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Computers and the Law

James Hambleton
David Matone

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"The computer in this century is like
the telephone in the last century," says
Francis Musselman, a partner in New
York-based Milbank, Tweed, Hadley &
McCloy, quoted in last November's
American Lawyer. "The telephone
was invented in 1876," he continues,"but most law firms didn't have them
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York-based Milbank, Tweed, Hadley &
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until near the end of the century. Law-
yers thought that because the tele-
phone wasn't the written word, it
couldn't be trusted. Also, they didn't
know how the damn things worked, so
they were afraid of them. I'd say that is
where we were with computers five
years ago, but like the telephone, it'll
c change."

Most lawyers still have no idea how
telephones really work, but they use
them furiously because they under-
stand what they're good for: remote
voice communication. Computers are
good for something equally simple:
remembering millions of pieces of
information.

Although these electronic memories
were first introduced for office man-
agement and accounting chores in law
offices, they also turn out to be tremen-
dously useful in legal research. The
day will arrive when most attorneys do
their legal research at a terminal beside
desk, at a considerable saving of
time and with greater accuracy than
presently.

The computer can manipulate
information and retrieve it in ways
which traditional sources of legal
research cannot. Using a traditional
legal research book, the attorney is tied
to the indexing and abstracting which

the legal editor has used. Searching for
a case on Ford Pinto brakes, where
does the attorney start? Are these
cases indexed under "Automobiles."
"Products Liability," or "Toots?" The
attorney has to second-guess the in-
der. Using the computer, the attorney is
not tied to any indexing system. Rather
than containing just digest paragraphs
or abstracts, the computer database
holds the full text of case decisions. By
entering the word "Pinto," the user can
find all documents which have an oc-
currence of that word. Some of these
documents, though, may contain ref-
erences to pintos ponies, or to Joe Pin-
to's divorce case.

Combining other words with "pinto"
the search may locate just those
cases on point. Perhaps the words
"gas tank" and variations of the word
"explode" would narrow the computer
search enough to retrieve only relevant
cases.

Through this process of combining
search words, the attorney is able to
create a unique index which will pro-
duce results faster and more efficiently
than the printed indexes. Each search
term is an index word; any word which
has appeared in a case can be used as
a search key to retrieve that particular
case. For example, if the only fact
which an attorney can remember about
a North Arkansas case is that the judge
talked about land suitable only for
mountain goats and agile sheep, enter-
ing words "goats" and "sheep" would
be the best search request. The com-
puter could do in a few seconds a
search which would take hours to do
manually with tradition search tools if
it could be done at all. Currently two
computer-assisted legal research sys-
tems are marketed nationally. The first,

LEXIS, a service of Media Data Center
of Miamisburg, Ohio, was introduced to
the public in 1973. The University of
Arkansas Law School began its sub-
scription to LEXIS in October 1978.
Westlaw, the second major com-
puter-assisted legal research service,
began general availability in 1975.
The West Publishing Company, one of
the largest law book publishers in the
country, markets Westlaw. While many
law schools have been forced by bud-
get limitations to choose one system
over the other, Arkansas has been for-
tunate in being able to acquire both.
Westlaw was installed in January of
1980.

Both the LEXIS and the Westlaw
databases contain the full text of
cases, codes, and administrative
material. The documents in LEXIS are
arranged into libraries by jurisdiction,
then subdivided into files by particular
courts or a combination of courts. For
example, the "GENFED" library con-
tains "general federal" documents
which are divided into, among others, a
"SUP" file for U.S. Supreme Court
cases, a "SUPCIR" file for U.S. Super-
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communications, and patents materials.

The Westlaw database contains the same type of documents as LEXIS does. Additionally, Westlaw includes headnotes, or edited summaries of the points of law in each case. The documents in Westlaw are arranged by "reporters," corresponding to the printed volumes of reported court cases published by West. Arkansas court cases, then, are in the "SW" file, since these cases are reported in the Southwestern Reporter. Specialized files, such as one for federal tax, contain both court decisions and administrative law materials.

Both LEXIS and Westlaw have a similar hardware configuration. A typewriter keyboard is joined to a cathode ray tube, which looks like a small T.V. set. Connection to the database itself is made by dialing an access number on a telephone next to the terminal. This dataphone is hooked to a modem which translates the signals into something both the main computer and the terminal can understand.

When connection is made, the searcher enters an identification number, which is used for billing purposes. Law schools are allowed special usage contracts which are comparatively inexpensive. This contract dictates, however, that the terminals can be used only by bona fide law students and faculty in connection with law school course work. Understandably, students may not use either system when a fee-paying client is involved.

Once "on-line," the user selects a library and file. Now the search begins. Using the keyboard, the searcher types on the screen the request, then transmits it to the computer. Both LEXIS and Westlaw are interactive, which means that the computer and the user "talk" back and forth until the user is satisfied with the information retrieved. After the computer processes the search request, it responds with the documents that satisfy that request.

Once retrieved, documents can be displayed in full text, by citation, or by key-word-in-context (KWIC). In the KWIC format, LEXIS displays the search words highlighted, surrounded by twenty words on either side. The corresponding format in Westlaw, the "term" mode, highlights the search word as it appears in a full screen of text.

The search itself can be made up of a single word or a combination of words. A "word" to the computer is any unbroken string of alphabetic or numeric characters. Both "C3PO" and "court" are words which the computer could process.

The searcher combines words or phrases using "connectors" between them. For example, the search "cat and dog" will retrieve any document in which both the word "cat" and the word "dog" appear. If the search "cat and dog" is entered, not only will documents with both words be located, but all documents containing only one word or the other. This "Boolean" logic is the basis for the syntax of both LEXIS and Westlaw.

Besides locating a single word, phrase or combination of words and phrases in documents, each system can also locate words or phrases in close proximity to each other. In LEXIS, the search "trial w/3 jury" demands that the word "trial" occurs within a certain number of words of the word "jury." Cases which discuss a "jury trial" or "trial by jury" will both be retrieved. A similar search in Westlaw requires that the two words be in the same sentence. By using these and other connectors, the searcher may tailor a request to retrieve just those cases needed.

If LEXIS and Westlaw simply found cases with a certain configuration of words which occurred at random in a document, that alone would be helpful. Each system, however, has the additional capability of retrieving documents which have words located in a specific part or segment of the document. For example, a searcher may request that a case containing the word "black" be retrieved only if that word occurs in the part of the document which indicates who wrote the opinion. Thus only opinions written by Justice Black will be retrieved, rather than any case dealing with a black cat.

This capability makes computer-assisted legal research much more flexible than manual research. The searcher may fashion a request to find cases after 1977 written by Judge Hickman involving implied warranties. Locating this kind of information could be very useful to an attorney about to argue a particular issue before a judge, and it is the kind of information almost impossible to retrieve using manual research aids. To find that case where the woman slipped on the banana peel in the store, where the tarantula bit the produce clerk, where the bottle of Coke exploded, the computer can be of invaluable help. But what are its disadvantages?

One of the problems in using computer-based legal research is the literateness of the machine. People tend to think in concepts, which they then clothe in words. All the machine can understand is words; it can only match strings of alphabetic or numeric characters at an incredibly high speed. If the searcher looks for all cases on "jurisdiction," only the six with that misspelling of the word will be retrieved. If the document has typos when it is put into the system, the typos remain and a search with the correct spelling of the word may miss the case.

Although spelling may seem minor, it can be a real problem in law. The name "M'Naghten" is spelled four different ways on one page of one court opinion. The redundancy in court opinion helps. A word misspelled in one sentence of the document may be spelled correctly somewhere else, so the document would ultimately be located. But doing a search by jurisdiction for a Texas case where, in the caption, the state is spelled "Taxes" will mean that case is forever lost. The partial solution is, of course, to list common misspellings and alternative search words. Never search for "arctic" without also looking for "artic."

Since the computer is word-based rather than concept-based, the searcher must be extremely careful what words are chosen for the search. Law students are taught to think in "index terms" or, in common parlance, taught to think "like a lawyer." Yet if the searcher couches the request in broad index terms, rather than in specific fact or search words, the computer will not find relevant cases. Judges write opinions using descriptive words; they do not use index terms. An opinion does not say "This is a torts case," but rather, "Plaintiff was standing on a train platform when she was hit by falling scales." The word "tort" would not retrieve this case, but the words "platform" and "scales" would.

Thinking like a lawyer will not help unless the user always keeps in mind how the machine operates. Traditional research requires an analysis of facts to isolate the underlying legal issues. When the points of law underlying the facts are determined, the attorney proceeds to an index or digest which is arranged by those points of law. The attorney using the computer must also analyze the
funds, but the search must be entered as a combination of fact words and specifically defined legal concept words.

English is a very imprecise language. Even when the word is spelled correctly, it may have a dozen different shades of meaning, and the searcher is only interested in one of those dozen. If the user inputs "constitutional" hoping to retrieve cases discussing a particular concept of constitutional law, a retrieved case may only refer to an older gentleman mugged while taking his constitutional. Often for esoteric concepts, adding more search terms does not help. Computers are most effective when the search words have a narrowly defined meaning, or where they describe a particular fact situation.

One of the advantages of using the Westlaw database is that an attorney may search by point of law, using the West headnotes, and combine with this "concept" search a few fact words which will pull out of the database only cases with similar facts. For example, all the headnotes under an "Injunction" key number describe what is a legally necessary showing for an injunction to be issued. None of these headnotes, however, indicate the facts in the case. By combining a word such as "abortion" with the headnote for injunction, the computer will retrieve injunction cases that deal with abortions.

Learning how to use computer assisted legal research systems effectively is becoming increasingly important for law students. Employers are looking at whether candidates have had exposure to computer-based legal research.

Arkansas students have a remarkable opportunity which few other law students have: the chance to familiarize themselves with both LEXIS and Westlaw. Instruction in computer-assisted research has been integrated into the first year legal research and writing program at Arkansas.

There are two basic aspects of learning how to use any computer-based system. First, the student must master the mechanical operation of the terminal. This includes what keys to push to select a database, enter a search request, and view the retrieved documents. Second, the student must learn the special syntax of each system. This includes search logic, search strategies, specialized segment or field searches and all the connectors which are used to link words together into more complex search requests.

Both West Publishing and Mead Data have supplied various training aids to help students learn both mechanical operation and search syntax. Westlaw has two tutorial courses online which do just that. A "terminal training" course and a "Westlaw training" course can be used by students to become familiar with these operations. Mead has prepared for free distribution a LEXIS handbook which discusses in detail use of the system. Videotapes are available which also help in demonstrating searching techniques. To introduce students to the terminal, Mead has developed a cassette tape "simulator" which directs the student through a sample problem. By the end of this problem, the student has used all the keys on the keyboard.

Using these vendor-supplied aids simplifies training law students to use computer-assisted legal research. The major problem is logistical: exactly how to give two hundred first year students fair and equal access to only two terminals, while upper class students are continued on page 31

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In addition, subscribers to the **Arkansas Legislative Report** are entitled to copies of up to 100 bills free of charge. After 100 bills, there is a charge of 25 cents for each bill requested.

Service will begin in November, when members of the General Assembly start prefilling bills for the 1983 session.

The cost of the **Arkansas Legislative Report** is $450 for the 60-day session. For extended and special sessions, the cost is $10 a day.
It was very gratifying to be representing the Young Lawyers’ Section of the Arkansas Bar Association at the annual meeting of the American Bar Association held in San Francisco. The section was a double winner in the 1981-1982 Award of Achievement competition sponsored by the Young Lawyers’ Division of the American Bar Association. The section received a first place award in the comprehensive application, division 1-C for state bar associations with less than 3,000 young lawyers. We were also awarded first place in the single project, service to the bar, for the Arkansas Guide to Statutes of Limitations handbook, which was published last year. The two first place awards are even more significant in view of the fact that only two applications are allowed to be submitted by an affiliated organization. These awards reflect the fine job that Harry Truman Moore, the executive council, and various committee chairmen did during the past bar year.

Our section was further honored to have Patrick Hayes of North Little Rock as the presiding Delegate Assembly Speaker at the San Francisco meeting. Pat relinquished the chair at the conclusion of the Delegate Assembly, and was presented a certificate of recognition by our section for the fine work he has done on behalf of Arkansas Young Lawyers in the Young Lawyers’ Division of the American Bar Association.

The section had a well-attended and enthusiastic executive council meeting in conjunction with the Fall Legal Institute held in Fayetteville in September. Sixteen executive council members and committee chairmen were present at the meeting. Status reports were presented on the projects underway.

Walter Paulson of Little Rock did a fine job of organizing a reception and brunch for the Mississippi Young Lawyers in conjunction with the Arkansas-Ole Miss Football Game in Little Rock.

Terry Paulson of Little Rock and Robert Ridgeway of Hot Springs coordinated the activities in conjunction with swearing in the new admittees to the Arkansas Bar. The swearing-in ceremony was held on Monday, September 27. Immediately after the formal ceremony, presentations were made to the admittees by various bar groups and organizations. A reception was held at the Arkansas Bar Center after the ceremonies were completed.

The annual Practice Skills Course was held on October 14 and 15 in Little Rock. Bob Lambert of Springdale and Donald Bacon of Little Rock presided as co-chairmen of the seminar. An excellent group of speakers was provided to acquaint new lawyers with the “nuts and bolts” aspects general law practice.

Plans are now underway for the section to sponsor an Affiliate Outreach/Continuing Legal Education meeting in conjunction with the horse racing season in Hot Springs next spring. The meeting will consist of two one-half day sessions, one dealing with implementation and ideas for public service projects and the second session dealing with a particular aspect of trial practice. Young lawyers from all of our bordering states will be invited to participate in this two-day seminar. In addition, a block of rooms has been reserved at the Ramada Inn in Hot Springs and a block of two hundred seats has been reserved at Oaklawn Park on both days of the seminar for those who wish to partake of the “Sport of Kings.”

On behalf of the section, I want to congratulate all of the new admittees to the Arkansas Bar. I hope that each will become an active member of the Arkansas Bar Association, and particularly the Young Lawyers’ Section.