

Eyes on the Horizon

Karen Eltis, *Courts, Litigants and the Digital Age: Law, Ethics and Practice* (Toronto: Irwin Law, 2012), pp 135. ISBN 978-1-55221-233-2

Christina Spiesel

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—————EYES ON THE HORIZON—————

Karen Eltis, *Courts, Litigants and the Digital Age: Law, Ethics and Practice* (Toronto: Irwin Law, 2012), pp 135. ISBN 978-1-55221-233-2.

*Christina Spiesel**

The digital age, the time of enormous cultural change we are living in right now, is relentlessly affecting all of our institutions, forms of communication, and social habits. The title of Karen Eltis's book, *Courts, Litigants and the Digital Age: Law, Ethics and Practice*,¹ signals that she is addressing current issues in our justice system arising from this technological shift. It was a pleasure to read such a thoughtful, nuanced, and broadly informed book. Eltis brings to her writing considerable intellectual resources, her previous work on privacy and security, and her in-depth knowledge and training in comparative law. I found myself oddly moved—odd because it is a rare experience to be moved when reading professional legal writing, with its typically dispassionate probing of questions and commitment to exhaustive citation to other legal texts. So I, a scholar, not legally trained, who writes about aspects of the law in the context of digitally mediated culture, was surprised.² This slender book gently appeals for engagement with new circumstances within the discourses of the legal profession. I am sure many readers who are participants and not just observers in justice systems will find this book useful too, for it raises truly important questions, contains clear explanations, and makes recommendations for policy.

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¹ (Toronto: Irwin Law, 2012). Karen Eltis is Canadian and is a professor at the University of Ottawa. She also teaches at Columbia Law School in the United States. Her discussion is largely about the Anglo-American legal system with special focus on cases in Canada, but she does meaningfully comment on the Continental civil law system and urges that we learn from it where appropriate.

² The author is based in the United States and writes from that perspective. She wishes to thank Judith Resnik, Sydney Spiesel, and Neal Feigenson for their contributions, and wishes to relieve them of any blame for errors, which are all her own.

This book is principally about readers and writers of text, and some issues of uncertainty introduced to texts by the digital world: instability, the problems of authentication and the general lack of error correction, gatekeeping (and its absence), and the temptations of the virtual worlds we visit. Eltis's analysis does not particularly probe the role of the massive influx of pictures into legal discourses, and she does not take on multimedia.³ Because this book is a call to engage, I will take the reviewer's prerogative and raise some concerns not dealt with directly by the author, expand on some issues that are only sparingly referred to (probably for reasons of space) but which are important to consider, and I will explain—later—why I was moved. But first, I will give readers of this review an all-too-brief summary of the scope of Eltis's book.

Courts, litigants, the digital age, law, ethics, practice—these are global terms, and while her work touches upon all of them, Eltis has wisely narrowed her discussion to what can be effectively covered in a short book clearly intended for those who have—or should have—a professional interest in the issues it raises and little time to wade through a large monograph. The language is accessible, and nonlegal readers may well find it very interesting to read about the Internet's impact on courts and judges, juries, (by implication) lawyers, and court administration, even if the author's targeted readership is inside those institutions. What, in her view, has the digital age in particular conferred on courts?

Eltis's answer involves a knot of interrelated issues pertaining to privacy, security, and publicity, as digitized legal text becomes widely available and as judges, litigants, and the public (some of whom become jurors) use social media, creating a new kind of text that can have consequences for the legal system. Legal texts are not behind walls, and neither are social media texts. Ready access to the vast library of the Internet confers new research abilities on all, including on judges. How can the Internet serve justice and not undermine it when courts are sites of the controlled revelation of facts that are tested? Should judges do background research on facts related to cases before them? What about jurors, perhaps tempted to do their own Internet searches and use social media while serving on a trial? Information, good (reliable) and bad (running from the ill-informed to crafted falsehoods), is widely dispersed across the Internet and available to all participants in legal action, including judges. The unfiltered (by the courts) results of searches will be available to anyone who looks for

³ For full disclosure, I am a co-author with Neal Feigenson of a book about the visual turn as it is affecting the law: Neal Feigenson & Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York: New York University Press, 2009).

them.⁴ In North American common law systems, judges must give their reasons and must support them with authoritative knowledge of the law and the facts. To the degree that judges' opinions are based on materials from the Internet, there is danger of improperly vetted information creeping into the record and of errors in interpretation arising because of textual errors resulting from the instability of the electronic medium itself. Eltis asks what happens to the judicial record and to the authority of our courts in the flickering electronic world of unstable text, in which errors of record and errors of fact can easily happen just from the (mal)functioning of the system itself.

The Internet is a dynamic medium, forever changing, but paradoxically, it never forgets—as unfortunate victims of identity theft discover when they try to repair their credit. Once posted, information cannot be recalled, since copies can be proliferated beyond any ability to find all of them, making it impossible both to ever correct bad information and to have confidence that citation to materials will be stable. Links get broken or become irrelevant or inaccessible as machines on which files are stored go off-line. In the legal context, stability is important so that those wishing to retrace the development of a judge's thinking may do so easily; for this, the Internet offers a promise (that materials will be easy to locate and access) that it cannot fulfill. Even if judges follow Eltis's wise suggestion to maintain hard copies of electronic materials they have either used for background or cited in documents, those reading the judge's opinion may not have access to these materials. This "lack of authoritativeness and durability effectively cripples the Internet's ability to tell courts anything of real substance about the reality it purports to depict."⁵

Material available through Internet searches can include social media postings as well. Social media are by definition sites of informal, often spontaneous communications where expectations regarding demeanour, proper address, and conventions of acceptable content, grammar, and

⁴ Paradoxically, though, searches themselves are filtered by the search providers' algorithms, which constitute a kind of filter; as advertising revenue becomes ever more important, searches can become inflected by outside interests. Search engine design uses indexing (keywords help with this), ranking (prioritizes items in the results), and what the search engines are now able to learn from search requests—for Google alone, 11.7 billion requests in April 2012: see comScore, Press Release, "comScore Releases April 2012 U.S. Search Engine Rankings" (11 May 2012), online: comScore <http://www.comscore.com/Insights/Press_Releases/2012/5/comScore_Releases_April_2012_U.S._Search_Engine_Rankings>. Not all links to other materials are equally important, and there are all kinds of invisible considerations of context that influence what the search engine shows in response to a query (returns). See e.g. Lucas D Introna & Helen Nissenbaum, "Shaping the Web: Why the Politics of Search Engines Matters" (2000) 16:3 *The Information Society* 169.

⁵ Eltis, *supra* note 1 at 45.

spelling have very different practices than we are accustomed to in written and spoken legal discourses. Site members can view one another's profiles, and boundaries between friends and friends of friends on-site can quickly become obscured. Judges and jurors use these forums along with millions of unknown others.⁶ This means that judges can face a loss of reputation or be seen in an adversarial light. Judges at trial are supposed to maintain the appearance of impartiality, so judges expressing personal opinions about matters under discussion on a social networking site may be seen to be taking sides or expressing values that someone may consider adversarial or improper for a judge to express. Or, like everyone else, they may reveal information in the flow of conversation that might be appropriate for an inner circle but not the world at large. As well, litigants can be exposed to damaging release of information; jurors can be tempted to research cases on their own or to share trial information and opinions inappropriately; and information about jurors is discoverable as well.

In short, the curtains that shielded the courts from too much openness have been removed. Privacy in court documents was maintained in part because of the need to go to court to access them. Further, court proceedings take place in special rooms with ritual behaviours, all of which contribute to setting the court in a special and regulated space. Probably only participants in the legal system were truly aware of the elaborate balances between public disclosure and transparency, on the one hand, and privacy and the protection it can provide, on the other, that informed both formal and informal court practices in the past. So, for instance, trial documents are public in the analogue world, but as it takes considerable energy and some costs to access them, all participants had some measure of privacy in the disclosure of personal information. Now, anyone with an Internet connection and basic searching skills can find vast amounts of information that would have formerly been hidden. Eltis provides cases and examples for all of these situations and others. If we cherish a culture that takes the rule of law seriously, what do legal professionals need to know in this changed environment? What new knowledge is required, and what competencies should professionals possess? Whatever the complete answer is, it surely ought to include prudence about technology and caution about its uses: judges and lawyers need advance thinking and not

⁶ "The number of judges on social media profile sites continued to rise. In 2012, 46.1 percent of judges responding to the survey reported using the sites, with the majority (86.3 percent) on Facebook" (Regina Koehler & Christopher J Davey, *2012 CCPIO New Media Survey: A Report of the New Media Committee of the Conference of Court Public Information Officers* (St Petersburg, Fla: Conference of Court Public Information Officers, 2012) at 5). Facebook itself became the world's third most populous "nation" in 2010: see "Status Update: Facebook Has Become the Third-Largest Nation", *The Economist* (22 July 2010), online: [The Economist <http://www.economist.com/node/16660401>](http://www.economist.com/node/16660401).

just reactive thinking. Eltis's suggestions are specific: Preserve hard copies of important materials from the Internet. Undertake an affirmative obligation to protect privacy. Eltis also recommends that judges go slowly in posting opinions rather than rushing to proclaim the news. These habits are consonant with traditional judicial values of impartiality, fairness, diligence, and dignity,⁷ even if they have a new flavour—such as the recommendation that judges should be very careful of using *Wikipedia* as a source.

Given the inherent problems that arise from our digitally networked lives, the author further asks, how can judges be participants in the digital age? If they simply refuse to engage, they will not be sharing a culture with the litigants who appear before them, not to mention the juries that serve in their courts; if they do engage, they run the risk of inadvertently losing the appearance of neutrality in the eyes of public, having their private lives exposed, and having their dignity and trustworthiness questioned. Formerly, public figures could carefully control the social face they would show in very different contexts. That is no longer the case.⁸

⁷ For a code of ethics for judges in the United States, see American Bar Association, *Model Code of Judicial Conduct* (February 2007), online: American Bar Association <http://www.americanbar.org/groups/professional_responsibility/publications/model_code_of_judicial_conduct.html>. The American Bar Association puts it this way:

An independent, fair and impartial judiciary is indispensable to our system of justice. ...

Judges should maintain the dignity of judicial office at all times, and avoid both impropriety and the appearance of impropriety in their professional and personal lives (*ibid.*, Preamble, paras 1-2).

See also Eltis, *supra* note 1, ch 5 (“‘Googling’ The Judge and the Perception of Impartiality: Out of Court Speech, Internet Search Engines, and Judicial Ethics”).

⁸ As I write, there is a very important intellectual property dispute between Apple and Samsung unfolding in San Jose, California, very close to Silicon Valley. The jury returned a verdict in Apple's favour on August 24, 2012. Fans of the litigants have raised the question of judicial bias in the online technology press: see Greg Sandoval, “Apple v. Samsung: Why Is Judge Koh so Angry?”, *CNET News* (21 August 2012), online: CNET <http://news.cnet.com/8301-13579_3-57497096-37/apple-v-samsung-why-is-judge-koh-so-angry/>. The article goes into some detail about Judge Koh's background and history, as well as her in-court demeanour. While using an impartial voice, it is hard not to ask whether the journalist is engaging in some litigation public relations that could be understood as part of trial strategy, if the facts of the story originated from one or another legal team. Another example is the publicity around Justice Thomas of the US Supreme Court: see Mike McIntire, “Friendship of Justice and Magnate Puts Focus on Ethics”, *New York Times* (18 June 2011), online: New York Times <<http://www.nytimes.com/2011/06/19/us/politics/19thomas.html>>. These have to do with media reports putatively investigated prior to publication and in established media. What about informal social media posts?

The book suggests that rethinking what the term “privacy” encompasses might help. Instead of thinking of privacy as analogous to spatial withdrawal to some place or situation where we cannot be observed, overheard, and so on, Eltis suggests that North Americans might do well to learn from Europeans. In the civil law tradition, privacy is conceived as pertaining to persons, and invasions of privacy are thought to lead to a “loss of meaningful control over the integrity of information.”⁹ Under that legal conception, people are defined as having “personality rights, with their countervailing duties”;¹⁰ Europeans are bringing these values to their media policy-making. Eltis suggests devising a hybrid of the common law and civil law traditions to ameliorate some of the problems both of definition and of administration. This may be very difficult to accomplish given the degree to which the gathering and circulation of personal information have been monetized, at least in the United States.

Finally, Eltis reminds us that courts are publishers; in the common law system, published opinions and their supporting documentation make the legal record public and visible, thereby providing the ongoing record that subsequent cases are expected to build on. This fosters confidence in the legal system that, in turn, engenders a willingness on the part of members of the public to use the courts to resolve their conflicts. Eltis fears that now litigants may be hesitant to use the courts for fear of potential worldwide exposure of information pertaining to them, their families, their associates, or their enterprises. Openness and access are fundamental to the rule of law in democratic countries, and their loss would be a considerable cultural blow. In articulating these problems, Eltis points to issues that lie at the heart of justice systems in democratic countries—issues that need to be addressed by members of the court system themselves. Eltis suggests that it is time for the courts to become both more knowledgeable about the technology that is affecting them and more proactive in dealing with those effects. Close to concluding, she writes:

Approaching the networked environment with cautious openness rather than trepidation or unbridled enthusiasm is a simple but helpful stance. The Internet age—with its promises and hurdles—cannot bypass the judiciary and reflection must ensue to ensure that the benefits of technology are harnessed towards the better administration of justice rather than subverted for undermining public confidence or further curtailing necessary judicial activities.¹¹

Marc Andreessen would agree that technological growth will not bypass the judiciary, but I suspect he and Eltis have conflicting values at

⁹ Eltis, *supra* note 1 at 120.

¹⁰ *Ibid.*

¹¹ Eltis, *supra* note 1 at 119.

stake. Andreessen, who invented the browser and is now an important venture capitalist in Silicon Valley, thinks technology is “poised to remake the whole economy. ... The next steps ... are education, financial services, health care, and then ultimately government.”¹² This is a vision of all the cultural sectors subsumed under a unifying (because submitted to the demands of software) technological regime. Is the legal system of the future, then, a computer application?¹³ “Technology is like water; it wants to find its level,” says Andreessen.¹⁴ This language makes the artificial human construction of technology into a natural phenomenon that cannot be argued with. Andreessen asserts that, as a natural force, technology deserves and maybe even commands our obedience. If technology simply *is*, then people cannot make choices about it, whereas if technology is thought of as giving us tools that we use, then we ought to have options for how it is designed and when it is used.¹⁵

Here, then, are the questions that must be asked both by the judiciary and by its public: What is meant by a legal system, and what do we want

¹² Marc Andreessen, “The Man Who Knows What’s Next”, *Wired* 20:5 (May 2012) 162 at 169.

¹³ Andreessen considers that the fundamental nature of the Internet is that it gives access to applications (which include all Web pages) rather than provide information. Applications are pieces of software—computer programs—that allow users of computers to accomplish specific tasks, in contrast to the operating system that governs the basic functions of the computing device. Applications generate or control materials like text or images that are presented to the user in what is considered the content layer. I am using word-processing software (an application) to create this piece of writing, which I see on my monitor. When we consult the Internet, we are reading, seeing, or hearing content that is made available to us by devices using software. Common sense would tell us that these representations can be considered “speech” and could be legally protected as such. (And yes, there are many unsettled issues around ownership and freedom of expression in the digital world we have been creating. These issues are too big to discuss further here.) If, however, we buy Andreessen’s claim that Web pages are not representations of content but are, instead, an “application”, then the pages could be subject to other kinds of regulation, and perhaps we need not worry about speech issues. In fact, both things are true: Web pages are generated by software and often permit a variety of functions for users to deploy to get more content or perform interactive operations (like doing a calculation or changing the size of an image). They also display content. The best we can do if we value the protection of speech, then, is to acknowledge that the content layer should not be confused with the software layer, which Andreessen is trying to do.

¹⁴ *Supra* note 12 at 166.

¹⁵ For a counternarrative about technology, see David F Noble, *The Religion of Technology: The Divinity of Man and the Spirit of Invention* (New York: Alfred A Knopf, 1997). For a more recent account, see Jaron Lanier, *You Are Not a Gadget* (New York: Alfred A Knopf, 2010).

it to be in the future?¹⁶ If we value something we call the rule of law, what values do we express through that idea? Is the rule of law best served by public or private entities creating software that will be opaque no matter who develops it?¹⁷ That is, can software be transparent in the same way that written law is?¹⁸ Should justice be monetized? This is the path of technological development—some private entity will build a technology, and there will be costs to maintaining it.¹⁹ In a technological regime, those costs can begin to affect a legal system in a more direct way, just as health insurance reimbursements may control the uses of certain medical devices or diagnostic algorithms.²⁰ Economic incentives are used to induce behaviour, whether it is on the part of the public through systems of taxation or through pricing of products, or on the part users of software. Software controls how people use it through programming defaults, permissions, and denials. Software interfaces can either make it easy for humans to use or may ignore their needs entirely, imposing undue burdens. When software is provided to a government entity by a vendor, the vendor does not necessarily place public good over competitive strategy. Design decisions will be covered by intellectual property considerations that may well lead away from best practices. Further, economic incentive can lead to some technological structures being created and to other possibilities being neglected. Often, the claim is made that things will be more effi-

¹⁶ One rigorously detailed description of a legal system can be found in Robert S Summers, *Form and Function in a Legal System: A General Study* (New York: Cambridge University Press, 2006) (especially chapter 10, “The Overall Form of a Legal System as a Whole”).

¹⁷ At its most general statement, the rule of law can be defined as “all persons and authorities within the state, whether public or private, should be bound by and entitled to the benefit of law publicly made, taking effect (generally) in the future and publicly administered in the courts” (Tom Bingham, *The Rule of Law* (London: Allen Lane, 2010) at 8). The laws that control the software are opaque to users.

¹⁸ These large topics have developing literatures, and in fairness, all software is not the same. Readers who wish to pursue this might see e.g. Lawrence Lessig, *Code: And Other Laws of Cyberspace* (New York: Basic Books, 1999); Neal Feigenson & Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York: New York University Press, 2009) (especially chapters 6 and 7). See also Danielle Keats Citron, “Technological Due Process” (2008) 85:6 Wash L Rev 1277.

¹⁹ Here is an example of huge costs and little benefit: after the expenditure of half a billion dollars to create a paperless, integrated case management system for the entire state of California, the state judicial council voted in March 2012 to halt deployment of the system. The beneficiaries to date had been vendors and consultants. See Dan Walters, “California Judicial Council Halts Court Case Management System”, *The Sacramento Bee* (27 March 2012), online: Sacramento Bee <<http://blogs.sacbee.com/capitolalert/latest/2012/03/california-udicial-council-halts-controversial-court-case-management-system.html>>.

²⁰ See e.g. Howard Brody, “From an Ethics of Rationing to an Ethics of Waste Avoidance” (2012) 366:21 New Eng J Med 1949.

cient if submitted to a technological regime. Yet will justice emerge from efficiency?

For different thinkers about the law, the idea of applying technology lies on a continuum between “never” and “why not go the whole way?”, in part depending on what they believe laws are in the first place.²¹ Are laws just rules that must be obeyed? Do courts engage in balancing interests not encompassed by a set of rules? And, of course, we know that the law serves multiple social functions, from shaping private behaviours and settling disputes, to large-scale public policy formation; courts and their litigants can become involved at many points along the way. In short, the judiciary is a third branch of government.²² Before we rush to modernization through technology, courts need to assess what risks to the rule of law are involved.

Eltis emphasizes the importance of transparency in democratic legal systems. Transparency is a word frequently deployed to mean availability—people know where to go for information, can see the large shape of a public legal system, and have rights and some knowledge of what they are and how to exercise them. Transparency is considered to be the major means by which people can keep watch on the operations of power, and the “sunshine” of disclosure can prevent both corruption and the abuse of power. What does it mean for the transparency of a legal system that software is opaque in its operations?²³ What does it mean for the rule of

²¹ Readers interested in visions of law-through-application might begin by exploring the expert agent SHYSTER, a case-based expert system for lawyers; see e.g. James Pople, *A Pragmatic Legal Expert System*, (Aldershot, UK: Dartmouth, 1996). More recently, a team of legally trained young scholars reported on FantasySCOTUS, a crowd-sourced software agent designed to predict US Supreme Court decisions: see Josh Blackman, Adam Aft & Corey Carpenter, “FantasySCOTUS: Crowdsourcing a Prediction Market for the Supreme Court” (2012) 10:3 Nw J Tech & Intell Prop 125. The article concludes with a proposal for a future agent called Harlan that could tell a client how a case will turn out and “tell an attorney not only what will happen, but also how it should be accomplished” (*ibid* at 165). The authors conclude, “We hope that FantasySCOTUS will serve as a first step in the evolution from today’s time-consuming, customized labor-intensive legal market to tomorrow’s on-demand commoditized law’s information revolution” (*ibid* at 166). In fact, it appears to be already a nascent enterprise. Meanwhile, lawyers are being replaced: see John Markoff, “Armies of Expensive Lawyers, Replaced by Cheaper Software”, *New York Times* (4 March 2011), online: New York Times <<http://www.nytimes.com/2011/03/05/science/05legal.html>>.

²² This is the case in the United States, where the judiciary is defined as a third branch of government. See “U.S. Federal Government”, online: USA.gov <www.usa.gov/Agencies/federal.shtml>. This classification does not prevent debates about the proper role the judiciary should play.

²³ The issues here are complicated. Software is opaque because it is composed of layers of code that become completely incomprehensible the closer they come to the hardware itself. And the hardware has logic wired in. In any normal sense, it is very hard for any-

law that judicial independence could be undermined through software itself? A simple example: Americans had no way of knowing that their telephony was being copied and sent to the National Security Agency;²⁴ similarly, neither would court systems know if any of their private data on a given network was being observed outside the courts and whether this capability of outside parties to access the data was built in by a manufacturer or vendor, a government contractor, or an anonymous other wrongdoer.²⁵ As with the first example, it is likely that in most cases no harm was being done to individuals, at least as long as they were not considered persons of interest. In terms of courts, should the issue become important enough to someone with power and vested interests, a little advance warning of the judge's line of thinking might give an unfair advantage to one side or another in litigation, almost like insider trading.²⁶

Lucas Introna, writing on ethics and information technology, also appeals to the value of transparency, meaning by it the

opening up of the design and development (and implementation) activity to multiple stakeholders for ongoing scrutiny and debate ... [and] designing technology in such a way that it is relatively transparent in its operation – i.e. that it is possible for ordinary informed users to understand the (un)intentions, (im)possibilities,

one to read the governing code in million-line programs generated by teams of programmers. This situation is further complicated by the fact that software is, for the most part, protected intellectual property containing trade secrets no company wants to disclose.

²⁴ For news accounts, see John Markoff & Scott Shane, "Documents Show Link Between AT&T and Agency in Eavesdropping Case", *New York Times* (13 April 2006), online: *New York Times* <<http://www.nytimes.com/2006/04/13/us/nationalspecial3/13nsa.html>>. See also Ryan Singel, "Spying in the Death Star: The AT&T Whistle-Blower Tells His Story", *Wired* (10 May 2007), online: *Wired* <<http://www.wired.com/politics/onlinerights/news/2007/05/kleininterview>>.

²⁵ Even without mal-intent, back doors are built into software by programmers so that they can more easily access parts of the code. This is similar to children's board games where it is possible to move ahead or fall back many spaces just by landing on a square. The advantages of such back doors are obvious: with software running through millions of lines of code, it would take a very long time to locate relevant sections to make adjustments or repairs. Yet other programmers understand these practices and are able to exploit them for external purposes. This is part of the technical tool set of hackers. See e.g. Cory Doctorow, "Your Cellphone Is a Tracking Device that Lets You Make Calls", *BoingBoing* (4 September 2012), online: *BoingBoing* <<http://boingboing.net/2012/09/04/your-cellphone-is-a-tracking-d.html>>.

²⁶ In fact, believing that enhancing predictability would be an aid to lawyers and litigants, the builders of Fantasy-SCOTUS write, "If lawyers could ascertain in advance what the likely results of litigation would be, they could 'avoid ... disputes altogether' and settle out of court" (Blackman, Aft & Carpenter, *supra* note 21 at 165 [footnote omitted], citing Richard Susskind, *The End of Lawyers: Rethinking the Nature of Legal Services* (Oxford: Oxford University Press, 2008) at 184).

(dis)functions, affordances/prohibitions of the artefacts that constitute their way of being.²⁷

He hopes that this different approach would make it more possible for the public to scrutinize the actions of the court system digitally just as it could in the analogue world.

This is a security issue as well as a cultural issue, and it sits precisely at the intersection of courts and technology.²⁸ Thinking back to the conduct demanded of the judiciary,²⁹ its independence, a value regarded as crucial to good judgment, is threatened if its networks are penetrated by outside interests. If the courts use servers connected to other agencies of government, different branches may well take an interest in information about ongoing litigation prior to decisions being made. If courts use servers provided by cloud services maintained by the private sector, the same interest in data may well pertain.³⁰ But even if courts have their own servers, when they are connected to the Internet, their security depends on forces over which courts have no control. The experience of the visitor to the Internet is of a virtual space, and it is easy to forget that it is instantiated by very physical entities—hardware, wires and cables, power sources. Devices can communicate with each other because of software. The software that is permanent and that makes the machine run is called firmware. Firmware makes choices. Think of processes analogous to all the automatic systems that run the body outside of human choice. People at their desks do not have control over the machines that structure the virtual space of the Internet. Security questions can come up in any layer of the complex technology architecture. How the hierarchies of machines are governed is a political and social question.³¹ Whose information gets priority in transmission? That is the net neutrality discussion. How many

²⁷ Lucas D Introna, “Maintaining the Reversibility of Foldings: Making the Ethics (Politics) of Information Technology Visible” (2007) 9:1 *Ethics and Information Technology* 11 at 22.

²⁸ See Bruce Schneier, *Liars and Outliers: Enabling the Trust That Society Needs to Thrive* (Indianapolis: John Wiley & Sons, 2012). Schneier points to the problem of protecting security while protecting a community that actually needs the liars and outliers of his title, who represent “an engine for innovation, an immunological challenge to ensure the health of the majority, a defense against the risk of monoculture” (*ibid* at 248). He sees some of our security concerns as a crisis of trust without which no society can function and which always involves risk. Eltis quotes him as well.

²⁹ See *Model Code of Judicial Conduct*, *supra* note 7.

³⁰ Eltis mentions servers in the introduction to the book but does not pursue this topic: *supra* note 1 at 11.

³¹ Needless to say, this is a huge topic. Readers might find it interesting to learn something about the embedded values in the technology that connects us. See e.g. Laura DeNardis, *Protocol Politics: The Globalization of Internet Governance* (Cambridge, Mass: MIT Press, 2009).

Internet addresses ought there to be, and who governs that? The proposal to have an adult-content domain name falls here. Should the Internet become more hierarchical so that governments can exercise more control? Each manufacturer covering the whole range of hardware, software, and peripheral devices (not to mention “smart” objects like our cellphones and cars) wants its intellectual property protected. What, exactly, can transparency mean in this context?³²

Security, privacy, and trust are issues that arise at the level of digital technologies, just as they can occur throughout the social order. Courts in the emerging order have to examine their own abilities to trust the technologies they deploy and consider them as part of the overall legal system they administer. They must not imagine technology as a set of neutral tools made available to them for purchase (or increasingly, for “rent” through licensing contracts). Like the public at large, judges may think of their computers paradoxically. On the one hand, they will relate to them as other people,³³ and on the other, they will see computers as the output of our quantitative, scientific, and engineering capacities, and thus as rational because of their source and methods.³⁴ What most will miss is the cultural dimension not only of what is on their screens but also of the technology itself. It is designed by humans, and it may have bias, which can arise from deliberate acts or as the unanticipated consequence of other design decisions. The bias can arise from how data is chosen, stored,

³² This is not the place for a description of the malfunctions of the current intellectual property regimes. Powerful companies producing intellectual property (e.g., movies, music, genetically modified agricultural products), faced with the ease of transmission of digital copies across the Internet, are looking for ways to contain their creations. In the case of copyrighted materials, they have been moving to automate enforcement through the use of software and hardware arrangements—movie files that are regionalized and will not play out of district, or little software robots (bots) that “crawl” the Internet looking for specific data that would indicate a copy of whatever the bot is coded to care about. This removes due process rights and other rights that individuals have. For a more overarching discussion, see Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World* (New York: Random House, 2001).

³³ See generally Byron Reeves & Clifford Nass, *The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places* (Cambridge, UK: Cambridge University Press, 1996).

³⁴ I have been urging readers to learn more about the technologies themselves in order to think about their consequences. For readers interested in computing, intelligence, and morality, see e.g. Georges Ifrah, *The Universal History of Computing: From the Abacus to the Quantum Computer* (New York: John Wiley & Sons, 2001); Pamela McCorduck, *Machines Who Think: A Personal Inquiry into the History and Prospects of Artificial Intelligence* (Natick, Mass: AK Peters, 2004); Jeff Hawkins & Sandra Blakeslee, *On Intelligence: How a New Understanding of the Brain Will Lead to the Creation of Truly Intelligent Machines* (New York: Henry Holt & Company, 2004); Wendell Wallach & Colin Allen, *Moral Machines: Teaching Robots Right from Wrong* (Oxford: Oxford University Press, 2009).

combined, displayed, and deployed.³⁵ Because efficiency depends upon collapsing (simplifying) and storing information for retrieval, decisions are made about what data to keep and what can be regarded as expendable,³⁶ and at each step, material is “lost”. Our brains do this too, but there is a large difference between the human brain and our technological systems: our technological systems are more rigid, harder to update and change, especially as systems become more interdependent. For example, human inspectors can determine whether a use of copyrighted material in another context conforms to fair use or not according to the pertinent legal scheme, changing determinations with changing criteria. Software bots surfing the Internet and searching for instances of copyrighted materials can determine the presence or absence of the materials but know nothing about the context in which they are presented.³⁷ It is not difficult to imagine competing entities automatically generating takedown requests of content to the detriment of the medium itself and the social purposes it is performing.

Yet access to knowledge is regarded by many legal scholars as a fundamental human right.³⁸ Automatic enforcement power can deprive people of essential information they need, whether for education, health, or safety, because of overbroad enforcement. When governments permit this privatization of enforcement, they remove due process rights and public control over punishment. To make this very concrete for a judicial system, what may happen if documents contain copyrighted material or if evidentiary exhibits use a visualization that then becomes the subject of an intellectual property takedown enforcement? Even if public purpose is added to fair use criteria, that would not cure the problem caused by automaticity.

³⁵ For search engine bias, see Abbe Mowshowitz & Akira Kawaguchi, “Bias on the Web” (2002) 45:9 Communications of the ACM 56; Introna & Nissenbaum, *supra* note 4.

³⁶ Readers likely have experienced the readable changes in their picture files as resolution parameters are shifted or, alternatively, the degradation of a photograph as it is worked on in .jpeg format, eventually making it impossible to return to the original state of the file unless it was saved separately.

³⁷ See Geeta Dayal, “The Algorithmic Copyright Cops: Streaming Video’s Robotic Overlords”, *Wired* (6 August 6 2012), online: *Wired* <<http://www.wired.com/threatlevel/2012/09/streaming-videos-robotic-overlords-algorithmic-copyright-cops/>>.

³⁸ For an overview of the many strands that comprise the discussion of access as a human right, see Gaëlle Krikorian & Amy Kapczynski, eds, *Access to Knowledge in the Age of Intellectual Property* (New York: Zone Books, 2010). Readers should pause over this automatic enforcement power deployed by corporate interests without negotiation with government and without criteria concerning human rights as to the information being factored in. Think of this applied to judicial opinions and other documents crucial to a system of law.

Eltis provides a detailed view of the specific challenges courts face from “Why Should Courts Care?” to “Additional Precautionary and Proactive Means”³⁹. I have been adding an account of issues that will further challenge our legal systems from the point of view of a radically shifting culture. Computer literacy can no longer be regarded as simply knowing how to operate hardware and software. What is needed is knowledge about digital technology, a demystification. Judges especially must know about the properties of the networks that enable the vast library on the Internet and the interactivity that has made it a social space infused with cultural power and importance.

The issues I have been outlining will all affect how the legal system works and whether and how judges remain independent and impartial. We are in the midst of a transformation of our cultures by digital technology that is so great that no aspect of our common lives will remain untouched. I have pointed to a few of them. I hope that I have convinced you, the reader, that the issues are large and important and that they demand of us that we see the systems and not just the machines in our offices, that we see the properties of networks and not just the wonderful content that appears on our screens from the vast library of the Internet. This has not been the focus of “technologizing” the law through, for instance, electronic records, audio recording of trial testimony, debates on cameras in the courtroom, distance appearances, expert systems for lawyers—all of which seem to conceptualize the court as a discrete unit. Once social media came into the mix, different uses came to the fore. Court information officers believe that using social media themselves will “support transparent courts and an informed citizenry through outreach and transparency.”⁴⁰ In at least one case, information officers used social media to argue for an issue important to the judiciary.⁴¹ Social media are seductive to use for communicating with a large number of people, and the cost seems low. The Conference of Court Public Information Officers lays out the landscape of cultural difference quite neatly:

- New media are decentralized and multidirectional, while courts are institutional and largely unidirectional.
- New media are personal and intimate, while courts are separate, even cloistered, and by definition independent.

³⁹ Eltis, *supra* note 1 at 2, 117.

⁴⁰ Chris Davey, “Third Report Released on New Media’s Impact on the Judiciary” (2 August 2012), online: Conference of Court Public Information Officers <<http://ccpio.org/blog/2012/08/02/third-report-released-on-new-medias-impact-on-the-judiciary/>>.

⁴¹ *Ibid.*

- New media are multimedia, incorporating video and still images, audio and text, while courts are highly textual.⁴²

The question is not whether to use it, but how. From their perspective, these differences need to be addressed before the courts can effectively engage with the social media landscape. Eltis and I would probably agree that this must be approached with great caution and awareness of the pitfalls for the courts. The qualities of traditional institutional culture underpin our notions of judgment—both what it is to have it and to perform it—and so rather than taking a big leap, the judiciary ought not just to be cautious but also to be proactive regarding their values.

Scholars like Carr and Turkle⁴³ express concerns that our engagement with, and seduction by, our digital tools is literally changing how we think, in a revolution as profound as was learning to read and write. They are concerned about the loss of capacity both to produce cultural work that requires long concentration and to relate to other humans in the rich face-to-face encounter involving all the senses. What will be the effect on judgments if judges lose their capacity for long concentration along with their litigants? Might judges, too, become so unused to the face-to-face encounter that they will prefer to make judgments on the screen? The current generation of judges knows both sides of this because they, like us, are caught in the middle. Rather than thinking negatively, they have a great opportunity to think positively about what changes may be made, about what should be preserved, and about where change may be productive.

In her first chapter, “Framing the Issues”, Eltis points out that the digital technologies that can provide research tools and access to a new kind of social life can also be used as a system of surveillance of the work habits (time spent on various tasks, time spent browsing the Web, unfinished writing) and communications (which include social media postings) of judges at work. Does this undermine judges’ independence? Does this substitute quantity for quality in judicial decision making? Would surveillance of judges’ work produce the same effects as in medicine, where physicians’ cognitive work with patients is often uncompensated?⁴⁴ In 1998, sociologist Richard Sennett ruminated on the relationship between workplace organization and character. He claimed that the new “flexible” capitalist workplace, a product of new forms of efficiency made possible

⁴² *Ibid.*

⁴³ Nicholas Carr, *The Shallows: What the Internet Is Doing to Our Brains* (New York: WW Norton, 2010). See also Sherry Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (New York: Basic Books, 2011).

⁴⁴ Eltis, *supra* note 1 at 13-16.

through technology (and not just digital technology), could undermine character that arises from “the ethical value we place on our own desires and on our relations to others.”⁴⁵ He asked, “How do we decide what is of lasting value in a society which is impatient, which focuses on the immediate moment?”⁴⁶ The idea of a community governed by laws is fundamental to democratic orders, however much they may differ from one another. It is the means by which people have tried to achieve justice for those living in the community. Legal systems are thus long-term creations built through generations. If we try to apply industrial ideas of efficiency to the judiciary, we will be asking them to abandon deliberation, independence, and the slow methods that give time for reason to trump emotion. Are we prepared to abandon, too, the idea that judges have good character? Alternatively, what are the values that will be brought to court by future judges who are digital natives? How might the current judiciary play a role in the creation of new legal culture?

And what about litigants who come before the court under these new cultural conditions? Just as Eltis was primarily focused on the judiciary in her book, so have I been in this review. Yet a current legal story is a fine example of the cultural clash arising from a confrontation between old and new norms, a court system with old habits and a litigant with new ones, and the problem of the instability of electronic text.

A Kentucky teenager went to a party in August 2011. She drank too much and lost consciousness. When she woke up she felt “like ‘something wasn't right’”;⁴⁷ her clothing was in disarray. Later, she found out that photographs of her private parts were being shown to classmates by two male students; while the pictures were not posted online, they were shown to many students. The young woman’s response was to report the boys to the police, and as a complainant, her name was made public. The police did investigate, the boys were charged with sexual assault and voyeurism, and a prosecutor negotiated a plea deal with the young men. Because they were minors, the names of the boys were withheld and the court records sealed, as is customary with matters before juvenile court. When she heard of the plea agreement, the young woman felt that she was being re-victimized by being exposed to public scrutiny, that her

⁴⁵ Richard Sennett, *The Corrosion of Character: The Personal Consequences of Work in the New Capitalism* (New York: WW Norton, 1998) at 10.

⁴⁶ *Ibid.*

⁴⁷ David Lohr, “Savannah Dietrich, 17-Year-Old Sexual Assault Victim, Ruined Attacker’s Life, Lawyer Says” (21 August 2012), online: The Huffington Post <http://www.huffingtonpost.com/2012/08/21/savannah-dietrich-sexual-assault_n_1819572.html>.

abusers were getting off with their reputations intact, and that the sentence was a slap on the hand.⁴⁸

Her subsequent actions were clearly unanticipated by the legal system but not a surprise if one is attuned to the emerging online culture. First, she sent out a series of tweets on Twitter, including at least one that named the boys. David Meija, the attorney for one of the boys, demanded that the young woman be charged with contempt of court. She responded by starting a petition on Change.org that garnered fifty thousand signatures in a very short time.⁴⁹ This may have contributed to Judge Angela McCormick Bisig's decision to remove the curtain around the records, making all materials public.⁵⁰ The public would know that the boys had confessed to manually penetrating the young woman's vagina and taking pictures that they shared with fellow students, and that they had done this because "they thought it would be funny."⁵¹ The boys pleaded guilty on June 26, 2012, and their sentencing, delayed by law, was made public on September 15, 2012. There is nothing new about public fascination with sexual behaviour, and at the time this case came to light, the United States was in a presidential campaign season filled with rhetoric about the proper role of women. This may have boosted the publicity surrounding the events, but what was new in this case was how the victim used social media to publicize what she regarded as an unjust outcome of a very bad situation, and then, again, used different Internet-based social media to garner public support so that her complaints could not be ignored. The young woman expected that she could and should communicate with her followers on Twitter, since she was in the middle of an important life event; she had access to powerful tools to do just that. She did not need a reporter on her side or a friend in a high place. She believed in the court

⁴⁸ See Juju Chang & Ely Brown, "Ky Teen Sexually Assaulted, Then Threatened With Jail Time" (20 August 2012), online: ABC News <<http://abcnews.go.com/US/kentucky-teen-sexually-assaulted-threatened-jail-time/story?id=17005633#.UedxS43qli>>.

⁴⁹ *Ibid.*

⁵⁰ Readers interested in the legal wrangling around the victim's concerns can find video coverage at "Judge Angela McCormick Bisig Rules on Savannah Dietrich Case" (28 August 2012), online: [courier-journal.com](http://www.courier-journal.com/VideoNetwork/1817603618001/Judge-Angela-McCormick-Bisig-rules-on-Savannah-Dietrich-case) <www.courier-journal.com/VideoNetwork/1817603618001/Judge-Angela-McCormick-Bisig-rules-on-Savannah-Dietrich-case>. A copy of the ruling was posted the next day at David Lohr, "Savannah Dietrich Case: Judge Rules Court Records Should Be Opened, Defense Appeals" (29 August 2012), online: Huffington Post, <www.huffingtonpost.com/2012/08/29/savannah-dietrich-court-records_n_1840557.html>.

⁵¹ Jason Riley & Andrew Wolfson, "Louisville Boys Sexually Assaulted Savannah Dietrich 'Cause We Thought It Would Be Funny'", *Courier-Journal* (20 August 2012), online: www.courier-journal.com <www.courier-journal.com> (see also the comment section of this article).

system, and by generating publicity for her concerns, she made herself heard by it.

If we take her perception of what to do to fix her own situation as a litigant and project it forward, it is not hard to imagine a scenario in which it becomes customary for people to appeal to crowds before appealing to the courts. What if the courts do not respond to every appeal? Will they then lose their authority and independence because the public is disappointed? While many may feel sympathetic to this young woman's situation and even to the means she chose to solve it, history is littered with poor outcomes when justice is outsourced to crowds. North Americans have only to think of lynching in the United States to see the difficulty.⁵² This case gives us a glimpse of a different kind of litigant coming to court, of different jurors. People on juries have already violated norms around secrecy and privacy during trial.⁵³

Discussion about the potential instability of judicial opinions due to Internet instability and practices can be echoed in the problems readers might find in researching the facts of stories and cases when materials are no longer available. I encountered a warning that a page was no longer available: a crucial piece of evidence in the public record had been taken down. The newspaper of record for this case, the *Courier-Journal* of Louisville, Kentucky, puts its archives behind a paywall (access-limiting software that requires payment to be opened) after thirty days, so tracing the story subsequently will become more difficult. The public has relied on the press to tell them the stories of trials; this is an important way that the courts become theirs, at least in the imagination. So judges and their litigants may face related problems of the instability of text.⁵⁴

Even a casual reading of history demonstrates that people long for justice no matter what their culture. But for most who observe rather than participate, the courts are not about the grand themes of jurisprudence that the legal academy debates, but about the unfolding drama of human conflicts and their resolution (not to mention all kinds of strange facts). Cultures symbolize justice in their public places. This longing and its iconography is explored by Resnik and Curtis's⁵⁵ *Representing Justice*. What

⁵² James Allen et al, *Without Sanctuary: Lynching Photography in America* (Santa Fe: Twin Palms, 2000) (making clear just how "crowd-sourced" lynching behavior could be).

⁵³ Eltis discusses the latter phenomenon in chapter 7, "Social Networking and Cyber Research Undermining the Jury System": *supra* note 1 at 108-18.

⁵⁴ By text, I mean all the different kinds of materials that may become part of the record and public discussion of the issues at trial that may illuminate it later.

⁵⁵ Judith Resnik & Dennis Curtis, *Representing Justice: Invention, Controversy, and Rights in City-States and Democratic Courtrooms* (New Haven: Yale University Press, 2011).

I found so moving in Karen Eltis's book was her obvious love and concern for the culture of law itself as an organizing institution of our common lives. She asks how the courts can adapt to a challenging new environment, maintaining both their independence and their connections to the lives of the people who appear before them. The challenges are, frankly, formidable. I think she is absolutely right, though, to challenge the courts to engage, to be more proactive. Our problem now is that technological change is occurring at a rate faster than the culture around it can assimilate or moderate. I hope that readers of Karen Eltis will respond to her call to become involved. For a democratic social order to survive, we must not think of justice as a profit centre; we need to have a truly public sphere where we can nurture dreams of the public good.⁵⁶ If any group has a special stake in that, it should be the judiciary. It is my hope that the judiciary, acting out of self-interest, will help us all to think through what must be preserved and what we can let go of in the revolution we are living through.

⁵⁶ I am indebted to Anthony T Kronman ("Rhetoric" (1999) 67:3 U Cin L Rev 677) for his thinking that lawyers create the public space through their rhetoric.