of the Book

The reality of progress is, as always, more complicated, and less dramatic. The computer and other electronic media for information storage, retrieval and dissemination are as revolutionary as were writing and the printing press. The new media are changing and will continue to change libraries, librarianship, and research, but the book will continue to be a major component of all three. For much of our reading, and particularly for works requiring reconsultation and reference, the book remains more efficient, more convenient and less expensive than the most advanced electronic media we can imagine for the future. Assume that the Geneva computer described in the 1967 news story existed today — and after twenty years of increasingly effective computerized legal research, it is

<sup>15.</sup> M. Felsky, "Enlightenment at the Speed of Information" (1988), 13 C.A.L.L. Newsletter 386.

<sup>16.</sup> Ibid., p. 387.

<sup>17.</sup> A refreshingly sober (and sometimes critical) view of the impact of new information technology is offered by M. Laver, *Information Technology: Agent of Change* (Cambridge University Press, 1989).

still a very remote dream — our personal reliance on books for information would be substantial. While the storage and retrieval of all current primary sources of law on computer or laser disks is certainly within sight, similar access to retrospective sources or to the huge secondary literature seems unlikely. The two commercial computer-based systems in the United States, LEXIS and WESTLAW, are in fact approaching the coverage of the purported Geneva facility, at least for domestic U.S. law. But that has had virtually no impact on the book holdings or space needs of our academic law libraries. After an erratic early development, Canada now has two growing computerized research services of its own. If CAN-LAW and QL's capacity for Canadian law were equal to that of LEXIS and WESTLAW, they would, I expect, have similarly negligible impact on the book collection in the Sir James Dunn Law Library.

After twenty years of remarkable growth in the use, capacity and effectiveness of a variety of electronic media, book production and sales continue to grow in the United States, <sup>19</sup> in Canada, in Great Britain, and world-wide, <sup>20</sup> in law and in all fields combined. Similarly, annual book acquisitions in law libraries and general research libraries have grown steadily despite their increasing use of and reliance on the new media.

Consider for a moment your own reading habits now and as you can project them twenty years into the future. Assume that QL, CAN-LAW, SOQUIJ, LEXIS and WESTLAW have increased their capacities to include all English and French language judicial decisions, statutes, and administrative law from 1800 to date, and that easily portable hand-held computers are supplemented by printers producing almost instantaneous, legible copies at low cost. I doubt that even then would you be prepared to scrap the book collections of your library, nor will the next generation of students, lawyers and researchers who may learn to read on computer terminals and tell time only from digital clocks. Even though they won't know what clockwise and counter-clockwise mean, they will still rely on books for a significant part of their research. Books will continue to be the preferred medium for reading texts of more than a few pages, although electronic media may be the primary access tool in identifying, locating and perhaps ordering relevant sources.

Our libraries will, of course, change considerably as computer storage and retrieval expand rapidly and as other electronic research media

<sup>18.</sup> See D. S. Marshall, "The History of Computer-Assisted Legal Research in Canada," in Law Libraries in Canada, Essays to Honour Diana M. Priestley, supra note 2, at 103-115.

<sup>19.</sup> Library and Book Trade Almanac, 24th to 34th editions (R. R. Bowker, 1969-1989).

<sup>20.</sup> Statistical Yearbook (UNESCO, 1965-1988).

become available for library and personal use. But these developments will not eliminate books or the necessity of extensive book storage facilities. In my law school, even after fifteen years of LEXIS service and vast increases in the capacity and versatility of such computer systems, the book remains the primary research medium. Book acquisitions continue to rise to meet the limit of available funds. Inter-library borrowing and lending of books increase each year, although more and more transactions are handled by fax which allows requests to be filled in the same day (or even half-day). While virtually every student is trained on LEXIS and WESTLAW, only about half of them use them regularly for research, and no more than 20% of our faculty are regular users.

#### IV. Microforms

Microform, once limited to infrequently consulted materials, is now the primary medium for some major categories of current research material, particularly federal legislative history, appellate records and briefs, legal newspapers and bar journals. The acceptance of the Congressional Information Service microfiche for federal documents of legislative history indicates the effectiveness and economy of large microfiche collections when made accessible by a well-designed, frequently updated hard copy index. Of course, its acceptance may have been due in part to the unavailability of the material on either of the computer services. If these documents become accessible through one of the computer services, I suspect that medium will replace the fiche. Often denigrated as a transitional medium, microforms have played an essential research role for fifty years and will, I suspect, continue to serve us for perhaps another fifty.

# V. CD-ROM Technology

CD-ROM (compact disk, read-only memory) and other compact disk formats are the latest medium for library use, offering mini-libraries on selected subjects, with periodic updating and relatively low cost. Since the subscriber rents or owns the disks, there is no charge for searching. Unfortunately, Canada does not yet have a CD-ROM product for legal research, although there are rumors of development of a service by at least one Canadian law publisher. It is amusing to see that even as CD-ROM begins to achieve a significant library role, the prophets and publicists of advanced expectations are already moving on to its successors. While most research libraries offer their readers only one or two CD-ROM products and the major law publishers are just beginning to introduce their products, the in-crowd talks of dynabooks and

hypermedia.<sup>21</sup> I won't bother explaining dynabooks now because you'll be reading about them in your Sunday supplements soon, and, before they reach your library, you'll be hearing about their successors. A hypertext system, however, enables the user to link text in one document to related information in other documents and thus move easily from one database to another.

The CD-ROM service which has achieved widespread acceptance in the United States is *LegalTrac*, a periodical indexing service of simplicity, breadth and versatility. Although very expensive when introduced, *LegalTrac* is remarkably attractive to readers because of its ease of use, the large number of journals it covers, and a printing capability which enables the reader to print out a bibliography of recent articles on a particular subject or by a specific author.

The West Publishing Company now offers five separate CD-ROM services (on federal civil practice, bankruptcy, government contracts, federal taxation, and tax management) at annual costs of from \$600 to \$1500 U.S. each. These services contain a compact library on the designated subject, include primary sources, commentary and forms, and a rather rudimentary form of hypertext that permits the user to move from a citation to the full text of the cited document in that publisher's WESTLAW system. The linkages are now cumbersome, but the format will undoubtedly be developed into a more sophisticated searching and switching capability. Other law publishers, particularly those who specialize in looseleaf services, are beginning to market similar products based on their print publications. LEXIS has just announced its first CD-ROM product, utilizing Wang technology licensed to them. It is a "book" by Peter Martin of the Cornell Law School on social security law which will only appear in the CD-ROM format, at least initially. This will be the first instance, to my knowledge, of a law text appearing only on CD-ROM.

Some CD-ROM products also permit the user to manipulate and store data in an electronic notebook, from which the retrieved material can be downloaded and incorporated directly into a document being drafted on the reader's PC, thereby saving the step of keyboarding documents separately into the wordprocessor. The drafter thus interacts with the medium, revising and reworking the retrieved text. I mention these products only to indicate another direction in which libraries will be moving. It is a direction which offers the potential for much greater interaction between media and users than we have seen before.

<sup>21.</sup> See, for example, R. DeBuse, "So That's a Book ... Advancing Technology and the Library" (1988), 7 Information Technology and Libraries 7.

#### VI. The Future of the Library

Even with these developments, the law library of the near future will be quite recognizable. It is likely to include the following components:

- A book collection growing at about the same rate as in research law libraries today. Decreases in the acquisition of primary sources in print format, resulting from increased coverage of computer databases, will be offset by increased monograph acquisitions in new fields of legal interest, including foreign and international law, and non-legal disciplines.
- 2. Microform collections continuing to grow, but probably at a slower rate than we've seen over the last twenty years.
- 3. The comprehensive full-text computerized legal research services expanding further and becoming more accessible and more versatile.
- 4. CD-ROM and other new interactive formats, often linked by hypertext to the large full-text computer research services, growing in number and significance, particularly in law offices.
- 5. Electronic work stations containing individual terminals for access to large computer research systems and smaller disk-based databases. Although these have been forecast as basic library equipment for the last ten years, it is unclear how long it will be before every student and faculty member has his or her own fully wired work station. The extent to which you can predict the future condition of the Canadian economy and the level of governmental support for legal education will determine how well you can fix the year of that library utopia with a fully functioning electronic work station for each reader. The current prediction is the year 2000, but I must warn you that five years ago it was 1990.

One increasingly important library activity whose continued growth we can safely predict is inter-library cooperation. Such cooperation has long existed among North American libraries, but its increase in the last twenty years through networks, bibliographic utilities, and regional and local consortia has vastly improved service to users. Inter-library lending, accelerated by access to online cataloging and facsimile transmission through electronic media, has been the most dramatic, but not the only feature of this cooperation. Shared cataloging and cooperative acquisitions plans have saved time and money, and increased the amount of accessible research material. The notion of "libraries without walls" has become more than a slogan, as consortia and networks rationalize collecting policies and allocate collecting responsibilities. This trend will undoubtedly grow.

Another noteworthy phenomenon affecting library holdings is the booktrade practice of repackaging already issued sources by subject and offering them as new products. This publishing tactic is deplored by librarians who often feel compelled to acquire such new offerings because of user demands, even though the contents are already in the library in another format. Topical reporters, looseleaf services, subject-specialized citators, and some of the new CD-ROM services, are examples of such reformatted publications. Although representing a drain on library budgets, these products reflect, as well as stimulate, the preference of researchers for smaller and more manageable collections. They may also indicate a direction toward subject reformatting in which law publishers, vendors of computer databases, and perhaps even law libraries will be moving.<sup>22</sup>

It is fortunate for library users that sound advice on the planning of library buildings has been available for the last twenty years and has usually been heeded. In 1967, a brief but influential report was issued by the Educational Facilities Laboratories, a non-profit corporation established by the Ford Foundation to aid educational institutions in planning their future facilities. The report, entitled *The Impact of Technology on the Library Building*, reflected the conclusions of a symposium of experts from a variety of relevant disciplines, including communications and information technologists, librarians, and architects. The report, issued in 1967, was remarkably farsighted in its main conclusions:

"... for the next 20 years the book will remain an irreplaceable medium of information. The bulk of library negotiations will continue to be with books...

To be sure, technology will modify library buildings. But the changes will involve trade-offs in space and demands for additional space, rather than less. The buildings planned now must be planned for expansion . . .

Now, more than ever, it is important to design library buildings so they will be inviting and comfortable for people to use. The library building itself will gradually change, but people, who use libraries, are a constant factor."<sup>23</sup>

I believe that advice will hold up as well for the next twenty years, although the actual configuration of law libraries and the relative importance of various media within individual libraries will undoubtedly be changing.

Before leaving this discussion of libraries, I must mention the Canadian Law Information Council and the important role it is playing both for libraries and legal research by improving access to legal information in

<sup>22.</sup> Felsky, op. cit., 387.

<sup>23.</sup> Pages 19-20.

Canada.<sup>24</sup> This enormously successful joint effort of the bar, federal and provincial governments, law teachers, law librarians, law publishers, and foundations, should be a model for the advancement of legal communication and research throughout the world. No other country has been so blessed. Certainly the United States badly needs such collaboration; our failure to develop an organization or program of that kind undoubtedly costs the government, the bar and the educational community large sums of money, and delays achievement of the widest and most efficient dissemination of legal information.

CLIC is now moving into a new phase and broadening its function from that of identifying and filling gaps in the Canadian legal information apparatus to identifying barriers to the dissemination of legal information and formulating policies and operational strategies to dissolve those barriers. In effect, CLIC will be moving from many small efforts to a broader, more policy-oriented role, focusing on fewer and more generalized projects. Initially, CLIC will focus on a comprehensive study of law library costs throughout Canada and the costs involved in providing legal information to rural areas. Whatever its program CLIC must continue to be a major force for the improvement of legal information access in Canada.

### VII. The Future of Research Technology

What will be the nature of the research process in the Sir James Dunn Law Library during the next twenty years? Its technological shape is implicit in the library context I've already outlined. However, I should perhaps note a reservation about the new computer technology as a panacea for the problem of controlling and retrieving the huge mass of information produced by our highly law-oriented societies. Full-text retrieval systems like LEXIS, WESTLAW, QL and CAN-LAW have significant limitations and cannot be relied upon exclusively, particularly for subject searches, without supplementary searching in other sources. Computer-assisted full-text retrieval is without question a tremendous aid to legal research, but it can be a misleading tool for many searches, if used alone. Sole reliance on word searches creates a tunnel vision and tends to limit one's results to fact-specific rules, often to the exclusion of broader and more imaginative analogies and conceptual parallels in the dicta of nonrelevant opinions.<sup>25</sup> Some writers have questioned the actual

<sup>24.</sup> For a summary of CLIC's recent and current activities, see Access to Legal Information in Canada, Addressing the Challenges of the 1990s (Canadian Law Information Council, n.d.); also Annual Reports, Canadian Law Information Council, 1975-77 to 1987-88.

<sup>25.</sup> S. A. Childress, "Warning Label for LEXIS: the Hazards of Computer-Assisted Research to the Legal Profession" (1982), 13 *Lincoln L. R.* 91.

efficiency of these systems by empirically measuring "recall" (i.e., how well the system retrieves *all* the relevant documents) and "precision" (how well the system retrieves *only* the relevant documents).<sup>26</sup> These two standards operate in an inverse relationship — improving one diminishes the other. Other analysts are concerned with the impact of this kind of research on the basic concept of relevancy and on the structure of legal thinking generally.<sup>27</sup> But technology is not the only changing influence on research.

Among the non-technological influences are several trends which are already affecting legal research in the United States and perhaps also in Canada, and can be expected to grow in importance. I see these as including the following developments:

- Increased focus on legislation and administrative law, as both federal
  and provincial regulation of economic, social and political activity
  continues despite periodic moves for deregulation of particular
  economic sectors.
- 2. Increased scope for inter-disciplinary research in approaches to legal problems in academic circles, in legislatures, courts and governmental agencies, and in litigation and appellate practice. The development of "law and" specialties in the law schools and in legal literature is but one symptom of this trend.
- 3. Growing influence of law from beyond the jurisdiction of the forum. This includes federal influences on the Canadian provinces and territories and on the states in my country, as well as foreign and comparative law influences from abroad.
- 4. Decreasing differences between the common and civil law systems as codification becomes increasingly attractive in common law states and as the authority of courts and judicial decisions grow in civil law countries. This remarkable development is apparent in the United States and in France, Germany and Austria. If the trend continues, it will have growing impact on the way research is carried on in both systems.
- 5. Increased attention to international law in the academic world, in litigation, and in governmental concerns. This tendency stems from a

<sup>26.</sup> Blair & Maron, "An Evaluation of Retrieval Effectiveness for a Full-Text Document Retrieval System" (1985), 28 Com. ACM 289. Blair & Maron's criticisms are further developed and enlarged in D. Dabney, "The Curse of Thamus" (1986), 78 Law Lib. J. 5, which is answered by several respondents in 1987 issues of (1986), 78 Law Lib. J. 337 and (1987), 79 Law L. J. 133.

<sup>27.</sup> R. C. Berring, "Full-Text Databases and Legal Research: Backing Into the Future" (1986), 1 *High Technology L. J.* 27; R. C. Berring, "Legal Research and Legal Concepts: Where Form Molds Substance" (1987), 75 *Calif. L. R.* 15.

- variety of causes and will undoubtedly continue as trade, tourism, and the internationalization of business enterprises grow, and as trade barriers dissolve.
- Growing interest in historical research in law in Canada, Britain, the United States, as well as in Western Europe. This development is evidenced by increased attention to historical sources in judicial opinions, by new journals and many scholarly publications.<sup>28</sup> Library collecting has followed this trend, as have bibliographers in preparing new reference tools.

These are, of course, only some of the tendencies which will continue to shape legal research. It is certainly too early to evaluate Ethan Katsh's projections of how the new technology may affect legal thinking, but it is safe to assume that the new media will be a significant influence on research methodology and perhaps also on the substance of research.

Katsh closes his book with an allegorical interpretation of the female figure of justice which is one of the centerpieces of legal iconography. Prior to the 16th century, the statue usually appears without a blindfold. After the 16th century, (i.e., after the invention and spread of printing) Justice generally is portrayed blindfolded. To explain this curious change, Katsh modifies an interpretation that was formulated by the late Bob Cover of the Yale law faculty and further developed in an article by Dennis Curtis and Judith Resnick.<sup>29</sup> Katsh interprets Cover's theory as follows:

... the blindfold worn by Justice symbolized not merely the law's desire to be impartial, but its need to limit and manage the use of information . . . By affecting the acquisition and use of information, print, in my view, has contributed to the legal blindfold and to the modern shape and form of the law. The development of new forms of communication in our era, therefore, places the goals, processes, institutions, concepts, and values of the law — its symbolic and real, its visible and invisible components in a precarious position. As the traditional icon has its blindfold loosened and lifted, ... all that is symbolized by a once-familiar figure of Justice will, ineluctably, be refashioned as well.30

On that uncertain note I will close my Read lecture by offering the hope that all of us — librarians, the academic community, the bench, bar and government - working together, can achieve the best utilization of the new research technology, and thereby assure a more effective administration of justice. That goal will require more attention to libraries

<sup>28.</sup> In Canada, for example, see Essays in the History of Canadian Law, edited by D. H. Flaherty, 2 vols. (Osgoode Society, 1981 & 1983).

<sup>29.</sup> D. Curtis and J. Resnick, "Images of Justice" (1987), 96 Yale L. J. 1727.

<sup>30.</sup> The Electronic Media and the Transformation of Law, p. 268.

than members of the legal community, both academics and practitioners, have offered in the past. Such attention requires intellectual as well as fiscal commitment. Information drives the law, as it fuels all intellectual endeavor. Since the central source of that information is the library, its concerns demand your attention, your involvement and your support. I don't believe that libraries are too important to be left to librarians, as some wag has suggested, but a library which excites the active interest of its users will be a better and more responsive center of learning and research. I have always felt that a law school gets the library it deserves. You finally have an excellent library — it is now up to you to deserve it.