

SYMPOSIUM: ELECTRONIC COMMUNICATIONS AND LEGAL CHANGE

ELECTRONIC CONFERENCES: THE REPORT OF AN EXPERIMENT

*I. Trotter Hardy**

INTRODUCTION

In the summer of 1992, about twenty law faculty and practicing attorneys participated in a conference that focused on the effects of electronic mail on law, law teaching, and law practice. The conference itself was conducted entirely by electronic mail: none of the participants ever left their homes or offices; none met the others face-to-face. The conference therefore served both as a substantive look at the effects of electronic mail on the legal profession, and as an experiment in the use of electronic mail to reduce travel costs and facilitate discussion among a diverse group of participants.

The discussion gave rise to a wide array of exciting ideas and implications for legal education. For example, electronic mail removes the visual cues that identify people by race, age, gender, or other similar classification. This "leveling" effect offers the potential of creating an electronic forum for allowing open discussion of otherwise sensitive issues. Because electronic conferencing is well within the technology available to most law faculty today, yet rarely used, this Article summarizes the substantive results of the conference and assesses its success as a technological experiment.

* I. Trotter Hardy is a professor at the Marshall-Wythe School of Law at the College of William & Mary. He would like to thank David Johnson, Fred Lederer, and Ed Richards for their helpful comments. Thanks are also extended to all the participants in the electronic mail conference, and especially to those who have graciously consented to have their remarks quoted.

I. THE NUTS AND BOLTS

The idea for the conference originated with the author, a law professor, and David Johnson, an attorney at the law firm of Wilmer, Cutler & Pickering. Both of us have been interested in the use of computers and computer networks in law practice and legal education for several years.

We knew that many lawyers use electronic mail ("e-mail") as a way of carrying on discussions within their firms, and that a number of law professors use e-mail to converse with distant colleagues. Most of these discussions operate either like letter correspondence or as the equivalent of weekly lunch gatherings, where the discussion is loosely related to a general topic but has no fixed agenda or timetable.

We wanted our experiment more closely to resemble an actual conference—to have a moderator, a reasonably focused theme, and beginning and ending dates. Most importantly, we wanted to bridge the gap between academics and practitioners, groups that seldom attend the same conferences. E-mail seemed to be—and proved to be—an excellent way to achieve the latter goal.

A. Who Participated?

We began by developing a list of people in teaching and law practice who we knew to use e-mail, and who might be interested in participating in an electronic conference. We settled on a list of approximately twenty-five people. The author created a mailing list on the William & Mary mainframe computer, drew up an e-mail "letter" of invitation, and sent copies out electronically.

Within a few days, replies came from most of those contacted, with a few regrets, and a few suggestions for additional names. A short time later, we had a finalized list of willing participants numbering about twenty.¹ The author explained to all participants that a conference

1. In alphabetical order, the participants included: David Banisar, Computer Professionals for Social Responsibility; Jerry Berman, Electronic Frontier Foundation; Anne Branscomb, Harvard University; Tom Bruce, Cornell University; Dick Danner, Duke University; Mike Godwin, Electronic Frontier Foundation; David Hamburger, ABA; Trotter Hardy, William & Mary; David Johnson, Wilmer, Cutler & Pickering; Ethan Katsh, University of Massachusetts at Amherst; David Maher, Sonnenschein, Nath & Rosenthal; Bill Marmon, MCI; Peter Martin, Cornell University; Charles Merrill, McCarter & English; Henry Perritt, Villanova University; Edward Richards, University of Missouri at Kansas

transcript would be maintained, that publication of the transcript was contemplated, and that participants would have a chance to review any proposed publication of their remarks.

B. How Did They Participate?

The conference was moderated by the author, and the distribution lists and archive files were maintained at his home institution, William & Mary. Participants exchanged messages over a combination of different e-mail networks. Most participants were connected directly to the "Internet," a world-wide computer network connecting universities and other organizations in the United States and abroad.²

As a rule, practicing attorneys do not have access to the education-oriented Internet, but are able to connect to various commercial electronic mail services of national or international scope. These commercial networks, in turn, are interconnected with the Internet, so that it is possible for e-mail messages to be exchanged over a combination of commercial and non-profit networks with relative ease.³ These interconnections point to just how pervasive computer networks really are today; nearly every individual in the United States who has a telephone could have local access to a computer network as well. And through any of these computer networks, it is possible to interconnect with nearly all other networks.

Of all the participants, one corresponded over the AT&T e-mail system, three corresponded over Compuserve's e-mail system, four used MCI e-mail, one used a Sprint e-mail network, and the balance of the participants corresponded over the Internet.⁴

City; Michael Siavage, Integrated Computer Management (Law-Hub); Douglas Simpson, IIT Hartford; Shari Steele, Electronic Frontier Foundation; Cleveland Thornton, Bromley Greene; Ian Wilson, Queensland University of Technology.

2. The "Internet" began as a research project of the Defense Department. It is now a civilian network that spans the globe, connecting most universities in the United States and many abroad. Most law faculty have access to the Internet, whether they know it or not.

3. Emphasis is on the word "relative" here. There are as yet no universal standards for the format of e-mail messages, and some networks do not happily receive messages from certain other networks that have substantially different formats. Indeed, much of the moderator's work in the conference was fixing problems such as the occasional rejected messages caused by the transition between commercial networks and the Internet.

4. Two of the participants were in law firms that had installed a firm-wide Local Area Network ("LAN") that was connected, in turn, with one of the commercial e-mail networks. These participants sent and received conference mail over their LAN's without having to dial some other host computer.

C. How Did It Go?

On the Monday morning designated in the letter of invitation as the first day, the author, as moderator, began the conference with a series of general questions about e-mail and law practice. Over the next three weeks, comments went back and forth among the participants. During that time, the active participants numbered eighteen; among them, they created about 150 messages, each ranging from a few lines to several computer screens of text. Approximately a dozen topics were addressed. Some of these brought about quick consensus; others were simply provocative or intriguing ideas for which consensus was neither forthcoming nor appropriate.

II. THE CONFERENCE

A. Use of E-mail Among Participants

What did we learn from the conference? For one thing, some people make surprisingly heavy use of e-mail. The heavy users seem to be concentrated in large law firms and corporate offices.

The most interesting e-mail use at our firm is as a first step in research. There is even, I am told, an informal associate network for requests for help on assignments. Messages transferred between the firm and clients have grown steadily to about 2000 per month.⁵ [Attorney with firm]

I get 50 to 70 messages a day and send 20 to 30. "Legal Advice," broadly construed, is intermixed with [a] wide range of communication. . . . Everyone has a computer at home and on the road as well as at [the] office. A one day turnaround on most queries is standard. . . . Drafts of pleadings and comments thereon are circulated over e-mail. [The m]ost important use of e-mail . . . is its role in [the] decision making process. Issues are teed up, commented

5. Italics indicate quotations from conference participants, edited by the author.

*upon and resolved, often without face to face meetings.
[Corporate counsel]*

I saved all my e-mail messages on our firm's LAN for the month of July to compile a statistical sample. Total messages during July: 441 excluding [the e-mail conference itself]. Of the 441 total, 204 were incoming, and 237 were outgoing. Of the 441 total, 340 were internal and 101 were external to the firm. Of the 340 internal messages, 197 were administrative in nature, 106 involved billable client work, 22 were educational, 14 were related to new business and clearing potential conflicts of interest, and 2 were for volunteer charitable activities. Of the 101 external messages, 29 were related to business development, 16 were with existing clients, 11 were with attorneys, 21 were with members of my family, 17 were educational, and 7 were for volunteer charitable activities. [Attorney with firm]

But interested law faculty make extensive use of e-mail as well.

1) I use MCI mail to collaborate with a co-author in a quarterly column for the IEEE. We exchange messages when in the idea stage. and Wordperfect binary files when we edit[].

2) I send faxes through MCI mail to folks without e-mail.

3) I use MCI mail as a gateway to the Internet to communicate with other academics. We discuss everything from information theory to good places to eat. I frequently use e-mail to try out research ideas.

4) I use e-mail to send articles to e-mail savvy publishers. (Yes, it does allow me to delay until the last second).

5) I use e-mail to communicate with my research assistant. I send him assignments and he sends me briefs. . . .

6) *We are setting up an e-mail system for exchanging preventive law information between the participants in the National Center for Prevention. We hope to extend this to corporations who work with the center.*

7) *I do not exchange e-mail with other professors at my law school (none of them use e-mail), but I do exchange mail with the reference librarian. He gives me info by e-mail, or pulls materials so they will be available when I come in to University. . . .*

I send 50 - 200 messages a month. [Law faculty]

I use e-mail to communicate with my students. All of my research assistants, seminar students, and directed research students get e-mail accounts on the main university VAX [computer] and on a law-school dialup bulletin board. I use e-mail over the Internet to communicate with other law professors active in the leadership of computing and law activities in legal education and with people . . . who are active in both e-mail and the public policy debate over electronic information policy. [Law faculty]

B. E-mail Is Not E-mail Is Not E-mail

When the conference began, many of the participants (including the author) looked upon e-mail as a monolithic technology: e-mail was e-mail, and it made sense to talk about what effects e-mail would have on law practice and teaching. It quickly became apparent that e-mail is an umbrella term that covers a variety of different manifestations. What effects it will have will vary with the types of uses that are being made of it.

In particular, e-mail often substitutes for paper mail: it can serve as an electronic letter or an article draft or a memorandum or a contract or any other document sent from one individual to another individual.

My model for e-mail is 18th century letter writing. If you look through the complete works of Jefferson, Franklin, Madison, etc., you discover that they wrote several short notes everyday. In their period, there being no phones or easy travel, they used paper as we use the ether. The only real difference is the delay time in messaging. It was also not unusual to carry on extended correspondences with persons one had never met.

While the [delay time] cannot be ignored, I do not think that it is as significant as the return to written communication rather than verbal. I would assert that Madison or Jefferson would be more comfortable with e-mail than some of my newly minted . . . law students. [Law faculty]

One substantive conclusion was that as a substitute for regular mail, express mail, or fax, e-mail raises few if any new legal issues, though it certainly expedites the mailing process. That fact alone may increase the volume of communications.

I agree . . . that e-mail more closely resembles a letter, both practically and legally. . . . Ensuring privacy and proving authenticity require new tools, but the legal issues are not conceptually different from those involved in protecting and authenticating hardcopy. [Attorney with firm]

Since e-mail has a certain informality about it (as one can see by my spelling) it seems to encourage questions and other comments more than a formal letter. Moreover, it is easier to respond. Lets face it, getting a letter out—printed and in the mail—is a pain even with a computer compared with e-mail. [Attorney with firm]

As a substitute for face-to-face meetings or phone calls, however, e-mail takes on a different quality: it eliminates visual and auditory cues, and adds the characteristic of a permanent record of the discussion.

The elimination of visual cues may mean that e-mail is most advanta-

geous for those who lack interpersonal skills or social "charisma." Electronic communication tends to devalue such skills, elevating in their stead the importance of verbal proficiency.

E-mail may devalue the fortunes of the charming and intimidating, relative to those strong in information skills. The former may shun or refuse e-mail, where they lack their usual advantage. The latter may embrace or abuse e-mail, where they feel no disadvantage. [Corporate counsel]

Like the observation that some people are better at speaking than at writing, and vice-versa, the observation about e-mail skills and personal skills is neither good nor bad. It does, however, suggest that different types of people will initially "take" to e-mail differently.

The lack of visual cues may also make e-mail most appropriate for communicating with people that one already knows well or with whom one has otherwise established a relationship of trust.

I think [the] utility and effectiveness of e-mail decreases as the communication becomes more hostile and confrontational. The openness of e-mail that is a virtue where base values and objectives are shared becomes a liability where there is mistrust and adversariness. Consequently, I suspect e-mail will develop more slowly in the litigation setting than in other areas of legal practice. [Corporate counsel]

Because sending messages out into the electronic void requires some trust and shared understandings regarding the groundrules for subsequent handling of the messages, electronic conversations will flourish among those who know that recipients will deal with the messages appropriately. A wink is the ultimate data compression—e-mail against the backdrop of shared expertise and values is pretty good. [Attorney with firm]

E-mail therefore is an unlikely medium for a teacher's first meeting with a student, or an attorney's first meeting with a client. But among

those with whom one deals on a regular basis, e-mail can acquire a quick, conversational flavor that speeds communication.

As in-house corporate counsel to a large financial institution, we advise and query people we've worked with for years, on similar issues with new twists. Were I to get an e-mail query from a stranger, in-house or out-house, I'd want phone or face-to-face contact until I had a sense of their resources, ethics and confidence.

After years of dealing together on a regular basis on closely related issues, [network communications within the company] naturally evolves into an arcane short hand well suited to the rhythms of e-mail: "Boss wants to know ASAP. SAID has a WC & COPL risk on PLR. Audit produced a big AP, and they offer to increase the LOC. What if they file Ch 11? Will the court freeze the LOC? I'm traveling, so e-mail—I'll download tonite. Warm Regards, . . ." In such an environment, where much daily work becomes a variation of fine points on familiar issues, e-mail provides a clear, fast [communications] channel that can sometimes deliver through time and distance better than fax, phone or face-to-face. [Corporate counsel]

C. Leveling Effects

The elimination of visual cues has consequences other than just an appeal to different types of people or a convenient shorthand for colleagues. Among the positive side effects is a tendency to "level" out certain differences among participants.

E-mail removes many of the nonverbal cues we associate with personality: voice modulation, looks, grooming, posture, stature, dress, office furnishings, and other subtleties of status and confidence. It devalues traditional advantages like charm, sex appeal, physical intimidation. It changes the paradigms of personal influence. [Corporate counsel]

Many of the advantages are that e-mail removes some of the visual [and] auditory barriers to communication and places the participants on a more or less level playing field
[University consultant]

In particular, e-mail used to create an electronic conference eliminates many of the usual indicia of status and station. You cannot see what the other participants are wearing, cannot hear their accents, cannot distinguish them by race, age, national origin, or disability. But for the fact that some names sound masculine and others feminine, e-mail users would have no means of recognizing gender (and if non-recognition of gender were an important goal, participants in an e-mail conference could use pseudonyms).

E-mail strips away the disabilities that many people feel in conversation. (Imagine what e-mail does to an English snob who places people by their accent). It is like the telephone test for assimilation: I cannot tell anything about the race/sex/nationality [off] my e-mail pals. Even someone with weak language skills can use a word processor and grammar checker to clean up . . . messages. [Law faculty]

E-mail is the telephone of a deaf and/or speechless person. A blind attorney has been an active participant on the Compuserve LawSig for many years, using a voice synthesizer to read and touch typing to write. [Attorney with firm]

One of the implications of this observation is that e-mail may be a very useful way for a law school or law firm to address sensitive topics in a new kind of community forum. With everybody "on-line" and visible only through what they say, not how they look or talk, a certain freedom of expression seems to ensue. It would be easy to have a student-teacher forum with the participants relying on pseudonyms, for example, to air complaints or simply ask questions that the questioner might otherwise consider too "dumb" or awkward to ask in person.

Anonymous conversations can have a down side, of course. Private computer "bulletin boards" sometimes experience what is called "flaming": unflattering personal commentary made easier because of anonymity or distance. But there are trade-offs in every activity, and the positive potential for e-mail in this context seems great indeed. Even face-to-face conferences, for that matter, sometimes exhibit sharp personal commentary. There, as with electronic conferences, a good moderator removes much of that risk—and more easily so with e-mail than otherwise. Our electronic conference, at any rate, experienced no difficulty whatever.

E-mail has great potential as a mechanism for intra-organizational dispute resolution or group problem solving. For issues within a law school community that have a strong emotional component—issues surrounding race or gender or sexual orientation, for example—the neutrality, leveling effects, and optional anonymity of e-mail offer tremendous potential for opening up communications and furthering understanding.

D. Mentor Relationships

E-mail has other exciting and little explored potentials as well. One suggestion, building on e-mail's low cost, avoidance of "telephone tag," and ability to carry documents as well as messages, was the use of e-mail to establish mentoring relationships between law students and practicing attorneys.

How would the group react to a proposal to use e-mail to tie law schools more closely to practice? Most law students have or will soon get access to the Internet. Perhaps a forward looking law school should set up an electronic adjunct mentoring program to extend class discussion by encouraging students to engage practitioners in e-mail exchanges. Would you participate in such a program?
[Attorney with firm]

Only a few responded to this query—but they responded favorably.

I like the idea of an electronic mentoring program to link law schools with practitioners. [My law school] hereby volunteers. [Law faculty]

I hope [the suggester of the mentoring idea] and/or others contact me about mentoring for law students. [Corporate counsel]

Such a program is now being established at the College of William and Mary. There already existed a "co-counsel" program that assigned individual students who chose to participate to interested alumni. However, the program clearly suffered from a difficulty in communications, as few students had answering machines or were able to say with precision when they would be at home to receive calls from an alumnus. On the other hand, students felt uncomfortable making the initial phone call to their "co-counsel" alumni contact. As a result, only the most persistent students made contact and were able to take advantage of the relationship. These communication problems should be greatly eased by the newly established e-mail mentor program.

E. Teaching

Several participants noted the possibility of conducting a short law school course either entirely by e-mail or with e-mail as a supplementary means of communication. Indeed, one participant had already conducted such a course, though not with law students.

This [teaching a class by e-mail] was an interesting exercise, as the students were highly motivated, middle management executives in institutions worldwide reaching as far as Brazil, Australia, and Saudi Arabia.

[A drawback was that] from the standpoint of comparison with the classroom, you do not know who is present at any given time, since they access the system often while traveling and do not necessarily pick up their assignments in a timely manner. . . . Overall, however, I think such courses can be conducted successfully, and will be a great asset for distributed legal education just as LEXIS is a great equalizing asset for the practice of law by small practitioners [University consultant]

Another participant described a "distance learning program" currently conducted by his law school without e-mail, that he felt would be greatly enhanced with the addition of e-mail:

We have students in Cairns (the same state but 1200 miles north), Darwin (2000 miles), Perth (3000 miles) etc. We try [to] cater [to] our distan[t] students in several ways. Printed "study guides" traverse course content and specify required readings. Video tapes of lectures supplement these. . . . The problem with most of this is that it is a one way street. Little if any interaction occurs between faculty and students. E-mail as an adjunct [would] therefore offer significant advantages. For a start, students could have direct regular contact with faculty members. . . . Course materials could be delivered and assignments filed without reliance on snail mail. [Law faculty]

One law professor had actually experimented with e-mail used as a supplement to a normal law school course, with good results.

I am excited by what e-mail adds to the mix even before one imagines adding distant experts and distant students to the equation. Whether the ratio is 40 to 1 or 120 to 1, the opportunity for more effective faculty student exchange represented by e-mail is, I think, enormous.

This past term I invited students in one class to view our internal e-mail system as an extension of the classroom. I made clear it was to be an extension and not a substitute. Questions were welcome from those who had been present for a class about [that class] for up to a week after the event (a limit designed to prevent this becoming a pre-exam review session).

What did I learn? Some students who were inaudible in the classroom found full voice through this medium and asked excellent questions. Questions could be reflective and make tight references to the book in a way few can pull off in the classroom. [Law faculty]

III. INTO THE FUTURE

A. Fluid Contracts

From practical suggestions about legal education, the conference occasionally veered to visionary predictions about the direction that e-mail might push the evolution of the substantive law. One participant raised the possibility that e-mail might eventually change the notion of what is a "contract" by melding together the tasks of contract drafting and dispute resolution. This idea grew from the observation that the speed and ease of e-mail communication encourages the rapid exchange of messages. It is thus possible to exchange bits and pieces of a document quickly, to make comments on a document quickly, and to solicit feedback quickly from a large number of people—to create, in short, a type of "living document."

I hope that the informality of e-mail will create ways to defuse risks by (1) creating relationship contracts, rather than static formal (long) documents that don't actually prevent disputes, (2) providing means quickly to discredit overargued or unsupported legal positions, (3) encouraging more broadbased and creative discussions of options. Perhaps one focus for future experiments can be to attempt to see whether the use of electronic messaging can in fact increase the benefits and reduce the costs of our legal system by preventing or resolving disputes. [Attorney with firm]

Rapidity and ease of on-going modification through e-mail suggest that even written contracts may become more of a steadily evolving, fluid, agreement than the current, static notion we associate with them today.

The notion of a "contract" is based on offer and acceptance. If e-mail is just a substitute for a written letter or two, or a discussion and a handshake, then contract law will presumably look the same in an e-mail age. But what if e-mail increases the fluidity of agreements: if terms are being modified several times a day as e-mail zips back and forth? Does that challenge any of our notions of what a "contract"

is or should be? [Moderator]

Fluid contracts might suggest that occasions for dispute would multiply, though it seems as likely that a contract might become something like an on-going bargaining session in which e-mail serves as the means of continually adjusting disagreements—more of a continuous alternative dispute resolution mechanism than a “contract.”

[I]t may be that the ability to exchange messages with a third party with both speed and precision can reduce disputes. In contract negotiation settings, the longer a disagreement or question remains outstanding, the harder it is to resolve. Perhaps we should be experimenting with on-line arbitration, with one or two screens submitted per side before a response of some kind from a neutral party. On the other hand, maybe the relative ease of submitting a dispute for a response from a third party would discourage local compromise. [Attorney with firm]

One problem with the use of e-mail for continuous dispute resolution or arbitration is that it seems informal, like a telephone call, yet it leaves a written record. Would that fact discourage a full exploration of options?

I do know of situations in which one party, fearful of the informality of e-mail, has specified that e-mail messages are not to count as relevant to contract interpretation or modification unless coming from a specified person. . . . E-mail creates a rich record of a relationship and in general that should reduce uncertainty about [what] has been agreed, or performed, over time. If used to negotiate contracts, e-mail creates a legislative history that can be very useful (or dangerous, depending on your point of view). [Attorney with firm]

We reached no consensus on this issue.

B. Polling the Reasonable Person

Another controversial idea that arose in the course of the conference was the concept of proving issues in litigation or arbitration by the use of e-mail polling. E-mail allows the use of a quick poll of a large number of people chosen at random to determine what they think. For example, what is "reasonable" or "customary" in a tort case grounded in negligence could be defined as what a majority of "pollees" thought was reasonable or customary. Not all conference participants agreed with this idea, of course; many found it undesirable on its face. The concept provoked a wide range of responses.

I do not see any reason why this environment will not be used for dispute resolution among many other uses. I am not sure that I see an electronic court or formal arbitration being established any time soon. However, it will certainly be used as a transport system for all types of documents and other forms of messages. Remember that this form of "e-mail" is a VERY primitive form of electronic messaging system which is transitional to a more highly developed and versatile digital system which can transport voice, video, and text simultaneously. Thus there will be no reason why a formal court procedure cannot eventually be devised which will be appropriate for "cyberspace." [University consultant]

I am not convinced that e-mail adds much to what is possible with state-of-the-art opinion survey techniques. I would not want a specific dispute resolved by an opinion survey as to what constitutes reasonable behavior. [Law faculty]

*I don't see why the common law *should*⁶ evolve according*

6. Due to limited control over the format of e-mail, emphasis is indicated with asterisks.

to an opinion survey of whatever population happens to be on the channel in which the poll is taken. I prefer a set of legal doctrines that evolve from a set of principles and precedents whose legitimacy has been established through their relationships with political institutions including the judiciary. Now if you want to integrate the polling idea with the defining characteristics of some of the political institutions [ellipsis in original] [Law faculty]

[The previous participant] says he does not want disputes resolved by an electronic poll. But consider the following: There has been substantial uncertainty about what policies ought to be adopted regarding system administrator access to e-mail in an employment setting. . . . Without necessarily treating a group vote as determinative, it would clearly be valuable for system administrators and policy makers at big corporations that use e-mail to be able quickly to canvas opinion regarding what constitutes proper practice in this novel setting. . . . [W]hy shouldn't we let some common law of employment relationships evolve in this way? [Attorney with firm]

On polling the general public, or general e-mail users, . . . we have elected officials who probably take account of polls too much already, especially as they get closer to election time. [Attorney with firm]

C. Knowledge Data Bases

Could a law firm's collective e-mail advice to clients (or a teacher's answers to student questions) become over time a kind of knowledge resource—the beginnings of an expert system on law practice or teaching, accessible by others? Again, participants voiced opinions that took us to the future and abruptly back.

Because e-mail is writing, and because many messages may be juxtaposed, discussion of legal issues in this medium places a premium on precision and thoroughness. Lawyers who compile good collections of substantive materials in electronic form will be able, quickly, to provide much more helpful responses than those who do not invest in such intellectual capital. So the combination of speedy reply and written comparability will encourage the development of computer based substantive tools for practice. [Attorney with firm]

Without disputing [the above] comment, I think it's worth observing that precision and thoroughness in e-mail discussions of legal issues (or of anything else) seems to be strongly correlated with ability to write well. Not every lawyer knows how to do this. [Corporate counsel]

E-mail could potentially be used not only for "knowledge data bases" but also for the data bases of publicly recorded information with which the law has long been concerned. Any e-mail message, after all, can be recorded and indexed and accumulated for later use.

Perhaps we'll see the [network] equivalent of filing offices, containing contract, UCC and land record filings, where, for a fee, contracts can be recorded in a Read-Only format accessible by those with appropriate clearance (and the fifty cents per Kb)—deeds, probated wills and liens public; contracts, trusts, wills of persons still living private, but the latter accessible by legal process for cause shown.

Parties could negotiate back and forth, exchanging revisions of e-mailed documents, until they attached encrypted "signatures" to it and launched it (with the filing fee withdrawal authorization) to the cyber-place of record. If all that is accessible via e-mail, with "Knowbots" searching the data bases to find data meeting certain descriptions, generating their own e-mail "reports" back to the "launch-

er," . . . much of the task of title searching, UCC searching and the like may be automated. . . . of course, if you are a techno-phobic title searcher, this may not be good news. [Corporate counsel]

D. Choice of Law

I have a client in Zagreb, Croatia. We talk by CompuServe. I send messages to him all the time. [Attorney with firm]

Electronic networks and e-mail already span the globe; ever greater interaction between people over great distances will become commonplace. This in turn raises the question of what law will apply to internationally coordinated ventures.

What if an agreement is reached among 20 or 50 or 100 people around the world about rights in some joint venture planned over an e-mail network? Or 20 people add comments to a message about a third party such that the comments collectively become defamatory? . . . What law applies? Who has standing to enforce rights? Of course, choice-of-law problems are by no means new with e-mail, but one can expect a dramatic increase in the number of these group exchanges with e-mail. Will that very increase in quantity bring about (or should it bring about) a substantive change in choice-of-law law? [Moderator]

There was no general answer to this question that would fit into current choice-of-law thinking but one participant saw the issue in a new and fascinating light.

By participating in this conference, it seems to me, we have entered a place populated by the participants in the conference. Of course, we have not really entered a physical place but the point is that you can ask many of the same questions about this place that you ask about any place. Lawyers might ask, for example, whether it is public or private. . . . An architect might ask whether the software and hardware, the architecture of this place, is conducive to

sharing ideas. A mediator might ask whether one can build trust in this kind of place. . . .

It seems to me that when you have created an environment in which these questions can be asked, you have created a place, or something that can be spoken about as if it physically existed and we were all there.

As for . . . the choice of law question: If cyberspace is a place, wouldn't it have its own law, Cyberlaw? [Law faculty]

IV. ASSESSMENT

Like anything new, conferences conducted by e-mail have certain advantages and disadvantages, compared to existing, in-person conferences.

Some of the disadvantages are readily apparent. One such disadvantage is the inability to meet others face-to-face for whatever help that is in the building of personal relationships. One conference participant wrote in a private message to the author, for example, that at the end of an e-mail conference day one cannot go out for a beer with the other participants.

Some of the productive aspects of face-to-face conferences lie in taking a break from the conference but still being able to talk with colleagues. There is no comparable break with an e-mail conference, although "side" (private) messages can be exchanged and may even be encouraged by the e-mail medium because they do not require the appearance of whispering.

Finally, face-to-face conferences feature a strong sense of leaving one's day-to-day world behind and thereby freeing one's attention for the new matters at hand. Because e-mail conference participants remain at their offices or homes, they have no corresponding sense of getting away.

The advantages of an electronic conference, however, are many. Chief among them is the extraordinarily low cost. Not counting anyone's time, such a conference is essentially free to its participants.⁷ Even considering

7. Commercial network participants sometimes are charged a small fee to send messages and in some instances are charged for the receipt of messages from outside the network, as

the time, the total number of hours required of participants (exclusive of the moderator) was far less than would have been true for even a one-day in-person conference.

It was a distinct advantage for participants to be able to "drop in" or out of the conference from time to time and yet fairly quickly be able to read over the transcript of all comments.

I have been away during the opening rounds of this conference and it is nice to be able to "arrive" late and, since it is all on my screen and nobody gives me a dirty look as I enter the conference room, still not feel that I have missed very much. [Law faculty]

The world-wide span of the Internet also allows participation by citizens of other countries as easily as those in the United States. One of the participants in our conference, for example, was a law faculty member in Brisbane, Australia.⁸

The potential advantages of having a conference with participants expressing diverse viewpoints is obvious. Less obvious, but equally important, is the fact that conferences on narrow issues become feasible. Drawing on interested faculty from around the world allows a critical mass of people to be assembled even on obscure conference topics. Although our conference was "world wide" only because of participation by one non-U.S. member, it included an array of academics, private practitioners, and others that would have been difficult to assemble for a face-to-face meeting.

Among the savings in time for the conference host (who in this case was also the moderator) is the avoidance of the endless details of an in-person conference: booking accommodations, setting up meeting rooms, arranging flights, arranging for coffee, etc. Those who have experienced the role of conference planner—or even had to make decisions for

from the Internet. One commercial network participant who was charged for messages estimated that the total cost of the conference to him was a little more than \$12. Internet participants, which would include most academic lawyers, will normally pay no charges whatever for their e-mail. The cost of an Internet connection is paid on a flat monthly rate by each university that chooses to join the network.

8. This participant actually resided in New Zealand for the duration of the conference. He would periodically connect from his personal computer in New Zealand to his campus mainframe computer in Brisbane, Australia, and in that way read and reply to conference messages.

somebody else to execute—will appreciate the minimal details of an electronic conference.

Conference participants can also save immense amounts of time as well. All travel time is eliminated, for instance. One participant in the e-mail conference estimated that he spent roughly four hours reading and writing comments throughout the three-week period of our conference. This is remarkably little time, and probably typical, for a conference that permits as much participation and generates as much commentary as an electronic conference easily does.

Nor does the volume of commentary go to waste. An electronic conference leaves its own transcript, accumulated automatically, without need of reporters or stenographers or audio-taping machinery. The transcript can be distributed quickly, again at essentially no cost, to participants or others over the same e-mail connection that allowed participation in the first place. Most significantly, the transcript is the conference. Others reading it can glean whatever there was to glean from the conference because nothing could have happened that is not fully and faithfully represented by the transcript.

In addition to the advantages of the “leveling” or equalizing of the participants previously noted, an electronic conference allows time for thoughtful replies to all questions and comments. No one has to make an off-the-cuff answer to a query for which more time would produce a better response; all queries and comments in an electronic conference allow thoughtful responses. Because of this time for deliberation, a much higher percentage of e-mail conference comments will be constructive.

CONCLUSION

The experiment of conducting a conference by electronic mail was a success. It is probably best not to compare an electronic conference to an in-person conference. They are different enough, in the type of interaction and in cost, that it makes sense to ask when is the one type called for and when the other—not whether one is better or worse than the other.

The answer to the question when to use one type versus the other turns on the relative advantages and disadvantages of the two formats. When personal, face-to-face contact, or a clear break from day-to-day activities is desired, then obviously a face-to-face conference is necessary. When low-cost and quick action are called for, an electronic conference

works extremely well. Moreover, electronic conferences level out differences among participants, removing many of the cues that may unconsciously condition our responses. The sense of focus that results can be liberating and highly productive. Electronic conferences have much to recommend them.⁹

9. Law faculty would do well to consider the use of electronic conferences. The author would be happy to discuss the mechanics or other aspects of electronic conferences with other law faculty. (804) 221-3826. Internet: thardy@mail.wm.edu.

